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From the Desk of the Chairperson

Dated, September 09, 2019

It is a real pleasure for me to be associated with the Indian Institute of Engineering Science and Technology, Shibpur which has a long and glorious heritage of 163 years in the field of Engineering and Science education. The Institute has undergone several transformation in the last three decades, starting from a Government Engineering College to a State aided University and then to an Institute of National Importance.

I took over as the Chairperson of the Board of Governors on 28th February, 2019 and noted that the Institute possesses really brilliant faculty members and hard working students and staff but the process of transition from a State aided University to a Central Institute is not yet complete.

The Institute has improved its NIRF ranking from 21a to 19 in the last year and I hope that with the hard effort of all the stake holders the ranking will improve in leaps. We must strive to be within the first ten within a few years.

The first phase of recruitment of faculty is complete. Efforts are made to fill up the remaining vacant posts shortly. The administrative reforms have started and our effort will be to have an efficient and paperless administration. The faculty members have to bring more projects and the Institute has to look for creating its own revenue. Infrastructure is to be uplifted to attract more foreign students. The DASA Scheme is already being implemented.

I hope we shall be able to resolve all the pending issues and create a fully equipped and efficiently administered environment in a short time in order that this Institute becomes one of the top ten Institutes of the country and has a global recognition.

Wish all the best to the academic community of IIEST, Shibpur.

(Vasudev K. Aatre)

Chairperson, BoG IIEST, Shibpur



From the Desk of the Director

Dated, September 23, 2019

It is a pleasure on my part to bring out the Annual Report of our Institute for the year 2018-19. Since the publication of the last Annual Report, a significant progress has been made by the Institute in respect of teaching-learning, research and administrative reforms.

We are extremely happy to welcome Dr. Vasudev. K. Aatre, Distinguished Scientist and former Secretary, Department of Defence Research & Development and Scientific Adviser to Raksha Mantri as the Honourable Chairperson of the Board of Governors of the Institute. We are sure to move forward towards achieving excellence under his dynamic guidance.

The institute has upgraded its NIRF ranking from 21A in 2018 to 19 in 2019. The stakeholders of the Institute are putting up their best efforts to improve the ranking further.

It is heartening to place on record that the first phase of filling up the vacant faculty positions which has been pending for a long time has been completed and the next phase of recruitment through rolling advertisement has been initiated. A group of fresh new faculty members have joined the Institute which will boost the academic activities in the years to come.

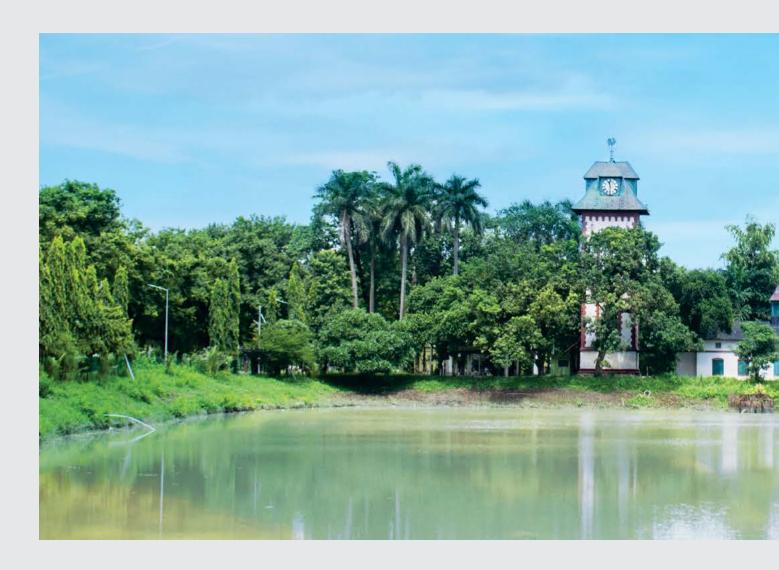
The Institute has taken steps to make the administration fully digital. Already several administrative activities including examination related matters have been made digital and can be accessed online.

An Institutional outreach has been successfully enhanced through social media interaction with the stakeholders via facebook, twitter, mail, etc.

I congratulate the entire team for their tireless efforts in giving the Annual Report its present shape.

Jai Hind!

(Parthasarathi Chakrabarti)



Vision

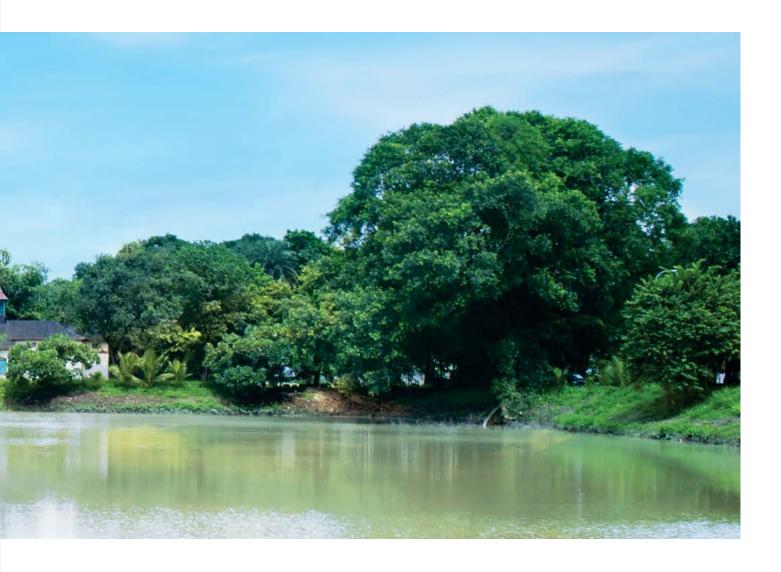
The Vision of IIEST, Shibpur is to become one of the best Institutes in the world in providing the state-of-the art multi-disciplinary research ambience that will usher innovative world-class technologies developed towards realizing the goal of Developed India, and thereby establish a unique identity for the institute amongst national and international academic and research organizations through knowledge creation, acquisition and dissemination for the benefit of society and humanity.

Mission

To generate high quality human and knowledge resources in our core areas of competence and emerging areas to make valuable contribution in technology for social and economic development of the nation.

To make focused efforts towards identification, monitoring and control of objective attributes of quality for continuous enhancement of academic processes, infrastructure and ambience.

To efficaciously enhance and expand, even beyond national boundaries, its contribution to the betterment of technical education and offer international programmes of teaching, consultancy and research.



Goals

To provide the best educational infrastructure for imparting high class education in science and technology and a creative atmosphere for inter-disciplinary research both by the students and the faculty.

To increase the student capacity to meet the growing demands for industry

To maintain global standards in student-faculty ratio, research output, publications in journals and placement of students

To participate in and contribute to nation building through various flagship schemes of the Government of India/State Governments requiring technological interventions thereby spurring economic growth for the welfare of the masses

To provide research and development consultancy, which will foster healthy industry-academia partnership, thereby providing a competitive edge to the indigenous manufacturing





Organisation and Administration

Established as the Calcutta Civil Engineering College in November 1856, this pioneering Institute, after several changes in its name at three different addresses, was lastly converted to an Indian Institute of Engineering Science and Technology by an amendment of the NITSER Act 2007. Today the Institute is an *Institute of National Importance* and its organizational and governing structure are on the lines of National Institutes of Technology (NITs). The Institute has four authorities, namely:

The Board of Governors	Authorities under the NITSED Act 2007	
The Senate	Authorities under the NITSER Act 2007	
The Finance Committee	Authorities under the IIEST Statutes 2017	
The Building and Works Committee		

The NITSER Council co-ordinates the activities of the Institute and other Institutes governed under the same Act.

The Governing structure of the Institute is as below.

- The President of India is the Visitor of IIEST, Shibpur. As provided in the NITSER Act, 2007, the Visitor appoints the Chairperson and the Director of the Institute
- The Council of NITSER is the apex decision making body.
 The Council is headed by the Hon'ble Union Minister
 of Human Resource Development and it comprises the
 Chairpersons and the Directors of the NITs, the IISERs
 and the IIEST Shibpur, beside other members including
 three Members of Parliament.
- The Board of Governors is responsible for the general superintendence, direction and control of the affairs of the Institute.
- The Senate of the Institute has the control and general regulation, and is responsible for the maintenance of standards of instruction, education and examination in the Institute. The Senate is empowered to frame and revise curricula and syllabi for the course of studies for various departments and to promote research in academic development activities.

- The Finance Committee is empowered to examine and scrutinise the annual budget of the Institute and make recommendations on any financial proposal to the Board.
- The Building and Works Committee undertakes construction of all major works after obtaining necessary administrative approval and expenditure sanction from the Board; it also enjoys the power to give the necessary administrative approval and expenditure sanction for minor works and to undertake the same.

During the year under review the Institute authorities initiated actions towards framing of a large number of rules, regulations, ordinance, etc.

1.1 Board of Governors

The Board of Governors of the Institute is constituted as per provisions of Section 11 of the NITSER Act, 2007. During 2018-19 the composition of the Board was as below:

Members of BOG, IIEST, Shibpur

Dr. Vasudev K. Aatre

Distinguished Scientist & former Secretary, Department of Defence Research & Development and Scientific Adviser to Raksha Mantri

Chairperson

(From 28.02.2019 to 24.02.2022)

E-mail: vasudev.k.aatre@gmail.com

Additional Secretary (TE) & CVO

MHRD, Govt. of India,

Shastri Bhawan, New Delhi-110 001

Ex-Officio-Member

E-mail: sandhu.edu@nic.in Ph: 23386903; 23381097

Prof. Parthasarathi Chakrabarti

Director, IIEST, Shibpur Howrah - 711103

Ex-Officio- Member

Ph: 033-26682674

Fax: 03326687575

E-mail: director@iiests.ac.in

Director, IISc., Bangalore

Sir C.V. Raman Avenue

Bangalore – 560 012

Ex-Officio- Member

Ph: 080-2360-0690/2293-2222

Secy to Director: 080-2293-2954

Fax: 91-80-23600936

Email: diroff@admin.iisc.ernet.in

anurag@ece.iisc.ernet.in

Director IIT, Guwahati

Guwahati - 781039, India

Member

(From 18.02.2019 to 07.02.2021)

Email: director@iitg.ac.in

Secretary, Ministry of Steel

Udyog Bhavan

New Delhi - 110011

Member

(From 18.02.2019 to 07.02.2021)

Email: secy-steel@nic.in

DG, CSIR-cum-Secretary, DSIR

Department of Scientific & Industrial Research, Ministry of Science & Technology, Technology Bhawan

New Mehrauli Road New Delhi- 110016

Member

(From 18.02.2019 to 07.02.2021)

Email: dgcsir@csir.res.in

Ph: +91-11-23710472, 23717053

Prof. Rohini Godbole

Centre for High Energy Physics IISC, Bangalore, Bengaluru-560012

Mamhai

(From 18.02.2019 to 07.02.2022)

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godbolerm@gmail.com

rohini@iisc.ac.in

Ph: +91-80-2293-2845

Secretary Higher Education Department

Govt. of West Bengal, Bikash Bhavan Salt Lake, Kolkata-700091

Ex-Officio- Member

E-mail: highereducationwb@gmail.com

Ph: 033-2321 1280

Prof. Subrata Chakraborty

Professor, Civil Engineering Department

(Senate nominated)

Member (till 21.02.2019)

E-mail: schak@civil.becs.ac.in

Prof. Shyamal Kumar Chattopadhyay

Professor, Dept of Chemistry, IIEST Shibpur (Senate nominated)

Member (till 21.02.2019)

E-mail: shch20@hotmail.com; shyamal@chem.iiests.ac.in; shyamalchattopadhyay@gmail.com

Prof. P.S. Avadhani

Professor & Former Principal, AUCE(A) Department of Computer Science and Systems Engineering, A.U. College of Engineering, Andhra University Visakhapatnam, Visakhapatnam Andhra Pradesh - 530003

Member

(From 18.02.2019 to 07.02.2021) E-mail: psavadhani@yahoo.com; psavadhani.csse@auvsp.edu.in

Joint Secretary & Financial Advisor

to the Govt. of India

Ministry of Human Resource

Development

Shastri Bhawan, New Delhi-110 001

Ex-Officio- Member E-mail: jsfa.edu@gov.in

Ph: 23382696

Dr. Biman Bandyopadhyay

Registrar

Indian Institute of Engineering Science and Technology, Shibpur

Howrah -711103

Secretary to BOG

Ph: (033) 2668-1503 (0)

Fax: (091)-(033)-2668-2916

E-mail: regis@becs.ac.in

1.2 The Senate

It is constituted under Section 14 of the NITSER Act 2007. The Senate of the Institute is its principal academic authority. All regular professors of the Institute are the members of Senate.

1.3 Finance Committee

The Finance Committee was constituted as provisions laid down in the section 10 of the IIEST Statutes. The Finance Committee for the Institute during the period under review was constituted with the following members:

SL. NO.	NAME OF THE MEMBERS	POSITION
1	Dr. Vasudev K. Aatre Distinguished Scientist & former Secretary Department of Defence Research & Development and Scientific Adviser to Raksha Mantri (From 28.02.2019)	Ex-Officio Chairman, Finance Committee
2	Prof. Parthasarathi Chakrabarti Director, IIEST, Shibpur (From 10.05.2018)	Ex-Officio Member
3	Additional Secretary (TE) & CVO, MHRD Govt. of India or his nominee or Joint Secretary (NITs & DL), MHRD Govt. of India or his/her nominee	Ex-Officio Member
4	Joint Secretary & Financial Advisor to the Govt. of India MHRD or her nominee	Ex-Officio Member
5	Prof. Shyamal Kumar Chattopadhyay Professor, Dept. of Chemistry, IIEST, Shibpur (till 21.02.2019)	Member
6	Prof. Subrata Chakraborty Professor, Civil Engineering Department (till 21.02.2019)	Member
7	Dr. Biman Bandyopadhyay Registrar, IIEST, Shibpur	Ex-Officio Member Secretary

Time to time, the Chairperson, in consultation with the Director, invites an expert as a special invitee. All financial proposals are placed before the Finance Committee before placing it to the Board for consideration and approval.

1.4 Building and Works Committee

The Building and Works Committee was constituted as per provision laid down in section 12 of IIEST Statute.

The Building and Works Committee of the Institute is responsible for making technical scrutiny of the design, estimates and specifications of the material as may be considered necessary. It is also responsible for enlistment of suitable contractors and acceptance of tenders. It has the power to give directions for departmental works (where necessary) and to settle rates not covered by tender and settle claims and disputes with contractors.

IN 2018-19, THE COMMITTEE CONSISTED OF THE FOLLOWING MEMBERS

SL. NO.	NAME OF THE MEMBERS	POSITION
1	Prof. Parthasarathi Chakrabarti Director, IIEST, Shibpur	Chairman
2	Director or Deputy Secretary or his nominee dealing with the Institute in the Ministry (MHRD), Govt. of India	Member
3	Director or Deputy Secretary or his nominee dealing with Finance of Institute in the Ministry (MHRD), Govt. of India	Member
4	Director or Deputy Secretary or his nominee dealing with Finance of Institute in the Ministry (MHRD), Govt. of India	Member
5	Prof. Sriman Kumar Bhattacharyya Deputy Director, IIT Kharagpur	Member
6	The Chief Engineer Civil, CPWD, Eastern Zone or his nominee from Civil Engineering wing	Member
7	The Chief Engineer Electrical, CPWD, Eastern Zone or his nominee from Electrical Engineering wing	Member
8	Prof. Sudip Kr. Roy Dean, Planning and Development, IIEST, Shibpur	Member
9	Dr. Biman Bandyopadhyay Registrar, IIEST, Shibpur	Secretary

1.5 Important Functionaries

Chairman, Council of NITSER

Shri Prakash Javadekar

Minister of Human Resource Development Government of India

Chairman, Board of Governors

Dr. Vasudev K. Aatre

Director

Prof. Parthasarathi Chakrabarti

Deans

Academic Affairs : Prof. Susanta Chakraborty

Faculty Welfare : Prof. Prasanta. Kumar Nandi

Associate Dean-Faculty Welfare : Prof. Sulata Mitra

Dean-Research & Consultancy : **Prof. Subhasis Bhaumik**

Dean-Planning & Development : Prof. Sudip Kumar Roy

Dean-Student Welfare : Prof. Debabrata Mazumdar

Associate Dean-Student Welfare : Dr. Asok Adak

Dean-International Relations & Alumni Affairs : Prof. Arindam Biswas

Registrar

Dr. Biman Bandyopadhyay

1.6 Administration

Director

Prof. Parthasarathi Chakrabarti

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Registrar

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Deputy Registrar (Estb., S&P)

Shri Sambhunath Datta

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Deputy Registrar (Academic)

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Sri Alok Kr. Maity

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Deputy Registrar (R & C)

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Superintending Engineer (Acting)

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Assistant Registrar & Internal Audit

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Assistant Registrar

Shri Shib Sankar Basak

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Assistant Registrar

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Assistant Registrar

Sri Dipankar Chakraborty

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Assistant Librarian (Selection Grade)

Shri Shushil Kumar Barman

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Assistant Librarian

Sri Abani Oraon

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Workshop Superintendent

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Physical Instructor

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M: 9433128404

Physical Instructor

Sri Sandip Chatterjee

E-mail: c.sandip2010@gmail.com

M: 9432835933

Public Information Officer

Dr. Devasis Datta

Deputy Registrar (R & C)

Ph. No: +913326684561(ext:355)

Appellate Authority

(Under the RTI Act 2005)

Prof. Subrata Chatterjee

Professor, Department of Metallurgy and Materials

Engineering

E-mail: schatterjee@metal.iiests. ac.in

Chief Warden

Dr. Sudipta Mukhopadhyay

Professor

Department of Mining Engineering E-mail: sudiptailest@gmail.com

M: 9433965705

Chief Vigilance Officer

Prof Abdur Rauf

Professor

Department of Electrical

Engineering

E-mail: rouf a@hotmail.com

Medical Officer

Dr. Rubi Golder

Ph. No.: +913326684561 (ext:332)

M: 9433805865

E-mail: rubigolder@gmail.com

1.7 Warden of Hostels (As on date)

Chief Warden: Prof. Sudipta Mukhopadhyay

	NAME	E-MAIL ID	HOSTEL
1	Dr. Nillohit Mukherjee	nillohit.mukherjee@gmail.com	A -39
2	Dr. Pritam Saha	pritam@civil.iiests.ac.in	A.C. Roy Hall (H-7)
3	Dr. Pritam Saha	saha.pritam@gmail.com	A type Qrs (H-9 ext.)
4	Dr. Nillohit Mukherjee	nillohit@cegess.iiests.ac.in	A.K. Seal Hall (H-10)
5	Shri Sambhunath Dutta	dattasn@gmail.com	B.Sen Hall (H-9)
6	Prof. S. K. Karmakar	skk.besus@gmail.com	D. Banerjea Hall (H-8)
7	Dr. Nillohit Mukherjee	mukherjee.nillohit@gmail.com	Downing
8	Dr. Ashis Kumar Bera	ashis@civil.iiests.ac.in	Hostel-11
9	Prof. Sudipta Mukhopadhyay	sudiptailest@gmail.com	Hostel-15
10	Prof. Subhash Mondal	scmondall@gmail.com	Hostel-16
11	Dr. Ayan Banerjee	ayanb12@gmail.com	Hostel-PG (H-13)
12	Dr. Sujata Biswas	sujata@civil.iiests.ac.in	Lt. Williams hall of residence.
13	Dr. Nityananda Nandi	nityananda@aero.iiests.ac.in	MacDonald Hall
14	Prof. Chaitali Ray	chaitali@civil.iiests.ac.in	Pandya Hall
15	Dr. Chanchal Majumdar	chanchal@civil.iiests.ac.in	Richardson Hall
16	Dr. Sukumar Kundu	erskundu@gmail.com	Sen Hall
17	Dr. Tapas Roy	tapash2000@hotmail.com	Sengupta Hall
18	Dr. Ananya Barui	ananya.pariksha@gmail.com	Sister Nivedita Hall
19	Prof. Aditya Bandyopadhyay	bandyopadhyay.aditya@gmail.com	Wolfenden Hall
20	Shri Alok Kr.Mitra	akmitra7077@gmail.com	Hostel -14

Staff members under HMC

SL. NO.	NAME	DESIGNATION
1	Sri Satyajit Barua	Superintendent (In-Charge)
2	Sri Mahadev Biswas	Superintendent
3	Sri Ruma Naskar	Superintendent
4	Sri Rita Ghosh	MTS
5	Sri Gouranga Choudhury	MTS

1.8 Head of the Departments

SL. NO.	DEPARTMENTS	NAME OF HOD	TENURE FROM	TENURE UPTO
1	Aerospace Engineering & Applier Mechanics	Prof. Koustuv Debnath Prof. Amit Roychowdhury	15.11.2016 15.11.2018	14.11.2018 14.11.2020
2	Architecture, Town & Regional Planning	Prof. Keya Mitra Prof. Partha Sarathi Mukhopadhyay	01.04.2016 02.04.2018	01.04.2018 01.04.2020
3	Chemistry	Prof. Binay Krishna Ghorai Prof. Ajit Kumar Mahapatra	16.12.2015 18.12.2017	18.12.2017 17.12.2019
4	Civil Engineering	Prof. Sudip Kumar Roy Prof. Anirban Gupta	04.02.2016 10.07.2018	10.07.2018 09.07.2020
5	Computer Science and Technology	Prof. Biplab Kumar Sikdar Prof. Sulata Mitra	06.03.2015 31.03.2017 (Afternoon)	31.03.2017 (Morning) 02.04.2019
6	Earth Science	Prof. Ananya Mukhopadhyay	03.05.2017	02.05.2019
7	Electrical Engineering	Prof. Ashoke Sutradhar	01.06.2017	31.05.2019
8	Electronics and Telecommunication Engineering	Prof. Monojit Mitra Dr. Ayan Banerjee	15.11.2016 15.11.2018	14.11.2018 14.11.2020
9	Human Resource Management	Prof. Manas Kumar Sanyal	23.08.2004	Until further order
10	Humanities and Social Sciences	Prof. Subhasis Bandyopadhyay	16.09.2016 (Afternoon)	
		Prof. Partha Sarathy Roy	17.09.2018	16.09.2020
11	Information Technology	Dr. Arindam Biswas Prof. Hafizur Rahaman	03.02.2014 11.07.2018	10.07.2018 10.07.2020
12	Mechanical Engineering	Prof. Shyamal Chatterjee	05.05.2017	04.05.2019
13	Metallurgy and Materials Engineering	Prof. Sumit Ghosh	24.05.2017	23.05.2019
14	Mining Engineering	Prof. Indranath Sinha Dr. Sudipta Mukhopadhyay	22.11.2016 22.11.2018	21.11.2018 21.11.2020
15	Mathematics	Prof. Tapan Kr. Roy	01.04.2017	31.03.2019
16	Physics	Dr. Amit Kundu	20.06.2017	19.06.2019

1.9 Head of the School/Centres

SL. NO.	DEPARTMENTS	NAME OF HOD	TENURE FROM	TENURE UPTO
1	Purabi Das School of Information Technology	Prof. Santi Prasad Maity Prof. Sipra Das (Bit)	10.07.2018 10.01.2019	09.01.2019 09.07.2019
2	School of Management Sciences	Prof. Aparna (Dey) Ghosh Prof. Aparajita Sengupta	10.07.2018 10.01.2019	09.01.2019 09.07.2019
3	M. N. Dastur School of Material Science and Engineering	Prof. Nil Ratan Bandyopadhyay	08.12.2017	07.12.2019
4	School of VLSI Technology	Prof. Hafizur Rahaman Prof. Konika Das (Bhattacharya) Prof. Jaya Sil	18.10.2017 11.07.2018 10.01.2019	10.07.2018 09.01.2019 09.07.2019
5	School of Community Science and Technology	Prof. Partha Sarathy Roy Prof. Souvanic Roy Prof. Sujay Kumar Mukherjea	27.06.2017 10.07.2018 10.01.2019	09.07.2018 09.01.2019 09.07.2019
6	School of Mechatronics and Robotics	Prof. Debjani Ganguly Prof. Subhasis Bhaumik Prof. Prasid Syam	14.08.2013 12.07.2018 15.10.2018	12.07.2018 14.10.2018 01.05.2019
7	School of Disaster Mitigation Engineering	Prof. Ambarish Ghosh Prof. Chaitali Ray Prof. Aparna (Dey) Ghosh	10.07.2018 10.01.2019	09.07.2018 09.01.2019 09.07.2019
8	School of Ecology, Infrastructure and Human Settlement Management	Prof. Souvanic Roy Prof. Swati Saha Prof. Souvanic Roy	25.09.2017 10.07.2018 10.01.2019	09.07.2018 09.01.2019 09.07.2019

SL. NO.	DEPARTMENTS	NAME OF HOD	TENURE FROM	TENURE UPTO
1	Centre of Excellence for Green Energy and Sensor Systems	Prof. Prasanta Kr. Nandi Prof. Anindita Sengupta	21.08.2018 27.02.2019	26.02.2019 26.08.2019
2	Centre for Healthcare Science and Technology	Prof. Amit Roychaudhury Prof. Santanu Das Prof. Dipali Banerjee	10.07.2015 10.07.2018 10.01.2019	09.07.2018 09.01.2019 09.07.2019
3	Centre for Water and Environmental Research	Prof. Anirban Gupta Prof. Debabrata Mazumder Prof. Ambarish Ghosh	15.12.2017 10.07.2018 10.01.2019	09.07.2018 09.01.2019 09.07.2019

1.10. Co-ordinator, TEQIP – III

Dr. Gopal Chandra Roy Assistant Professor

Department of Mining Engineering

1.11. Professors-in-Charge

Library : Prof. Sudip Kumar Chattopadhyay
Furniture : Prof. Sudipta Mukhopadhyay
Examination : Prof. Chandan k Chanda

Design and Management of the Institute's

Website : Sri Amal Barman

ERP Cell : Dr. Indrajit Banerjee

DUO India Fellowship Program : Prof. Arindam Biswas

Chairman, Committee for development, redesign the Institute Website, look after its maintenance and Network and

IT Infrastructure Committee : Prof. Arindam Biswas







Human Resources

As is true with the other CFTIs, sanctioned posts for both teaching and non-teaching posts are dependent on approved student intake of the Institute. Except in the case of employees paid from contingencies, the members of staff of the Institute are classified as under:-

- Academic staff: Director, Deputy Director, Professor, Associate Professor, Assistant Professor, Professor Training and Placement, and such other academic posts as may be decided by the Board from time to time.
- ii) Technical staff: System Manager, Workshop Superintendent, Librarian, Scientific Officers, Research Engineers, Deputy Librarian, Assistant Workshop Superintendent, System Analyst, Programmer, Foreman, Technician, Instructor, Laboratory Assistant, Mechanic, Overseer, Technical Assistant, Draftsman and such other technical posts as may be decided by the Board from time to time.
- iii) Administrative and others staff: Registrar, Deputy Registrar and Assistant Registrar, Accounts Officer, Audit Officer, Estate Officer, Executive Engineer, Assistant Engineer, Junior Engineer, Medical Officer, Medical Assistant, Horticultural Assistant or Officer, Office Superintendent, Security Officer, Stores Officer, Store Keeper, Office Assistants, Data Entry Operators and such other Administrative and other staff as may be decided by the Board from time to time.

Conversion of this institute from a State University to a CFTI was realized through enactment of the NITSER (Amendment) Act 2014.

The pay scale enjoyed by the employees are at par with that in other CFTIs and, as provided in the IIEST Statutes, the employees of the Institute are entitled to allowances as admissible to the Central Government Employees. The employees of the Institute are governed by the Central Civil Services (Conduct) Rules, 1964.

The Institute is yet to frame the code of conduct for employees and, as such, the Institute follows the Central Civil Services (Classification, Control and Appeal) Rules, 1965 as per provisions laid down in Section 25 of the IIEST Statutes. The leave for all the employees of the Institute is governed by the Central Civil Services (Leave) Rules 1972.

As per MHRD Guidelines the ratio of academic and non-academic staffs at the Institute should be around 1:1.1. But at the time of its conversion in 2014 the staff position was significantly skewed towards non-academic staffs and right sizing will require some time.

2.1 Academic Staff

The Academic staff scenario in 2018-19 is shown in Table 2.1. Details of Academic staffs in various academic departments, schools and centres are furnished below.

Table 2.1: Faculty members of Individual Departments

AEROSPACE ENGINEERING AND APPLIED MECHANICS

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	SUJAY KUMAR MUKHERJEA	Ph.D.	PROFESSOR
2	SALIL HALDAR	Ph.D.	PROFESSOR
3	KOUSTUV DEBNATH	Ph.D.	PROFESSOR
4	SUBHASIS BHAUMIK	Ph.D.	PROFESSOR
5	SANTANU MAJUMDER	Ph.D.	PROFESSOR

SI NO	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
6	AMIT ROY CHOWDHURY	Ph.D.	PROFESSOR
7	RANA ROY	Ph.D.	PROFESSOR
8	BASUDEB BHATTACHARYYA	Ph.D.	ASSOCIATE PROFESSOR
9	NITYANANDA NANDI	Ph.D.	ASSOCIATE PROFESSOR
10	PRITHWISH KUMAR DAS	Ph.D.	ASSOCIATE PROFESSOR
11	MIHIR CHANDRA MANNA	Ph.D.	ASSOCIATE PROFESSOR
12	AMARTYA BHATTACHARYA	Ph.D.	ASSOCIATE PROFESSOR
13	NILOY KHUTIA	Ph.D.	ASSOCIATE PROFESSOR
14	PABITRA HALDER	Ph.D.	ASSOCIATE PROFESSOR
15	DEBASHIS PAL	Ph.D.	ASSISTANT PROFESSOR Gr-I
16	KRISHNENDU BHOWMIK	M.Sc.(Engg)	ASSISTANT PROFESSOR Gr-II

ARCHITECTURE T & R P

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	ARUP SARKAR	Ph.D.	PROFESSOR
2	ADITYA BANDYOPADHYAY	Ph.D.	PROFESSOR
3	SOUVANIC ROY	Ph.D.	PROFESSOR
4	SWATI SAHA	Ph.D.	PROFESSOR
5	PARTHA SARATHI MUKHOPADHYAY	Ph.D.	PROFESSOR
6	KEYA MITRA	Ph.D.	PROFESSOR
7	AMITAVA ROY	Ph.D.	ASSOCIATE PROFESSOR
8	SUBRATA KUMAR PAUL	Ph.D.	ASSOCIATE PROFESSOR
9	SOUMEN MITRA	Ph.D.	ASSOCIATE PROFESSOR

CHEMISTRY

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	BIBHUTOSH ADHIKARY	Ph.D.	PROFESSOR
2	ANUP MONDAL	Ph.D.	PROFESSOR
3	SHYAMAL KR. CHATTOPADHYAY	Ph.D.	PROFESSOR
4	PRASANTA KR. NANDI	Ph.D.	PROFESSOR
5	BINAYKRISHNA GHORAI	Ph.D.	PROFESSOR
6	AJIT KUMAR MAHAPATRA	Ph.D.	PROFESSOR
7	SUDIP KUMAR CHATTOPADHYAY	Ph.D.	PROFESSOR

SL. NO	. FACULTY NAME	HIGHEST DEGREE	DESIGNATION
8	CHINMOY BHATTACHARYA	Ph.D.	ASSOCIATE PROFESSOR
9	JHUMA GANGULY	Ph.D.	ASSOCIATE PROFESSOR
10	PAPU BISWAS	Ph.D.	ASSOCIATE PROFESSOR
11	NANDA DULAL PAUL	Ph.D.	ASSISTANT PROFESSOR Gr-I

CIVIL ENGINEERING

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	KALYAN KR. CHATTOPADHYAY	Ph.D.	PROFESSOR
2	KALYAN KUMAR BHAR	Ph.D.	PROFESSOR
3	SUDIP KUMAR ROY	Ph.D.	PROFESSOR
4	SUBRATA CHAKRABORTY	Ph.D.	PROFESSOR
5	ANIRBAN GUPTA	Ph.D.	PROFESSOR
6	AMBARISH GHOSH	Ph.D.	PROFESSOR
7	CHAITALI RAY	Ph.D.	PROFESSOR
8	APARNA (DEY) GHOSH	Ph.D.	PROFESSOR
9	DEBASHIS MOITRA	Ph.D.	PROFESSOR
10	DEBABRATA MAZUMDER	Ph.D.	PROFESSOR
11	PRASANTA CHAKRABORTY	M.E.	ASSOCIATE PROFESSOR
12	ARUN KUMAR CHAKRABORTY	M.T.R.P	ASSOCIATE PROFESSOR
13	ASHIS KR. BERA	Ph.D.	ASSOCIATE PROFESSOR
14	SUGATO PAL	M.E.	ASSOCIATE PROFESSOR
15	SUJATA BISWAS	Ph.D.	ASSOCIATE PROFESSOR
16	SOUMYA BHATTACHARJYA	Ph.D.	ASSOCIATE PROFESSOR
17	TAPASH KUMAR ROY	Ph.D.	ASSOCIATE PROFESSOR
18	ASOK ADAK	Ph.D.	ASSOCIATE PROFESSOR
19	CHANCHAL MAJUMDER	Ph.D.	ASSOCIATE PROFESSOR
20	SUJIT KUMAR DALUI	Ph.D.	ASSISTANT PROFESSOR Gr-I
21	PRITAM SAHA	Ph.D.	ASSISTANT PROFESSOR Gr-I
22	UJJWAL SAHA	Ph.D.	ASSISTANT PROFESSOR Gr-I
23	SANDIP CHAKRABORTY	M.E.	ASSISTANT PROFESSOR Gr-II
24	SNEHA MURMU	M.E.	ASSISTANT PROFESSOR Gr-II

COMPUTER SCIENCE AND TECHNOLOGY

SL. NO	. FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	UMA BHATTACHARYA	Ph.D.	PROFESSOR
2	JAYA SIL	Ph.D.	PROFESSOR
3	SUSANTA CHAKRABORTY	Ph.D.	PROFESSOR
4	AMIT KUMAR DAS	Ph.D.	PROFESSOR
5	SIPRA DAS (BIT)	Ph.D.	PROFESSOR
6	BIPLAB KR SIKDAR	Ph.D.	PROFESSOR
7	SULATA MITRA	Ph.D.	PROFESSOR
8	SEKHAR MANDAL	Ph.D.	PROFESSOR
9	ASIT KUMAR DAS	Ph.D.	PROFESSOR
10	SOMNATH PAL	M.E.	ASSOCIATE PROFESSOR
11	MANAS HIRA	M.Tech.	ASSOCIATE PROFESSOR
12	ABHIK MUKHERJEE	Ph.D.	ASSOCIATE PROFESSOR
13	APURBA SARKAR	Ph.D.	ASSOCIATE PROFESSOR
14	SURAJEET GHOSH	Ph.D.	ASSOCIATE PROFESSOR
15	SAMIT BISWAS	Ph.D.	ASSISTANT PROFESSOR Gr-I
16	TAMAL PAL	M.E.	ASSISTANT PROFESSOR Gr-II
17	MALAY KULE	M.Tech.	ASSISTANT PROFESSOR Gr-II
18	ASHISH KUMAR LAYEK	M.E.	ASSISTANT PROFESSOR Gr-II

EARTH SCIENCES

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	BHABANIPRASADMUKHOPADHYAY	Ph.D.	PROFESSOR
2	ANANYA MUKHOPADHYAY	Ph.D.	ASSOCIATE PROFESSOR
3	ATIN KUMAR MITRA	Ph.D.	ASSISTANT PROFESSOR Gr-I

ELECTRICAL ENGINEERING

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	DEBASIS SARKAR	Ph.D.	PROFESSOR
2	GAUTAM BANDYOPADHYAY	Ph.D.	PROFESSOR
3	JAGADISH PAL	Ph.D.	PROFESSOR
4	ASHOKE SUTRADHAR	Ph.D.	PROFESSOR
5	ABHIJIT CHAKRABARTI	Ph.D.	PROFESSOR

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
6	BISWARUP BASAK	Ph.D.	PROFESSOR
7	PRASID SYAM	Ph.D.	PROFESSOR
8	ABDUR ROUF	M.Tech.	PROFESSOR
9	CHANDAN KUMAR CHANDA	Ph.D.	PROFESSOR
10	DEBABRATA ROY	Ph.D.	PROFESSOR
11	APARAJITA SENGUPTA	Ph.D.	PROFESSOR
12	MAINAK SENGUPTA	Ph.D.	PROFESSOR
13	KONIKA DAS (BHATTACHARYA)	Ph.D.	PROFESSOR
14	ANINDITA SENGUPTA	Ph.D.	PROFESSOR
15	DEBJANI GANGULY	M.E.	ASSOCIATE PROFESSOR
16	AMAL BARMAN	M.E.	ASSOCIATE PROFESSOR
17	AMALENDU BIKASH CHOUDHURY	Ph.D.	ASSOCIATE PROFESSOR
18	KAUSHIK MUKHERJEE	Ph.D.	ASSOCIATE PROFESSOR
19	ABHINANDAN DE	Ph.D.	ASSOCIATE PROFESSOR
20	PARAMITA CHATTOPADHYAY	Ph.D.	ASSOCIATE PROFESSOR
21	SUKANYA PARUI	Ph.D.	ASSISTANT PROFESSOR Gr-I
22	SUVARUN DALAPATI	Ph.D.	ASSISTANT PROFESSOR Gr-I
23	BHASKARAN BARMAN	M.E.	ASSISTANT PROFESSOR Gr-II

ELECTRONICS AND TELECOMMUNICATION ENGINEERING

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	MONOJIT MITRA	Ph.D.	PROFESSOR
2	SANTANU DAS	Ph.D.	PROFESSOR
3	BAIDYA NATH RAY	Ph.D.	PROFESSOR
4	SUSANTA KUMAR PARUI	Ph.D.	PROFESSOR
5	AYAN BANERJEE	Ph.D.	ASSOCIATE PROFESSOR
6	CHIRASREE ROY CHAUDHURI	Ph.D.	ASSOCIATE PROFESSOR
7	TAMAGHNA ACHARYA	Ph.D.	ASSOCIATE PROFESSOR
8	PARTHA BHATTACHARYYA	Ph.D.	ASSOCIATE PROFESSOR
9	DEBASIS MITRA	Ph.D.	ASSISTANT PROFESSOR Gr-I
10	ANKITA PRAMANIK	Ph.D.	ASSISTANT PROFESSOR Gr-I

HUMAN RESOURCE MANAGEMENT

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	MANAS KUMAR SANYAL	Ph.D.	PROFESSOR

HUMANITIES AND SOCIAL SCIENCES

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	RUPEN BASU MALLIK	M.Com, ICWA	ASSOCIATE PROFESSOR
2	PARTHA SARATHY ROY	Ph.D.	ASSOCIATE PROFESSOR
3	MALLIKA GHOSH SARBADHIKARY	M.Phil	ASSOCIATE PROFESSOR
4	SUBHASIS BANDYOPADHYAY	MA	ASSOCIATE PROFESSOR

INFORMATION TECHNOLOGY

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	HAFIZUR RAHAMAN	Ph.D.	PROFESSOR
2	SANTI PRASAD MAITY	Ph.D.	PROFESSOR
3	ARINDAM BISWAS	Ph.D.	PROFESSOR
4	SUKANTA DAS	Ph.D.	ASSOCIATE PROFESSOR
5	TUHINA SAMANTA	Ph.D.	ASSOCIATE PROFESSOR
6	PRASUN GHOSAL	Ph.D.	ASSOCIATE PROFESSOR
7	INDRAJIT BANERJEE	Ph.D.	ASSOCIATE PROFESSOR
8	SURAJIT KUMAR ROY	Ph.D.	ASSOCIATE PROFESSOR
9	CHANDAN GIRI	Ph.D.	ASSOCIATE PROFESSOR
10	SHYAMALENDU KANDAR	M.Tech.	ASSISTANT PROFESSOR Gr-II
11	MALAY BHATTACHARYYA	Ph.D.	ASSISTANT PROFESSOR Gr-II

M.N.DASTUR SCHOOL OF MATERIAL SCIENCE AND ENGINEERING

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	NIL RATAN BANDYOPADHYAY	Ph.D.	PROFESSOR

MATHEMATICS

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	BASUDEB MUKHOPADHYAY	Ph.D.	PROFESSOR
2	BINAYAK SAMADDER CHOUDHURY	Ph.D.	PROFESSOR
3	JAGABANDHU DE	Ph.D.	PROFESSOR
4	GURUPRASAD SAMANTA	Ph.D.	PROFESSOR
5	MURARI MITRA	Ph.D.	PROFESSOR

SL. NO	. FACULTY NAME	HIGHEST DEGREE	DESIGNATION
6	TAPAN KR. ROY	Ph.D.	PROFESSOR
7	SANAT KR. MAJUMDER	Ph.D.	PROFESSOR
8	ASOKE KUMAR DHAR	Ph.D.	PROFESSOR
9	TAPAN KR. KAR	Ph.D.	PROFESSOR
10	PARBATI SAHA	Ph.D.	PROFESSOR
11	PRITHA DAS	Ph.D.	PROFESSOR
12	SHARIFUL ALAM	Ph.D.	ASSOCIATE PROFESSOR
13	UJJAL DEBNATH	Ph.D.	ASSOCIATE PROFESSOR
14	SMITA PAL (SARKAR)	Ph.D.	ASSISTANT PROFESSOR Gr-I

MECHANICAL ENGINEERING

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	DEBASISH DUTTA	Ph.D.	PROFESSOR
2	SUJOY KUMAR SAHA	Ph.D.	PROFESSOR
3	SISIR KUMAR GUHA	Ph.D.	PROFESSOR
4	SANTANU KR. KARMAKAR	Ph.D.	PROFESSOR
5	APURBA KISHORE DUTTA	Ph.D.	PROFESSOR
6	BIJAN KUMAR MANDAL	Ph.D.	PROFESSOR
7	SHYAMAL CHATTERJEE	Ph.D.	PROFESSOR
8	SOMNATH CHAKRABARTI	Ph.D.	PROFESSOR
9	PARTHAPRATIM DEY	Ph.D.	PROFESSOR
10	SUBHAS CHANDRA MONDAL	Ph.D.	PROFESSOR
11	ACHIN KUMAR CHOWDHURI	Ph.D.	ASSOCIATE PROFESSOR
12	SUDIP GHOSH	Ph.D.	ASSOCIATE PROFESSOR
13	ARITRA GANGULY	Ph.D.	ASSOCIATE PROFESSOR
14	ASHIM GUHA	Ph.D.	ASSISTANT PROFESSOR Gr-I
15	UTTAM RANA	M.Tech.	ASSISTANT PROFESSOR Gr-II
16	RATHINDRA NATH DE	M.E.	ASSISTANT PROFESSOR Gr-II

METALLURGY AND MATERIALS ENGINEERING

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	SUBRATA CHATTERJEE	Ph.D.	PROFESSOR
2	AMITAVA BASU MALLICK	Ph.D.	PROFESSOR
3	PARTHA PROTIM CHATTOPADHYAY	Ph.D.	PROFESSOR

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
4	SWARUP KR GHOSH	Ph.D.	PROFESSOR
5	SANJOY SADHUKHAN	Ph.D.	ASSOCIATE PROFESSOR
6	SUMIT GHOSH	M.E.	ASSOCIATE PROFESSOR
7	MANOJIT GHOSH	Ph.D.	ASSOCIATE PROFESSOR
8	DEBDULAL DAS	Ph.D.	ASSOCIATE PROFESSOR
9	SUKUMAR KUNDU	Ph.D.	ASSISTANT PROFESSOR Gr-I
10	TAPENDU MANDAL	M.Tech.	ASSISTANT PROFESSOR Gr-II

MINING

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	PRABIR KUMAR PAUL	Ph.D.	PROFESSOR
2	NETAI CHANDRA DEY	Ph.D.	PROFESSOR
3	INDRANATH SINHA	Ph.D.	PROFESSOR
4	SURANJAN SINHA	Ph.D.	PROFESSOR
5	PRATIK DUTTA	Ph.D.	PROFESSOR
6	SUDIPTA MUKHOPADHYAY	Ph.D.	PROFESSOR
7	GOPAL CHANDRA ROY	Ph.D.	ASSISTANT PROFESSOR Gr-I
8	MD. MIRAJUL ISLAM	Ph.D.	ASSISTANT PROFESSOR Gr-I

PHYSICS

SL. NO	. FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	DIPALI BANERJEE	Ph.D.	PROFESSOR
2	BICHITRA KR. GUHA	Ph.D.	PROFESSOR
3	SUKHENDU SEKHAR SARKAR	Ph.D.	PROFESSOR
4	MOUSUMI BASU	Ph.D.	PROFESSOR
5	SAMPAD MUKHERJEE	Ph.D.	ASSOCIATE PROFESSOR
6	SAMAR JANA	Ph.D.	ASSOCIATE PROFESSOR
7	AMIT KUNDU	Ph.D.	ASSOCIATE PROFESSOR
8	KRISHNENDU MUKHERJEE	Ph.D.	ASSOCIATE PROFESSOR
9	SYED MINHAZ HOSSAIN	Ph.D.	ASSOCIATE PROFESSOR
11	ABHIJIT BISOI	Ph.D.	ASSISTANT PROFESSOR Gr-I
12	MOJAMMEL HAQUE MONDAL	Ph.D.	ASSISTANT PROFESSOR Gr-I
13	DWIPESH MAJUMDER	Ph.D.	ASSISTANT PROFESSOR Gr-I
14	DEBASIS RAY	Ph.D.	ASSISTANT PROFESSOR Gr-II

OTHER TEACHING STAFF

SL. NO.	FACULTY NAME	HIGHEST DEGREE	DESIGNATION
1	ZIA-UL-ALAM	Ph.D.	PHYSICAL INSTRUCTOR (SR.)
2	SANDIP CHATTOPADHYAY	Master in Physical Education	PHYSICAL INSTRUCTOR (SR.)
3	DIBYENDU CHATTERJEE	Ph.D.	WORKSHOP SUPTD.

NEWLY JOINED FACULTY MEMBERS AT DIFFERENT DEPARTMENTS

SL. NO.	NAME	DEPARTMENT	JOINING DATE
1	DR. UJJAL BHATTACHARJEE	Chemistry	26/02/2019
2	DR. NIRNAY GHOSH	CST	06/03/2019
3	DR. LAKSMIKANTA ADAK	Chemistry	08/03/2019
4	DR. DEBOJYOTI PANDIT	Civil Engineering	11/03/2019
5	DR. SANTANU DAS	Mechanical Engineering	11/03/2019
6	DR. RIK CHATTAPADHYAY	ETC	11/03/2019
7	DR. AVERI MUKHOPADHYAY	Humanities and Social Sciences	11/03/2019
8	DR. SORITA OJHA	Mathematics	11/03/2019
9	DR. BHASKAR DE	Architecture	11/03/2019
10	DR. JOYDEEP BHOWMIK	Aerospace Engineering & AM	27/02/2019
11	DR. PRATIM KUMAR	Aerospace Engineering & AM	15/03/2019
12	DR. GAUTAM ANAND	Metallurgy & Materials Engineering	25/03/2019

2.2 Non-Academic Staff

A list of employees along with their designations is provided in the Table 2.2 while Table 2.3 provides the list of Institute Officers.

TABLE 2.2: TECHNICAL STAFF IN POSITION

SL NO.	NAME OF THE EMPLOYEE	DESIGNATION	SL NO.	NAME OF THE EMPLOYEE	DESIGNATION
1	ABHIJIT BHATTACHARYYA	ASSISTANT (Selection Grade-II)	5	ASIM DAS CHAKRABORTY	ASSISTANT (Selection Grade-II)
2	ANINDYA MUKHOPADHYAY	ASSISTANT (Selection Grade-II)	6	AYANDEB DATTA	ASSISTANT (Selection Grade-II)
3	ARINDAM BANERJEE	ASSISTANT (Selection Grade-II)	7	BAIDYANATH MONDAL	ASSISTANT (Selection Grade-II)
4	ARPITA DAS	ASSISTANT (Selection Grade-II)	8	CHANDRANI MUKHOPADHYAY	ASSISTANT (Selection Grade-II)

SL NO.	NAME OF THE EMPLOYEE	DESIGNATION	SL NO.	NAME OF THE EMPLOYEE	DESIGNATION
9	PARTHA SARATHI	ASSISTANT	33	MANTU GOSWAMI	SUPERINTENDENT
10	NATH PIJUSH DATTA	(Selection Grade-II) ASSISTANT	34	NIMAIN CHARAN SATAPATHY	SUPERINTENDENT
11	RAM SUNDER YADAV	(Selection Grade-II) ASSISTANT	35	PARTHASARATHI MAITY	SUPERINTENDENT
		(Selection Grade-II)	36	RAJA BANERJEE	SUPERINTENDENT
12	SANTANU GANGULI	ASSISTANT (Selection Grade-II)	37	RASBIHARI CHAKRABARTI	SUPERINTENDENT
13	SAROJIT DAS	ASSISTANT (Selection Grade-II)	38	RUMA NASKAR (CHAKRABORTY)	SUPERINTENDENT
14	SHYAMAL KR. MANNA		39	SATYAJIT BARUA	SUPERINTENDENT
1.5	COMMATHERAS	(Selection Grade-II)	40	SUNIL KR. MANNA	SUPERINTENDENT
15	SOMNATH DAS	ASSISTANT (Selection Grade-II)	41	SUSMITA SARKAR	SUPERINTENDENT
16	SOURASIS MITRA	ASSISTANT	42	SWATI KAR (DEB)	SUPERINTENDENT
		(Selection Grade-II)	43	TAMAL KUMAR DAS	SUPERINTENDENT
17	SUBRATA BAIDYA	ASSISTANT (Selection Grade-II)	44	TARAKNATH DAS	SUPERINTENDENT
18	SUCHITA KHAKHA	ASSISTANT (Selection Grade-II)	45	UJJAL KUMAR GUPTA	SENIOR SUPERINTENDENT
19	SUJAN SARKAR	ASSISTANT (Selection Grade-II)	46	ARUN KUMAR GHOSH	SENIOR SUPERINTENDENT
20	SUJATA MANDI	ASSISTANT (Selection Grade-II)	47	DEBASISH SAHA	ASSISTANT (Selection Grade-II)
21	SURAJIT DAS	ASSISTANT (Selection Grade-II)	48	ASHOK KUMAR ROY	MULTI TASKING STAFF (COOK)
22	TARUN KANTI MITRA	ASSISTANT (Selection Grade-II)	49	BIKASH MAJHI	MULTI TASKING STAFF (COOK)
23	UTPAL GHOSH	ASSISTANT (Selection Grade-II)	50	JOYDEB DOLAI	MULTI TASKING STAFF (COOK)
24	UTTAM CHATTERJEE	ASSISTANT (Selection Grade-II)	51	MANAS KUMAR SAHA	MULTI TASKING STAFF (COOK)
25	ALOK ROY	SUPERINTENDENT	52	RABIN JANA	MULTI TASKING STAFF (COOK)
26	ARUP KUMAR PATRA	SUPERINTENDENT	53	RADHASHYAM	MULTI TASKING STAFF
27	BIPLAB MUKHERJEE	SUPERINTENDENT		CHATTERJEE	(COOK)
28	GAUTAM BISWAS	SUPERINTENDENT	54	RANJAN KUMAR PAL	MULTI TASKING STAFF (COOK)
29	JUDHISTIR MANDAL	SUPERINTENDENT	55	SANJIB DAS	MULTI TASKING STAFF
30	KASHI NATH SINGH	SUPERINTENDENT	33	GANGID DAG	(COOK)
31 32	MADANMOHAN BOSE MAHADEV BISWAS	SUPERINTENDENT SUPERINTENDENT	56	SANKAR KARMAKAR	MULTI TASKING STAFF (COOK)

SL NO.	NAME OF THE EMPLOYEE	DESIGNATION	SL NO.	NAME OF THE EMPLOYEE	DESIGNATION
57	TARAK MAJHI	MULTI TASKING STAFF (COOK)	77	DEBASHIS MONDAL	MULTI TASKING STAFF (JR. DURWAN)
58	TARAPRASANNA GANGULY	MULTI TASKING STAFF (COOK)	78	GOURANGA CHOWDHURY	MULTI TASKING STAFF (JR. DURWAN)
59	TARUN CHANDRA DAS	MULTI TASKING STAFF (COOK)	79	HARE KRUSHNA DASH	MULTI TASKING STAFF (JR. DURWAN)
60	UTTAM KUMAR DOLAI	MULTI TASKING STAFF (COOK)	80	MURALI DHAR ROUT	MULTI TASKING STAFF (JR. DURWAN)
61	ARUN KR. PATRA	MULTI TASKING STAFF (COOK-SR)	81	PINTU DAS	MULTI TASKING STAFF (JR. DURWAN)
62	BISWAJIT KAR	MULTI TASKING STAFF (COOK-SR)	82	PRADIP DAS	MULTI TASKING STAFF (JR. DURWAN)
63	KALYAN PRASAD PATHAK	MULTI TASKING STAFF (COOK-SR)	83	RABI NAYEK	MULTI TASKING STAFF (JR. DURWAN)
64	MURALI MOHAN MOHANTY	MULTI TASKING STAFF (COOK-SR)	84	SANJAY GHOSH	MULTI TASKING STAFF (JR. DURWAN)
65	NIRMAL KAR	MULTI TASKING STAFF (COOK-SR)	85	SAPANI NAYEK	MULTI TASKING STAFF (JR. DURWAN)
66	SUBIR GHOSH	MULTI TASKING STAFF (SR. CYCLO. OPERATOR)	86	SISIR KUMAR ROY	MULTI TASKING STAFF (JR. DURWAN)
67	ASHOKE HALDER	MULTI TASKING STAFF (JR. DRIVER)	87	SUDAMA CHOWDHURY	MULTI TASKING STAFF (JR. DURWAN)
68	MITHILESH KUMAR ROY	MULTI TASKING STAFF (JR. DRIVER)	88	SUDARSHAN MAHATO	MULTI TASKING STAFF (JR. DURWAN)
69	SIBU DAS	MULTI TASKING STAFF (JR. DRIVER)	89	SUSHIL KUMAR DEY	MULTI TASKING STAFF (JR. DURWAN)
70	TRIBHUBAN SHOW	MULTI TASKING STAFF (HEAD DURWAN)	90	TARAK NATH JANA	MULTI TASKING STAFF (JR. DURWAN)
71	ARABINDA SAMANTA	MULTI TASKING STAFF (JR. DURWAN)	91	BADAL SEAL	MULTI TASKING STAFF (SR. DURWAN)
72	ASIK MOHAMMAD	MULTI TASKING STAFF (JR. DURWAN)	92	BHANU DAS	MULTI TASKING STAFF (SR. DURWAN)
73	BAPI MAJHI	MULTI TASKING STAFF (JR. DURWAN)	93	BHULU GHOSH	MULTI TASKING STAFF (SR. DURWAN)
74	BISWAJIT SARKAR	MULTI TASKING STAFF (JR. DURWAN)	94	BIMAL KR. GHOSH	MULTI TASKING STAFF (SR. DURWAN)
75	BISWANATH DARJEE	MULTI TASKING STAFF (JR. DURWAN)	95	DEBABRATA PATRA	MULTI TASKING STAFF (SR. DURWAN)
76	CHANDAN KARMAKAR	MULTI TASKING STAFF (JR. DURWAN)	96	DEBENDRA NATH GHOSAL	MULTI TASKING STAFF (SR. DURWAN)

SL NO.	NAME OF THE EMPLOYEE	DESIGNATION	SL NO.	NAME OF THE EMPLOYEE	DESIGNATION
97	GANESH CH. SARDAR	MULTI TASKING STAFF (SR. DURWAN)	117	SANJOY BHAGAT	MULTI TASKING STAFF (HELPER-III)
98	JOYDEV DAS	MULTI TASKING STAFF (SR. DURWAN)	118	SANTINATH CHAKRABORTY	MULTI TASKING STAFF (HELPER-III)
99	KAJAL BHATTACHARYA	MULTI TASKING STAFF (SR. DURWAN)	119	SURESH CHANDRA NAIK	MULTI TASKING STAFF (HELPER-III)
100	KRUSHNA CH. KAR	MULTI TASKING STAFF (SR. DURWAN)	120	JAGANNATH ROY	MULTI TASKING STAFF (HELPER-I)
101	MAHESH DAS	MULTI TASKING STAFF (SR. DURWAN)	121	AMAR NATH DUTTA	MULTI TASKING STAFF (HELPER-II)
102	NEMAI CHARAN BAL	MULTI TASKING STAFF (SR. DURWAN)	122	BADAL CH. DAS	MULTI TASKING STAFF (HELPER-II)
103	RAM BRIJ PROSAD HARIJAN	MULTI TASKING STAFF (SR. DURWAN)	123	CHANDA DEVI	MULTI TASKING STAFF (HELPER-II)
104	SIBAPRASAD JANA	MULTI TASKING STAFF (SR. DURWAN)	124	DEB KUMAR JANA	MULTI TASKING STAFF (HELPER-II)
105	SWAPAN CHAKRABORTY	MULTI TASKING STAFF (SR. DURWAN)	125	JOYDEB GANGULY	MULTI TASKING STAFF (HELPER-II)
106	TARAK DAS	MULTI TASKING STAFF (SR. DURWAN)	126	MD. MURTAZA	MULTI TASKING STAFF (HELPER-II)
107	TUSHAR KANTI MITRA	MULTI TASKING STAFF (SR. DURWAN)	127	MD. SIRAJUDDIN	MULTI TASKING STAFF (HELPER-II)
108	PRASANTA MAJHI	MULTI TASKING STAFF (JR. FARASH)	128	MURARI MONDAL	MULTI TASKING STAFF (HELPER-II)
109	MILAN MAJUMDAR	MULTI TASKING STAFF (SR. FARASH)	129	PRABIR NASKAR	MULTI TASKING STAFF (HELPER-II)
110	ASHURA BEGAM	MULTI TASKING STAFF (HELPER-III)	130	RAJENDRA BHAGAT	MULTI TASKING STAFF (HELPER-II)
111	BIJON SARKAR	MULTI TASKING STAFF (HELPER-III)	131	SUSANTA BHATTACHERJEE	MULTI TASKING STAFF (HELPER-II)
112	BIPLAB KAYAL	MULTI TASKING STAFF (HELPER-III)	132	SATYA NARAYAN KARMAKAR	MULTI TASKING STAFF (LAB. ATTENDANT-III)
113	DHIMAN CHANDRA DAS	MULTI TASKING STAFF (HELPER-III)	133	SAUMENDU ATTA	LIBRARY AND INFORMATION ASSISTANT
114	RITA GHOSH	MULTI TASKING STAFF (HELPER-III)	134	MANTU CHAKRABORTY	MULTI TASKING STAFF (HEAD MALI)
115	RUMA DAS GHOSH	MULTI TASKING STAFF (HELPER-III)	135	DILIP KUMAR BAG	MULTI TASKING STAFF (JR. MALI)
116	SANJAY SINGH	MULTI TASKING STAFF (HELPER-III)	136	RAJKUMAR DHALI	MULTI TASKING STAFF (JR. MALI)

SL NO.	NAME OF THE EMPLOYEE	DESIGNATION	SL NO.	NAME OF THE EMPLOYEE	DESIGNATION
137		MULTI TASKING STAFF (JR. MALI)	157		MULTI TASKING STAFF (JR. PEON)
138	SIDHESWAR ROY	MULTI TASKING STAFF (JR. MALI)	158	MAHUA SARKAR	MULTI TASKING STAFF (JR. PEON)
139	TINKU DAS	MULTI TASKING STAFF (JR. MALI)	159	MALATI DEY	MULTI TASKING STAFF (JR. PEON)
140	BUDDHADEV SAMANTA	MULTI TASKING STAFF (SR. MALI)	160	MANOJ BHAGAT	MULTI TASKING STAFF (JR. PEON)
141	DILIP KR. DAS	MULTI TASKING STAFF (SR. MALI)	161	MILON KUMAR DAS	MULTI TASKING STAFF (JR. PEON)
142	SK. KARIM	MULTI TASKING STAFF (SR. MALI)	162	MRINMOY KUMAR JANA	MULTI TASKING STAFF (JR. PEON)
143	SAMIR KR. ROY	TECHNICIAN (SELECTION GRADE-I)	163	NARAYAN CHANDRA DASH	MULTI TASKING STAFF (JR. PEON)
144	BABLU SANTRA	TECHNICIAN (SELECTION GRADE-I)	164	PRASANTA MALLICK	MULTI TASKING STAFF (JR. PEON)
145	DIBYENDU PAUL	TECHNICIAN (SELECTION GRADE-I)	165	RAKESH KUMAR NAYAK	MULTI TASKING STAFF (JR. PEON)
146	JAYANTA KUNDU	TECHNICIAN (SELECTION GRADE-I)	166	SANDIP PRAMANICK	MULTI TASKING STAFF (JR. PEON)
147	SAIBAL GHOSH	TECHNICIAN (SELECTION GRADE-I)	167	SANTANU PRAMANICK	MULTI TASKING STAFF (JR. PEON)
148	PRADIP KUMAR DEY	TECHNICIAN (SELECTION GRADE-I)	168	SUBHADRA MANNA	MULTI TASKING STAFF (JR. PEON)
149	ASHOK KUMAR GHOSH	MULTI TASKING STAFF (JR. CASH SARKAR/	169	SUBHAS SARKAR	MULTI TASKING STAFF (JR. PEON)
150	AVIJIT NATH	RECORD SUPPLIER) MULTI TASKING STAFF	170	TARAK NATH DEY	MULTI TASKING STAFF (JR. PEON)
151	BIBHUTI BHUSAN	(JR. PEON) MULTI TASKING STAFF	171	UTTAM PAL	MULTI TASKING STAFF (JR. PEON)
152	DEY BIMAL DUTTA	(JR. PEON) MULTI TASKING STAFF	172	GOUR MONDAL	MULTI TASKING STAFF (SR. CASH SARKAR)
153	CHAITALI	(JR. PEON) MULTI TASKING STAFF	173	AMIYA KUMAR PAUL	MULTI TASKING STAFF (SR. PEON)
154	BHATTACHARJEE DIPENDU PAUL	(JR. PEON) MULTI TASKING STAFF	174	ANJAN KUMAR SUR	MULTI TASKING STAFF (SR. PEON)
155	KAKALI PAKHIRA	(JR. PEON) MULTI TASKING STAFF	175	ARATI MAJUMDAR	MULTI TASKING STAFF (SR. PEON)
156	(PAN) KRISHNA CHAKRABORTY	(JR. PEON) MULTI TASKING STAFF (JR. PEON)	176	ASIT BARAN DEY	MULTI TASKING STAFF (SR. PEON)

SL NO.	NAME OF THE EMPLOYEE	DESIGNATION	SL NO.	NAME OF THE EMPLOYEE	DESIGNATION
177	DEBASISH SIKDAR	MULTI TASKING STAFF (SR. PEON)	197	TARUN PAUL	SENIOR PERSONAL ASSISTANT
178	DHARMENDRA DAS	MULTI TASKING STAFF (SR. PEON)	198	HARAN CHANDRA SADHUKHAN	PRIVATE SECRETARY
179	GOPAL CHANDRA PARUA	MULTI TASKING STAFF (SR. PEON)	199	CHINMOY SANA	PERSONAL ASSISTANT
180	JAHAR PAL	MULTI TASKING STAFF	200	MALAY GARAI	PERSONAL ASSISTANT
		(SR. PEON)	201	MAMIT MITRA	PERSONAL ASSISTANT
181	JULFIKER ALI MOLLA	MULTI TASKING STAFF (SR. PEON)	202	SUBHRA ROY	SENIOR STENOGRAPHER
182	KANAI DAS	MULTI TASKING STAFF	203	SUJIT MAZUMDAR	SENIOR STENOGRAPHER
		(SR. PEON)	204	RAJESH ROUTH	MULTI TASKING STAFF (JR. SWEEPER)
183	LAKSHMAN HANSDA	MULTI TASKING STAFF (SR. PEON)	205	TAPAN ORAON	MULTI TASKING STAFF (JR. SWEEPER)
184	PRADUT KR. MANNA	MULTI TASKING STAFF (SR. PEON)	206	BHOLA PRASAD HARIJAN	MULTI TASKING STAFF (JR. SWEEPER)
185	PROSENJIT PANJA	MULTI TASKING STAFF (SR. PEON)	207	CHANDRA SHEKHAR MALAKAR	MULTI TASKING STAFF (JR. SWEEPER)
186	PURNENDU BERA	MULTI TASKING STAFF (SR. PEON)	208	IDRISH MALLICK	MULTI TASKING STAFF (JR. SWEEPER)
187	RABIN DAS	MULTI TASKING STAFF (SR. PEON)	209	JOYDEB BARUA	MULTI TASKING STAFF (JR. SWEEPER)
188	RAMA ROY	MULTI TASKING STAFF (SR. PEON)	210	KAILAS NAYAK	MULTI TASKING STAFF (JR. SWEEPER)
189	RANU DEY	MULTI TASKING STAFF (SR. PEON)	211	LALOO HELA	MULTI TASKING STAFF (JR. SWEEPER)
190	RICHARD FRANSIS SUBBA	MULTI TASKING STAFF (SR. PEON)	212	MD. RIAZ	MULTI TASKING STAFF (JR. SWEEPER)
191	SALEHA KHATUN	MULTI TASKING STAFF (SR. PEON)	213	MENOKA TURI	MULTI TASKING STAFF (JR. SWEEPER)
192	SANJOY GHOSH	MULTI TASKING STAFF (SR. PEON)	214	MINA ROUTH	MULTI TASKING STAFF (JR. SWEEPER)
193	SUBRATA CHAKRABORTY	MULTI TASKING STAFF (SR. PEON)	215	NAGESWAR MAHATO	MULTI TASKING STAFF (JR. SWEEPER)
194	SUKUMAR SARKAR	MULTI TASKING STAFF (SR. PEON)	216	NARESH BHAGAT	MULTI TASKING STAFF (JR. SWEEPER)
195	SWAPAN BANERJEE	MULTI TASKING STAFF (SR. PEON)	217	RAM PROSAD ROUTH	MULTI TASKING STAFF (JR. SWEEPER)
196	MINTU CHARAN KHAN	SENIOR PERSONAL ASSISTANT			(3 32 2.17)

SL NO.	NAME OF THE EMPLOYEE	DESIGNATION	SL NO.	NAME OF THE EMPLOYEE	DESIGNATION
218	SEKHAR RAO	MULTI TASKING STAFF (JR. SWEEPER)	237	AMALENDU SAHOO	SENIOR TECHNICAL ASSISTANT
219	SUSANTA PAL	MULTI TASKING STAFF (JR. SWEEPER)	238	AMAR TARAFDER	SENIOR TECHNICAL ASSISTANT
220	ASOKE ROUTH	MULTI TASKING STAFF (SR. SWEEPER)	239	AMRITA BANDYOPADHYAY	SENIOR TECHNICAL ASSISTANT
221	GANGADHAR NAYAK	MULTI TASKING STAFF (SR. SWEEPER)	240	ANJANA SENGUPTA	SENIOR TECHNICAL ASSISTANT
222	GITA HELA	MULTI TASKING STAFF (SR. SWEEPER)	241	ASISH KUMAR PAUL	SENIOR TECHNICAL ASSISTANT
223	NIRANJAN NAYAK	MULTI TASKING STAFF (SR. SWEEPER)	242	BIBHAS CHANDRA MITRA	SENIOR TECHNICAL ASSISTANT
224	PROMILA NAYAK	MULTI TASKING STAFF (SR. SWEEPER)	243	BISWAJIT DAS	SENIOR TECHNICAL ASSISTANT
225	RAJKUMAR DOME	MULTI TASKING STAFF (SR. SWEEPER)	244	DEBJIT BHOWMIK	SENIOR TECHNICAL ASSISTANT
226	RAM CHANDRA ROUTH	MULTI TASKING STAFF (SR. SWEEPER)	245	PRASANTA GOPE	SENIOR TECHNICAL ASSISTANT
227	RANKANIDHI NAYAK	MULTI TASKING STAFF (SR. SWEEPER)	246	PRODIP KUMAR ROY	SENIOR TECHNICAL ASSISTANT
228	BAGALA PRASAD PATRA	TECHNICAL ASSISTANT (SELECTION GRADE-II)	247	RAJAT MUKHOPADHYAY	SENIOR TECHNICAL ASSISTANT
229	BASUDEB AICH	TECHNICAL ASSISTANT (SELECTION GRADE-II)	248	RAKTIM MAITY	SENIOR TECHNICAL ASSISTANT
230	BASUDEB DEY	TECHNICAL ASSISTANT (SELECTION GRADE-I)	249	SAJAL KUMAR CHAKRABORTY	SENIOR TECHNICAL ASSISTANT
231	DIPANKAR DAS	TECHNICAL ASSISTANT (SELECTION GRADE-I)	250	SUGATA MUNSHI	SENIOR TECHNICAL ASSISTANT
232	JAYANTA KUMAR CHANDRA	TECHNICAL ASSISTANT (SELECTION GRADE-I)	251	SUMITRA BAGCHI	SENIOR TECHNICAL ASSISTANT
233	MILAN KANTI DEY	TECHNICAL ASSISTANT (SELECTION GRADE-II)	252	SUSANTA DHARA	SENIOR TECHNICAL ASSISTANT
234	RANJAN KUMAR BISWAS	TECHNICAL ASSISTANT (SELECTION GRADE-I)	253	SUTAP CHAKRABORTY	SENIOR TECHNICAL ASSISTANT
235	SANTANU CHATTOPADHYAY	TECHNICAL ASSISTANT (SELECTION GRADE-I)	254	AMAL KUMAR MANDAL	TECHNICAL ASSISTANT
236	SUSANTA KUMAR CHAKRABORTY	TECHNICAL ASSISTANT (SELECTION GRADE-I)	255	AMITAVA CHOWDHURY	TECHNICAL ASSISTANT

SL NO.	NAME OF THE EMPLOYEE	DESIGNATION	S	L O.	NAME OF THE EMPLOYEE	DESIGNATION	
256	AMITAVA PAL	TECHNICAL ASSISTANT	28	30	SARBANI SARKAR	TECHNICAL ASSISTANT	
257	AMIYA RATAN ROUT	TECHNICAL ASSISTANT	28	31	SINTU DAS	TECHNICAL ASSISTANT	
258	BIJIT KUMAR DEY	TECHNICAL ASSISTANT	28	32	SNEHASHIS SAHA	TECHNICAL ASSISTANT	
259	BISHNU PADA	TECHNICAL ASSISTANT	28	33	SOMA SARDAR	TECHNICAL ASSISTANT	
0.00	CHOUDHURY	TECHNICAL ACCIOTANT	28	34	SOUMEN GOPE	TECHNICAL ASSISTANT	
260	BISWAJIT SAMANTA	TECHNICAL ASSISTANT	28	35	SOUVIK PATRA	TECHNICAL ASSISTANT	
261	BRAJA GOPAL KONER	TECHNICAL ASSISTANT	28	36	SUBHAJIT BISWAS	TECHNICAL ASSISTANT	
262	BRINDABAN PATTA	TECHNICAL ASSISTANT	28	37	SUBHAS GANGULY	TECHNICAL ASSISTANT	
263	HARI PRASAD SAHA	TECHNICAL ASSISTANT	28	38	SUBHASISH	TECHNICAL ASSISTANT	
264	INDRANI SANTRA	TECHNICAL ASSISTANT	00	20	PRADHAN	TECHNICAL ACCICTANT	
265	JANARDAN KAR	TECHNICAL ASSISTANT			SUJATA MISRA	TECHNICAL ASSISTANT	
266 267	KANKAR MOHAN DAS KEYARANI MANDAL	TECHNICAL ASSISTANT TECHNICAL ASSISTANT	29	90	SWAPAN KUMAR JANA	TECHNICAL ASSISTANT	
268	MOHINI MOHAN DEBSHARMA	TECHNICAL ASSISTANT	29	91	SWAROOP SHOBHAN MUKHERJEE	TECHNICAL ASSISTANT	
269	NANI GOPAL ROY	TECHNICAL ASSISTANT	29	92	BALARAM RAY	TECHNICIAN (SELECTION GRADE-II)	
270	PARTHA SARATHI BARURI	TECHNICAL ASSISTANT	29	93	BISWANATH POREL	MULTI TASKING STAFF (WORKSHOP	
271	PRADIP KUMAR DAS	TECHNICAL ASSISTANT				ATTENDANT-I)	
272	PRADIP MISTRY	TECHNICAL ASSISTANT	29	94	AJOY KUMAR DAS	MULTI TASKING STAFF	
273	RAJIB	TECHNICAL ASSISTANT				(WORKSHOP ATTENDANT- III)	
074	BANDYOPADHYAY	TECHNICAL ACCIOTANT	29	95	MD SHAMIM	MULTI TASKING STAFF	
274	RAMESH HALDER	TECHNICAL ASSISTANT				(WORKSHOP ATTENDANT- III)	
275	RUMELI BOSE	TECHNICAL ASSISTANT	20	96	JOYDEB DAS	MULTI TASKING	
276	SALIL KUMAR DALUI	TECHNICAL ASSISTANT				STAFF (WORKSHOP	
277	SANJOY NASKAR	TECHNICAL ASSISTANT		. 7	AMADENDEA MATI	ATTENDANT-I)	
278	SANTOSH KUMAR KAYAL	TECHNICAL ASSISTANT	29	97	AMARENDRA NATH POLLEY	MULTI TASKING STAFF (WORKSHOP ATTENDANT-II)	
279	SARBANI BARARI	TECHNICAL ASSISTANT				ALLEINDAINT-II)	

2.3 Institute Officers

Details of incumbent officers have been provided here.

Table 2.3: Detail List of Institute Officers

NAME OF THE EMPLOYEE	RE-DESIGNATION W.E.F. 04.03.2014
DR. BIMAN BANDYAPADHYAY	REGISTRAR
SRI SAMBHU NATH DATTA	DEPUTY REGISTRAR
DR. NIRMALYA KR. BHATTACHARYYA	DEPUTY REGISTRAR
DR. DEVASIS DATTA	DEPUTY REGISTRAR
SRI ALOK KR. MAITY	DEPUTY REGISTRAR
SRI DIPANKAR CHAKRABORTY	ASSISTANT REGISTRAR
SRI ALOK KR. MITRA	ASSISTANT REGISTRAR
DR. BIVORE DAS	ASSISTANT REGISTRAR
SRI SHIB SANKAR BASAK	ASSISTANT REGISTRAR
SRI USHA SHANKAR BHATTACHARYA	ASSISTANT TRAINING OFFICER
DR. HARI PRASAD SHARMA	JOINT LIBRARIAN
SRI SUSHIL BARMAN	ASSISTANT LIBRARIAN (SELECTION GRADE)
SRI ABANI ORAON	ASSISTANT LIBRARIAN
DR. RUBI GOLDER	MEDICAL OFFICER
	DR. BIMAN BANDYAPADHYAY SRI SAMBHU NATH DATTA DR. NIRMALYA KR. BHATTACHARYYA DR. DEVASIS DATTA SRI ALOK KR. MAITY SRI DIPANKAR CHAKRABORTY SRI ALOK KR. MITRA DR. BIVORE DAS SRI SHIB SANKAR BASAK SRI USHA SHANKAR BHATTACHARYA DR. HARI PRASAD SHARMA SRI SUSHIL BARMAN SRI ABANI ORAON

2.4 Faculty/Officers/Staff Superannuated

As the Institute was transformed from a State University to a Centrally Funded Technical Institute, the age of Superannuation of teachers was changed from 60 to 65. The list of staff members who retired during the period mentioned is furnished in Table 2.4.

Table 2.4: List of Non-Teaching retired employees from April 2018 to March 2019

SL. NO.	EMPLOYEE NAME	DATE OF RETIREMENT
1	ASHOK KR DAS	(4/2018)
2	S.S. GANGULY	(6/2018)
3	RAMNATH SHAW	(6/2018)
4	T.K. DAS	(6/2018)
5	BIMAL KR JANA	(6/2018)
6	S.K.MAJI	(10/2018)
7	JHUMA DAS	(11/2018)
8	PARBATI DAS	(11/2018)
9	GOBARDHAN NAYAK	(1/2019)
10	BISWANATH DAS	(3/2019)
11	R.B. NAYAK	(3/2019)







Academic Programmes

The Institute offers the following undergraduate and postgraduate programmes.

- Four-year B.Tech degree programme
- Five-year Dual Degree(B.Tech-M.Tech) programme
- Five Year B.Arch degree Programme

- Two-Year Full-Time M. Tech degree Programme
- Two-Year Full-Time MURP degree Programme
- Two-Year Full Time M.Sc Programme
- Two Year Full Time MBA Programme

3.1 Four-year B.Tech Degree Programme

The Institute offers 4-year full time courses leading to B.Tech degrees in the following nine disciplines

- (a) Aerospace Engineering
- (b) Civil Engineering
- (c) Computer Science and Technology
- (d) Electrical Engineering
- (e) Electronics and Telecommunication Engineering
- (f) Information Technology

- (g) Mechanical Engineering
- (h) Metallurgy and Materials Engineering
- (i) Mining Engineering

The programme offers two options on the basis of performance (i) Change of discipline at the end of 2nd semester and (ii) at the end of 6th semester, to switch over to dual B.Tech-M.Tech degree programme for completing M.Tech programme along with the B.Tech programme by studying for one more year.

3.2 Five-Year Integrated B.Arch Degree Programme

The Institute offers a regular full time five year degree programme in architecture leading to B.Arch degree by Architecture Town & Regional Planning Department.

3.3 Two-Year Full-Time M.Tech Degree Programme

The Institute offers 2-year full time courses leading to M.Tech degree in the following fifteen disciplines

- i) Engineering Mechanics- Aerospace Engineering & Applied Mechanics Dept.
- ii) Civil Engineering-Civil Engineering Department
- iii) Computer Science and Engineering- Computer Science and Technology Dept.
- iv) Electrical Engineering- Electrical Engineering Department
- v) Electronics and Telecommunication Engineering Electronics and Telecommunication Engineering Department
- vi) Renewable Energy Science and Technology- Centre of Excellence in Green Energy and Sensor Systems

- vii) Biomedical Engineering- Centre for Health Care Science and Technology
- viii) Safety & Occupational Health- Centre for Health Care Science and Technology
- ix) Information Technology- Information Technology Department
- x) Materials Engineering- Dr. M N Dastur School of Materials Science and Engineering
- (xi) Metallurgy & Materials Engineering Metallurgy and Materials Engineering Department
- xii) Mechanical Engineering- Mechanical Engineering Department

- xiii) Mechatronics-School of Mechatronics & Robotics
- xiv) Mining Engineering- Mining Engineering Department
- xv) Geoinformatics- Mining Engineering Department
- xvi) VLSI Design- School of VLST Technology

All the above mentioned Engineering Departments including Architecture offer 2-year full time PG programme leading to M.Tech and MURP (for Architecture) degrees. The admission was done through CCMT or the Centralised Counselling System for the NITs and CFTIs. Details of specialisation for the courses are furnished in Table 3.1

Table 3.1: Details of Specialisations in ME/M.Tech. Programmes

SL. NO.	DEPARTMENT	SPECIALISATION
1	Civil Engineering	a) Structural Engineering
		b) Soil Mechanics and Foundation Engg.
		c) Water Resources Engg.
		d) Highway & Traffic Engg.
		e) Environment Engg.
2	Electrical Engineering	a) Electrical Machines
		b) Power Systems
		c) Power Electronics & Drives
		d) Control System
3	Electronics &Telecommunication Engineering	a) Digital Systems
		b) Microwave & Communication Engineering
		c) Communication Engg. & Signal Processing
4	Computer Science & Engineering	Computer Science & Engineering
5	Aerospace Engineering and Applied Mechanics	a) Mechanics of Solids
		b) Mechanics of Fluids
6	Mechanical Engineering	a) Machine Design
		b) Heat Power Engineering
		c) Production Engineering
7	Information Technology	Information Technology
8	Metallurgy & Materials Engineering	a) Iron and Steel Technology
		b) Surface Engineering
9	Mining Engineering	a) Mining Engineering
		b) Geo-informatics
10	Architecture Town & Regional Planning	Master of Urban & Regional Planning
11	School of Material Sc. & Engineering	Material Sc. & Tech.
13	School of VLSI Design	VLSI Design
14	Center of Excellence for Green Energy & Sensor Systems	Renewable Energy Science & Technology
15	Centre for Healthcare Science and Technology	Biomedical Engineering

3.4 Two-Year Full Time M.Sc. Degree Programme

The Institute offers 2-year full time courses leading to M.Sc. degree in the following five disciplines

- a) Chemistry Department of Chemistry
- b) Food Processing & Nutrition Sciences- School of Community Science and Technology
- c) Applied Geology Department of Earth Science
- d) Applied Mathematics Department of Mathematics
- e) Physics Department of Physics

These programmes are offered by the departments of Physics, Chemistry, Mathematics, Earth Sciences and by the School of Community Science and Technology (SOCSAT).

3.5 Two-Year Full Time MBA Programme

The Institute offers a two-Year full-time MBA programme by School of Management Science.

3.6 Ph.D Programme

On successful completion, scholars enrolled/registered for doctoral programme of the institute obtain Ph.D. degree in (i) Architecture, (ii) Engineering, (iii) Science and (iv) Management

List of Ph.D. AWARDEE in the Convocation held on 23rd December, 2018

SL. NO.	NAME OF THE CANDIDATE	DEPARTMENT	STREAM
1	SAYAHNYA ROY	AE & AM	Engineering
2	PRADIP PAUL	AE & AM	Engineering
3	PRASUN DUTTA	AE & AM	Engineering
4	KRISHNENDU BARMAN	AE & AM	Engineering
5	SOUMI BHATTACHARYYA	CE	Engineering
6	MOUMITA PALCHAUDHURI	CE	Engineering
7	INDRAJIT CHOWDHURY	CE	Engineering
8	SANDIPAN NATH THAKUR	CE	Engineering
9	SUDIPTA PAL	CE	Engineering
10	SUPARNA BISWAS	CST	Engineering
11	SHAMPA SENGUPTA	CST	Engineering
12	SOUVIK BASU	CST	Engineering
13	SAIKAT MAITY	CST	Engineering
14	BARNALI KUNDU (SARKAR)	EE	Engineering
15	PARTH SARATHI PANIGRAHY	EE	Engineering
16	AYAN CHATTERJEE	ETC	Engineering
17	ATANU BANERJEE	ETC	Engineering

SL. NO.	NAME OF THE CANDIDATE	DEPARTMENT	STREAM
18	KOUSHIK DUTTA	ETC	Engineering
19	ANUMOY GHOSH	ETC	Engineering
20	SUDARSHAN CHAKRAVORTY	ETC	Engineering
21	JOYDEEP BANERJEE	ETC	Engineering
22	MOUSUMI BHANJA	ETC	Engineering
23	PRATIK MONDAL	ETC	Engineering
24	SUKANTA DHAR	CEGESS	Engineering
25	HEMANTA GHOSH	CEGESS	Engineering
26	SUCHISMITA MITRA	CEGESS	Engineering
27	ANKUR BHATTACHARJEE	CEGESS	Engineering
28	ARIJIT BARDHAN ROY	CEGESS	Engineering
29	SUBHAMITA MUKHERJEE	IT	Engineering
30	MAYUKH SARKAR	IT	Engineering
31	NIMISHA GHOSH	IT	Engineering
32	SANDIP BANERJEE	PDSIT	Engineering
33	CLIO ANDREA ZANDLIET	MNDSMSE	Engineering
34	UJJWAL GHANTA	MNDSMSE	Engineering
35	ASHIM GUHA	ME	Engineering
36	DEBAJIT MISRA	ME	Engineering
37	GOPINATH T.	Met and Mat Engineering	Engineering
38	PRATIK KUMAR MALLICK	Met and Mat Engineering	Engineering
39	VIBHASH CHANDRA SINHA	Met and Mat Engineering	Engineering
40	GOURAB DHARA SHARMA	Mining Engineering	Engineering
41	PARTHA SARATHI GUPTA	VLSI	Engineering
42	GOPINATH MONDAL	Chemistry	Science
43	BIBHUTI BHUSHAN SHOW	Chemistry	Science
44	SUVONIL SINHA RAY	Chemistry	Science
45	SANJIB SHYAMAL	Chemistry	Science
46	SHATABDI BOXI	Chemistry	Science
47	ANIRBAN GHOSH	Chemistry	Science
48	CHANDRIMA DAS	Chemistry	Science
49	PRIYADARSHINI CHAKRABORTY	SOCSAT	Science
50	ASIM KUMAR DAS	Mathematics	Science
51	CHAITALI BANDYOPADHYAY	Mathematics	Science
52	TOTAN GARAI	Mathematics	Science

SL. NO.	NAME OF THE CANDIDATE	DEPARTMENT	STREAM
53	BACHCHU SK	Mathematics	Science
54	SACHINDRA NATH MATIA	Mathematics	Science
55	CHAITY GANGULI	Mathematics	Science
56	SUVANKAR BISWAS	Mathematics	Science
57	AMIT DAS	Physics	Science
58	DIBYENDU SHEE	Physics	Science
59	SHILADITYA ACHARYA	Physics	Science
60	MRINAL SEAL	Physics	Science
61	MOUSUMI MITRA	Physics	Science
62	JNUI DEB MALLICK DATTA	HRM	Management
63	MONALIKA DEY	SOMS	Management

3.7 Student Strength

Table 3.2 Student Strength as on 14.09.2018

CATEGORY	UG				PG				PH.D.				TOTAL
	MAL	E.	FEM	ALE	MAI	LE	FEM	ALE	MA	LE	FEM <i>A</i>	\LE	
	NPH	PH	NPH	PH	NPH	PH	NPH	PH	NPH	PH	NPH	PH	
General	820	43	142	5	367	4	120		382		125		2008
SC	279		41		88		29		125		33		595
ST	166		38		19		6		4				233
OBC	629		84		199		30		76		11		1029
Total	1894	43	305	5	673	4	185	0	587	0	169	0	3865

Table 3.3 Ph.D. Students at IIESTS

PH.D STUDENTS	2014-15	2015-16	2016-17	2017-18	2018-19
No. of Full Time Admitted	259	131	71	171	52
Degree Awarded	52	57	74	83	63

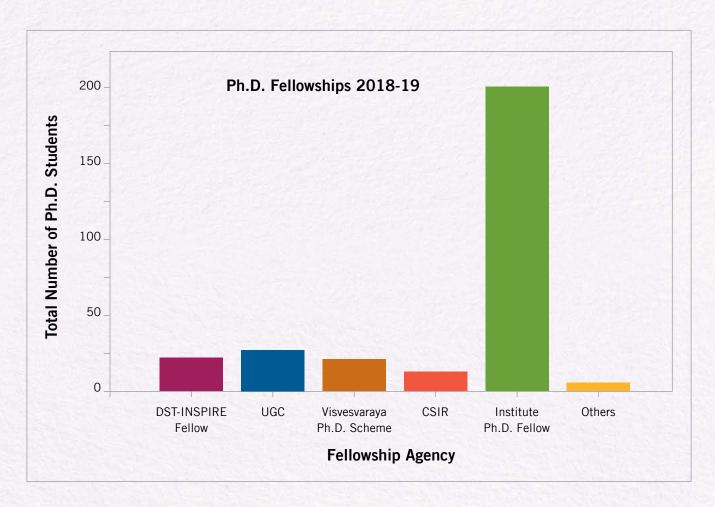
3.8 Scholarship to Students

Undergraduate and Dual Degree

The Institute offers a large number of scholarships to its students. Practically every meritorious and/or financially poor student may get scholarship. A number of scholarships offered by the Global Alumni Association of this Institute are also available to the students. Full Scholarship for all students in the dual-degree courses will be available during 9th to 10th semester.

Post Graduate Level

Besides the GATE scholarship for the M.Tech students the Institute offers a large number of scholarships to its students. Practically every meritorious and/or financially poor student may get scholarship. Currently almost 50% of the students are getting scholarships. No Tuition Fee is to be paid by the students belong to SC/ST/PwD category. A number of scholarships offered by the Global Alumni Association of this Institute are also available to the students. For details, students are also advised to visit the website of the Global Alumni Association of this Institute. Total number of scholars under different fellowship are shown below. The number of candidates with scholarship at Ph.D. level offered by different funding agencies are shown in the following Bar diagram.



3.9 Institute Results

Statistics of Examination result of the Year 2018 (UG and PG)

COURSE	APPEARED	PASSED	PASS PERCENTAGE
Bachelor of Engineering in Mechanical Engineering	56	55	98.21
Bachelor of Engineering in Civil Engineering	66	66	100
Bachelor of Engineering in Electrical Engineering	42	41	97.62
Bachelor of Engineering in Electronics & Telecommunication Engineering	34	34	100

COURSE	APPEARED	PASSED	PASS PERCENTAGE
Bachelor of Engineering in Metallurgy & Materials Engineering	26	24	92.3
Bachelor of Engineering in Mining Engineering	27	27	100
Bachelor of Engineering in			
Computer Science & Technology	45	45	100
Bachelor of Engineering in Information Technology	36	36	100
Bachelor of Engineering in Aerospace Engineering	23	23	100
Bachelor of Architecture	17	17	100
Total (Under Graduate Degree)	372	368	98.92
Master of Technology in Mechanical Engineering	15	15	100
Master of Technology in Civil Engineering	28	28	100
Master of Technology in Electrical Engineering	15	15	100
Master of Technology in Electronics & Telecommunication Engineering	24	24	100
Master of Technology in Engineering Mechanics	19	19	100
Master of Technology in Mining Engineering	3	3	100
Master of Technology in			
Computer Science & Engineering	12	12	100
Master of Technology in Information Technology	10	10	100
Master of Urban and Regional Planning	9	9	100
Master of Technology in Geoinformatics	7	7	100
Master of Technology in Renewable Energy Science and Technology	10	10	100
Master of Technology in VLSI Design	12	12	100
Master of Technology in Materials Engineering	10	10	100
Master of Technology in Mechatronics	14	14	100
Master of Science in Chemistry	24	24	100
Master of Science in Applied Mathematics	27	27	100
Master of Science in Physics	21	21	100
Master of Science in Applied Geology	22	22	100
Master of Science in Food Processing & Nutrition Sciences	22	22	100
Master of Biomedical Engineering	6	6	100
Master of Business Administration	8	8	100
Total (Post Graduate Degree)	318	318	100



3.10 Convocation



The Fifth Convocation of the Indian Institute of Engineering Science and Technology, Shibpur was held on 23rd December, 2018. The Hon'ble Director of the Institute, Prof. Parthasarathi Chakrabarti along with the Respected Chief Guest for the occasion, Swami Atmapriyananda, Vice Chancellor of Ramkrishna Mission Vivekananda University, Members of the Board of Governors, and Members of the Academic Senate graced the Convocation with their presence. It was well attended by graduating students and their

family members, members of faculty, staff and students, invited dignitaries, guests, and members of the media. The Convocation celebrated the successful completion of the academic year 2017-18, which marked 386 undergraduate level and 319 postgraduate level students passing out of the institute. Further, 65 Ph.D. degrees were awarded in the ceremony. Institute Medals were awarded to thirty candidates securing the highest marks in different disciplines. The President of India Gold Medal, awarded to the student who secures first position among the undergraduates of all ten engineering disciplines taken together, was conferred on Shrouti Dutta from the Department of Aerospace Engineering and Applied Mechanics. Several endowment medals were also awarded to the students who had stood first in their respective disciplines or had secured highest marks in particular subjects. In his address, Prof. Chakrabarti appreciated that the institute is registering a commendable growth in the research activities clearly evident by several facts such as filing of new patents, rise in the publication record of the faculty members and the students, increase in the number of Doctoral students enrolled in the institute, and rise in the volume of sponsored research and consultancy of the institute with new research projects being sanctioned to the institute since the last Convocation by several funding agencies. Prof. Chakrabarti happily acknowledged that







the faculty members of the institute had also actively participated in many conferences and seminars, organized several academic activities in the institute, and along with the students won several prestigious awards and fellowships since the last Convocation. Prof. Chakrabarti also commented on the satisfactory placement record of the institute and observed that many students have simultaneously opted for higher studies in reputed Institutes abroad and in India. He also mentioned the institute's well-planned mentoring of Institute of Bhagalpur College of Engineering (BCE), Bhagalpur, Bihar under the TEQIP-III twinning agreement between IIEST, BCE and MHRD, and productive use of TEQIP funding in providing assistance to students to attend workshops, seminars, and conferences. He further focussed on the infrastructural development of the institute since the last Convocation such as setting up of multiple laboratories and upgrading the facilities of Ramanujan Central Library. Finally, Prof. Chakrabarti also acknowledged such activities of the institute that have social impact through community engagement such as the Department of Civil Engineering innovating technologies to provide arsenic-free water to villagers, Dr. M. N. Dastur School of Materials Science and Engineering providing hands-on training for preparation of fire retardant jute composite to rural women, and the Department of Humanities and Social Sciences continuing to run ICHHE - a school for underprivileged children.







Academic Departments, Schools and Centres

When founding of the Institute was contemplated in 1854, it is interesting to note that the government of India put the condition that the College would 'not be sub-divided into departments'. Much has changed ever since. As the institute expanded continually, the internal constitution of the institute also underwent structural adjustments. New departments were opened; a few were widened while a few others were winded up. The following paragraphs present very brief profiles of the departments and centres with which the Institute, in its latest incarnation as IIEST, launched itself up.

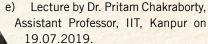


4.1 Aerospace Engineering and Applied Mechanics

The department of Applied Mechanics was established as a separate major engineering department in 1947 and subsequently the Drawing Section was attached to it in late fifties. With effect from 2008, the department has been renamed as the Department of Aerospace Engineering and Applied Mechanics. Till date, the prominent research areas of the department are Biomechanics, Robotics and Mechatronics, Structural Dynamics and Earthquake Engineering, Computational Fluid Dynamics, Soil-Structure Interaction, Eco-Hydraulics etc. Recent sponsors of research projects at the department include: DST, AICTE, UGC, BARC, BRNS, MHRD, and CSIR. The research outcomes of the department can be gauged by the significant number of publications made by faculty members in journals of repute.

- Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)
 - a) Vijit Kanjilal (B.Tech), AE & AM (Roll No.: 511315038) received the prestigious Prime Ministers

- b) Tamas Paul (B.Tech), AE & AM, Roll no.: 511316013 received an award with financial support from GABESU for development of VTOL UAV.
- Workshops/Conferences/Seminars organized
 - a) Invited lecture by Prof. Debopam Das, IIT Kanpur on 19th July, 2018.
 - b) Lecture by Prof. Surjya Kumar Maiti, G K Devarajulu Chair Professor, Mechanical Engg. Department, IIT Bombay on 06.09.2018.
 - c) Lecture by Dr. Pijush Ghosh, Associate Professor, Department of Applied Mechanics, IIT Madras on 02.01.2019.
 - d) Seminar on: From Computational Thinking to Security Engineering: Evolution and Challenges by Prof. Hsueh-Yung Benjamin Koo, Director of International Relations of iCenter, Professor of Tsinghua University and Dr. Gautam Dasgupta, Professor, Columbia University, New York on 16.01.2019.



f) Two days' workshop on VSSC ISRO's FEAST FEA Technology from 01.08.2019 to 02.08.2019.



- Workshops/Conferences/Seminars Attended
 - a) GeM and e-procurement Integrated Training and Policy Research sponsored by TEQIP-III, 17-18 June, 2019.
 - Deep Learning and its usability through hardware interactions, sponsored by TEQIP-III, 24-28 June, 2019.
 - c) Classroom Teaching by NITTTR, Kolkata organized by TEQIP-III, 9-11 July, 2019.
 - d) 5th International Conference on Aircraft Core Technology, Gyeongsang National University, Jinju, South Korea. (4 – 5 June, 2019).

Patent Filed

Patent Registered National, Patent Tile: Quadrotor Convertiplane Air Vehicle, Patent Number: 201711020832

Patent Registered National, Patent Title: A Novel Sprinducedornithopter Wing Design with Bent Spar, Patent Number:201911016240

- Major Research Facilities/Lab developed:
 - Development of Propeller Test Ring.
 - Project on VTOL aircraft design and development.
 - Under-development Low Speed Aerodynamics Lab.



4.2 Architecture, Town and Regional Planning

After Independence, the Bengal Engineering College became the first institution in this country to initiate a Five-year full time undergraduate Degree course on Bachelor of Architecture (B.Arch.) and two-year part time postgraduate on Diploma course in Town and Regional Planning (DTRP), from 1949. In 1975 the part time Diploma programme was upgraded to a full time postgraduate degree programme in Town and Regional Planning (MTRP).Now, as an integral part of the IIEST, the department has expanded considerably with varied areas of research that include the following

Architecture and Built form, Computer Aided Architecture, Vernacular and Rural Architecture, Energy and Building, Urban Design, Architectural Conservation, Housing and Human Settlement Planning, Transportation Planning, Remote Sensing and Geographical Information System, Environmental Planning and Management, Rural Planning and Development, Regional Planning and Development, Earthquake resilient Buildings and Built form, Urban Planning/Town Planning, Infrastructure Planning, Urban administration, management and finance, Climate Change and Human Settlements. Presently the department has developed several state of the art facilities for the benefit of the students, such as Material Museum for permanent display of samples of building materials, Computer Aided Architectural Design laboratory, Multimedia Simulation Laboratory and Remote Sensing and GIS laboratory.

- Achievements/Awards received by the faculty members:
 - a) Dr. Sutapa Das received 10th CIDC Vishwakarma Award by Construction Industry Development Council,
 a joint venture by Niti Aayog and Construction Industry of India.

- b) Dr. Sutapa Das received IEI Shrimati Saroma Sanyal Memorial Prize 2018 (best paper in water supply and sanitary engineering) by Institution of Engineers (India) for the paper titled 'Sustainable waste water treatment in developing countries: A study of IIT Kharagpur campus'.
- c) Prof. Keya Mitra is serving as a Member of the International Editorial Board, Projects for: Series of Publications, Sapienza Universita di Roma
- d) Prof. Keya Mitra is serving as an International External Reviewer for the Research Development Fund Proposals at Xi'an Jiaotong-Liverpool University (XJTLU), China.
- e) Prof. Keya Mitra is serving as a Member, National Advisory Committee, National Information Centre of Earthquake Engineering, IIT Kanpur
- f) Prof. Parthasarathi Mukhopadhyay is serving as an Alternate Member of the Panel for Timber and Bamboo (CED 46:P6) under the National Building Code Sectional Committee, CED 46.
- Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)
 - a) Mr. Abhishek Sharma and Mr. Vaibhav Singh were awarded the Saint Gobin Scholarship 2018 for their Design of Flexible Living Spaces
 - b) Mr. Kiran Bari secured First Position in Javelin Throw at the Annual Athletic meet held at IIEST Shibpur on 12 March 2019.



c) Ms. Nayanika Dey was awarded Suhas Choudry Memorial Scholarship under the auspices of Global Alumni Association of Bengal Engineering and Science University (GAABESU) Scholarship Program 2018-19 on 23 February 2019.

d) Ms. Abhinanda Chatterjee was awarded the First Prize of Prof. V. N. Prasad, National Best Thesis Award 2018 for post-graduate students under the auspices of Institute of Town Planners, India (ITPI) during Valedictory Function of the 67th National Town and Country Planning Congress on 05 January 2019.

Workshops/Conferences/
 Seminars organized

a) National Workshop on Earthquake
Resistant Practices for Undergraduate
Students of Architecture held at IIT Kanpur
during July 2019 to sensitize the students
of architecture in earthquake resistant design
practices through technical lectures followed by
design studios, organized by Prof. Keya Mitra as
Joint Coordinator.

Workshops/Conferences/Seminars attended in India and abroad

b) Prof. Arup Sarkar attended the International Conference on Sustainable Development at Rome, Italy, organised by the European Center of Sustainable Development during September 2018, as paper presenter.

c) Dr. Sutapa Das attended 2nd INAE Youth Conclave during 10-12 August 2018 at IIT Kharagpur as a jury member.

d) Dr. Sutapa Das attended Indo-Swiss Building Energy Efficiency (BEEP) Camp during September 2018 for Building Science Educator, Ahmedabad as invited expert.

e) Dr. Sutapa Das attended 33rd Indian Engineering Congress, Udaipur during 21-23 December 2018 as invited delegate.

4.3 Chemistry

The over a century old department has a glorious past. The Department, besides engaging itself in undergraduate and postgraduate teaching has a heritage of conducting research in various fields. At present, the faculty members are involved in research in the frontier areas of Chemistry and Chemical Physics, which include Coordination & Bioinorganic Chemistry, Carbohydrate Chemistry, Electrochemistry & Corrosion Science, Fuel Cell Technology, Molecular Recognition & Supramolecular Chemistry, Structural Chemistry, Catalysis, Synthetic Organic & Organometallic Chemistry, Thin Film Semiconductor, Solar Photo-voltaic & Photo-electrochemical Non-linear Optical Phenomena: Modelling& Computation, Non-equilibrium Statistical Mechanics. Relativistic & non-relativistic Electronic Structure Theory. The department is endowed with a number of research projects sponsored by various funding agencies. The department has also been selected for MHRD special grant and DST-FIST and UGC-SAP programmes.

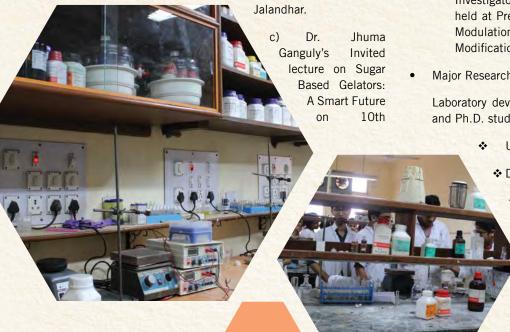
- Workshops/Conferences/Seminars attended in India and abroad
 - a) Prof. Ajit Kr. Mahapatra Invited lecture on A journey from TLC stick to thin film membrane: Fluorescent sensing based toxic ions detection at SESTEC-2018, May 23-26, DAE-BRNS (BITS Pilani Goa campus).
 - b) Dr. Jhuma Ganguly's Invited lecture on Microgels for Development of Functional Bio-inspired application on 106th Indian Science Congress, India 3rd to 7th January, 2019, LPU,

Indo-German Frontiers of Engineering Symposium organized by the Alexander von Humboldt Foundation, DST and IIT, Kanpur from 24 to 27 May 2018 at Potsdam, Germany.

- d) Dr. Chinmoy Bhattacharya attended 12th International Symposium on Advances in Electrochemical Science and Technology (iSAEST-12) held at Hotel Trident, Chennai during 08-10 January 2019, organized by Society for Advancement of Electrochemical Science and Technology (SAEST) & CSIR – CECRI, Karaikudi.
- e) Dr. A. Kar visited the Department of Chemistry, University of Cambridge for a scientific collaboration from 23rd May- 9th June, 2018. I had meetings with the co-workers to discuss scientific ideas and future project ideas. Royal Society London funded this visit.
- f) Dr. A. Kar visited Salem Co-operative Dye Association in Salem, Tamil Nadu, India from 28th March-31st March, 2019 to look at water treatment and decontamination processes used in the industry. Royal Society London funded this visit.
- g) Conferences (Oral Presentation)- Dr. Jayanta Nanda, Peptide replication in the context of Origins of life, 7th Indian Peptide Society Symposium held at BITS-Pilani, Hyderabad Campus, Hyderabad, February 28 to March 01, 2019.
- h) Dr. Debabani Ganguly attended Regional Young Investigators' Meeting Kolkata, Feb 5-6th, 2019, held at Presidency University, Kolkata on Structural Modulation of p53 terminals upon Post-Translational Modification.
- Major Research Facilities/Lab developed:

Laboratory developed for Undergraduate, Post graduate and Ph.D. students.

- UV-VIS spectrophotometer
 - Diode array spectrophotometer
 - UV-VIS-NIR spectrophotometer with DRS attachment
 - FT-IR with diamond ATR attachment
 - Gas Chromatography



4.4 Civil Engineering

Founded in May, 1856, the Department of Civil Engineering, as old as the Bengal Engineering College itself, is a 149-year-old Engineering Department. The Department was, originally established as the Civil Engineering College, Calcutta with the object of imparting training to personnel in the field of Civil Engineering for the fulfilment of the need of the Public Works Department of the Government of India. Since then it has been striving to develop and maintain a glorious national tradition of producing quality Civil Engineers for the country. In course of time the Civil Engineering College was upgraded to the status of a full-fledged Government Engineering College with various disciplines, and renamed as the Bengal Engineering College. Then it was upgraded to Bengal Engineering and Science University, Shibpur. Presently, the institute has been converted to an Institute of National Importance and named as IIEST Shibpur.

The Civil Engineering department, at present, provides facilities for research and development in the broad areas of Structural Engineering, Geo-Technical Engineering, Water Resources Engineering, Environmental Engineering and Transportation Engineering. The Department has been associated with various sponsored projects in the above fields. It is one of the Government of India recognized Quality Improved Programme Centres and associated with topical research and development activities. The Department regularly undertakes sponsored research from the AICTE, MHRD, UGO, CSIR etc.



- Achievements/Awards received by the faculty members:
 - a) Awarded the "Young Geotechnical Engineer Best Paper Award" sponsored by Centre for Geomechanics and Railway Engineering, University of Wollongong, Australia and the Organizing Committee of ISGTI-2018for the paper entitled "Use of hybrid geosynthetics in mitigating rainfall induced slope instability" [Awarded on 8th April 2018 at the International Symposium on Geotechnics of Transportation Infrastructure (ISGTI 2018), held in IIT Delhi from 7th 8th April].
- Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)
 - a) INSDAG All India Design Competition; a group of three 4th year students were awarded the 1st prize.
 - b) Atin Roy received the best paper award in the student category (honorary mention) at the 4th International Conference on Reliability, Safety and Hazard (ICRESH 2019), Jan. 10-13, 2019 at the Indian Institute of Technology, Madras.
 - Neelanjan Dutta (research scholar) Received 3rd Position at Rural Drinking Water Technology Hackathon, IIT Kharagpur, 2019.

- d) Mr. Najmul Haque Barbhunia obtained First Best Paper Award in International Conference on Advanced Technologies for Industrial Pollution Control (ATIPC 2018) during December 17-19, 2018.
- e) Ms. Sushma Das obtained Second Best Paper Award in International Conference on Advanced Technologies for Industrial Pollution Control (ATIPC 2018) during December 17-19, 2018.
- · Workshops/Conferences/Seminars organized
 - a) International Conference On Advanced Technologies for Industrial Pollution Control (ATIPC-2018), Organized by Civil Engineering Department, IIEST, Shibpur. December 17–19, 2018. (Prof. Debabrata Mazumder, Prof. Chanchal Mazumder and Prof. Asok Adak, Coordinators)
 - b) Conference on Water, Sanitation and Hygiene (WASH) for All – Sustainability Issues under Rural Indian Conditions, Organised by CiviL Engineering Department, IIEST Shibpur and Rural Development Forum, IE(I) (Prof. Anirban Gupta, Organising Secretary)
- Workshops/Conferences/Seminars attended in India and abroad
 - a) Prof. Dipankana Bhattacherjee: International Symposium on Geotechnics of Transportation Infrastructure (ISGTI 2018), April 07-08, 2018, IIT Delhi, India.
- Patent Filed

One–Pot Synthesis of Grapheme Oxide-Mn-Fe Composite Nano-Material And Purifying Water By The Same.

Application No. TEMP/E- 1/52706/2018-KOL. Dated 20.12.2018

- Major Research Facilities/Lab developed:
- a) Laboratory Model Testing Facility for Measurement of Ground Motion Parameter (Peak Particle Velocity, Frequency and Time Period) under simulated Construction Induced Vibration.
- b) Laboratory Model Testing Facility to Study the Behaviour of Embankment under simulated Traffic loading





4.5 Community Science and Technology





4.6 Computer Science and Technology

The Department of Computer Science and Technology (CST) was established in 1982. Since its inception the department has played an important role in developing a vibrant and forward looking academic environment. The department always maintains state-of-the-art infrastructure and facilities for advanced research and consultancy. It was accredited by the National Board of Accreditation (NBA) as 'A' grade and received ISO 9000 certification in 1999-2000. The department was also honoured as the DST-FIST sponsored department in 2004. Some of the thrust areas identified by the department include Cryptanalysis, Database Verification/ Consistency Checking and Data Mining, Image Processing including document image processing and CBIR, Avionics and robotics control, VLSI Design and Testing for Sub-micron Technology. Further, the department also conducts advanced research on Interconnection network, Mixed Signal Design and Testing, Mobile Computing, Theory and Applications of Cellular Automata in diverse fields, Synthesis and Testing of reversible circuit, Digital Micro fluidic Bio Chip and Nano-Biochip, Pattern Recognition, and Bio Informatics.

- Workshops/Conferences/Seminars organized
 - "1st International Conference, Computational Intelligence in Pattern Recognition (CIPR)", During
 - 19th 20th January 2019
 - b) "Managing Uncertainty in Health Informatics - A Data Driven Approach", During 31st -
 - "Modeling and Performance Communication Networks". Delivered by Prof. Mansoor Alam, Electrical Engineering Computer Science Dept., The University of Toledo, Toledo.

4th August 2018.

- Workshops/Conferences/Seminars attended in India and abroad
 - a) 2nd International Conference on Advanced Computational and Communication **Paradigms** (ICACCP) 2019, Prof. Sekhar Mandal
 - b) CIPR 2019: 1st International Conference, January 19-20, 2019, IIEST Shibpur, India, Prof. Ashis kr.Layek
 - c) INDICON 2018: 15th International IEEE India Conference, December 16-18, 2018, Amrita Vishwa Vidyapeetham, Coimbatore, India, Prof. Ashis kr.Layek
 - d) IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), Indore, India, 16-19 December 2018, Dr. Surajeet Ghosh.
- Major Research Facilities/Lab developed:
 - a) IoT Lab: Department has purchased 20 raspberry pi and few sensors to set up an IoT lab.
 - b) High Computing Servers: Department has purchased and set up a high computing server cluster consists of 12 PowerEdge MX740C Servers

installed over two chassis. This platform can be set up as a Cloud Computing platform (if needed). Also, these servers can be used by the students and research scholars for their daily work.

> platform c) A for machine learning: Department has purchased a GPU server, using that students and scholars can do their machine learning activities.





4.7 Disaster Mitigation Engineering

In the spirit of developing interdisciplinary research facilities and the development of different mitigation processes against natural hazards, the School of Disaster Mitigation Engineering has been established by this university in 2007. The experimental workstation of the school is under construction near the 2nd gate of this University, where a 1.5 m x 1.5m Horizontal single Axis Seismic Table is being installed in October 2008 under the TEQIP program. For the school, housing has been provided on the 3rd floor in the 8th storied new building under construction in the Southern portion of the University. Proposal for setting up Post Graduate Course in

Disaster Mitigation Engg./Earthquake Engg. are being framed for introduction shortly.

Previous Director

- Prof. B.C. Chattopadhyay
- Dr. Sekher Chandra Dutta

Dr. Ambarish Ghosh(e-mail: ambarish@civil.becs.ac.in), Professor, Department of Civil Engineering is presently appointed as the Director of the school to spearhead its initial development.



4.8 Earth Sciences

Though teaching of geology as a subject was introduced in the civil engineering curricula more than a century ago, Geology became an important section of the Department of Mining and Geology ever since its establishment in 1956. With introduction of master's programme in applied geology the department was bifurcated and the Department of Geology came into being in 2005. It was later renamed as the Department of Earth Sciences. During its less than a decade's existence as a separate entity the department has established linkages with industry and academia alike both in India and abroad. Strengthening of departmental infrastructure is on the anvil; so is closer international and national collaboration. Students of the present department are being trained by permanent



- Workshops/Conferences/Seminars attended in India and abroad
 - a) Bera, A., Mukhopadhyay, B. P.: Application of Geospatial techniques for Rural Agricultural Development in Kumari River Basin, West Bengal. Paper presented at International seminar on Rural Development, Institute for Social Development and Research, Ranchi, Jharkhand on 27th -29th October, 2018.
 - b) Roy, N., Choudhury, N., Mitra, A. K. and Mandal, N., 2018. Development of buckle folds in shearzones: a field and experimental study. Rock Deformation and Structure Conference (RDS-V).
 - c) Sinha, S., Mitra, A. K., and Mandal, N., 2018. Development of tectonic fabric in rocks: a theoretical and experimental approach. Rock Deformation and Structure Conference (RDS-V).
 - d) Talukdar, M., Pal, S. K. and Bhui U.K. 2019. Characterization of ruby variety corundum from Sittampundi Layered Complex of PCSZ: Linking composition and gem quality. International Conference on "Electron Microscope and Allied Analytical Techniques (EMAAT 2019), 7-9 June, Shimla, Organised by H.P. University and Electron Microscopy Society of India (EMSI).
- Major Research Facilities/Lab developed:
 - a) Hydrogeology Laboratory (Under the supervision of Prof. B. P. Mukhopadhyay).
 - b) Structural Geology Laboratory (Under the supervision of Dr. Atin Kumar Mitra).



4.9 Ecology, Infrastructure and Human Settlement Management

Environment and ecology of the globe in the era of globalization and rapid urbanization are subjected to unprecedented stress. The resource destructive development practices compel the human settlements growing beyond the thresholds of sustainability. To address the environmental and ecological challenges confronting the developmental process today, formation of a multidisciplinary research group for adopting alternative approaches for planning and management of human settlements and infrastructure development was felt necessary in the University with diversified human resource pool. The School of Ecology, Infrastructure and Human Settlement Management was established to conduct interdisciplinary and cutting edge research, post graduate studies and extend technical support services on issues having the critical interface of ecology, human settlements and infrastructure development.

- Thrust Areas for Research/Consultancy
 - 1. Spatial and Environmental Planning
 - 2. Community-Based Natural Resource Management
 - 3. Infrastructure and Utilities Planning
 - 4. Carrying Capacity Assessment for Urban Settlements
 - Human Settlement Planning for Ecologically Fragile Areas
 - Environmental Risk Mitigation for Low-Income Settlements
 - 7. Vernacular Architecture and Sustainability
 - 8. Planning for Heritage Conservation
 - 9. Climate Change and Human Settlements

- 10. Rehabilitative Planning for Climate Refugees
- 11. Natural Resource Extraction and Livelihood Sustainability of Local Communities
- 12. Green Building Techniques
- Major Research Projects in 2019
 - GCRF Living Deltas Hub: International Collaborative Research Project with Newcastle University (2019-2023) supported by UK Research and Innovation (UKRI)
 - 2. Inventory of Heritage Buildings in Serampore supported by National Museum of Denmark
 - 3. Heritage Walk Development in Serampore supported by National Museum of Denmark
 - 4. Integrated Conservation and Development Plan for Serampore supported by National Museum of Denmark





4.10 Electrical Engineering

A combined Electrical and Mechanical Engineering Department was established in the then Bengal Engineering College in the year 1902. Demerger of the departments took place in 1912 and the Department came into existence. The degree course in Electrical Engineering was introduced during the year 1935-36. First batch of students with M.E. Degree in Electrical Engineering came out in 1955. Since 1989 this department has been serving as one of the QIP Centres for Post Graduate Studies and Research in Electrical Engineering. Research specializations offered in the department include Control Systems, Electrical Machines, Power Electronics, and Power Systems. The faculty members are actively engaged in numerous collaborative and sponsored research projects. In the last few years, a number of research projects with a funding of a few crores have been executed (funding from Central Government agencies). However, more than 10 research projects have also been funded by non-Government agencies.

- List of Awards/laurels/achievements of Faculty member
 - a) Fellow Received by Dr. Anindita Sengupta by the Institution of Engineers(India).
 - b) Chairperson Dr. Anindita Sengupta was selected as Chairperson of IEEE Joint Control Systems Society and Instrumentation & Measurement Society Chapter, Kolkata Section, India for the year 2019.
 - c) Dr. Anindita Sengupta chaired Control System and Application Session of IEEE region 10 symposium TENSYMP 2019.
- Workshops/Conferences/Seminars organized
 - a) Technology forecasting day by IBM, organised for the Students in November 2018.
 - b) Workshop on Cloud Computing with mentoring from IBM for all branches of Engineering.
 - c) IEEE IMS Distinguished Lecture Program with Prof. Mihaela Albu, Dept. of Electrical Engineering, Politehnica University of Bucharest, Romania, as distinguished speaker organised by Dr. Anindita Sengupta, Dept. Electrical Engineering and IEEE Joint CSS-IMS Chapter, Kolkata on 1st March, 2019.

- d) Special Lecture on Electrical and Instrumentation Interface in Control System with Er. Debabrata Sarkar, Chief Engineer, Instrumentation and Control, Qater Kenz, W.L.L. speaker organised by Dr. Anindita Sengupta, Dept. of Electrical Engineering and IEEE Joint CSS-IMS Chapter, Kolkata on 29th August, 2018.
- Workshops/Conferences/Seminars attended in India and abroad
 - a) Dr. P. Chattopadhyay attended, presented paper, chaired the session at IEEE 5thInternational Conference on Electric Power and Energy Conversion, Kikakaishy, Japan, April, 2018.
- Patent Filed

A Performance Measurement Method for I-V tracing of Solar PV Generators, with S. Basu Pal, D. Mukherjee and K. Das (Bhattacharya), Date of Filing 3rd Nov, 2018, Patent Filing No-201831041698

Major Research Facilities/Lab developed:

New basic Electrical Laboratory was developed for 1st year UG students of all branches.





4.11 Electronics and Telecommunication Engineering

The initial nucleation of the department was in the Department of Physics and Telecommunication from which the department demerged from its parent department in 1968, and was christened as the Department of Electronics and Telecommunication Engineering. The first batch of electronics and telecommunication engineers graduated from the department in 1971, the master's programme was launched in 1972. Currently PG programmes are offered in the specialisation of Digital Systems and Instrumentation, Microwave Communication, and Communication Engineering and Signal Processing. Thrust areas identified by the department include Area Optimization of Linear Analog VLSI Circuit, ASIC chip design for Biomedical and Sensor Applications, Broadband over Power Line, Development of Field Deployable Biosensor System for Pathogen Detection, Fault Diagnosis of Analog and Mixed Signal Circuit. The department also conducts research on MEMS Based Integrated Sensor System Design and Development, Microstrip antenna for wireless communication, Network and Information Security, VLSI Architecture Design for Real Time Signal Processor and Wireless Communication and Networking. Considerable effort has been put forward during the last couple of years towards setting up new undergraduate and postgraduate laboratories and augmenting the facilities in the existing laboratories. The department has registered a commendable performance in research and development work. A good number of research projects worth a high value are being carried out with the assistance of various funding agencies leading to high volume of quality publications in international and national journals and conferences.

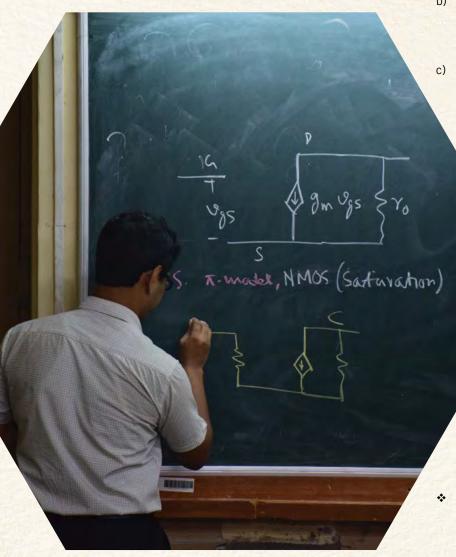
- Achievements/Awards received by the faculty members:
 - a) Fellow:
 - Fellow, Institution of Engineers (India) [FIE(I)] received by Dr. Partha Bhattachryya)
 - Fellow, The Institution of Electronics and Telecommunication Engineers (India) [FIETE] received by Dr.Partha Bhattachryya.
 - b) Supervisor of thethesis awarded as "Innovative Master Thesis Award-2018" by Indian National Academy of Engineering (INAE): Name of the scholar: Mr. Rajarshi Roychaudhuri, Title of the thesis:" Self Assembled Nano-Heterostructures of MnO2 for Efficient Vapor Sensor Device Applications" to Dr. Partha Bhattacharyya.

- c) Supervisor of thethesis awarded as ISSS Postgraduate Student Award (Masters) 2018, Name of the scholar: Mr. Rajarshi Roychaudhuri, Title of the thesis: Self Assembled Nano-Heterostructures of MnO2 for Efficient Vapor Sensor Device Applications "toDr. Partha Bhattacharyya.
- d) Visvesvaraya Young Faculty Research Award, 2017 (for 5 years) received by Dr. Chirasree Roy Chaudhuri.
- e) 2018: Young Faculty Research award GABESU by Dr.Debasis Mitra.
- Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)
 - a) "Innovative Master Thesis Award-2018" by Indian National Academy of Engineering (INAE): Name of the scholar: Mr. Rajarshi Roychaudhuri, Title of the thesis: "Self Assembled Nano-Heterostructures of MnO2 for Efficient Vapor Sensor Device Applications".



- b) ISSS Postgraduate Student Award (Masters) 2018, Name of the scholar: Mr. Rajarshi Roychaudhuri, Title of the thesis: Self Assembled Nano-Heterostructures of MnO2 for Efficient Vapor Sensor Device Applications ".
- c) Post Graduation student Miss. PRIYA SHARMA [Roll No.320716009] working under supervision of Prof. Chirasree Roy Chaudhuri has received the following awards.
- Awarded "Ashok Kumar Sarkar Memorial PG Research Award-2018" by Global Alumni Association of Bengal Engineering and Science University, Shibpur, March 8, 2018 at IIEST, Shibpur
- Awarded 2nd prize for Best Oral Presentation in International conference on Rural Technology Development and Delivery (RTDD-2018), March 9-11, 2018 at IIT Delhi.

- Workshops/Conferences/Seminars organized
 - a) Technical Program Committee Member and Reviewer, ICST2018 (2018 12th International Conference on Sensing Technology (ICST)), Limerick, Ireland, December 3-6, 2018 by Dr. Partha Bhattacharyya.
 - b) Program Chair, Session Chair and Reviewer, 2nd International Symposium on Devices, Circuits and Systems (ISDCS-2019, March 6th 8th 2019), Hiroshima University, Japan by Dr. Partha Bhattacharyya.
- Workshops/Conferences/Seminars attended in India and abroad
 - a) Invited lecture in 2nd International Symposium on Devices, Circuits and Systems (ISDCS-2019, March 6th – 8th 2019), Hiroshima University, Japan (By Dr. Partha Bhattacharyya)
 - Attended "First International Conference on Nanotechnology: Theory and Applications (NTAconf 2018)", Cairo, Egypt during 10th - 13th December, 2018(By Dr. Partha Bhattacharyya)
 - c) Attended "International Microwave and RF Conference (IMaRC) 2018 organized by IEEE Microwave Theory and Techniques Society (MTT-S) held on Nov 28-30, 2018 at Hotel Novotel, Kolkata (By Prof. Susanta Kumar Parui).
 - d) Attended two days of Technical Planning workshop of Young Faculty Research Fellows (YFRF) organized by the Visvesvaraya Ph.D. Programme on 28thMay to 29th May 2018 at IISc. Bangalore,India by Dr. Chirasree Roy Chaudhuri.
 - e) International Workshop on Antenna Technology (iWAT), March 3-6, 2019, Miami, USA by Dr. Debasis Mitra.
 - Major Research Facilities/Lab developed:
 - Nano thin films and solid state gas sensor devices laboratory.
 - ❖ Electronic Circuits Lab, Digital Signal and Image Processing Lab.
 - ❖ The Biosensors Laboratory developed focuses on innovative technological solutions for Biological research and Clinical diagnosis.
 - Applied Electromagnetics Laboratory.





4.12 Green Energy and Sensor Systems

The Centre of Excellence for Green Energy and Sensor Systems (CEGESS) was established in November, 2009 with the objectives to promote renewable energy in general and Solar Energy in particular, to conduct cutting-edge research as a frontline R&D incubator through a multidisciplinary approach in the field of renewable energy and sensor systems, and to contribute to the development of highly qualified and innovative personnel through specialized training and knowledge build-up in areas of renewable energy and sensor systems. The Research and education at CEGESS is closely associated with industry and several national & foreign academic institutions of repute with an aim to foster cutting edge research and establish ourselves as a leader in this field. Interests and activities in the centre include solar cell design, fabrication and characterization with a special focus on nano-materials, solar photovoltaic systems design and development, solar energy storage system, smart microgrid, sensor design, fabrication and characterization using novel materials and methods for agricultural, environmental, automobile and healthcare applications (including quantum dot based biosensors) and development of SMART sensor system.



- List of Patents (Filed/granted)
 - "Synthesizing a composite of SnO2 core-shell nanostructure with reduced graphene oxide for selective gas sensing", Sanhita Majumdar, Anupam Nandi, H Saha (Application no. 201831024272) Date of filing: 29.06.2018.
 - "Synthesis of amine functionalized graphene capped silicon nanocrystal assembly", Syed Minhaz Hossain, Anupam Nandi, Susmita Biswas, Sudipta Chakrabarty, Sanhita Majumdar, Hiranmay Saha (Application no. 201931020690) Date of filing 24.05.2019.
- List of Awards/laurels/achievements of Faculty members
 - Dr. S. P. Gonchaudhuri received the prestigious Mission Innovation Champion Award from India.
 - Dr. S. Mukhopadhyay was elected as a fellow of the Institute of Engineering and Technology (IET), UK (2019)
 - Dr. S. Mukhopadhyay was elected as a fellow of the Royal Society of Arts, Manufacturing and Commerce (RSA), UK (2019)
 - Dr. S. Mukhopadhyay was elected as a fellow of the Institute of Electronics and Telecommunications Engineering, India (IETE) (2018)
 - Dr. Anirban Bagui, Assistant Professor (Inspire Faculty) of CEGESS, has been honoured with prestigious Fulbright-Nehru postdoctoral fellowship to work at North Carolina State University, USA.
 - Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)
 - Sri Arijit Roy and Sri Ankur Bhattacharya of CEGESS have been awarded the Doctoral Degree at the IIEST Convocation held on 28th Dec, 2018.
 - Dr. Ankur Bhattacharya, visited Exeter University, UK to work with Prof. Tapas Mallik under the JUICE_UKCERI Exchange Fellowship program for two months from 29th Jan, 2019.
 - Ms. Dipanjana Adak, Research Scholar, CEGESS, IIEST Shibpur, presented a Conference paper titled "Sol-gel processed silica based highly transparent self- cleaning coatings for solar glass covers" in E-MRS 2019 spring meeting at the Acropolis Convention Centre in Nice (France) from May 27 to 31, 2019.

- Workshops/Conferences/Seminars organised by the faculty members
 - Invited Lecture on "Lightning and its relation with global climate change" on 02.07.2018 at Director Committee Room, IIEST, Shibpur delivered by Dr. Anirban Guha and Prof. Barin Kumar De, Department of Physics, Tripura University.
 - Invited lecture on "Photovoltaic Module Reliability-Importance of Materials" on 18.12.2018 at CEGESS meeting room delivered by Mr. Rahul Khatri, DuPONT India Ltd.
 - One Day Workshop on "Introduction to Time Series Modelling" on 11.1 2019 organised jointly with Department of Statistics & A K Chowdhury School of IT, University of Calcutta

- Inter-disciplinary research group meeting on Renewable Energy developments in India: A Data Science project under LISA 2020 initiative on 12.03.2019 with Department of Statistics, University of Calcutta regarding multivariate forecasting of reliability of solar plant performance.
- National Workshop on "Photovoltaic Module Reliability" organised by CEGESS on 28th March, 2019 at Hotel Hindusthan International, Kolkata sponsored by the Department of Science & Technology, Government of India, DuPONT Photovoltaic Solutions and Institution of Engineering and Technology (IET-UK), Kolkata Local Network.
- Workshops/Conferences/Seminars attended by the faculty members in India and abroad
 - Prof. H. Saha delivered a lecture on "Renewable Energy Micro Grid: Sustainable Solution for Energy Access and Security in India" at National Workshop on Recent Trends in Power & Energy (RTPE2018) held at Mizoram University, 6-10 Oct, 2018.

Prof. H. Saha delivered a talk on "Hybrid Renewable Energy Microgrid: OFF Grid Solution for 24x7 Energy Access" at Second International Stakeholders Meet on Mission Innovation Challenge IC2: Off –grid Access to Electricity held at IIT Delhi, New Delhi, India from 1-2nd March, 2019.

* Prof. H. Saha delivered a lecture on "Advanced Silicon Solar Cells-Current Status and Future trends" at International Conference on Efficient Solar Power Generation and Energy Harvesting, held at Amity University, Noida from 12th to 14th February, 2019.



- Partha Chaudhuri delivered an Invited Talk entitled "Solar cell: Prsesnt Status and Future trend" in the Refresher Course RCPHYS1819 on Recent developments in Physics: Theory and Experiment held at Jadavpur University on December 05, 2018;
- Prof. B. Bandyopadhyay delivered Keynote Address during Valedictory Session of the 9th World Renewable Energy Technology Congress, August 23, 2018 at New Delhi, India.
- Prof. B. Bandyopadhyay addressed Keynotes on 'Solar Water pumping for Agriculture-new business models' during World Water Summit, New Delhi 22nd August 2018.



- Prof. B. Bandyopadhyay addressed as Chief Guest at International Conference on Communication and Computing Systems (ICCCS-2018), Gurgaon, December 01 - 02, 2018.
 - Prof. B. Bandyopadhyay delivered a public lecture on the theme "New Energy Resources" at India International Centre, New Delhi on 12th January, 2019. (Series of Lectures organized by CEAI in collaboration with India International Centre (IIC) on the theme "Engineers and the Society")

- Prof. B. Bandyopadhyay represented as Session Chair: Solar Rooftop :International Conference on Business Economics and Sustainable Development, New Delhi, 17-18 Jan 2019
- Prof. R. Bhattacharya presented a Plenary Talk on "Nanomaterials Centric PV Research Highlights of DST-IIEST PV Hub at IIEST, Shibpur" at International Conference on Advances in Nanomaterials and Devices for Energy and environment (ICAN2019) held at IIIT Gwalior from January 27-29, 2019.
- Prof. R. Bhattacharya delivered an Invited Talk on 'Self-Cleaning Techniques for Solar Panels - a Multidisciplinary Approach' at International Conference on Efficient Solar Power Generation and Energy Harvesting (ESPGEH) 2019 held at Amity Institute for Advanced Research and Studies (Materials & Devices), Amity Institute of Renewable and Alternative Energy, Amity University in Noida from 12th to 14th February, 2019.
 - Pr. S. Patra, Assistant Professor (Inspire Faculty) of CEGESS, Visited University of Montpellier, France from 10.12.2018 to 10.03.2019 for collaborative research at University of Montpellier on " The application of biopolymer in Li-metal battery"
 - Dr. A. Bagui, Assistant Professor (Inspire Faculty) of CEGESS, visited NTU, Singapore for collaborative research work under DST-INSPIRE Faculty scheme from 03-01-2019 to 31-03-2019.
 - ❖ Dr. A. Bagui participated in 2nd Global RE-INVEST Renewable Energy Investors' Meet and Expo held at India Expo Mart in Greater Noida from 3rd to 5th October, 2018 and discussed "Human Resource Development at CEGESS, IIEST Shibpur for Renewable Energy Supported by MNRE".
- Dr. S. Majumdar, Women Scientist of CEGESS, visited University of Dubna, Moscow, Russia from 17.12.2018 to 30.12.2018 for a talk of her Project "Synthesis fabrication and development of graphene based gas sensors for detection of ammonia, nitrogen oxides and carbon monoxide".
- Major Research Facilities/Lab developed in the department
 - Dr. Anirban Bagui and Prof. Hiranmay Saha are involved in setting up of a new "Organic and Perovskite Solar Cell Lab" in the centre.



4.13 Health Care Science and Technology

This Centre had been established in 2010 with the objectives (a) to provide a platform for interdisciplinary teaching and research in the fields of Health Care Science and Technology leading to a better integrated health care delivery system, (b) to develop highly qualified and innovative professionals in the field of Bio-medical Science and Technology through intensive knowledge and teaching (c) to introduce interdisciplinary master's and doctoral program in Health Care Science and Technology and (d) to collaborate with different medical research institutions and health care institutions.

- List of Awards/laurels/achievements of Faculty members and the students
 - "Nano Carbons Choke Breathing of Mosquito Larvae Causing Anoxia" was highlighted on a programme named as "Science Monitor and Gyan Vigyan" in Rajya Sabha TV, 2018.
 - "Nano-carbon: New India-made weapon against mosquitoes" published in Economics Times, 18th October, 2018.
 - "Nano-carbon: the new weapon of India against the mosquitoes carrying the virus zika" Published in The Koz Telegram, 18th October, 2018.

- "Nano-Carbon: New India-Made Weapon against Mosquitoes" Published in NDTV, India, 18th October, 2018.
- Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)
 - Dr. Bholanath Pakhira, received AWSAR award 2018 of Rs 10,000 and a certificate of appreciation for his work, "From Coal to Nanocarbon to Cross Blood Brain Barrier to Treat Alzheimer, Parkinson and Brain Tumour" by Department of Science and Technology, Govt. of India on the occasion of National Science Day, 28th February, 2019.



- Workshops/ Conferences/Seminars organized by the faculty members
- Conference on
 Biophysical Controls and
 Quantitative Interpretation
 in Medicine, Sept. 7 2018,
 Sponsored by WBDST

Workshops/Conferences/
 Seminars attended by the faculty

members in India and abroad

- Invited talk By Dr. P. Datta SASTRA in Indo-US Bilateral Workshop "3D Printing: Solutions for Medical Devices" in which Deemed University 16 -17th August, 2018
- Invited talk by Prof. S. Sarkar in IIT Kanpur, NIT Manipur, Mahatma Gandhi Central University, Bihar, IIT Roorkee, IIT Guwahati, Dibrugarh University, Assam, Bankura University, West Bengal
- Major Research Facilities/Lab developed in the department
 - Safety and occupational health Laboratories.





4.14 Humanities and Social Sciences

The establishment of the Department of Humanities in 1945 reflected a holistic and pragmatic approach to engineering education in the modern era. Renamed as the Department of Humanities and Social Sciences in 2004, the department has always emphasized the need for modernized syllabi in communication skills, knowledge of the society, and economy that are in tune with contemporary developments. Along with Core and Elective courses in Sociology, Management and Finance, the Humanities and Social Sciences department has been offering a core course on Professional Communication in English to the B.Tech. first semester students. Various other English elective courses on Indian Writings in English, Literature and Urban Experience, Popular Literature, Film Studies, Business Communication, Research and Technical Writing for Engineers are also offered both at the undergraduate and the postgraduate levels. It is also imperative that the students of IIEST, Shibpur should have adequate managerial skills to cope with the recent changes in the social and the economic environment of business. It is, therefore, the responsibility of the Humanities and Social Sciences department to fill the lacunae in the aforementioned areas and enable a less jarring transition of our graduates from students to responsible and mature citizens. Additionally, the HSS department also extends its teaching to the postgraduate courses in the MBA programme since 1999.

The department, at present, offers Ph. D programs in English and Cultural Studies, and Management Studies. It also offers a compulsory course on Technical Writing to all the Ph. D scholars of the institute.

(iii) Workshops/Conferences/Seminars organized

 a) Prof. Mallika Ghosh Sarbadhikary - Workshop on Digital Humanities and Social Science – an Al (Artificial Intelligence) & ML (Machine Learning)
 driven approach conducted by

Somnath Mukherjee, Louisiana State University, USA, 2019.



- c) Prof. Mallika Ghosh Sarbadhikary International Conference on Evolution of Tradition: Interrogating Transformations in Traditional Folk Performing Arts in collaboration with KNIDS and supported by ICSSR (Eastern Regional Centre) 2019.
- d) Prof. Mallika Ghosh Sarbadhikary Co-ordinator for Revaluation Lecture Series:
 - Dr. Atreyi Gupta, faculty, Global Modern Art, South and South Asian Art, the History of Art department, University of California, Berkeley, "Atomic Power, Hydroengineering and Postcolonial Development: Technocracy's Aesthetic Binds in Nehruvian India."
 - Dr. Arshiya Sethi, University of Minnesota, Minneapolis, "India's Cultural Policy: Real Imagined or Created."
- e) Prof. Mallika Ghosh Sarbadhikary Workshop on Visual Reasoning in collaboration with School of Cognitive Science, Jadavpur University. 2019
- f) Prof. Subhasis Bandyopadhyay- Workshop organised:
 - Rasa Poorna a performative depiction of social conditions on 25th March 2019 at Department of HSS, IIEST and chaired the session.
 - ii. ISLA Part II.
 - Workshop on Visual Reasoning in collaboration with School of Cognitive Science, Jadavpur University.
- g) Prof. Subhasis Bandyopadhyay- Talk organised jointly with M. G. Sarbadhikary: 1. India's Cultural Policy delivered by Dr. Arshiya Sethi of ICCR, New Delhi on 27th March, 2019.
- h) Prof. Subhasis Bandyopadhyay- Initiated an online Multiple Language Learning Laboratory (BUSUU) in association with McGraw-Hill International, USA in February, 2019
- (iv) Workshops/Conferences/Seminars attended in India and abroad
 - a) Bandyopadhyay, S. Women in India: Issues at the workplace – a talk delivered at NIT Durgapur, 18th August, 2018
 - b) Bandyopadhyay, S. Uncaging the Imagination, Value Sensitivity and Scientific Ingenuity the Indian

- Challenge in the Next Decennial A paper presented at the National Brainstorming Session on SSR organised by DST, Government of India, Udaipur, 13-14 July, 2018.
- c) Dr. Madhumita Roy resented a paper titled "The City and the Wilderness in Salman Rushdie's Two Years Eight Months and Twenty-Eight Nights" in an International Conference on Ecology and Culture organised by FSLE and Amrita Viswa Vidyapeetham from December 15-17 2018.
- d) Prof. Mallika Ghosh Sarbadhikary presented at Literary London Society Annual Conference, London, 2018, Ways of Seeing: Jonson and Judgement in Bartholomew Fair in the panel, Speech and Spectacle.
- e) Prof. Mallika Ghosh Sarbadhikary was invited as Panellist at Crossroads of Knowledge Seminar, Fitzwilliam College, Cambridge, 2018 for the panel, Law and Literature.
- f) Prof. Mallika Ghosh Sarbadhikary attended a conference on Digital Humanities: Approaching Humanities using Computational Tools, Heritage Institute of Technology, 2019.
- g) Prof. Mallika Ghosh Sarbadhikary attended a national workshop on Rural development: Changing Paradigms and Evolving Approaches, Department of Geography, Calcutta University.
- h) Prof. Rupen Basu Mallik attended the XIV International Conference in Accounting and Finance on Future of Accounting & Finance; Co-Chaired a session on Financial Inclusion, Indian Accounting Association Research Foundation, 5&6 January, 2019.
- i) Prof. Rupen Basu Mallik attended a discussion on New Provisions under Income Tax Act 1961,
 Merchant Chamber of Commerce & Industries, 19/4/2018

j)Prof. Rupen Basu Mallik attended a conference on Companies Amendment Act 2017 & Insight into Kotak Committee Recommendations, Merchant Chamber of Commerce & Industries, 21/4/2018

k) Prof. Rupen Basu Mallik attended the MCCI FinTech Forum, Merchant Chamber of Commerce & Industries, 12/5/2018

- I) Prof. Rupen Basu Mallik attended the MCCI East India Energy Forum 2018, Merchant Chamber of Commerce & Industries, 8/6/2018.
- m) Prof. Rupen Basu Mallik attended a conference on Business Growth Through Digital Media, Merchant Chamber of Commerce & Industries, 11/7/2018.
- Prof. Rupen Basu Mallik attended a workshop on Excel Analytics and PowerPoint Presentation Skills, Merchant Chamber of Commerce & Industries.
- o) Prof. Rupen Basu Mallik attended a conference on Mutual Funds-Securing India's Financial Future, Merchant Chamber of Commerce & Industries, 24/8/2018.
- p) Prof. Rupen Basu Mallik attended the MCCI India Economic Forum 2018, Merchant Chamber of Commerce & Industries, 15/9/2018.
- q) Prof. Rupen Basu Mallik attended the MCCI Logistic Forum-Regional Integration through Transport and Trade, Merchant Chamber of Commerce & Industries, 1/12/2018.
- r) Prof. Rupen Basu Mallik attended the MCCI Insurance Forum, Merchant Chamber of Commerce & Industries, 31/12/2018.
- s) Prof. Rupen Basu Mallik attended the MCCI Education Forum-India as an Edu Economy by 2020- Prospects and challenges, Merchant Chamber of Commerce & Industries, 14/2/2019.
- t) Prof. Rupen Basu Mallik attended a conference on Way Forward to Skill Bengal-Reforms Challenges and Imperatives, Merchant Chamber of Commerce & Industries, 19/2/2019.
- Prof. Rupen Basu Mallik attended a conference on The Biggest Economic Reform –The Insolvency and Bankruptcy Code, Merchant Chamber of Commerce & Industries, 26/2/2019.
- v) Prof. Rupen Basu Mallik attended a conference on Capital Connect Rediscovering Kolkata, Indian Chamber of Commerce, 7/11/2018.
- w) Prof. Rupen Basu Mallik attended the 9th ICC MSME Conference, Indian Chamber of Commerce, 29/8/2018.
- x) Prof. Rupen Basu Mallik attended the ICC Conference on to Build East, Indian Chamber of Commerce, 25 & 26/9/2018.
- y) Prof. Rupen Basu Mallik attended a workshop on IFRS, Indian Accounting Association, 2/3/2019.



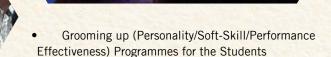


4.15 Human Resource Management

The erstwhile Training and Placement of the Institute was rechristened as Department of Human Resource Department in the year 1994 -95 and is headed by one Professor and other staff. The current activities of the department encompass the following:

 Job Placements of students of the university though Campus and Off-campus selection processes.

 Vacational/Summer Training of the students of the University including Summer Internship Programme at foreign universities and Remote Internship Programme at reputed industries.



- Industry-Contact programme/Academic collaborations with major industries including Tata Steel, Infosys, MindTree, Larsen & Toubro, ABB, Punj Lloyd, Cognizant, Tech-Mahindra, Wipro etc.
- Entrepreneurship Development Programme conducted by a newly set-up Cell under the department funded by AICTE
- IPR Awareness and Facilitation
- Career Counseling





4.16 Information Technology

The beginning of this century is marked as the start of the Information Age which has not only revolutionized Indian and global industrial markets but has also had an impact on the engineering education system. The erstwhile BESU, Shibpur responded timely by introducing a new specialized engineering degree course in Information Technology under the department of Information Technology in the year 2000. The course is unique with respect to the similar degree program offered by other Indian universities and is framed accordingly to educate graduate engineer to be an expert of microelectronics based processing, computing and communication of data that global IT sector of coming days demands. The department has celebrated its first 10 years of existence with an impressive record of achievement. The strength of the department has been in its diverse areas of research in which it has excelled. Research focuses of the department are in the fields of Systems Architecture and Design, Theory and Applications of Cellular Automata, Digital Image Watermarking and Signal Processing, Digital Geometry and Image Analysis, Wireless and Mobile Communication, Sensor Network, FPGA based Embedded Systems.

- Achievement/Awards received by the faculty members
 - a) Dr. Prasun Ghosal has achieved the following recognition:
 - Editor, IEEE Ethics and Policy in Technology eNewsletters (IEEE Internet Initiative newsletter and IEEE Future Directions newsletter).
 - Elected to serve as the Secretary, Executive Committee, IEEE Circuits and Systems Society, Kolkata Chapter
 - Elected to serve as the Administrative Committee Member, IEEE Computer Society, Kolkata Chapter
 - Elected to serve as the Member of the Computer Engineering Divisional sub-committee, West Bengal State Centre, Institute of Engineers, India (IEI)
 - b) IETE J C Bose Memorial Award- The best engineering Oriented Work for the work "Stability Analysis in Top-Contact and Side-Contact Graphene Nanoribbon Interconnects [Ph.D. Student- Sandip Bhattacharya, Supervisor - Hafizur Rahaman.

- Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)
 - a) Best paper awarded to Pampa Howlader (Ph.D. Scholar) and Hafizur Rahaman (Supervisior) at IEEE CCSN held in December 2018
- Workshops/Conferences/Seminars organized
 - a) 2nd IEEE International Symposium on Devices, Circuits and Systems (ISDCS 2019) jointly organized by Hiroshima University, Japan and IIEST Shibpur under Bi-lateral Cooperation between India and Japan during 6-8 March 2019. (Patron:-Prof. Parthasarathi Chakrabarti and General Co-Chair - Prof. Hafizur Rahaman)
 - b) Dr. Prasun Ghosal has been involved in different workshops/seminars organized as IEEE Kolkata Section CAS Chapter and CS Chapter activities.
 - c) 7th Indian School on Logic and its Applications (Part II): Logic and Automata. December 17 22, 2018,
 Venue: IIEST, Shibpur
 - d) One Week FDP on Development of IoT and its Application from 17-21 June 2019, sponsored by TEQIP III has been organised with Principal Coordinator from the department.
- Workshops/Conferences/Seminars attended in India and abroad
 - a) IEEE Asian Test Symposium and WRTLT, 2018, CPDA, Hefei, China, October 15-19, 2018, Prof Hafizur Rahaman.
 - b) IEEE Asian Test Symposium and WRTLT, 2018, CPDA, Hefei, China, October 15-19, 2018, Prof Chandan Giri.
 - c) International Conference on Signal Processing and Communications (SPCOM 2018), CPDA, IISc Bangalore, India, July 16-19, 2018, Prof Santi P. Maity.
 - d) International Conference on Recent Advances in Engineering and Technology, CPDA, Chennai, India, December 23-24, 2018, Dr. Tuhina Samanta.

Patent Filed

❖ Title: a reliable internet of things (iot) enabled smart healthcare decision-aid method and system to support medical management services in post disaster scenarios.

Inventors:

- 1. Sagar Bose
- 2. Indrajit Banerjee

File no.: 201831020949

Date of Filing the patent: 05.06.2018

Date of Publication of patent: 29.06.2018

❖ Title: method for selecting a forwarding vehicle for

Major Research Facilities/Lab developed:

September 19, 2018.

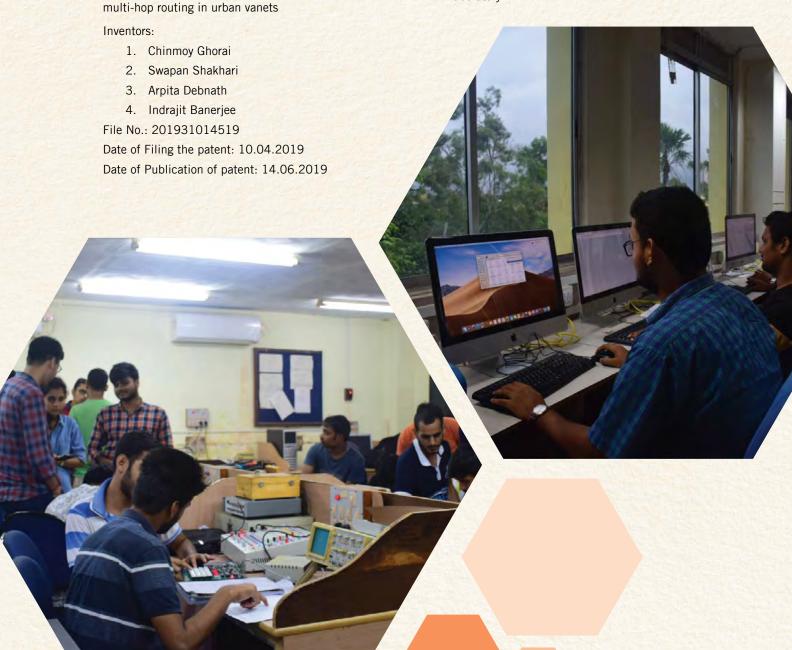
IoT and Intelligent Embedded Systems Design Laboratory

Prasun Ghosal, Aditi Saha, Shahid Ali Nadaf, Vikash

Kumar Sukhla, Gopal Ch. Saha (Inventors), "Methods

and systems for wireless charging of smart cards",

Indian Patent Application No. 201821035337, Filed on





4.17 Management Sciences

School of Management Sciences was started in 1999. Master of Business Administration courses are taught in the School of Management Sciences. The courses include writing of dissertation on business and industrial topics by the MBA students under the guidance of faculty members both in the 1st and 2nd year. Beside this doctoral researches are carried out under the aegis of the School. Academic and

B. E. COLLEGE

research focus of the School is in the areas of Financial Management, Human Resource Management, IT Management, Marketing Management and Operations Management.

Workshops/Conferences/Seminars organised by the faculty members

Dr. Poulomi Mukherjee (Mondal)

- Entrepreneurship Awareness Camps under DST-NIMAT Project 2018-19
- NRDC Sponsored workshop on IPR on 23.02.19, as a part of NRDC-IIEST-IFC activity.
- Seminar/workshops on Entrepreneurship during Scintillations 2019

Workshops/Conferences/Seminars attended by the faculty members in India and abroad

Dr. Jnui Deb Mallick Datta

Workshop on Incubator Management organized by NEXUS Startup Hub on 19-20 Feb, 2019 (as a part of TCGTBI, IIESTS) in American Centre, Kolkata.

Attended workshop/seminars as a member of Institution Innovation Council (IIC) (Set up by MHRD's Innovation Cell MIC) at IIEST, Shibpur





4.18 Materials Science and Engineering

Dr. M. N. Dastur School of Materials Science and Engineering was established in 2001 to address the growing demand amongst the academicians, scientists and practicing engineers. The knowledge of behaviour of materials is a prerequisite for the holistic development of science, engineering and technology with a focus to provide a synergic environment to pursue the interdisciplinary teaching and research. The school has the theoretical and experimental resources to address the scientific and engineering problems.

Since last decade the school has been able to make modest footprints in its journey towards development and understanding the characteristics of advanced and emerging materials for efficacious application. From 2003 the School has been offering an M. Tech. Programme in Materials Engineering. Thrust areas of research for the School are Nano-structured semiconducting materials, Energy and Environment Materials, Smart materials, Composite materials, High strength steels, Materials modeling and Optimisation, and Bio-materials.

Workshops/Conferences/Seminars organised faculty members

- Major Research Facilities/Lab developed in the department:
 - Materials Processing and Heat Treatment Lab
 - Metallographic Lab:
 - Polymer Composite Lab:
 - Polymer Synthesis and Processing (PSP) Lab
 - Polymeric Biomaterials Lab (PBL)
 - B.O.D. Incubator Shaker
 - Laminer Flow Hood
 - Modelling and Optimization Lab
 - Microscopy and Electrical Characterization Lab:
 - SMALL (Laboratory for Low-dimensional Advanced) Material Synthesis)
 - Computer Lab
 - Electrochemistry and Advanced Materials Laboratory





Since the inception of B. E. College the Department of Mathematics earned a glorious heritage of conducting research activities in various fields of Mathematics. The department also undertakes teaching of Mathematics, including Statistics, Operations Research, Numerical Analysis and Computational Techniques, to undergraduate and postgraduate students in various branches of Engineering, Architecture. The past and

present members of faculty of the department have been conducting research works in different branches of Pure and Applied Mathematics. The research work undertaken in the department is spread over the areas of:

Fracture Machines, Mathematics Education, Random Analysis, Functional Analysis and Fuzzy Systems, Fluid Mechanics, Graph Topology, Thermoelasticity, Maximum Entropy Models, Mathematical and Statistical Theory of Life Testing and Reliability, Fuzzy Logic and Fuzzy Petrinets, Fuzzy Optimization and Application in O.R.





4.20 Mechanical Engineering

The inception of the Mechanical Engineering Department may be traced back to 1921 when a diploma course in Mechanical Engineering started in this Institute. The first degree course in Mechanical Engineering started from 18th July, 1930. Moving through a few decades, the Department of Mechanical Engineering consolidated to its present condition offering 10-Semester Dual Degree Course and a 4-Semester Postgraduate Course. The Department provides ample laboratory facilities and hands-on training to its students both in the conventional subjects and also in the emerging fields of specialization. The Departmental faculty consists of erudite teachers who actively pursue research work of original nature. Almost, all the members of the faculty have earned to their credit quite a number of praiseworthy research papers published in highly reputed peer reviewed international journals. Some of the senior faculty members are engaged as Fellows of renowned International

b) Animesh Talapatra received Best paper Award in ICMEN 2019 for the paper titled "Tribological Behaviour of Functionalized Graphene Reinforced Thermoplastic Polyurethane Elastomer Nanocomposites using Molecular Dynamics Simulations". The co-author of the same paper is Dr. D.Datta of ME Department.

 Achievements/Awards received by the faculty members:

societies like American Society of Mechanical Engineers, Institution of Mechanical Engineers, London, etc.

a) Dr. Santanu
Das received
'Lalit Kishore
C h a u d h a r y
Memorial Award
for Best Paper'
from the Department
of Mechanical
Engineering, IIT Kanpur.
(2018).

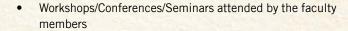
b) Dr. Bidyut Pal awarded Fellowship of the Higher Education Academy (FHEA), UK, April 2018.

 Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)

a) Two UG students (2019 Pass out) namely Mr. Gourab Ckakraborty was selected for RWTH AACHEN Univ. Germany, and Mr. Avik Ghosh was selected for UC SanDiego, US for MS. They also got good score in GRE.



- c) Students of Mechanical Engineering department participated in the Virtual BAJA SAEINDIA 2019 organized by SAEINDIA on 12th and 13th July 2019 at Chitkara University, Punjab.
- d) The students of this Department participated in HPVC Asia Pacific 2019 under the aegis of ASME student chapter of IIEST, Shibpur.
- e) Shitendu Some received Best paper presentation award in International Conference on Recent Innovations and Developments Mechanical Engineering (IC-RIDME 2018), NIT Meghalaya, Shilong, India, November 8-10, 2018. Paper entitled: 'Effect of journal misalignment and coupled-stress lubricant on the film pressure of a double-layered porous journal bearing'



Dr. S.K. Saha

Advances in Heat Transfer Enhancemnts, International Conference on Thermal Engineering: Theory and Applications, February 23-26, 2019 PDPU and Reyerson University, Gandhinagar, Gujarat, INDIA

Dr. B.K. Mandal

- Performance and Emission Characteristics of Compression Ignition Engine using Biodiesel: Workshop on Combustion Process in IC Engine (CPICE-2018), November 01-05, 2018 under TEQIP-III organized by NIT Silchar
- Numerical Investigation on Flame Development and Soot Formation in Diffusion flame: Workshop on Combustion Process in IC Engine (CPICE-2018), November 01-05, 2018 under TEQIP-III organized by NIT Silchar
- Effect of Alcohol addition to Diesel and Biodiesel on the Combustion Characteristics of Compression Ignition Engine: Workshop on Combustion Process in IC Engine (CPICE-2018), November 01-05, 2018 under TEQIP-III organized by NIT Silchar
- 4. Thermo-economic Analysis of Different Refrigeration Systems for High Temperature Lift Using Alternative Refrigerants: International Conference on "Emerging Technologies for Sustainable and Intelligent HVAC & R Systems, 27-28 July, 2018 in Kolkata organized by the Institution of Engineers (India)
 - 5. Heat Exchanger: Refresher course on Emerging Trends in Mechanical Engineering with Inter-Disciplinary Application, 2nd 22th January, 2019 organized by Department Of Mechanical Engineering, Jadavpur University

Dr. Bidyut Pal

1. 'Digital correlation techniques for evaluation of orthopaedic implants and prediction of hip fracture' at a workshop entitled 'Experimental strains in orthopaedic biomechanics using digital correlation techniques', jointly organised by the British Society for Strain Measurements, British Orthopaedic Research Society, and the University of Portsmouth, 1-2 November, 2018.



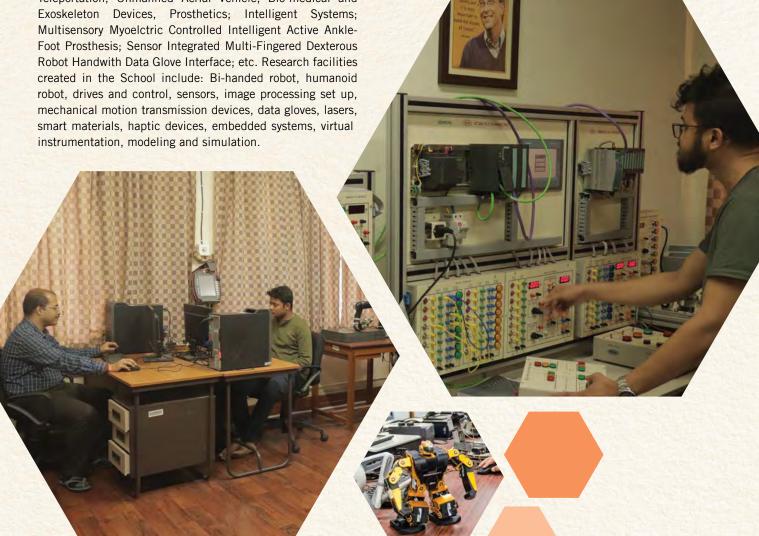


4.21 Mechatronics and Robotics

Keeping parity with the evolving multi-disciplinary technological advancement a School of Mechatronics and Robotics had been established in the Institute in 2007.In sync with the changed technological scenario, the School introduced a new specialised interdisciplinary postgraduate programme in Mechatronics in collaboration with three CSIR laboratories, namely - CMERI Durgapur, CEERI Pilani and CSIO Chandigarh. The course has been framed toeducate graduate engineers to be an expert in mechatronics, an interdisciplinary subject that involves fusion of mechanical, electrical, and electronics engineering. Doctoral programmes in Mechatronics and Robotics are pursued at the School.

The School has been actively pursuing research in the areas of: Dexterous Robotic Hand, Mobile Robots, Micro Systems; Teleportation, Unmanned Aerial Vehicle, Bio-medical and

- Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)
 - a) Participation of Saptak Bhattacherjee in Sakura Science Program (Japan) from 20 June, 2018 to 10 July, 2018 and ILDP (Hiroshima University, Japan) from 5th November, 2018 to 5th December, 2018
 - b) Participation of Ganesh Roy (AE&AM Dept.) in ILDP (Hiroshima University, Japan) from 3rd to 27th Dec, 2018)
- Major Research Facilities/Lab developed in the department -
 - PLC & Automation Production System Laboratory





4.22 Metallurgy and Materials Engineering

The Department of Metallurgy started its journey at the Bengal Engineering College in the year 1939 with the introduction of a 3 year degree course in Metallurgy under the Calcutta University. The department is the second oldest metallurgy department of the country. Over the years, the department has contributed significantly in the frontiers of Metallurgy. This department was the first to introduce postgraduate course in metallurgy in the country. The faculty members of the department have developed excellent expertise in the areas of Physical Metallurgy, Computational Techniques, Mechanical Behaviour of Materials, Nano-Technology, Powder Metallurgy, High Strength Steel, Diffusion Bonding and Friction of Stir Welding.

- Achievements/Awards received by the faculty members:
 - a) Dr. Debdulal Das received Best Poster Presentation award under Non-Ferrous category for the paper titled "Cyclic deformation response of an artificially aged AA6063 alloy" authored by A. P. Sekhar, S. Nandy, K.K. Ray and D. Das in the 72nd Annual Technical Meeting of the Indian Institute of Metals held at Kolkata during 15-16th November, 2018.
- Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)
 - a) Fourth year student Vijay Kumar Gupta participated in Metallurgy tech-fest of NIT Durgapur and won first prize in Metallography competition and second prize in poster presentation competition. He participated in Metallurgy tech-fest of Jadavpur University and won first prize in poster-presentation and second prize in Metallography.
 - b) Fourth year students Arijit Samaddar and Ashim Bikash Mandal participated in Metallurgy technical fest of Jadavpur University and won first prize in both paper and poster presentation competition.
 - c) Five-member team of fourth year students (Arijit Samaddar, Ashim Bikash Mandal, Prasun Bishoi, Soumya Mahato and Murlidhar Yadav) won second prize in Quiz competition in Metallurgy technical fest in IIT-Kharagpur.
 - d) Fourth year student Souradeep Saha won the first prize in technical fest of Jadavpur University in Metallography competition and business plan competition and he got selected in DRDO Druse (National level selection)

- e) Fourth year student Kuldeep Paul won first prize in Business plan competition in Jadavpur University technical fest and Metallography competition, he won first prize in Daksh HIT innovation competition, and got selected in DRDO Druse National level selection.
- f) Third year student Bhaskar Jyoti Das completed an 8-week certificate course on Solar Photovoltaics: Principles, Technologies & Materials under Prof. Ashish Garg of Indian Institute of Technology, Kanpur from NPTEL and being within the Top 2% of the course (January, 2019-April, 2019).
- g) Third year student, Arkajit Ghosh published an article entitled 'Renewable and Sustainable Materials in Automotive Industry' in Reference Module in Materials Science and Materials Engineering, Elsevier, March 2019. He also presented poster entitled 'Aluminium and its Alloys to enhance sustainability in Automotive Industry' at International Conference on Non Ferrous Minerals and Metals, Kolkata on 13th July 2019, completed course entitled 'Nature and Properties of Materials' in NPTEL offered by IIT Kanpur with a score of 81% in October 2018. Arkajit Ghosh along with another third year student Avinava Roy published an article 'Enhancement of Various Properties of Copper by Severe Plastic Deformation' in Copper Topics monthly journal of ICDC, March 2019 issue.
- h) Avinava Roy represented college in International Conference on Non Ferrous Minerals and Metals 2019 as a poster presenter on Renewable and Sustainable Materials in Automotive industry. He completed 2 NPTEL Courses on "Properties of Materials" (August October, 2018) offered by Prof. Bisakh Bhattacharya, IIT Kanpur and "Biomedical Nanotechnology "(August October) by Prof. P. Gopinath, IIT Roorkee and achieved Elite certificates in both of courses.
- i) Third year student Aditya Jha was Finalist in B Plan competition at KSHITIJ 2K19 at IIT Kharagpur and he participated in Start-up conclave in Delhi.
- j) Third year student Benny Paul Basumatary participated in Boeing competition in making RC Airplane, reached the final round in Droid blitz (an amphibian robot), won futsal competition 3 times organised by college and he is part of college football team.

- Workshops/Conferences/Seminars organized
 - a) International Conference on "Tailoring Grain Orientation: Processing and Applications" under Indo-Belgium Top-up Grant in Collaboration with TEQIP III and Indian Institute of Metals, BESU Chapter, 28-29th March 2019 organized by Dr. Manojit Ghosh.
- Workshops/Conferences/Seminars attended in India and abroad
 - a) Key Note Speaker, D. Das, "Hot deformation behavior and flow stress modelling of an ultra-high strength steel", Asia Steel International Conference 2018, February 6-9, 2018, Bhubaneswar, India.

Patent Filed

A Simple and Economical Processing Route For Preparing MnBi Magnetic Powder, Inventors: Amitava Basu Mallick, Angshuman Sarkar, Debashis Sur, Patent Application no. 201931009142; Date of Filing: 08.03.2019; Date of Publication: 26.04.2019

- Major Research Facilities/Lab developed:
 - Development of Abrasive and Erosive Wear Testing Facility (Two-body and Three-body Abrasion as well as Dry and Slurry Erosion).





4.23 Mining Engineering

In India, tertiary level education and training in mining engineering started at this Institute, way back in 1906. The Department was winded up in 1929 and re-established in 1956. The Department offers undergraduate and postgraduate programme in Mining Engineering. The Department of Mining Engineering is an approved QIP centre for postgraduate study in Mining Engineering.

Research specialisations available in the department include Carbon sequestration, Coal bed methane, GIS and Remote sensing, Mine Environment, Environmental Management, Mine Planning and Design, Mineral Dressing, Occupational Health and safety and Rock Mechanics and Strata Control

- Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)
 - Award Name: Student Project of the Year 2018-19,
 Awarded by: Institute of Scholars,

Bangalore. Project: Research and Development project on Analysis of Rope Performance for Various

Opencast Mines, Recipient:
Shri Anirban Paul and
Shri Sougata Mazumder,
Final Year UG Students,
Department of Mining
Engineering, IIEST,
Shibpur, Guide: Prof.
(Dr.) Netai Chandra Dey,
Department of Mining
Engineering, IIEST, Shibpur.

b) Award 3rd Name: National Rank in Paper Presentation (IDEATE) - Mining, 2018, Awarded by: KHANAN, Indian Institute of Technology (Indian School of Mines), Dhanbad, Recipient: Shri Sougata Mazumder, Final UG Students, Department of Mining Engineering, IIEST,

c) Award Name: 2nd National Rank in Case Study (NIRVANA) - Mining, 2018, Awarded by: KHANAN, Indian Institute of Technology

Shibpur.

- (Indian School of Mines), Dhanbad, Recipient: Shri Sougata Mazumder, Shri Soumik Sinha and Shri Swapnaneel Bhuiya, Final Year UG Students, Department of Mining Engineering, IIEST, Shibpur.
- d) Award Name: 2nd National Rank in The Mining Technical Quiz (Quizzine), 2018, Awarded by: KHANAN, Indian Institute of Technology (Indian School of Mines), Dhanbad, Recipient: Shri Sougata Mazumder and Shri Soumik Sinha, Final Year UG Students, Department of Mining Engineering, IIEST, Shibpur
- Workshops/Conferences/Seminars organized
 - a) A Two-Day Industry Academia Conclave (INITIUM 2019) held on 18-19 January, 2019.Faculty Convenor: Shri G. C. Roy and Shri Md. M Islam.
 - b) Visiting Industries: Coal India Limited, Hindustan Copper Limited, KPMG, Gainwell Commosales Pvt. Ltd., DMT Consulting Pvt. Ltd.
- Workshops/Conferences/Seminars attended in India and abroad
 - a) Prof S. Sinha delivered lecture in one workshop at Mansar mine on environmental parameters for sustainable mining at Mansar mine, Nagpur M/S MOIL
- Major Research Facilities/Lab developed: The following facilities has been added to the below mentioned labs.

Coal Analysis Lab

- Fully Automatics Bomb Calorimeter
- Analytical Spectrophotometer

Survey Lab

Theodolite (2 nos.)

GIS Lab

- Mirror Stereoscope
- Pocket Stereoscope

Mineral Dressing Lab

- Wet High Intensity Magnetic Separator
- Floor Standing Temperature and Humidity Chamber
- Weighing Balance
- Roll Crusher

Rock Mechanics Lab

Rock Deformation Measurement Device

Environment Lab

Air Quality Monitoring System



4.24 Physics

The department of Physics has a century old past and has come through the era of revolutionary thoughts in the world of physics to the present century of technological revolution. The year 2000 was a landmark for this department when the M.Sc. course in Applied Physics was introduced. In the last five years the faculty members of the department have contributed more than 100 research papers in international journals of repute and international conference proceedings. Many of our students are engaged in research and some of them are also in scientific jobs in various premier research institutions of India, such as SINP, IACS, TIFR, BARC, IPR, CGCRI etc. Identified thrust areas of research are as follows:

Nuclear structure and nuclear astrophysics, High energy physics, Quantum field theory at finite temperature and density and Quantum chromodynamics, Synthesis and characterization of thermoelectric nanomaterials and composites, Magnetic properties of materials. Characterization of Fuel cells and its components, Preparation and characterization of oxide glass by sol-gel route, Spectroscopic investigation on rare earth and transition metals in search of LASER materials, Fluorescence and phosphorescence study of rare earth materials, Design and optimization of optical fibers for dense WDM system, Fabrication and characterization of optical nanofibers, Nonlinear pulse propagation through single mode optical fibers and waveguides, Atomic Physics in Plasmas, Laser-atom interactions, Spectroscopy of confined quantum systems, Manybody techniques in atomic physics, Silicon nanostructure based : Light emitters, Detectors, Microcavities, Sensors, Processing and characterization of electro-ceramic materials used as

Workshops/Conferences/Seminars organized

capacitor dieletrics, sensors and actuators.

a) Project advisory committee (PAC) (SERB-DST) meeting on physical sciences-2 July
 4-5, 2019 at IIEST, Shibpur, PI- Prof. Dipali Banerjee, Co PI- Dr. M. Pal Chowdhury

b) National Conference on Recent Developments in Nanoscience and Nanotechnology, held on 29 - 31st Jan, 2019 in Jadavpur University, entitled "Electrodeposition of SnSe thin film and its Photocatalytic activity" Pinaki Mandal, Sk. Taheruddin Ahmed, Anup Mondaland Dipali Banerjee. Patents filed "Amine functionalized graphene capped silicon nanocrystal assembly"

Hossain, S. M. (Applicant and Inventor), Nandi, A. (Co-inventor), Biswas, S. (Co-inventor), Chakrabarty, S. (Co-inventor), Majumdar, S. (Co-inventor), Saha, H. (Co-inventor), Application no. 201931020690. Date. 2019/5/24



- Major Research Facilities/Lab developed:
 - Microprocessor controlled 1800°C box furnaces.
 - Hydraulic pressing machine.
 - HP LCR meter.
 - Spectrophotometer (UV-Visible: 190-1100 nm).
 - Luminescence Spectrometer.
 - Electric Furnace (1400°C).
 - Combined PL & EL setup.

- IV-CV measurement with temperature variation.
- Electro-chemical setup for preparation of nanostructure materials.
- CVD furnace for graphene synthesis.
- Furnace for Oxidation/annealing.
- High precision IV-CV measurement setup (Keithley 4200A)
- ❖ IBM-Z pro work station.
- Dell T7500 work station.
- Ultrasonic Pulse Receiver.
- Spin Coater, Centrifuge & Hydrothermal Unit.
 - Tube Furnace.
 - UV-Vis Spectrophotometer (190-900 nm).
 - Magnetic Susceptibility Measurement Unit.
 - Closed Cycle Liquid Helium Cryostat.
 - Vacuum Coating Unit.
 - GM Counter and Radioactive Counter sample with lead shield.
 - Thermal Conductivity measurement set-up.
 - Z-scan instrument for measuring nonlinear properties of optical materials.
 - Linear stage setup for pulling fiber from micro to nano dimensions.
 - High precision ammeter and source meter.
 - Nal detector with multichannel analyser.
 - Thermal Chemical Vapor System.
 - Plasma Jet.
 - ❖ Indigenously developed PVC coated Chemical Bench/Fume Hood.
 - Computer interfaced I-V characterized measurement setup- Agilent.
 - Computer interfaced LCR meter (1 MHz) Agilent.

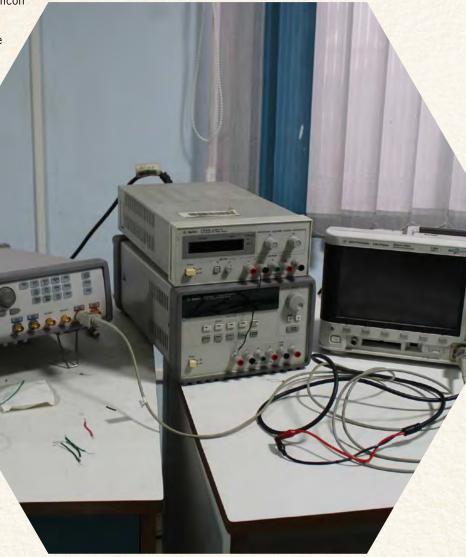


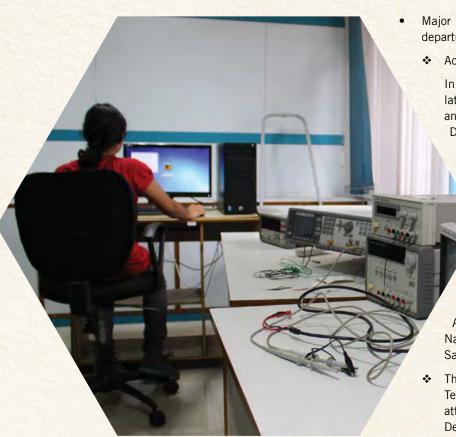
4.25 VLSI Technology

Founded as a part of the Special Manpower Development Project of the Ministry of Information Technology, the School started functioning in 2006 with a flagship M.Tech Course in VLSI Design. The School aims to integrate the efforts of scientists and engineers working in different fields of Microelectronics and Semiconductor devices, towards design and production of VLSI. Major equipment and instruments procured for the school are Linux servers, Sun Solaris Servers, Workstations etc.

- List of Awards/laurels/achievements of Faculty members
 - a) Design (GDSII) of "14 bit Single and Multi-channel Fully Differential SAR ADC" has been submitted to SCL & CDAC under India Chip Program (SMDP-C2SD) for IC fabrication and packaging (Silicon Number: EDU0086 and EDU0087)
 - b) IETE J C Bose Memorial Award- The best engineering Oriented Work for the work "Stability Analysis in Top-Contact and Side-Contact Graphene Nanoribbon Interconnects [Ph.D. Student- Sandip Bhattacharya, Supervisor Hafizur Rahaman.
 - c) Best paper awarded to Pampa Howlader (Ph.D. Scholar) and Pranab Roy (Faculty) at CCSN held at Kolkata in December 2018
- Workshops/Conferences/ Seminars organized by the faculty members
 - a) 2nd IEEE
 International
 Symposium on
 Devices, Circuits and
 Systems (ISDCS 2019)
 jointly organized by
 Hiroshima University, Japan
 and IIEST Shibpur under Bilateral Cooperation between
 India and Japan during 6-8 March
 2019. (Patron:-Prof. Parthasarathi
 Chakrabarti and General Co-Chair
 -Prof. Hafizur Rahaman)

- b) Prof. Tapas Kumar Maity, Hiroshima University, Japan delivered 4 week lectures on Devices and Circuits Co-Design under ILDP Programme, Japan (Course Co-ordinator:- Prof. Hafizur Rahaman).
- Workshops/Conferences/Seminars attended by the faculty members in India and abroad
 - Dr. Kasturi Ghosh attended the 2nd IEEE International Symposium on Devices, Circuits and Systems (ISDCS 2019) at Hiroshima University on 6-8 March 2019.





Major Research Facilities/Lab developed in the department

Academic and Research Infrastructure

In the School of VLSI Technology, We are using latest VLSIEDA tools and hardware in our VLSI and Embedded systems Laboratories. The UG/PG/Doctoral students from Information Technology/Computer Science/Electronic Engg./Electrical Engg are getting exposure with these industry standard tools and equipment. In eastern India, only two or three university/institutes have this type of laboratory.

 Achievements/Awards received by the students (Academic, Extracurricular, Co-Curricular)

❖ IETE J C Bose Memorial Award-Thebestengineering Oriented Work "Stability Analysis in Top-Contact and Side-Contact Graphene Nano ribbon Interconnects" [Ph.D. Student-SandipBhattacharya, Supervisor - Hafizur Rahaman.

The following Ph.D. students from School of VLSI Technology received the ILDP, Japan fellowship for attending the 2nd IEEE International Symposium on Devices, Circuits and Systems (ISDCS 2019) jointly

organized by Hiroshima University, Japan and IIEST Shibpur under Bi-lateral Cooperation between India and Japan during 6-8 March 2019.

a) Mr. Indranil Maity

b) Mr. Subhajit Das

Indranil Maity received ILDP-Japan fellowship for pursuing 2 month Internship on "Preparation of GO Membranes onto Porous Tubular Ceramic Support" under the supervision of Prof. Hiroki Nagasawa at Graduate School of Engineering, Hiroshima University, Japan from 9th January-9th March, 2019.



4.26 Water and Environment Research

Stressing the needs of advanced research and knowledge dissemination, the University has established the Centre for Advanced Research on Water that will provide a common platform with state-of-the-art infrastructure for more focused and holistic interdisciplinary and collaborative research on water. Objective of this is to i) serve as the central focus for water resources research at the University, ii) work in collaboration with national and international research organizations to solve complex water resources problems at the national and international level, iii) communicate the results of its advanced research to government, industry, and other educational institutions, iv) act as a regional centre for water-related research, education, planning, and implementation and v) innovate and implement technology solutions for the people.







Centre of Excellence on Microstructurally Designed Advanced Materials

The Centre of Excellence on Microstructurally Designed Advanced Materials was established in 2013 with the financial assistance received under the TEQIP II scheme. Multipurpose Tribometer, 3D Optical Surface Profilers, Atomic Force Microscope (AFM), Hall Effect Measurement Set-Up, Ultrasonic Vibrator, Melting Furnace & Thermal Evaporation System laboratories were developed and are operational from February 2015.

The centre primarily focuses on multi disciplinary research, training and development of concepts in computation, design, characterization and application of materials in the areas of

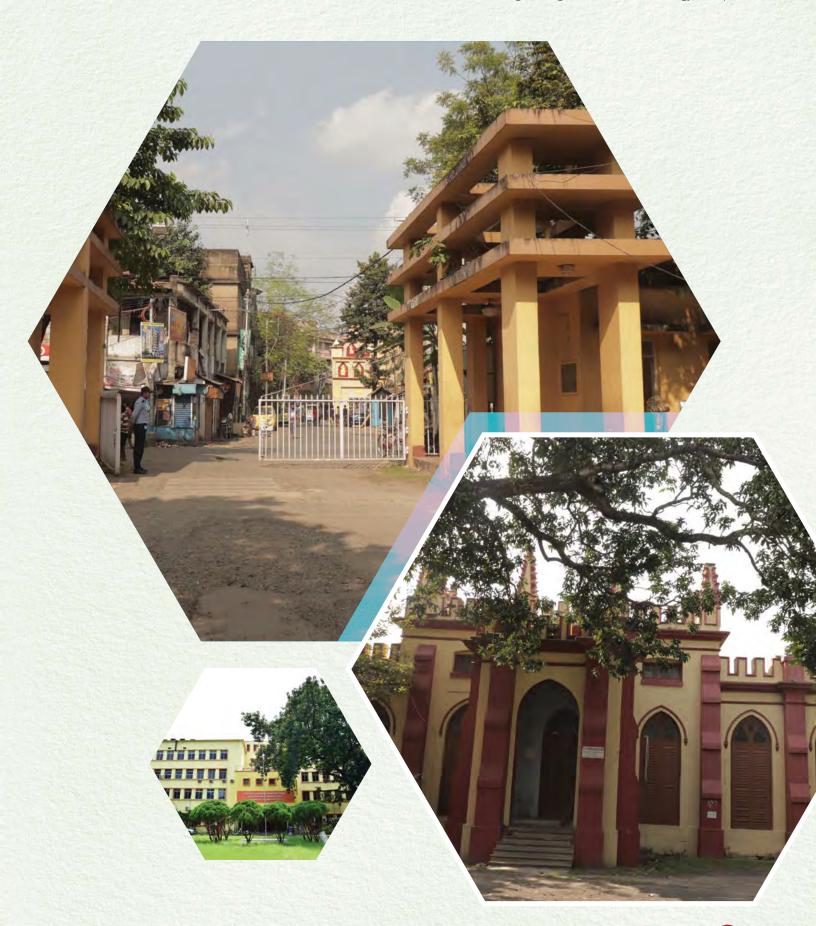
advanced sensor materials, affordable bio-implants, and crash worthy structural steel, alternative permanent magnet materials and materials refurbishment. Apart from carrying out research in the areas mentioned above, the centre also aims at creating technologies that can be commercially exploited by industries.

At present no of research scholars are engaged with their research activities in the field of developing advanced materials.

Projects and financial assistances received from different funding agencies are enlisted below

5.1 Projects & financial assistance received/submitted from other funding agency:

SI. No.	Project Name	Funding Agency	Duration	Total Amount	Status
01	"Development of High Energy Density Rare Earth Free MnBi and FeCo/Cu Core-shell Exchange Spring Coupled Permanent Magnet" Prof. A. Basu Mallick	DST-SERB Project	3 years	64,10591.00	On going
02	"Fatigue study for seismic performance assessment of Rebars" Dr. Debdulal Das	Tata Steel Pvt. Ltd. Jamshedpur	3 years	28,81,840.00	On going
03	"Fatigue Property Evaluation and Micro structural Characterization of Hot Rolled Steels" Dr. Debdulal Das	Tata Steel Pvt. Ltd. Jamshedpur	12 months	14,85961.00	On going







Academic Service Centres

The academic service centres discharge important support functions in the Institute's endeavour to produce quality human resources in the realm of applied sciences, engineering and technology, and management. The Institute's academic service centres comprise (i) the Ramanujan Central Library, (ii)

the Tagore Centre for Green Technology Business Incubation (TCGTBI), (iii) the Computer Centre, (iv)the Sophisticated Instrumentation Centre, (v) the Continuing Education Programme (CEP) Cell, and (vi) the Workshop.

6.1 Ramanujan Central Library

The Institute library has the distinction of being one of the oldest and largest resourceful technical libraries in the Eastern India. The library not only caters to the basic information needs of faculty members, research scholars and students of this Institutebut also provides information and documentation services to researchers of neighbouring universities andresearch institutes. The process of strengthening the infrastructure and facilities of the Ramanujan Central Library continued throughout the period under review. The Library is open from 9.00 A.M. to 12 O'clock in the midnight from Mondays to Fridays and 10.00 A.M. to 6.30 P.M. on Saturdays and Sundays. The library provides open access services for books and other learning materials to its members including students.

Collection Development

During the period under review 547 books were added in the collection of the library. The number of books and other documents issued to the members in the above period is 43,692. The library procured 2248 e-books of John Wiley and Sons published during 2015 to 2018 and 1384 e-books of Pearson Education (India). The library boasts of having a good collection of old and rare books and journals of the nineteenth century.

6.1.1 Computerization

The library has already computerized its entire housekeeping operations and now offered services through the integrated library management system - LibSys7. The library is providing online search facilities (WebOPAC) of its collection through the website of the Institute for remote access. Library has upgraded its servers and integrated library management software, introduced biometric attendance management system and RFID based inventory control system for better collection management and efficient circulation services to its members. Procurement process of additional desktop computers and other peripherals are in process.

6.1.2 Services Offered

- Web based library services
- Access to electronic journals
- Access to bibliographic (Citation) databases
- Lending Service
- Reading Room and e-Reading Room Service
- Reference Service
- Digital Question Papers Access Service
- Inter Library Loan Service
- Similarity (Plagiarism) Checking Service
- Institutional Digital Repository Service
- Services to Alumni and distinguished visitors

6.1.3 Electronic Resources

The facilities in the Library have been significantly improved by the way of introducing a good number of scholarly electronic resources. The access of e-resources - ASCE Journals, ASME Journals, IEL Online, American Chemical Society (ACS), American Institute of Physics (AIP), American Physical Society (APS), Oxford University Press, Royal Society of Chemistry (RSC), Springer Link, Taylor & Francis Journals, JSTOR, Economic and Political Weekly, ISID and Web of Science database available through the E-SHODH SINDHU Consortium is continued. The subscription of seven subject collections (namely, Chemistry; Computer Science; Earth and Planetary Sciences; Engineering; Physics and Astronomy; Materials Science; and Mathematics) of Elsevier's Science Direct database is also continued. The library is subscribing Wiley Online Journals from 2019, bibliographical database Scopus and similarity checking web tool Turnitin.

The library staff members make the users aware about the online citation searching and similarity (plagiarism) checking

services and help them in using these tools. A User Awareness Programme on Similarity Checks and its Benefits was organized on 17th August 2018.

Participation in Seminars/Conferences/ Training Programmes

Dr. H. P. Sharma, Joint Librarian has acted as a resource person in the UGC Refresher Course in Library and Information Science on Transforming Academic Libraries organized by UGC-HRDC and DLIS, University of Calcutta during September 4-25, 2018 and delivered a lecture titled 'Changing Nature of Collection Management and Services in Academic Libraries: A Librarian's perspectives'.

Publication

H. P. Sharma (and others), Understanding pattern of collaborative research in the field of Quark Gluon Plasma during 1973-2013: a study, College Libraries, vol.34, no.1, March 2019, p.80-95.

6.2 Tagore Centre for Green Technology Business Incubation (TCGTBI)

The Tagore Centre for Green Technology Business Incubation (TCGTBI), a society registered under the West Bengal Societies Registration Act, 1961, is set up to promote innovation and entrepreneurship by converting and translating technology ideas and innovation in various disciplines of science and engineering into products, processes and services for commercial exploitation and the benefit of society. To accomplish its goal, TCGTBI runs and manages a Business Incubator (BI) at the Institute to facilitate incubation of new enterprises with innovative technologies by admitting them in BI and providing them physical, technical and networking supports and services.

6.2.1 Infrastructure

Infrastructural facilities are offered to the incubate companies on an individual basis, along with a set of shared/common infrastructure mentioned here-in-under:

- Office space: Company specific
- Internet connection

Apart from company specific infrastructure as stated above, TCGTBI provide following facilities to all incubatee companies on shared basis:

- I. Photocopier
- II. Scanner
- III. Shredder
- IV. Teleconferencing facilities as available. The usage of this facility will be paid by incubates as per the rate fixed by TCGTBI, time to time.

- V. Meeting/Conference room with projection equipment
- VI. TCGTBI Library facilities
- VII. Pantry facilities

VIII.Common secretarial pool/staff

Besides, TCGTBI facilitate the incubatee companies to access departmental laboratories and other resources of IIEST, Shibpur or at its Partner Institute for their specific requirements. Access to Institutional resources is possible as per extant rules of the Institutes, after observing necessary formalities and on payment of required fees. Usage of such resources should be with permission of the concerned department.

6.2.2 Entrepreneurship Promotion

In a globalised and digitised world of today, a culture of innovation, creativity and entrepreneurship have become the watch word in most economies. But, Entrepreneurial talent sitting within academia is largely untapped in India, as mostly in academic institutes employability is more focused than entrepreneurship. Thus, to promote entrepreneurship amongst students of technology institute and offer them the needed support to turn their ideas into reality, at IIEST-Shibpur, TCGTBI is established, that aims to help students build and grow a business. IIEST-Shibpur being the home to thousands of incredibly smart students with innovative ideas, where TCGTBI wishes to support every part of a student entrepreneur's journey, from inspiring their ideas, to helping create a compelling pitch and connecting them to the global network of mentors, investors and experts.

6.3 Computer Centre

The Centre had its modest beginning in 1976 in the premises of the Electrical Engineering Department with a TDC-316 machine operated through punched cards. In 1992, the centre became a separate central computing facility, complete with servers and networked computers, on two floors of the block III of the main building. Presently the Computer Centre is located at the new Technology building near the main administrative building, to provide adequate regular computing infrastructure, as well as high performance computing facilities for the students, research scholars, faculty members and staffs.

6.3.1 Resources/Facilities

At present, in its temporary location, the centre primarily caters for the computing needs of UG curriculum. There are two laboratories: Laboratory-I and Laboratory-II, each equipped with 30 nos. of Pentium 4 pcs. These are connected through LAN to a central server. The PCs are provided with Internet facilities also.

6.3.2 Hardware

- 2 nos. HP Prolient DL145 Rack Server
- HP Blade Centre

- 150 nos. of Desktop PC
- 3 nos. Laser Printer
- Scanner
- Multi Utility Print/Scan/Copier
- · Wall mount Projector
- Internet Gateway Server

6.3.3 Software

- OS: Red Hat Linux, Windows XP
- Compilers : GNU compilers for C/C++ and Java

6.3.4 Short-Term Courses/Training Programs

The centre offers short-term courses for students on programming, as well as basic computer training programmes for staff.

6.4 Sophisticated Instrumentation Centre

The Sophisticated Analytical Instruments Facility (SAIF), formerly known as RSIC, was established by Department of Science and Technology (DST). The key commitment of the Centre is to provide advanced instrumental facility and scientific services required to support and to raise the level of research contributions at par with the international standards. The purpose of establishing these centres is to provide data collection facility from sophisticated analytical equipments to scientific community for their advanced research with nominal charges. The SAIF facility at IIEST Shibpur has started its journey recently in 2016. The high-end facilities available at the Centre included Scanning Electron Microscope (SEM), Nano indentation etc. The Centre also arranges testing facilities in state-of-the art analytical instruments, viz., Multipurpose Tribometer, 3D Optical Profiler, Thermal Evaporation System and Atomic Force Microscopy. As a first instalment to set up SAIF facility at IIEST Shibpur, three major instruments namely, Single Crystal X-ray Diffractometer, NMR, and High Resolution Mass Spectrometer have been approved by DST. The Single Crystal X-ray Diffractometer has already been installed at IIESTS and running successfully.

Main objectives of the centre are as below:

- To provide data collection facility to the samples received from different Institutes/Universities/National Labs/ Colleges/Industries other than IIESTS.
- To acquire and develop capability for preventive maintenance and repair of sophisticated instruments
- To organize short term courses/workshops on the use and application of various instruments and analytical techniques
- To train technicians for maintenance and operation of sophisticated instruments to undertake design and development of instruments/accessories of existing instruments.

6.4.1 Administration

To facilitate smooth functioning of SAIF, whose activities are going to increase manifold in near future, a Local Advisory Committee has been constituted for SAIF, IIESTS consisting of following members given below.

S K chattopadhyay Professor, Department of Chemistry	Coordinator
B K Ghorai	Member
Professor and Head, Department of Ch	emistry
Nanda D. Paul	Member
Assistant Professor, Department of Che	emistry
P Biswas	Member
Assistant Professor, Department of Che	emistry
S Jana Professor, Department of Physics	Member
S K Chattopadhyay	Member

Professor, Department of Chemistry

6.4.2 Users of the Facilities

The facilities provided at the Centre may be utilized by any user/organization on payment of nominal charges. The details about the procedure for using the facilities and the charges for sample analysis, information about short term courses/ training programmes/workshops etc. can be obtained from the respective Coordinators of the SAIFs or the websites of the Facilities.

6.5 Continuing Education Programme (CEP) Cell

The Continuing Education Programme (CEP) and the Quality Improvement Programme (QIP) Cell at IIEST, Shibpur has been actively involved in reaching out to and communicating with the working professionals across the academic and industrial institutions and organizations to setup, uplift and build an environment conducive for the development of competency and the related training requirements. Such a venture has led to the enrichment of a holistic culture of the industry-academia handshake which has not only culminated in the betterment of the aforesaid, but also has led to better chances and provisions of placement of our students. In addition, this has further strengthened the possibilities of collaborative research.

The All India Council for Technical Education (AICTE) funds fully the courses offered and organized by the QIP aimed to

meet three major objectives. These objectives, in turn, form the primary activities of the QIP aimed at the degree level Engineering, Pharmacy and Polytechnic institutions. These objectives are to (a) create and provide opportunities to faculty members of the degree-level engineering institutions to improve their qualification by offering admissions to Master's and Ph.D. programmes, (b) arrange short term courses at the major QIP centres to serve the teachers in a fruitful manner, and (c) undertake curriculum development related activities for the enrichment of the teaching-learning process. In such a structure, a candidate upon selection followed by the admission is put on deputation, with the parent institution bearing his/her salary and allowances. In turn, any candidate selected for admission under the QIP needs to stick to an undertaking to serve his/her parent institution for a minimum period of three years after completion of the programme.

6.6 TEQIP - III

Based on the performance of TEQIP-I and TEQIP-III, National Project Implementation Unit (NPIU), New Delhi has assigned IIEST, Shibpur as the Mentor Institute of Bhagalpur College of Engineering (BCE), Bhagalpur, Bihar under the TEQIP-III twinning agreement between IIEST, BCE and MHRD. IIEST, Shibpur will help BCE for its overall academic and administrative development for NBA, autonomy and introduction of post graduate programmes.

NPIU has sanctioned a funding of Rs. 7.00 crores to IIEST, Shibpur for the project period 2017-2020. Out of this fund, Rs. 1.97 crores has been utilised for the financial year 2018-19.

Equipment namely Isolation Transformer (EE Dept.), Micro Hardness Tester (ME Dept.), High Performance Liquid Chromatography (CE Dept.), DSP/DIP Processing Unit (ETC Dept.), Microprocessor Controlled Electrolytic Sample Preparation System (Met.E. Dept.), Rack Mounted Server

(CST Dept.), Low Frequency Impedance and Dielectric Measurement Unit with variable temperature option (ETC Dept.), Return Circuit Open Surface Water Tunnel (AE&AM Dept.) and software namely DS-5 Development Studio (EE Dept.) was procured within F.Y 2018-19.

TEQIP-III has provided financial assistance to two seventy seven students of under graduate engineering students for attending summer internship program organised by educational institution/research organisation/industry.

TEQIP-III has provided financial assistance to one hundred eighteen (188) students of engineering students for attending Seminar/Conference/Workshop held within India to present their paper accepted by program organizer.

Eight in-house programs were organised by engineering departments with financial support from TEQIP-III fund.

TEQIP-III has provided financial assistance to two hundred forty students of final year under graduate engineering students for payment of GATE-2018 Registration Fee.

Ten faculty members from BCE, Bhagalpur, Bihar discussed with the Head along with faculty members of CE Dept. and ETC Dept., IIEST, Shibpur during December 26-27, 2018 for process of vetting of SAR (Self Assessment Report) related to NBA Accreditation.

Forty- four students (CST - 13 nos.; CE- 8 nos.; EE - 6 nos.; Me - 5 nos.; ETC - 12 nos.) from Bhagalpur College of Engineering completed Summer Internship, 2018 in the respective departments of IIEST, Shibpur during June 01-30, 2018.

TEQIP-III has supported with financial assistance to 190 students (AE&AM - 13 nos.; CE - 36 nos.; CST - 17 nos.; EE - 23 nos.; ETC - 43 nos.; IT - 12 nos.; ME - 25 nos.; Met. E. - 10 nos. and Min. E. - 11 nos.) of engineering departments for purchase of consumable items related to their research purposes.

Four faculty members from IIEST, Shibpur (Dr. Ujjwal Saha – CE Dept, Dr. Pritam Saha – CE Dept., Dr. Susanta Kumar Parui – ETC Dept., Dr. Ankita Pramanik – ETC Dept.) delivered special lecture series in BCE, Bhagalpur, and Bihar during December 16-19, 2018.

Four education tours for students of under graduate students were undertaken with financial support from TEQIP-III fund.

6.7 Workshop

Different shops of the IIEST workshop are looked after by different departments. While the mechanical engineering department takes care of the machine shop, the carpentry shop, and the fitting shop, the forging and welding shop is looked after by the materials and metallurgical engineering department. The department of electrical engineering is responsible for running and upkeep of the electrical shop. It handles the teaching of workshop practical courses meant for all the 1st year students at undergraduate level in addition to that for higher semester students of a few departments namely mechanical engineering, at both undergraduate and postgraduate levels. Going beyond the realm of curricular courses, the workshop extends its facilities to different academic units of the Institute in fabricating models and prototypes for both academic and extra mural research.

Besides conventional machines and equipments, the workshop is equipped with modern fabrication and production units. State of the art equipments available with the Workshop include CNC Machining Centre, CNC Milling with ATC, Centreless grinding Machine, Universal Milling Machine with retrofit, etc. The emerging thrust areas of the Workshop include the following.

- Advanced manufacturing processes
- Product manufacturing
- Product assembly and inspection
- Manufacturing planning
- Computer aided manufacturing for industry.









Sponsored Research and Industrial Consultancy Activities

The Research and Consultancy Cell has, of late, matured into the singular channel for diverse externally funded research and industrial consultancy at the Institute. As of now its principal role is to act as a facilitator for R&D activities at the Institute. But, in consonance with the 'make in India' thrust of the Government and in tune with the technology roadmap of the country the Cell is now gearing up to play a greater role to act as the hinge point for multi and interdisciplinary mega research for which the Institute is now well poised.

A tradition of uncompromising quality-concern has put the Institute in good treads and, over the last few years, a good number of government and non-government funding agencies like AICTE, UGC, CSIR, DST, DIT, DAE, BRNS, DRDO, ISRO, UNICEF have come forward to sponsor Research Projects. Presently the Institute is putting a purposeful thrust on collaborative research both at national and international level.

In order to enhance the level of intellectual productivity and efficacy, the Institute has established a "Research and Consultancy Cell (RACC)" of which the principal objective is to facilitate - on behalf of the institute, coordination in administration, managerial, liaison, monitoring etc. of sponsored research and consultancy work within the ambit of the administrative framework of the Institute. This allows research workers to devote more time to fruitful research without bothering much on not-too-technical but no-less-important other aspects of the project administration and implementation.

The Institute enjoys a reputation for excellence in research and development. Casting a glance at its academic departments, the Institute can boast of commendable performance of its faculty members, particularly their quality research output which is reflected by a good number of publications in peer-

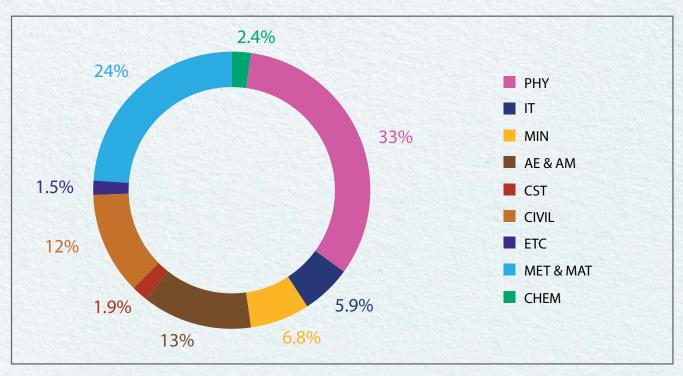
reviewed national and international Journals. A significant number of research projects funded by AICTE, UGC, DST, CSIR, ISRO, DRDO, DIT, Ministry of Steel, Ministry of Defense, SMDP, BRNS, MNRE, TATA Steel, TISCO, SAIL, NML, ICDC, NMRL and international funding agencies like CIDA, USAID, DelPHE, SANEI etc. bear testimony to the quality of research programmes carried out at the Institute. In the recent past Institute shared its research accomplishments with IISC (ACRC) Bangalore, IBM Kolkata, TATA Steel, SAIL, Infosys, DRDL, CPRI, TCS etc.

The number of sponsored projects and the funding have increased significantly during the last five years. Besides the conventional fields of technology and science, the Institute in recent years has brought many frontier areas of S&T under the purview of its sponsored research activities. Some of such areas are: Advanced Materials, Bio-Mechanics, Bio-materials, Earthquake Dynamics, Disaster Management, Environmental Remediation, Fuel Cell, Green Energy and Sensors, Healthcare Science and Technology, Mobile Computing, Nano Science and Technology, Power Electronics, Remote-sensing and GIS, Space Technology, MEMs fabrication, Structural Engineering, Surface Engineering, VLSI and Embedded Systems, Sensor Network, Mechatronics and Robotics, Water Resource, Turbulent Flow, Carbon Sequestration, Remote Sensing, Atomic and Nuclear Physics, Soft Computing, Image processing etc. Major augmentation in infrastructure for facilitating academic, research and administrative activities in the Institute has been undertaken during the past one year.

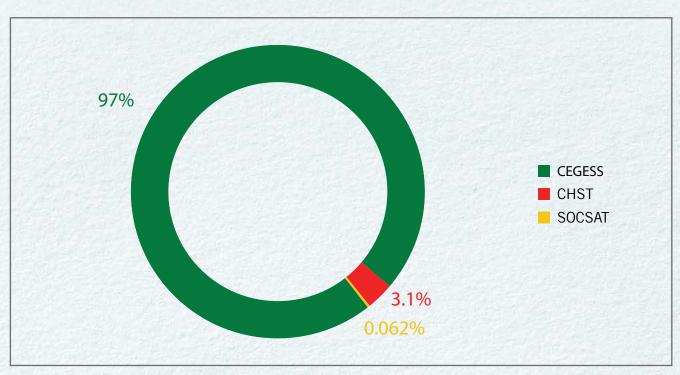
Particulars of new externally funded projects initiated in 18-19 are furnished in table 7.1.Details of completed projects in 18-19 is mentioned in table 7.2 while the list of ongoing projects in 18-19 is documented in table 7.3.List of Consultancy projects is recorded in table 7.4 and 7.5.

Table 7.1: New Externally Funded Projects initiated in 2018-19

SI. No.	Dept.	Name of Principal Investigator	Funding Agency	Sanctioned Amount (Rs. in lakh)
1	AE & AM	Subhasis Bhaumik	The Institution of Engineers (India)	0.2500
2	AE & AM	Nityananda Nandi	Ministry of Earth Science, Govt. of India	36.9000
3	AE & AM	Amit Roy Chowdhury	SERB	29.5320
4	CHEM	Ajit Kumar	CSIR	11.8017
5	CIVIL	Ambarish Ghosh	Dept. of Higher Education, Science & Technology and Bio-Technology (Govt. of W.B.)	15.7600
6	CIVIL	Anirban Gupta	UNICEF, Kolkata	34.6478
7	CIVIL	Soumya Bhattacharjya	CSIR	8.2845
8	CST	Surajeet Ghosh	Science & Technology and Biotechnology (GOWB)	9.3080
9	ETC	Chirasree Roy Chaudhuri	Digital India Corporation, A Section 8 Company of Ministry of Electronics and Information Technology, Govt. of India	7.4000
10	IT	Sukanta Das	SERB	5.4529
11	IT	Indrajit Banerjee	DST-WB	15.8600
12	IT	Arindam Biswas	Dept. of Biotechnology, Govt. of India	8.0000
13	MET & MAT	Arunanshu Haldar	SERB	114.8983
14	MET & MAT	Swarup Kumar Ghosh	Electrosteel Casting Limited (ECL)	2.7140
15	MIN	Prabir Kumar Paul	SERB	34.1764
16	PHYS	Abhijit Majumdar	Science & Technology and Biotechnology (GOWB)	16.5500
17	PHYS	Dipali Banerjee	SERB	33.7136
18	PHYS	HOD, Physics	DST-FIST	115.0000
19	SOCSAT	Jayati Bhowal	Indian Council of Medical Research	1.7800
20	CHST	Ananya Barui	Dept. of Biotechnology, Govt. of India	65.9520
21	CHST	Ananya Barui	Indian Council of Medical Research	2.2840
22	CHST	Ananya Barui	Indian Council of Medical Research	20.0040
23	CEGESS	Nillohit Mukherjee	SERB	46.5460
24	CEGESS	Anirban Bagui	DST-Inspire	86.2743
25	CEGESS	Nillohit Mukherjee	Dept. of Higher Education, Science & Technology and Bio-Technology (Govt. of W.B.)	11.6775
26	CEGESS	Partha Chaudhri	DST	2621.4340



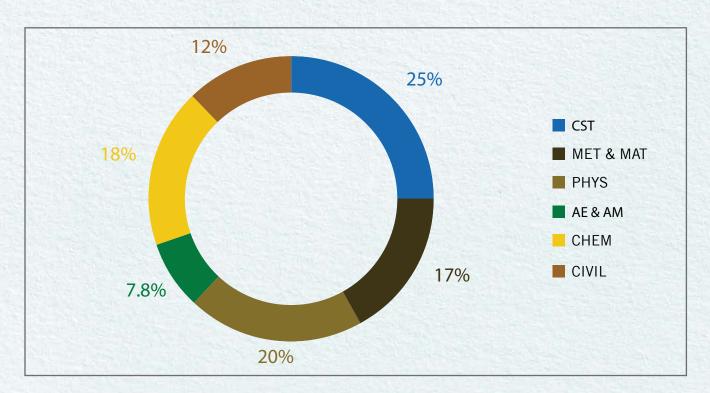
Department wise New Projects



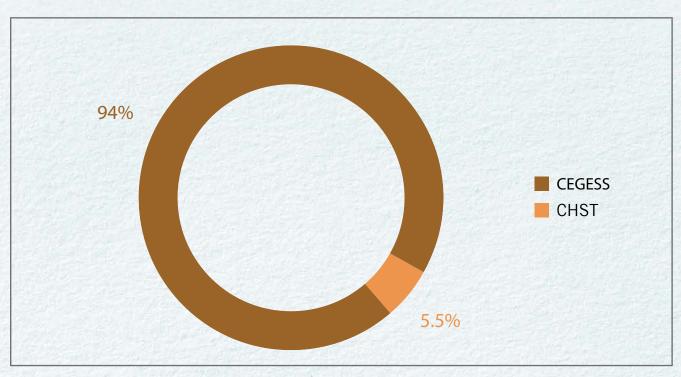
School and Centre wise New Projects

Table 7.2: Completed Projects in 2018-2019

SI. No.	Dept.	Name of Principal Investigator	Funding Agency	Sanctioned Amount (Rs. in lakh)
1	AE & AM	Subhasis Bhowmik	DST	32.0000
2	CHEM	Chinmoy Bhattachayya	DST	7.8800
3	CHEM	Chinmoy Bhattachayya	SERB	49.5000
4	CHEM	Ajoy Kumar Paramanik	SERB	16.6000
5	CIVIL	Anirban Gupta	UNICEF	2.3460
6	CIVIL	Anirban Gupta	UNICEF	11.2746
7	CIVIL	Anirban Gupta	UNICEF	17.6050
8	CIVIL	Anirban Gupta	UNICEF	12.0187
9	CIVIL	Anirban Gupta	IIT-K	6.0000
10	CST	Sipra Das Bit	ITRA-MLA	57.5400
11	CST	Jaya Sil	ITRA-MLA	46.1800
12	MET & MAT	Subrata Chatterjee	Tata Steel	20.0870
13	MET & MAT	Subrata Chatterjee	Defence	28.3795
14	MET & MAT	Swarup Kumar Ghosh	ECL	1.9838
15	MET & MAT	Manojit Ghosh	BRNS	18.9402
16	PHYS	Abhijit Majumder	BRNS	21.1044
17	PHYS	Sampad Mukherjee	NASF	26.0352
18	PHYS	Sudipta Kanungo	DST	33.4619
19	CHST	Pallab Datta	DST	24.5400
20	CHST	Sabyasachi Sarkar	Tata Steel	3.1200
21	CHST	Dibyendu Sain	SERB	17.7000
22	CHST	Jagadish Chandra Misra	SERB	30.5000
23	CEGESS	Hiranmay Saha	MNRE	1300.0000



Department wise Completed Projects



School and Centre wise Completed Projects

Table 7.3: List of Ongoing Projects in 2018-2019

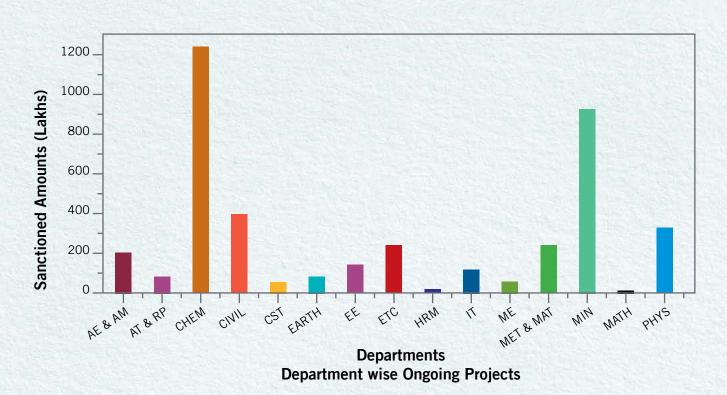
SI. No.	Dept.	Name of Principal Investigator	Funding Agency	Sanctioned Amount (Rs. in lakh)
1/	AE & AM	AMIT ROYCHOWDHURY	DBT	63.1480
2	AE & AM	AMIT ROYCHOWDHURY	DST	18.0000
3	AE & AM	KOUSTUV DEBNATH	SERB	81.0000
4	AE & AM	NITYANANDA NANDI	MoES	36.9000
5	AT & RP	SOUVANIC ROY	DST	65.9820
6	AT & RP	SOUVANIC ROY	MHRD-IITKGP	10.0000
7	CHEM	AJIT KUMAR MAHAPATRA	BRNS	22.6680
8	CHEM	AJIT KUMAR MAHAPATRA	SERB	28.3756
9	CHEM	AJIT KUMAR MAHAPATRA	CSIR	11.8017
10	CHEM	ANITA DAS	SERB	19.2000
11	CHEM	ARIK KAR	DST	35.0000
12	CHEM	ARIK KAR	RS	26.9439
13	CHEM	BINAY KRISHNA GHORAI	DST-FIST	145.0000
14	CHEM	CHINMOY BHATTACHARYA	DST-WB	10.8253
15	CHEM	CHINMOY BHATTACHARYA	CSIR	9.0000
16	CHEM	DEBABANI GANGULY	DBT	88.0000
17	CHEM	JAYANTA NANDA	DST	35.0000
18	CHEM	JAYATI DUTTA	NMRL-CARS	9.8924
19	CHEM	MRINAL K BERA	DST	54.6200
20	CHEM	MRINAL K BERA	CSIR	17.5600
21	CHEM	NANDA DULAL PAUL	CSIR	18.1680
22	CHEM	NANDA DULAL PAUL	SERB	30.9500
23	CHEM	SASANKA DALAPATI	DST	35.0000
24	CHEM	SHYAMAL KUMAR CHATTOPADHYAY	DST-SAIF	650.0000
25	CHEM	SHYAMAL KUMAR CHATTOPADHYAY	DST-WB	9.1800
26	CHEM	SOURAV MARDANYA (PDF)	SERB	19.2000
27	CIVIL	AMBARISH GHOSH	DST-WB	15.7600
28	CIVIL	ANIRBAN GUPTA	UNICEF	4.2200

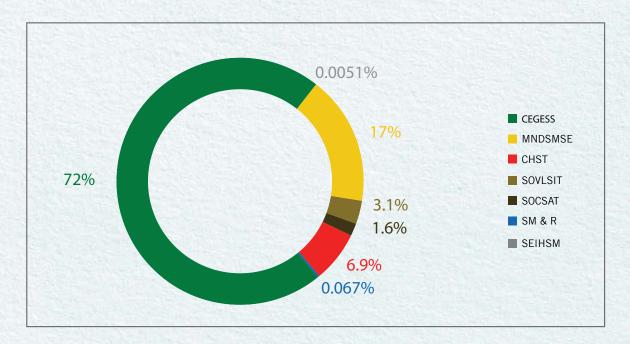
SI. No.	Dept.	Name of Principal Investigator	Funding Agency	Sanctioned Amount (Rs. in lakh)
29	CIVIL	ANIRBAN GUPTA	UNICEF	19.3821
30	CIVIL	ANIRBAN GUPTA	IC-IMPACTS	9.0548
31	CIVIL	ANIRBAN GUPTA	UNICEF	21.7206
32	CIVIL	ANIRBAN GUPTA	UNICEF	34.6478
33	CIVIL	ARUN KR. CHAKRABORTY	AHUT	2.0000
34	CIVIL	ARUN KR. CHAKRABORTY	TATA STEEL	5.5000
35	CIVIL	ARUN KR. CHAKRABORTY	ACC	2.2472
36	CIVIL	CHAMPAKALI DAS	DST	23.8000
37	CIVIL	KALYAN KR. BHAR	PHED-GOWB	62.7000
38	CIVIL	KALYAN KR. BHAR	GITA	25.1177
39	CIVIL	SOUMYA BHATTACHARJYA	CSIR	8.2845
40	CIVIL	SUDIP KUMAR ROY	CSIR	100.4500
41	CIVIL	SUMIT CHAKRABORTY	SERB	26.4472
42	CST	AMIT KUMAR DAS	INTEL	15.2448
43	CST	SURAJEET GHOSH	DBT	20.4480
44	CST	SURAJEET GHOSH	DST-WB	9.3080
45	EARTH	ATIN KUMAR MITRA	SERB	30.9880
46	EARTH	BHABANI PRASAD MUKHOPADHYAY	WBPDCL	22.2200
47	EE	ASHOKE SUTRADHAR	UCG-SAP	43.0500
48	EE	MAINAK SENGUPTA	MURATA	59.8656
49	ETC	BAIDYA NATH ROY	SERC-DST	32.0000
50	ETC	CHIRASHREE ROY CHAUDHURI	ICMR	46.9780
51	ETC	CHIRASHREE ROY CHAUDHURI	IEI	1.2000
52	ETC	CHIRASHREE ROY CHAUDHURI	DIC-MLA (VIS)	7.4000
53	ETC	DEBASIS MITRA	MLA-DEITY (VIS)	37.0000
54	ETC	PALLABI PRAMANIK - PDF	SERB	14.4000
55	ETC	PARTHA BHATTACHARYYA	MLA-DEITY (VIS)	37.0000
56	ETC	SUSANTA KUMAR PARUI	SERC-DST	31.9060
57	ETC	SUSANTA KUMAR PARUI	CSIR	19.9200
58	HRM	MANAS KR. SANYAL	NRDC	6.0000
59	ĬΤ	ARINDAM BISWAS	DBT	8.0000
60	IT	INDRAJIT BANERJEE	DST	76.0400

SI. No.	Dept.	Name of Principal Investigator	Funding Agency	Sanctioned Amount (Rs. in lakh)
61	IT	INDRAJIT BANERJEE	DST-WB	15.8600
62	IT	MALAY BHATTACHARYYA	MLA-DEITY (VIS)	37.0000
63	IT	PRASUN GHOSAL	IEI.	0.5000
64	IT	PRASUN GHOSAL	IEI	0.3000
65	IT	SUKANTA DAS	SERB	5.4529
66	ME	PARTHA PRATIM DEY	BRNS	40.9628
67	MET & MAT	AMITAVA BASU MALLICK	SERB	64.1059
68	MET & MAT	ARUNANSU HALDAR	SERB	114.8983
69	MET & MAT	DEBDULAL DAS	TATA STEEL	14.8500
70	MET & MAT	DEBDULAL DAS	TATA STEEL	14.8500
71	MET & MAT	DEBDULAL DAS	TATA STEEL	28.8184
72	MET & MAT	MANOJIT GHOSH	DST	17.2000
73	MET & MAT	PARTHA PRATIM CHATTOPADHYAY	TATA STEEL	2.0000
74	MET & MAT	SWARUP KUMAR GHOSH	ECL	2.7140
75	MIN	PRABIR KR. PAUL	SERB	34.1764
76	MIN	PRATIK DUTTA	DST	65.9820
77	MIN	PRATIK DUTTA	UOL	19.8091
78	MIN	PRATIK DUTTA	CMPDI	763.1200
79	MIN	SUDIPTA MUKHOPADHAYA	UGC	3.7530
80	MATH	BINAYAK SAMADDAR CHOWDHURY	DST	8.8374
81	PHYS	ABHIJIT BISOI	SERB	33.6834
82	PHYS	ABHIJIT MAJUMDAR	DST-WB	16.5500
83	PHYS	AMIT KUNDU	DST-FIST	115.0000
84	PHYS	CHIRASREE LAHIRI	SERB	19.2000
85	PHYS	DIPALI BANERJEE	SERB	33.7136
86	PHYS	MANISH PAL CHOWDHURY	DST	42.0550
87	PHYS	MOUSUMI BASU	SERB	21.6117
88	PHYS	SAMAR JANA	SERB	28.1094
89	PHYS	SAMAR JANA	DBT	43.0460
90	SOVLSIT	HAFIJUR RAHAMAN	DEITY-MCIT	128.0000

SI. No.	Dept.	Name of Principal Investigator	Funding Agency	Sanctioned Amount (Rs. in lakh)
91	SOVLSIT	LOPAMUDRA BANERJEE	DST	20.4500
92	MNDSMSE	NILRATAN BANDYOPADHYAY	SDF-TATA	628.2000
93	MNDSMSE	NILRATAN BANDYOPADHYAY	TATA STEEL	0.7500
94	MNDSMSE	PROSENJIT SAHA	DST	35.0000
95	MNDSMSE	PROSENJIT SAHA	SERB	42.1953
96	MNDSMSE	PROSENJIT SAHA	DST	21.0375
97	MNDSMSE	SUBRATA CHATTERJEE	MoT	54.7400
98	MNDSMSE	SWATILEKHA GHOSH	DST	35.0000
99	SOCSAT	MANISHA MAITY	ICMR	1.7800
100	SOCSAT	SUJAY KR. MUKHERJEA	FPI&H	74.7500
101	SEISHM	SOUVANIC ROY	SHH-K-WB	2.0000
102	SEISHM	SOUVANIC ROY	SHH	1.2500
103	SM & R	SOUVANIC ROY	IEI	0.2500
104	CHST	AMIT ROYCHOWDHURY	DBT	10.0100
105	CHST	AMIT ROYCHOWDHURY	SERB	29.5320
106	CHST	ANANYA BARUI	CCRH	30.0000
107	CHST	ANANYA BARUI	DST	34.3200
108	CHST	ANANYA BARUI	ICMR	20.0040
109	CHST	ANANYA BARUI	DBT	65.9520
110	CHST	ARITRI GHOSH	ICMR	2.2840
111	CHST	CHITRANGADA DAS MUKHOPADHYAY	NMPB-MOA	37.5460
112	CHST	CHITRANGADA DAS MUKHOPADHYAY	DST-WB	15.7600
113	CHST	PALLAB DATTA	ICMR	22.4800
114	CHST	RAKHI MAJUMDAR	SERB	19.2000
115	CHST	SABYASACHI SARKAR	SERB	50.0000
116	CEGESS	ANIRBAN BAGUI	DST	86.2743
117	CEGESS	ARINDAM KOLE	SERB	19.2000
118	CEGESS	CHANDAN BANERJEE	DST	55.3540
119	CEGESS	HIRANMAY SAHA	WBREDA	3.1000

SI. No.	Dept.	Name of Principal Investigator	Funding Agency	Sanctioned Amount (Rs. in lakh)
120	CEGESS	HIRANMAY SAHA	OZTRON	1.0000
121	CEGESS	HIRANMAY SAHA	MNRE	5.0000
122	CEGESS	HIRANMAY SAHA	нітк	2.0000
123	CEGESS	HIRANMAY SAHA	DST	293.8729
124	CEGESS	HIRANMAY SAHA	TSECL	11.5000
125	CEGESS	HIRANMAY SAHA	BHEL	19.9900
126	CEGESS	HIRANMAY SAHA	DST	138.1400
127	CEGESS	NILLOHIT MUKHERJEE	DST	40.5636
128	CEGESS	NILLOHIT MUKHERJEE	DST-WB	11.6775
129	CEGESS	NILLOHIT MUKHERJEE	SERB	46.5460
130	CEGESS	PARTHA CHAUDHURI	DST	21.0280
131	CEGESS	PARTHA CHAUDHURI	DST	2621.4340
132	CEGESS	SANHITA MAJUMDAR	DST	30.0000
133	CEGESS	SNEHANGSHU PATRA	DST	35.0000
134	CEGESS	SNEHANGSHU PATRA	SERB	30.4700





School and Centre wise Ongoing Projects

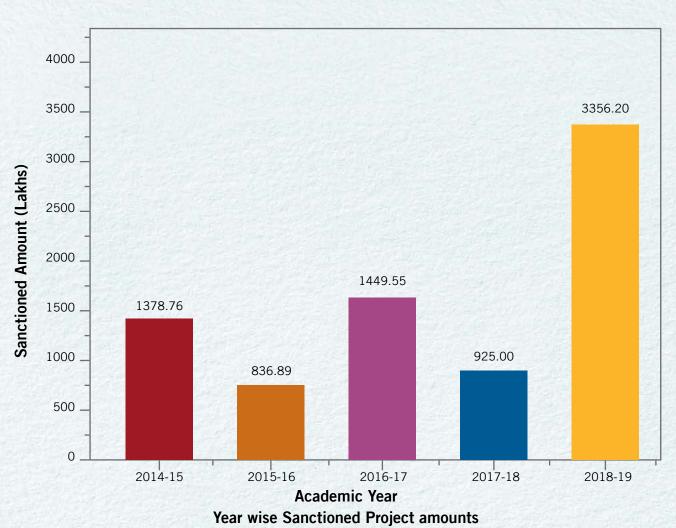


Table 7.4 List of Consultancy Project 2017-18

SI. No.	Financial Year	Dept.	Name of Principal Investigator	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
1	2017-2018	Civil	Ambarish Ghosh	Executive Engineer, Kolkata Division, Govt. of West Bengal	1.6461
2	2017-2018	Civil	Ambarish Ghosh	Executive Engineer, Kolkata Division, Govt. of West Bengal	2.3010
3	2017-2018	Civil	Kalyan Kumar Bhar	Modern Construction Co., Kolkata	6.1360
4	2017-2018	Civil	Kalyan Kumar Bhar	Bengal Shipyard Limited, Kolkata	31.2405
5	2017-2018	Civil	Ambarish Ghosh	Kolkata Port Trust	4.4250
6	2017-2018	Civil	Tapas Kumar Roy	Civil Solutions, Unit No. 212, Diamond Arcade (2nd Floor), 68, Jessore Road, Kolkata - 700055	0.5900
7	2017-2018	Mining	Pratik Dutta & Prabir Kumar Paul	NCL India Ltd. (A. Govt. of India Enterprise)	4.1300
8	2017-2018	Civil	Prasanta Chakraborty	Narayan Kumar	0.4720
9	2017-2018	Civil	Ambarish Ghosh	Z-Tech (India) Pvt. Ltd., 04 South End Park, Kolkata - 700029	0.8850
10	2017-2018	Civil	Kalyan Kumar Chattopadhyay	Executive Engineer, KCD-3, CPWD, Kolkata	2.9500
11	2017-2018	Civil	Saibal Kumar Ghosh	Sudarshan Sengupta & Sons Kharagpur	0.5900
12	2017-2018	Civil	Saibal Kumar Ghosh	ITD Cementation India Ltd.	2.0000
13	2017-2018	Civil	Saibal Kumar Ghosh	Westinghouse Saxby Farmer Limited	1.1800
14	2017-2018	Civil	Saibal Kumar Ghosh	Sikaria Divinity (P) Ltd.	5.9000
15	2017-2018	Civil	Asok Adak	Transtonnelstory-Afcons Joint Venture	1.7700
16	2017-2018	Civil	Ambarish Ghosh	Kish Developers LLP	3.1860
17	2017-2018	Civil	Soumya Bhattacharjya	Westinghouse Saxby Farmer Limited	0.2360
18	2017-2018	Architecture	Arup Sarkar	Howrah Municipal Corporation	6.0700
19	2017-2018	Civil	Ambarish Ghosh	Mackintosh Burn Limited	4.1300
20	2017-2018	Civil	Saibal Kumar Ghosh	Royal Infrastructure Ltd., Kolkata	7.0800
21	2017-2018	Civil	Ambarish Ghosh	Dineshchandra R. Agarwal Infracon Pvt. Ltd., Gujrat	1.2980

SI. No.	Financial Year	Dept.	Name of Principal Investigator	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
22	2017-2018	Civil	Ambarish Ghosh & Kalyan Kumar Chattopadhyay	Regent Hirise Pvt. Ltd.	5.3100
23	2017-2018	Civil	Ambarish Ghosh	Traders & Engineers Private Ltd.	0.6490
24	2017-2018	Civil	Saibal Kumar Ghosh	ELIXIR, Kolkata - 700025	3.5400
25	2017-2018	Civil	Ambarish Ghosh	NBCC (India) Ltd.	3.5400
26	2017-2018	AE&AM	Souvanic Roy, Soumen Mitra, Ruchira Das, Subrata Kr. Paul	National Museum of Denmark (NMD), Denmark	9.2500
27	2017-2018	Civil	Saibal Kumar Ghosh	Sudarshan Sengupta & Sons, Kharagpur	0.5900
28	2017-2018	Civil	Kalyan Kumar Chattopadhyay	Panchdeep Constructions Ltd., Howrah	1.1800
29	2017-2018	Mining	Netai Chandra Dey	Eastern Coalfields Limited (ECL)	0.0850
30	2017-2018	Civil	Tapas Kumar Roy	Bagnan College, Howrah	0.8260
31	2017-2018	CEGESS	Hiranmay Saha	Bengal Sun Solar Energy (I) Pvt. Ltd.	0.2500
32	2017-2018	Civil	Saibal Kumar Ghosh	D.C. Rakshit & Company	0.4720
33	2017-2018	Mechanical	Sudip Ghosh	West Bengal Medical Services Corporation Ltd., Govt. of West Bengal	8.0000
34	2017-2018	Civil	Sugato Pal	West Bengal Tourism Development Corporation Ltd.	0.5900
35	2017-2018	Civil	Saibal Kumar Ghosh	Siddha Waterfront LLP	7.0800
36	2017-2018	Civil	Saibal Kumar Ghosh	Siddha Real Building LLP	7.0800
37	2017-2018	Civil	Ambarish Ghosh	UC Consultancy	0.9440
38	2017-2018	Civil	Saibal Kumar Ghosh	Panchdeep Constructions Ltd., Howrah	0.2832
39	2017-2018	Civil	Saibal Kumar Ghosh	Shamvwi Consultant	1.0620
40	2017-2018	Civil	Aparna (Dey) Ghosh	Kalyani Mahavidyalaya	0.5900
41	2017-2018	Civil	Ambarish Ghosh	Asutosh College, Kolkata	3.4810

SI. No.	Financial Year	Dept.	Name of Principal Investigator	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
42	2017-2018	Civil	Saibal Kumar Ghosh	Royal Infrastructure Ltd., Kolkata	2.1240
43	2017-2018	Civil	Ambarish Ghosh	Chowringhee Residency Pvt. Ltd.	1.4160
44	2017-2018	Civil	Ambarish Ghosh	Parvati Resources Pvt. Ltd.	2.6550
45	2017-2018	Electrical	Jagadish Pal	West Bengal Medical Services Corporation Ltd., Govt. of West Bengal	24.0000
46	2017-2018	Civil	Ambarish Ghosh & Kalyan Kumar Chattopadhyay	Arun Prakash Gupta	2.9500
47	2017-2018	Civil	Ambarish Ghosh & Kalyan Kumar Chattopadhyay	Kalyan Gupta	2.9500
48	2017-2018	Civil	Saibal Kumar Ghosh	Bygging India Pvt. Ltd.	1.1800
49	2017-2018	Civil	Ambarish Ghosh	Kolkata Division, Social Sector, P.W.Dte., Govt. of West Bengal	0.6500
50	2017-2018	Civil	Ambarish Ghosh	Kolkata Division, Social Sector, P.W.Dte., Govt. of West Bengal	1.4500
51	2017-2018	Civil	Ambarish Ghosh	Kolkata Division, Social Sector, P.W.Dte., Govt. of West Bengal	3.0500
52	2017-2018	Civil	Subrata Chakraborty	Eastern Metec Pvt. Ltd., Kolkata	0.4720
53	2017-2018	Civil	Aparna (Dey) Ghosh	Development Consultants Private Limited	18.0000
54	2017-2018	Civil	Tapas Kumar Roy	Haldia Development Authority	1.7700
55	2017-2018	Civil	Saibal Kumar Ghosh	Siddha Real Estate Development Pvt. Ltd.	6.9000
56	2017-2018	Civil	Saibal Kumar Ghosh	Ganesh Tracom Pvt Ltd & Others	6.9000
57	2017-2018	Civil	Soumya Bhattacharjya	Calwien Marketing Pvt. Ltd.	0.5750
58	2017-2018	Civil	Saibal Kumar Ghosh	Bismi Construction, Kolkata	0.6900
59	2017-2018	Civil	Saibal Kumar Ghosh	KMDA, Kolkata	4.6000
60	2017-2018	Civil	Saibal Kumar Ghosh	Paschim Medinipur Zilla Parishad	1.4375

SI. No.	Financial Year	Dept.	Name of Principal Investigator	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
61	2017-2018	Civil	Saibal Kumar Ghosh	Basu & Associates	1.1500
62	2017-2018	Civil	Subrata Chakraborty	Eastern Metec Pvt. Ltd., Kolkata	1.3800
63	2017-2018	Civil	Saibal Kumar Ghosh	KMDA	4.6000
64	2017-2018	Civil	Ambarish Ghosh	Z-Tech (India) Pvt. Ltd., 04 South End Park, Kolkata - 700029	1.4375
65	2017-2018	Mining	Pratik Dutta & Prabir Kumar Paul	HINDALCO Industries Ltd.	2.9900
66	2017-2018	Civil	Ambarish Ghosh	IRCON International Ltd.	0.8050
67	2017-2018	Civil	Kalyan Kumar Chattopadhyay & Ambarish Ghosh	Oriental Nicco Projects Pvt. Ltd.	3.4500
68	2017-2018	Civil	Kalyan Kumar Chattopadhyay & Ambarish Ghosh	R.K. Construction	1.7250
69	2017-2018	Civil	Ambarish Ghosh	STUP Consultants Pvt. Ltd.	2.8750
70	2017-2018	Civil	Kalyan Kumar Chattopadhyay	Vardhman Engineering Works, Delhi	4.6000
71	2017-2018	Civil	Sudip Kumar Roy & Sandip Chakraborty	RITES Ltd.	3.4500
72	2017-2018	HRM	Manas Kumar Sanyal	RITES Ltd.	4.0250
73	2017-2018	Civil	Kalyan Kumar Chattopadhyay	Executive Engineer, Kolkata West Division, Public Works Department, Govt. of W.B.	1.2000
74	2017-2018	Civil	Kalyan Kumar Chattopadhyay	Hooghly River Bridge Commissioners	0.8625
75	2017-2018	Civil	Sudip Kumar Roy	Vidyasagar University	1.2888
76	2017-2018	Civil	Ambarish Ghosh	Byucksan India Pvt. Ltd.	17.2500
77	2017-2018	Civil	Ambarish Ghosh	Dineshchandra R. Agrawal Infracon Pvt. Ltd., Gujrat	2.875
78	2017-2018	Civil	Kalyan Kumar Chattopadhyay & Ambarish Ghosh	Swarn Ganga Reality Ltd.	2.6450

SI. No.	Financial Year	Dept.	Name of Principal Investigator	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
79	2017-2018	Civil	Ambarish Ghosh	Er. Prosenjit Sen, Empanelles Structural Engineer of KMC	4.0700
	Total				289.4661

Table 7.5 List of Consultancy Project 2018-19

SI. No.	Financial Year	Dept.	Name of Principal Investigator	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
1	2018-2019	Civil	Tapas Kumar Roy	Kolkata Port Trust	1.1800
2	2018-2019	Civil	Kalyan Kumar Chattopadhyay	Bengal Concessions Private Limited	3.4810
3	2018-2019	Civil	Ambarish Ghosh	Transtonnelstroy Afcons J.V.	7.6700
4	2018-2019	Civil & Mining	Ambarish Ghosh & Netai Chandra Dey	Khagra Joydev Resources Private Limited	8.2600
5	2018-2019	Civil	Soumya Bhattacharjya	Kolkata Municipal Corporation, Town Planning & Development Department	4.9000
6	2018-2019	Civil	Kalyan Kumar Chattopadhyay	West Bengal Medical Services Corporation Limited	10.9504
7	2018-2019	Civil	Ambarish Ghosh	Office of the Executive Engineer, South 24 Parganas Division, Social Sector P.W.DTE, Govt. of West Bengal	1.7700
8	2018-2019	Civil	Kalyan Kumar Chattopadhyay	BBT Elevated Road Private Ltd.	5.9000
9	2018-2019	Civil	Tapas Kumar Roy	Haldia Development Authority	4.2480
10	2018-2019	Civil	Ambarish Ghosh	Traders & Engineers Pvt. Ltd., Kolkata	2.0650
11	2018-2019	AE&AM	Amit Roy Chowdhury	Conveyor & Ropeway Services Pvt. Ltd.	2.5960
12	2018-2019	Civil	Tapas Kumar Roy	Civil Solutions, Unit No. 212, Diamond Arcade (2nd Floor), 68, Jessore Road Kolkata - 700055	0.3540
13	2018-2019	Civil	Ambarish Ghosh	U.C. Consultancy	1.1800
14	2018-2019	Civil	Kalyan Kumar Bhar	BMT Consultants (India) Pvt. Ltd.	12.7322
15	2018-2019	Civil	Soumya Bhattacharjya	Tirupati Enterprises	1.1800
16	2018-2019	Civil	Ambarish Ghosh	Asutosh College	3.4810

SI. No.	Financial Year	Dept.	Name of Principal Investigator	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
17	2018-2019	Civil	Kalyan Kumar Bhar	Sudarshan Sengupta & Sons	0.5039
18	2018-2019	Electrical	Mainak Sengupta	IIT Kharagpur	15.5701
19	2018-2019	Civil	Ambarish Ghosh & Sujit Kumar Dalui	TEKNO Enterprise	1.2980
20	2018-2019	Civil	Ambarish Ghosh	The Executive Engineer, North 24 Parganas Division, Govt. of West Bengal	2.3010
21	2018-2019	Mining	Netai Chandra Dey	Weastern Coalfields Limited	8.3780
22	2018-2019	AE&AM	Amit Roy Chowdhury	AKS Power Equipments Pvt. Ltd.	0.4000
23	2018-2019	Civil	Sujit Kumar Dalui	Larsen & Toubro Limited	0.4720
24	2018-2019	Civil	Soumya Bhattacharjya	ITD Cementation India Ltd.	2.0000
25	2018-2019	Mining	Netai Chandra Dey	Coal India Limited	2.5960
26	2018-2019	Metallurgy	Sukumar Kundu	Lal Baba Seamless Tube Pvt. Ltd.	1.5340
27	2018-2019	Civil	Ambarish Ghosh & Kalyan Kumar Chattopadhyay	Bengal Concessions Private Limited	11.2100
28	2018-2019	Civil	Ambarish Ghosh	Traders & Engineers Pvt. Ltd., Kolkata	1.6520
29	2018-2019	Civil	Subrata Chakraborty	Dineshchandra R. Agarwal Infracon Pvt. Ltd.	1.1800
30	2018-2019	Civil	Saibal Kumar Ghosh	Panchdeep Construction Ltd.	9.7232
31	2018-2019	Civil	Ambarish Ghosh	Dineshchandra R. Agarwal Infracon Pvt. Ltd.	4.1300
32	2018-2019	Civil	Tapas Kumar Roy	Haldia Development Authority	3.5047
33	2018-2019	Architecture	Arup Sarkar & Swati Saha	Howrah Municipal Corporation	13.2340
34	2018-2019	Civil	Tapas Kumar Roy	Kolkata Port Trust	3.5400
35	2018-2019	Civil	Saibal Kumar Ghosh	Panchdeep Construction Ltd.	11.8000
36	2018-2019	Civil	Saibal Kumar Ghosh	Decoarch	1.1800
37	2018-2019	Civil	Ambarish Ghosh	Rail Vikas Nigam Limited	2.9500

SI. No.	Financial Year	Dept.	Name of Principal Investigator	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
38	2018-2019	Civil	Ambarish Ghosh	Kolkata Metro Rail Corporation Limited	49.3240
39	2018-2019	Electrical	Mainak Sengupta	Shakti Pumps (India) Ltd.	4.3336
40	2018-2019	Civil	Sudip Kumar Roy	Hooghly River Bridge Commissioners	7.9060
41	2018-2019	Civil	Tapas Kumar Roy	Second Vivekananda Bridge Tollway Company Private Ltd.	1.5340
42	2018-2019	Mining & Civil	Netai Chandra Dey & Asok Adak	Khagra Joydev Resources Private Limited	8.8500
43	2018-2019	Mining	Pratik Dutta	Western Coalfields Limited	8.0871
44	2018-2019	Civil	Ambarish Ghosh	Traders & Engineers Pvt. Ltd., Kolkata	1.0620
45	2018-2019	Civil	Ambarish Ghosh	Traders & Engineers Pvt. Ltd., Kolkata	1.0030
46	2018-2019	Civil	Ambarish Ghosh	Traders & Engineers Pvt. Ltd., Kolkata	0.8850
47	2018-2019	Civil	Ambarish Ghosh	Traders & Engineers Pvt. Ltd., Kolkata	0.9440
48	2018-2019	Civil	Ambarish Ghosh	Tribeni Constructions Ltd., Kolkata	1.4750
49	2018-2019	Civil	Ambarish Ghosh	Visva Bharati University	3.3630
50	2018-2019	Civil	Saibal Kumar Ghosh	Calcutta Cane Traders, Kolkata	0.7080
51	2018-2019	Civil	Tapas Kumar Roy	Civil Solutions, Unit No. 212, Diamond Arcade (2nd Floor), 68, Jessore Road Kolkata - 700055	0.2124
52	2018-2019	Civil	Saibal Kumar Ghosh	Prasun Enterprise	1.1800
53	2018-2019	Civil	Ambarish Ghosh & Kalyan Kumar Chattopadhyay	Chitra Estate & Credit Private Limited	3.5400
54	2018-2019	Civil	Sudip Kumar Roy & Sandip Chakraborty	Mackintosh Burn Limited, Kolkata	0.8850
55	2018-2019	Civil	Kalyan Kumar Chattopadhyay	Kristi Engineering Services Pvt. Ltd.	2.3600
56	2018-2019	Mining	Netai Chandra Dey & Gopal Chandra Roy	General Manager, Bankola Area, ECL	3.9884
57	2018-2019	Civil	Saibal Kumar Ghosh	Alipore Institute of Management & Technology	2.3600
58	2018-2019	Civil	Debabrata Mazumder	Kolkata Metropolitan Development Authority	16.5200

SI. No.	Financial Year	Dept.	Name of Principal Investigator	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
59	2018-2019	Electrical	Ashok Kumar Maitra	Gorkhaland Territorial Administration, Darjeeling	7.5520
60	2018-2019	Civil	Kalyan Kumar Chattopadhyay	Hooghly Cochin Shipyard Limited	5.6050
61	2018-2019	Civil	Kalyan Kumar Chattopadhyay	Prostarm Info Systems Ltd.	0.4130
62	2018-2019	Civil	Tapas Kumar Roy	Kolkata Port Trust	8.2600
63	2018-2019	Civil	Kalyan Kumar Bhar	MCPI Private Limited	5.0008
64	2018-2019	Civil	Saibal Kumar Ghosh	ESSEM Enterprise, Kolkata	1.1800
	Total				319.6358

Table 7.6 Revenue Earned from Consultancy Project During last 3 years (Year wise)

2016-17 (For the Year ended	2017-18 (For the Year ended	2018-19 (For the Year ended
31.03.2017) in Rs.	31.03.2018) in Rs.	31.03.2019) in Rs.
3,12,91,177.00	3,27,78,176.00	4,35,58,662.00



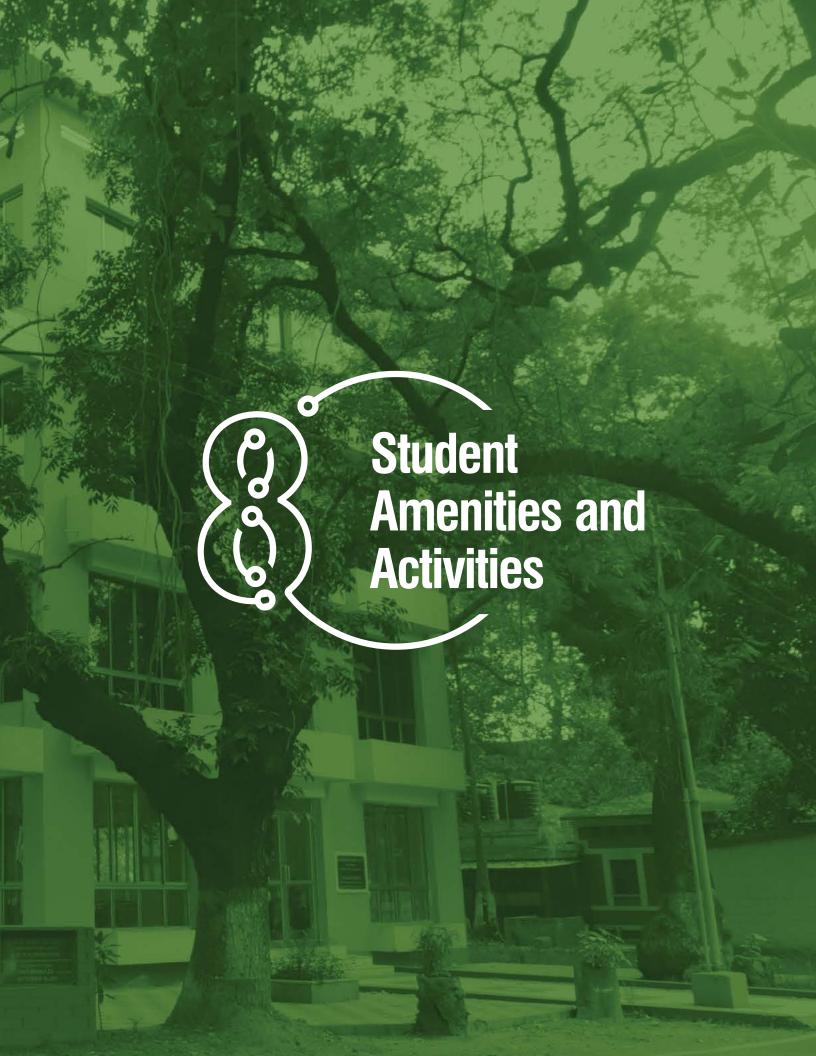
Academic and Research Collaboration

Over the last few years, in tune with the Institute policy of strengthening national and international collaboration, the Institute has signed quite a number of MOUs with various academic/research/government organisations and Industry houses. Details of MOU signed in 2018-19 are furnished in Table 7.7.

Table 7.7 MOU Signed with various academic/research/government/organisations and Industry houses

Financial Year	Between	Name of the Signatories
2018-19	INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD	PROFESSOR VISHNU PRIYE, DEAN (RESERARCH AND DEVELOPMENT
2018-19	BHARAT PERTROLEUM CORPORATION LTD	SUMITA DAS, DEPUTY GENERAL MANAGER





Student Amenities and Activities

8.1 General

On the recommendation of the Review Committee (1953), a proctorial department was established at the erstwhile Bengal Engineering College, Shibpur in the year 1956. The principalobjective of the department was to look after their discipline, welfare, and extra-curricular activities of students. With the conversion of this Institute to a CFTI the Institute switched over to a Dean based mode of functioning and, as such, since 2014, it functions under the direct supervision of the Dean (Student Welfare). In order to create an environment conducive to fostering growth of academic and cultural life in the Institute and to develop sound mental health of students the Institute considers it important to engage those students creatively in various activities to hone their soft skills. Such activities include, inter-alia, activities in the domain of sports, culture, soft skill, and hobbies. Various students' societies like Societies for Artistic Expression, Music and Dance, Debate and Quiz, Drama and Literature, Modelling and Robotics have been formed with befitting names. These societies function under the overall guidance of the Dean - Student Welfare.

8.2 Proctorial Board

A Proctorial Board has been constituted at the Institute to monitor and oversee the discipline related matters and to advise the Director on corrective and other necessary measures. For imposing disciplinary measures the Board is guided by the 'Manual on Student discipline' framed by the Institute Senate.

8.3 Students' Hostels

There are 18 Hostels/Halls of Residence for students. Three women's hostels cater exclusively to girl students and research scholars. Day to day management of each of the halls/hostels is looked after by a Warden/Superintendent appointed from amongst the members of the faculty/officer. At every hostel, a mess committee constituted from amongst the borders oversee the messing arrangements. At the Institute level, a

Joint Mess Committee (JMC), comprising representatives from every mess committee, ensures co-ordination and takes policy decisions. While the overall hostel administration is looked after by the Chief Warden, responsibility for dispute resolution is vested with the Dean (Student Welfare).

8.4 Sports and Games

The Athletic Club is the hub of the activities involving sports, games and physical exercises. Athletic Club plays a key role in the everyday lives of students cultivating and nurturing their talents in the sports and games arena. The students under the auspices of the Institute's athletic club participated in a variety of physical activities during their time beyond academic hours.

The Campus has two play grounds, - The 'Lords' in the east and the 'Oval' towards the west. These play grounds provide opportunities to the students for practicing sport like cricket, football, etc. A newly constructed Basketball Ground is a new attraction. A swimming pool opens to the students and campus-inmates for nine months of the year. The gymnasium of the Institute has undergone significant modernisation in the recent past.

Sport facilities available at the Institute include Volleyball Ground, Badminton Court (Concrete), Basketball (hard court) and a well equipped gymnasium. A Students' Amenity Centre and a Yogic practice arena has recently been added to the facilities. Activities relating to Sports and Games are overseen by the Institute Sports Board.

8.5 Sports Training

The first-degree curricula of the Institute require the students to opt for one of the many programmes offered under the aegis of the sports board. Apart from two regular physical instructors, a few part timers are associated in the physical training and sport related training/coaching of the students. Stress is put on scientific training procedure for development of sports performances in different sporting events.

8.6 National Service Scheme (NSS)

The Institute's NSS programme is oriented towards developing socially sensitised personality in the students. NSS cadres offer complimentary assistance in academic pursuits of local destitute children in the form of free tuition. NSS units also raise and distribute books and related learning materials. Exercise books, copies, pen, pencil, erasers are distributed on "No charge basis". During the year under review, the NSS unit organized a garment distribution programme and also organized a Voluntary Blood Donation camp in the University campus.

In last session, the NSS unit of the institute have done number of social activities with the volunteers of the institute.

- Displayed hoarding, banner at prominent places in the slum areas regarding Health, Nutrition, Hygiene, Sanitation, ill-effects of drug & smoking, child labour, early marriage etc for focusing public attention and awareness.
- Numbers of dustbins have been installed in different parts of the campus to keep the campus clean under "SWACHH BHARAT ABHYAN".

- Continuing Self defence activities for female students.
 Total 20 girls were actively engaged in this programme.
- Organized one Women's Self Defence workshop on 08.08.2018 in the campus.

8.7 National Cadet Corps(NCC)

The NCC unit at the Institute is affiliated to the Senior Division of 49 Bengal Battalion NCC. The Unit aims to serve the nation through appropriate activities. It also prepares the students for NCC certification examination

For the session 2018-19, the Institute Sports Board registered 40 students cadet in the 41 Bengal Bn NCC. We have supported the unit to conduct Firing activities twice in the Institute Firing Range. But due to unavoidable circumstances, no cadets of this institute took part in the said Small Arm firing activities. This year we are going to register more than 40 students as NCC cadets to the unit. And this year, we are going to organize an additional programme on advantages of NCC in future endeavour of the Engineers and technocrats, having engineering degrees. They could get ample scope to crack SSB examination in the Defence Services as Engineers.

8.8 Games and Sports Activities organised

Table 8.1 Institutional Competitions

SI. No.	Event	D	ate
		From	to
1.	Inter Hostel Football Tournament for Boys	09.04.2018	19.04.2018
2.	Invitational Football Tournament (2018-19)	09.04.2018	19.04.2018
3.	Inter Department Knock-out Football Tournament for 1st Semester BTech/BArch Boys	16.08.2018	24.08.2018
4.	Inter Department Football Tournament for Boys	28.08.2018	07.09.2018
5.	Inter Year Football Tournament for Boys	24.09.2018	28.09.2018
6.	Inter Hostel Table Tennis Championship for Boys	04.10.2018	09.10.2018
7.	Inter Hostel Badminton Tournament for Boys	21.01.2019	24.01.2019
8.	Individual Badminton Championship for Girls	24.01.2019	24.01.2019
9.	Inter Year Cricket Tournament for Boys	09.02.2019	17.02.2019
10.	T-20 Invitation Cricket Tournament for Boys	20.02.2019	19.03.2019
11.	Inter year Basketball Tournament for Boys	02.04.2019	05.04.2019
12.	Annual Athletic Meet for both Boys and Girls	12.03.2019	12.03.2019
13.	Inter Department Chess Tournament		

Table 8.2 Off Campus Competitions

SI. No.	Event	Organiser	Da	te
			From	to
1.	East Zone Inter University Cricket Tournament for Boys	Ravenshaw University, Odisha	06.01.2019	24.01.2019

8.9 Students Senate

In order to create an environment conductive for fostering growth of academic and cultural life in the Institute and to develop sound mental health of the students by engaging themselves creatively within the Institute campus, an idea of constituting a Students' body named Students' Senate was conceived. The principal objective for forming the Students' Senate has been to empower the students so that they can express themselves and act creatively in diverse areas of academics, culture, sports and games with a sense of fraternity.

With all bonafide students as its members, the General Council of the Students' Senate is elected by its members. The General Council comprises Secretaries, Treasurers from various Students' Academic Societies, Students' Societies of Creative Expressions and Captains of Students' Clubs of Games and Sports.

The executive committee of the Senate is constituted mostly from amongst the members of the general council through a process of election. The Director nominates the President and the Vice-President of the executive committee from amongst the members of the faculty.

Students' Societies

Various students' societies are active; the societies provide platforms to students to pursue extra-curricular activities and hobbies. The Students' Societies active in 2018-19 include:

1) Camera Buff The Cine Club

2) Catharsis The Photographic Society

3) Code IIEST The Coding Club

The Debating Society 4) Debsoc 5) Euphony The Music Club 6) Les Thespiens The Drama Club 7) Lit SOC The Literary Society 8) Quiz Maniac Being The Quiz club The Dance Club 9) Reflex-o Beta 10) Robodarshan The Robotic Society 11) SCAGE The Society for Creative Arts and Green Environment.

At the 'Students' Centre for Creative Expression', the students practice dramatics, music, photography, quiz and debates, etc. Students interested in scientific modelling and Robotics find ample scope to develop innovative models, including robots. The students Robotics club has developed a number of different types of Robots, including Robots with vision. A coding club nurtures the students to hone their software development acumen. Instruo, the intercollegiate technomanagement festival and the REBECA, the Annual Students' Social are the intercollegiate events that cause reverberations in the campus through hundreds of feet-fall.







Training and Placement

Training and placement of students are looked after by the Human Resource Management (HRM) Department. Mandate of the Department includes, inter alia, the following.

- Job Placements of students of the Institute though Campus and Off-campus selection processes
- Internship/Summer Training of students at various industries and research institutes
- Grooming up (Personality/Soft-Skill/Performance Effectiveness) Programme for the Students
- Facilitation for other options: Preparatory programme for competitive examinations and other educational options abroad
- Industry Interaction Programme/Academic collaborations
- Entrepreneurship Development
- Innovation and IPR awareness and facilitation
- Career Counselling

This predominantly is a service department catering to all UG, PG and Ph.D. students in terms of their placement and training.

9.1 On-Campus Recruitment

- One month Placement Preparatory Program for students of IIEST, funded by TEQIP-II.
- Entrepreneurship orientation for 2017 new entrants.
- Seminar-cum workshop on Innovation & IP Creation: imperatives of Professiona I Education, sponsored by NRDC
- Students Interaction with representative NEN on appbased entrepreneurship learning module
- Research Scholar of HRM dept. awarded with "Outstanding Paper Award" in Intellectual Property Rights in 24th West Bengal State Science & Technology Congress 2017
- Interaction Programme with various industries.

The details of the UG and PG placements of last 3 years with department wise break up is furnished in Table 9.1 and Table 9.2 respectively. Table 9.3 records the details of the placement of students from schools/centres at the PG level. Table 9.4 documents the vocational training data of the last 3 years.

Table 9.1 UG Placement

Year	Department	CST	ETC	EE	IT	ME	CE	MET	MIN	AERO	Total
2018-19		82	43	61	81	61	59	25	30	20	462
2017-18	Total No.of Offers for UG	58	31	44	61	52	44	16	16	12	334
2016-17	101 00	84	70	70	72	56	59	28	32	12	483

Table 9.2 PG Placement (Departments)

Year	Department	CST	ETC	EE	ICE	ME	CE	MET	MIN	Appl Mech	Total
2018-19		5	11	3	7	5	7	1	0	1	40
2017-18	Total No.of Offers for UG	6	4	3	6	2	4	0	0	1	26
2016-17		4	7	3	2	3	1	0	0	1	21

Table 9.3 PG Placement (School/Centre)

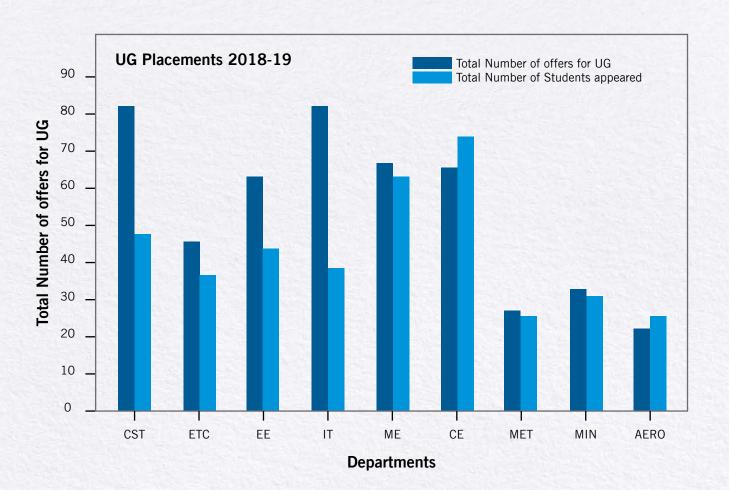
Year	Department	Bio-Medical	VLSI	Mat Science	Mechatronics
2018-19		0	6	0	1
2017-18	Total No.of Offers for UG	0	15	1	2
2016-17		1	7	1	1

Table 9.4 Vacational Training Data

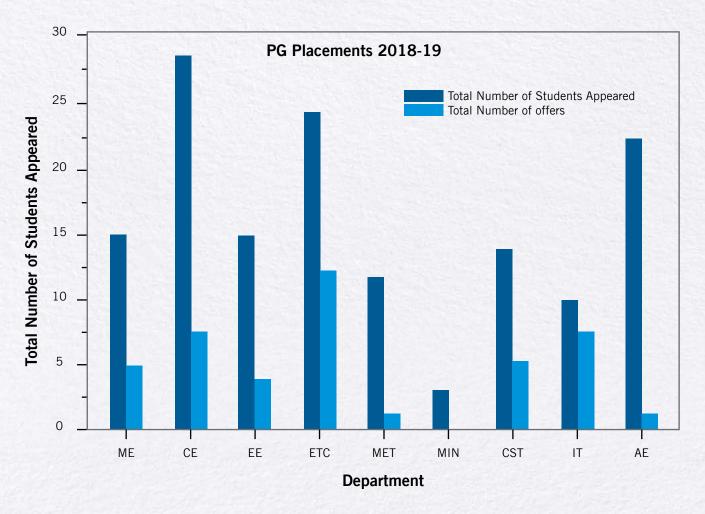
Year	Training (Year wise)		
2018-19		61	
2017-18	No.of companies offering Vacational Training	55	
2016-17		67	

Placement Statistics for 2018 passout batch of IIEST, Shibpur

Eligible UG Batch Size vs. Total Offers made through placement - 2018 pass-out batch



Eligible PG Batch Size vs. Total Offers made through placement - 2018 pass-out batch



9.2 Recruiters of 2018 pass out Batch

List of Companies/Institutions Offering Job Opportunities

SI. No.	Recruiters	SI. No.	Recruiters
1	Aakash Institute	10	BuyerForesight
2	Abzooba Inc.	11	Byju's
3	Acxiom Consulting Ltd.	12	Cadence Design Systems
4	Aditya Birla Group	13	Capgemini
5	Adobe Inc.	14	CESC Ltd.
6	AECOM	15	CGI Information Systems
7	Appnomic (Obopay)	16	Cirel Systems Pvt. Ltd.
8	BABTECH Consulting Engineering	17	Codenation Solutions LLP
9	Bajaj Auto Ltd.	18	Cognizant Technology Solutions

SI. No.	Recruiters	SI. No.	Recruiters
19	Daimler Commercial Vehicles Ltd	49	Netcracker Technologies
20	DCG AlLabs	50	Nineleap Technologies Ltd.
21	Denso Haryana Pvt. Ltd.	51	Nissan Digital
22	Development Consultants Private Limited	52	Price Waterhouse Coopers
23	DMT Consulting Ltd.	53	S.K.Samanta & Co. Ltd.
24	DX Corr Ltd.	54	Saint Gobain
25	Dynamic Digital Technologies	55	Samsung R&D
26	ELEATION	56	Sasken Technologies
27	Electrosteel Casting Ltd.	57	Shapoorji & Pallonji Co. Ltd.
28	Elegant Marine Services	58	Silfra Technologies
29	Envestnet Yodlee	59	Simplex Infrastractures Ltd.
30	Gainwell Commosales Pvt. Ltd.	60	SMS India Ltd
31	Haldia Petrochemicals Ltd.	61	Subex Limited
32	Hindusthan Unilever Ltd.	62	Tata Bhusan Steel Ltd.
33	Hyland Software Ltd.	63	Tata Bluescope Steel Ltd.
34	Hyundai Motors India Ltd.	64	Tata Consultancy Services
35	Infosys Ltd.	65	Tata Power Ltd.
36	Institute of Engineering and Management	66	Tata Projects Ltd.
37	IPM Commodities Pvt. Ltd.	67	Tata Steel Ltd.
38	ITD Cementation India Ltd.	68	Tega Industries Ltd.
39	Jacobs	69	Texas Instruments
40	Jindal Stainless Steel Ltd.	70	Vedanta Limited
41	JSW Steel Ltd.	71	Vikram Solar Ltd.
42	Larsen & Tubro Ltd.	72	Whatfix
43	Maheswari mining Pvt. Ltd.	73	Wood Group (Foster Wheeler)
44	Maruti Suzuki India Ltd.	74	WSP India Ltd.
45	Mentor Graphics	75	Xelpmoc Designs
46	Mentor Graphics	76	Zifo R & D Solutions
47	Microsoft IDC	77	ZS Associates
48	MN Dastur & Co. Ltd.	78	Zycus

Besides, Final Placements, many students, pre-dominantly from Pre-final Year also had the opportunity for Vocational Training or Summer Internship Programme in reputed industrial/academic institutions - some of them also leading to Pre-Placement Offers.

9.3 List of Companies/Institutions Offering VT/Internship Opportunities

SI. No.	Company/Institution	SI. No.	Company/Institution
1	Bharat Sanchar Nigam Limited	27	Dynamic Digital Technology
2	Barclays	28	Eastern Coalfields Ltd.
3	Bharat Electronics Ltd.	29	Electric Workshop Division Northern Railways
4	Bharat Heavy Electricals Ltd.	30	Garden Reach Shipbuilders Engineering Ltd.
5	Bhava Atomic Research Centre	31	Gas Authority of India Limited, Delhi
6	Bhilai Steel Plant	32	Gun & Shell Factory Cossipore, Kolkata
7	Bhusan Steel Limited	33	Haldia Development Authority
8	Bihar State Power Holding Company Ltd.	34	Heavy Engineering Corporation Ltd.
	(BSPHCL)	35	Hindustan Aeronautics Ltd.
9	Bihar State Power Transmission Company Ltd.	36	Hyland Software Solutions Ltd.
10	Bokaro Steel Plant	37	IISc., Bangalore
11	Bokaro Thermal Power Station	38	IIT, Delhi
12	BOPT, Chennai	39	IIT, Madras
13	Bridge & Roof Co. Ltd.	40	IIT, BHU
14	Central Coalfields, Ranchi	41	IIT, Bhubaneswar
15	Centre for Artificial Intelligence and Robotics	42	IIT, Bombay
16	Centre for Modernising Government Initiative	43	IIT, Kanpur
17	Centre for Railway Information System, Kolkata	44	IIT, Roorkee
18	CESC Limited	45	Indian Ordnance Factories, Ishapore
19	Crompton Greaves Ltd.	46	Indian Railways
20	CSIR, MI&E	47	Institute for Development & Research in Banking
21	CSIR, CGCRI		Technology
22	CTPP, RVUN, Chhabra	48	IOCL, Haldia, Vadodara
23	Damodar Valley Corporation	49	ISI, Kolkata
24	DCG Data Core Center	50	ISRO, Chandigarh
25	Defence Research Development Organisation, Delhi, Chandipur	51	ISRO, Punjab
26	Durgapur Steel Thermal Power Station, Andal	52	Jadavpur University

SI. No.	Company/Institution
53	Jaipur Metro Rail Corporation
54	Jharkhand Urja Vikas Nigam Ltd.
55	Kanti Thermal Power Plant
56	Larsen & Toubro Limited, ECC Division
57	Lucknow Metro Corporation Ltd.
58	M. N. Dastur Ltd.
59	Marathon Electric Motor (India) Ltd.
60	Mejia Thermal Power Station
61	Metro Railways
62	Microsoft
63	National Aluminium Company Limited
64	National Metallurgical Laboratory
65	National Thermal Power Corporation, Kahalgaon
66	National Thermal Power Corporation, UP
67	Neo Tele-Tronix Pvt. Ltd.
68	ONGC Academy
69	ONGC, Rajahmundry
70	Power Grid Corporation, Kolkata
71	Power System Operation Corporation Ltd.
72	Price Waterhouse Coopers Limited

SI. No.	Company/Institution
73	PWD, Kolkata
74	PWD, Haridwar
75	Semi Conductor Laboratory, Punjab
76	Semiconductor Technology and Applied Research Centre, Bangalore
77	Siemens Ltd. Kolkata, Mumbai
78	South Eastern Coalfields Ltd.
79	South Eastern Rail, Kharagpur
80	South Eastern Railway, Ranchi
81	Tafe Motor and Tractor Ltd.
82	Tata Steel
83	TCS Innovation Lab
84	UP Power Corporation, Ghazipur
85	Variable Energy Cyclotron Centre
86	Vikram Solar Ltd.
87	Vishakapatnam Steel Plant
88	West Bengal State Electricity Distribution Co. Ltd.
89	West Bengal Power Development Corporation Ltd.





Campus Facilities

Located on the west bank of River Hooghly towards the east of the Acharya Jagadish Chandra Bose Indian Botanic Garden at Shibpur Howrah, the walled campus of the Institute occupies an area of 124 ha. The campus has a rich flora diversity with a mix of water bodies, most of which are connected to the Ganges and thus enjoy tide and wane of the river.



Well connected by road, rail and river the campus is located at 22.5552° N, 88.3071° E. While a few of the buildings pre-dates the Institute, The principal activities of the Institute are carried out from two sets of buildings, viz., (i) the main integrated four storied academic buildings comprising 11 blocks, and (ii) the eight storied Science and Technology Buildings of which four blocks have been constructed till date.

Estate

Main Academic Building

Constructed in the early fifties this integrated building is an early hall mark of the noted architect and civil engineer Mr Habibur Rahaman. The main academic complex is a fourstoried building covering about 22,000 square metre area that accommodates most of the engineering departments, The Training and Placement Cell, the Academic Section and the Examination Section.



Science and Technology Building

The newly constructed eight-storied Science and Technology building with 14400 square metres area accommodates some of the existing engineering departments, science and management departments, and various centres and schools. Office of the Vice-Chancellor, Offices of the Deans, Registrar, and other financial and administrative offices are also located in this building. Annexes to this building are now being constructed to accommodate future departments, schools, centres and offices.



Eight-Storeyed Science & Technology Building

Workshop Complex

The old Workshop complex where the former Bengal Engineering College was originally started in this campus is now a heritage building. Part of the workshop is housed in the adjoining building. The workshop complex is quite large, encompassing an area of about 8500 square metres. The Workshop Complex has nine engineering shops to offer trainings in different basic shop practices including Carpentry Shop, Smithy Shop, Welding and Painting Shop, Fitting Shop, Machine Shop, Foundry and Pattern Shop, Boiler Shop, Electric Shop, Automobile Shop and Project Model Shop



Health Services

The Institute has a hospital to cater to the needs of the campus inmates with medical officers and other supporting staff. It provides 24 hours ambulance service. Besides, the hospital has an ID Ward to effectively isolate students suffering from infectious diseases such as chicken pox, mumps, measles etc. Outdoor treatment is available in two shifts: morning and afternoon except Sundays and holidays. Serious cases are generally transferred either to any city hospital or to the Students' Health Home, Kolkata, the institute having Universal Membership for the later. The institute hospital provides 24 hours ambulance service.

Banks

The Campus has branches of three banks - United Bank of India (UBI), UCO Bank, and State Bank of India (SBI) - along with associated ATM facilities.

Campus Services and Management

 The Institute is provided with uninterrupted power supply from the Calcutta Electric Supply Corporation Limited.

- Water supply is provided by the Howrah Municipal Corporation. In addition, the Institute has its own captive generation plant and also water supply sources.
- There are three agencies which look after the maintenance of various services in the campus:
- The Public Works Department (Maintenance) for maintenance of all buildings and roads
- The Public Works Department (Electrical) to look after the maintenance of electrical services
- Public Health Engineering Department for maintenance of water supply and sewage disposal

Halls/Hostels of Students

The Institute, with a sanctioned student strength of 3630, has 17 hostels including three girls' hostels.

There are 9 multi-seated hostels for boys:

- A. C. Roy Hall (Hostel 7)
- D. Banerjee Hall (Hostel 8)
- A. K. Seal Hall (Hostel 9)
- Hostel 10
- Hostel 11
- Hostel 13 exclusively for PG and Research Scholars
- Hostel 14
- Hostel 15
- Hostel 16





Single Seated Halls of Residence

There are 5 single-seated halls for boys:

- Macdonald Hall
- Richardson Hall
- Sen Hall
- Sengupta Hall
- Wolfenden Hall





Macdonald Hall

Richardson Hall

Women's Hostel

There are 3 girls' hostels (single and multi-seated):

- Lt. William Hall of Residence
- Pandya Hall
- Sister Nivedita Ladies Hostel



Sister Nivedita Hall of Residence



Lt. William Hall for female PG & Research Scholars

Sports Grounds

here are two main sports grounds - named after the famous English stadiums - the Lords, and the Oval. Lords ground is for general purpose games and sports, and also serves as main venue for the Convocation Ceremony and the College Fest - REBECA. The Oval Ground is well-maintained and is used for Physical Training, Sports Meets, and inter and intra-college Cricket and Football matches.





Lords Ground Oval Ground

Basketball Court

The institute has a basketball court near the Hospital Building, opposite to Oval Ground. Basketball enthusiasts flock here in the evenings for friendly matches.

Alumni Swimming Pool

The Alumni Swimming Pool is a wonderful gift from our alumni assocation, GAABESU, to the residents of the institute. It started operating from April 2013.



Alumni Swimming Pool

Gymnasium

The century old heritage athletic club building houses the gymnasium. GAABESU, our alumni association, recently renovated the building, bought new equipments, and inaugurated the upgraded gymnasium in August 2014.



Gymnasium

Students' Amenities Centre

This is a common-room for students, just beside the Lords Ground. It offers multi purpose service, and also houses the Drama Club of the institute. It was initiated with generous contribution from an alumnus of 1948 batch.

Students' Centre for Creative Expressions

Slater Hall houses some of the clubs and societies of the institute, most notably the Music Club, the Debate Club, the Photography Club and the Innovation Centre.

Netaji Bhavan

This is a building overlooking the Lords Ground, and serves multi-purpose. During festivities like Convocation, College Fests and Conferences, it can serve as reception area, as dining area or as a stage for street-theatres. In other times, it is a centre for UdyanSabpeyechhirAsar - an external body conducting children's programs in physical fitness exercise, games & sports, drawing and painting, and other cultural activities.



Spiritual Development

The Vivekananda Youth Circle (for boys) and Sister Nivedita Study Circle (for girls) help in holistic personality development of the students. A meditation centre for students - PrasantaNeer (BABTECH Meditation Hall) – was designed, funded, and constructed in the year 2013 by an alumnus of 1974 batch.





Water Bodies

The campus has three large water bodies which add to its beautification. Of these, the Bidisha Lake has a connection to the River Ganges, and hence experiences the rise and fall of water level through tides.

Institute Gates

The main gate of the institute (known as First Gate) was a gift from our alumni in the year 1956, when the institute completed a 100 years of its journey. The first gate leads to the main academic buildings, the Halls of Residence, and the Lords Ground. The second gate was reconstructed in the year 2013 to an impressive architectural structure. The new design was done by a student of Architecture Department, and the funding was from alumni of 1983 batch. The second gate leads to the hostels, ladies' hostels, Wolfenden Hall, Oval Grounds and Swimming Pool. A Third Gate is also present which opens to the Botanical Garden adjoining area, and is open for selected times of the day.



Odyssey of the institute

This is a Gallery of Historical Events. The journey of our institute from 1856 to present day is carved in thirteen stone tablets. The 200 kg giant bell in the centre is over a century old. In 1820, it was installed in a tower beside the then Bishop's College. It is said that the renowned poet Michael Madhusudan Dutta - who stayed in Bishop's College during that time - used to wake up in the morning hearing the sound of this bell.





The Cemetery

The institute has a graveyard adjacent to Pandya Hall and the Guest House. In here, graves dating back to 1852 and before can be found.



Clock Tower

The famous Turret Clock of the Clock Tower was installed in the year 1921. This iconic structure has always found its place in the logo of the institute. The clock was donated by Sir Rajendranath Mukherjee, an alumnus of 1883 batch, and chief engineer the modern Howrah Bridge, and the Victoria Memorial.





Other Activities on Campus

11.1 Activities Organised by the Industry-Institute Partnership Cell (2018-19)

IBM DAY: REPORT

The IBM DAY on Technology forecasting was held on 29th August, 2018 in the afternoon at IIESTS. The main audience comprised of very enthusiastic 7th Semester Engineering, the MBA and M.Tech students. Their feedback was very encouraging for the organisers. A majority described the event as highly interactive and helped enrich them with the knowledge of technological advances. The changing business perspectives with the changing digital breakthroughs were depicted very vividly by IBM. Lastly the role of Patenting of new concepts; and how to let loose the fountain of ideas which will eventually lead to innovation was highlighted in the session.

A Seminar on DIGITAL DISRUPTION IN LIGHTING AND ITS IMPACT ON LIGHTING APPLICATION, held at the Electrical Engineering Dept, IIEST, Shibpur

There was a seminar in the Electrical Engineering Seminar room of IIEST Shibpur on 25 October '2018. It was jointly organised by the Electrical Engineers' Society, IIESTS and the Indian Society of Lighting Engineers (ISLE), Kolkata Chapter.

Ms. SudeshnaMukhopadhyay, Chief Design Officer at IBahn Illumination Pvt Ltd, ex Head-Philips Lighting Design Centre and Lighting Academy delivered a highly informative, and enriching talk on the Latest Developments in Illumination Design and Control. The topic was DIGITAL DISRUPTION IN LIGHTING AND ITS IMPACT ON LIGHTING APPLICATION

The seminar was attended by the faculty members of the Electrical Engineering Department and the Department of Architecture, along with the office-bearers of ISLE. There was a huge participation of the students from both these Departments and a Quiz was conducted for the students by Ms. Mukhopadhyay.

Illumination is not just the primary source of vision but it influences our life styles and habits. It shapes and modulates the complete space design and architecture of a place. Certain



The IBM professionals addressing the students

new factors came into focus during the deliberation that affect the design of a proper lighting system such as melanopic lumen, a new photometric measure of light intensity (which is termed "melanopic") and photo biological safety etc. The control of the blue spectrum on the melatonin pigment and how it influences the human sleeping pattern was discussed. In concise, the physiological effect of lighting, its Science and Engineering was interestingly presented.

Light is mainly specified by intensity, time of day, wavelength and light distortion. It is mainly produced by heat, electromagnetic radiation and semiconductors. Lighting pollution is another aspect that needs attention and taken care of.

At present, there is a new age big bang in lighting industry. More emphasis is given on wireless light controllers, smart and IOT based lighting systems, architectural integration with the help of technologies like WIFI/BLE/ZIG Bee/Bluetooth/LIFI. And now there has started a protocol war in lighting applications where the lighting industry needs the help of IT experts. Thereafter the Illumination Engineering is no longer a prerogative of the Electrical Engineers, the Architects and Electrical Engineers, Instrumentation and IT Experts dominate this scene along with the physicists who come up with new concepts in lighting philosophy.



Mr. Kamal Sethia, Chairman ISLE being felicitated by a student of the EE Dept. In the presence of the Head, EE Dept.

BRIDGING THE GAP-TECHNICAL SEMINAR by CESC Ltd.

On 3 October 2018, CESC Ltd. and the Department of Electrical Engineering, IIEST Shibpur jointly presented a seminar on "Recent Advances in Power Transformer Technology". This Seminar was intended for "Bridging the Gap" for the students from academic institutes while they enter the Industry. The seminar was conducted by Mr. Sanjay Kar Chowdhury, Senior Manager, HR, CESC. The seminar was mainly aimed at introducing the concepts of power transformers from an industrial point of view to the students of second and third year. Mr. Chowdhury's amiable nature and

his spirited character caught the attention of young students as they cruised on an informative journey with him through one of the most difficult and advanced topics in modern day electrical engineering. Along with the basics of power transformers he introduced them to the recent advances in its technology that are being adapted by CESC as well as by other power utilities worldwide, information which isn't found in the normal curriculum of engineering and hence it turned out to be immensely enlightening. Mr. Chowdhury's expertise and experience is indeed commendable and inspiring for a young electrical engineer. Finally a quiz session followed the talk in which the students actively took part and won many prizes.



Mr. Sanjay Kar Chowdhury, Sr. Manager HR Department, CESC Ltd. distributing the prizes to students

IBM Workshop on Cloud Computing : IBM conducted a workshop on cloud computing on 30th March, 2019. The workshop focused on both basic as well as advanced topics related to the IBM cloud. The participants got hands-on experience in deploying, creating, and building applications on top of the IBM cloud. Advanced concepts on Watson Assist, Watson Discovery, and Watson Natural Language Understanding were also introduced and the participants were made aware of their capabilities and implementation details.

Once the students completed the learning and were able to clear associated short quiz and complete hands on associated, they obtained Badges on IBM Cloud Essentials. The details are available -https://cognitiveclass.ai/badges/ibm-cloud-essentials/. The resource personnel for this workshop were Mr. Mani Madhukar (Program Manager, University Relations), Ms. Amrita Ray (IBM Cloud Senior Specialist), SouvikMajumder (Cognitive Senior Architect), and Debajit Ray (Senior Solution Architect)



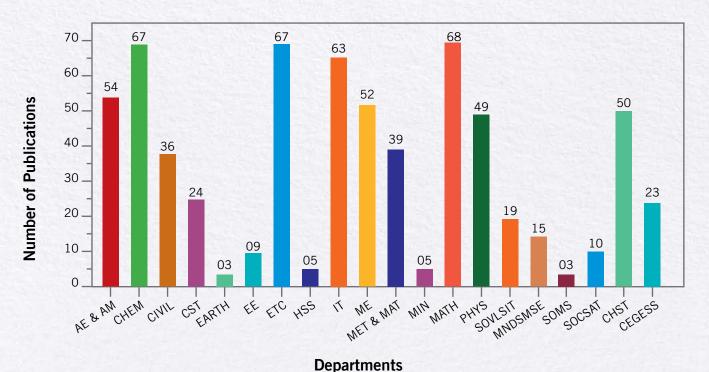
Dr. Mani Madhukar, University Relations Manager addressing the students in the Workshop on Cloud Computing



Appendix - I



List of Peer Reviewed Archival Journal Publications 2018-19



A. Department wise Publications

Above diagram shows the department wise journal publications of the Institute

Aerospace Engineering and Applied Mechanics

- P. Kumar, P. C. Joshi, R. Kumar and S. Biswas, Defence Technology, 14, pp. 250–260, 2018. [Impact Factor: 1.261]
- 2. P. Kumar, Defence Technology, **14**, pp. 661–673, 2018. [Impact Factor: 1.261]
- 3. A. Manashand, P. Kumar, Defence Technology, **15**, pp. 227–232, 2019. [Impact Factor: 1.261]
- 4. P. Kumar, Defence Technology, DOI: doi.org/10.1016/j. dt.2019.03.002, 2019. [Impact Factor: 1.261]
- 5. S.K. Singh, P.K. Raushan and K. Debnath, Ocean Engineering, **18**, pp. 59–70, 2019. [Impact Factor: 2.730]
- S.K. Singh, P.K. Raushan, K. Debnath and B. S. Mazumder, Journal of Offshore Mechanics and Arctic Engineering, 141, pp. 1–10, (2019). [Impact Factor: 1.044]

- K. Barman, S. Roy, V.K. Das and K. Debnath, Journal of Hydrology, 571, pp. 87–10, 2019. [Impact Factor: 3.727]
- 8. V.K. Das, S. Roy, K. Barman, K. Debnath, S. Chaudhuri and B.S. Mazumder, Engineering Geology, **252**, pp. 110–124, 2019. [Impact Factor: 3.100]
- 9. S. Roy, S. Ghoshal, K. Barman, V.K. Das, S. Ghosh and K. Debnath, Engineering Science and Technology, an International Journal, **22**, pp. 282–293, 2019. [Impact Factor:NA]
- 10. S. Roy and K. Debnath, Canadian Journal of Civil Engineering, **46**, pp. 621–633, 2019. [Impact Factor: 0.869]
- 11. S. Chaudhuri, K. Debnath, S. Roy and M. K. Manik, ISH Journal of Hydraulic Engineering, **25**, pp. 79–86, 2019. [Impact Factor: 2.183]

- 12. K. Barman, K. Debnath and B. S. Mazumder, Water Resources Research, **55**, pp. 55–75, 2019. [Impact Factor 4.36]
- 13. S. Roy, V.K. Das and K. Debnath, Catena, **172**, pp. 356–368, 2019. [Impact Factor: 3.851]
- 14. S. K. Singh, P. K. Raushan, K. Debnath, M. Mukherjee and B. S. Mazumder, ISH Journal of Hydraulic Engineering, pp. 1–14, 2018. [Impact Factor: 2.183]
- 15. S.K. Singh, K. Debnath and B. S. Mazumder, Canadian Journal of Civil Engineering, **46**, pp. 69–71, 2018. [Impact Factor: 0.869]
- P.K. Raushan, S.K. Singh and K. Debnath, Journal of Wind Engineering and Industrial Aerodynamics, 182, pp. 252–261, 2018. [Impact Factor: 3.010]
- 17. P.K. Raushan, S.K. Singh, K. Debnath, M. Mukherjee and B. S. Mazumder, Ocean Engineering, **167**, pp. 310–316, 2018. [Impact Factor: 2.730]
- 18. S.K. Singh, P.K. Raushan and K. Debnath, Ocean Engineering, **160**, pp. 20–32, 2018. [Impact Factor: 2.730]
- K. Barman, K. Debnath and B. S. Mazumder, Journal of Offshore Mechanics and Arctic Engineering, 140, 2018. [Impact Factor 1.044]
- S. Chaudhuri, S K. Singh, K. Debnath and M. K. Manik, Environmental Fluid Mechanics, 18,pp' 417–441, 2018. [Impact Factor: 1.846]
- 21. S. K. Singh, P. K. Raushan, K. Debnath and B. S. Mazumder, ISH Journal of Hydraulic Engineering, pp. 1–12, 2018. [Impact Factor: 2.183]
- 22. K. Barman, S. Roy and K. Debnath, Estuarine, Coastal and Shelf Science, **202**, pp. 1–17, 2018. [Impact Factor: 2.611]
- 23. S. Roy, S. S. Samantaray and K. Debnath, Ocean Engineering, **150**, pp. 176–193, 2018. [Impact Factor: 2.730]
- A. Ghosh, S. Raha, S. Dey, K. Chatterjee, A. R. Chowdhury and A. Barui, Analyst, 144, pp. 1309–1325, 2019. [Impact Factor 3.864]
- 25. S. Chatterjee, S. Dey, S. Majumder, A. R. Chowdhury and S. Datta, International Journal for Numerical Methods in Biomedical Engineering, **35**, pp. 1–17, 2019. [Impact Factor 2.082]
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- 27. P. P. Maity, D. Dutta, S. Ganguly, K. Kapat, K. Dixit and A. R. Chowdhury, Communications Biology, **2**, pp. 1–11, 2019. [Impact Factor: NA]
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- 38. J. C. Misra, B.Mallick, A. Sinha and A. R. Chowdhury, The European Physical Journal Plus, **133** pp. 1–18, 2018. [Impact Factor: 2.612]
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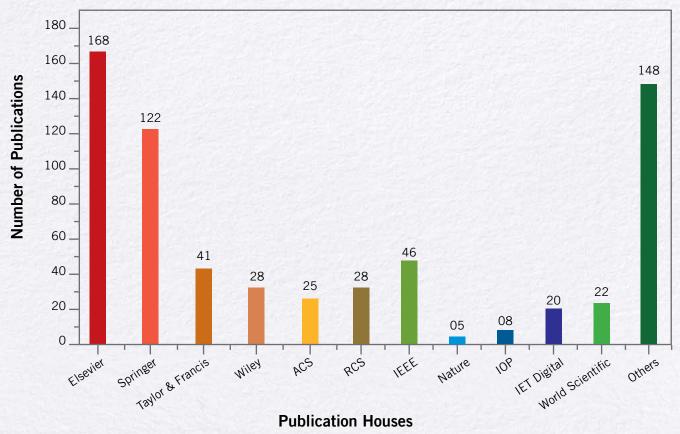
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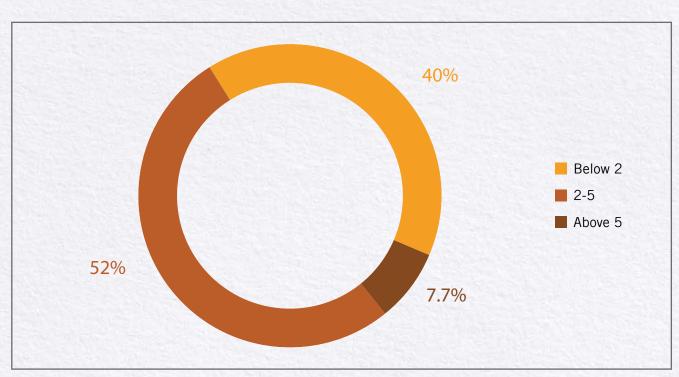
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Following graphs A and B shows the publication details in terms of Departments, Schools, Centresand Publication Houses. Figure C shows the impact wise Pie Chart of the Institute as a whole.



B. Publication House wise Publications



C. Impact Factor wise Publication (Pie Chart)

Appendix - II



Book, Book Chapter, Monograph

Architecture Town and Regional Planning

- A. Mohanta, R.N. Mohanty, and S. Das, Technical issues of using BIM: East Indian architects' perspective. In Research into Design for a Connected World, A Chakraborti, ed. Springer, Singapore, pp. 565-574, 2019.
- R. Mukhopadhyay, and P. Mukhopadhyay, Innovations in Bamboo and Concrete Based Construction for Sustainable and Durable Housing, Chapter 21, Sustainable Building Technologies, K.S. Jagadish, ed. BMTPC, New Delhi, pp. 274-293, 2019.
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- 4. B. De, Orientation and Canyon Aspect Ratio for a City in Warm Humid Climate, LAP LAMBERT Academic Publishing, Saarbrücken, Germany, 2018.
- A. Mohanta, and S. Das, Trends and challenges of facilities management of green buildings of eastern India, Annual Technical Volume 2018 of Architectural Engineering Division on 'Technologies for Futuristic Architecture and Urbanism', Kolkata: IE(I), pp. 67-77, 2018.

Chemistry

- P. Maji and J. Ganguly, Mushroom: A magical medicinal food for all, Organic and Medicinal Chemistry, Volume 02, Chapter 08, Nova, pp. 343, 2018.
- S. Shyamal, A.K. Satpati, A. Maity, C. Bhattacharya, Hydrogen production through solar-driven water splitting: Cu (I) Oxide-based semiconductor nanoparticles as the next-generation photocatalysts,, Nanostructured Materials for Energy Related Applications, Springer, Chapter 8, pp. 189-222, 2019.
- S. Shyamal, P. Hajra, H. Mandal, A. Bera, D. Sariket, C. Bhattacharya*, Fundamentals of Photocatalytic Water Splitting (Hydrogen and Oxygen Evolution), Visible Light-Active Photocatalysis: Nanostructured Catalyst Design, Mechanisms, and Applications, Chapter 3, Wiley-VCH Verlag GmbH & Co. KGaA, 2019.

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- 12. D. Mitra, K.K. Chattopadhyay, P. Chattopadhyay, Nano Fluid for Energy Harvesting and Related Applications, Encyclopedia of Renewable and Sustainable Material, Elsevier, 2019.
- 13. T. Dutta, D. Santra, C. P. Lim, J. Sil, P. Chattopadhyay, Statistical Feature Analysis of Thermal Images from Electrical Equipment, Decision Science in Action, A part of the Asset Analytics book Series, Performance and Safety Management, Springer, 2018.

Electronics and Telecommunication Engineering

- 14. K. Ghosh, H. Rahaman and P. Bhattacharyya, Chemically Functionalized Penta-Graphene for Electronic Device Applications: Journey from Theoretical Prediction to Practical Implementation, Springer Nature, Singapore, 2019.
- P. Bhattacharyya, D. Acharyya, K. Dutta, Prospects and Constraints of Resistive and Capacitive Measurement of Nano-Structured Gas Sensors: A Comparative Analysis, in the book 'Environmental Nanotechnology Vol-2, Springer, New York, 2019.
- 16. P. Mondal, S. Kumar Parui, Two Step Coupled Gap Resonator and Its Application as Bandpass Filter, Book: Nanoelectronics, Circuits and Communication Systems, pp. 425-434, Springer, Singapore, 2019.

- 17. G. Ali Sarkar, S.K. Parui, Microstripline fed two element E-Plane HDRA Antenna Array, Advance in Communication, Devices & Networking, Springer, Singapore, 2019.
- P. Sharma, N. Samanta, S. Gan, D. Bhattacharyya, C. Roy Chaudhuri, A Cost Effective and Field Deployable System for Soil Macronutrient Analysis Based on Near-infrared Reflectance Spectroscopy, Rular Technology Development & Delivery, Springer, pp. 309-322, 2018.

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- A. Paul and S. P. Maity, Differential Evolution in PFCM Clustering for Energy Efficient Cooperative Spectrum Sensing, Advances in Intelligent Computing, Studies of Computational Intelligence, Springer, pp. 77-101, 2019.
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- 24. A. Ganguly and R.K. De, Solar Thermal Energy-Fundamentals of Collection, Storage and Applications in the Book Advances in Renewable Energy and Sustainable Systems, Chapter 5, Nova Science Publishers Inc, New York, USA pp. 57-96, 2018.
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- S. Mondal, G. Paul, S. C. Mondal, Investigation into the Application of Liquid CO₂ and MQL for CNC Turning of Al Alloy 3055, Research into Design for a Connected World, Springer (SCI), Singapore, pp. 977-987, 2019.
- 29. S. Ghosh, Biomass-Based Distributed Energy Systems: Opportunities and Challenges, Sustainable Energy and Transportation, Springer, Singapore, pp. 235-252, 2018.
- 30. S. Ghosh, Gas Cleaning and Tar Conversion in Biomass Gasification, Coal and Biomass Gasification, Springer, Singapore, pp. 151-172, 2018.
- 31. D. Roy, S. Samanta and S. Ghosh, Energetic and Exergetic Analyses of a Solid Oxide Fuel Cell (SOFC) Module Coupled with an Organic Rankine Cycle, Advances in Fluid and Thermal Engineering, Springer, Singapore, pp. 13-24, 2019.
- 32. S. Das, and S.K. Guha, Effect of Turbulence on Stability of Journal Bearing with Micropolar Lubrication: Linear and Non-Linear Analysis, Advances in Materials, Mechanical and Industrial Engineering, Lectures Notes on Multidisciplinary Industrial Engineering, Springer International Publishing, Chapter 25: pp. 523-545, 2019.

Metallurgy and Materials Engineering

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- 34. M. Ghosh, A. Ghosh, A. Roy, Renewable and Sustainable Materials in Automotive Industry, Reference Module in Materials Science and Materials Engineering, Chapter no. 11461, Elsevier Inc, pp. 1-18, 2019.
- 35. S. Mitra, S. K. Ghosh and S. Mukherjee: A Novel Low-Carbon High-Strength Steel: Processing, Microstructure and Mechanical Properties, T. K. Roy et al. (eds.), Advanced High Strength Steel, Lecture Notes in Mechanical Engineering, Springer Nature Singapore Pte Ltd., pp. 125-133, 2018.





BALANCE SHEET AS ON 31ST MARCH 2019

Amount in Rupees

Sources of Funds	Schedule	Current Year	Previous Year
Corpus/Capital Fund	1	2,431,328,059	2,113,758,564
Designated/Earmarked/Endowment Funds	2	277,500,576	249,094,673
Current Liabilities & Provisions	3	445,814,699	508,582,479
Total		3,154,643,333	2,871,435,716

Application of Funds	Schedule		Current Year	Previous Year
Fixed Assets	4		1,307,296,551	1,234,096,619
- Tangible Assets		1,299,883,718		
- Capital Work in Progress				
- Intangible Assets		7,412,833		
Investments from Earmarked/Endowment Funds	5		231,890,763	256,151,787
- Long Term		206,518,584		
- Short Term		25,372,179		
Investments - Others	6		383,719,404	375,334,135
Current Assets	7		1,179,362,859	956,334,953
Loans, Advances & Deposits	8		52,373,755	49,518,222
Total			3,154,643,333	2,871,435,716

Significant Accounting Policies 23
Contingent Liabilities and Notes to Accounts 24

Indian Institute of Engineering Science and Technology, Shibpur Howrah - 711 103, W.B., India

Dy. Registrar (Finance)

Dv. Biman Bandyopadhyay Br. Registrar Indian Institute of Etigineeting Science & Technology, Shibpur Howth - 7.11 103, West Bengal, India

Registrar

Frètrer / Director
unde afeulest femres shellest there, freq.
Indian Institute of Engineering
Science and Technology, Shibpur
genge-yaring, Westerley, were
Howesh, 711,00, West Engal, India

Director

(D. Bandhopadhyay)
Proprietor
M.No - 057861
Debasis Bandyopadhyay & CO.
Chartered Accountants

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2019

Particulars	Schedule	Current Year	Previous Year
INCOME			
Academic Receipts	9	221,283,432	177,968,308
Grants/Subsidies	10	1,210,942,813	1,012,104,095
Income from Investments	11	24,336,222	31,598,242
Interest earned	12	16,536,813	10,834,891
Other Income	13	21,084,409	19,298,664
Prior Period Income	14	6,586,654	29,603,155
Total (A)		1,500,770,343	1,281,407,356
EXPENDITURE			
Staff Payments & Benefits (Establishment expenses)	15	910,308,298	763,083,568
Academic Expenses	16	197,966,682	192,388,217
Administrative Expenses	17	120,455,129	108,544,958
Transportation Expenses	18	1,191,615	934,974
Repairing & Maintenance	19	22,020,319	42,388,872
Depreciation		132,706,976	106,831,164
Finance Costs	20	38,207	40,859
Other Expenses	21	-	262,817
Prior Period Expenses	22	2,429,230	27,978,765
Total (B)		1,387,116,456	1,242,454,194
Balance being excess of Income over Expenditure (A-B)		113,653,887	38,953,162
Transfer to/from Designated Fund			
Building fund			
Others (specify)			
Balance being Surplus/(Deficit) carried to Capital Fund		113,653,887	38,953,162

Significant Accounting Policies

23 24

Contingent Liabilities And Notes To Accounts

Dy. Registrar (Finance)

Dr. Biman Bandyopadhyay Registrar ian Institute of Engineering Science & Technology, Shi Howrah - 711 103, West Bengal, India

Registrar

Director

(D. Bandhopadhyay) Proprietor M.No - 057861 Debasis Bandyopadhyay & CO. **Chartered Accountants**

RECEIPTS AND PAYMENTS ACCOUNTS FOR THE YEAR ENDED 31st MARCH 2019

	Receipts	Current Year	Previous Year		Payments	Current Year	Previous Year
1	Opening Balances			1	Expenses		
	a) Cash Balances	6,650	6,650		a) Establishment Expenses	912,494,152	763,083,568
	b) Bank Balances				b) Academic Expenses	196,880,039	192,236,800
	i. in Current Accounts	135,244,258	39,772,530		c) Administrative Expenses	121,046,315	108,366,931
	ii. Savings Accounts	390,096,273	369,356,788		d) Transportation Expenses	1,191,615	934,974
	iii. Howrah Treasury PF	255,847,174	209,944,453		e) Repairs & Maintenance	22,014,537	42,388,872
	c) Cheques in hand	-	-		f) Prior Period Expenses	115,149	-
					g) Other Expenses	-	262,817
П	Grants Received			11	Payments against Earmarked/Endowment Funds	1,794,673	1,986,429
	a) From Govt. of India	950,000,000	1,300,000,000				
	b) From State Govt.	-	9,552,162	111	Payments against Sponsored/Scheme	447,094,360	252,946,405
	c) From UGC-Non Plan	-	<u> </u>				
	d) Form Other Sources (Details)	-		IV	Payments against Sponsored/Fellowship/ Scholarship	48,564,962	37,192,668
Ш	Academic Receipts	221,278,360	177,968,308	٧	Investments and Deposits made		
					a) Out of Earmarked/ Endowments Funds	6,524,917	-
IV	Receipts against Earmarked/Endowment Funds	23,867,505	27,210,702		b) Out of Own Funds (Investments-Others)		126,289,893
٧	Receipts against Sponsored/Scheme	658,715,209	225,354,968	VI	Term Deposits with Schedule Banks		
VI	Receipts against Sponsored/Fellowship/ Scholarship	47,102,474	40,705,241	VII	Expenditure on Fixed Assets and Capital Works-in-progress		
					a) Fixed Assets	174,529,052	73,744,522
VII	Income on Investments from				b) Capital Works-in- Progress		
	a) Earmarked/ Endowment Funds	11,196,961	1,479,316				

RECEIPTS AND PAYMENTS ACCOUNTS FOR THE YEAR ENDED 31st MARCH 2019 (...Contd)

	Receipts	Current Year	Previous Year		Payments	Current Year	Previous Year
	b) Other Investments	-	6,811	VIII	Other Payments including Statutory Payments	230,782,276	110,177,328
VIII	Interest Received on			IX	Refunds of Grants	-	
	a) Bank Deposits	1,444,148	8,834,846				
	b) Loans & Advances	-		X	Deposit and Advances	26,497,132	203,221,957
	c) Savings Bank Accounts	16,536,813	11,567,407				
	d) Provident Fund	-	15,704,750	XI	Other Payments (including Finance Cost)	69,610	40,859
IX	Investments Encashed	35,013,560		XII	Other Payments (including prior period/ write off)	-	-
Х	Other Income (Including Prior Period Income)	20,059,709	18,877,430	XIII	Adjustment of Howrah Treasury PF a/c	236,909,013	
				XIV	Closing Balances		
ΧI	Deposit and Advances	24,599,519	85,780,340		a) Cash Balances	-	6,650
					b) Bank Balances		
XII	Miscellaneous Receipts including Statutory Receipts	214,947,637	151,945,677		i. in Current Accounts	92,395,599	135,244,258
					ii. Savings Accounts	487,052,850	390,096,273
XIII	Any Other Receipts	-			iii. Howrah Treasury PF	-	255,847,174
1500					c) Cheques in hand	-	<u> </u>
	Total	3,005,956,251	2,694,068,380		Total	3,005,956,251	2,694,068,380

Deputy Registrar (Finance)
Indian Institute of Engineering Science
and Technology, Shibper
Howrah-711 103, W.B. India

Dy. Registrar (Finance)

Dv. Biman Bandyopadhyyay Registrar Indian Institute of Epineering Science & Technology, Shibpur Horeth. 711 103, west Bengal, India

Registrar

Prétre / Director

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India Institute of Regineering
Science and Technology, Shibour

my 71100,
More Bengal, India

Director

(D. Bandhopadhyay)
Proprietor
M.No - 057861
Debasis Bandyopadhyay & CO.
Chartered Accountants

SCHEDULE - 1 CORPUS FUND/CAPITAL FUND

	Particulars Particulars	Current Year	Previous Year
	Balance at the beginning of the year	2,113,758,564	1,880,058,767
Add:	Contributions towards Corpus/Capital Fund	-	-
Add :	Grants from UGC, Government of India and State Government to the extent utilized for capital expenditure	173,259,615	193,403,220
Add :	Assets Purchased out of Earmarked Funds\Assets Purchased out of Sponsored Projects, where ownership vests in the institutions	30,785,736	40,259,454
Add:	Assets Donated/Gifts received	-	
Add:	Other Additions/(Deletions)	(129,743)	(38,916,039)
Add :	Excess of Income over Expenditure transferred from the Income & Expenditure Account	113,653,887	38,953,162
	Total	2,431,328,059	2,113,758,564
Deduct :	Deficit transferred from the Income & Expenditure Account	-	-
	Balance at the end of the year	2,431,328,059	2,113,758,564

SCHEDULE - 2 DESIGNATED/EARMARKED/ENDOWMENT FUNDS

		Fund wi	se breakup		То	tal
Particular	Fund - NSS	Fund - DST FIST	Institutional Development Fund	Endowment Funds	Current Year	Previous Year
A.						
a) Opening balance	345,761	9,000,000	127,472,978	112,275,935	249,094,673	208,075,556
b) Additions during the year	-	75.5 Z. 10.5 .	21,038,695	3,450,646	24,489,341	30,018,033
c) Income from investments made of the funds					-	-
d) Accrued interest on investments/ advances			8,437,280	5,318,042	13,755,322	11,867,554
e) Interest on Savings Bank a/c	12,687			942,776	955,463	3,877,878
f) Other additions (specify nature)					-	
Total (A)	358,448	9,000,000	156,948,953	121,987,398	288,294,799	253,839,021
В.						
Utilization/Expenditure towards objective funds						
i) Capital Expenditure			-		-	3,636,494
ii) Revenue Expenditure	1,110		1,086,643	706,470	1,794,223	1,107,853
iii) Transferred to Schedule 3(a)		9,000,000			9,000,000	AMERICAN -
Total (A)	1,110		1,086,643	706,470	1,794,223	4,744,347
Closing balance at the year end (A-B)	357,338		155,862,310	121,280,928	277,500,576	249,094,673

SCHEDULE - 2A ENDOWMENT FUNDS

Sub-schedule to support the figures in the column "Endowment Funds" in the schedule "Earmarked/Endowment Funds" forming part of the Balance Sheet

		Opening	Opening Balance	Additions during the year	ing the year	T.	Total	Expenditure		Closing Balance	
Si. No.	Name of the Endowment	Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)	on the object during the year	Endowment	Accumulated Interest	Total (10+11)
1	2	က	4	2	9	7	8	6	10	11	12
-	Von Newman Scholarship Fund	53,747	18,815		1,638	53,747	20,453		53,747	20,453	74,200
0	Dr. S. P. Brambha Memorial Merit Scholarship Fund	106,895	37,409		3,260	106,895	40,669		106,895	40,669	147,564
m	Prabir Sengupta Memorial Prize Fund	7,599	3,844		711	7,599	4,555		7,599	4,555	12,154
4	Renu Chakraborty V. L. Fund	55,737	19,122		3,344	55,737	22,466		55,737	22,466	78,203
D	Dr. Fazlue Kader Memorial Scholarship Fund	115,629	61,826		8,986	115,629	70,812		115,629	70,812	186,441
9	J. N. Neogi Students' Benefit Fund	72,248	38,631		5,615	72,248	44,246		72,248	44,246	116,494
7	Snita Memorial Prize Fund	15,407	8,238		1,197	15,407	9,435		15,407	9,435	24,842
∞	Dr. B. N. Dey Scholarship Fund	37,519	20,061		2,914	37,519	22,975		37,519	22,975	60,494
6	Kunja Kusum Scholarship Fund	77,444	27,104		2,362	77,444	29,466		77,444	29,466	106,910
10	Sanat Kanta Nirmalya Basini Biswas Golden Jubilee Scholarship Fund	20,087	6,888		1,204	20,087	8,092		20,087	8,092	28,179
11	Prof. N. N. Sen Memorial Scholarship Fund	39,432	13,806		1,202	39,432	15,008		39,432	15,008	54,440
12	Acharya P. C. Roy Scholarship	91,587	32,050		2,792	91,587	34,842		91,587	34,842	126,429

SCHEDULE - 2A ENDOWMENT FUNDS (... Contd)

		Opening	Opening Balance	Additions during the year	ing the year	ĭ	Total	Expenditure		Closing Balance	
 §	Name of the Endowment	Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)	on the object during the year	Endowment	Accumulated Interest	Total (10+11)
1	2	က	4	5	9	7	8	6	10	11	12
13	Ramlal Nandy & Ganoda Sundari Nandy Memorial Scholarship Fund	46,928	16,430		1,430	46,928	17,860		46,928	17,860	64,788
14	Liluah Iron Works Ltd. Scholarship	46,928	16,430		2,195	46,928	18,625		46,928	18,625	65,553
15	R & K Ahmed Merit Scholarship	56,769	19,871		1,730	56,769	21,601		56,769	21,601	78,370
16	The President of India Gold Medal	56,769	3,211		1,730	56,769	4,941	8,297	56,769	(3,356)	53,413
17	Alumni Donation Seminar Series	352,521	173,696		31,121	352,521	204,817		352,521	204,817	557,338
18	Jogesh Chandra Banerjee Memorial Scholarship Fund	478,376	167,426		14,586	478,376	182,012		478,376	182,012	660,388
19	Anir Burnwal Memorial Merit cum Means Scholarship Fund	107,110	33,686		6,568	107,110	40,254		107,110	40,254	147,364
20	Jaya Smriti Puroskar (BESUS)	24,189	8,453		2,241	24,189	10,694	1,000	24,189	9,694	33,882
21	BEC (55) Scholarship Fund	281,033	151,400		29,327	281,033	180,727		281,033	180,727	461,760
22	BEC Sholarship	100,592	12,177	1	25,297	100,592	37,474		100,592	37,474	138,066
23	BECA - 1964	230,040	121,035	-	18,412	230,040	139,447		230,040	139,447	369,487
24	Prof. S. C. Dasgupta Gold Medal	143,098	52,022		15,042	143,098	67,064	8,296	143,098	58,768	201,866
25	Jaya Smriti Puroskar	21,374	9,047	-	2,038	21,374	11,085	_	21,374	11,085	32,460
26	Siddhananada Memorial Lecture	53,875	41,121		989'9	53,875	47,807		53,875	47,807	101,682
27	BESU Endowment Fund	5,000,000	1,724,684		455,979	5,000,000	2,180,663	-	5,000,000	2,180,663	7,180,663

INDIAN INSTITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY

SCHEDULE - 2A ENDOWMENT FUNDS (... Contd)

		Opening	Opening Balance	Additions during the year	ing the year	12	Total	Expenditure		Closing Balance	
S S	Name of the Endowment	Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)	on the object during the year	Endowment	Accumulated Interest	Total (10+11)
1	2	ဧ	4	2	9	7	8	6	10	11	12
28	Prabodh Chandra Mitra Scholarship Fund	153,625	24,134	-	5,770	153,625	29,904	ı	153,625	29,904	183,529
29	Dhaibat Ghosh Memorial Scholarship	433,732	208,673		43,302	433,732	251,975	1	433,732	251,975	685,706
30	Prof. P. C. Mitra Memorial Award	51,458	(6,410)	1	4,823	51,458	(1,587)	16,048	51,458	(17,635)	33,824
31	Bijoy Ashu Chair Professor Fund	10,048,394	3,299,623		220,191	10,048,394	3,519,814	1	10,048,394	3,519,814	13,568,208
32	Prabodh Kumar Chatterjee Fund	194,000	29,900	-	1,031	194,000	30,931	-	194,000	30,931	224,931
33	Rai Sahib Amulya Chandra Mitra Endowment Fund	300,000	51,702	-	13,703	300,000	65,405		300,000	65,405	365,405
34	Rai Sahib Amulya Chandra Mitra Endowment Fund	200,000	146,414	-	18,480	200,000	164,894		200,000	164,894	364,894
35	S. C. Dasgupta Memorial Fund	1,100,000	793,597		64,412	1,100,000	858,009	1	1,100,000	858,009	1,958,009
36	Prabodh Kumar Chatterjee Fund	50,000	68,220	-	17,650	20,000	85,870	-	20,000	85,870	135,870
37	Madhusudan Bhattacharjee Memorial Fund	215,000	31,750		13,500	215,000	45,250	33,000	215,000	12,250	227,250
38	B. K. Bose Lecture Fund	225,000	52,316		4,673	225,000	56,989	1	225,000	56,989	281,989
39	Students Reward Programme Fund	1,650,000	26,122		102,093	1,650,000	128,215		1,650,000	128,215	1,778,215
40	Sougata Mukherjee Memo. Award for Excellence Fund	509,507	112,412		31,526	509,507	143,938	56,000	509,507	87,938	597,445

SCHEDULE - 2A ENDOWMENT FUNDS (...Contd)

		Contract	Polonoo	Additions dis.	acon off ac	-	Total	Cynopolitica		Coucled Paisol	
		Opening	Opening balance	Additions during the year	lig the year	9	Idi			CIOSING DAIANCE	
Si. No.	Name of the Endowment	Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)	on the object during the year	Endowment	Accumulated Interest	Total (10+11)
П	2	က	4	5	9	7	8	6	10	11	12
41	Suhas Choudry Swimming Excellence Prize Fund	122,132	11,924		7,828	122,132	19,752	24,000	122,132	(4,248)	117,884
42	Ujjal Dasgupta Scholarship Corpus Fund	1,361,590	226,581	1	87,273	1,361,590	313,854	220,000	1,361,590	93,854	1,455,444
43	GAABESU Admission Grant - 2	582,400	144,144		34,944	582,400	179,088	-	582,400	179,088	761,488
44	Prof A K Seal Gold Medal	100,000	8,112	-	17,499	100,000	25,611	8,297	100,000	17,314	117,314
45	BEC Prize	207,870	28,380	-	-	207,870	28,380	-	207,870	28,380	236,250
46	Indian Oil Scholarship	36,000	(36,000)			36,000	(36,000)	-	36,000	(36,000)	
47	Other Scholarships	1	1		1	1		1	-	-	1
48	Students' Welfare Fund	455,000	(96,330)		10,539	455,000	(85,791)	53,347	455,000	(139,138)	315,862
49	BECA - 1981 Batch		1		1	1		1	-	-	1
20	Dastur Fund	2,105,000	(1,328,040)			2,105,000	(1,328,040)	1	2,105,000	(1,328,040)	776,960
51	TATA Steel Chair Professor	818,006	(98,926)		-	818,006	(98,926)		818,006	(98,926)	719,080
52	Corpus Fund - a/c Teqip	6,279,719	4,433,932	3,103,114	714,969	9,382,833	5,148,901		9,382,833	5,148,901	14,531,734
53	Faculty Development Fund - a/c Teqip	518,576	155,714	•	43,996	518,576	199,710	-	518,576	199,710	718,286
54	Equipment Replacement Fund - a/c Teqip	518,576	155,714		43,996	518,576	199,710		518,576	199,710	718,286
55	Maintenance Fund - a/c Teqip	10,251,765	7,043,524		1,051,151	10,251,765	8,094,675		10,251,765	8,094,675	18,346,440
26	Depreciation Fund - a/c Teqip	4,010,324	3,019,859	1	471,813	4,010,324	3,491,672	I	4,010,324	3,491,672	7,501,996
22	Staff Development Fund - a/c Teqip	4,596,537	3,461,749		537,871	4,596,537	3,999,620	ı	4,596,537	3,999,620	8,596,157

SCHEDULE - 2A ENDOWMENT FUNDS (...Contd)

		Opening	Opening Balance	Additions during the year	ing the year	ĭ	Total	Expenditure		Closing Balance	
<u>જ</u> .ં	Name of the Endowment	Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)	on the object during the year	Endowment	Accumulated Interest	Total (10+11)
П	2	က	4	5	9	7	8	6	10	11	12
28	Besus Foundation (GAABESU)	8,066,380	4,032,873		922,439	8,066,380	4,955,312	000'09	8,066,380	4,895,312	12,961,692
29	K K Pal Chaudhuri Arch	20,000	24,018		5,175	20,000	29,193		20,000	29,193	79,193
09	Prof. P. C. Mitra Memorial Award - 2	100,000	44,981		10,949	100,000	55,930		100,000	55,930	155,930
61	Donation-Alumni	100,000			54,400	100,000	54,400	29,400	100,000	25,000	125,000
62	Amiya Basu Endowment Fund	6,444,262	289,882	-	332,608	6,444,262	622,490	140,000	6,444,262	482,490	6,926,752
63	Arun Ch Mitra, Ganesh Mitra, Sindhubala Mitra Memorial Fund	200,000	(15,622)			200,000	(15,622)	16,488	200,000	(32,110)	167,890
64	Alpona Banerjee	9,902,719	643,632		643,632	9,902,719	1,287,264	-	9,902,719	1,287,264	11,189,983
65	Aveek Guha Memorial Gold	115,000	(16,608)	•		115,000	(16,608)	8,297	115,000	(24,905)	90,095
99	Class on 91 and 92 Arch.	I				1			1		1
29	Provat Chandra Neogi	2,700,000	-	-	78,975	2,700,000	78,975	24,000	2,700,000	54,975	2,754,975
89	Tarun Kanti Ghosh	-		347,532	_	347,532			347,532		347,532
	Total	82,465,504	29,810,430	3,450,646	6,260,818	85,916,150	36,071,248	706,470	85,916,150	35,364,778	121,280,928

SCHEDULE - 3 CURRENT LIABILITIES & PROVISIONS

		Current Year	Previous Year
Α	CURRENT LIABILITIES		
	1. Deposits from staff		
	2. Deposit from students	12,069,900	114,065
	3. Sundry Creditors		
	a) For Goods and Services		
	b) Others		
	4. Deposit - Others (including EMD, Security Deposit)	2,376,293	3,972,415
	5. Statutory Liabilities (TDS, WC Tax, CPF, GIS, NPS)		
	a) Overdue		
	b) Others	2,729,246	280,924,374
	6. Other Current Liabilities		
	a) Salaries	-	
	b) Receipts against sponsored projects	403,485,209	182,313,230
	c) Receipts against sponsored fellowships and scholarships	18,576,005	34,386,231
	d) Unutilized Grants	46,851	46,851
	e) Grants in advance		
	f) Other funds		
	g) Audit Fees	600,000	219,897
	h) Other liabilities [Miscellaneous Recoveries]	1,103,672	1,405,512
	i) Other liabilities [Professional Charges]	212,400	160,000
	j) Other liabilities [Electricity Charges]	2,836,064	3,260,845
	k) Other liabilities [Miscellaneous Receipts - suspenses/sources to be traced]	1,779,059	1,779,059
	Total (A)	445,814,699	508,582,479
В	PROVISIONS		
	1. For taxation		
	2. Gratuity		
	3. Superannuation Fund		
	4. Accumulated Leave Encashment		
	5. Trade Warranties/Claims		
	6. Others (Specify)		
	Total (B)	-	
	Total (A + B)	445,814,699	508,582,479

SCHEDULE - 3(A) SPONSORED PROJECTS

SI. No.	Name of the Project	Opening Bal	ance	Receipts/ Recoveries during	Total	Expenditure	Closing Bala	ance
		Credit	Debit	the year		during the year	Credit	Debit
1	2	3	4	5	6	7	8	9
1	Research Project Accounts	158,920,456		587,075,423	745,995,879	373,570,013	372,425,866	
2	Consultancy Fund	19,245,781	_	81,912,840	101,158,621	75,647,238	25,511,383	
3	Testing Fees Fund	4,146,993	<u> </u>	1,596,200	5,743,193	195,233	5,547,960	<u> </u>
	Total	182,313,230		670,584,463	852,897,693	449,412,484	403,485,209	

SCHEDULE - 3(B) SPONSORED FELLOWSHIPS AND SCHOLARSHIPS

SI.	Name of Consession	Opening	g Balance	Transactions d	uring the year	Closing	Balance
No.	Name of Sponsor	Credit	Debit	Credit	Debit	Credit	Debit
1	2	3	4	5	6	7	8
1	Minority Development Scholarship	84,400			84,400		
2	CSIR - Fellowship and Contingency	1,456,194	(773,671)	309,969	415,734	576,758	-
3	Inspire Faculty -DST	2,194,866	-	10,406,970	10,309,823	2,292,013	<u>-</u>
4	Inspire Fellowship -DST	3,624,218	-	13,214,114	14,176,820	2,661,512	-
5	QIP Contingency	15,000				15,000	
6	QIP Fellowship	4					-
7	IEI Fellowship	60,000			60,000	-	- A 100 C
8	UGC BSR Research fellowship	-	(1,074,573)		18,833	() () () () () ()	(1,093,406)
9	UGC Ph.D. Fellowship (JRF/SRF)	1,259,864			1,259,864		- 100 C
10	National Scholar Science - MNRES	1,041,858	-	-	1,041,858	-	<u>-</u>
11	UGC Fellowship Post Doctoral	760,058	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	- 1		760,058	
12	UGC Raman Fellowship Post Doctoral	4,302,068	-	-	-	4,302,068	
13	Other Miscelleneous Grant - DST	334,664	-	420,936	510,938	244,662	## W # W # W # W # W # W # W # W # W #
14	Other Misc. Receipts -CSIR	70,860		84,700	84,700	70,860	-
15	Other Misc. Receipts	2,315,794	-	426,554	1,017,327	1,725,021	5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
16	Faculty Recharge Program (UGC)	17,710,539	72 FEBRUARY 1972	-	20,948,458	-	(3,237,919)
17	Honararium - The National Accademy of Science India	-	(370,000)	370,000		-	-
18	INSA Scientist (Others)	-	(2,912)	102,912	100,000	9.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5	0.5746.5723.3
19	UGC Research Awardee	172,233				172,233	-
20	GRSE/CSR Project for SOCSAT	1,441,525			1,441,525		
21	Visvesvaraya Ph.D. Fellowship	2,119,824	-	17,208,791	17,586,424	1,742,191	Name of the second
22	UGC D S Kothari Fellowship	-	(2,424,142)	3,201,988		777,846	-
23	Gian Course	-	(50,636)	917,190	28,268	838,286	
24	Stipend - Means cum Merit Scholarship	43,200	-	403,000	339,000	107,200	-
25	Other Miscelleneous Grant - State	75,000				75,000	
26	NREF	100000000000000000000000000000000000000	-	3,538,000	2,020,864	1,517,136	
27	Post Doctoral Fellow (DST-SERB)	-		960,000	261,839	698,161	
	Total	39,082,165	(4,695,934)	51,565,124	71,706,675	18,576,005	(4,331,325)

SCHEDULE - 3(c) UNUTILIZED GRANTS FROM UGC, GOVERNMENT OF INDIA AND STATE GOVERNMENTS

			Current Year	Previous Year
Α	Plan Grants : Government of India			
	Balance b/f		(72,235,368)	(176,406,019)
	Add : Reversal of Utilization of Grant	shown last year	4,300,000	<u>-</u>
	Add : Grants during the year		1,300,000,000	1,300,000,000
		Total (a)	1,232,064,632	1,123,593,981
3/6	Less : Refunds		-	-
17	Less : Utilized for Revenue Expendit	ure	1,210,942,813	1,002,426,128
	Less: Utilized for Capital Expenditur	e	173,259,615	193,403,220
		Total (b)	1,384,202,428	1,195,829,349
	Unutilized carried forward (a-b)	Transferred to Schedule 7, being excess expenditure over sanctioned amount	(152,137,796)	(72,235,368)
В	UGC Grants - Plan			
	Balance b/f			
	Add : Receipts during the year			
		Total (C)	-	
	Less : Refunds			
	Less : Utilized for Revenue Expendit	ure		
	Less : Utilized for Capital Expenditur	e		
		Total (d)	-	
	Unutilized carried forward (c-d)		-	
С	UGC Grants - Plan			
44	Balance b/f			
TO SEC	Add : Receipts during the year			
		Total (e)	-	
	Less : Refunds			
10	Less : Utilized for Revenue Expendit	ure		
	Less: Utilized for Capital Expenditur	e		
1		Total (f)	-	
	Unutilized carried forward (e-f)		-	
D	Grants from State Government			
	Balance b/f		46,851	172,656
	Add : Receipts during the year		_	9,552,162
		Total (g)	46,851	9,724,818
	Less : Refunds			
	Less: Utilized for Revenue Expendit	ure	-	9,677,967
	Less: Utilized for Capital Expenditur	e		
		Total (h)	-	9,677,967
	Unutilized carried forward (g-h)		46,851	46,851
	Grand	Total (A+B+C+D)	(152,090,945)	(72,188,517)
	Less : Deficit amount as per Part A to	ransferred to Schedule 7	(152,137,796)	(72,235,368)
100	Grand	d Total (B+C+D)	46,851	46,851

SCHEDULE - 4 FIXED ASSETS

ū			Gross Block					Depreciation			Net Block	Slock
i ė	Assets Heads	Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction/ Adjustments	Total Depreciation	2018-03-31	2019-03-31
1	Land [leasehold]	385,170			385,170		-				385,170	385,170
2	Site Development	310,181	-	-	310,181			1			310,181	310,181
m	Buildings	538,962,458	18,654,044	- 100 100 100 100 100 100 100 100 100 10	557,616,502	2%	35,296,808	11,127,674	1	46,424,482	503,665,650	511,192,019
4	Roads and Bridges	388,025	514,380	-	902,405	2%	31,042	18,048	1	49,090	356,983	853,315
2	Tubewells & Water Supply	8,232,569			8,232,569	2%	280,632	164,018	•	444,649	7,951,937	7,787,920
9	Sewerage & Drainage										-	1
_	Electrical Installation and Equipments	165,209,848	2,104,460		167,314,308	2%	18,949,455	8,273,728		27,223,183	146,260,393	140,091,125
∞	Plant & Machinery	159,011,606	-	-	159,011,606	2%	31,802,321	7,950,580	1	39,752,902	127,209,285	119,258,705
0	Scientific & Laboratory Equipments	319,274,887	92,545,243	-	411,820,130	%8	61,439,384	32,945,610		94,384,994	257,835,503	317,435,136
10	Office Equipments	18,265,253	11,621,998	-	29,887,251	7.5%	3,088,328	2,241,544	1	5,329,871	15,176,925	24,557,380
11	Audio Visual Equipments	594,207	210,398		804,605	7.5%	65,155	60,345		125,500	529,052	679,105
12	Computers & Peripherals	79,100,067	46,605,983		125,706,050	20%	42,108,290	25,141,210		67,249,500	36,991,777	58,456,550
13	Fittings	88,708,401	5,931,125		94,639,526	7.5%	19,394,015	7,097,964		26,491,979	69,314,386	68,147,547
14	Vehicles	375,838			375,838	10%	150,335	37,584		187,919	225,503	187,919
15	Library Books & Scientific Journals	91,934,076	171,755	7	92,105,831	10%	32,353,603	9,210,583		41,564,186	59,580,473	50,541,645
16	Small Value Assets	170,835	213,280		384,115		157,808	226,305		384,113	13,027	2
	Total (A)	1,470,923,422	178,572,666		1,649,496,088		245,117,175	104,495,195		349,612,370	1,225,806,247	1,299,883,718
17	Capital Work in Progress (B)											
Ū.		Opening				Rate of	Amortization	Amortization	Deduction/	Total	Net	Net Value
Š	Intangible Assets	Balance	Additions	Deductions	Closing Balance	Depreciation	Opening Balance	for the year	Adjustments	Amortization	2018-03-31	2019-03-31
18	Computer Software	11,961,600	5,060,476	-	17,022,076	40%	10,941,998	3,134,187	968'06	13,985,790	1,019,602	3,036,286
19	E-Journals	40,510,615	22,183,371		62,693,986	40%	33,239,845	25,077,594		58,317,439	7,270,770	4,376,547
20	Pate											1
	Total (C)	52,472,215	27,243,847	-	79,716,062		44,181,843	28,211,782	968'06	72,303,229		7,412,833
Gra	Grand Total (A + B +C)	1,523,395,637	205,816,513		1,729,212,150		289,299,019	132,706,976	90,396	421,915,599	1,234,096,619	1,307,296,551

SCHEDULE - 4A PLAN

ī		ס	Gross Block					Depreciation			Net	Net Block
No.	Assets Heads	Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction/ Adjustments	Total Depreciation	2018-03-31	2019-03-31
	Land [leasehold]	385,170	1		385,170						385,170	385,170
2	Site Development	-					-				-	,
8	Buildings	507,831,696	18,654,044		526,485,740	2%	34,064,030	10,529,715	-	44,593,744	473,767,666	481,891,995
4	Roads and Bridges	388,025	514,380		902,405	2%	31,042	18,048		49,090	356,983	853,315
2	Tubewells & Water Supply	7,432,569		-	7,432,569	2%	248,952	148,651		397,603	7,183,617	7,034,966
9	Sewerage & Drainage	•				2%	1	-		-		
_	Electrical Installation and Equipments	142,080,842	2,104,460		144,185,302	2%	16,275,014	7,209,265		23,484,279	125,805,828	120,701,023
00	Plant & Machinery	158,406,181			158,406,181	2%	31,681,236	7,920,309		39,601,545	126,724,945	118,804,636
6	Scientific & Laboratory Equipments	93,646,758	63,761,596	1	157,408,354	%8	16,677,428	12,592,668		29,270,096	76,969,330	128,138,258
10	Office Equipments	17,396,883	11,621,998		29,018,881	7.5%	2,952,901	2,176,416		5,129,317	14,443,982	23,889,564
11	Audio Visual Equipments	594,207	210,398		804,605	7.5%	65,155	60,345		125,500	529,052	679,105
12	Computers & Peripherals	64,495,751	43,332,988	-	107,828,739	20%	34,478,721	21,565,748		56,044,468	30,017,031	51,784,271
13	Furniture, Fixtures & Fittings	78,348,004	5,602,624	1	83,950,628	7.5%	16,936,120	6,296,297		23,232,417	61,411,884	60,718,211
14	Vehicles	375,838		1	375,838	10%	150,335	37,584		187,919	225,503	187,919
15	Library Books & Scientific Journals	90,819,668	-		90,819,668	10%	32,053,415	9,081,967		41,135,382	58,766,253	49,684,286
16	Small Value Assets	170,835	213,280		384,115	100%	157,808	226,305		384,113	13,027	2
	Total (A)	1,162,372,428	146,015,768		1,308,388,196		185,772,156	77,863,319		263,635,475	976,600,272	1,044,752,721
17	Capital Work in Progress (B)											•

S	Intangible Assets	Opening Balance	Additions	Deductions	Deductions Closing Balance	Rate of	Amortization Opening	Amortization for Deduction/		Total	Net	Net Value
No						Depreciation	Balance	the year	Adjustments	Amortization	2018-03-31	2019-03-31
18	18 Computer Software	11,797,875	5,060,476		16,858,351	40%	10,687,878	3,134,187		13,822,066	1,109,997	3,036,285
19	19 E-Journals	40,510,615	22,183,371		62,693,986	40%	33,239,845	25,077,594	1	58,317,439	7,270,770	4,376,547
20	20 Patents	1					-	1		ı	1	1
	Total (C)	52,308,490	27,243,847	1	79,552,337		43,927,723	28,211,782	-	72,139,505	8,380,767	7,412,832
2	Grand Total (A + B +C)	1,214,680,918 173,259,615	173,259,615		1,387,940,533		229,699,879	229,699,879 106,075,101		335,774,980	335,774,980 984,981,039	1,052,165,553

SCHEDULE - 4B NON-PLAN

ū		ß	Gross Block					Depreciation			Net Block	lock
<u>.</u>	Assets Heads	Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction/ Adjustments	Total Depreciation	2018-03-31	2019-03-31
1	Land	-		1	-		-				-	-
2	Site Development	•			-					•		•
8	Buildings	31,130,762			31,130,762	2%	1,232,778	597,960		1,830,738	29,897,984	29,300,024
4	Roads and Bridges	-	•		-		-	1		-	-	1
2	Tubewells & Water Supply	800,000		1	800,000	2%	31,680	15,366		47,046	768,320	752,954
9	Sewerage & Drainage	-			-		ı	1		1	-	1
7	Electrical Installation and Equipments	18,869,238		1	18,869,238	2%	1,839,751	851,474		2,691,225	17,029,487	16,178,013
00	Plant & Machinery	-	•	-	-		-			-	-	1
6	Scientific & Laboratory Equipments	1			1		1			•	•	1
10	Office Equipments	-	-	-			-			•	-	•
11	Audio Visual Equipments	_			-					-	•	1
12	Computers & Peripherals	-		-	-					•	1	•
13	Furniture, Fixtures & Fittings	-	1	1	-			1		1		•
14	Vehicles	-		-	-							1
15	Library Books & Scientific Journals											'
16	Small Value Assets	-		-	1		-					•
7	Total (A)	50,800,000			50,800,000		3,104,209	1,464,800	-	4,569,009	47,695,791	46,230,991
17	Capital Work in Progress (B)									1		
S. No.	Intangible Assets	Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Amortization Opening Balance	Amortization for the year	Deduction/ Adjustments	Total Amortization	Net Value 2018-03-31 20	alue 2019-03-31
18	Computer Software									-		-
19	E-Journals				-						•	•
20	Patents											•
	Total (C)			-			1		1	1		1
Grar	Grand Total (A + B +C)	50,800,000		•	50,800,000		3,104,209	1,464,800	-	4,569,009	47,695,791	46,230,991

SCHEDULE - 4C INTANGIBLE ASSETS

ō			Gross Block					Depreciation			Net	Vet Block
No.	Assets Heads	Opening Balance	Additions	Deductions	eductions Closing Balance	Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction/ Adjustments	Total Depreciation	2018-03-31	2018-03-31 2019-03-31
1	Patents & Copyrights				-							-
2	Computer Software				-					-	-	1
m	E-Journals				-							1

SCHEDULE - 4(C)(i) PATENTS AND COPYRIGHTS

Particulars	Opening Balance	Additions	Gross	Amortization	Net Block 31/03/2018	Net Block 31/03/2019
Patent Granted						
1. Balance as on 31/03/2014 of Patents obtained in 2010-11						
(Original Value - Rs.)						
2. Balance as on 31/03/2014 of Patents obtained in 2011-12						
(Original Value - Rs.)						
3. Balance as on 31/03/2014 of Patents obtained in 2012-13						
(Original Value - Rs.)						
4. Patents granted during the current year					-	
Total	1		-			1
Particulars	Opening Balance	Additions	Gross	Amortization	Net Block 31/03/2018	Net Block 31/03/2019
Patents Pending in respect of Patents applied for						
1. Expenditure incurred during the year 2009-10 to 2011-12						
2. Expenditure incurred during the year 2012-13					-	
3. Expenditure incurred during the year 2013-14					-	
Total	1					•

SCHEDULE - 4D OTHERS

2			Gross Block						Depreciation		Net	Net Block
ų Š	Assets Heads	Opening Balance	Additions	Deductions	Deductions Closing Balance	Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction/ Adjustments	Total Depreciation	2018-03-31	2019-03-31
-1	Land	-					•	1				,
2	Site Development	310,181	1	-	310,181		1	1			310,181	310,181
m	Buildings	-		-	-		-	-		-		1
4	Roads and Bridges			-	-		-					ı
D	Tubewells & Water Supply		T.		-		-	L				1
9	Sewerage & Drainage	-	-		-		1	-		-		1
_	Electrical Installation and Equipments	4,259,768	ı		4,259,768	2%	834,690	212,988		1,047,679	3,425,078	3,212,089
00	Plant & Machinery	605,425	-	-	605,425	2%	121,085	30,271		151,356	484,340	454,069
6	Scientific & Laboratory Equipments	225,628,129	28,783,647	-	254,411,776	%8	44,761,956	20,352,942		65,114,898	180,866,173	189,296,878
10	Office Equipments	868,370	-	-	868,370	7.5%	135,427	65,128		200,555	732,943	667,816
11	Audio Visual Equipments				1		-					-
12	Computers & Peripherals	14,604,316	3,272,995	-	17,877,311	20%	7,629,569	3,575,462		11,205,032	6,974,747	6,672,279
13	Furniture, Fixtures & Fittings	10,360,397	328,501	-	10,688,898	7.5%	2,457,895	801,667		3,259,562	7,902,502	7,429,336
14	Vehicles		-	-			1	1				1
15	Library Books & Scientific Journals	1,114,408	171,755		1,286,163	10%	300,188	128,616		428,804	814,220	857,359
16	Computer Software	163,725	-	-	163,725	40%	254,120		968'06	163,724	(90,395)	1
17	E Journals	-	•		-	40%	-					1
	Total	257,914,719	32,556,898		290,471,617		56,494,930	25,167,075	968'06	81,571,610	201,419,789	208,900,00
18	Capital Work in Progress				1							1
	Grand Total	257,914,719	32,556,898	-	290,471,617		56,494,930	25,167,075	96,396	81,571,610	01,419,789	208,900,007

	161,616
Earmarked Funds	
Sponsored Projects/Consultancy Funds	30,624,120
Own Funds	1,771,162
	32,556,898
	d Funds d Projects/Consultancy Funds ds

SCHEDULE - 5 INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS

		Current Year	Previous Year
1	In Central Government Securities		
2	In State Government Securities		
3	Other Approved Securities		
4	Shares		
5	Debentures and Bonds		
6	Term Deposits with Banks	231,890,763	256,151,787
7	Others (to be specified)		
	Total	231,890,763	256,151,787

SCHEDULE - 5A INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS (FUND WISE)

		Current Year	Previous Year
1	Endowment Funds	50,498,889	46,867,270
2	Earmarked Funds/Sponsored Projects	181,391,874	209,284,517
	Total	231,890,763	256,151,787

ANNEXURE - I ENDOWMENT FUND FIXED DEPOSITS AS AT 31.03.2019

SI.	Name of Endowment		Date of	Rate of	Closing Balance as on 31.03.2019			Date of
No.	Fund	Account No.	Deposit/ Reinvestment	Interest	Principal Amt.	Accumulated Int.	Total	Maturity
1	Von Newman Scholarship Fund	0171100443029	2018-09-12	6%	53,747.00		53,747.00	2023-09-12
2	Dr. S. P. Brambha Memorial Merit Scholarship Fund	0171100442992	2018-09-12	6%	106,895.00		106,895.00	2023-09-12
3	Probir Sengupta Memorial Prize Fund	0171100433112	2017-10-31	6%	11,302.38	851.01	12,153.39	2022-10-31
4	Renu Chakraborty V. L. Fund	0171100433105	2017-10-31	6%	55,737.00		55,737.00	2022-10-31
5	Dr. Fazlur Kader Memorial Scholarship Fund	0171100442800	2018-09-12	6%	180,879.89	5,561.26	186,441.15	2023-09-12
6	J. N. Neogi Students' Benefit Fund	0171100442862	2018-09-12	6%	113,019.65	3,473.93	116,493.58	2023-09-12
7	Sunita Memorial Prize Fund	0171100442879	2018-09-12	6%	24,100.96	741.77	24,842.73	2023-09-12
8	Dr. B. N. Dey Scholarship Fund	0171100442886	2018-09-12	6%	58,692.05	1,802.42	60,494.47	2023-09-12
9	Kunja Kusum Scholarship Fund	0171100442961	2018-09-12	6%	77,444.00		77,444.00	2023-09-12

ANNEXURE - I

ENDOWMENT FUND FIXED DEPOSITS AS AT 31.03.2019

SI.	Name of Endowment		Date of	Rate of	Closing E	alance as on 31.03	.2019	Date of
No.	Fund	Account No.	Deposit/ Reinvestment	Interest	Principal Amt.	Accumulated Int.	Total	Maturity
10	Sarat Kanta Nirmalya Basini Biswas Golden Jubilee Scholarship Fund	0171100433099	2017-11-01	6%	20,087.00		20,087.00	2022-11-01
11	Prof. N. N. Sen Memorial Scholarship Fund	0171100443074	2018-09-12	6%	39,432.00		39,432.00	2018-09-12
12	Acharya P. C. Roy Scholarship	0171100443012	2018-09-12	6%	91,587.00		91,587.00	2023-09-12
13	Ramlal Nandy & Genoda Sundari Memorial Scholarship Fund	0171100442947	2018-09-12	6%	46,928.00		46,928.00	2023-09-12
14	Liluah Iron Works Ltd. Scholarship	0171100443043	2018-09-12	6%	47,693.00		47,693.00	2023-09-12
15	R & K Ahmed Merit Scholarship	0171100443036	2018-09-12	6%	56,769.00		56,769.00	2023-09-12
16	The President of India Gold Medal	0171100443050	2018-09-12	6%	56,769.00		56,769.00	2018-09-12
17	Alumni Donation Seminar Series	0171100433075	2017-10-31	6%	494,631.89	62,705.35	557,337.24	2022-10-31
18	Jogesh Chandra Memorial Scholarship Fund	0171100443081	2018-09-12	6%	478,376.00		478,376.00	2023-09-12
19	Anil Burnwal Ment cum Means Scholarship Fund	0171100303499	2017-08-08	6%	109,469.00		109,469.00	2022-08-08
20	Jaya Smriti Puroskar (BESUS)	0171100404736	2017-08-08	6%	33,205.03	3,677.20	36,882.23	2022-08-08
21	BECA - 1964	0171100441964	2018-09-12	6%	358,557.67	10,929.33	369,487.00	2023-09-12
22	Prof. S. C. Dasgupta Gold Medal	1532100009461	2017-11-09	6%	213,244.50	13,472.61	226,717.11	2022-08-08
23	Jaya Smriti Puroskar	1532100009478	2017-08-08	6%	30,411.43	3,047.55	33,458.98	2022-08-08
24	Dhaibat Ghosh Memorial Scholarship	1532100058113	2017-04-23	6%	624,203.68	61,502.69	685,706.37	2022-04-23
25	Prabodh Kumar Chatterjee Fund - 1	1532100047560	2017-09-28	6.16%	250,000.00		250,000.00	2020-09-28
26	Rai Sahib Amulya Chandra Mitra Endowment Fund	1532100047588	2017-09-28	6.16%	341,445.63	22,163.91	363,609.54	2020-09-28
27	Rai Sahib Amulya Chandra Mitra Endowment Fund	1532100047579	2017-09-28	6.16%	300,000.00		300,000.00	2020-09-28
28	S. C. Dasgupta Memorial Fund	1532100047384	2017-09-23	6.16%	1,879,185.14	128,823.80	2,008,008.94	2020-09-23
29	Prabodh Kumar Chatterjee Fund - 2	1532100058122	2018-09-12	6.00%	50,000.00		50,000.00	2021-04-23
30	Madhusudan Bhattacharjee Memorial Fund	1532100062116	2018-09-12	6.00%	200,000.00		200,000.00	2021-07-12
31	B. K. Bose Lecture Fund	1532100068998	2018-09-12	6.00%	225,000.00		225,000.00	2021-02-08

ANNEXURE - I

ENDOWMENT FUND FIXED DEPOSITS AS AT 31.03.2019 (...Contd)

SI.	Name of Endowment		Date of	Rate of	Closing E	Balance as on 31.03	3.2019	Date of
No.	Fund	Account No.	Deposit/ Reinvestment	Interest	Principal Amt.	Accumulated Int.	Total	Maturity
32	Sougata Mukherjee Memo. Award for Excellence Fund	1532100089751	2018-12-13	6.00%	509,507.00		509,507.00	2020-12-13
33	Students Reward Programme Fund	1532100089760	2018-12-13	6.00%	1,650,000.00		1,650,000.00	2020-09-13
34	Suhas Choudry Swimming Excellence Prize Fund	1532100055888	2018-04-22	6.10%	127,549.00		127,549.00	2019-04-22
35	Ujjal Dasgupta Scholarship Corpus Fund	1532100055912	22-04-2018%	7.00%	1,421,977.00		1,421,977.00	2019-04-22
36	GAABESU Admission Grant - 2	1532100055930	2018-09-12	6%	582,400.00		582,400.00	2021-03-14
37	Prof. P. C. Mitra Memorial Award	1532100070364	2017-12-03	6%	77,077.12	9,071.71	86,148.83	2022-12-03
38	Prof. P. C. Mitra Memorial Award	1532100090632	2018-09-26	6.00%	151,594.09	4,335.90	155,929.99	2023-09-26
39	K. K. Pal Chaudhuri Arch.	1532100084640	2018-07-02	6.00%	77,077.12	2,116.13	79,193.25	2023-07-02
40	Prof. A. K. Seal Gold Medal	23690310006207	2018-11-26	6.35%	139,238.00	3,027.95	142,265.95	2019-08-26
41	Prof. Amiya Basu Endowment Fund - 1	23690310011904	2018-11-23	6.75%	3,150,000.00		3,150,000.00	2021-11-23
42	Prof. Amiya Basu Endowment Fund - 2	1532100194853	2018-12-26	6.50%	1,658,787.00		1,658,787.00	2019-12-26
43	B.E.C. (55) Scholarship Fund	23690310006481	2018-06-27	6.60%	437,666.00	22,236.25	459,902.25	2019-06-27
44	Prabodh Chandra Mitra Scholarship Fund	2369031006504	2018-06-27	6.60%	86,472.00	4,392.75	90,864.75	2019-06-27
45	Siddhananda Memorial Lecture Fund	23690310006573	2018-07-03	6.60%	100,303.00	5,094.00	105,397.00	2019-07-03
46	BESU Endowment Fund	23690310006498	2018-06-27	6.60%	6,804,849.00	345,662.50	7,150,511.50	2019-06-27
47	BESU Endowment Fund	23690310011584	2018-09-09	6.60%	29,005.00	1,145.58	30,150.58	2019-09-09
48	B.E.C. (55) Scholarship Fund	23690310011577	2018-09-09	6.60%	1,866.00	73.92	1,939.92	2019-09-09
49	Bijoy Ashu Chair Professor Fund	10382034315	2016-08-30	7.00%	113,490.00		113,490.00	2019-08-30
50	Bijoy Ashu Chair Professor Fund	34205796198	2018-06-15	6.90%	6,716,655.00		6,716,655.00	2019-06-15
51	Bijoy Ashu Chair Professor Fund	34205799520	2018-06-15	6.90%	6,716,654.00		6,716,654.00	2019-06-15
52	Alpona Banerjee Memorial Endowment Fund	1532100196833	08-02-2017%	6.50%	9,902,000.08		9,902,000.08	2027-02-08
53	Provat Chandra Neogi Memorial Endowment Fund - 1	1532100243766	2018-06-02	6.00%	450,000.00		450,000.00	2028-06-02
54	Provat Chandra Neogi Memorial Endowment Fund - 2	1532100255615	2018-09-26	6.00%	2,250,000.00		2,250,000.00	2028-09-26
		Grand Total			49,782,979.31	715,909.52	50,498,888.83	

ANNEXURE - I

EARMARKED FUND FIXED DEPOSITS AS AT 31.03.2019

			Date of		Closing B	alance as on 31.0	3.2019	
SI. No.	Name of Endowment Fund	Account No.	Deposit/ Reinvestment	Rate of Interest	Principal Amt.	Accumulated Int.	Total	Date of Maturity
1	BESUS Project Fund	1532100055985	2018-03-09	6.16%	2,500,000.00		2,500,000.00	2021-03-09
2	BESUS Project Fund	1532100055994	2018-03-09	6.16%	2,500,000.00		2,500,000.00	2021-03-09
3	BESUS Project Fund	1532100056009	2018-03-09	6.16%	2,500,000.00		2,500,000.00	2021-03-09
4	BESUS Project Fund	1532100056018	2018-03-09	6.16%	2,500,000.00		2,500,000.00	2021-03-09
5	BESUS Project Fund	1532100056027	2018-03-09	6.16%	2,500,000.00		2,500,000.00	2021-03-09
6	BESUS Project Fund	1532100066413	2018-08-25	4.25%	14,581,422.22	281,100.59	14,862,522.81	2021-08-25
7	BESUS Project Fund	1532100066477	2018-08-25	4.25%	14,581,422.22	281,100.59	14,862,522.81	2021-08-25
8	BESUS Project Fund	1532100066440	2018-08-25	4.25%	14,581,422.22	281,100.59	14,862,522.81	2021-08-25
9	BESUS Project Fund	1532100046419	2018-09-28	6.26%	9,000,000.00		9,000,000.00	2021-09-28
10	DST - SAIF	1532100214520	2018-03-26	4.50%	-		-	2018-06-26
11	BESUS Overhead Fund	1532100036786	2017-03-09	6.25%	500,000.00		500,000.00	2020-03-09
12	BESUS Overhead Fund	1532100036795	2017-03-09	6.25%	500,000.00		500,000.00	2020-03-09
13	BESUS Overhead Fund	1532100036801	2017-03-09	6.25%	500,000.00		500,000.00	2020-03-09
14	BESUS Overhead Fund	1532100036810	2017-03-09	6.25%	500,000.00		500,000.00	2020-03-09
15	BESUS Overhead Fund	1532100036829	2017-03-09	6.25%	500,000.00		500,000.00	2020-03-09
16	BESUS Overhead Fund	1532100036838	2017-03-09	6.25%	500,000.00			2020-03-09
17	BESUS Overhead Fund	1532100045669	2018-09-28	6.16%	520,712.00			2021-09-28
18	BESUS Overhead Fund	1532100045702	2018-09-28	6.16%	520,712.00			2021-09-28
19	BESUS Overhead Fund	1532100050193	2017-11-21	6.16%	6,810,936.04	589,568.69		2020-11-21
20	BESUS Overhead Fund	1532100052924	2018-09-28	6.16%	846,009.58	20,902.21		2021-09-28
21	BESUS Overhead Fund	1532100052933	2018-09-28	6.16%	1,692,019.15	41,804.45		2021-09-28
22	BESUS Overhead Fund	1532100055958	2018-03-14	6.16%	4,254,325.96	281,905.79		2021-03-14
23	BESUS Overhead Fund	1532100055967	2018-03-14	6.16%	4,254,325.96	281,914.81	4,536,240.77	2021-03-14
24	BESUS Overhead Fund	1532100088406	2016-08-29	6.50%	5,186,009.21	931,288.37		2019-08-29
25	BESUS Overhead Fund	1532100071390	2015-12-17	6.75%	6,450,258.21	1,543,816.66	7,994,074.87	2018-12-17
26	BESUS Overhead Fund	1532100071406	2015-12-17	6.75%	6,450,258.21	1,543,816.66	7,994,074.87	2018-12-17
27	BESUS Overhead Fund	1532100071372	2015-12-17	6.75%	1,290,050.37	308,763.02	1,598,813.39	2018-12-17
28	BESUS Overhead Fund	1532100102414	2017-02-19	6.25%	5,791,583.85	802,343.95	6,593,927.80	2020-02-19
29	BESUS Overhead Fund	1532100105484	2017-03-31	6.25%	2,574,037.27	336,131.78	2,910,169.05	2020-03-31
30	BESUS Overhead Fund	1532100120920	2017-10-22	6.00%	9,652,639.75	863,651.16	10,516,290.91	2020-10-22
31	BESUS Foundation	23690310007990	2017-08-02	6.40%	1,514,430.98	164,194.30		2020-04-28
32	BESUS Foundation	23690310011676	2017-08-02	6.55%	6,619.00	748.09	7,367.09	2019-06-07
33	Corpus Fund	23690310006405	2018-06-17	6.25%	10,014,303.38	508,081.83	10,522,385.21	2019-06-17
34	Corpus Fund	1532100142847	2018-09-12	6.25%	747,226.41	21,611.68		2019-09-12
35	Maintenance Fund	23690310006436	2018-06-17	6.25%	16,240,300.37	823,192.88	17,063,493.25	2019-06-17
36	Maintenance Fund	1532100142816	2018-09-12	6.25%	1,114,612.72	64,120.38	1,178,733.10	2019-09-12
37	Equipment Replacement Fund	1532100142823	2018-09-12	6.25%	650,914.33	37,445.09		2019-09-12
38	Faculty Development Fund	1532100142830	2018-09-12	6.25%	650,914.33	37,445.09	688,359.42	2019-09-12
39	Staff Development Fund	23690310006412	2018-06-17	6.60%	8,044,082.34	431,167.75	8,475,250.09	2019-06-17
40	Depreciation Fund	23690310006429	2018-06-17	6.60%	7,016,993.64	376,115.73	7,393,109.37	2019-06-17
		Grand Total			170,538,541.72	10,853,332.14	181,391,873.86	

SCHEDULE - 6 INVESTMENT - OTHERS

		Current Year	Previous Year
1	In Central Government Securities	-	
2	In State Government Securities	-	-
3	Other Approved Securities	-	-
4	Shares	-	
5	Debentures and Bonds	-	-
6	Term Deposits with Banks	383,719,404	375,334,135
7	Others (to be specified)	-	<u>-</u>
	Total	383,719,404	375,334,135

SCHEDULE - 7 CURRENT ASSETS

		Current Year	Previous Year
1. Stock			
a)	Stores and Spares		
b)	Loose Tools		
c)	Publications		
d)	Laboratory chemicals, consumables and glass ware		
e)	Building Materials	100	
f)	Electrical Materials		
g)	Stationery		
h)	Water Supply Materials		
2. Sundr	Debtors:	-10	
a)	Debts outstanding for a period exceeding six months		
b)	Others		

SCHEDULE - 7 CURRENT ASSETS (...Contd)

		Current Year	Previous Year
	MHRD Grant receivables [over and above sanctioned for the year]	152,137,796	72,235,368
c)	MHRD Grant receivables [sanctioned for the year]	350,000,000	
d)	Any Other Receivables	119,006	81,840
e)	Interest receivable on PF (Treasury) for the year		
	2016-2017	-	
	2017-2018	-	18,739,540
Cash a	nd Bank balances :		
a)	With Scheduled Banks		
	- in Current Account	92,395,599	135,244,258
	- in Term Deposit Accounts	97,657,608	84,083,849
	- in Savings Accounts	487,052,850	390,096,273
	- with Howrah Treasury PF a/c	-	255,847,174
b)	With Non-Scheduled Banks		
c)	Cash in hand	-	6,650
d)	Cheques in hand	-	
Post O	ffice - Savings Accounts		
	Total	1,179,362,859	956,334,953

SAVINGS BANK ACCOUNT (2018-19)

SI. No.	Name of the Bank	Account No.	Type of Account	Head of Account	Purpose	Closing Balance as on 31.03.2019
1	U.B.I.	1532010021386	S.B.	P.G. Admission	Academic Fee Receipt A/c	735,003.00
2	U.B.I.	171010375799	S.B.	Corpus Fund	Earmarked - TEQIP	3,204,047.25
3	U.B.I.	1532010020688	S.B.	Faculty Development	Earmarked - TEQIP	29,927.00
4	U.B.I.	1532010020679	S.B.	Equipment Replacement	Earmarked - TEQIP	29,927.00
5	U.B.I.	0171010375829	S.B.	Maintenance Fund	Earmarked - TEQIP	44,943.78
6	U.B.I.	0171010375811	S.B.	Depreciation Fund	Earmarked - TEQIP	83,337.00
7	U.B.I.	0171010375802	S.B.	Staff Development	Earmarked - TEQIP	91,617.00
8	U.B.I.	1532010006354	S.B.	BESUS Foundation	Alumni Donation	(214,679.81)
9	U.B.I.	Sweep A/c	S.B.	BESUS Foundation	Alumni Donation	14,372,000.00
10	U.B.I.	1532010023269	S.B.	Schools & Centre	Academic Fee Receipt A/c	464,717.59
11	ICICI	003401010516	S.B.	P.D.S.I.T.	Academic Fee Receipt A/c	12,068.00
12	U.B.I.	1532010020828	S.B.	Composite A/c	Academic Fee Receipt A/c	17,461.00
13	U.B.I.	0171010348333	S.B.	B.E.C. Scholarship	Scholarship A/c	774,973.93
14	U.B.I.	0171010348350	S.B.	B.E.C. Prize	Endowment/Earmarked/Chair A/c	236,083.67
15	U.B.I.	1532010029740	S.B.	BESUS - NSS A/C	National Service Scheme	372,782.50
16	U.B.I.	1532010077288	S.B.	Visvesvaraya Ph.D. Fellowship	Sponsored Fellowship A/c	4,193,669.50
17	U.B.I.	1532010079772	S.B.	GIAN Courses	Endowment/Earmarked/Chair A/c	838,286.00
18	U.B.I.	1532010079763	S.B.	Students Welfare Fund	Endowment/Earmarked/Chair A/c	255,569.25
19	U.C.O.	23690110000489	S.B.	Tuition Fees	Academic Fee Receipt A/c	(4,972,114.67)
20	U.C.O.	Sweep A/c	S.B.	Tuition Fees	Academic Fee Receipt A/c	47,252,862.00
21	U.C.O.	23690110000960	S.B.	Academic Services	Academic Fee Receipt A/c	2,001,359.13
22	U.C.O.	23690110040461	S.B.	Prof. Amiya Basu Endowment	Endowment/Earmarked/Chair A/c	289,266.63
23	S.B.I. Shalimar	1381942908	S.B.	Bijou Ashu Prof.	Endowment/Earmarked/Chair A/c	829,970.85
24	S.B.I., BESUS	33725727857	S.B.	I.I.E.S.T.	Grants from MHRD A/C	13,820,837.54
25	U.B.I.	1532010005180	S.B.	Research & Consultancy Fund	Sponsored Project A/c	(4,028,003.35)
26	U.B.I.	Sweep A/c	S.B.	Research & Consultancy Fund	Sponsored Project A/c	317,923,000.00
27	U.B.I.	1532010020305	S.B.	UGC - SAP - BESUS	Sponsored Project A/c	CLOSED
28	U.B.I.	1532010024781	S.B.	SOCSAT/GRSE/CSR Project	Sponsored Project A/c	CLOSED
29	U.B.I.	0171010301001	S.B.	BE College Testing Fees Fund	Sponsored Project A/c	476,086.50

SAVINGS BANK ACCOUNT (2018-19) (...Contd)

SI. No.	Name of the Bank	Account No.	Type of Account	Head of Account	Purpose	Closing Balance as on 31.03.2019		
30	U.B.I.	Sweep A/c	S.B.	BE College Testing Fees Fund	Sponsored Project A/c	3,884,000.00		
31	U.B.I.	1532010005173	S.B.	Institutional Development Fund	Institute Receipt - Earmarked A/c	2,728,877.92		
32	U.B.I.	Sweep A/c	S.B.	Institutional Development Fund	Institute Receipt - Earmarked A/c	80,477,000.00		
33	U.B.I.	1532010071619	S.B.	SMDP - C2SD	Sponsored Project A/c	13,647.25		
34	U.B.I.	1532010084491	S.B.	BCMFRL of Homoeopathy	Sponsored Project A/c	170,712.50		
35	U.B.I.	1532010089353	S.B.	MOT Jute Composite	Sponsored Project A/c	643,615.25		
	Total							

CURRENT BANK ACCOUNT (2018-19)

SI. No.	Name of the Bank	Account No.	Type of Account	Head of Account	Purpose	Closing Balance as on 31.03.2019				
1	U.B.I.	0171050031501	C/A	BEC General Fund	Grants from State Govt. & Other Receipt	4,800,539.52				
2	U.B.I.	Sweep A/c 0171050031501	C/A	BEC General Fund	Grants from State Govt. & Other Receipt	23,470,000.00				
3	U.B.I.	0171050031510	C/A	BEC Development Fund	Testing Fees, Consultancy Fees, Donation for Development Scheme	1,009,884.71				
4	U.B.I.	Sweep A/c 0171050031510	C/A	BEC Development Fund	Testing Fees, Consultancy Fees, Donation for Development Scheme	13,543,486.00				
5	U.B.I.	0171050031528	C/A	BEC Employees Benefit Fund	Pension Contribution, Gratuity etc.	508,811.87				
6	U.B.I.	Sweep A/c 0171050031528	C/A	BEC Employees Benefit Fund	Pension Contribution, Gratuity etc.	6,379,628.00				
7	U.B.I.	0171050031536	C/A	BEC Miscellaneous Fund	Miscellaneous Receipt, E.C. & H.R. Charges etc.	1,543,720.43				
8	U.B.I.	Sweep A/c 0171050031536	C/A	BEC Miscellaneous Fund	Miscellaneous Receipt, E.C. & H.R. Charges etc.	40,270,000.00				
9	U.B.I.	171050031293	C/A	QIP	Quality Improvement Programme	32,936.00				
10	S.B.I., Howrah	31906556458	C/A	Prof. Tax	Tax & Duty	118,203.00				
11	U.B.I.	153205000435	C/A	SDF-Tata/SMSE/NRB A/c	Sponsored Project A/c	108,389.25				
12	U.B.I.	Sweep A/c	C/A	SDF-Tata/SMSE/NRB A/c	Sponsored Project A/c	610,000.00				
	Total									
	Grand Total									

ANNEXURE - I

GENERAL FUND FIXED DEPOSITS AS AT 31.03.2019

SI.			Date of	Rate of	Closing	Balance as on 31.0	3.2019	Date of
No.	Name of Fund	Account No.	Denosit/	Interest	Principal Amt.	Accumulated Int.	Total	Maturity
1	B.E. College - General Fund A/c	1532100046932	2017-09-14	6.00%	10,000,000.00		10,000,000.00	2020-09-14
2	BEC General Fund	23690310008157	2017-08-17	6.40%	77,219.66	9,636.30	86,855.96	2020-05-26
3	BEC General Fund	23690310011669	2017-08-17	6.55%	1,744.00	191.03	1,935.03	2019-07-07
4	BEC General Fund	23690310008140	2017-08-17	6.40%	6,365,080.00	649,665.80	7,014,745.80	2020-05-13
5	BEC General Fund	23690310011515	2017-08-17	6.55%	14,154.00	1,557.82	15,711.82	2019-07-05
6	BEC General Fund	23690310008133	2017-08-17	6.40%	5,537,613.00	565,214.07	6,102,827.07	2020-05-13
7	BEC General Fund	23690310007983	2017-08-02	4.75%	57,285,775.00	4,271,244.15	61,557,019.15	2020-04-28
8	BEC General Fund	23690310011645	2017-08-08	6.55%	127,389.00	14,367.36	141,756.36	2019-06-05
9	BEC General Fund	23690310007976	2017-08-02	4.75%	21,132,021.00	1,575,679.63	22,707,700.63	2020-04-28
10	BEC General Fund	23690310011638	2017-08-02	6.55%	46,992.00	5,300.49	52,292.49	2019-06-05
11	BEC General Fund	23690310007969	2017-08-02	4.75%	48,120,001.00	3,587,895.41	51,707,896.41	2020-04-28
12	BEC General Fund	23690310011621	2017-08-02	6.55%	107,007.00	11,386.44	118,393.44	2019-06-05
13	BEC General Fund	23690310007952	2017-08-02	4.75%	25,460,318.00	1,898,356.79	27,358,674.79	2020-04-28
14	BEC General Fund	23690310011614	2017-08-02	6.55%	56,617.00	6,024.78	62,641.78	2019-06-05
15	BEC General Fund	23690310007945	2017-08-02	4.75%	12,730,152.00	949,185.89	13,679,337.89	2020-04-28
16	BEC General Fund	23690310007938	2017-08-02	4.75%	21,641,271.00	1,613,603.42	23,254,874.42	2020-04-28
17	BEC General Fund	23690310011591	2017-08-02	6.55%	48,124.00	5,120.36	53,244.36	2019-06-05
18	BECSOMS	23690310006399	2018-06-17	6.60%	2,756,185.40	147,733.27	2,903,918.67	2019-06-17
19	BECSOMS	1532100058900	2017-02-07	6.50%	9,900,000.00		9,900,000.00	2021-11-07
20	BECSOMS	1532100058919	2017-02-07	6.50%	2,600,000.00		2,600,000.00	2021-11-07
21	Institute General Fund	23690310006061	2018-05-13	6.25%	37,478,138.00	2,098,908.13	39,577,046.13	2019-05-13
22	Institute General Fund	23690310011324	2018-03-21	6.35%	77,496.00	5,049.00	82,545.00	2019-06-16
23	IIEST-Student Fee Collection Fund	23690310017302	2017-10-31	4.75%	126,289,893.00	8,756,939.00	135,046,832.00	2020-10-31
24	BESU	34087266649	2019-02-05	6.80%	7,268,527.00	76,360.00	7,344,887.00	2020-02-05
25	BESU	34087253584	2019-02-05	6.80%	7,268,527.00	76,360.00	7,344,887.00	2020-02-05
26	BESU	34087265125	2019-02-05	6.80%	7,268,527.00	76,360.00	7,344,887.00	2020-02-05
27	BESU	34087241863	2019-02-05	6.80%	7,268,526.00	76,360.00	7,344,886.00	2020-02-05
28	BESU	34087247413	2019-02-05	6.80%	7,268,526.00	76,360.00	7,344,886.00	2020-02-05
29	BESU	34087250572	2019-02-05	6.80%	7,268,526.00	76,360.00	7,344,886.00	2020-02-05
30	BESU	31688180670	2016-09-15	7.25%	464,380.00	90,468.60	554,848.60	2019-06-12
31	BESU	31744729481	2016-11-01	7.00%	7,688,415.00	1,438,309.27	9,126,724.27	2019-07-29
32	PDSIT	003414136321	2017-04-05	6.50%	12,692,118.00	824,234.94	13,516,352.94	2020-04-05
33	PDSIT	003414101445	2016-08-28	6.50%	60,079.00	3,905.00	63,984.00	2019-08-28
34	PDSIT	003414151586	2016-03-04	6.50%	6,787.00	1,202.26	7,989.26	2019-03-05
35	PDSIT	003414110876	2017-05-29	6.50%	10,522.00	512.65	11,034.65	
450		Grand Total	100000000000000000000000000000000000000		452,386,650.06	28,989,851.86	481,376,501.92	

SCHEDULE - 8 LOANS AND ADVANCES

	Current Year	Previous Year
1. Advance to employee : (Non interest bearing)		
a) Salary		
b) Festival	191,600	858,100
c) Medical Advance	1,703,810	1,713,086
d) Other (to be specified)	-	
- Advance to employees	538,337	3,214,518
2. Long Term Advance to employees : (Interest bearing)	-	
a) Vehicle Loan	-	-
b) Home Loan	-	
c) Other (to be specified)	-	
3. Advances and other amounts recoverable in cash or in kind or value to be received		
a) On Capital Account	22,713,513	29,244,935
b) to Suppliers	263,429	120,000
c) Other (to be specified) - Advance Student Research Scholars	202,000	342,000
d) Other (to be specified) - Advance for Research Projects	8,117,611	2,463,776
e) Other (to be specified) - Advance for Consultancy	70,034	225,000
f) Other (to be specified) - Institute Development Fund	80,000	80,000
g) Other-Miscellaneous	-	3,081,922
h) Other-E Journals	5,001,115	407,080
4. Prepaid Expenses	-	-
a) Insurance	-	-
b) Other Expenses	-	
5. Deposits	-	All Marie Control
a) Telephone	-	-
b) Lease Rent	-	<u> </u>
c) Electricity	7,392,772	6,974,314
d) AICTE, if applicable	-	-
e) Other (to be specified) - against research projects	37,500	37,500
f) Other (to be specified) - against consultancy	54,850	54,850
g) Other (to be specified) - Income Tax Deducted at Source	1,675,859	701,141
6. Income Accrued		
a) On investments from Earmarked/Endowment Funds		
b) On investments - Others		
c) On Loans and Advances		
7. Other - Current assets receivable from UGC/sponsored projects		
a) Debit balances in Sponsored projects		
b) Debit balances in Sponsored Fellowships & Scholarships	4,331,325	<u>-</u>
c) Grants Receivables		
d) Other Receivables from UGC		
8. Claim Receivable		
Advance Tax receivable		
Total	52,373,755	49,518,222

SCHEDULE - 9 ACADEMIC RECEIPTS

		Current Year	Previous Year
Fee	es from Students		
A.	Academic		
	1. Tuition Fees	168,073,692	140,331,195
	2. Admission Fees	3,163,300	3,267,101
	3. Enrolment Fees		
	4. Library Admission Fees		
	5. Laboratory Fees		
13	6. Art & Craft Fees		
	7. Registration Fees		
	8. Course Fees	6,637,500	
	Total (A)	177,874,492	143,598,296
В.	Examinations		
	1. Admission Test Fees	-	
	2. Annual Examination Fees		
	3. Mark sheet, Certificate Fees		
	4. Entrance Examination Fees	7,626,000	6,425,000
	Total (B)	7,626,000	6,425,000
C.	Other Fees		
	1. Identity Card Fees		
	2. Fine/Miscellaneous Fees	6,693,880	4,008,401
	3. Medical Fees	-	
	4. Transportation Fees	-	
	5. Hostel Development Fees	11,627,400	3,742,600
	Total (C)	18,321,280	7,751,001
D.	Sale of Publications		
	1. Sale of Admission Forms	-	4,000
	2. Sale of Syllabus, Question Papers etc		
	3. Sale of prospectus including admission forms		
	Total (D)	-	4,000
E.	Other Academic Receipts		
	1. Registration fee for workshops, programmes, Student Activities Fees	3,269,900	3,200,000
100	2. Registration fees (Academic Staff College)	- (
	3. External Examination Fees Receipts	-	-
	4. Convocation fees	561,260	990,011
	5. Tuition Fees - Self Financing Course	-	
	6. Infrastructure Maintenance Fees	13,630,500	16,000,000
	Total (E)	17,461,660	20,190,011
	Grand Total (A+B+C+D+E)	221,283,432	177,968,308

SCHEDULE - 10 GRANTS/SUBSIDIES (IRREVOCABLE GRANTS RECEIVED)

Particular.		Plan		Tatal Diam	Comment Versi Tetal	Previous Year Total	
Particulars Particulars	Govt of India	UGC Plan	State Govt Grant	Total Plan	Current Year Total		
Balance B/F	(72,235,368)	=	46,851	(72,188,517)	(72,188,517)	(176,233,363)	
Add : Receipts during the year plus reversal	1,304,300,000		<u>-</u>	1,304,300,000	1,304,300,000	1,309,552,162	
Total	1,232,064,632		46,851	1,232,111,483	1,232,111,483	1,133,318,799	
Less : Refund					-	-	
Balance	1,232,064,632		46,851	1,232,111,483	1,232,111,483	1,133,318,799	
Less : Utilized for Capital Expenditure (A)	173,259,615			173,259,615	173,259,615	193,403,220	
Balance	1,058,805,017		46,851	1,058,851,868	1,058,851,868	939,915,578	
Less : Utilized for Revenue Expenditure (B)	1,210,942,813			1,210,942,813	1,210,942,813	1,012,104,095	
Balance C/F (C)	(152,137,796)		46,851	(152,090,945)	(152,090,945)	(72,188,517)	

SCHEDULE - 11 INCOME FROM INVESTMENTS

Particulars Particulars	Earmarked/Endo	wment Funds	Other Inv	estments
Farticulars	Current Year	Previous Year	Current Year	Previous Year
1. Interest				
a. On Government Securities				
b. Other Bonds/Debentures				
2. Interest on Term Deposits	13,755,322	11,809,076	23,886,627	31,196,658
Income accrued but not due on Term Deposits/Interest bearing advances to employees				
4. Interest on Savings Bank Accounts	955,463	732,516	-	
5. Interest on Security Depsoits with CESC	-		418,459	394,772
5. Others (Specify) - Dividend			31,136	6,811
Total	14,710,785	12,541,592	24,336,222	31,598,242
Transferred to Earmarked/Endowment Funds	14,710,785	12,541,592		
Balance	Nil	Nil		

SCHEDULE - 12 INTEREST EARNED

	Particulars Particulars	Current Year	Previous Year
1.	On Savings Accounts with scheduled banks	16,536,813	10,834,891
2.	On Loans		
	a. Employees/Staff		
	b. Others		
3.	On Debtors and Other Receivables		
	Total	16,536,813	10,834,891

SCHEDULE - 13 OTHER INCOME

	Current Year	Previous Year
A. Income from Land and Buildings		
1. Hostel Room Rent	7,304,597	1,570,821
2. Licence Fees	1,912,317	1,889,415
3. Hire Charges of Auditorium/Play ground/Convention Centre/Guest House etc.	1,435,729	1,122,417
4. Electricity Charges recovered	5,992,212	2,682,664
5. Water Charges recovered	-	
Total (A)	16,644,855	7,265,317
3. Sale Institute's Publications	-	
C. Income from holding events		
1. Gross Receipts from annual function/sports carnival		
Less : Direct expenditure incurred on the annual function/sports carnival		
2. Gross Receipts from fetes		
Less : Direct expenditure incurred on the fetes		
3. Gross Receipts for Educational Tours		
Less : Direct expenditure incurred on the tours		
4. Others (to be specified and separately disclosed)		
- Course Fees	28,864	
- Centre Fees for External Exams	-	104,200
- Seminar Programme Fees receipts	1,568,488	2,512,877
Total (C)	1,597,352	2,617,077
. Others		
1. Income from Consultancy and Institutional Development Fund	1,086,643	214,634
2. RTI Fees		
3. Income from Royalty		
4. Sale of application forms	1,241,973	342,800
5. Miscellaneous Receipts (Sale of tender forms, waste paper etc.)	493,689	134,790
6. Sale/Disposal of Assets/Scraps	-	
a. Owned Assets	-	8,517,446
b. Assets received free of costs	-	
7. Grants/Donations from Institutions, Welfare Bodies and International Organizations	-	
8. Others (specify) - liabilities written back	19,897	206,600
Total (D)	2,842,202	9,416,270
Grand Total (A+B+C+D)	21,084,409	19,298,664

SCHEDULE - 14 PRIOR PERIOD INCOME

	Particulars Particulars	Current Year	Previous Year
1.	Academic Receipts	525,600	
2.	Income from Investments	-	
3.	Interest earned	-	2,380,615
4.	Income from MHRD Grant	- 1	26,688,765
5.	Depreciation	- (533,775
6.	Other Income - Salary/Contribution for CMS	6,061,054	
	Total	6,586,654	29,603,155

SCHEDULE - 15 STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)

	Building to a		Current Year		Previous Year			
	Particulars Particulars	Plan Others		Total	Plan	Others	Total	
a)	Salaries and Wages			-				
	- Central	816,653,543	-	816,653,543	663,989,783		663,989,783	
	- UGC			-				
	- Own sources and out of State Government Grant	-	30,592,974	30,592,974	-	43,137,378	43,137,378	
b)	Allowances and Bonus	4,641,099	36,384	4,677,483	9,869,164	759,880	10,629,044	
c)	Contribution to Provident Fund	1,945,775	-	1,945,775	371,967	-	371,967	
d)	Contribution to Other Fund (specify)			-		4	-	
e)	Staff Welfare Expenses			-		-	- 1	
f)	Retirement and Terminal Benefits	9,600,507	-	9,600,507	5,734,547	-	5,734,547	
g)	LTC Facility	4,687,201	-	4,687,201	13,350,038	-	13,350,038	
h)	Leave Salary	7,592,825	-	7,592,825	3,345,350	Total Par	3,345,350	
i)	Children Education Allowance	2,258,453	-	2,258,453	3,654,561	-	3,654,561	
j)	Honorarium	-	921,111	921,111	-	1,496,006	1,496,006	
k)	Others (Specify) - CVP Payment	8,889,896	-	8,889,896	2,718,180		2,718,180	
1)	Others (Specify) - Composite Transfer and Packing	-	229,114	229,114				
m)	Others (Specify) - Pension Payment	22,259,416	-	22,259,416	14,656,714	-	14,656,714	
	Total	878,528,715	31,779,583	910,308,298	717,690,304	45,393,264	763,083,568	

SCHEDULE - 15A EMPLOYEES RETIREMENT AND TERMINAL BENEFITS

	Pension	Gratuity	Leave Encashment	Total
Opening Balance as on				
Addition : Capitalized value of Contributions received from other organizations				
Total (a)		-	-	
Less : Actual Payment during the year (b)				
Balance available as on 31/03/ c = (a-b)		-	-	-
Provision required on 31/03 as per Acturial Valuation (d)				
A. Provision to be made in the current year (d-c)	-	-	-	
B. Contribution to New Pension Scheme				
C. Medical reimbursement to retired Employees				
D. Travel to Hometown on Retirement				
E. Deposit Linked Insurance Payment				
Total (A+B+C+D+E)		1-11	-	-

To transfer to Schedule 10 [i.e. Govt of India Grant]	
from Schedule 15	878,528,715
from Schedule 16	188,471,006
from Schedule 17	118,485,357
from Schedule 18	1,188,852
from Schedule 19	21,839,653
from Schedule 20	
from Schedule 21	
from Schedule 22	2,429,230
	1,210,942,813

SCHEDULE - 16 ACADEMIC EXPENSES

	Portioulors		Current Year		Previous Year			
	Particulars Particulars	Plan	Others	Total	Plan	Others	Total	
a)	Laboratory expenses	2,997,176	1,239,966	4,237,142	2,841,123	1,095,942	3,937,065	
b)	Field work/Participation in Conferences	809,058	-	809,058	1,372,577	906,544	2,279,121	
c)	Expenses on Seminars/Workshops	1,054,579	-	1,054,579	684,918	929,579	1,614,497	
d)	Payment to visiting faculty	6,959,747	2,734,433	9,694,180	24,762,812	436,200	25,199,012	
e)	Examination	1,101,175	-	1,101,175	1,522,303		1,522,303	
f)	Student Welfare expenses	428,714	-	428,714	221,565		221,565	
g)	Admission expenses			-				
h)	Convocation expenses	2,545,423	-	2,545,423	2,664,261	40,000	2,704,261	
i)	Publications			-				
j)	Stipend/means cum merit scholarship	-	-	-				
k)	Subscrition expenses	408,500	-	408,500		10,225,500	10,225,500	
1)	Others (sports/cultural/medal etc)	2,312,947	-	2,312,947	1,601,092		1,601,092	
m)	Departmental Contingencies	7,568,043	597,851	8,165,894	8,912,785	1,698,211	10,610,996	
n)	Inaugural/Special Pograme	1,503,038	-	1,503,038	- I	-		
0)	Ph.D. and Other Fellowships (Institute)	156,537,395	-	156,537,395	126,740,355		126,740,355	
p)	Research Project Expenditure - Recurring Expenses	4,245,211	1,760,008	6,005,219		3,222,862	3,222,862	
q)	Institute Development Expenditure - Research Support		1,086,643	1,086,643		214,634	214,634	
r)	Travelling And Conveyance	-	2,076,775	2,076,775	22,632	2,272,322	2,294,954	
	Total	188,471,006	9,495,676	197,966,682	171,346,423	21,041,794	192,388,217	

SCHEDULE - 17 ADMINISTRATIVE AND GENERAL EXPENSES

	Particulars		Current Year			Previous Year	
	Particulars	Plan	Others	Total	Plan	Others	Total
A.	Infrastructure						
	a) Electricity and power	35,381,615		35,381,615		36,849,156	36,849,156
	b) Water Charges			-			
	c) Insurance			-			
	d) Rent, Rates and Taxes (including property tax)	-	10,951	10,951		6,720	6,720
В.	Communication			-	-		
	e) Postage and Stationery	587,334	144,607	731,941	496,905	74,992	571,897
	f) Telephone, Fax and Internet Charges	317,028	-	317,028	818,291	109	818,400
C.	Others			-			
	g) Printing and Stationery (consumption)	1,518,643	-	1,518,643	664,662		664,662
	h) Travelling and Conveyance Expenses	2,879,303	-	2,879,303	101,516	152,495	254,011
	i) Hospitality	1,555,639	-	1,555,639			
	j) Auditors Remuneration	600,000	19,000	619,000	200,000		200,000
	k) Professional Charges	1,505,870	-	1,505,870	1,575,466		1,575,466
	I) Advertisement and Publicity			-	956,652		956,652
	m) Magazines and Journals			-	-		-
	n) Others (specify) - Hiring of Manpower	39,207,940	-	39,207,940	33,356,917	-	33,356,917
	o) Guest House Expenses	-	826,777	826,777		800,424	800,424
	p) Remuneration to Experts			-			- A
	q) Security Services	31,719,662	-	31,719,662	<u> </u>	26,393,747	26,393,747
	r) Others (specify) - Contingencies	1,503,697	531,291	2,034,988	4,851,355	627,334	5,478,689
	s) Others (specify) - Administrative Charges - EPF	62,852	-	62,852			-
1	t) Meeting Expenses	1,645,774	437,146	2,082,920		618,217	618,217
	Total	118,485,357	1,969,772	120,455,129	43,021,764	65,523,194	108,544,958

SCHEDULE - 18 TRANSPORTATION EXPENSES

	Positive from		Current Year			Previous Year	r	
	Particulars Particulars	Plan	Others	Total	Plan	Others	Total	
1	Vehicles (owned by institution)			-			-	
	a) Running expenses	889,972	640	890,612		269,346	269,346	
	b) Repair & Maintenance	298,880	-	298,880		10,046	10,046	
	c) Insurance expenses			-			-	
2	Vehicles taken on rent/lease					-		
	Rent/lease and Running expenses			-		655,582	655,582	
3	Vehicle (Taxi) hiring expenses		2,123	2,123		-	-	
	Total	1,188,852	2,763	1,191,615		934,974	934,974	

SCHEDULE - 19 REPAIRS & MAINTENANCE

	Destinutore		Current Year			Previous Year	
	Particulars Particulars	Plan	Others	Total	Plan	Others	Total
a)	Buildings (including Electrical maintenance)	8,572,206	-	8,572,206	2,725,262	-	2,725,262
b)	Furniture & Fixtures	712,458	-	712,458	13,588		13,588
c)	Plant & Machinery	-	-	-	-		
d)	Office Equipment	1,068,972	176,890	1,245,862	1,293,110		1,293,110
e)	Computers & Softwares	2,329,363	-	2,329,363	4,953,608	<u>-</u>	4,953,608
f)	Laboratory & Scientific Equipments	2,424,168	3,776	2,427,944	1,431,086	<u>-</u>	1,431,086
g)	Audio Visual Equipments	-	-	-			<u>.</u>
h)	Cleaning Material & Services	-	-	-			-
i)	Book Binding Charges	-	-	-			-
j)	Gardening	-	-	-			-
k)	Estate Maintenance	4,788,768	-	4,788,768	24,021,332	-	24,021,332
1)	Others (specify) - PHE maintenance	1,943,718	-	1,943,718	7,950,886	<u>-</u>	7,950,886
	Total	21,839,653	180,666	22,020,319	42,388,872	<u> </u>	42,388,872

SCHEDULE - 20 FINANCE COSTS

	Doublesslave		Current Year		Previous Year		
	Particulars Particulars	Plan	Others	Total	Plan	Others	Total
a)	Bank Charges	-	38,207	38,207		- 40,859	40,859
b)	Interest on Term Loan		-	-			
c)	Others (specify)			-			
	Total	-	38,207	38,207		- 40,859	40,859

SCHEDULE - 21 OTHER EXPENSES

	Bertleiden		Current Year				
	Particulars Particulars	Plan	Others	Total	Plan	Others	Total
a)	Provision for Bad and Doubtful Debts/Advances			-			
b)	Irrecoverable Balance written off			-			<u> </u>
c)	Grants/Subsidies to other institutions/organizations			-			
d)	Others (specify) - Penalties and Interest	-	-	-		262,817	262,817
		-	-	-			-
	Total	-	-	-	-	262,817	262,817

SCHEDULE - 22 PRIOR PERIOD EXPENSES

	Doubleulous		Current Year		Previous Year		
	Particulars Particulars	Plan	Others	Total	Plan	Others	Total
1	Establishment expenses	-	-	-	-	<u>-</u>	-
2	Academic expenses			-			-
3	Administrative expenses	994,279	-	994,279	-		-
4	Transportation expenses			-			
5	Repairs & Maintenance - Estate	-	-	-	26,688,765	-	26,688,765
6	Depreciation	1,434,951	-	1,434,951	1,290,000	-	1,290,000
	Total	2,429,230	-	2,429,230	27,978,765		27,978,765

SCHEDULE - 23

Significant Accounting Policies:

Indian Institute of Engineering Science and Technology is an Autonomous body. The Institute is financed by the Ministry of Human Resource and Development, Government of India through Plan and Non Plan. The Institute is also undertaken various research projects and consultancy works through its esteemed teachers and the assets created out of it is duly stated in this financial statements.

Financial Statements

The Institute prepared the following Financial Statements i.e. Balance Sheet and Income & Expenditure Account for the year ended as on 31st March 2019. The Common Accounting format as prescribed by the Ministry has been followed in drawing up those financial statements; however, in its first year the institute had its best endeavor to follow every line item of the said prescribed form, however, the same in some cases could not be strictly followed and will be incorporated in the ensuing financial year's statement;

Accounting Concept

The financial statement have been prepared under Historical Cost Convention unless otherwise stated and on the principal of going concern method.

Accounting Basis

The account is prepared under accrual basis of accounting, excepting the cases specifically stated in these significant accounting policies. Government grants & Subsidies are accounted for on accrual basis if reasonable assurance obtained for its definite future receipts.

Investment Accounting

The Institute has invested its fund available to its credit in fixed deposits with scheduled commercial banks and the same is stated at the face value plus accrued interest thereon.

Governments Grants & Subsidies

Government Grants/Subsidies receivable during the year under Non recurring head are being treated as Capital Receipts and accounting for under Corpus Fund to the extent utilized for capital expenditure. Government Grants/Subsidies earmarked for certain purpose receivable during the year under any head and to be utilized by way of payment for that specific purpose are being treated as Capital Receipts & accounting for under Earmarked Fund.

Government Grants/Subsidies receivable during the year under Recurring head are being treated as Revenue receipts and accounted for as income under the head Grant/Subsidy to the extent the same has been utilized for the purpose for which the grant has been sanctioned.

Revenue Recognition

Tuition Fees

Tuition fees, Sale of Admission Forms have been accounted for as and when actually received from the students.

Interest Income

Interest on savings bank account have been considered as income as and when the same is credited in bank account and interest accrued on fixed deposits have been accounted for at the end of the year.

Fixed Assets and Depreciation Accounting

Fixed Assets are valued at a cost of acquisition inclusive of inward expenses and incidental expenses. Condemned & unserviceable assets are written off in accounts as and when required.

Gifted/donated assets, if any, are valued at declared value where available; if not available, the value is estimated based on the present market value adjusted with reference to the physical condition of the assets. They are set up by credit to Capital fund and merged with fixed assets of the institute. Depreciation is charged at the rates applicable to the respective assets.

Books received as gifts, if any, are valued at selling prices printed on the books. Where they are not printed, the value is based on assessment.

Fixed assets are valued at cost less accumulated depreciation. Depreciation on fixed assets is provided on Straight line method at the following rates:

SI. No.	Particulars	Rate of Depreciation (p.a)
1	Building	2%
П	Roads & Bridges	2%
Ш	Tubewells and Water Supply	2%
IV	Electrical Installations & Equipments	5%
٧	Plant & Machinery	5%
VI	Scientific and Laboratory Equipment	8%
VII	Office Equipment	7.5%
X	Audio Visual Equipment	7.5%
XI	Computers & Peripherals	20%
XII	Furniture & Fixture	7.5%
XIII	Vehicles	10%
XIV	Library Books and Scientific Journals	10%
XV	Computer Software	40%
XVI	E-Journals	40%

Depreciation is provided for the whole year on additions during the year, irrespective the dates of addition.

Where an assets is fully depreciated, it will be carried at a residual value Re 1 in the balance sheet and will not be further depreciated. Thereafter, depreciation is calculated on the additions of each year separately at the rate of depreciation applicable for that asset head.

Assets created out of Earmarked Funds and funds of sponsored projects, where the ownership of such assets vests in the Institute, are set up by credit to Capital Fund and merged with the Fixed Assets of the Institute. Assets created out of Sponsored Project funds, where the ownership is retained by the sponsors but held and used by the institute are separately disclosed in the Notes on Accounts

Inventories

The inventories of chemicals, stationery etc are not separately maintained and the whole quantity have been accounted for as consumed as and when purchased.

Retirement Benefits

Provident fund of the employees has been deducted from salary and the same is being transferred to State Bank of India, Howrah Branch, which is being maintained by Howrah Treasury – I, Govt of West Bengal.

Other retirement benefits are accounted for as and when being actually incurred

Earmarked/Endowment Funds

Earmarked funds created by the institute and Endowment funds received by the institute has been separately accounted for and also its corresponding investments and assets.

Sponsored Projects

In respect of the ongoing sponsored projects, the amounts received from sponsors are credited to the head `Current Liabilities and Provisions – Current Liabilities – Other Liabilities – Receipts against ongoing projects". As and when expenditure is incurred/advances are paid against such projects, or the concerned project account is debited with allocated overhead charges, the liability account is debited.

In addition to the earmarked fund for the junior research fellowships funded by the University Grants Commission, Fellowships and Scholarships are also sponsored by various organizations. These are accounted in the same way as sponsored projects except that the expenditure generally is on disbursement of fellowships and scholarships, which may include allowances for contingent expenditure by the fellows and scholars.

The institute itself also awards fellowships and scholarships, which are accounted as Academic Expenses.

Income Tax

The income of the Institute is exempt from Income Tax under section 10(23c)(iiiab) of the Income Tax Act, 1961. No provision for income tax is therefore made in the accounts.

SCHEDULE - 24

Contingent Liabilities & Notes on Accounts:

- 1. Claims against the Institute suits Rs. Nil (Previous year Rs. Nil)
- 2. Previous year's figures have been regrouped/rearranged whenever deems fit.
- 3. Addition in the year to fixed assets purchased out of sponsored projects and earmarked fund for which the effective ownership lies with the institute and the institute is using the same for the purpose of the activities of the institute only:-

Plan Grant Rs. 17,32,59,615 Sponsored Projects Rs. 3,06,24,120

Approximate value of gifted books as on 31/03/2019 is Rs. 1,61,616

The assets have been set up by credit to Capital Fund

In the balance sheet as on 31st March 2014 and the balance sheet of earlier years, fixed assets created out of plan funds and fixed assets created out of non plan funds or other funds from sources were not exhibited distinctly.

Disclosure on Library Books :-

4041 books worth Rs. 1,92,208 missing as per report submitted by a CA firm on physical verification of the library books as on 31/03/2017; the same could not be reduced from the written down value of the library books as per schedule 4 as the date of addition and consequent depreciation charged on the same could not be accurately ascertained;

- 4. The Institute is set up on land measuring 114 acres at Shibpur. The institute is an erstwhile state university and the title of the land rests with the Government of West Bengal. The title of the land is not yet transferred to the Institute's name and the state government has been approached to make the necessary transfer process. The value of land is taken as Nil in the balance sheet.
- 5. In the opinion of the management, the current assets, loans and advances and deposits have been valued on realization in the ordinary course, equal at least to the aggregate amount shown in the balance sheet.
- 6. In the endeavor of the institute to conform the prescribed common format to the best extent possible, the provident fund assets and liabilities have been taken out from the accounts and are being presented separately.
- 7. Schedules 1 to 24 are annexed to and form an integral part of the balance sheet as on 31st March 2019 and the Income and Expenditure account for the year ended as on that date.

Dy. Registrar (Finance)

Dr. Biman Bandyopadhyay Registrar Indian Institute of Engineering Science & Technology, Shibpur Howrah - 711 103, West Bengal, India

Registrar

Science and Technology, Shibpt हायझ - 711103, पश्चमश्चन, भारत Howrah 711103, West Bengal, Ind

Director

(D. Bandhopadhyay)
Proprietor
M.No - 057861

Debasis Bandyopadhyay & CO. Chartered Accountants

PROVIDENT FUND ACCOUNT

Balance Sheet as at 31.03.2019

Liabilities	Amount	Assets	Amount
GPF		Recoverable Advance	41,125,559
Opening balance	282,022,348		
Add : Subscription received	53,948,450	Howrah Treasury a/c	315,158,869
Add : Interest	18,367,878		
Less : Withdrawal	4,304,960	Interest accrued as on 31/03/2019	22,831,854
(A)	350,033,716		
CPF			
Opening balance	2,187,595		
Add : Subscription received	766,248		
Add : Interest	186,741		
Less : Withdrawal			
(B)	3,140,584		
CPF (Institute Contribution)			
Opening balance	2,182,944		
Add : Subscription received	742,254		
Add : Interest	184,930		
Less : Withdrawal	-		
(C)	3,110,128		
Interest Reserve Account	22,831,854		
Total	379,116,282	Total	379,116,282

and Technology, Shibpur Howrah-711 103, W.B, India

Dy. Registrar (Finance)

Registrar

Director



(D. Bandhopadhyay) Proprietor M.No - 057861 Debasis Bandyopadhyay & CO. **Chartered Accountants**

PROVIDENT FUND ACCOUNT

Receipts and Payments Account for the year ended 31.03.2019

Receipts	Amount	Payments	Amount
Opening Balance [11020301]	255,847,174	GPF Advance [07040100]	10,579,846
GPF Subscription [07010503]	52,813,550	GPF Withdrawal [07040300]	4,304,960
CPF Subscription [07010509]	766,248		
CPF Contribution by Employers [20030200]	742,254		
GPF Advance refund [07010504]	1,134,900		
Interest received [03020200]	18,739,549	Closing Balance [11020301]	315,158,869
Total	330,043,675	Total	330,043,675

Income and Expenditure Account for the year ended 31.03.2019

Expenditure	Amount	Income	Amount	
Interest credited to PF a/c	18,739,549	Interest accrued for the year	22,831,854	
		Interest received for the year	18,739,549	
Surplus/(Deficit)	22,831,854			
Total	41,571,403	Total	41,571,403	

Deputy Registrar (Finance)
Indian Institute of Engineering Science
Howrash -711 103, W.B. India

Dy. Registrar (Finance)

Dr. Binnan Bandyopadhyay Registrar Indian Institute of Edigineering Science & Technology, Shibpur Howah - 71 11 03, West Bengal, India

Registrar

निर्देशक / Director प्रातीन अध्यानिको विकार को जीवीनो अस्मान, शिक्यूर Indian Institute of Engineering Science and Technology, Shibpur अध्यान - 11105, पिटा स्थापन, स्थाप (Novah 711105, West Bragal, India

Director

(D. Bandhopadhyay)
Proprietor
M.No - 057861
Debasis Bandyopadhyay & CO.
Chartered Accountants



भारतीय लेखा तथा लेखा-परीक्षा विभाग महा निदेशक, लेखा-परीक्षा का कार्यालय, केन्द्रीय, कोलकाता

INDIAN AUDIT AND ACCOUNTS DEPARTMENT OFFICE OF THE DIRECTOR GENERAL OF AUDIT, CENTRAL, KOLKATA.

No: OA II (AB)/AR/2018-19/IIEST /559

Date: 12.03.2020

A copy of the Separate Audit Report, alongwith Annexure, on the accounts of the Indian Institute of Engineering Science and Technology, Shibpur, for the financial year 2018-19, is forwarded to the Director, Indian Institute of Engineering Science and Technology, Shibpur, Howrah-711103, for information and necessary action.

Arrangement may please be made for preparation of Hindi Version of the Separate Audit Report, with Annexure, at your end, and sending the same directly to the Ministry.

It may please be ensured that the Audited Accounts and the Separate Audit Report, along with Amnexures, are placed before the apex body, for consideration and adoption, before the same are sent to the Government for being placed in Parliament.

Two copies of the printed Annual Report, for the financial year 2018-19 (both English and Hindi Version), containing the Audited Accounts and the Separate Audit Report, along with Annexures, as laid before the Parliament, may please be forwarded to this Office, for necessary action at this end.

Encl.: As stated

Dy. Director (Inspection)

जि. आई. प्रेस विल्डिंग, 8 किरण शंकर राय रोड (1म मंजिल), कोलकाता-700001 Govt. of India Press Building. 8, Kiran Sankar Roy Road, Kolkata- 700001 Phone: 2254-0221, (Gram: ACCOUNTCENT) POST BOX: 2699, Fax No.: 033 22135377



भारतीय लेखा तथा लेखा-परीक्षा विभाग महा निदेशक, लेखा-परीक्षा का कार्यालय, केन्द्रीय, कोलकाता

INDIAN AUDIT AND ACCOUNTS DEPARTMENT OFFICE OF THE DIRECTOR GENERAL OF AUDIT, CENTRAL, KOLKATA.

> No: OA II (AB)/AR/2018-19/IIEST/55 & Date: 11-03-1000

To
The Secretary,
Ministry of Human Resource Development,
Government of India,
Department of Higher Education,
Technical Section-I, Shastri Bhawan,
New Delhi - 110001

<u>Subject</u>: Separate Audit Report on the accounts of the Indian Institute of Engineering Science and Technology, ShibpurHowrah, for the financial year 2018-19.

Sir.

Lam to forward herewith the Separate Audit Report, in the prescribed format, on the accounts of the Indian Institute of Engineering Science and Technology, Shibpur, Howrah, for the financial year 2018-19. A copy of the annual accounts of the organisation, for the financial year 2018-19, is also enclosed.

- Iwo copies of the Separate Audit Report (both English and Hindi Version), as presented before the Parliament, may please be forwarded to this office, for necessary action at this end.
- The dates of laying of the audited accounts and the Separate Audit Report, for the financial year 2018-19, on the Tables of both the Houses of Parliament, may also please be communicated to this office.

Yours faithfully.

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Encl.: As stated

(Deepak Narain) Director General of Audit Central: Kolkata

जि. आई. प्रेस विल्डिंग, 8 किरण शंकर राय रोड (1म मंजिल), कोलकाता-70001 Govt. of India Press Building. 8, Kiran Sankar Roy Road, Kolkata-700001 Phone: 2254-0221, (Gram: ACCOUNTCENT) POST BOX: 2699, Fax No.: 033 22135377 Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of the Indian Institute of Engineering Science and Technology, Shibpur, Howrah, for the year ended 31 March 2019

We have audited the attached Balance Sheet of the Indian Institute of Engineering Science and Technology, Shibpur, Howrah, as at 31 March 2019, the Income and Expenditure Account and Receipts and Payments Account for the year ended on that date, under Section 19(2) of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971, read with Section 22(2) of the National Institute of Technology, Science Education and Research (Amendment) Act, 2014. These financial statements are the responsibility of the Institute's Management. Our responsibility is to express an opinion on these financial statements based on our audit.

- 2. This separate Audit Report contains the comments of the Comptroller and Auditor General of India (CAG) on the accounting treatment only, with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms etc. Audit observations on financial transactions in regard to compliance with extent Laws, Rules & Regulations (i.e. Propriety and Regularity aspects) and efficiency-cum-performance aspects etc., if any, are reported through Inspection Reports/CAG's Audit Reports separately.
- 3. We have conducted our audit in accordance with the Auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.
- 4. Based on our audit, we report that:

- We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit;
- ii. The Balance Sheet and Income and Expenditure Account/Receipt and Payment Account, dealt with in this report, have been drawn up in terms of the format prescribed by the Ministry of Human Resource Development, Government of India vide order No. 29-4/2012-FD dated 17 April 2015.
- iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Indian Institute of Engineering Science and Technology, Shibpur, Howrah as required under Section 22(2) of the National Institute of Technology, Science Education and Research (Amendment) Act, 2014, insofar as it appears from our examination of books.
- iy. We further report that:

Comments on Accounts

- A. Balance Sheet
- 1.1 Liabilities

1.1.1 Corpus/Capital Fund (Schedule-1): ₹243.13 crore

The above head was overstated by ₹3.08 crore due to capitalisation of assets valuing ₹3.08 crore, procured out of sponsored projects, even though the ownership of these assets had not been transferred to the Institute. This also resulted in overstatement of 'Fixed Assets' (Schedule-4D) by ₹3.08 crore.

1.2 Assets

1.2.1 Current Assets (Schedule-7): ₹117.94 crore

In deviation from instructions of the MHRD dated 25 October 2018, an amount of ₹15.21 crore was shown as receivable, instead of adjusting the same from internal receipts. This resulted in overstatement of 'Current Assets' (Schedule-7) and the 'Corpus/Capital Fund' (Schedule-1) by ₹15.21 crore.

B. Income and Expenditure Account

2.1 Expenditure

2.1.1 Depreciation (Schedule-4): ₹13.27 crore

The above head was overstated by ₹1.29 crore due to the following:

- a) Overstated by ₹1.30 crore due to charging of depreciation on the fully depreciated value of E-Journals and Computer Software, instead of restricting the same to the residual value.
- b) Understated by ₹1.17 lakh, due to charging of depreciation on Buildings, Tube-wells and Water Supply and Electrical Installation, as ₹1.96 crore, in the annual accounts, instead of ₹1.97 crore.

As a result, the 'Excess of Income over Expenditure' was understated by ₹1.29 crore.

2.2 Income

2.2.1 Prior Period Income (Schedule-14): ₹65.87 lakh

The above head was also understated by ₹1.93 crore due to adjustment of written back liabilities of taxes, provident fund and fellowships amount in the 'Corpus/Capital Fund' (Schedule-1), instead of routing the same through the Income and Expenditure Account, resulting in understatement of the 'Excess of Income over Expenditure' by ₹1.93 crore.

C. General

- 3.1 No mention was made in the Notes to Accounts regarding deposit of ₹1 crore to UGC for acquiring the status of Institution of Eminence.
- 3.2 The deficiencies in the customised software 'Campus Connect', relating to linking of annual accounts with the physical vouchers, led to difficulties in finding the audit trails of transactions.
- 3.3 Identification and proper accounting of miscellaneous receipts of ₹17.79 lakh has been pending since long.

- 3.4 Despite mention in the previous year audit report, no rectification was carried out in regard to the following:
- a) The material effect due to change of method of depreciation from 'Written Down Value Method' as per the Companies Act, 1956, to the 'Straight Line Method', as prescribed by MHRD from the year 2014-15, was not disclosed in the annual accounts.
- b) Retirement benefits were not provided as per the actuarial method of valuation, in terms of Accounting Standard 15 and the Format of Accounts prescribed by the MHRD.
- 3.5 Although there were investments totalling ₹23.19 crore from 'Endowment and Earmarked Funds' under Schedule-5, accrued interest thereof was not separately disclosed as 'Income accrued on Investment from Earmarked/ Endowment Funds' under 'Loans and Advances' (Schedule-8).
- 3.6 In a deviation from the Format of Accounts prescribed by the MHRD, accrued interest on investments was not shown separately from the amount of interest earned from FDs, under the head 'Income from Investments' (Schedule-11).
- 3.7 The pending recovery of ₹99.56 lakh, on account of irregular payment of adhoc bonus and short recovery of electricity charges from staff, was not included under 'Loans and Advances' (Schedule-8).

D. Grants-in-Aid

The Institute is mainly financed by grants from Government of India. For the financial year 2018-19, it received an amount of ₹130 crore (Revenue). Out of this amount, it spent ₹138.42 crore (Revenue expenditure-₹121.09 crore and Capital expenditure-₹17.33 crore), resulting in excess expenditure of ₹8.42 crore, which was met from internal receipts.

E. Net Effect

The net effect of the comments given in the preceding paragraphs was that both Assets and Liabilities were overstated by ₹18.29 crore as at 31 March 2019 and the Excess of Income over Expenditure was understated by ₹3.22 crore for the year ended 31 March 2019.

v. Subject to our observations in the preceding paragraphs, we report that the Balance

Sheet, Income and Expenditure Account and Receipts and Payments Account, dealt with by

this report, are in agreement with the books of accounts.

vi. In our opinion, and to the best of our information, and according to the explanations

given to us, the said financial statements, read together with the Accounting Policies and

Notes on Accounts, and subject to the significant matters stated above and other matters

mentioned in Annexure to this Audit Report, give a true and fair view, in conformity with

accounting principles generally accepted in India:

a. insofar as it relates to the Balance Sheet, of the state of affairs of the

Indian Institute of Engineering Science and Technology, Shibpur,

Howrah, as at 31 March 2019 and

b. insofar as it relates to the Income and Expenditure Account of the

Surplus, for the year ended on that date.

For and on behalf of the C&AG of India

Place: Kolkata

Date: 12.03.2020

Despit None

(Deepak Narain) Director General of Audit

(Central) Kolkata

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Annexure

A Adequacy of Internal Audit System

The Internal Auditing System is inadequate, insofar as the Institute did not have an Internal Audit Manual.

B Adequacy of Internal Control System

The Internal Control System is inadequate in the following areas:

- 1. There was no plan for rotation of duties of employees dealing with cash, stock and other valuables.
- 2. No Security Deposits/Fidelity guarantees were obtained in respect of employees handling valuables such as cash and stocks.
- 3. Cheque Protectors were not used.
- 4. The Institute did not have a centralized purchase department. Consequently, none of its departments could compile a list of pending purchase orders.
- 5. Receipts of materials were not evidenced by pre-numbered 'Goods Received Notes'.
- 6. Identity cards were neither renewed periodically, nor were they taken back from the employees at the time of retirement.
- 7. Confirmation of balances of 'Loans & Advances' was not obtained periodically.

C. System of physical verification of Assets and Inventories.

The Institute did not prepare any consolidated Fixed Assets Register in terms of GFR-2017. Further, it did not conduct physical verification of Fixed Assets and Inventory during the year 2018-19.

D Regularity in payment of statutory dues:

The Institute is regular in payment of its statutory dues.





