वार्षिक प्रतिवेदन

Annual Report

2022-23

Indian Institute of Engineering Science and Technology, Shibpur

An Institute of National Importance

भारतीय अभियांत्रिकी विज्ञान एवं प्रौद्योगिकी संस्थान, शिवपुर

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Annual Report

2022 – 23

(April 01, 2022 – March 31, 2023)

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Indian Institute of Engineering Science and Technology, Shibpur

From the Desk of the Chairperson

The Institute has continued to stride confidently into the post-pandemic world, with in-person classes now in full swing and with students and faculty maintaining the high academic excellence expected of them.

Faculty members have published their research in journals of international repute while securing significant funding for R&D and consultancy projects. Multiple conferences and workshops have been held in the various departments of the Institute, even as the Institute, as a whole, played host to several events aimed at advancing research in technology and development.

Students of the Institute have continued the tradition of winning laurels nationally and internationally. While many graduating students have opted for higher education in national and foreign institutions, internships and important industry engagement programmes have supplemented an already robust placement scenario. Additionally, several collaborative ventures, such as the signing of MoU with other Universities to initiate studies and programmes, particularly related to Intellectual Property Rights and interactions with international organizations viz DAAD, etc., have been undertaken to facilitate research and internship opportunities for students.

IIEST has received funding from the Ministry to construct a building for developing laboratories, classrooms, and seminar halls. The architectural plan has been completed at the Institute level to construct the proposed boys' hostel, and the construction work will start soon. Institute Works Division (IWD) and CPWD are working to renovate many existing residential buildings, hostels and the Institute Guest House. The necessary modules of the SMILE-ERP system of the Institute have almost been finalized and will be operational soon.

The alumni have announced more scholarships and financial support for deserving students of the Institute. An effort to invigorate the Tagore Centre for Green Technology Business Incubation under the Alpona Banerjee Memorial Endowment Fund, which has been set up with a generous donation from an alumnus, has been undertaken.

I hope the progress in all sectors escalates to a new height to establish IIEST as an internationally acclaimed technical Institute soon. I convey my best wishes to all the stakeholders.

Thank You.
Jai Hind!

(Vasudev K. Aatre)
Chairperson, Board of Governors (BOG)

From the Desk of the Director

The Financial Year 2022-23 has been another successful year for IIEST, Shibpur. The Institute continues to maintain high standards in quality teaching-learning processes and contribute significantly to research and development in the emerging areas of Science and Technology for the advancement of knowledge. This is evidenced by an impressive number of publications in leading Scientific and technical journals during this period.

In this financial year, the Institute has completed the selection committee meetings for faculty recruitment in 19 departments/Schools/Centers. The year also witnessed the successful implementation of the first phase of the restructuring of existing non-faculty members following the guidelines of the Ministry of Education.

The Institute has effectively revived with adequate financial support the Tagore Centre for Green Technology Business Incubation (TCGTBI) which had to be closed down completely during COVID-19. The Center was made fully functional during this financial year by inducting a good number of new incubatee. During this period the Institute also created a 24x7 Innovation laboratory where the students are free to work on their innovative ideas at their convenience under the guidance of their mentors. The students of the Institute participated in several academic and extra-curricular activities outside the Institute and made the Institute proud by bringing distinction and laurels to the Institute. I am happy to see that all the stakeholders of the Institute are striving hard to perform even better for the Institute to scale new heights. I congratulate all individuals whose notable contributions during the financial year are recorded in this report.

Finally, I would like to thank all members of the Annual Report Committee for their untiring efforts in the in-house preparation of the soft copies of the report in both English and Hindi.

Thank you all for your support and cooperation.
Jai Hind!!

(Parthasarathi Chakrabarti)
Director

Vision

The Vision of Indian Institute of Engineering Science and Technology (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.

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01 Organisation and Administration

1. 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 NITSER Act 2007
The Senate	
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 IISET 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 2022-2023, the composition of the Board was as below.

	Dr. Vasudev K. Aatre Distinguished Scientist & former Secretary, Department of Defense Research & Development and Scientific Advisor to Raksha Mantri **Chairperson** E-mail: vasudev.k.aatre@gmail.com	
Prof. Parthasarathi Chakrabarti **Director,** IIEST, Shibpur, Howrah – 711 103. **Ex-Officio Member** Ph: 033-26682674 Fax: 033-26687575 E-mail: director@iiests.ac.in	**Additional Secretary (TE)** Ministry of Education, Govt. of India Shastri Bhawan, New Delhi – 110 001 or his/her nominee **Ex-Officio Member** Ph: 011-23381097 Fax: 011-23386903 E-mail: ashe-mhrd@gov.in	**Joint Secretary & Financial Advisor** to the Govt. of India, Ministry of Education, Shastri Bhawan, New Delhi-110 001 or his/her nominee **Ex-Officio Member** E-mail: jsfa-moe@gov.in Ph: 011-23382696
Director, IISc, Bangalore Sir C.V. Raman Avenue, Bangalore – 560 012. **Ex-Officio Member** Ph: 080-23600690 / 22932222 Secy. to Director: 080-22932954 Fax: 80-23600936, E-mail: office.director@iisc.ac.in, director@iisc.ac.in	**Secretary, Higher Education Department,** Govt. of West Bengal Bikash Bhavan, Salt Lake Kolkata- 700 091. **Ex-Officio Member** E-mail: highereducationwb@gmail.com Ph: 033-23211280	Members under clause e,f,i under section 11A of NITSER Act.2007 - vacant
Prof. Prasid Syam Professor, Department of Electrical Engineering, IIEST, Shibpur (Senate nominated). **Member** E-mail: ps@ee.iiests.ac.in	**Prof. Amit Roy Chowdhury** Professor, Department of Aerospace Engineering and Applied Mechanics, IIEST, Shibpur (Senate nominated). **Member** E-mail: amit@aero.iiests.ac.in	**Dr. Devasis Datta** Registrar (Acting), IIEST, Shibpur **Secretary to BOG** Ph: 033-26681503 (O) Fax: 033-26682916 E-mail: regis@iiests.ac.in

1.2 The Senate

It is constituted under Section 14 of the National Institute of Technology ACT, 2007 (29 of 2007), the National Institutes of Technology (Amendment) ACT, 2012 (No. 28 of 2012), and the National Institutes of Technology, Science Education and Research (Amendment) ACT, 2014 (no. 9 of 2014). The Senate of the Institute is its principal academic authority. All permanent professors of the Institute are the members of Senate.

1.3 Finance Committee

	Dr. Vasudev K. Aatre Distinguished Scientist & former Secretary, Department of Defense Research & Development and Scientific Advisor to Raksha Mantri. **Ex-Officio Chairperson** E-mail: vasudev.k.aatre@gmail.com	
Prof. Parthasarathi Chakrabarti **Director**, IIEST, Shibpur. **Ex-Officio Member** Ph: 033-26682674 Fax: 033-26687575 E-mail: director@iiests.ac.in	**Joint Secretary & Financial Advisor** to the Govt. of India, Ministry of Education, Shastri Bhawan, New Delhi-110 001 or his/her nominee **Ex-Officio Member** E-mail: jsfa-moe@gov.in Ph: 011-23382696	**Joint Secretary (TE)** Ministry of Education, Govt. of India or his/her nominee **Ex-Officio Member**
Dr. Devasis Datta Registrar (Acting), IIEST, Shibpur (from 01.02.2022) **Ex-Officio Member Secretary** Ph: 033-26681503 (O) Fax: 033-26682916 E-mail: regis@iiests.ac.in	**Prof. Amit Roy Chowdhury** Professor, Department of Aerospace Engineering and Applied Mechanics, IIEST, Shibpur (Senate/BOG nominated). **Member** E-mail: amit@aero.iiests.ac.in	Member nomination from BoG Pending

From 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 Important Functionaries

Chairman, Council of NITSER	
Shri Ramesh Pokhrial 'Nishank' Minister of Human Resource Development, Government of India	
Chairman, Board of Governors	
Dr. Vasudev K. Aatre	
Director	
Prof. Parthasarathi Chakrabarti	
Deans	
Academic Affairs	Prof. Sudip Kr Roy
Faculty Welfare	Prof. Prasanta Kumar Nandi (upto to 04.04.2022) Prof. Binay Krishna Ghorai (From 05.04.2022)

Research & Consultancy	Prof. Hafizur Rahaman
Planning & Development	Prof. Subhasis Bhaumik
Student Welfare	Prof. Sudipta Mukhopadhyay
International Relations & Alumni Affairs	Prof. Debasis Datta
Associate Deans	
Academic Affairs	Prof. Asok Adak
Faculty Welfare	Prof. Sulata Mitra (upto 04.04.2022) Dr. Chinmay Bhattacharya (from 05.04.2022)
Research & Consultancy	Dr. Papu Biswas
Student Welfare	Dr. Nityananda Nandi
International Relations & Alumni Affairs	Dr.Soumen Mitra
Registrar	
Dr. Devasis Datta (Acting)	

1.5 Administration

	Director Prof. Parthasarathi Chakrabarti Ph: 033-26682674 Fax: 033-26687575 E-mail: director@iiests.ac.in	
	Registrar Dr. Devasis Datta (Acting) Ph: 033-26681503 E-mail: regis@iiests.ac.in	
Joint Librarian Dr. Hari Prasad Sharma Ph: 033-26684561 (284) E-mail: sharma_hp@hotmail.com	**Deputy Registrar (S&P)** vacant	**Deputy Registrar (Admin)** Dr. Devasis Datta Ph: 033-26684561 M: 9477215168 E-mail: d3dr.iiests@gmail.com
Assistant Librarian (Selection Grade) Shri Shushil Kumar Barman Ph:033-26684561 (291) E-mail: sushilbarman@gmail.com	**Deputy Registrar (Finance)** Shri Alok Kumar Maity Ph: 033-26684561 (216) E-mail: dr.finance@iiests.ac.in	**Deputy Registrar (Academic)** Dr. Nirmalya Bhattacharya Ph: 033-26688081 M: 9831212905/9830844455 E-mail: controller@iiests.ac.in
Assistant Librarian Sri Abani Oraon Ph: 033-26684561 (725) E-mail: abani@library.iiests.ac.in	**Assistant Registrar** Shri Alok K. Mitra Ph: 033-26684561 (276) E-mail: akmitra707@yahoo.co.in	**Assistant Registrar & Internal Auditor** Shri Shib Sankar Basak Ph: 033-26684561 (378) M: 9434144611 E-mail: shibu9355@yahoo.co.in, arssb@iiests.ac.in

Assistant Registrar Dr. Bivore Das Ph: 033-26684561 (643) E-mail: bibhor.das@gmail.com, arbd@iiests.ac.in	**Assistant Registrar** Sri Dipankar Chakraborty Ph: 033-26684561 (640) E-mail: dcosd@yahoo.co.in	**Chief Warden** Prof. Sudipta Mukhopadhyay Professor, Department of Mining Engineering E-mail: sudiptaiiest@gmail.com
Medical Officer Dr. Rubi Golder Ph: 033-26684561 (332) E-mail: rubigolder@gmail.com	**Central Public Information Officer** Dr. Hari Prasad Sharma Ph: 033-26684561 (284) E-mail: sharma_hp@hotmail.com	**Superintending Engineer (Actg.)** Prof. Tapash Kumar Roy Ph: 033-26684561 (345) E-mail: uengineer@iiests.ac.in
Workshop Superintendent Dr. Dibyendu Chatterjee E-mail: dibeyendu_660@rediffmail.com	**Physical Instructor** Sri Sandip Chatterjee E-mail: c.sandip2010@gmail.com	**Physical Instructor** Dr. Zia-Ul-Alam E-mail: alamzia2002@yahoo.com
	Chief Vigilance Officer Prof. Abdur Rouf Professor, Department of Electrical Engineering E-mail: arouf@ee.iiests.ac.in	

1.6 Head of the Departments

Departments	Name of Head	Tenure From	Tenure Upto
Aerospace Engineering and Applied Mechanics	Prof. Sujay Kr. Mukherjea	01.04.2022	31.07.2023
Architecture and Planning	Prof. Subrata Kumar Paul	10.07.2020	09.07.2023
Chemistry	Dr.Jhuma Ganguly	18.12.2021	17.12.2023
Civil	Prof. Ambarish Ghosh	10.07.2020	09.07.2023
Computer Science and Technology	Prof. Asit Kumar Das	31.05.2021	30.05.2023
Electrical Engineering	Prof. Konika Das Bhattacharya	01.06.2021	31.05.2023
Earth Science	Dr. Ananya Mukhopadhyay	03.05.2021	02.05.2023
Electronics and Telecommunication Engineering	Prof. Susanta Kumar Parui	15.11.2021	14.11.2023
Human Resource Management	Prof. Manas Kumar Sanyal	23.08.2004	Until further order
Humanities and Social Sciences	Shri Rupen Basu Mallick	17.09.2020	21.09.2023
Information Technology	Dr. Sukanta Das	10.07.2020	09.07.2022
	Dr. Prasun Ghosal	11.07.2022	10.07.2024

Departments	Name of Head	Tenure From	Tenure Upto
Mathematics	Prof. Pritha Das	06.07.2021	05.07.2023
Mechanical Engineering	Dr. Sudip Ghosh	16.06.2021	15.06.2023
Metallurgy and Materials Engineering	Dr. Debdulal Das	08.06.2021	07.06.2023
Mining Engineering	Prof. Netai Chandra Dey	18.11.2021	17.11.2023
Physics	Dr. Syed Minhaz Hossain	21.06.2021	20.06.2023

1.7 Heads of Schools and Centres

Schools

Schools	Name of Head	Tenure From	Tenure Upto
Advanced Materials, Green Energy and Sensor Systems	Prof. Mousumi Basu	17.03.2022	16.09.2022
	Prof. Santanu Das	19.09.2022	18.03.2023
	Prof. Santi Prasad Maity	24.03.2023	2309.2023
Community Science and Technology	Prof. Ajit Kumar Mahapatra	12.01.2022	11.07.2022
	Prof. Susanta Chakraborty	12.07.2022	11.01.2023
	Prof. Ajit Kumar Mahapatra	12.01.2023	11.06.2023
Disaster Mitigation Engineering	Prof. Souvanic Roy	10.01.2022	09.07.2022
	Head, Department of Civil Engineering	17.01.2022	Until further order
Ecology, Infrastructure and Human Settlement Management	Head, Civil Engg. Dept	17.01.2022	Untill further order
Management Sciences	Prof. Binay Krishna Ghorai	11.02.2022	05.04.2022
	Prof. Anirban Gupta	05.04.2022	04.10.2022
	Prof. Dipali Banerjee	14.10.2022	13.04.2023
	Prof. Anirban Gupta	18.04.2023	17.10.2023
Mechatronics and Robotics	Prof. Santanu Das	16.03.2022	15.09.2022
	Prof. Shanti Prasad Maity	16.09.2022	15.03.2023
	Prof. Monojit Mitra	24.03.2023	23.09.2023

Schools	Name of Head	Tenure From	Tenure Upto
Purabi Das School of Information Technology	Prof. Monojit Mitra	10.01.2022	19.04.2022
	Head, Computer Science and Technology	20.04.2023	Until further order
VLSI Technology	Prof. Dipali Banerjee	18.10.2021	17.04.2022
	Prof. Monojit Mitra	19.04.2022	18.10.2022
	Prof. Bhabani Prasad Mukhopadhyay	09.11.2022	08.05.2023

Centres

Centres	Name of Head	Tenure From	Tenure Upto
Healthcare Science and Technology	Prof. Susanta Chakraborty	12.01.2022	11.07.2022
	Prof. Ajit Kumar Mahapatra	12.07.2022	11.01.2023
	Prof. Susanta Chakraborty	12.01.2023	11.07.2023
Water and Environmental Research	Head Civil Engineering Dept.	Until further order.	

02 Human Resources

2. 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.

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.

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 staff members 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 staff and right sizing will require some time.

2.1 Academic Staff

The academic staff scenario in 2022-23 is shown in Table 2.1 and Table 2.2. Details of Academic staff members in various Academic Departments, Schools and Centre are furnished below:

Table 2.1: Regular Faculty Members of individual Departments

Department of Aerospace Engineering and Applied Mechanics (AE&AM)

Sl. No.	Name	Designation	Highest Degree
1	Sujay Kumar Mukherjea	Professor	PhD

Sl. No.	Name	Designation	Highest Degree
2	Salil Haldar	Professor	PhD
3	Subhasis Bhaumik	Professor (HAG)	PhD
4	Koustuv Debnath	Professor	PhD
5	Amit Roy Chowdhury	Professor (HAG)	PhD
6	Santanu Majumder	Professor	PhD
7	Rana Roy	Professor	PhD
8	Basudeb Bhattacharyya	Associate Professor	PhD
9	Nityananda Nandi	Associate Professor	PhD
10	Prithwish Kumar Das	Associate Professor	PhD
11	Mihir Chandra Manna	Associate Professor	PhD
12	Niloy Khutia	Associate Professor	PhD
13	Pabitra Halder	Associate Professor	PhD
14	Debashis Pal	Assistant Professor Grade I	PhD
15	Krishnendu Bhowmik	Assistant Professor Grade II	M.Sc. (Engg.)
16	Joydeep Bhowmik	Assistant Professor Grade II	PhD
17	Pratim Kumar	Assistant Professor Grade II	PhD
18	Prince Raj Lawrence Raj	Assistant Professor Grade II	PhD
19	Indrajit Mukherjee	Assistant Professor Grade II	PhD

Department of Architecture and Planning

Sl. No.	Name	Designation	Highest Degree
1	Souvanic Roy	Professor	PhD
2	Arup Sarkar	Professor	PhD
3	Keya Mitra	Professor	PhD
4	Partha Sarathi Mukhopadhyay	Professor	PhD
5	Amitava Roy	Associate Professor	PhD (D.Engg)
6	Subrata Kumar Paul	Associate Professor	PhD
7	Soumen Mitra	Associate Professor	PhD
8	Sutapa Das	Associate Professor	PhD
9	Bhaskar De	Assistant Professor Grade II	PhD
10	Tuhin Subhra Maparu	Assistant Professor Grade II	PhD

Department of Chemistry

Sl. No.	Name	Designation	Highest Degree
1	Shyamal Kr. Chattopadhyay	Professor (HAG)	PhD

Sl. No.	Name	Designation	Highest Degree
2	Prasanta Kr. Nandi	Professor (HAG)	PhD
3	Binaykrishna Ghorai	Professor (HAG)	PhD
4	Ajit Kumar Mahapatra	Professor (HAG)	PhD
5	Sudip Kumar Chattopadhyay	Professor (HAG)	PhD
6	Chinmoy Bhattacharya	Associate Professor	PhD
7	Jhuma Ganguly	Associate Professor	PhD
8	Papu Biswas	Associate Professor	PhD
9	Nanda Dulal Paul	Assistant Professor Grade I	PhD
10	Ujjal Bhattacharjee	Assistant Professor Grade II	PhD
11	Laksmikanta Adak	Assistant Professor Grade II	PhD

Department of Civil Engineering (CE)

Sl. No.	Name	Designation	Highest Degree
1	Sudip Kr. Roy	Professor (HAG)	PhD
2	Subrata Chakraborty	Professor (HAG)	PhD
3	Anirban Gupta	Professor (HAG)	PhD
4	Ambarish Ghosh	Professor (HAG)	PhD
5	Chaitali Ray	Professor (HAG)	PhD
6	Aparna (Dey) Ghosh	Professor	PhD
7	Debabrata Mazumder	Professor	PhD
8	Sugato Pal	Associate Professor	ME
9	Arun Kumar Chakraborty	Associate Professor	MTRP
10	Ashis Kr. Bera	Associate Professor	PhD
11	Sujata Biswas	Associate Professor	PhD
12	Soumya Bhattacharjya	Associate Professor	PhD
13	Tapash Kumar Roy	Associate Professor	PhD
14	Asok Adak	Associate Professor	PhD
15	Chanchal Majumder	Associate Professor	PhD
16	Sujit Kumar Dalui	Assistant Professor Grade I	PhD
17	Pritam Saha	Assistant Professor Grade I	PhD
18	Ujjwal Saha	Assistant Professor Grade I	PhD
19	Sandip Chakraborty	Assistant Professor Grade II	PhD
20	Sneha Murmu	Assistant Professor Grade II	ME
21	Debojyoti Pandit	Assistant Professor Grade II	PhD
22	Dipankana Bhattacherjee	Assistant Professor Grade II	PhD
23	Anuj Kishor Budhkar	Assistant Professor Grade II	PhD

Department of Computer Science and Technology (CST)

Sl. No.	Name	Designation	Highest Degree
1	Jaya Sil	Professor (HAG)	PhD
2	Susanta Chakraborty	Professor (HAG)	PhD
3	Sipra Das (Bit)	Professor (HAG)	PhD
4	Biplab Kr Sikdar	Professor (HAG)	PhD
5	Sulata Mitra	Professor	PhD
6	Sekhar Mandal	Professor	PhD
7	Asit Kumar Das	Professor	PhD
8	Somnath Pal	Associate Professor	ME
9	Manas Hira	Associate Professor	MTech
10	Abhik Mukherjee	Associate Professor	PhD
11	Apurba Sarkar	Associate Professor	PhD
12	Surajeet Ghosh	Associate Professor	PhD
13	Samit Biswas	Assistant Professor Grade I	PhD
14	Nirnay Ghosh	Assistant Professor Grade II	PhD
15	Tamal Pal	Assistant Professor Grade II	PhD
16	Malay Kule	Assistant Professor Grade II	PhD
17	Ashish Kumar Layek	Assistant Professor Grade II	ME

Department of Electrical Engineering (EE)

Sl. No.	Name	Designation	Highest Degree
1	Ashoke Sutradhar	Professor	PhD
2	Prasid Syam	Professor	PhD
3	Abdur Rouf	Professor	MTech
4	Chandan Kumar Chanda	Professor (HAG)	PhD
5	Mainak Sengupta	Professor	PhD
6	Debabrata Roy	Professor	PhD
7	Aparajita Sengupta	Professor	PhD
8	Konika Das (Bhattacharya)	Professor	PhD
9	Anindita Sengupta	Professor	PhD
10	Debjani Ganguly	Associate Professor	ME
11	Amal Barman	Associate Professor	ME
12	Amalendu Bikash Choudhury	Associate Professor	PhD
13	Kaushik Mukherjee	Associate Professor	PhD
14	Abhinandan De	Associate Professor	PhD
15	Paramita Chattopadhyay	Associate Professor	PhD

Sl. No.	Name	Designation	Highest Degree
16	Sukanya Parui	Assistant Professor Grade I	PhD
17	Suvarun Dalapati	Assistant Professor Grade I	PhD
18	Bhaskaran Barman	Assistant Professor Grade II	ME

Department of Earth Sciences (ES)

Sl. No.	Name	Designation	Highest Degree
1	Bhabani Prasad Mukhopadhyay	Professor	PhD
2	Ananya Mukhopadhyay	Associate Professor	PhD
3	Atin Kumar Mitra	Assistant Professor Grade I	PhD
4	Moumita Talukdar	Assistant Professor Grade II	PhD

Department of Electronics and Telecommunication Engineering (ETCE)

Sl. No.	Name	Designation	Highest Degree
1	Monojit Mitra	Professor	PhD
2	Santanu Das	Professor (HAG)	PhD
3	Susanta Kumar Parui	Professor	PhD
4	Ayan Banerjee	Associate Professor	PhD
5	Chirasree Roy Chaudhuri	Associate Professor	PhD
6	Tamaghna Acharya	Associate Professor	PhD
7	Partha Bhattacharyya	Associate Professor	PhD
8	Debasis Mitra	Assistant Professor Grade I	PhD
9	Ankita Pramanik	Assistant Professor Grade I	PhD
10	Rik Chattapadhyay	Assistant Professor Grade II	PhD

Department of Human Resource Management (HRM)

Sl. No.	Name	Designation	Highest Degree
1	Manas Kumar Sanyal	Professor	PhD

Department of Humanities and Social Sciences (HSS)

Sl. No.	Name	Designation	Highest Degree
1	Rupen Basu Mallik	Associate Professor	M.Com, ICWA
2	Mallika Ghosh Sarbadhikary	Associate Professor	PhD
3	Subhasis Bandyopadhyay	Associate Professor	MA
4	Averi Mukhopadhyay	Assistant Professor Grade II	PhD
5	Madhumita Roy	Assistant Professor Grade II	PhD

Department of Information Technology (IT)

Sl. No.	Name	Designation	Highest Degree
1	Hafizur Rahaman	Professor (HAG)	PhD
2	Santi Prasad Maity	Professor (HAG)	PhD
3	Arindam Biswas	Professor	PhD
4	Sukanta Das	Associate Professor	PhD
5	Tuhina Samanta	Associate Professor	PhD
6	Prasun Ghosal	Associate Professor	PhD
7	Indrajit Banerjee	Associate Professor	PhD
8	Surajit Kumar Roy	Associate Professor	PhD
9	Chandan Giri	Associate Professor	PhD
10	Ruchira Naskar	Assistant Professor Grade I	PhD
11	Shyamalendu Kandar	Assistant Professor Grade II	PhD

Department of Mathematics

Sl. No.	Name	Designation	Highest Degree
1	Binayak Samadder Choudhury	Professor (HAG)	PhD
2	Guruprasad Samanta	Professor (HAG)	PhD
3	Murari Mitra	Professor	PhD
4	Sanat Kr. Majumder	Professor	PhD
5	Asoke Kumar Dhar	Professor	PhD
6	Tapan Kr. Kar	Professor (HAG)	PhD
7	Parbati Saha	Professor	PhD
8	Pritha Das	Professor	PhD
9	Shariful Alam	Associate Professor	PhD
10	Ujjal Debnath	Associate Professor	PhD
11	Smita Pal (Sarkar)	Assistant Professor Grade I	PhD
12	Sarita Ojha	Assistant Professor Grade II	PhD

Department of Mechanical Engineering (ME)

Sl. No.	Name	Designation	Highest Degree
1	Santanu Kr. Karmakar	Professor	PhD
2	Debasish Dutta	Professor	PhD
3	Sujoy Kumar Saha	Professor (HAG)	PhD
4	Apurba Kishore Dutta	Professor	PhD
5	Bijan Kumar Mandal	Professor	PhD
6	Shyamal Chatterjee	Professor	PhD

Sl. No.	Name	Designation	Highest Degree
7	Parthapratim Dey	Professor	PhD
8	Subhas Chandra Mondal	Professor	PhD
9	Sudip Ghosh	Associate Professor	PhD
10	Aritra Ganguly	Associate Professor	PhD
11	Ashim Guha	Assistant Professor Grade I	PhD
12	Bidyut Pal	Assistant Professor Grade II	PhD
13	Uttam Rana	Assistant Professor Grade II	MTech
14	Santanu Das	Assistant Professor Grade II	PhD

Department of Metallurgy and Materials Engineering (MET)

Sl. No.	Name	Designation	Highest Degree
1	Amitava Basu Mallick	Professor (HAG)	PhD
2	Partha Pratim Chattopadhyay	Professor	PhD
3	Swarup Kr Ghosh	Professor	PhD
4	Sumit Ghosh	Associate Professor	MMetE
5	Manojit Ghosh	Associate Professor	PhD
6	Debdulal Das	Associate Professor	PhD
7	Kaushik Das	Assistant Professor Grade I	PhD
8	Sukumar Kundu	Assistant Professor Grade I	PhD
9	Gautam Anand	Assistant Professor Grade II	PhD
10	Tapendu Mandal	Assistant Professor Grade II	MTech

Department of Mining Engineering (MIN)

Sl. No.	Name	Designation	Highest Degree
1	Prabir Kr. Paul	Professor (HAG)	PhD
2	Netai Ch. Dey	Professor (HAG)	PhD
3	Indranath Sinha	Professor	PhD
4	Pratik Dutta	Professor	PhD
5	Sudipta Mukhopadhyay	Professor	PhD
6	Gopal Chandra Roy	Assistant Professor Grade I	PhD
7	Md. Mirajul Islam	Assistant Professor Grade I	PhD

Department of Physics

Sl. No.	Name	Designation	Highest Degree
1	Dipali Banerjee	Professor (HAG)	PhD

2	Mousumi Basu	Professor	PhD
3	Sampad Mukherjee	Associate Professor	PhD
4	Samar Jana	Associate Professor	PhD
5	Amit Kundu	Associate Professor	PhD
6	Krishnendu Mukherjee	Associate Professor	PhD
7	Syed Minhaz Hossain	Associate Professor	PhD
8	Abhijit Bisoi	Assistant Professor Grade I	PhD
9	Mojammel Haque Mondal	Assistant Professor Grade I	PhD
10	Dwipesh Majumder	Assistant Professor Grade I	PhD
11	Debasis Ray	Assistant Professor Grade II	PhD

School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS)

Sl. No.	Name	Designation	Highest Degree
1	Nillohit Mukherjee	Assistant Professor Grade II	PhD
2	Santanu Maity	Assistant Professor Grade II	PhD

School of Community Science and Technology (SOCSAT)

Sl. No.	Name	Designation	Highest Degree
1	Jayati Bhowal	Assistant Professor Grade II	PhD
2	Shantonu Roy	Assistant Professor Grade II	PhD

School of Mechatronics and Robotics (SMR)

Sl. No.	Name	Designation	Highest Degree
1	Tanmay Pal	Assistant Professor Grade II	PhD

School of VLSI Technology

Sl. No.	Name	Designation	Highest Degree
1	Tamal Ghosh	Assistant Professor Grade II	PhD

Centre of Healthcare Science and Technology (CHST)

Sl. No.	Name	Designation	Highest Degree
1	Ananya Barui	Assistant Professor Grade II	PhD

Table 2.2: Non-Regular Faculty Members

Temporary Faculty

Sl. No.	Name	Dept./School/Centre
1	Apurba Das	Aerospace Engineering and Applied Mechanics
2	Nilavarasan T	
3	Shreya Banerjee	
4	Sunil Manohar Maharana	
5	Rajesh Kumar Yadav	
6	Mouli Majumdar	Architecture and Planning
7	Krishanu Santra	
8	Suchismita Nayak	
9	Varsha Vinod	
10	Syed Meheboob Elahi	Chemistry
11	Deepti Ranjan Majhi	Civil Engineering
12	Sangita Deb Barman	
13	Saptarshi Kundu	
14	Kaniska Biswas	
15	Swarup Kumar Barman	
16	Deep Roy	
17	Swaraj Chowdhury	
18	Akshay Pratap Singh	
19	Subhra Paul	
20	Reetam Mondal	Electrical Engineering
21	Mithu Sarkar	
22	Debdeep Saha	
23	Syed Abdullah Qasim	
24	Rajesh Panda	
25	Sumit Kumar Pandey	
26	Pritam Paral	
27	Mrinal Kanti Layek	Earth Science
28	Vikas Kumar Das	
29	Rajkumar Ghosh	
30	Dipankar Saha	Electronics and Telecommunication Engineering
31	Suman Samui	
32	Basabdatta Palit	
33	Manas Rakshit	
34	Anirban Chakraborty	

Sl. No.	Name	Dept./School/Centre
35	Madhupriya Samanta	
36	Sourav Kundu	
37	Subhabrata Roy	
38	Shashwati Banerjee	Humanities and Social Sciences
39	Koninika Mukherjee	
40	Soumen Samanta	Mathematics
41	Akashdip Karmakar	
42	Vikash Kumar	Mechanical Engineering
43	Amit Kumar Rai	
44	Snehasish Bhattacharjee	
45	D. Sunil Kumar	
46	Pradip Mondal	
47	Mukesh Kumar	
48	Vinod Kumar Singh	
49	Tamonash Jana	
50	Santanu Sardar	
52	Avishek Kumar	Metallurgy & Materials Engineering
52	Debasish Chatterjee	
53	Aditi Sarkar	Mining Engineering
54	Shreedevi Moharana	
55	Poulami Ghosh	Physics
56	Sangeeta Das	
57	Gaurav Saini	School of Advanced Materials, Green Energy and Sensor Systems
58	Joynarayan Mukherjee	
59	Kaunsar Jabeen	School of Community Science & Technology
60	Dipsikha Kalita	
61	Subir Das	School of Mechatronics & Robotics
62	Sananda Chatterjee	
63	Anup Gorai	
64	Manasi Das	
65	Partha Sarathi Chowdhury	School of Management Sciences
66	Poulomi Mukherjee Mondal	
67	Rana Basu	
68	Shanujas.V	
69	Satarupa Roychowdhury	
70	Mandira Dey	

Sl. No.	Name	Dept./School/Centre
71	Subhadip Chakraborty	Centre for Healthcare Science and Technology
72	Subhadip Pradhan	

Visiting Faculty

Sl. No.	Name	Dept./School/Centre
1	Kajal Mukhopadhyay	Human Resource Management
2	Prasun Kumar Chatterjee	Human Resource Management
3	Rajendra Nath Basu	School of Advanced Materials, Green Energy and Sensor Systems
4	Suranjan Sinha	Mining Engineering
5	Manas Kumar Mukhopadhyay	Mining Engineering
6	Abhijit Chakrabarti	Electrical Engineering
7	Subhasis Chaudhuri	Electrical Engineering
8	Hiranmay Saha	School of Advanced Materials, Green Energy and Sensor Systems
9	Partha Chaudhuri	School of Advanced Materials, Green Energy and Sensor Systems

Contractual Faculty

Sl. No.	Name	Dept./School/Centre
1	Pranab Roy	VLSI Technology
2	Sudip Ghosh	VLSI Technology
3	Sumita Mukhopadhyay	School of Advanced Materials, Green Energy and Sensor Systems
4	Chitrangada Das Mukhopadhyay	School of Healthcare Science and Technology

INSPIRE Faculty

Sl. No.	Name	Dept./School/Centre
1	Swatilekha Ghosh	School of Advanced Materials, Green Energy and Sensor Systems
2	Arik Kar	Chemistry
3	Subhabrata Koley	Aerospace Engineering and Applied Mechanics
4	Pratik Kumar Das	Earth Sciences

UGC-FRP Faculty

Sl. No.	Name	Dept./School/Centre
1	Mrinal K. Bera	Chemistry

2	Manish Pal Chowdhury	Physics
3	Abhijit Majumdar	Physics

Superannuated Faculty

Sl. No.	Name	Date of Superannuation
1	Aditya Bandyopadhyay	30.04.2022
2	Anup Mondal	31.07.2022
3	Debashish Moitra	31.08.2022
4	Amit Kumar Das	30.11.2022
5	Sukhendu Sekhar Sarkar	30.11.2022
6	Swati Saha	31.01.2023

2.2 Non-Academic Staff Members and Officers

Officers Cadre

Sl. No.	Name	Department	Designation
1	Alok Kumar Maity	Office of the Finance	Deputy Registrar
2	Devasis Datta	Office of the Registrar	Deputy Registrar
3	Nirmalya Kumar Bhattacharyya	DR (Academic)	Deputy Registrar
4	Hari Prasad Sharma	Library	Joint Librarian
5	Usha Shankar Bhattacharya	Training & Placement	Asst.Training Officer (SG)
6	Alok Kumar Mitra	Office of the Registrar	Assistant Registrar
7	Bivore Das	Office of the Registrar	Assistant Registrar
8	Dipankar Chakrabarty	Office of the Finance	Assistant Registrar
9	Shib Sankar Basak	Office of the Registrar	Assistant Registrar
10	Sushil Kumar Barman	Library	Assistant Librarian (SG)
11	Abani Oraon	Library	Assistant Librarian

Administration: Higher Grade

Sl. No.	Name	Department	Designation
1	Haran Chandra Sadhukhan	Office of the Dean (FW)	Private Secretary
2	Mintu Charan Khan	Mechanical Engineering	Private Secretary
3	Tarun Paul	Electronics & Tele-communication Engineering	Private Secretary
4	Mamit Mitra	Office of the Finance	Private Secretary
5	Chinmoy Sana	Office of the Dean (SW)	Private Secretary
6	Malay Garai	Human Resource Management	Private Secretary
7	Arun Kumar Ghosh	Office of the Registrar	Superintendent SG-I
8	Tamal Kumar Das	Office of the Finance	Superintendent SG-I
9	Raja Banerjee	Office of the Dean (Academic and Examination)	Superintendent SG-II
10	Nimain Charan Satapathy	Office of the Finance	Superintendent SG-II
11	Alok Roy	Workshop	Superintendent SG-II
12	Kashi Nath Singh	Office of the Registrar	Superintendent SG-II
13	Sunil Kumar Manna	Office of the Finance	Superintendent SG-II
14	Biplab Mukherjee	Electrical Engineering	Superintendent SG-II
15	Swati Kar (Deb)	Office of the Dean (Academic and Examination)	Superintendent SG-II
16	Mantu Goswami (Manna)	Office of the Dean (Academic and Examination)	Superintendent SG-II
17	Madan Mohan Bose	Office of the Registrar	Superintendent SG-II

Sl. No.	Name	Department	Designation
18	Susmita Sarkar	Office of the Finance	Superintendent SG-II
19	Arup Kumar Patra	Office of the Finance	Superintendent SG-II
20	Tarak Nath Das	Office of the Registrar	Superintendent SG-II
21	Partha Sarathi Maity	Office of the Registrar	Superintendent SG-II
22	Mahadev Biswas	Hostel Management Council	Superintendent SG-II
23	Gautam Biswas	Office of the Dean (Academic and Examination)	Superintendent SG-II
24	Judhistir Mandal	Office of the Finance	Superintendent SG-II
25	Rashbihari Chakrabarti	Office of the Registrar	Superintendent SG-II

Administration: Lower Grade

Sl. No.	Name	Department	Designation
1	Arpita Das	Office of the Dean (Academic and Examination)	Assistant (SG-II)
2	Debasish Saha	Central Library	Assistant (SG-I)
3	Partha Sarathi Nath	Office of the Registrar	Assistant (SG-I)
4	Sarojit Das	Office of the Finance	Assistant (SG-II)
5	Ayandeb Datta	Office of the Registrar	Assistant (SG-I)
6	Surajit Das	Office of the Registrar	Assistant (SG-II)
7	Arindam Banerjee	Office of the Registrar	Assistant (SG-II)
8	Sujata Saren	Office of the Finance	Assistant (SG-I)
9	Chandrani Mukhopadhyay	Office of the Registrar	Assistant (SG-II)
10	Abhijit Bhattacharyya	Office of the Finance	Assistant (SG-II)
11	Subrata Baidya	Office of the Registrar	Assistant (SG-I)
12	Pijush Datta	Office of the Registrar	Assistant (SG-I)
13	Santanu Ganguli	Office of the Finance	Assistant (SG-II)
14	Anindya Mukhopadhyay	Office of the Registrar	Assistant (SG-I)
15	Tarun Kanti Mitra	Office of the Finance	Assistant (SG-II)
16	Somnath Das	Office of the Finance	Assistant (SG-I)
17	Uttam Chatterjee	Office of the Finance	Assistant (SG-II)
18	Asim Das Chakraborty	Physics	Assistant (SG-I)
19	Sujan Sarkar	Office of the Dean (Academic and Examination)	Assistant (SG-I)
20	Sourasis Mitra	Office of the Registrar	Assistant (SG-I)
21	Shyamal Kumar Manna	Hospital	Assistant (SG-I)
22	Baidyanath Mondal	Compound Section	Assistant (SG-I)
23	Ram Sunder Yadav	Human Resource Management	Assistant (SG-I)

Sl. No.	Name	Department	Designation
24	Suchita Khakha	Dean (Students' Welfare)	Assistant (SG-I)

Technical: Higher Grade

Sl. No.	Name	Department	Designation
1	Ranjan Kumar Biswas	Civil Engineering	Technical Assistant SG-I
2	Bagala Prasad Patra	Workshop	Technical Selection Gr I
3	Sajal Kumar Chakraborty	Civil Engineering	Technical Assistant SG-I
4	Amrita Bandopadhyay (nee Khan)	Civil Engineering	Technical Assistant SG-I
5	Pradip Kr. Roy	Website Cell	Technical Assistant SG-I
6	Sugata Munshi	Chemistry	Technical Assistant SG-I
7	Amalendu Sahoo	Aerospace Engineering and Applied Mechanics	Technical Assistant SG-I
8	Anjana Sengupta	Architecture and Planning	Technical Assistant SG-I
9	Rajat Mukhopadhyay	Electronics and Tele-communication Engineering	Technical Assistant SG-I
10	Raktim Maity	Electrical Engineering	Technical Assistant SG-I
11	Sutap Chakraborty	Office of the Finance	Technical Assistant SG-I
12	Debjit Bhowmik	Office of the Dean (Academic and Examination)	Technical Assistant SG-I
13	Saumendu Atta	Central Library	Library and Information Assistant SG-I
14	Asish Kumar Paul	Mechanical Engineering	Technical Assistant SG-I
15	Susanta Dhara	Computer Centre	Technical Assistant SG-I
16	Amar Tarafder	Civil Engineering	Technical Assistant SG-I
17	Biswajit Das	Computer Centre	Technical Assistant SG-I
18	Sumitra Bagchi	Computer Science and Technology	Technical Assistant SG-I
19	Prasanta Gope	Mining Engineering	Technical Assistant SG-I
20	Bibhas Chandra Mitra	Physics	Technical Assistant SG-I
21	Bijit Kumar Dey	Mechanical Engineering	Technical Assistant SG-I
22	Soma Naskar (Sardar)	Information Technology	Technical Assistant SG-I
23	Mohini Mohan Debsharma	Civil Engineering	Technical Assistant SG-I
24	Pradip Kr. Das	Electrical Engineering	Technical Assistant SG-I
25	Keyarani Mondal	Architecture and Planning	Technical Assistant SG-I
26	Brindaban Patta	Electronics and Tele-communication Engineering	Technical Assistant SG-I

Sl. No.	Name	Department	Designation
27	Rajib Bandopadhyay	Electrical Engineering	Technical Assistant SG-I
28	Subhasish Pradhan	Mechanical Engineering	Technical Assistant SG-I
29	Sarbani Barari	Office of the Registrar	Technical Assistant SG-I
30	Amitava Chowdhury	Mining Engineering	Technical Assistant SG-I
31	Janardan Kar	Mining Engineering	Technical Assistant SG-I
32	Braja Gopal Koner	Institute Work Division	Technical Assistant SG-I
33	Sanjoy Naskar	Workshop	Technical Assistant SG-I
34	Pradip Mistry	Electronics and Tele-communication Engineering	Technical Assistant SG-I
35	Soumen Gope	Network and IT Infrastructure	Technical Assistant SG-I
36	Souvik Patra	Information Technology	Technical Assistant SG-I
37	Rumeli Bose	Computer Science and Technology	Technical Assistant SG-I
38	Salil Kumar Dalui	Metallurgy and Materials Science and Engineering	Technical Assistant SG-I
39	Amiya Ratan Rout	Information Technology	Technical Assistant SG-I
40	Swaroop Shobhan Mukherjee	Civil Engineering	Technical Assistant SG-I
41	Amal Kumar Mandal	Physics	Technical Assistant SG-I
42	Snehashis Saha	Information Technology	Technical Assistant SG-I
43	Hariprasad Saha	Workshop	Technical Assistant SG-I
44	Subhajit Biswas	Information Technology	Technical Assistant SG-I
45	Ramesh Halder	Chemistry	Technical Assistant SG-I
46	Amitava Pal	Electrical Engineering	Technical Assistant SG-I
47	Partha Sarathi Baruri	Electrical Engineering	Technical Assistant SG-I
48	Sintu Das	Physics	Technical Assistant SG-I
49	Sujata Misra	Computer Science and Technology	Technical Assistant SG-I
50	Swapan Kumar Jana	Metallurgy and Materials Science and Engineering	Technical Assistant SG-I
51	Nani Gopal Roy	Mechanical Engineering	Technical Assistant SG-I
52	Kankar Mohan Das	Mechanical Engineering	Technical Assistant SG-I
53	Sarbani Sarkar	Architecture and Planning	Technical Assistant SG-I
54	Santosh Kumar Kayal	Workshop	Technical Assistant SG-II
55	Biswajit Samanta	Electronics and Tele-communication Engineering	Technical Assistant SG-II
56	Bishnu Pada Choudhury	Information Technology	Technical Assistant SG-II
57	Rabi Sankar Kandar	Hospital	Sr. Pharmacist

Sl. No.	Name	Department	Designation
58	Moumita Sahoo (Porya)	Hospital	Sr. Pharmacist

Technical: Lower Grade

Sl. No.	Name	Department	Designation
1	Balaram Roy	Office of the Registrar	Technician SG - I
2	Dibyendu Paul	Electronics and Telecommunication Engineering	Technician SG - I
3	Pradip Kumar Dey	Mechanical Engineering	Technician SG - I
4	Saibal Ghosh	Mining Engineering	Technician SG - I
5	Jayanta Kundu	Aerospace Engineering and Applied Mechanics	Technician SG - I
6	Bablu Santra	Electrical Engineering	Technician SG - I
7	Sudipta Mandal	Hospital	Technician

Supporting Staff

Sl. No.	Name	Department	Designation
1	Ashok Kumar Ghosh	Office of the Finance	Office Attendant SG I
2	Debabrata Patra	Compound Section	Office Attendant SG I
3	Rankanidhi Nayak	Compound Section	Office Attendant SG I
4	Gangadhar Nayak	Compound Section	Office Attendant SG I
5	Niranjan Nayak	Compound Section	Office Attendant SG I
6	Raj Kumar Dome	Compound Section	Office Attendant SG I
7	Tarak Das	Mathematics	Office Attendant SG I
8	Mahesh Das	Compound Section	Office Attendant SG I
9	Subir Ghosh	Office of the Registrar	Office Attendant SG I
10	Sibu Das	Hospital	Office Attendant SG I
11	Mithilesh Kumar Roy	Hospital	Office Attendant SG I
12	Ashoke Halder	Hospital	Office Attendant SG I
13	Gita Hela	Compound Section	Office Attendant SG I
14	Prabir Naskar	Workshop	Office Attendant SG I
15	Ram Chandra Routh	Compound Section	Office Attendant SG I
16	Asoke Routh	Computer Science and Technology	Office Attendant SG I
17	Saleha Khatun	Aerospace Engineering and Applied Mechanics	Office Attendant SG I
18	Dharmendra Das	Office of the Registrar	Office Attendant SG I
19	Gopal Chandra Parua	Aerospace Engineering and Applied Mechanics	Office Attendant SG I

Sl. No.	Name	Department	Designation
20	Nemai Charan Bal	Dean, Faculty Welfare	Office Attendant SG I
21	Sukumar Sarkar	Office of the Registrar	Office Attendant SG I
22	Siba Prasad Jana	Office of the Registrar	Office Attendant SG I
23	Jahar Pal	Computer Science and Technology	Office Attendant SG I
24	Ranu Dey	Architecture and Planning	Office Attendant SG I
25	Julfikar Ali Molla	Chemistry	Office Attendant SG I
26	Richar Francis Subba	Office of the Dean (Academic and Examination)	Office Attendant SG I
27	Asit Baran Dey	Office of the Finance	Office Attendant SG I
28	Sanjay Ghosh	Electrical Engineering	Office Attendant SG I
29	Purnendu Bera	Architecture and Planning	MTS Workshop Attendant II
30	Amarendra Nath Polley	Office of the Registrar	Office Attendant SG I
31	Chanda Devi	Earth Science	Office Attendant SG I
32	Arun Kumar Patra	Department of Students' Activity	Office Attendant SG I
33	Murali Mohan Mohanty	Department of Students' Activity	Office Attendant SG I
34	Kalyan Prasad Pathak	Department of Students' Activity	Office Attendant SG I
35	Nirmal Kumar Kar	Department of Students' Activity	Office Attendant SG I
36	Badal Seal	Workshop	Office Attendant SG I
37	Rambrij Prasad Harijan	Compound Section	Office Attendant SG I
38	Dilip Kumar Das	Mechanical Engineering	Office Attendant SG I
39	Buddhadev Samanta	Dean, Students' Welfare	Office Attendant SG I
40	Rabin Das	Office of the Registrar	Office Attendant SG I
41	Murari Mondal	Institute Work Division	Office Attendant SG I
42	Milan Majumder	Office of the Director	Office Attendant SG I
43	Tapan Oraon	Compound Section	Office Attendant SG I
44	Ram Prosad Routh	Compound Section	Office Attendant SG I
45	Rajesh Routh	Compound Section	Office Attendant SG I
46	Susanta Pal	Office of the Registrar	Office Attendant SG I
47	Rama Roy	Computer Science and Technology	Office Attendant SG I
48	Amiya Kumar Paul	Physics	Office Attendant SG I
49	Arabinda Samanta	Office of the Registrar	Office Attendant SG I
50	Prosenjit Panja	Office of the Finance	Office Attendant SG I
51	Biswajit Kar	Department of Students' Activity	Office Attendant SG I
52	Pradut Kumar Manna	Compound Section	Office Attendant SG I
53	Prasanta Mallick	Office of the Registrar	Office Attendant SG I

Sl. No.	Name	Department	Designation
54	Bibhuti Bhusan Dey	Central Library	Office Attendant SG I
55	Deb Kumar Jana	Mathematics	Office Attendant SG I
56	Susanta Bhattacharjee	Office of the Finance	Office Attendant SG I
57	Arati Majumdar	Earth Science	Office Attendant SG I
58	Menoka Turi	Compound Section	Office Attendant SG II
59	Tarak Nath Dey	Metallurgy and Materials Science and Engineering	Office Attendant SG II
60	Santanu Pramanick	Office of the Registrar	Office Attendant SG II
61	Subhas Sarkar	Office of the Registrar	Office Attendant SG II
62	Manoj Bhagat	Metallurgy and Materials Science and Engineering	Office Attendant SG II
63	Sidheswar Roy	Compound Section	Office Attendant SG II
64	Uttam Pal	Electronics and Tele-communication Engineering	Office Attendant SG II
65	Ashura Begum	Humanities and Social Sciences	Office Attendant SG II
66	Harekrushna Dash	Compound Section	Office Attendant SG II
67	Sapani Nayek	Compound Section	Office Attendant SG II
68	Sudama Chaowdhury	Compound Section	Office Attendant SG II
69	Md. Riaz	Compound Section	Office Attendant SG II
70	Asik Mohammad	Compound Section	Office Attendant SG II
71	Bapi Majhi	Compound Section	Office Attendant SG II
72	Ruma Das Ghosh	Dean, Research and Consultancy	Office Attendant SG II
73	Rabi Nayak	Compound Section	Office Attendant SG II
74	Nageswar Mahato	Compound Section	Office Attendant SG II
75	Sisir Kumar Roy	Civil Engineering	Office Attendant SG II
76	Kakali Pakhira (Pan)	Office of the Registrar	Office Attendant SG II
77	Chaitali Bhattacharjee	Office of the Registrar	Office Attendant SG II
78	Kumaresh Dey	School of Mechatronics and Robotics	Office Attendant SG II
79	Dilip Kumar Bag	Dean, Students' Welfare	Office Attendant SG II
80	Rajkumar Dhali	Dean, Students' Welfare	Office Attendant SG II
81	Jaydeb Barua	Compound Section	Office Attendant SG II
82	Sanjoy Ghosh	Mining Engineering	Office Attendant SG II
83	Laloo Hela	Compound Section	Office Attendant SG II
84	Rita Ghosh	Hostel Management Council	Office Attendant SG II
85	Biplab Kayal	Office of the Dean (Academic)	Office Attendant SG II
86	Chandan Karmakar	Office of the Registrar	Office Attendant SG II

Sl. No.	Name	Department	Designation
87	Dhiman Chandra Das	Office of the Dean (Academic)	Office Attendant SG II
88	Biswajit Sarkar	Mechanical Engineering	Office Attendant SG II
89	Md. Shamim	Workshop	Office Attendant SG II
90	Tarak Nath Jana	Office of the Dean (Academic)	Office Attendant SG II
91	Bhola Prasad Harijan	Compound Section	Office Attendant SG II
92	Biswanath Darjee	Workshop	Office Attendant SG II
93	Ajoy Kumar Das	Workshop	Office Attendant SG II
94	Idrish Mallick	Office of the Dean,Faculty Welfare	Office Attendant SG II
95	Sudarsan Mahato	Human Resource Management	Office Attendant SG II
96	Naresh Bhagat	Compound Section	Office Attendant SG II
97	Satya Narayan Karmakar	Civil Engineering	Office Attendant SG II
98	Dipendu Paul	Institute Work Division	Office Attendant SG II
99	Sushil Kumar Dey	Office of the Finance	Office Attendant SG II
100	Debashis Mondal	Metallurgy and Materials Science and Engineering	Office Attendant SG II
101	Gouranga Chowdhury	Hostel Management Council	Office Attendant SG II
102	Bijan Sarkar	Computer Science & Technology	Office Attendant SG II
103	Chandra Shekhar Malakar	Compound Section	Office Attendant SG II
104	Tinku Das	Office of the Dean, Students' Welfare	Office Attendant SG II
105	Pradip Das	Compound Section	Office Attendant SG II
106	Suresh Chandra Naik	Office of the Registrar	Office Attendant SG II
107	Sanjay Bhagat	Compound Section	Office Attendant SG II
108	Pintu Das	Office of the Dean, Students' Welfare	Office Attendant SG II
109	Sanjay Singh	Centre for Healthcare Science and Technology	Office Attendant SG II
110	Sadhu Thakur	Compound Section	Office Attendant SG II
111	Radhashyam Chatterjee	Department of Students' Activity	Sr, Office Attendant
112	Ashok Kumar Roy	Department of Students' Activity	Sr, Office Attendant
113	Taraprasanna Ganguly	Department of Students' Activity	Sr, Office Attendant
114	Ranjan Kumar Pal	Department of Students' Activity	Sr, Office Attendant
115	Bikash Majhi	Department of Students' Activity	Sr, Office Attendant
116	Tarak Majhi	Department of Students' Activity	Sr, Office Attendant
117	Sanjib Das	Department of Students' Activity	Sr, Office Attendant
118	Rabin Jana	Department of Students' Activity	Sr, Office Attendant

Sl. No.	Name	Department	Designation
119	Joydeb Dolai	Department of Students' Activity	Sr, Office Attendant
120	Tarun Chaandra Das	Department of Students' Activity	Sr, Office Attendant
121	Manas Kumar Saha	Department of Students' Activity	Sr, Office Attendant
122	Uttam Kumar Dolai	Department of Students' Activity	Sr, Office Attendant
123	Sankar Karmakar	Department of Students' Activity	Sr, Office Attendant
124	Krishna Chakraborty	Electronics and Tele-communication Engineering	Sr, Office Attendant
125	Mrinmoy Kr. Jana	Office of the Director	Sr, Office Attendant
126	Milon Kr. Das	Institute Work Division	Sr, Office Attendant
127	Mahua Sarkar	Office of the Finance	Sr, Office Attendant
128	Avijit Nath	Mechanical Engineering	Sr, Office Attendant
129	Sekhar Rao	Compound Section	Sr, Office Attendant
130	Sandip Pramanick	Electrical Engineering	Sr, Office Attendant
131	Rakesh Kr. Nayak	Civil Engineering	Sr, Office Attendant
132	Narayan Chandra Dash	Office of the Registrar	Sr, Office Attendant
133	Subhadra Manna	Office of the Registrar	Sr, Office Attendant
134	Mina Routh	Compound Section	Sr, Office Attendant
135	Malati Dey	Office of the Registrar	Sr, Office Attendant

Contractual Non-Academic Staff

Sl. No.	Name	Designation
1	Susanta Sarma	Office Assistant
2	Malay Kumar Dhir	Office Assistant
3	Suman Sarkar	Group-D
4	Koushik Dey	Group-D
5	Avijit Banerjee	Assistant (Maintenance of Information System)
6	Monoj Das	Physical Trainer-Cum- Ground Maintenance Staff
7	Dinabandhu Sadhukhan	Group-D
8	Amal Das	Technical Assistant
9	Sourav Kundu	Technical Assistant
10	Arindam Bhattacharjee	Office Assistant
11	Suvankar Bose	Technical Support Staff
12	Mouli Das	Technical Support Staff
13	Dipsikha Chandra (Pal)	Computer Assistant
14	Goutam Bandyopadhyay	Accountant (Contractual)
15	Shiladitya Bhandary	Sr. Network Assistant

Sl. No.	Name	Designation
16	Bishwarup Bhattacherjee	Project Office Staff (Group-C) Category
17	Swapan Kumar Patra	Project Office Staff (Group-C) Category
18	Bimal Adhya	Project Office Staff (Group-C) Category
19	Sanchayita Dhara	Technical Assistant
20	Uttam Kayal	Driver
21	Avijit Das	Driver
22	Goutam Paul	Technical Assistant
23	Sambhu Meta	Document Preparation Assistant
24	Sandipan Patra	Technical Assistant
25	Rabindra Nath Das	Group-D
26	Sudipta Das	Junior Assistant
27	Indrajit Ghosh	Information cum Data Entry Assistant
28	Sougata Das	Project Office Staff
29	Subhasree Majumder	Part time Office Assistant
30	Manoranjan Jana	Project Office Staff
31	Sukhen Adhikari	Project Office Staff
32	Sanjay Dey	Project Office Staff (Group-C) Category
33	Malay Kundu	Scientific Officer
34	Ratna Ghosh	Technical Assistant
35	Sudip Bhattacharjee	Laboratory Attendant
36	Kumar Nayak	Laboratory Attendant
37	Pradip Kumar Majumder	Office Peon
38	Sanjay Sarkar	Office Assistant
39	Aloke Mondal	Group-D
40	Suhrid Bakshi	Technical Assistant
41	Manick Chandra Pal	Group-D
42	Kanchan Kumar Maji	Accounts Assistant
43	Goutam Sarkar	Office Assistant
44	Mousumi Shaw (Das)	Library Assistant
45	Pranab Satpathi	Office Peon
46	Rajat Mullick	Office Peon
47	Saikat Ganguli	Accounts Assistant
48	Asish Bag	Accounts Assistant
49	Sukanta Guha	Office Peon
50	Dibyendu Banerjee	Assistant Engineer (Civil)

Superannuated Non-Academic Staff

Sl. No.	Name	Date of Superannuation
1	Joydeb Ganguly	31.05.2022
2	Sujit Mazumdar	27.05.2022 (Expired)
3	Mantu Chakraborty	31.07.2022
4	Tushar Kanti Mitra	30.09.2022
5	Bhanu Das	31.10.2022
6	Subhra Roy	30.11.2022
7	Satyajit Barua	31.12.2022
8	Rajendra Bhagat	31.12.2022
9	Debendra Nath Ghosal	31.01.2023
10	Subrata Chakraborty	28.02.2023
11	Bimal Dutta	28.02.2023
12	Yasin Mullick	28.02.2023 (Allotted State Govt. Employee)

03 Academic Programmes

3. Academic Programmes

The Institute offers the following Undergraduate (UG), Postgraduate (PG) and Doctoral (PhD) programmes:

UG:

- Four-Year BTech Degree
- Five-Year Dual Degree (BTech-MTech)
- Five-Year BArch Degree

PG:

- Two-Year MTech Degree
- Two-Year MPlan Degree
- Two-Year MSc
- Two-Year MBA

PhD:

- Doctoral Programme

3.1 Four-Year BTech Degree / Five-Year Dual Degree (BTech-MTech)

The Institute offers **Four-year full-time** programme leading to **BTech Degree** in the following disciplines:

a) Aerospace Engineering (AE)
b) Civil Engineering (CE)
c) Computer Science and Technology (CST)
d) Electrical Engineering (EE)
e) Electronics and Telecommunication Engineering (ETCE)
f) Information Technology (IT)
g) Mechanical Engineering (ME)
h) Metallurgy and Materials Engineering (MET)
i) Mining Engineering (MIN)

On the basis of performance of a student, options are offered to (i) Change discipline at the end of 2nd semester for BTech programme and (ii) Switch over to Dual Degree (BTech-MTech) programme at the end of 6th semester for completing MTech programme along with the BTech programme by studying for one more year.

3.2 Five-Year BArch Degree

The Institute offers **Five-year full-time** programme in Architecture leading to **BArch Degree**.

3.3 Two-Year MTech Degree

The Institute offers **Two-year full-time** programme leading to **MTech Degree** in the following disciplines:

a) Applied Mechanics - Aerospace Engineering and Applied Mechanics Department (AE&AM)
b) Civil Engineering - Civil Engineering Department (CE)
c) Computer Science and Engineering - Computer Science and Technology Department (CST)
d) Electrical Engineering - Electrical Engineering Department (EE)
e) Electronics and Telecommunication Engineering - Electronics and Telecommunication Engineering Department (ETCE)
f) Information Technology - Information Technology Department (IT)
g) Mechanical Engineering - Mechanical Engineering Department (ME)
h) Metallurgy & Materials Engineering - Metallurgy and Materials Engineering Department (MET)
i) Geoinformatics - Mining Engineering Department (MIN)
j) Mining Engineering - Mining Engineering Department (MIN)
k) Materials Science and Engineering - School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS)
l) Renewable Energy Science and Technology - School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS)
m) Mechatronics - School of Mechatronics and Robotics (SMR)
n) VLSI Design - School of VLSI Technology (VLSI)
o) Biomedical Engineering - Centre for Healthcare Science and Technology (CHST)
p) Safety & Occupational Health - Centre for Healthcare Science and Technology (CHST)

Details of specializations for the courses above are furnished in Table 3.1.

3.4 Two-Year MPlan Degree

The Institute offers **Two-year full-time** programme in the following discipline leading to **MPlan Degree**

a) Urban and Regional Planning - Department of Architecture and Planning

Table 3.1: Details of MTech / MPlan Programmes

Academic Sections	Specializations
Department of Aerospace Engineering and Applied Mechanics	Mechanics of Fluids
	Mechanics of Solids
Department of Architecture and Planning	Urban and Regional Planning
Department of Civil Engineering	Environmental Engineering
	Geotechnical Engineering
	Structural Engineering
	Transportation Engineering
	Water Resources Engineering
Department of Computer Science and Technology	Computer Science and Engineering

Academic Sections	Specializations
Department of Electrical Engineering	Control System and Instrumentation
	Power and Energy Systems
	Power Electronics, Machines and Drives
Department of Electronics and Telecommunication Engineering	Communication Engineering and Signal Processing
	Microelectronics and VLSI Design
	Microwave Communication
Department of Information Technology	Information Technology
Department of Mechanical Engineering	Machine Design
	Thermal Engineering
	Manufacturing Science
Department of Metallurgy and Materials Engineering	Materials Engineering
	Manufacturing Technology
Department of Mining Engineering	Geoinformatics
	Mining Engineering
School of Advanced Materials, Green Energy and Sensor Systems	Materials Science and Technology
	Renewable Energy Science and Technology
School of Mechatronics & Robotics	Mechatronics
School of VLSI Technology	VLSI Design
Centre for Healthcare Science and Technology	Biomedical Engineering
	Safety and Occupational Health

3.5 Two-Year MSc Degree

The Institute offers **Two-year full-time** programme leading to **MSc Degree** in the following disciplines

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

3.6 Two-Year MBA

The Institute offers a **Two-year full-time** programme leading to **MBA Degree** by School of Management Sciences (SOMS).

3.7 PhD Programme

The Institute offers **full time Doctoral Programme** to obtain **PhD Degree** in (i) Architecture, (ii) Engineering, (iii) Science and (iv) Management.

3.8 Student Strength

Category	UG				PG				PhD				Total
	Male		Female		Male		Female		Male		Female		
	NPH	PH	NPH	PH	NPH	PH	NPH	PH	NPH	PH	NPH	PH	
General	830	27	242	2	252	0	112	0	401	3	164	0	**2033**
SC	325	1	92	0	79	0	25	0	99	0	36	0	**657**
ST	155	0	18	0	16	0	5	0	1	0	0	0	**195**
OBC	644	11	163	2	112	0	33	0	97	0	20	0	**1082**
EWS	215	0	57	0	53	0	14	0	5	0	5	0	**349**
Total	**2169**	**39**	**572**	**4**	**512**	**0**	**189**	**0**	**603**	**3**	**225**	**0**	**4316**
Total Male / Female (course-wise)	**2208**		**576**		**512**		**189**		**606**		**225**		
Total (UG / PG / Ph.D.)	**2784**				**701**				**831**				

PhD Students	2016-17	2017-18	2018-19	2019-2020	2020-21	2021-22	2022-23
No. of Full Time Admitted	71	171	52	85	72	57	**91**
Degree Awarded	74	83	63	96	108	129	**63**

3.9 Institute Result

Statistics of Examination Year 2022

I. BArch, BTech under Dual Degree Programme

Course	Appeared	Passed	Pass Percentage
Bachelor of Architecture	14	14	100
Bachelor of Technology Under Five Year Dual Degree (BTech - MTech) Programme in Aerospace Engineering	2	2	100
Bachelor of Technology Under Five Year Dual Degree (BTech - MTech) Programme in Electrical Engineering	1	1	100

II. BTech

Course	Appeared	Passed	Pass Percentage
Bachelor of Technology in Aerospace Engineering	34	31	91.2
Bachelor of Technology in Civil Engineering	99	99	100
Bachelor of Technology in Computer Science and Technology	73	73	100
Bachelor of Technology in Electrical Engineering	74	74	100
Bachelor of Technology in Electronics and Telecommunication Engineering	50	50	100
Bachelor of Technology in Information Technology	76	76	100
Bachelor of Technology in Mechanical Engineering	79	79	100
Bachelor of Technology in Metallurgy and Materials Engineering	30	30	100
Bachelor of Technology in Mining Engineering	31	31	100

III. Dual Degree (BTech)

Course	Appeared	Passed	Pass Percentage
Bachelor of Technology Under Five Year Dual Degree (BTech - MTech) Programme in Civil Engineering	3	3	100
Bachelor of Technology Under Five Year Dual Degree (BTech - MTech) Programme in Electrical Engineering	3	3	100

IV. Dual Degree (MTech)

Course	Appeared	Passed	Pass Percentage
Master of Technology Under Five Year Dual Degree (BTech - MTech) Programme in Civil Engineering	3	3	100
Master of Technology Under Five Year Dual Degree (BTech - MTech) Programme in Electrical Engineering	3	3	100

V. MTech / MPlan / MSc / MBA

Course	Appeared	Passed	Pass Percentage
Master of Technology in Applied Mechanics	22	22	100
Master of Technology in Civil Engineering	46	45	97.8
Master of Technology in Computer Science and Engineering	13	13	100
Master of Technology in Electrical Engineering	15	15	100
Master of Technology in Electronics and Telecommunication Engineering	30	29	96.7
Master of Technology in Information Technology	14	14	100

Master of Technology in Mechanical Engineering	24	23	95.8
Master of Technology in Metallurgy and Materials Engineering	6	6	100
Master of Technology in Geoinformatics	11	8	72.7
Master of Technology in Mining Engineering	4	4	100
Master of Technology in Materials Science and Engineering	8	8	100
Master of Technology in Renewable Energy Science and Technology	12	12	100
Master of Technology in Mechatronics	16	16	100
Master of Technology in VLSI Design	16	16	100
Master of Technology in Biomedical Engineering	12	12	100
Master of Technology in Safety and Occupational Health	7	7	100
Master of Planning	13	12	92.3
Master of Science in Chemistry	25	25	100
Master of Science in Applied Geology	7	7	100
Master of Science in Applied Mathematics	26	26	100
Master of Science in Physics	21	20	95.24
Master of Science in Food Processing & Nutrition Science	11	11	100
Master of Business Administration	19	19	100

3.10 Convocation

The Ninth Annual Convocation of the Institute was held on December 16, 2022. Swami Suvirananda, Hon'ble Chancellor Ramakrishna Mission Vivekananda Educational and Research Institute and General Secretary Ramakrishna Math and Ramakrishna Mission delivered the Convocation Address as the Chief Guest. Dr. Vasudev K Aatre, Former Director General, Defense Research and Development Organization (GoI) & Former Scientific Adviser to Raksha Mantri & Chairperson, Board of Governors, IIEST, Shibpur, presided over the function. Prof. Parthasarathi Chakrabarti Director, IIEST, Shibpur delivered the Welcome Address.

Total number of Degree recipients in this Convocation was 1012. Degrees and prizes were awarded in this Convocation to a total of 560 Undergraduate students of 10 courses, 370 postgraduate students from different courses, 06 Dual Degree students of two courses and 76 Ph.D. Fellows who have completed their studies and passed the examinations during this period. Medals have been awarded to 37 candidates who have secured highest marks in different disciplines. THE PRESIDENT OF INDIA GOLD MEDAL was awarded to the student Souradip Nath, Information Technology Department who secured 1st position among the undergraduates of all ten engineering disciplines taken together. GANESH CHANDRA MITRA MEMORIAL MEDAL was awarded to the students Shreya Mukherjee, Mathematics Department & Tamal Khamrui, School of VLSI Technology who secured 1st position among the postgraduates of all the disciplines taken together. Some endowment medals also have been awarded to the students who have stood first in their respective disciplines or have secured highest marks in particular subject.

04 Academic Units

4. Academic Units

- ***DEPARTMENTS***

4.1 Department of Aerospace Engineering and Applied Mechanics (AE&AM)

The Department of Applied Mechanics was established as a major engineering department in 1947, and from 2008 the Department was renamed as the Department of Aerospace Engineering and Applied Mechanics. The Department offers undergraduate program in Aerospace Engineering and postgraduate programs in different areas of Applied Mechanics. Till date, the prominent research areas of the department are Aerodynamics, Aerospace structures, High speed flow, Fluid dynamics, Turbulence, Biomechanics, Robotics and Mechatronics, Structural Dynamics and Earthquake Engineering, Soil-Structure Interaction, Hydraulics, Propulsion and Combustion etc. Recent sponsors of research projects at the department include: DST, DRDO, NAL, AICTE, UGC, BARC, BRNS, MHRD, Ministry of Earth Science 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.

- **Invited Talk / Key-Note Address Given**

1. Dr. Subhasis Bhaumik delivered a Lecture on "Applications of Machine Vision in Industrial Automation, Robotics and Industry 4.0" Short Term Course on Machine Vision for Robot Applications in Manufacturing, Centre of Excellence in Advanced Manufacturing, IIT Kharagpur, May 2022.
2. Dr. Subhasis Bhaumik delivered a Lecture in the Refresher Course on "Entrepreneurship Development and Business Management/Commerce", UGC's HRDC at Punjabi University, Punjab, August 2022
3. Dr. Subhasis Bhaumik delivered a Lecture in AICTE Faculty Development Program on "Innovative micro- and nano-technologies and fundamental principles", HIT Haldia, November 2022.

4. Dr. Subhasis Bhaumik delivered an Impact Lecture on "University, Creativity and Innovation: Leading the way to Entrepreneurship", August 2022, RCC Institute of Information Technology, Kolkata
5. Dr. Subhasis Bhaumik delivered an Invited talk in the SERB Sponsored Karyashala entitled "Application of Artificial Intelligence (AI) and Machine Learning (ML) Techniques in Robotics", CSIR – CMERI Durgapur, January 2023.
6. Dr. Subhasis Bhaumik delivered an Invited talk, in the workshop on Robotics and Drone, CIT Kokrajhar, February 2023.

- **Invited Talk Organised**

1. Professor, J. Mike Walker '66 Department of Mechanical Engineering [MEEN], Texas A&M University [TAMU] delivered invited talk on "Meanderings of a Mechanical Nano-Technologist: From Engineering-Ethics to Engineering-Medicine" on 2nd December, 2022,

4.2 Department of Architecture and Planning

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The Department of Architecture, Town and Regional Planning at the Indian Institute of Engineering Science and Technology, Shibpur has a long and rich history. Shortly after Independence, in 1949, two sister Departments were established at the erstwhile Bengal Engineering College, that is, the Department of Architecture headed by Mr G K Paknikar and the Department of Town and Regional Planning headed by MrAbani Kumar De. The former offered the first 5-Year undergraduate degree in architecture of the country (Bachelor of Architecture-B Arch), the latter offered the first 2-Year postgraduate diploma in town and regional planning of the country (Diploma in Town and Regional Planning-DTRP).

Later, in October 1952, the two Departments merged to form the Department of Architecture, Town and Regional Planning headed by Mr Joseph Allen Stein, the renowned American architect, who has left his indelible mark in the post-independence architecture of India. The DTRP programme subsequently became a full-time course in Master of Town and Regional Planning (MTRP) from 1975.

In 2019, responding to the requirements of the present times, the postgraduate programme was upgraded as Master of Planning (specialization in Urban and Regional Planning). This was done to broaden the horizon of the Department in terms of academics, research and students' employment opportunities.

In its first ever participation as an independent entity in the National Institutional Ranking Framework (NIRF) for Architecture, approved by the Ministry of Human Resource Development, the Department obtained the sixth position in India rankings 2020, from amongst 66 participating institutions and departments of architecture.

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.

4.3 Department of Chemistry

Photon Technology International (PTI) spectrophotometer (Horiba, Delta diode) and multifunctional time-correlated single-photon counting (TCSPC) fluorescence spectrophotometer

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 &Supra-molecular Chemistry, Structural Chemistry, Catalysis, Synthetic Organic & Organometallic Chemistry, Thin Film Semiconductor, Solar Photo-voltaic & Photo-electrochemical Cells, Non-linear Optical Phenomena: Modelling& Computation, Non-equilibrium Statistical Mechanics, Relativistic & non-relativistic Electronic Structure Theory, and Fluorescence Spectroscopy and Imaging. 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.

Gas Chromatography

- **Workshops/Conference/Seminars/Symposium/Webinars etc. Organized**

1. The Department of Chemistry, IIEST, Shibpur organized a One-day program, "National Chemistry Day" to celebrate the 161st Birth Anniversary of Acharya Sir Prafulla Chandra Ray on 2nd August, 2022.
2. The Department of Chemistry, IIEST, Shibpur in association with IIT, Dhanbad organized a 7-day workshop on "Advanced Instrumental Techniques for Chemists" from July 18, 2022 to July 24, 2022 under the aegis of DST-STUTI Programme.

- **Workshops/Conferences/Seminars Attended in India and Abroad**

1. Dr. Ajit Kumar Mahapatra: "International Conference on Recent Advances in Materials Chemistry and Catalysis (RAMCC-2023)", Organised by Department of Chemistry, Dibrugarh University, Dibrugarh, Asam, March 1-3, 2023,
2. Dr. Ajit Kumar Mahapatra: National Workshop on "Hands-on Training on the Development of Image-guided Theranostic as Personalized Medicine" Organized by: Centre for Interdisciplinary Sciences (CIS) JIS Institute of Advanced Studies and Research (JISIASR) Kolkata, JIS University, January 16 -22, 2023,
3. Dr. Ajit Kumar Mahapatra: International Symposium on 'Exploring Molecules, Materials and Bio-materials for Sustainable Society' Organized by: Department of Chemistry, Midnapore College (UG & PG Autonomous), 8-10th September, 2022,
4. Dr. Ajit Kumar Mahapatra: National Workshop on "Faculty Development Program on Recent Trends in Material Frontiers: Chemical and Biological Aspects**"** Organized by: Department of Chemical and Biological Sciences (CBS), Amity University, Kolkata, 01–05 August**,** 2022,
5. Prof. Shyamal Kumar Chattopadhyay attended and Chaired a Technical session at the 27th ISCB International Conference (ISCBC-2022) held during 16 - 19th Nov 2022, at BIT Mesra, Ranchi, jointly organized with Indian Society of Chemists and Biologists (ISCB) and Department of Chemistry, BIT-Mesra.
6. Dr. Jhuma Ganguly chaired a Technical session in the Celebration of the 161st Birth Anniversary of Acharya Prafulla Chandra Ray and International Seminar during August 02 and 03, 2022, in association with Bangladesh Chemical academy and Department of Chemistry, Javadpur University, WB, India.
7. Dr. Jhuma Ganguly chaired a Technical session in International conference in Recent Trends in Chemical sciences-2022 (RTCS-2022), Organized by Indian Chemical Society,

and hosted by Department of Chemistry and Chemical Biology, Indian Institute of Technology (ISM) Dhanbad, India during 16-18th December, 2022.

8. Dr. Jhuma Ganguly attended and acted as an adjudicator for the Poster session in 2nd International Conference on "Advanced Developments in Chemistry and Allied Sciences-2023 (ADCAS-23)" is being organized on 17th-18th January 2023 at Deenbandhu Chhotu Ram University of Science and Technology Murthal, Sonepat, India
9. Dr. Ajit Kumar Mahapatra: National Workshop on "Faculty Development Program on Recent Trends in Material Frontiers: Chemical and Biological Aspects" Organized by: Department of Chemical and Biological Sciences (CBS), Amity University, Kolkata, 01–05 August, 2022, Invited Lecture Topic: Fluorescent probes for toxic chemical sensing.
10. Dr. Chinmoy Bhattacharya attended the international conference on "Electrochemistry in Industry, Health and Environment - 2023 (EIHE-2023)". Organized by the DAE-BRNS and Indian Society for ElctroAnalytical Chemistry (ISEAC), held at BARC, Mumbai, India, during February 7 - 11, 2023.
11. Dr. Chinmoy Bhattacharya attended the international conference on "Recent Trends in Chemical Sciences-2022 (RTCS-2022)"; organized by: Indian Chemical Society, hosted by: Dept. of Chemistry & Chemical Biology, IIT (ISM), Dhanbad, during Dec.16-18, 2022

- **Invited Talk / Key-Note Address Given**

1. Dr. Jhuma Ganguly delivered Invited talk on "Functionalized Microgel" in International conference in Recent Trends in Chemical sciences-2022 (RTCS-2022), Organized by Indian Chemical Society, and hosted by Department of Chemistry and Chemical Biology, Indian Institute of Technology (ISM) Dhanbad, India during 16-18th December, 2022.
2. Dr. Jhuma Ganguly delivered an Invited talk on "Sugar based hydrogels for Targeted applications" in 2nd International Conference on "Advanced Developments in Chemistry and Allied Sciences-2023 (ADCAS-23)" is being organized on 17th-18th January 2023 at Deenbandhu Chhotu Ram University of Science and Technology Murthal, Sonepat, India
3. Prof. Shyamal Kumar Chattopadhyay delivered an invited talk titled "Biomimetic catalysis using copper and vanadium complexes" at the 27th ISCB International Conference (ISCBC-2022) entitled "Research and Innovation in Chemical, Pharmaceutical, and Biological Sciences." held during 16 - 19th Nov 2022, at BIT Mesra, Ranchi, jointly organized with Indian Society of Chemists and Biologists (ISCB) and Department of Chemistry, BIT-Mesra.
4. Dr. Chinmoy Bhattacharya delivered an invited lecture on "$BiVO_4$-a futuristic Semiconductor for Photoelectrochemical Applications" in the international conference on "Electrochemistry in Industry, Health and Environment - 2023 (EIHE-2023)". Organized by the DAE-BRNS and Indian Society for ElctroAnalytical Chemistry (ISEAC), held at BARC, Mumbai, India, during February 7 - 11, 2023.
5. Dr. Chinmoy Bhattacharya delivered an oral presentation on "In Situ Chemical Synthesis of g-C_3N_4/In_2O_3... Photoelectrochemical Water Oxidation" in the international conference on "Recent Trends in Chemical Sciences-2022 (RTCS-2022)"; organized by: Indian Chemical Society, hosted by: Dept. of Chemistry & Chemical Biology, IIT (ISM), Dhanbad, during Dec.16-18, 2022
6. Dr. Ajit Kumar Mahapatra delivered an Invited Lecture on "Small molecule fluorescent probes for the detection of hazardous nerve and choking agents" at the "International Conference on Recent Advances in Materials Chemistry and Catalysis (RAMCC-2023)", Organised by Department of Chemistry, Dibrugarh University, Dibrugarh, Asam, March 1-3, 2023.
7. Dr. Ajit Kumar Mahapatra delivered an Invited Lecture on "Therapeutic Regimen of Nerve Agent Poisoning" at the National Workshop on "Hands-on Training on the Development

of Image-guided Theranostic as Personalized Medicine" Organized by: Centre for Interdisciplinary Sciences (CIS) JIS Institute of Advanced Studies and Research (JISIASR) Kolkata, JIS University, January 16 -22, 2023.

8. Dr. Ajit Kumar Mahapatra delivered an Invited Lecture *on* "Small molecule fluorescent probes for the detection and quantification of hazardous nerve agents and biochemical signaling species" at the International Symposium on 'Exploring Molecules, Materials and Bio-materials for Sustainable Society' Organized by: Department of Chemistry, Midnapore College (UG & PG Autonomous), 8-10th September, 2022.

- **Invited Talk Organised**

1. Prof. Sanjit Konar, Department of Chemistry, IISER Bhopal, on the topic "Spin-State Switching in Dynamic Molecular Materials" at 3.00 PM on 16th September (Friday) at the Seminar room of the Department of Chemistry, IIESTS

4.4 Department of Civil Engineering (CE)

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.

Prototype frame Model

Lock gate model

- **Workshops/Conference/Seminars/Symposium/Webinars etc. Organized**

1. Department of Civil Engineering has organised 3rd international conference on advanced technologies for industrial pollution control (ATIPC-2022), 21st -23rd December 2022, Chairman Prof. Ambarish Ghosh, Executive Chairman Prof. Debabrata Mazumder, Co-Chairman Dr. Chanchal Majumder and Dr. Asok Adak.

- **Workshops/Conferences/Seminars Attended in India and Abroad**

1. Dr. Tapas Kumar Roy attended the International Conference namely the 4th African Regional Conference on Geosynthetics (GEOAFRICA 2023)' organized by the Geo-African Society, Cairo, Egypt on 20th-23rd February 2023.
2. Dr. Chanchal Majumder presented the following papers on
   a) Development for the Detection of 2-Methylpyridine by High-Performance Liquid Chromatography.
   b) Decolourization of Textile Dye RR-141 using Electrochemical Process.
3. Dr. Anuj K Budhkar attended the conference titled Recent Advances in Traffic Engineering (RATE 2022) organized by SVNIT Surat on 11th -12th November 2022 and presented the paper titled “Driver Perception of Superimposed Horizontal and Vertical Road Curves for Bi-Directional Roads. Recent advances in Traffic Engineering (RATE 2022).”

- **Invited Talk / Key-Note Address Given**

1. Prof. Sudip K. Roy and Dr. Pritam Saha delivered the invited talk on "Deficiencies in the planning of roadways and traffic systems – a review of peri-urban road environment of Kolkata", SVBTC-Round Table Dialogue, Kolkata, 14th March 2023.
2. Prof Sudip K. Roy and Dr. Pritam Saha delivered the invited talk on "Impact of E-Rickshaws in City Traffic", One day workshop on 'City Road User Concerns: Priorities and Solutions organized by CEAI, Kolkata, 7th May 2022.

3. Prof. Subrata Chakraborty delivered a keynote talk at the 12th Structural Engineering Convention-An International Conference, MNIT Jaipur, 19th-22nd Dec. 2022 on the topic "Metamodeling Approach of Reliability Analysis of Underground Tunnel."
4. Prof. Aparna Dey Ghosh delivered the webinar on "Tuned Liquid Dampers for Structural Vibration Control" organized by the Council of Vibration Specialists on 28th June 2022.
5. Prof. Ambarish Ghosh has delivered a lecture as keynote speaker on the topic "Geotechnical challenges in the construction of metro tunnel under river Ganga for east-west Metro Rail in Kolkata" at an International Seminar on "Recent Challenges in the Field of Civil Engineering for a Sustainable Future" organized by the Civil Engineering Department, Aliah University on 17th March 2023.
6. Dr. Tapas Kumar Roy delivered the invited talk / Keynote on Quality Control of Highway Construction for the Engineers/ Officers of PWD, Government of West Bengal. Public Works (Roads) Directorate, Government of West Bengal organized by the Civil Engineering Department, IIEST Shibpur held on 5th-10th June 2023.
7. Dr. Sujit Kr. Dalui delivered the keynote talk at the structural Laboratory of City College, Landon, 20th -27th Feb. 2023 on the topic "Advances on Inerter-based Vibration Absorbers for Resilient Structures to Wind and Earthquake Hazards."
8. Dr. Dipankana Bhattacherjee delivered a distinguished lecture on "Mitigation of Rainfall-Induced Slope Instability in Hilly Terrain using Hybrid Geosynthetic Inclusions" on 21st April 2022 at the University of Engineering and Management (UEM), Jaipur under the flagship of the Institution's Innovation Council.

- **Invited Talk Organised**

1. An Invited Talk was organized by Prof. Chaitali Ray, Dr. Sujit Kumar Dalui, and Dr. Saptarshi Kundu on "Physics-based Simulation in Research and Education: Current Practices and Key Initiatives" on 20th July 2022 at the Seminar Hall of the CE Department, which was delivered by Dr. Dipankar Choudhury, Ansys Fellow and Deputy CTO, Academic, and Research Programs Lead, Ansys Inc.
2. Prof. Arun Kr. Chakraborty has organized a series of invited lectures on the following topic:
   a) Steel Bridge Construction and Mechanized construction on 4th April 2022 at the seminar Hall of the CE dept., which was delivered by Mr. Achyut Ghosh, Technical Advisor (International) Mageba SA, Switzerland.
   b) Present-day concrete construction for infrastructure Projects using construction chemicals on 11th April 2022 at the seminar Hall of the CE dept., which was delivered by Mr. Milon Muhkopadhyay, Ex-Project Manager, H.C.C. (Kolkata Metro Projects).
   c) Application of grouts & sealants in construction on 9th November 2022 at the seminar Hall of the CE dept., which was delivered by Mrs. Ankana Ganguly, Regional Technical Head (East) STP Ltd (A Berger group of companies).
   d) Distress of foundation system: from the construction point of view on 16th November 2022 at the seminar Hall of the CE dept., which was delivered by Mr. Sudip Nath, Senior General Manager & H.O.D. (Geotechnical) of CE Testing Company Pvt. Ltd.
   e) Steel Bridge Construction and Necessity of Bridge Maintenance, Restoration techniques on 23rd March 2023 at the seminar Hall of the CE dept., which was delivered by Mr. Amitabha Datta, Ex-Vice President, STUP Consultant Pvt. Ltd.

4.5 Department of Computer Science and Technology (CST)

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 are Machine learning including Deep Neural Networks and Soft Computing techniques, Generative Adversarial Networks, Internet Of Things, Wireless Sensor Network, Mobile Computing, Cryptanalysis, Image, Text, Audio and Video Processing including Medical Image Analysis, Code Mixed Bilingual Language Processing, Low Resource Real Time Image Processing and Sequence Tagging, Managing Uncertainty in Primary Healthcare. Further, the department also conducts advanced research on Interconnection Network, Mixed Signal Design and Testing, Text Mining in Diverse Social Media Data Analysis, 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.

Hardware Laboratory

Software Laboratory

- **Sponsored Programme Organised**

1. Dr. Biplab Kumar Sikdar: Second Asian Symposium on Cellular Automata Technology, 2023 (ASCAT 2023), March 2-4, 2023.

- **Workshops/Conferences/Seminars Attended in India and Abroad**

1. Dr. Apurba Sarkar Attended the International Workshop on Combinatorial Image Analysis (IWCIA 2022), Messina (Italy), 13-15 July 2022.
2. Dr. Apurba Sarkar Attended the International Conference on Data, Electronics and Computing (ICDEC-2022), 7th - 9th September, 2022.

- **Invited Talk / Key-Note Address Given**

1. Prof. Jaya Sil delivered an Invited talk on Reinforcement learning, organized by St. Thomas' College of Engineering & Technology, 4, Diamond Harbour Road, Kidderpore, Kolkata, West Bengal India 700023, 2023.
2. Prof. Sipra Das Bit delivered an Invited Lecture in Analytics Global Conference 2023 held in association with IIM Bangalore, organized by Analytics Society of India, Kolkata Chapter, 2023.
3. Prof. Sipra Das Bit delivered an Invited Lecture in Faculty Development Program on 'Data Security & IoT organized by St. Thomas' College of Engineering and Technology, Kolkata in July, 2022.

4.6 Department of Electrical Engineering (EE)

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 around Rs.5 crores are under execution. There have been consistent

efforts in the field of Magnetics for the last few years. The notable Research Projects from the Department of Electronics and IT, GoI going on during the 2020-21 are Wide- band Gap Based Semiconductor Device for High Current Industry Applications; MEMS for Electric Machines and Drives, Magnetic Core Power Inductors. Also, international Research Project Collaboration under the SPARC Scheme of MHRD is going on with, MIT USA in vibration monitoring systems for switched reluctance motor-based drives. Research work on high efficiency power electronic converter technology using next generation Si/SiC-based switching devices for high frequency operation under reduced losses, is under development with University of Hiroshima, Japan. Another new field in the Area of Magnetics has been funded by DST, GoI, past researches in the Areas of Magnetic Bearings have opened up another Area for Exploration of Knowledge, i.e. Applications of Magnetostriction in Energy Harvesting. The research project aims to investigate various behaviors of magnetostrictive energy harvester under mechanical stress or vibration. To add to the laurels of the Department, the intellectual assets created over the years have been patented, and have been granted this year, one in the area of instrumentation-in favour of both the Indian Council of Agricultural research (ICAR) and IIEST, Shibpur, 'A system for testing dynamically bending behaviour of semi rigid fabrics and a method of such testing.' And the second in the area of Power Electronics 'A Low Cost, Small in size and High Frequency Current Sourced Converter for Induction Cooking Application and heat treatment in soft metals.'

4.7 Department of Earth Sciences (ES)

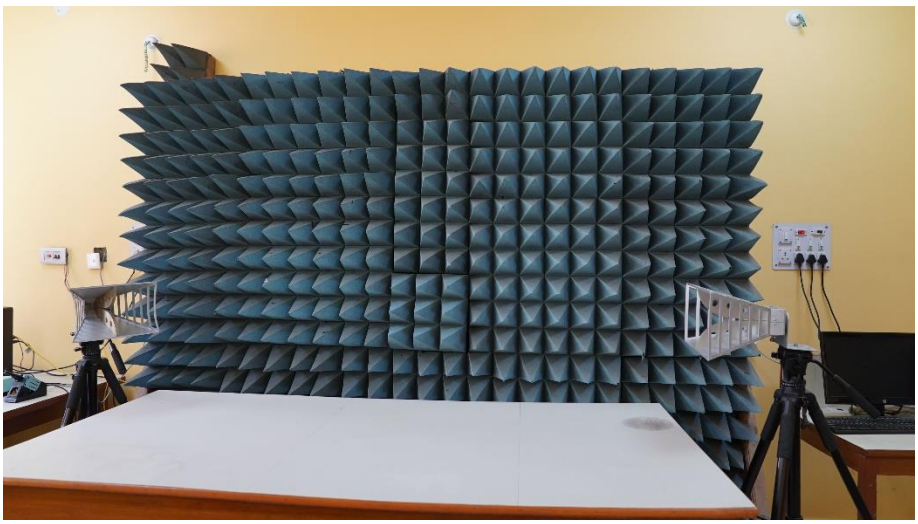
The subject of geology was first introduced in the civil engineering curricula more than a century ago in the Department of Civil Engineering. Furthermore, Geology became an important section of the Department of Mining ever since its establishment in 1956. With introduction of master's programme in applied geology, the department bifurcated and the Department of Geology came into being in 2005. It was later named as the Department of Earth Sciences to host teaching and research in a wide spectrum of Earth Sciences. This diversification from classical Geology has helped students to undertake research programs in other interesting fields like Hydrogeology with an application of GIS and Remote Sensing, Geophysics and Tectonic Geomorphology.

Students of the present department are being trained by permanent and eminent visiting faculty members involved in frontier areas of research like Structural Geology, Igneous & Metamorphic Petrology, Sedimentology, Sequence Stratigraphy, Basin tectonics,

Hydrogeology, Environmental Geology etc. The students are taught to apply their knowledge to cope up with the need of hydrogeological problems, natural hazard mitigation, petroleum or mineral exploration, and geoscience research at par with international standard. Students are also getting the facility of performing analogue experiments in Experimental Geology Laboratory which will help students to understand the dynamics of Earth and process-response systems. The curriculum has been revised to meet the requirements of various Industries and National competitive examinations. The knowledge is helping them to get jobs in Government organizations like SWID, Geological Survey of India, Oil sectors, Mining Industries, and Academic Departments. Training of application of geological knowledge, which is essential for mine planning, handling other problems of mining geology and engineering geology are also being imparted to them in this course.

Within a short span of time, the department has been able to accommodate several numbers of research scholars for the Ph.D. degree. At this stage, they are enrolled and working on research problems in Hydrogeology, GIS-Remote Sensing applications, Sedimentology and Structural geology with Mathematical modelling. For the purpose of study, fund has been sanctioned through projects, mentored by the faculty members from the Department of Science &Technology, Govt. of India, University Grants Commission, ONGC& WBPDCL. The Department aims to focus on future efforts to apply geoscientific research in multidisciplinary subjects.

4.8 Department of Electronics and Telecommunication Engineering (ETCE)



The department of Electronics and Telecommunication Engineering started its journey in July, 1967 after its nucleation from the Department of Physics and Telecommunication from the erstwhile Bengal Engineering College. The batch of Electronics and Telecommunication engineers graduated from this department in 1971. The Master's program was launched in 1972 and the first batch of post graduate passed out in 1974. Currently, PG programmes are offered in the specialization of Microelectronics and VLSI Design, Microwave Communication, and Communication Engineering and Signal Processing.

The department, besides engaging itself in undergraduate and postgraduate teaching has a heritage of conducting research in various fields like MEMS based Biosensors, Graphene and other two dimensional material based gas sensor devices, Microwave Devices, Electromagnetic Metamaterial, Microstrip Antennas, MIMO Radars for Collision Avoidance, VLSI Architecture Design for Real Time Signal and Image Processing Systems, Energy and

Spectrally Efficient Wireless communication for Cellular IoTApplications, Artificial Intelligence in Medical Image Processing, Deployable Biosensors System for Pathogen Detection, Photonic Topological Devices based on 2D Photonic Crystal.

Department laboratories are upgraded with several high-end equipment like RF Network Analyzer (100MHz-40 GHz), Vector Signal Generator (9kHz-3GHz), Automatic PCB Prototype Machine for designing microstrip circuit, Photodiode Characterization Unit (200-2000 nm with Czerny-Turner Configuration), EDFA Training System, Laser Spectrum Analyzer, Positioner System for Antenna Measurements, BET Surface Area and Pore Size Analyzer, Dielectric Measurement Kit, Software Defined Radio and many more. Considerable effort has been put forward during the last couple of years towards setting up new laboratories for undergraduate and post graduate students like Microelectronics Lab, Digital Signal and Image Processing Lab, VLSI and CAD Lab, Microwave Research Lab and Anechoic Chamber, Wireless Communication Lab, Optoelectronics Lab.

The faculty members are actively engaged in their individual as well as numerous collaborative and sponsored research projects of UGC, CSIR, ISRO, DST, AICTE, DRDO, etc., worth a high value. In course of their research faculty members have published large volume of quality publications in different international and national journals and conferences. Faculty members have also earned lot prestigious awards and laurels through their research. Department has produced large number of technologists, scientists and educationalists over more than fifty years who are bearing the flag of the department worldwide.

4.9 Department of Human Resource Management (HRM)

The erstwhile Department of Training and Placement, was renamed as Department of Human Resource Management with extension of activities beyond job placements and training. The department also offers Ph.D. programmes in the areas of Entrepreneurship and IPR. The major current activities of the department encompass the following:

- Job Placements of students of the Institute through Campus and Off-campus selection processes.
- Summer Internship of the students of the Institute including Summer Internship Programme at foreign universities and Remote Internship Programme at reputed industries.
- Facilitating Internships of students of other Institutes under supervision of different faculty-members of IIESTS.

- Facilitating various Grooming up (Personality/Soft-Skill/ Performance Effectiveness) Programmes for the Students
- Organizing / facilitating various Industry Engagement events / activities on behalf of various major industries

During 2022-23 academic year, campus placement selection process, both for final recruitment and Internship, have successfully been organized mostly on a physical /hybrid mode, after a long spell of almost two years when the selection processes were held only on virtual mode due to severe Covid pandemic resulting in lock-down. Infrastructure facilities are also being augmented at HRM department to cope up with the increasing demands of the recruiters.

4.10 Department of Humanities and Social Sciences (HSS)

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 syllabus 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 Writing 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. The department seeks to offer new courses on Basic & Development Economics, Data Analysis and Corporate Governance in the near future.

The HSS Department also runs an outreach programme named “ICCHE.” Under the aegis of this programme, the students of IIESTS teach local slum and pavement dwelling children after class hours. They also organize hands-on training in computers and teach children a variety of life skills. ICCHE has also done commendable work during the Covid period in distributing provisions to the families in the neighbourhood. ICCHE not only benefits the above-mentioned children but also the participating students of IIESTS who get a grooming in having a sense of social responsibility and feeling of empathy towards the underprivileged and downtrodden section of the society. The programme is running under at present the guidance of CMA Rupen Basu Mallik, an Associate Professor of the Department.

- **Workshops/Conference/Seminars/Symposium/Webinars etc. Organized**

1. Shri Subhasis Bandyopadhyay as the National Convener organized four sessions of RC-24, Sociology of Childhood and Youth of Indian Sociological Society in the 47th All India Sociological Conference at USTM, Meghalaya during 20-22 December, 2022.

- **Workshops/Conferences/Seminars Attended in India and Abroad**

1. Shri Subhasis Bandyopadhyay: Realignment of the concepts: Kashmiriyat and the STEAM International Conference organised at Sher E Kashmir University of Technology in Awantipora, during 6th-7th September, 2022
2. Shri Subhasis Bandyopadhyay: Chaired a Session on Cellular Automata and Culture in the First Asian Symposium on Cellular Automata Technology, 2022 (ASCAT 2022), International conference, 03-Mar-22 to 05-Mar-22.
3. Debalina Das & Dr. Averi Mukhopadhyay: Spectatorship, Gender Performance, and Gaze in Satoshi Kon's Perfect Blue Gender, Culture and Society, organised by New Literaria- An International Journal of Interdisciplinary Studies in Humanities in collaboration with the Department of English and Foreign Language, Guru Ghasidas Vishwavidyalaya, Bilaspur, during 25th-27th November, 2022
4. Miss. Rachna & Dr. Averi Mukhopahyay: The Importance of Geographical Space on Women's Existence and its Consequences on Social and Psychological space of women: A Special reading of Mitra Phukan's *The Collector's Wife* in Gender, Culture and Society, organised by New Literaria- An International Journal of Interdisciplinary Studies in Humanities in collaboration with the Department of English and Foreign Language, Guru Ghasidas Vishwavidyalaya, Bilaspur, during 25th-27th November, 2022
5. Dr. Madhumita Roy: Colonial Policing Curbing Crimes and Reinstating Discipline in Amitav Ghosh's Sea of Poppies: A Postcolonial Critique Crime and Punishment in Colonial India, organised by the Department of English & IQAC K.K. Das College, Kolkata in Collaboration with New Alipore College & Maheshtala College, on 9th December, 2022
6. Shri Arnab Roy & Dr. Madhumita Roy: Colonial Discursive Forces and the Alienation of Individual Selves: A Postcolonial Critique of Amitav Ghosh's The Glass Palace British Commonwealth and Postcolonial Studies Conference, organised by Georgia Southern University, Department of English, during10th-11th February, 2023)
7. Dr. Mallika Ghosh Sarbadhikary: The Absent Women in Feluda's World RC-24, Sociology of Childhood and Youth of Indian Sociological Society, in the 47th All India Sociological Conference at USTM, Meghalaya, during 20th-22nd December, 2022

- **Invited Talk / Key-Note Address Given**

1. Dr. Mallika Ghosh Sarbadhikary had joined the OED Researchers Advisory Group for 2023-2024. She had delivered a lecture in the Sensitization and Advocacy Workshop organized by the ICC of Jadavpur University on 22nd November 2022. She had delivered a lecture at NIT, Durgapur in the sensitization programme organized by the ICC on 25th Nov 2022.
2. Shri Subhasis Bandyopadhyay had delivered a Plenary Session talk on Regional Aspirations in India in an International Conference organized to commemorate 100 Years of the Sociology Department at Lucknow University during April 28-30, 2023.

4.11 Department of Information Technology (IT)

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.

4.12 Department of Mathematics

The Department of Mathematics, established at the very inception of the institute, has consistently been one of the most active departments both in terms of delivery of course material and research output. Besides instilling in the undergraduate engineering students of

the institute the rudiments of pure and applied mathematics since its commencement in 1856, the department has also been offering the Masters of Science in Applied Mathematics degree since the year 2000. Correspondingly, the department now undertakes the teaching of a wide variety of Pure and Applied courses including Analysis, Algebra, Differential Equation, Discrete Mathematics, Linear Programming, Operations Research, Mathematical Biology, Statistics, Numerical Analysis and Computational Techniques, to undergraduate and postgraduate students in various branches of Science, Engineering and Architecture. The department also has a rich history of conducting impactful research in these and other related fields of Mathematics. Specifically, research work is undertaken throughout the areas of Functional Analysis, Topology, Nonlinear Dynamics and Chaos, Mathematical Biology, Elasticity, Fluid Mechanics, Cosmology, Quantum Information Theory, Mathematical and Statistical Theory of Life Testing and Reliability, Fuzzy Logic, Fuzzy Optimization and Application in Operations Research, Management System.

- **Invited Talk / Key-Note Address Given**

1. Dr. Tapan Kumar Kar: FDP on Mathematical Biology and Biostatistics, Organised by Department of Mathematics, Amity University, Kolkata, Others, 26-Jul-21 to 30-Jul-21

- **Invited Talk Organised**

1. Prof. Agnieszka Krystyna Wiszniewska - Matyszkiel, Faculty of Mathematics, Informatics and Mechanics, Institute of Applied Mathematics and Mechanics, University of Warsaw, Poland delivered a talk on the topic mathematical model of the tragedy of the commons with relation to counteracting pandemic on 16.02. 2023 at 11:30 AM.

4.13 Department of Mechanical Engineering (ME)

Though the department started its journey in 1921, the first degree level course in Mechanical Engineering started in 1930. Postgraduate courses in the department started in 1954. Over the years, through its high level of teaching and research, the department has earned a name and fame for itself, making significant contributions to this important field of engineering. The department offers 8-Semester Undergraduate (B. Tech.) and 4-Semester Postgraduate (M. Tech.) courses in Mechanical Engineering, with current annual intakes of 96 and 33, respectively. A 10-semester Dual Degree (B. Tech.-M. Tech.) Program is also in place.

Currently, M. Tech. courses are available in three specializations, namely, Machine Design, Thermal Engineering, and Manufacturing Science.

The department runs a full-time PhD program, where currently 19regularresearch scholars are engaged, mostly with institute fellowship, in research in the frontier areas like vibration and control, composite materials, tribology, energy technology and renewable energy, non-traditional machining, biomechanics, advanced ceramics, combustion science and technology, alternative fuels, CFD and numerical heat transfer. Many research projects are supported by funding agencies like DST, MHRD, BRNS etc.

The departmental faculty consists of erudite teachers who actively pursue original research work and publish the findings in the reputed international journals and also disseminate their experiences through invited talks in national and international conferences and seminars. Many faculty members work in close cooperation with researchers in other Indian as well international institutes and some are also associated with renowned professional societies like Society of Automotive Engineers (SAE), Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE), Solar Energy Society of India (SESI), American Society of Mechanical Engineers (ASME, USA), Institution of Mechanical Engineers (IMechE, UK), The Institution of Engineering and Technology (IET, UK) etc.

AY 2022-23 saw the continuation of Centenary Celebration of the Mechanical Engineering Department of IIEST Shibpur, 2021 being the Centenary Year.

- **Workshops/Conference/Seminars/Symposium/Webinars etc. Organized**

As part of the Centenary Celebration, a series of events, mostly in online mode, were initiated in AY 2021-22. The year-long Centenary Lecture Series (CLS) was continued in AY 2022-23, under which weekly invited lectures were delivered by eminent speakers (including department's alumni) from industries as well as academic and research institutes like IISc, IITs, CSIR-CMERI,and from overseas also like USA, Canada, Singapore, etc.

A list of the speakers who delivered lectures during AY 2022-23 under CLS:

Date	Speaker Designation and Affiliation	Title of the talk
04-05-2022	Prof. Mustafizur Rahman Managing Director, MikrotoolsPte. Ltd, Singapore	Innovation Keeps us Relevant
04-12-2022	Prof. Sudipta De Professor, ME, JU, Alumnus 1989	Future Indian Energy: should we step towards decentralisation?
19-04-2022	Dr. Uttam Kumar Chatterjee Former Head, Regional Quality Function, Unilever AAC Alumnus 1976	Total Productive Maintenance - a Japanese approach to move towards ‘zero accident, zero breakdown, zero defects and losses'
26-04-2022	Mr. Subhankar Raha Head, Mechanical Engineering Services, Arya Engineers and Contractors, Pune, Alumnus 1982	Orientation of upcoming engineers to bridge the gap between College & Corporate
31-05-2022	Dr. Prabodh Kumar Maji Former CGM (Energy), MECON Alumnus 1984	Renewable energy for sustainable development: objective, current status, future prospects, and challenges

06-07-2022	Dr. Aniruddha Mukhopadhyay Chief Field Technologist, AnsysInc, USA, Alumnus 1984	Changing landscape of product engineering and blurring the boundaries of science and technology
14-06-2022	Prof. G K Ananthasuresh Professor, ME, IISc Bangalore	Positive Outcomes with Negative Stiffness in Mechanical Design
21-06-2022	Dr. Apurba Mukherjee Co-Founder, VP and CTO, Shaga Medical, USA, Alumnus 1965	Time for a New Approach to Early Detection of Breast Cancer-Intraductal Technologies in the Molecular Liquid Biopsy Age
28-06-2022	Dr. Dheepa Srinivasan Chief Engineer, Pratt & Whitney, United Technology Corporation India Pvt. Ltd., IISc Bangalore	Successful Qualifications of Additive Manufacturing for the Aerospace/Gas Turbine Sector
07-05-2022	Prof. Suman Chakraborty Professor, ME, IIT KGP	Flipping with the flow - Perspectives of puzzling fluid dynamics and human health
07-12-2022	Prof. Pankaj Mallick Professor, ME, University of Michigan, Dearborn, Alumnus 1966	Automobiles, Environment and Lightweighting
19-07-2022	Prof. Narayan Kar Professor, Electrical and Computer Engineering, University of Windsor, Canada	Modern Powertrain Technologies for Electric Vehicles: An Overview
26-07-2022	Dr. Naresh Chandra Murmu Senior Principal Scientist, CSIR-CMERI, Alumnus 1992	Metal Additive Manufacturing System - Developing Affordable System
08-02-2022	Mr. Shyam Ganguli Former Assistant Vice President and Operations Chief Engineer, FM Global, USA,Alumnus 1968	Exciting World of Developing & Utilizing Standards in Real World Applications
08-09-2022	Dr. P Theerthamalai Former Outstanding Scientist and Project Director, Akash-NG, DRDO	Intake Aerodynamics
16-08-2022	Prof. Prasanta Kumar Das Professor, ME, IIT Kgp	Nexus between Human Thermoregulation and Cardiovascular Operations
23-08-2022	Dr. Pradip Saha Chairman and Managing Director, Flotherm Consultants (P) Ltd. Former Principal Engineer, GE Alumnus 1968	Nuclear Power and its Role in Carbon-free Electricity Generation in the future
30-08-2022	Prof. Partha Pratim Bandyopadhyay Professor, ME, IIT Kgp	Thermal Spraying: A technology for adding layers
06-09-2022	Dr. Sudip Bhattacharjee Ford Motor	Vehicle Design for Crashworthiness
13-09-2022	Dr. Sambhunath Nandy CMERI, Alumnus 1994	Underwater Robotics: Design and Control Challenges
27-09-2022	Prof. Pradip Kumar Ray Emeritus Professor, IIT Kgp (IEM) Alumnus 1979	Ergonomic Design of Products in Mechanical Systems Engineering: International Context
11-10-2022	Dr. Gautam Sen Gupta Technical Fellow, Boeing (Retd)	Prediction of Transonic Flutter

18-10-2022	Prof. Sanjay Gupta Professor, ME, IITKgp	The Relevance of Biomechanical Analysis in Joint Replacements: Numerical and Experimental Investigations
01-11-2022	Mr. Shubhendu Dasgupta Former Supervising Engineer for BOP Systems, Illinois Power	Nuclear Safety
08-11-2022	Prof. Amitava Datta Professor, Power Engg, JU	Clean Passenger Mobility: The Case of Bio-Syngas
15-11-2022	Dr. Pradip Saha Technical Fellow, Boeing	Overview of Global Aerospace Parts Manufacturing Technologies
22-11-2022	Prof. Prabir Basu Former Director of Energy Studies, Nova Scotia, Canada	Global climate emergency 2022 - is Kolkata ready!

- **Workshops/Conferences/Seminars Attended in India and Abroad**

1. Prof. Sudip Ghosh has attended the Plenary Meeting (virtual) of ISO/TC 238 Solid biofuels on 19thand 20th May 2022 as part of Indian Delegation.
2. Prof. Bidyut Pal attended a Workshop on '3D Printed Auxetic Structures of Soft and Hard Materials and its High Strain Rate Studies', hybrid mode, IIT Madras, 1-3 September 2022.
3. Prof. Bidyut Pal attended Advanced Level Innovation Ambassador Training program, virtual mode, organized by the MoE Innovation Cell, GoI, Trainee, August 2022.
4. Prof. Santanu Das physically attended a seminar talk on 'Challenges Faced by RVNL during Metro Construction in Kolkata' by Mr. Amit Roy, Executive Director, RVNL, Kolkata, at Rail Vikash Nigam Limited (RVNL) Kolkata Head Office. The seminar was jointly organized on 30 July 2022 by IMechE Eastern India Panel and RVNL.

- **Invited Talk / Key-Note Address Given**

1. Prof.S udip Ghosh has delivered an "Invited Lecture" at the 5th Regional Science and Technology Congress, 2022-23 at Maulana Azad College, Kolkata, on the 5thJanuary, 2023.
2. Prof. Sudip Ghosh has delivered an invited talk in the AICTE sponsored Faculty Development Program on "Innovative micro- and nano-technologies and fundamental principles", organized by HIT Haldia during 14th to 25th November 2022.
3. Prof. Bidyut Pal delivered a keynote address on 'Biomechanical analyses of orthopaedic implants: few examples', International Conference of Materials Science and Mechanical Engineering (ICMSME 2023), organized by the Department of Mechanical Engineering, RERF Group of Institutions, Barrackpore, West Bengal, India,19-20 January, 2023.
4. Prof. Bidyut Pal delivered an invited talk on 'Advances in Orthopaedic Biomechanics' for National Workshop on "Artificial Intelligence in Healthcare", organized by the Department of Computer Science and Engineering, Jalpaiguri Government Engineering College, Jalpaiguri, 3rd August 2022.
5. Prof. Bidyut Pal delivered an invited talk on 'Research and Innovation in Orthopaedic Implants Design' in a one-day seminar on 'Recent Trends and Innovation in Engineering', organized jointly by the Department of Mechanical Engineering and the Department of Computer Science and Engineering, Jalpaiguri Government Engineering College, Jalpaiguri, 2nd August 2022.

- **Invited Talk Organised**

1. Prof. Santanu Das has organized a seminar talk on 'Computational aspects inelectrodynamic measurements' by Dr. Arijit Hazra, Assistant Professor, Mechanical Engineering Department, GITAM Visakhapatnam, India on 17th January 2023

- **Students Achievements**

Event	Students Achievements
SAE M-BAJA 2021-22	Team "Automobeings" earned the 10th position nationally in the SAE m-Baja (2021-22) CAE Round.
ASME E-HPVC 2022	At the ASME e-HPVC 2022, Team "RAGNAR 3.0" was placed third nationally and fourth globally in the Critical Design Review Competition. Additionally, it was ranked 2nd nationally and 6th globally in the innovation competition.
ASME E-HPVC 2022	At the ASME e-HPVC 2022, Our other Team, Team "DYUTI" was placed 9th nationally and 25th globally in the Critical Design Review Competition
TECHGIUM BY LTTS	S. Sowjanya, T. Sai Snehal Kumar were Finalists in "Techgium" organized by L&T Technology Services
ASME ESD 2023	Athena A Shaji was ranked 2nd Globally in ASME Sustainability Innovations Competition in E-Fest digital 2023
Boieng National Aeromodelling Competition	Shreyas Kumar with his team is qualified for finals of Boeing National Aeromodelling Competition at IIT Kharagpur and qualified for first round at IIT Kanpur
MITACS Research Intern	Shobhit Das has successfully completed the prestigious and fully funded MitacsGlobalink Research Internship at the University of Alberta, Canada.
DAAD WISE Fellowship	Shobhit Das has been awarded the prestigious DAAD-WISE Fellowship at the Technical University of Munich.
IASc SRFs	Shreyas Kumar and Abhishek Rajput have been the recipient of the prestigious Indian Academy of Sciences Summer Research Fellowship Program (SRFP).
IISC CENSE Intern	Shobhit Das has got the opportunity to serve as a research intern at IISc CeNSE (Indian Institute of Science Centre for Nano Science and Engineering)
PROF. GSR Summer Internhip	Samim Molla and Subhamoy Chattaraj have achieved the esteemed Prof. GSR Summer Internship at CSIR, Chennai. Among the highly competitive10 vacancies nationwide.
Flipkart Grid 4.0	Our students secured a place among the top 50 teams in India in the prestigious Flipkart Grid 4.0 Software Development Challenge.
Microsoft Azure Hackathon	Jyoti Jaiswal was honoured as a Microsoft Azure Hackathon 2022 Semi-finalist.
Intern At New Jersey Institute of Technology, USA	Shreyas Kumar was selected as a Machine Learning Intern at New Jersey Institute of Technology and is working to publish a paper on Applications of ML in Nanomaterials
TOYCATHON 2021	Jyoti Jaiswal achieved the distinction of being a ToyCathon 2020 Finalist.
Microsoft Engage	Satakshi Singh was Microsoft engage intern 2022
Women of Mettle Season 5	Tannishtha Bag was among the Top 10 (National) and Akanksha Kumari was among the Top 50 (National) Women of Mettle Season 5, organised by Tata Steel Limited.

4.14 Department of Metallurgy and Materials Engineering (MET)

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 in the country. A two-year post-graduate degree program in Physical Metallurgy was introduced in the year 1953. It has now evolved into a four-year course. This department was the first to introduce a post-graduate course in metallurgy in the country. Prof. N. N. Sen, who later became the Principal of the B. E. College, was the first Professor and Head of the Department of Metallurgy, Chemistry, and Geology. In 1965, Chemistry became a separate department, and Geology was attached to the Department of Mining. In 1949, Prof. W. Baukhloh of Technische Hochschule, Berlin joined the department as a Professor of Metallurgy. There was a spurt in the research activity in the department with the joining of Dr. A. K. Seal as a faculty in 1949 after the completion of his Ph.D. from Sheffield University. Over the years, the department has produced a good number of eminent metallurgists working in India and abroad. They have made significant contributions to academics, research, and industry. The department takes pride in recalling that Sri P. R. Roy and Dr. C. Ganguli, both; alumni of this department, have received the prestigious Padma Shri Award of the Government of India.

The department, in its continued inspiration of young minds towards embracing the true notion of materials engineering, has produced an annually increasing number of B. Tech graduates moving towards academia, placing them among some of the best universities of the world like the University of Michigan, UC San Diego, University of Illinois at Urbana Champaign, University of British Columbia and so on. The B. Tech programme is also a major player in providing the nation's leading metallurgical industries like Tata Steel Ltd., Vedanta Ltd., Aditya Birla Group, etc., with some of the brightest minds, boasting of increasingly robust placement records year after year. The Ph.D. program has, so far, produced a considerable number of doctorates. At present research in several diverse areas, e.g., steel, nonferrous alloys, composites, Nanoscience and Nanotechnology, are being actively pursued. The department has already pioneered the development of certain vital steels and alloys like HSLA steels, maraging steels, and shape memory alloys, to name a few. These developments have had a tremendous impact on the overall development of the subject in the national scenario. Special efforts have been directed towards the evolution of suitable means for effective technology transfer to the

existing industries. The department feels proud to announce its collaborative ventures with organizations, such as, TISCO, SAIL, ISRO, BARC, NML, ICDC, and NMRL.

The faculty members of the department have developed excellent expertise in the areas of Physical Metallurgy, High Strength Steels, Tribology, Mechanical Behaviour of Materials, Nano-Technology, Powder Metallurgy, Multifunctional composites, Computational Materials Engineering, Diffusion Bonding and Friction of Stir Welding. Fresh perspectives riding on the advancements in materials engineering and technology have prompted the launch of specializations like manufacturing technology and materials engineering in the M. Tech. curricula as well. These will help breathe in a novel outlook in the form of subjects like additive manufacturing, multifunctional materials, biomedical devices, etc., welcoming the Government's initiatives of focusing more on smart and advanced materials.

The department is thus continuing to be a major influence on the developmental scope of metallurgy and materials engineering in India, eschewing notions of stagnancy and bolstering the nation's efforts in achieving self-sustenance in every walk of science and technology.

- **Workshops/Conferences/Seminars Attended in India and Abroad**

1. Dr Kaushik Das attended oral paper presentation on "An Eshelby-Mori-Tanaka Based Micromechanical Model for Piezoelectric Polymer Composites with Spatially and Randomly-oriented Inclusions in an Orthotropic Matrix" at the 8th Asian Conference on Mechanics of Functional Materials and Structures (ACMFMS 2022), IIT Guwahati, 11-14 December, 2022
2. Dr Gautam Anand attended oral paper presentation on "Shannon Entropy-Based Materials Design" at 10th International Conference on Multiscale Modelling of Materials (MMM10), Baltimore, USA

- **Invited Talk / Key-Note Address Given**

1. Dr Kaushik Das delivered an invited talk on "Computation prediction of effective properties of piezoelectric composites" at the 8th Asian Conference on Mechanics of Functional Materials and Structures (ACMFMS 2022), IIT Guwahati, 11 -14 December, 2022
2. Dr Kaushik Das delivered an invited talk on "Prediction of Effective Electroelastic Properties of Piezoelectric Composites" at Platinum Jubilee Conference on Perspectives in Materials Research (PMR 2022), IISc Bangalore, 21-23 December 2023

4.15 Department of Mining Engineering (MIN)

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 in1956. The department is dedicated towards in depth education, research and consultancy in mining engineering and its allied fields. The Department offers undergraduate and post graduate programme in Mining Engineering and post graduate programme in Geo-informatics. The Department of Mining Engineering is an approved QIP centre for postgraduate study in Mining Engineering. Research specializations available in the department include Mining Machinery, Carbon sequestration, Coal bed methane, GIS and Remote sensing, Mine Environment, Environmental Management, Mine Planning and Design, Mineral Dressing, Ergonomics, Occupational Health and safety and Rock Mechanics and Strata Control.

- **Workshops/Conference/Seminars/Symposium/Webinars etc. Organized**

1. 5- day Course work on “Ergonomics and Industrial Safety” during 27-31 March 2023 under the Convenorship of Dr. Netai Chandra Dey and Co-Convenor Dr. Shibaji Ch. Dey

4.16 Department of 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 can be considered as 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 many international conference proceedings. Nearly thirty PhD students are working in this department. Many of our old 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. as well as in different well recognized universities and institutes in abroad. The department is endowed with a number of research projects sponsored by various funding agencies. Physics department has also been awarded with phase-I of DST-FIST. At present the departmental faculty members and their research groups are actively working in the following identified broad thrust areas of research like Condensed matter physics theory and applications in magnetic, electronic optoelectronic and photonic materials and devices and Nuclear physics: Experiment and Theory, Cosmology and Theoretical High Energy Physics.

- **Workshops/Conference/Seminars/Symposium/Webinars etc. Organized**

1. The Department of Physics, IIEST, Shibpur in collaboration with IIT(ISM) Dhanbad organized a One-week hands-on Training program on “Fabrication and Characterization of Advanced Photovoltaic Devices” to build human resources and their knowledge capacity using open access science and technology infrastructure through the scheme "*Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI)*" sponsored by the Department of Science and Technology, Government of India. The program was organized with the support of the School of Advanced Materials, Green energy and Sensor Systems (SAMGESS) and Chemistry Department during 12-18 December 2022. This training program was coordinated by Dr. Syed Minhaz Hossain, Head, Department of Physics, IIEST Shibpur and Prof. S. K. Sharma, Department of

Applied Physics, IIT(ISM) Dhanbad. This program includes thirty participants (Faculty/Research Scholars) from various Universities/Colleges/institutes in India, with no more than three from the same Universities/Colleges/institutes.

Photograph of Physics Demonstration Laboratory
during an outreach program for School Students

- **Workshops/Conferences/Seminars Attended in India and Abroad**

1. Dr. Dwipesh Majumder attended WE-Heraeus-Seminar in Germany on Ultracold Quantum Matter: Basic Research and Applications during 12-16 December 2022. He presented a paper on Collective excitation in quantum droplets of Bose-Bose mixture authored by Avra Banerjee, Saswata Sahu and Dwipesh Majumder

- **Invited Talk / Key-Note Address Given**

1. Dr. Syed Minhaz Hossain delivered an invited talk on 3rd Generation Photovoltaics at the Centre for Renewable & Sustainable Energy Studies, JIS Institute of Advanced Studies and

Research (JISIASR) on the occasion of one Day National Workshop on "Renewable Energy Resources in India: Career Prospects & Challenges" on the 15th February 2023, Kolkata

2. Dr. Syed Minhaz Hossain delivered an invited talk on 'Surface States: Origin and Applications' at the Department of Electronics Science, Calcutta University on February 6, 2023.

- **Invited Talk Organised**

1. Dr. Biplab Pal, Kaliachak College delivered a talk on "The wonderful world of "Flat band Physics" on 2 September 2022
2. Dr. Rupak Mukherjee, Princeton University, USA delivered a talk on "How computational physics is shaping nuclear fusion reactors" on 1 July 2022
3. Prof. S. Chakrabortty, Department of Physics, IIT Ropar delivered a talk on "Tensionless string theory: A fairy tale on the worldsheet" on 20 April 2022

- ***SCHOOLS***

4.17 School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS)

School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS) has been formally created by the clubbing of erstwhile Centre of Excellence for Green Energy and Sensor Systems (CEGESS) and M. N. Dastur School of Material Science and Engineering (MNDSMSE) in Jan 2021.

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 and 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

MNDSMSE 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 modelling and Optimisation, and Bio-materials. In addition to research the school provides technical consultancy services to various industries and govt agencies.

At SAMGESS both the activities described above are being continued with integrated management of existing resources available to both CEGESS and MNDSMSE.

4.18 School of Community Science & Technology (SOCSAT)

The School of Community Science and Technology was established in 2004. A four semester M.Sc. Course on “Food Processing and Nutrition Science” started from the Academic session (2007-2008). The objectives of the school were to formulate and implement specific programs like technology innovation and technology transfer and science and technology (S&T) awareness programs to the rural sectors, to impart food processing training sessions along with the demanded basic and applied research in food and nutrition and to promote sustainable growth of different marginalized communities especially women self-help groups in order to promote technology and create entrepreneurship. The prominent research area is waste to wealth, probiotics, functional foods, food processing and waste to energy. Recent year, SOCSAT has published in reputed international journals and books. SOCSAT has witnessed significant campus placement in recent years.

- **Workshops/Conference/Seminars/Symposium/Webinars etc. Organized**

1. Dr. Jayati Bhowal: One day seminar on "Recent Development on Millet-Based Technology". Date: 7th November 2022.
2. Dr. Jayati Bhowal: One Day Poster Presentation and Quiz Competition Theme: "2023 International Year of Millets". Date: 17 th November 2022

- **Invited Talk / Key-Note Address Given**

1. Dr. Shantonu Roy delivered an Invited Talk in a Two-day National Seminar on "Impact of Environment on Biodiversity" at Govt. Nagarjuna PG College of Science Raipur, Chhattisgarh. 26th June 2023.

4.19 School of 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 has been installed in October 2008 under the TEQIP program. Proposal for setting up Post Graduate Course in Disaster Mitigation Engineering/Earthquake Engineering are being framed for introduction shortly.

4.20 School of Ecology, Infrastructure and Human Settlement Management

The School came into existence in 2006 to conduct inter-disciplinary and cutting-edge research, postgraduate studies and to extend technical support services on issues having the critical interface of ecology, human settlements and infrastructure development. The School's activities focus on Spatial and Environmental Planning, Natural Resource Management, and Green Architecture. Identified thrust areas for the department include Spatial and Environmental Planning, Community based Natural Resource Management, Carrying Capacity Assessment for Urban Settlements, Human Settlement Planning for Ecologically Fragile Areas, Planning for Heritage Conservation, and Climate Change and Human Settlements. The areas in which research work is undertaken also include Natural Resource Extraction and Livelihood, Sustainability for Local Communities, Green Building Techniques, and Institutional Reform and Capacity Building for Urban, Rural and Natural Resource Governance.

4.21 School of Management Sciences (SOMS)

School of Management Sciences has emerged as an Institution of excellence in all facets of management education with highly specialized, sophisticated and 21st Century oriented courses and curriculum. The goal of SOMS is to achieve professional growth through holistic management education to shape future leaders for the corporate through intermingling of functional knowledge of Marketing, Finance, Operations, Human Resource & IT Management. The MBA programme is designed to deliver the latest business education. The emphasis of the programme is on an integrated understanding of the totality of business, its philosophy and socio-economic inter-relationship. The programme is specially designed to develop and enhance the basic managerial skills and abilities of students and to equip them with tools &

techniques of modern management for better decision-making. Different teaching methods like case studies, simulation games, group discussions, group seminars, scenario building and project work are used to make the teaching-learning process interesting. Students are encouraged to analyze, innovate and prepare themselves for professional challenges of the industry. The two years' programme leading to the Masters in Business Administration

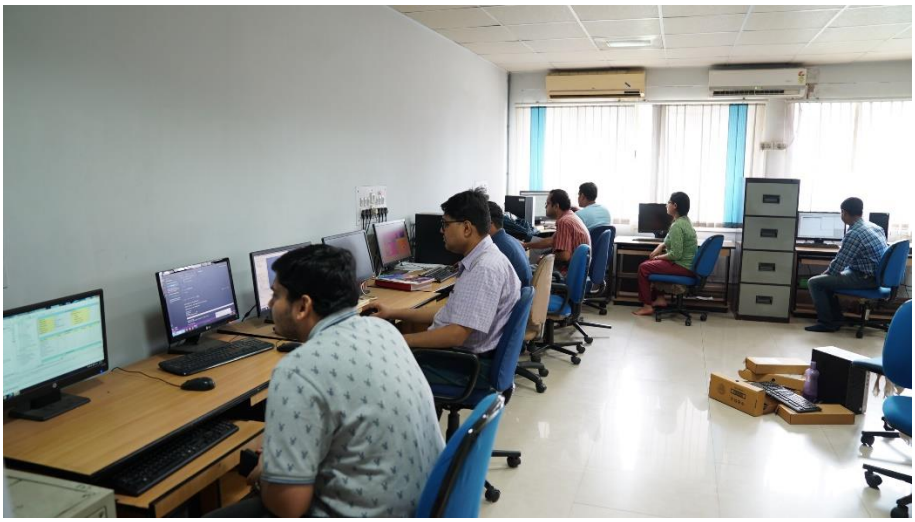
4.22 School of Mechatronics and Robotics (SMR)

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 specialized interdisciplinary postgraduate programme in Mechatronics in collaboration with three CSIR laboratories, namely - CMERI Durgapur, CEERI Pilani and CSIO Chandigarh. The course has been framed to educate 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 Exoskeleton Devices, Prosthetics; Intelligent Systems; Multisensory Myoelctric

Controlled Intelligent Active Ankle-Foot Prosthesis; Sensor Integrated Multi-Fingered Dexterous Robot Hand with Data Glove Interface, etc.Research facilities created in the School include: Bi-handed robot, humanoid robot, drives and control, sensors, image processing set up, mechanical motion transmission devices, data gloves, lasers, smart materials, haptic devices, embedded systems, virtual instrumentation, modeling and simulation.

4.23 School of 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 MTech 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.

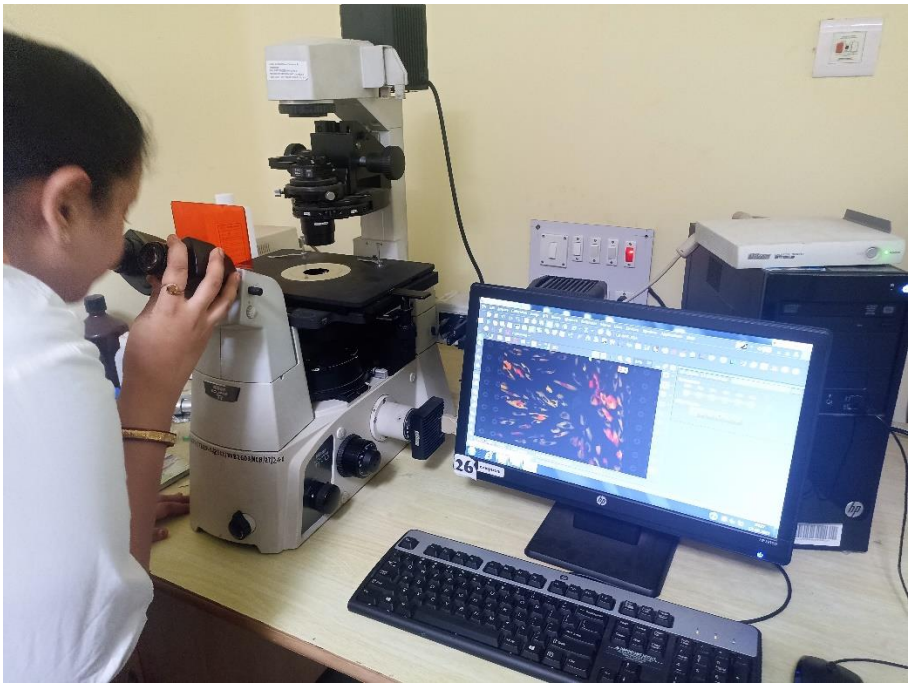
- ***CENTRE***

4.24 Centre for Healthcare Science and Technology (CHST)

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.

This Center also offers part time MTech programme in Safety and Occupational Health Engineering as well as inter-disciplinary research. Safety and Occupation Health (SOH) has gained importance due to the dramatic change that has taken place in the work environment where the workforce is exposed to diverse occupational pursuits and hazards. This Centre aims at developing a competent human resource capable of implementing the safety policy for organized and un-organized sectors; create and strengthen infrastructure for SOH engineering; establish a synergy between the stake holders and carry out research in upcoming fields.

The research activities of this Centre have a diverse hue that include Study of Ergonomics and Physiology in industries; Industrial Health & Hygiene in organized and unorganized sector; Hazard Identification Technique in key industries and Safety Audit and Management.



05 Sponsored Research and Industrial Consultancy

5.1 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 MNRE, MoE (MHRD), CSIR, DST, DeitY, DAE, DBT, BRNS, DRDO, ISRO, UNICEF, AICTE, UGC, Tata Steel, IBM etc 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 MHRD, MNRE, MeitY, DST, DBT, Digital India Corporation, DST-FIST, Indian Council of Medical Research, UNICEF, Ministry of Earth Science, CSIR, ISRO, DRDO, Ministry of Steel, Ministry of Defense, DAE-BRNS, TATA Steel, Electrosteel Casting Limited (ECL) and international funding agencies like CIDA, USAID, DelPHE, SANEI, UKRI-RCUK 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, TATA Steel, SAIL, Infosys, DRDL, CPRI, TCS, etc.

The number of sponsored projects and the funding have increased steadily. Besides the conventional fields, 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 include Advanced Materials, Green Energy and Sensors, Synthesis of new compounds and catalysis, Computational Chemistry, Robotics, Bio-Mechanics, Power Electronics, VLSI and Embedded Systems, Mechatronics, Earthquake Dynamics, Disaster Management, Environmental Remediation, Healthcare Science and Technology, Computational Biology, Mobile Computing, Nano Science and Technology, Remote-sensing and GIS, Space Technology, Structural Engineering, Communication, Sensor Network, Water Resource and Environment, Transportation Planning, Fluid Mechanics, Carbon Sequestration, Atomic and Nuclear Physics, Soft Computing, Image processing, Mine Safety, Housing and Human Settlement Planning, Electrochemistry, Sedimentology, Environmental Economics, Mathematical & Statistical Theory of Life Testing and Reliability, Rural Technology etc.

Casting a glance at its academic departments, the Institute can boast of commendable performance of its faculty members and research scholars, particularly their quality research output which is reflected by a good number of publications in peer-reviewed national and international journals. Institute shares its research accomplishments with other institutes, research organizations and industry.

Major augmentation in infrastructure for facilitating academic, research and administrative activities in the Institute has been undertaken. A total no. of about 328 research projects worth more than Rs. 152 Cr. and about 695 consultancy projects amounting to about Rs. 73 Cr. sanctioned to the Institute during the period of 2011 –2022.

5.2 Research Account Statement for the Last Two Financial Years

Table 5.1: Estimates in terms of Funds Received:

Sl.	Financial Year	Amount Received from Different Funding Agencies (Rs.)			Fund (in Rs.) Transferred to Institute Overhead From		Expenditure (Rs.)	
		R&D Project	Consultancy	Testing Fees	R&D Project	Consultancy	Manpower	Equipment
1	2022-23	2,60,00,845 For 47 projects	4,30,90,489 For 88 consultancy works	32,118 For 02 testing	41,08,646	1,01,65,668	1,95,64,912 Total 65 project personnel	6,56,26,942
2	2021-22	5,02,69,995 For 59 projects	6,41,78,752 For 104 consultancy works	43,500 For 02 testing	41,61,964	1,61,70,468	2,27,73,923 Total 68 project personnel engaged	6,33,34,716

Table 5.2: Estimates in terms of Actual Number of Projects (R&D and Consultancy) Executed and Total Available Funds:

Sl.	Financial Year	Total number of R&D and Consultancy Projects executed	Total Fund available for execution of the research and consultancy work (Rs.) [Unutilized fund – Financial Statement (Audit Report) for the Year 2021-22]
1	2022-23	312	21,96,61,208
2	2021-22	346	30,70,65,101

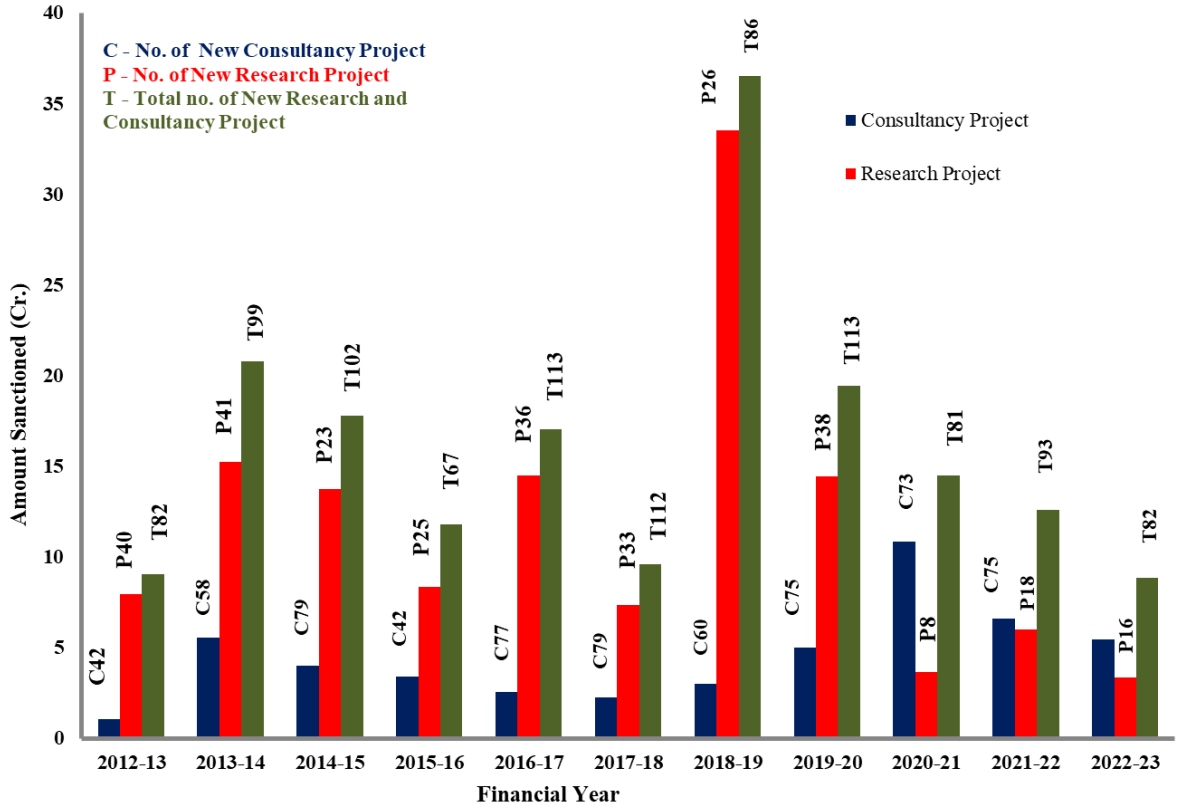


Fig. 1: No. of new sponsored research and consultancy projects sanctioned during the FY 2012-13 to FY 2022-23

5.3 Highlights of Ongoing Sponsored Research Activities

- Ministry of Electronics and Information Technology (MeitY), GoI has sanctioned 3 projects to Electrical Engineering Department under NaMPET-III scheme.
- The DST-IIEST Solar PV Hub centre was formally inaugurated by Shri Ramesh Pokhriyal "Nishank", Hon'ble Education Minister, Government of India on 27th October, 2020.
- 2020 IBM Global University Program Academic Award has been received by the Electronics and Telecommunication Engineering Department.
- Ministry of Education sponsored seven SPARC Projects are ongoing in the present tenure to facilitate global research network, improve research eco-system and academic standard. In connection with the SPARC projects, experts from Hiroshima University, Duke University, University of Illinois, Urbana Champagne and Purdue University have visited this institute for academic and collaborative research activities.
- MoE and DST, GoI (through Technology development initiative) supported impacting research innovation and technology (IMPRINT-2) project involving Tata Steel as the participating collaborating industry, are currently undergoing in the Metallurgy and Materials Engineering Department.
- Tata Steel has sanctioned 02 projects in the area of development of advanced high strength steel to the Metallurgy and Materials Engineering Department which are ongoing in the current tenure.
- The Ministry of AYUSH, Govt. of India through the Central Council of Research in Homeopathy (CCRH) has sanctioned the establishment of Dr. Bholanath Chakroborty

Fundamental Research Laboratory on Homeopathy. The laboratory will be equipped with several high-end equipments and will act as a coordinating centre for scientific researchers working in evaluation of medicines belonging to this AYUSH system.

- A collaborative research hub being executed by a research consortium led by New Castle University, UK with financial support from Research Council UK (RCUK) under the Global Challenges Research Fund to address the challenges of delta regions of Ganges-Brahamaputra-Meghna.
- School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS, formerly, Centre for Excellence for Green Energy and Sensors System, SAMGESS) has been recognized by Ministry of New Renewable Energy (MNRE) and also by DST Solar Hub with an objective to perform research and development on large scale silicon solar photovoltaic cells, modules and systems including design, fabrication and characterization using novel materials and methods for which financial support has been sanctioned by DST (GoI) in the FY 2018-19. Several instrumental facilities have already been installed in the school.

Table 5.3: New Externally Funded Projects Initiated in 2022-23

Sl. No.	Department	Funding Agency	Total Amount Sanctioned (Rs. in lakh)
1	Aerospace Engineering & Applied Mechanics (AE&AM)	DST-SERB	29.83640
2		DST-SERB	39.10087
3		DST-SERB	38.76400
4	Chemistry	DST-SERB (NPDF)	22.36800
5		INSA-DST, GoI	2.50968
6		DST-SERB (TARE)	10.05000
7	Civil Engineering	Ansys Software Private Limited, Pune.	33.85000
8		East Hooghly Polyplast Pvt. Ltd.	12.00000
9		DST-SERB	30.89372
10	Computer Science and Technology (CST)	DST-SERB (TARE)	10.05000
11	Earth Sciences	DST, GoI	35.00000
12	Electronics and Telecommunication Engineering (ETCE)	TIH Foundation for IoT and IoE, IIT Bombay.	3.60000
13		DST-SERB	8.25000
14		ISRO, Dept. of Space, GoI, Bengaluru	26.69880
15	Mathematics	DST-SERB,	6.60000
16		DST, GoI, Women Scientists Scheme -A (WOS-A)	29.71599
Total			**339.28746**

Table 5.4: Completed Projects in 2021-22

Sl.	Department	Name of the Principal Investigator	Funding Agency
1	Aerospace Engineering & Applied Mechanics	Nityananda Nandi	MOES
2		Joydeep Bhowmik	DDO-DYSL-AST-CAS
3	Chemistry	Head of the Department	DST-FIST
4		Ajit Kumar Mahapatra	CSIR
5		Sangeeta Ghosh / Chinmoy Bhattacharyya	DST-WOS A
6		Sudip K Chattopadhaya	CSIR
7	Centre for Healthcare Science and Technology (CHST)	Chirtangada Das Mukhopadhyay	NMPB-MOA
8	Civil Engineering	Soumya Bhattachayya	CSIR
9	Electrical Engineering	Anindita Ganguly / Aparijita Sengupta	SERB-DST (TARE)
10	Information Technology	Sukanta Das	SERB-DST
11		Indrajit Banerjee	DST-WB
12	Mathematics	Tapan Kumar Kar	CSIR
13	Physics	Dipali Banerjee	SERB-DST
14		Head of the Department	DST-FIST
15		Abhijit Bisoi	DRC/SERB-DST/EE/AB/033/17-18
16	SAMGESS	Snehangshu Patra	DST-INSPIRE
17		Hiranmay Saha	TSECL
18		Hiranmay Saha	DST
19		Nillohit Mukherjee	SERB-DST

Table 5.5: Details of All Projects in 2022-23

Sl.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
1	2022-2023	Civil Engg.	Prof. Chaitali Ray	Analysis of Bridge with Hollow Core Stiffened FRP Deck Under Dynamic Loading Considering Fluid-structure and Soil-structure Interaction	Ansys Software Private Limited, Pune.	3 years	33.85000	28.06.2025
2	2022-2023	Earth Sciences	Dr. Pratik Kumar Das	Water in the Earth's mantle and its geodynamic implications: a first principles approach	DST, GoI	5 years	35.00000	05.04.2027
3	2022-2023	ETC	Dr. Ankita Pramanik, Assistant Professor (Mentor). Sriman Dutta, Sandip Paul Minz, and Sarvesh Dubey (UG students)	Hydrogen-Leak Observance and Control Kit (H-LOCK)	TIH Foundation for IoT and IoE, IIT Bombay.	10 months	3.60000	29.05.2023
4	2022-2023	Math.	Tapan Kumar Kar	Development of mathematical modelling and computational techniques of some class age structured epidemic problems	SERB, GoI	3 years	6.60000	03.01.2026

Sl.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
5	2022-2023	Chem.	Mintu Nandi (NPDF) / Sudip Kumar Chattopadhyay (Mentor)	Information theoretic analysis of quorum sensing network in Vibrios	SERB, GoI	2 years	22.36800	02.11.2024/26.12.2024
6	2022-2023	ETCE	Debasis Mitra & Rik Chattopadhyay	Development of the Microwave-Photonic Hybrid Wearable Sensor for in vivo Monitoring of Hip Stem Micromovements	SERB, GoI	3 years	8.25000	25.12.2025
7	2022-2023	Chem.	Chinmoy Bhattacharya	WO_3 - TiO_2 Nanostructured Composite Thin Films for Electrochromic and Gas Sensor Applications	INSA-DST, GoI	03.01.2023 to 15.05.2023	2.50968	15.05.2023
8	2022-2023	AE&AM	Rana Roy	Assessing response of structures to bidirectional seismic excitations: Explorations to simple, efficient and design-oriented options	SERB, GoI	3 years	29.83640	22.02.2026
9	2022-2023	Civil Engg.	Ambarish Ghosh	Development of Bank Protection Methodologies for Various Vulnerable Reaches of Rivers in West Bengal through Model Studies and Preparation of Design Charts and Guidelines	East Hooghly Polyplast Pvt. Ltd.	2 years	12.00000	28.02.2025
10	2022-2023	Civil Engg.	Anuj Kishor Budhkar	Impact and Suitability of Electric vehicles to Indian roads	SERB, GoI	3 years	30.89372	06.03.2026
11	2022-2023	AE&AM	Prince Raj Lawrence Raj	Simulation and Experimental Studies of ammonium dinitramide (ADN) based green liquid propellants interaction studies with hot surfaces under different pressure regimes	SERB, GoI	3 years	39.10087	16.03.2026
12	2022-2023	Chem.	Dr. Gourisankar Roymahapatra, Associate Professor (P.I.) and Dr. Jhuma Ganguly, Associate Professor (Mentor)	Microgel of sugar based heteroaromatic moieties: Synthesis, mechanism of gelation, antibacterial potency and computational study	SERB under TARE, GoI	3 years	10.05000	13.10.2025
13	2022-2023	CST	Dr. Souvik Sengupta, Aliah University, Kolkata (P.I.) and Dr. Asit Kumar Das, IIEST, Shibpur, Howrah (Mentor)	Natural Language Processing and Machine Learning based enhancement in Education Technologies	SERB under TARE, GoI	3 years	10.05000	27.10.2025
14	2022-2023	Math.	Dr. Barnali Pyne, Woman Scientist-A & P.I. and Prof. Tapan Kumar Kar, IIEST, Shibpur (Mentor)	Study of Levy flights in a bounded domain using fractional calculus	DST, GoI, Women Scientists Scheme -A (WOS-A)	3 years	29.71599	24.03.2026
15	2022-2023	ETCE	Dr. Tamaghna Acharya	RES-SAC-2022-005: Techniques for coexistence & integration of communication satellites and terrestrial IMT systems	ISRO, Dept. of Space, GoI, Bengaluru	3 years	26.69880	30.03.2026
16	2022-2023	AE&AM	Dr. Amit Roy Chowdhury	Designing, Development and Performance Evaluation of Bioactive Porous Titanium Developed by Laser Additive Manufacturing and Reactive Surfacing for Implant Application	SERB, GoI	3 years	38.76400	01.03.2026
17	2021-2022	SAMGESS	Santanu Maity	Development of artireflective and self-cleaning coatings on solar cover glass with enhanced power output for	DST, GoI	3 years	16.66000	30.08.2024

Sl.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
				silicon based solar panels and devices.				
18	2021-2022	SAMGESS	Konika Das (Bhattacharya)	Going Remote - Solar Energy for Lighting and Hygienic Sanitation with Smart Exhaust System for Rural Applications	DST, GoI	3 years	143.33470	21.10.2024
19	2021-2022	AE&AM	Joydeep Bhowmik	Experimental studies to assess the effect of wing flexibility on the aerodynamic performance of Flapping Flight	DRDO, GoI	2 years	26.47000	16.08.2023
20	2021-2022	ETCE	Debasis Mitra	AI based Detection of Acute Respiratory Distrees Syndrome (AI-DARDS): An artificial intelligence aided non-contact framework for detecting acute respiratory distress syndrome using microwave sensors	DBT, GoI	3 years	24.12696	27.10.2024
21	2021-2022	AE&AM	Joydeep Bhowmik	Development of a novel Unmanned Aerial Aquatic Vehicle (UAAV) with advanced retractable wing and dual propulsion system	SERB-DST, GoI	3 years	36.11690	06.09.2024
22	2021-2022	Chem.	Mrinal K. Bera	Electrochemistry in organic synthesis: An incredible tool for environmentally benign synthesis of valuable carbocyclic and heterocyclic compounds.	SERB-DST, GoI	3 years	45.79696	28.12.2024
23	2021-2022	Civil Engg.	Debojyoti Pandit	Development of a numerical method to predict loading history from a given shape of a one-dimensional structure	SERB-DST, GoI	3 years	14.70810	30.12.2023
24	2021-2022	Chem.	Nanda Dulal Paul	Design and Synthesis of new cheap and earth abundant transition metal catalysts and development of new catalytic methodologies for the dehydrogenative functionalization of alcohols.	CSIR	3 years	23.93360	09.02.2025
25	2021-2022	Chem.	Chinmoy Bhattacharya	Modulation of scheelite InVO4, CaWO4 semiconductor - employing carbon-supported materials (graphene, g-C3N4, C-dots) as electron flow mediator and electrocatalysts for photoelectrochemical H2-O2 production direct splitting of water.	DST, GoI	3 years	28.49703	07.10.2024
26	2021-2022	AE&AM	Pritam Kumar	Synthesis, Prilling and Coating of Ammonium Dinitramide (ADN): A promising oxidizer	DRDO, GoI	3 years	1.06000	18.01.2025
27	2021-2022	CST	Abhik Mukherjee	Development of compact and efficient grid tied solar powered inverter (SPI) systems	DST, GoI	3 years	25.93080	02.09.2024
28	2021-2022	Civil Engg.	Sujit Kumar Dalui	Interference effects on irregular plan shape tall buildings under wind excitation	DST-WB	3 years	13.00000	20.03.2025
29	2021-2022	AE&AM	Pratim Kumar	Thermal decomposition and combustion studies of prilled and coated ammonium nitrate (AN) and potassium dinitramide (KDN) based novel green oxidizers and propellants for future space and defense applications	SERB-DST, GoI	3 years	45.56816	03.03.2025
30	2021-2022	Physics	Manish Pal Chowdhury	Chemiresistive-magnetic hybrid gas sensor for NH3 gas detection	UGC-DAE CSR (CRS)	3 years	2.28120	30.03.2025
31	2021-2022	AE&AM	Amit Roy Chowdhury	Antibiofilm peptide-functionalized titanium implants	SERB-DST, GoI	3 years	6.05000	09.03.2025

Sl.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
32	2021-2022	AE&AM	Prince Raj Lawrence Raj	Three-Dimensional Ice Accretion Estimation of SARAS MK II Aircraft Under various flying and cloud conditions (Simulation Studies)	CSIR-NAL	11 months	33.94270	23.10.2022
33	2021-2022	Arch. T&RP	Souvanic Roy	Documentation of the infrastructure projects implemented under the Smart City Mission of India	National Institute of Urban Affairs, GoI	36 days	1.00000	31.03.2022
34	2020-2021	AE&AM	Subhabrata Koley	Micromechanics based intra and inter-laminar damage models with emphasis on spatial randomness boundary layer and interface.	DST, GoI	5 years	112.40000	03.08.2025
35	2020-2021	Chem.	Ujjal Bhattacharjee	Investigation of two-photon absorption in nanoparticles with delayed fluorescence for nanoscale temperature measurement in biologically relevant samples	SERB-DST	2 years	29.79990	28.12.2022
36	2020-2021	Chem.	Laksmikanta Adak	Dual transition metal catalysis for C-C and C-heteroatom bond forming reactions: Sustainable approaches to the synthesis of biologically relevant heterocycles	SERB-DST	2 years	24.75000	12.01.2023
37	2020-2021	Elec. Engg.	Mainak Sengupta	Design and development of magnetic core power inductor (HF-Mag)	MEITY	33 months	49.24000	27.02.2023
38	2020-2021	Elec. Engg.	Mainak Sengupta	Design and development of WBG device based high current converters for industry applications	MEITY	36 months	116.98000	27.05.2023
39	2020-2021	Elec. Engg.	Mainak Sengupta	MEMS for electric machines and drives (MEMS Machines)	MEITY	36 months	42.09000	27.05.2023
40	2020-2021	ETCE	Ankita Pramanik	Underground mine monitoring system	IBM	36 months	19.74627	28.02.2024
41	2020-2021	VLSI Tech	Sarit Chakraborty	Design optimization of Micro-Electrode-Dot - Array based Digital Microfluidic Biochips (MEDA-DMFBs) for Cyberphysical Systems	SERB-TARE	36 months	10.05000	13.12.2023
42	2019-2020	CHST	Howa Begam	Development of injectable bone substitute using biphasic calcium phosphate/ biopolymer composite loaded with platelet rich plasma for bone defect	ICMR	3 years	3.14560	06.10.2023
43	2019-2020	Mining	Netai Chandra Dey	Capacity building for testing and developing software-based fatigue sustainable workload model to monitor and control fatigure sustainablity for Indian underground coal miners-an ergo-experimental approach	SERB-DST	3 years	32.71181	25.02.2023
44	2019-2020	IT	Prasun Ghosal	Exploring the feasibility of search space minimization in drug designing system using mRNA-Ribosome mathematical modeling and simulation	DST	3 Years	6.6000	08.03.2023
45	2019-2020	Chemistry	Laksmikanta Adak	Synthesis of iron complexes and their catalytic role in 1.4-addition reactions of organoboron reagents to alpho.beta-unsaturated carbonyl and related compounds	DST-WB(STB)	3 Years	6.3000	02.03.2023

Sl.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
46	2019-2020	Chemistry	Nanda Dulal Paul	Sustainable and economically affordable synthetic approaches towards bioligically and medicinally active molecules.	DST-WB(STB)	3 Years	3.3000	10.03.2023
47	2019-2020	Math	Ujjal Debnath	Stability analysis of various dark energy models in the Universe	DST	3 Years	6.6000	18.02.2023
48	2019-2020	CST	Nirmay Ghosh	SecIoT: An integrated framework for comprehensive security and forensic analysis of IoT-based sment home and healthcare devices and wearables.	DST	2 Years	16.6606	16.02.2022
49	2019-2020	Civil	Chanchal Majumder	Arsenic-organic interaction: Removal by functional carbon nanocomposite and optimization of the process parameters.	DST-WB(STB)	3 Years	14.4600	
50	2019-2020	Civil	Pritam Saha	Development of operational strategies for e-rickshaws for improving air quality on roads	DST-WB(STB)	3 Years	11.9580	
51	2019-2020	ETCE	Ankita Pramanik	Development of UV and IoT based sensor for online water quality monitoring	DST-WB(STB)	3 Years	14.9580	
52	2019-2020	Chemistry	Nanda Dulal Paul	Exploring Homogenous catalysis using transition metal complexes of redox noninnocent ligands	DST	3 Years	32.5970	05.02.2023
53	2019-2020	Mining	Pratik Dutta	Development of a geomechanical model for cyclic CO2 injection and methane release through experimental studies of matrix shrinkage/swelling, mechanical properties, and permeability of coals.	DST	3 Years	49.1089	17.12.2022
54	2019-2020	Chemistry	Jhuma Ganguly	New Generation Multifunctional Green Nanocomposite Coatings for the control of Biodeterioration of Cultural Heritage	DST	36 Months	30.9229	17.11.2022
55	2019-2020	Metallurgy	Manojit Ghosh	Development of advanced ultrafine grained aluminium alloys for aircraft and aerospace applications through Severe Plastic Deformation: Correlating microstructure, mechanical properties and crystallographic texture	Sparc - MHRD	2 Years	39.9563	24.06.2021
56	2019-2020	SEIHSM	Souvanic Roy	GCRF Living Deltas Hub	UKRI-RCUK	5 Years	201.0126	12.02.2024
57	2019-2020	Metallurgy	Arunansu Haldar/ Swarup kumar Ghosh	Pilot scale development of abrasion resistance (400 BHN hardness) and advanced high strength steel (1000 MPa) with superior ductility through HSM	TATA STEEL	2 Years	49.5305	22.01.2022
58	2019-2020	Metallurgy	Arunansu Haldar/ Swarup kumar Ghosh	Design of novel high strength formable steel through HSM	TATA STEEL	2 Years	49.5305	06.02.2022
59	2019-2020	CST	Susanta Chakraborty	Design Optimization and Security Prediction of Real Time Cyberphysical Digital Microfluidic Biochips	Sparc - MHRD	2 Years	47.5093	10.06.2021
60	2019-2020	AE&AM	Amit Roy Chowdhury	Functional Optimization and Development of Polymer-Carbon Nanocomposites for Customized Bone Grafting	DST	3 Years	83.6986	27.10.2022
61	2019-2020	Civil	Anirban Gupta	Fist Program - 2018 [TPN - 20199]	DST	5 Years	148.0000	19.09.2024

Sl.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
62	2019-2020	IT	Ruchira Naskar	Digital Image Forensics in the Context of a Connected India: Algorithms and Implementation	DST	3 Years	15.1210	11.09.2022
63	2019-2020	Earth Science	Moumita Talukdar	Evolutionary History and Origin of the BIF-mafic-ultramafic-anorthosite Packets of Moyar-Bhawani-Cauvery Shear Zone (MBCSZ) from Granulite Terraane of Southern India (GTSI) with a new insight on the calculation of UV Visible Spectroscopy	DST-Inspire	5 Years	35.0000	02.04.2022
64	2019-2020	Chemistry	Debabani Ganguly	Part1 and Sgg: un-tango-ling microtubule regulation	DBT	3 Years	1.5000	24.06.2022
65	2019-2020	Civil	Anirban Gupta	Low carbon option for wastewater treatment and reuse - A case study in the East Kolkata Wetlands	WBPCB	2 Years	10.0016	30.06.2021
66	2019-2020	Civil	Anirban Gupta	Determination of volume flow of sewage at point and non-point sources of the East Kolkata Wetlands, the water quality and hydrological parameters at various points	WBPCB	2 Years	10.1140	30.06.2021
67	2019-2020	IT	Hafizur Rahaman	Development of high efficiency power electric converter technology using next generation Si/SiC-based switching devices with integrated gate drivers for high frequency operation at reduced losses	Sparc - MHRD	2 Years	90.1423	14.03.2021
68	2019-2020	IT	Hafizur Rahaman	Device, Circuits and Architectures for implementing Stochastic Spin Logic for Energy Efficient Boolean and Non-Boolean Computing	Sparc - MHRD	2 Years	89.1485	29.04.2021
69	2019-2020	Electrical	Debabrata Roy	Applications of Magnetostriction in Energy Harvesting	DST	3 Years	58.1359	26.05.2022
70	2019-2020	Chemistry	Jhuma Ganguly	Development of Benign Microgel Templates for the Control of Deterioration Metal and Oxide Nanoparticles	DST-WB(STB)	3 Years	6.2500	30.01.2022
71	2019-2020	IT	Hafizur Rahaman	Design-for-Test Solution for 3D Integrated circuits	Sparc - MHRD	2 Years	89.3423	14.03.2021
72	2019-2020	CST	Abhik Mukherjee	Summarizing Content Streams on Online Social Media during Emergency Events	ICSSR-MHRD	2 Years	13.6500	31.03.2021
73	2019-2020	IT	Sukanta Das	Exploring Cellular Automata Model for Hardware Security	Sparc - MHRD	2 Years	59.1548	29.04.2021
74	2018-2019	Metallurgy	Debdulal Das	Microstructure quantification and structure-property correlation of dual-phase steels (TCS Research Scholar Program - Cycle 14)	TCS Foundation	30.06.2020 (Extendable till June 2022)	7.7200	Jun-22
75	2018-2019	Electrical	Mainak Sengupta	Development of motor ecentricity and vibration monitoring systems and control strategies for switched reluctance motor-based drives	Sparc - MHRD	2 Years	97.2352	14.03.2021
76	2018-2019	Metallurgy	Arunanshu Haldar	Design and development of new generation advanced high strength steels with enganced strength, ductility and application properties by controlling the amount and stability of retained austenite	SERB	3 Years	114.8983	10.03.2022

Sl.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
77	2018-2019	Physics	Abhijit Majumdar	Synthesis and Characterization of Piezoelectric & Photoactive Nanocomposite and their application in Root Canal Disinfection	Science & Technology and Biotechnology (GOWB)	3 Years	16.5500	31.05.2022
78	2018-2019	CST	Surajeet Ghosh	Development Design and Implementation of a Comparison-Free Scalable High-Throughput Energy Efficient Hardware Sorting Engine for FPGA-Based Embedded System Applications	Science & Technology and Biotechnology (GOWB)	3 Years	9.3080	25.02.2022
79	2018-2019	CHST	Ananya Barui	Developing Functional Skin Construct with Embedded Pericytes: Potential for Vasculaeization	Dept. of Biotechnology, Govt. of India	3 Years	65.9520	12.12.2021
80	2018-2019	Civil	Ambarish Ghosh	Prediction of construction induced vibration and development of mitigation strategy	Dept. of Higher Education, Science & Technology and Bio-Technology (Govt. of W.B.)	3 Years	15.7600	07.10.2021
81	2018-2019	IT	Sukanta Das	Computational Problems & Cellular Automata	SERB	3 Years	5.4529	03.10.2021
82	2018-2019	ETCE	Chirasree Roy Chaudhuri	Young Faculty Research Fellowship of Visvesvaraya Ph.D. Programme	Digital India Corporation, A Section 8 Company of Ministry of Electronics and Information Technology, Govt. of India	5 Years	7.4000	23.01.2023
83	2018-2019	SAMGESS	Anirban Bagui	Performance Optimization Organic Solar Cells	DST-Inspire	5 Years	86.2743	21.08.2022
84	2018-2019	CHST	Aritri Ghosh (Ananya Barui)	Mitochondrial Dynamics in Oral Cancer: Assessing Functional Link with Appoptosis EMT and Metabolic Dysfunctions through Integrated Spectroscopic and Biochemical Studies	Indian Council of Medical Research	3 Years	2.2840	22.04.2021
85	2018-2019	CHST	Ananya Barui	Regulation of Lineage Specific Differentiation of Mesenchymal Stem cells under Biomatrices with Varied Elastic Properties	Indian Council of Medical Research	3 Years	20.0040	31.07.2021
86	2018-2019	SAMGESS	Nillohit Mukherjee	Nanostructured Materials and Interfaces for Enzymeless Electrochemical Sensing of Serotonin and Dopamine	Dept. of Higher Education, Science & Technology and Bio-Technology (Govt. of W.B.)	3 Years	11.6775	11.06.2021
87	2018-2019	SAMGESS	Partha Chaudhri	DST Solar PV Hub Pase - II	DST	5 Years	2621.4340	26.06.2023

Sl.	Financial Year	Dept.	Name of Principal Investigator	Title of the Project	Funding Agency	Dura-tion	Total Amount Sanctioned (Rs. in lakh)	Probable Date of Completion
88	2018-2019	CHST	Amit Roy Chowdhury	Design and Manufacturing of Patient Specific Dental Implants Composed of Porous Titanium Functionalized with Osseointegration - Promoting and Antibacterial Coatings	SERB	3 Years	29.5320	20.06.2021
89	2018-2019	Mining	Prabir Kumar Paul	Identification of Above Ground Vegetation Biomass in the Kalimpong subdivision of West Bengal	SERB	3 Years	34.1764	23.05.2021
90	2017-2018	Chemistry	Arik Kar	Core@shell semiconductor nanomaterials for the photocatalytic continuous flow treatment of xanthene dyes	The Royal Society, Independe nt Scientific Academy of the UK	5 Years	26.9439	05.10.2022
91	2017-2018	Chemistry	Chinmoy Bhattacharya	Modifications of Aurivillius Type Semiconducting Photocatalysts through Incorporation of Dopants and Cocatalysts for Improvement of Photoelectrochemical water Oxidations Behaviour	CSIR	3 Years	9.0000	30.04.2020
92	2017-2018	CHST	Ananya Barui, Chirasree Roychaudhuri & Ashoke Sutradhar	Bholanath Chakraborty Laboratory for Fundamental Research in Homeopathy	Central Council for Research in Homeopat hy (CCRH), Ministry of Ayush, Govt. of India	5 Years	30.0000	03.04.2022

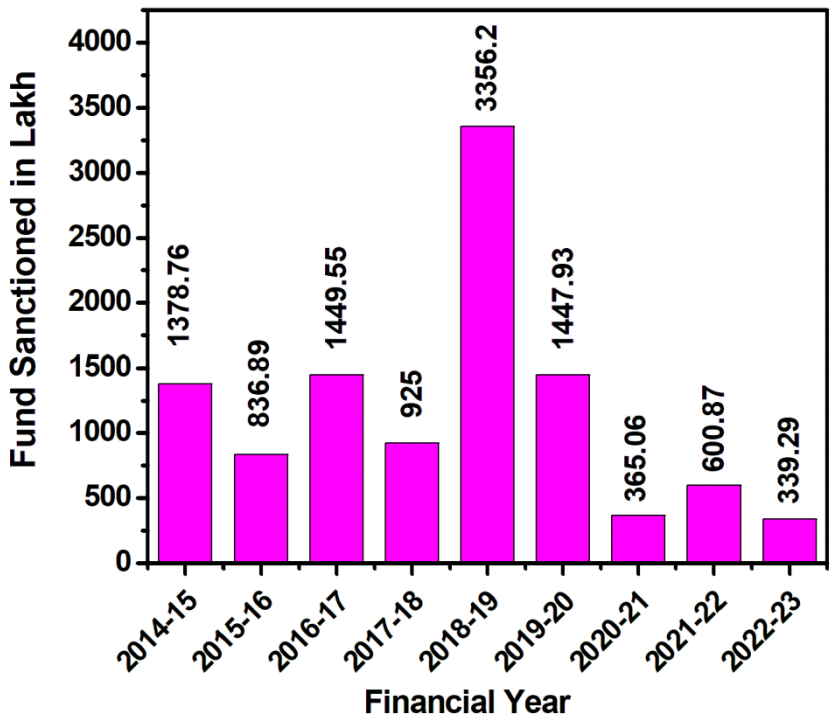


Fig.2: Year wise Sanctioned Project amounts

5.4 Major Consultancy Projects

Important funding agencies like Coal India Limited, Western Coalfields Limited, Eastern Coalfields Limited, Kolkata Municipal Corporation, West Bengal Medical Services Corporation Limited, P.W.DTE, Govt. of West Bengal, Haldia Development Authority, IIT Kharagpur, Larsen & Toubro Limited, ITD Cementation India Ltd., Kolkata Port Trust, Rail Vikas Nigam Limited, Kolkata Metro Rail Corporation Limited, Hooghly River Bridge Commissioners, Second Vivekananda Bridge, VisvaBharati University, Mackintosh Burn Limited, Kolkata Metropolitan Development Authority, Gorkhaland Territorial Administration, Bridge and Roof Co. (India) Ltd., Singareni Collieries Company Limited (SCCL), Hindalco Industries Ltd., PDCL etc are providing significant consultancy activities.
In 2021-22, total 18 new sponsored research projects were sanctioned with an amount of Rs. 6.01 Cr. from different agencies. In 2021-22, total 75 new consultancy works were sanctioned with an amount of Rs. 6.59 Cr. from different agencies. The following tables and diagrams describe the details of new externally funded projects started during the year, ongoing projects, and completed projects, particulars of new consultancy work sanctioned and carried out during year 2021-22.

Table 5.6: List of New Consultancy Projects Sanctioned in 2021-22

Sl.	Department	Funding Agency	Amount Sanctioned (Rs. In Lakhs)
1	Arch. & Planning	Sector VI Industrial Township Authority	77.88000
2		Shyama Prasad Mukherjee Port	4.72000
3		BPC Consultant India Pvt. Ltd.	5.31000
4		U C Consultancy	1.32160
5		PS Unipon Garment Park LLP	7.08000
6		ITD Cementation India Limited	1.18000
7		Mackintosh Burn Limited	3.54000
8		National Mission for Clean Ganga	1.77000
9		Bismi Construction	0.59000
10		Kolkata Metropolitan Development Authority	5.36900
11		Jatipura Real Estate Pvt. Ltd.	4.13000
12		Century Ports Ltd.	10.03000
13	Civil	Traders and Engineers Private Ltd.	15.93000
14		Mackintosh Burn Limited	11.80000
15		Ram Kripal Singh Construction Pvt. Ltd.	4.72000
16		Gaja Engineering Pvt. Ltd.	1.18000
17		WPIL Limited	5.78200
18		Haldia Development Authority	1.41600
19		ACC India Pvt. Ltd.	5.01500
20		Chandernagore Municipal Corporation	2.95000
21		Bismi Construction	0.94400
22		Shyama Prasad Mukherjee Port	47.79000
23		ITD Cementation India Limited	1.77000
24		Gaja Engineering Pvt. Ltd.	3.54000

Sl.	Department	Funding Agency	Amount Sanctioned (Rs. In Lakhs)
25		Shikshayatan Foundation	4.13000
26		The Executive Engineer, Malda Division, PHE Dte., Doulatpur PHE Complex	2.95000
27		The Executive Engineer, Malda Division, PHE Dte., Doulatpur PHE Complex	2.95000
28		The Executive Engineer, Malda Division, PHE Dte., Doulatpur PHE Complex	2.95000
29		The Executive Engineer, Malda Division, PHE Dte., Doulatpur PHE Complex	2.95000
30		The Executive Engineer, Malda Division, PHE Dte., Doulatpur PHE Complex	2.95000
31		The Executive Engineer, Malda Division, PHE Dte., Doulatpur PHE Complex	2.95000
32		P. S. Group Realty Pvt. Ltd.	8.26000
33		WPIL Limited	6.49000
34		National Mission for Clean Ganga	1.77000
35		Kolkata Metro Rail Corporation Limited	4.13000
36		WPIL Limited	5.72300
37		Gaja Engineering Pvt. Ltd.	5.90000
38		Central Pollution Control Board	13.23960
39		BPC Consultant India Pvt. Ltd.	2.95000
40		United Exploration India Pvt. Ltd.	1.18000
41		S.E. Builders & Realtors Ltd.	2.00600
42		Geotechnical Engineers Consortium	2.95000
43		Tide Technocrats Pvt. Ltd.	0.88500
44		U C Geo-Consultancy Pvt. Ltd.	1.32160
45		Gaja Engineering Pvt. Ltd.	3.54000
46		Swarnamoyee Jogendranath Mahavidyalaya	3.54000
47		National Mission for Clean Ganga	1.77000
48		Coal Mines Associated Traders Pvt. Ltd.	2.36000
49		West Bengal Medical Services Corporation Ltd.	81.64420
50	Elecetrical	CESC Ltd.	5.94720
51	IIPC	Conveyor & Ropeway Services Pvt. Ltd.	2.24200
52		NLC India Ltd.	16.52000
53		Gainwell Commosales Private Limited	8.85000
54		Eastern Coalfields Limited	3.83500
55		Gainwell Commosales Private Limited	10.03000
56		Hindalco Industries Limited	3.54000
57	Mining	Mahanadi Coalfields Ltd.	2.12400
58		Bharat Coking Coal Ltd.	4.13000
59		Western Coalfields Limited	11.80000
60		Western Coalfields Limited	11.21000
61		Western Coalfields Limited	11.80000
62		Bharat Coking Coal Ltd.	11.80000

Sl.	Department	Funding Agency	Amount Sanctioned (Rs. In Lakhs)
63		Gainwell Commosales Private Limited	16.52000
64		Western Coalfields Limited	14.16000
65		RCCPL Pvt. Ltd.	2.95000
66		Gainwell Commosales Private Limited	11.80000
		Total	**546.50**

06 Institution's Innovation Council

6. About Institution's Innovation Council (IIC) 5.0

In 2018, the Ministry of Education (MoE and erstwhile MHRD) in collaboration with AICTE had launched the Institution's Innovation Council (IIC) program through MoE's Innovation Cell (MIC) for Higher Education Institutions (HEIs) to encourage the creative energy of the student population and to systematically foster the culture of innovation, startup and entrepreneurial ecosystem in educational institutions. Primarily, the IICs' role is to engage a large number of faculty and staff, and encourage, inspire, and nurture young students in various innovation and entrepreneurship-related activities such as ideation, problem-solving, proof of concept development, design thinking, IPR, project handling and management at pre-incubation/incubation stage so that innovation and entrepreneurship ecosystem gets established and stabilized in HEIs. The MIC envisioned creating a network of IICs across selected HEIs to stimulate innovation in institutions through multitudinous modes leading to an innovation-boosted ecosystem in these campuses.

IIEST, Shibpur has been a part of this program since its inception. Currently, IIC5.0 is in effect, and IIC 4.0 secured a 3-star rating last year out of a 5-star rating system. IIC5.0, IIEST Shibpur has been conducting various activities, as mandated by the MIC, throughout the year to foster a culture of innovation among students and faculties. Moreover, an Institute Innovation Laboratory (IIL) has been set up where students and faculties can work on their innovative ideas. The laboratory provides anytime access. The activities in the laboratory are linked with IIC5.0. Currently, the laboratory has adequate infrastructure and equipment that the students and faculties can use for their work. Requisition for purchasing more equipment is in progress.

6.1 Selected Events Organized by IIC5.0

A summary of few selected events organized by IIC5.0 is given below.

- **Inter/Intra Institutional Innovation Competition/Challenge/Hackathon and Reward Best Innovations**

  Type: Calendar Activity

IIC5.0recently organized a competition seeking innovative solutions from the students to some real-life problems. About 50 innovative proposals were received from the students. Seventeen innovative proposals have been shortlisted to receive financial support under the Alpona Banerjee Memorial Endowment fund. Students are currently working on their idea to build the prototype. Some of the supported innovative projects currently ongoing are listed below.

- Sound less smart grass cutters run by electricity
- Device for washing of utensils, operating at variable speed
- Routine generation system
- System for water quality monitoring & Depth profiling at Bidisha Lake
- e-Waste Management
- Surveillance system for un-manned Labs (with fire & smoke detection, door opening, date logging of entrance & exit, image processing for activity detection)
- Signalling & Speed-monitoring system for the campus
- Smart stick for visually impaired

- Voice Controlled Wheelchair for in-house use
- Development of MyIIEST App & interactive chatbot development
- Water Treatment Plant

- **National Startup Day**

  Type: Celebration Activity

The session started with a welcome address by Prof. Arindam Biswas, President, IIC 5.0, IIEST Shibpur, followed by Inauguration by Prof. Parthasarathi Chakrabarti, Hon'ble Director, IIEST Shibpur. The main attraction of the session was an invited talk by our Guests. The session acquainted the students with the process of identifying an idea for building a prototype, where simulation is not the end of the journey; it is a model or a product creation that gives the ultimate joy. This is an ecosystem that we are trying to build in the Institute so that the students learn to work towards productization and ultimately build something of their own which is needed for the country and which can have a positive impact on the economy. The speakers also presented some of their achievements which encouraged many of the students. The session was very interactive. Following this, an introduction to our existing start-up ecosystem and TGCTBI was given by Dr. Jnui Datta. The session was successfully completed with the vote of thanks and valedictory by the Convener of IIC 5.0.

- **Inauguration of Institute Innovation Laboratory and Lecture Demonstration**

Type: Self-Driven Activity

The programme was conducted in two phases. The first phase started with the inaugural ceremony of the Institute Innovation Laboratory. The laboratory was inaugurated by Prof. Parthasarathi Chakrabarti, Hon'ble Director, IIEST, Shibpur. Dr. B N Das was present as an invited resource person. The institute has established the Institute Innovation Laboratory, where students and faculties of the institute can work on their innovative project ideas. The activities in the laboratory are linked with the Institution's Innovation Council (IIC5.0). Some innovation research proposals have already been shortlisted for funding from an alumni donation. Prof. Chakrabarti, Dr. B N Das, Prof. Biswas (President, IIC5.0) and other faculty members interacted with the students who talked about their innovative project proposals.

The 2nd phase started with the welcome address by Prof. Arindam Biswas, President, IIC 5.0, IIEST Shibpur. This was followed by a brief address by Prof. Parthasarathi

Chakrabarti, Hon'ble Director, IIEST Shibpur. The main attraction of the session was an invited talk by our guest, Dr. B N Das. A lecture cum demonstration was delivered by Dr. Das, who engaged the students with his brilliant physical demonstration of several scientific phenomena. The session encouraged the students to start thinking and find answers to many fundamental problems/phenomena related to elementary physics and chemistry. The session was full of fun and students interacted with the resource person very enthusiastically. The session was successfully completed with the vote of thanks and valedictory by the Convener of IIC 5.0.

- **Expert talk on Process of Innovation Development, Technology Readiness Level (TRL); Commercialisation of Lab Technologies & Tech-Transfer**

  Type: Calendar Activity

The session included lectures cum demonstrations by the invited experts. Prof. Subhasis Bhaumik (President, IIC4.0, IIEST, Shibpur, Eminent Expert in Robotics and Mechatronics) enlightened the students about the process of innovation and development. He emphasized the technology readiness level required for developing innovative products. He also touched on the manufacturing capabilities required for any product development process. A detailed talk was delivered by him on the basics of Computer numerically controlled (CNC) machines.

The second part of the session was done by Dr. Joydeep Bhowmik, Innovation Ambassador and Innovation Activity Coordinator, IIC5.0, IIEST, Shibpur. He provided a practical demonstration to the students on innovation and technology readiness by fostering their knowledge and develop professional machines and techniques which can not only be used to make UAVs but several other useful daily-use parts and accessories. Dr. Joydeep Bhowmik demonstrated varieties of CNC machines that he has designed and developed in-house. He explained the process of the technology readiness level and also touched on the patent application process for protecting the IP. The participants were acquainted with open-sourced

software and designs to build their own CNC machines. A demonstration was given on how to prepare a drawing to cut a sample material with a CNC router and a hot wire CNC machine. The machines were designed and developed by Dr J Bhowmik and he had shared his experience with how these machines can be designed and made use of. The program is designed to address a larger group of interested students, even if they are from non-aerospace backgrounds, to learn to apply basic engineering skills to manufacture various parts of an aircraft from various available items and the manufacturing techniques using open-sourced technologies on 3-D printing, and other types of CNC machines that can be built at home for an affordable budget. The participants were also given a chance to test their flying skills in a simulator. The session was successfully completed with a vote of thanks and valedictory by the Convener of IIC 5.0.

- **Innovation & Entrepreneurship Outreach Program in Schools/Community**

  Type: Calendar Activity

A few members of the IIC5.0 team (Dr. Syed Minhaz Hossain, Dr. Papu Biswas, Dr. Joydeep Bhowmik), IIEST, Shibpur visited a high school (Barhat Sambhunath Banipith High School (HS), Barhat, Patashpur, Purba Midnapore, West Bengal) for an outreach program aiming to promote innovation and entrepreneurship activities among school children. A couple of research scholars of the institute joined them in this program. The resource persons talked to the school children about various innovations in sciences. They demonstrated various engaging science experiments to promote science among school children. Flying of an unmanned aeroplane was another major attraction for school children. The teachers of the school were also fully engaged in the activities. A very fruitful interaction took place with the school students and teachers.

- **Science Day**

  Type: Celebration Activity

IIC5.0 celebrated National Science Day on 28th February 2023. Sixty schoolchildren and teachers from two nearby schools (BE College Model School and SSPS Vidyalaya, Howrah) were invited to participate in the event. The event aimed at promoting science and innovations among school children. The event was inaugurated by the Hon'ble Director, Prof. Parthasarathi Chakrabarti. Prof. Arindam Biswas, President IIC5.0 delivered the welcome address. The resource persons engaged the school children by demonstrating various innovative experiments

in physics and chemistry. They demonstrated various engaging scientific experiments to promote science among school children. Dr. Papu Biswas demonstrated the importance of colours in inorganic chemistry. Dr. Syed Minhaz Hossain demonstrated the role of different types of scattering behind the colours we see around us. The demonstration and flying of an unmanned aeroplane by Dr. Joydeep Bhowmik were other attractions for the school children. The teachers of the school were also fully engaged in the activities. Another major attraction of the event was a demonstration on skywatching. Prof. Swapan Sur engaged the students in skywatching practicals on the rooftop of the S&T building in the evening. A very fruitful interaction took place with the school students and teachers.

6.2 Key Functionaries

Director - Prof. Parthasarathi Chakrabarti
President - Prof. Arindam Biswas
Vice President - Dr. Papu Biswas
Convener - Dr. Bidyut Pal

Coordinators :

Innovation Activity Coordinators - Dr. Syed Minhaz Hossain and Dr. Joydeep Bhowmik
Startup Activity Coordinator - Dr. Prince Raj Lawrence Raj
Internship Coordinator - Dr. Santanu Maity
IPR Coordinator - Dr. Paramita Chattopadhyay
Social Media Coordinator - Dr. Madhumita Roy
ARIIA Coordinator - Dr. Pritam Saha
NIRF Coordinator - Dr. Ankita Pramanik
Yukti Coordinator - Dr. Asok Adak
NISP representative - Dr. Jnui Deb Mallick Datta

External Experts :

IP Expert/ Patent Expert - Prof. Anirban Mazumder, NUJS
Startup/ Alumni Entrepreneur - Mr. Ayan Roy and Mr. Soumyodeep Das, VBRIDGE
Expert from nearby Industry/ Industry association/ Ecosystem Enablers - Mr. Gautam Ray, CESC Ltd.

***Student Members*:** Ms. Jagriti Garg, Mr. Tathagata Ghosh, Mr. Murli Manohar Mishra, Mr. Souvik Sengupta, Md Shabaz Ansari, Mr. Subhamoy Chattaraj, Mr. Prasoon Ravi, Ms. Disha Trivedi, Mr. Nitish Kumar, Mr. Pulkit, Ms. Shreya Das, Mr. Sayak De Bhowmik, Mr. Sushant Kashyap, Ms. Srijana Mishra, Mr. Rohan Das, Mr. Amartya Singh, Ms. Kasturi, Mr. Sayandeep Maitra, Mr. Anuvab Sen, Mr. Prince Kumar, Mr. Ayandeep Garain, Mr. Subhajit Mondal, Ms. Ishita Chaudhary, Ms. Ritu Kulshrestha, Mr. Joybrata Dhar, Mr. Arihant Jain, Ms. Soumili Mahato, Mr. Soham Nath, Mr. Souvik Nath, Mr. Utsab Kundu, Ms. Swarnila Roy, Mr. Dhruv Jhunjhunwala, Mr. Raushan Singh, Mr. Rounak Choudhury, Mr. Shreyash Pandey, Mr. Shivang Agrahari, Mr. Arya Jain, Ms. Dibyashree Panda, Mr. Soumil Dev, Mr. Avinash Kumar , Mr. Chhandam Daripa, Mr. Subhankar Mondal, Ms. Janhvi Singh, Mr. Arnav Anand, Mr. Adiptya Ghosh, Mr. Karan Tomar, Mr. Devajothi Sardar, Ms. Parnasree Mahata, Mrs. Prajina V P, Mr. Gurudutta Pal, Mr. Sandip Kumar Murmu, Ms. Raksha Pahariya, Mr. Arghya Paul

6.3 Resource Strength (Human Capital and Physical Capital)

Total No. of IIC Members - 69
Total No. of IAs - 10
Incubation Unit - 1
IP Facilitation Unit - 1
Institute Innovation Laboratory - 1

Recently, two international students (Mr. Tom Boireau and Ms. Noraiane Petit) from the University of Poitiers, France, visited the Institute Innovation Laboratory for a 2-months internship program on Geometry, AI and Innovation. The students worked under the supervision of Prof. Arindam Biswas, President IIC5.0.

6.4 Facilities, Infrastructure of Pre-Incubation & Incubation in Promotion of Innovation and Entrepreneurship in the Campus

Tagore Centre for Green Technology Business Incubation (TCGTBI), the incubation facility of Indian Institute of Engineering Science and Technology, Shibpur (IIEST, Shibpur) is a registered society under the Societies Registration Act, 1860. TCGTBI has been set up with support from National Science and Technology Development Board (NSTEDB), Department of Science and Technology, Government of India, 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 the society.

TCGTBI, the technology agnostic business incubator, is a specialized facility or program, designed to support and nurture the growth of startups and early-stage companies. Some common facilities, supports, and services provided by TCGTBI are crucial as initial hand-holding for the budding entrepreneurs.

Highlights of TCGTBI

- Secure, research-focussed, innovative, entrepreneurial ambience.
- Vast alumni network of the Host Institute
- Situated at the Heart of the city with Super communication facility
- Institutional Association with other Entrepreneurship bodies viz. NEN, ISBA etc.
- Technology mentorship and provision for continuous innovation & product improvement
- Co-working space, consisting dedicated A/C cubicle space with LAN and Wi-Fi connectivity with High speed Internet, Reprographic facilities, Fully equipped Conference Room, Self-service pantry, 24 x 7 operation on demand
- Access to Workshop and Large Seminar facility, access to Library & laboratory, Capital Equipment Facility for shared usage and Product Display Arena

Supports Provided by TCGTBI

- Offers Incubation Support
- Mentoring support provided by a vibrant, highly experienced and dedicated Mentor's Pool
- Provides Business development supports viz. Marketing, legal, accounting assistance
- Facilitation for IP Protection
- Access to Angel investors and Venture capitalists
- Support for Networking Activities
- Links to higher education resources, resources of student pool and strategic partners
- Security and multi-purpose staff support
- Organise Seminars, Workshops, Expert Lectures on every relevant business domain for incubates, start-up businesses, prospective student entrepreneurs and others
- Facilitate Technology Commercialization
- Promote Study-based activities and Research on the areas of Innovation, IP and Entrepreneurship

6.5 Achievements

- Number and different types of I & E and IPR activities Conducted: 22
- No. of student's faculty ideas generated: 18
- No. of student's faculty Innovation/prototypes developed: 07
- No. of Technology/Invention Transfer: 1
- No. of Student & Faculty Startups/Ventures established

  (Student) Completed – 3, Under processing - 3
  (Faculty) Under processing – 1

Amount spent on promotion and creating awareness on innovation and entrepreneurship in the campus + amount grant or fund supported to student and faculty lead innovations, startups and IPR is Rs.2,70,000.00

6.6 Highlight of Few Best IIC Faculty/Student Members and Their Achievements/Rewarded for the Innovations at Different Forum

Indian National Academy of Engineering (INAE) in collaboration with Birla Institute of Technology (BIT) Mesra, Ranchi had organized an annual flagship event "National Frontiers of Engineering"- (NatFoE-23) under the aegis of INAE-SERB conclave on "Atmanirbhar Technologies – Engineering Secured Future" during 24th June to 25th June 2023 at BIT Mesra campus. On 26th June 2023, there was a National Level Competition called "Innovation in Manufacturing Processes - IMP23" for UG/PG/PhD students & Startups. In the PhD & Startup category, the first position was secured by Ms. Piyali Mukherjee from the Department of Electronics & Telecommunication Engineering, Indian Institute of Engineering & Technology, Shibpur.

Soumen Purkait, student of Electrical Engineering, won Reliance Foundation Scholarship for the academic year 2021 – 2022 in recognition of his academic achievements and demonstration of leadership with a vision to build next generation technology solutions for India. He was awarded scholarship amount of six lakh rupees by Reliance Foundation.

Subhankar Pramanik, student of Information and Technology Department secured global rank 10 in TCS codevita Season 10, Round 2. He was one of the top 30 coders who qualified for the Grand Finale. The competition was held online on 15th – 16th April 2022.

6.7 Highlight Selected Startups Established by Students/Faculties with Mention of Founder/Cofounder Name

- **Addauto Technology Private Limited**

This is a student startup working towards development of the following:

1. Real time fog detection using Raspberry Pi and Python. The product aims to solve the problems of less visibility during the fog by increasing the view point in real time. This device, priced reasonably, will be useful in avoiding accidents in roads, highways, railways.

2. IOT-based Real Time Home Care Surveillance System, which aims to solve issues related to energy saving and home or room safety for domestic houses, high rise buildings and hotel rooms etc. These devices can save electricity, check wastage of water and also can save the plants by the hydroponics farming.

Name of the Founder: Avik Kumar Das, Ph.D Student
Name of the Co-founder: Ardhendu Sarkar, Ph.D Student

- **Creatron Technologies Private Limited**

This is a student startup working towards building green field compressed bio-gas generations plants. Bio-CNG can be used as alternative fuel towards transportation while capture carbon di-oxide waste from environment. Creatron Technologies Private Limited will also manufacture organic fertilizers.

Name of the Founder: Subhasish Dey, Ph.D Student

- **Babypanda Store LLP**

This is a student startup primarily focused in the domain of sustainability. BABYPANDA STORE LLP proposes for the development of biodegradable bristles from plant-based material for bamboo toothbrushes. The proposed bristles will be made-up of entirely allergy-free, skin-safe, non-toxic and biodegradable materials. The whole bristle material will be infused with naturally sourced anti-microbial compounds, which prevent any buildup of microbial bio-films in the brush.

Name of the Founder: Hrithik Raj, UG Student (Graduated)
Name of the Co-founder: Ankur Saiba, UG Student (Graduated)

- **Locer**

A retail-tech SaaS startup established by current 4th year students of IIEST Shibpur that aims to digitise, modernise and organize the entire unorganized retail sector of India.

Name of the Founder: Raushan Singh, UG Student
Name of the Co-founder: Prajwal Velupala, UG Student

- **Scrub100**

This student initiative proposes to develop a high-speed cleaning device that is designed to remove particulate matter from any surface with ease. This versatile tool can effectively remove dirt, dust, and rust, making it ideal for cleaning a wide range of surfaces, including floors, walls, and machineries. Scrub100 would be equipped with a liquid dispensing feature, allowing users to easily apply and distribute liquids such as water or rust remover. Scrub100 can be a useful tool for not only cleaning surfaces but also for a wide range of applications that require liquid distribution.

Name of the Founder: Joybrata Dhar, UG Student
Name of the Co-founder: Arnab Pal, UG Student

- **Silpgram**

This student initiative proposes to develop an online platform for promotion and sales of India's traditional paintings like Manjusa (art from Bhagapur, Bihar), Potochitro (from Medinipur,West Bengal) and many more.

Name of the Founder: Tejash Raj, UG Student

- **Cold Plasma Technology Solutions**

This faculty initiative proposes to develop cold plasma pen, which is an innovative product that offers a portable and effective solution for surface decontamination. It is a unique product that has the potential to change the conventional approach for decontamination of surfaces.

Name of the Founder: Dr. Manish Pal Chowdhury, Faculty Member

Detail of Social media & Connections of IIC institute

https://twitter.com/iic_iiests
https://www.linkedin.com/in/iic-iiest-shibpur/
https://www.facebook.com/iic.iiests/
https://www.youtube.com/iiciiestshibpur
https://www.instagram.com/iic_iiests/

07 Training and Placement

7. Training and Placement

7.1 The Mandate

Training and placement of students are administered by the Human Resource Management (HRM) Department of the Institute. The Mandates of the Department include, *inter alia*, the following.

- Job Placements of the students of the Institute through Campus and Off-campus selection processes
- Internship of students of the Institute at various industries and research institutes
- Internship of students of other institutes at IIEST
- 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
- Offering PhD Programme in specific inter-disciplinary areas

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

7.2 Industry-Connect and Allied Events

Some of the related Industry-Connect and allied events facilitated by HRM Department during 2022- 2023 (till 31.3.2023) where IIESTS students took part:

Sl.	Event Title	Hosted by
1	Career Opportunity in the Dept. of Atomic Energy	BARC
2	Session on Safety in Manufacturing Units	Aditya Birla Group
3	Cloud Computing	MindTree
4	Case Study Competition	Maruti Suzuki
5	Women for Mettle	Tata Steel
6	Innovation Challenge	Accenture
7	Software Development Challenge	Flipkart
8	Women in Teaching - Webinar	Sales Force
9	Webinar on Machine Learning	Amazon
10	Technology Talk Session	CTS
11	Contest on Innovation	Hyundai
12	Innovation Talk	Texas Instruments
13	Jackothan	Publicis Sapient
14	Competition on CSR ideas in the area of Education & Environment	Samsung
15	Innovation Challenge	Ericsson
16	App. Challenge	Hero
17	Seminar	Google India

7.3 Placement Statistics

The details of the UG and PG placements for the last 3 years with department wise break up are furnished in Table 7.3.1 and Table 7.3.2, respectively. Table 7.3.3 records the details of the placement of the students from schools /centers at the PG level. Table 7.3.4 documents the Internship / Summer Training data for the last 3 years.

Table 7.3.1 : UG Placement

	Dept.	CST	ETCE	EE	IT	ME	CE	MET	MIN	AE& AM	ARCH	TOTAL
2022-2023 2023 passout batch (upto 31.03.23)	Total Number of Offers including multiple offers	101	56	92	100	87	84	44	45	18	3	630
2021-2022 2022 pass out batch		104	59	87	110	77	101	42	30	21	4	635
2020-2021 2021 passout batch		87	72	83	94	58	70	20	23	9	0	516

Table 7.3.2 : PG Placement (MTech & Dual Degree)

	Dept.	CST	ETCE	EE	ICE	ME	CE	MET	MIN	AE&AM	Physics	Chemistry	Math	Earth Sc	TOTAL
2022-2023 2023 passout batch (upto 31.03.2023)	Total Number of Offers including multiple offers	6	9	16	8	8	21	0	0	2	0	1	4	4	79
2021-2022 2022 passout batch		15	19	8	18	11	5	6	0	3	1	0	5	0	91
2020-2021 2021 passout batch		10	15	3	9	1	2	3	2	2	0	0	0	0	47

Table 7.3.3 : PG Placement (School/Centre)

	Department / Course	Bio Medical	VLSI	Mat. Sc.	Mechatronics	Safety &Occu-pational Health	REST	MBA	FPNS	TOTAL
2022-2023 2023 passout batch (upto 31.03.23)	Total Number of Offers including multiple offers	9	10	2	6	0	2	3	8	40
2021-2022 2022 passout batch		2	12	3	15	1	6	3	3	45
2020-2021 2021 passout batch		0	7	0	1	1	0	2	1	12

Table 7.3.4: Vacational Training / Internship

Year	Internship / Training	
2022-2023 (Summer Vacation 2022)	No. of Companies / Organisations offering Internship	40+
2021-2022 (Summer Vacation 2021)		34+
2020-2021		30+

The above figures do not include Internships in different Industries and Academic Institutions organised through individual initiatives of the students.

Figures 7.3.1 and **7.3.2** below depict the status of Total Offers made to the students of 2023 Pass-out Batch, for Full Time Employment (FTE), vis-à-vis Total Number of eligible / interested students, from UG and PG courses, respectively.

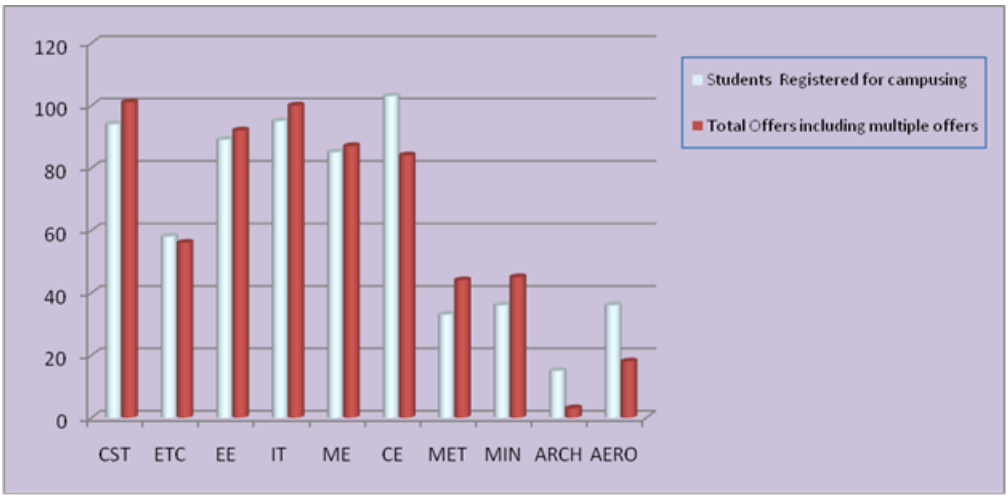


Fig. 7.3.1 : Eligible UG Batch Size vs. Total Offers made through Institutional Placement Process for 2023 Pass-Out Batch (Uptp 31.03.2023)

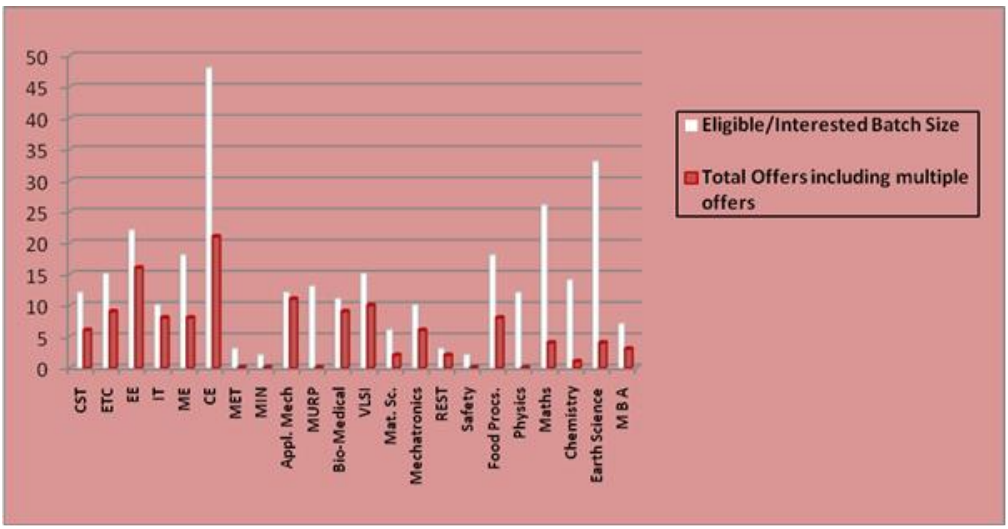


Fig. 7.3.2 Eligible PG Batch Size vs. Total Offers made through Institutional Placement Process for 2023 Pass-Out Batch (Uptp 31.03.2023)

7.4 Recruiters

Different Recruiters, as detailed in **Table 7.4**, through their On / Off Campus selection processes have recruited IIEST students of 2023 pass-out batch in different profiles.

Table 7.4: Recruiters of 2023 Pass-Out Batch (Till 31st March, 2023)

Recruiters	Recruiters
Aakash Byju's	Ericsson India Global Services
Accenture	EXL Services Pvt. Ltd.
Adani Group	FermionIC Design Pvt. Ltd.
Aditya Birla Group	Gainwell Commosales Pvt. Ltd.
Adpushup Software Pvt. Ltd.	Goods & Services Tax Networks
Afcons Infrastructure Ltd.	Google India
Aliens Group	Grappus
Alstom India Ltd.	Guilt free Industries Ltd. (RPSG FMCG)
Amazon Development Centre India	Gunjan App Studio &Solutions LLP
Arcellor Mittal Design & Engineering Centre P Ltd.	Haldia Petrochemicals Ltd.
Avanseus Technologies Pvt. Ltd.	Hind Rectifiers Ltd.
Bajaj Auto	Hindustan Unilever Ltd.
Bandhan Bank Ltd.	Hindusthan Constructions Co. Ltd.
Bosch Global Software Technologies Pvt. Ltd.	Hitachi Energy India Ltd.
Cabinet Secretariat, Govt. of India	HSBC India
Cambium Networks	Hyundai Motor India Ltd.
Caterpillar Inc.	IBM India
CEAT Ltd.	Incture
Century Plyboards India Ltd.	Institute of Engineering & Management
CESC Ltd.	International Combustion (India) Ltd.
CHUBB Ltd.	ITD Cementation India Ltd.
Cirel Systems Pvt. Ltd.	Itobuz Technologies
Cognizant	ITRON
Daimler Truck Innovation India Pvt. Ltd.	Jacobs
Dalmia Cement Bharat Ltd.	Jindal Stainless Ltd.
DCPL	Jio Platforms Ltd.
Deutsche Bank	JK Tech
Digite Infotech Pvt. Ltd.	JSW Group
DXCorr Hardware Technologies Pvt. Ltd.	Kotak Mahindra Life Insurance
Dynamic Digital Technology (Motorola Solutions)	Kyndryl Global Technology Services
L &T Ltd.	Sumcon Infra ventures Ltd.
L&T Infrastructure Engineering Ltd.	Svaya Robotics Pvt. Ltd.
Latent View Analytics Pvt. Ltd.	Synopsys India Pvt. Ltd.
Lexmark International	Systra India
Maruti Suzuki India Ltd.	Tata Steel Ltd.
Maxflow Fans Manufacturing	Tata Consulting Engineers Ltd.

Recruiters	Recruiters
MCPI Pvt. Ltd.	Tata Metaliks
Mecon Ltd.	Tata Power Ltd.
Media.Net	Tata Steel Long Products Ltd.
Meerut Institute of Engineering& Technology	Tata Steel UISL
Merilytics Pvt. Ltd.	Tata Consulting Services
Microsoft IDC	Tega Industries Ltd.
MindTree	Texas Instruments
Natwest Group	Uber
Oracle Corporation	Vedanta Limited
Paapri Business Technologies (India) Pvt. Ltd.	Veritas Technologies LLC
Physics Wallah	Vikram Solar Pvt. Ltd.
Polestar Solution & Services India Pvt. Ltd.	Vision Group Retail Technologies P Ltd.
Primetals Technologies India Pvt.Ltd.	Volvo Group India Pvt. Ltd.
Protivity India Ltd.	Wells Fargo EGS India Pvt. Ltd.
PWC	Willis Tower Watson Group (Acclaris)
Re-Sustainability Ltd.	Worley India Pvt. Ltd.
SA Infrastructure Consultants Pvt. Ltd.	WPIL Ltd.
Saint-Gobain India	WSP
Samsung Research Institute (Delhi)	Xplorer Consultancy Pvt. Ltd.
Samsung Research Institute (Noida)	Zifo R & D
Shapoorji Pallonji& Company Ltd.	ZS Associates Pvt. Ltd.
Siemens Mentor Graphics	SMS India Pvt. Ltd.
Signalchip Innovations Pvt. Ltd.	

7.5 Vacational Training or Summer Internship

Besides, final Placements, many students, predominantly from Pre-final Year, also had the opportunity for Vacational Training (VT) or Summer Internship Programme in reputed industrial / academic institutions - some of which are also maturing to Pre-Placement Offers. However, it may be mentioned that, due to lock-down arising out of Covid-19 pandemic, many such internships, particularly in physical mode, were affected during summer vacation of 2021. Some of that could successfully conduct the Internship during Summer Vacation 2021 are listed in **Table 7.5** below:

Table 7.5 : Some of the Organisations where the Students had undergone their Internship during Summer-2022

Name of the Organisations	Name of the Organisations
NTPC (Mejia Thermalpower Station, Bankura)	GRSC
DRDO, Bangalore	Bridge & Roof Ltd
Google India	CEMILAC
Sales Force	IOCL
Texas Instruments India Pvt. Ltd.	Rasthriya Ispat Nigam Ltd.

Wells Fargo	ISM, Dhanbad
Deutsche Bank India	DCPL Ltd.
Microsoft IDC	Enerstat Solutions Pvt. Ltd.
Tata Steel Ltd.	KPMG
Pricewater House Coopers	Subhasree Projects
Natwest Group	WBSETCL
Accenture	Automatic Energy Regulatory Board
Placewit	APGENCO
CESC Ltd.	VECC
TCS Research and Innovatioin	BHEL
Primetals Technologies India Pvt. Ltd.	Tata Hitachi
Tata Projects	Mecon Ltd.
POSOCO	Bharat Dynamics Ltd.
Railtel Corpn. Of India	DVC
ONGC	Hyundai
Bengal Tools Ltd.	Rain Soft Global Software

08 Faculty Recruitment

8.1 Status of Regular Faculty Recruitment

The selection process for the recruitment of faculty positions in 20 (twenty) Academic units of the institute was initiated against the Rolling advertisement (**No. JU/RO/19/57, dated: 11.06.2019** and **subsequent notifications**). Total number of applications received is 1587, till the closing date of receiving application (7th March, 2022), of which 465 candidates was short-listed and called for interview. The Selection Committee meetings for 19 (nineteen) Academic units were held from August 22, 2022 to January 20, 2023.

8.2 Special Drive for Faculty Recruitment Against Backlog Reserved Vacancies **(Advertisement No. RO/SE/21/12, Dated: 22.09.2021)**

Total number of applications received against the Backlog Advt. is 510, of which 215 candidates was short-listed and called for interview. The Selection Committee meetings for 19 (nineteen) Academic units were held from August 22, 2022 to January 20, 2023.

09 Academic Contributions

9. ACADEMIC CONTRIBUTIONS

9.1 Journal Publication

Department of Aerospace Engineering and Applied Mechanics (AEandAM)

1. G. Roy, A.K. Bhoi and S. Bhaumik, "A comparative approach for MI-based EEG signals classification using energy, power and entropy", Innovation and Research in BioMedical engineering (IRBM), Elsevier, vol.43, pp.434-446, 2022 [Impact Factor: 5.5]
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5. Avik Kumar Das, and Ankita Pramanik. "Efficient Image Transmission in UWA Channel", IEEE Ocean Engineering Technology and Innovation Conference: Management and Conservation for Sustainable and Resilient Marine and Coastal Resources (OETIC), IEEE, 2022
6. Shalini Patel, Soumyadeep Das, Debasis Mitra, Subhasis Sarkar and Chaitali Koley, "Biological Liquid Monitoring using Microwave Resonator" 2022 URSI Regional Conference on Radio Science (USRI-RCRS), Indore, December 2022

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6. Kinshuk Hazra and A.Ganguly, "Mathematical model of a solar based poly-generation system for producing power, cooling and desalination", Paper ID 78, 1st International Conference in Fluid, Thermal and Energy Systems (ICFTES 22), NIT Calicut, 9-11 June 2022
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9.3 Book Authored

Department of Computer Science and Technology (CST)

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School of Community Science and Technology (SOCSAT)

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9.4 Book Chapter Authored

Department of Aerospace Engineering and Applied Mechanics (AE&AM)

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2. Siladitya Khan, Gautam Gare, Ritwik Chattaraj, Srijan Bhattacharya, Bikash Bepari and Subhasis Bhaumik, "Inverse Kinematic Modeling of Bending Response of Ionic Polymer Metal Composite Actuators", Book on Ionic Polymer – Metal Composites: Evolution, Applications and Future Directions, CRC Press, pp.95-121, May 2022
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School of Advanced Materials, Green Energy and Sensor Systems (SAMGESS)

1. Deboraj Muchahary, Sagar Bhattarai, Ajay Kumar Mahato and Santanu Maity, "A Brief on Emerging Materials and Its Photovoltaic Application, Emerging Materials: Design, Characterization and Applications", Springer Nature Singapore, pp.361-406, May 2022
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School of Community Science and Technology (SOCSAT)

1. Keshav Rajarshi, Karri Sudharshana and Shantonu Roy, "Extremophiles for Wastewater Treatment Extremophiles: Wastewater and Algal Biorefinery", Chapter 2, CRC press, January 2023

School of VLSI Technology (VLSI)

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Centre for Healthcare Science and Technology (CHST)

1. Chavali Ravikanth, Bikash K Pradhan, Deepti Bharti, Angana Sarkar, Ananya Barui, Preetam Sarkar, Satyapriya Mohanty and Kunal Pal, "Advanced Methods in Biomedical Signal Processing and Analysis", Chapter 14, Academic Press, pp.375-405, 2023.
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9.5 Patent and Copyright

Department of Computer Science and Technology (CST)

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Department of Electrical Engineering (EE)

1. Mainak Sengupta and Devraj Roy, "A System Employing Mixed-Signal Platform for Parameter and Position Estimation of a Switched Reluctance Motor", December 2022, Patent Application No. 202231074542
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School of Community Science and Technology (SOCSAT)

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9.6 PhD Supervised

Sl.	Supervisor (s)	Name of the Candidate	PhD Awarded with Effect From
Department of Aerospace Engineering and Applied Mechanics			
1	Dr. Amit Roy Chowdhury	Krishnendu Bhowmik	28.12.2022
2	Dr. Kaustuv Debnath Dr. Santosh Kumar Singh	Pankaj Kumar Raushan	05.01.2023
Department of Chemistry			
3	Dr. Jhuma Ganguly	Biswajit Jana	25.11.2022
4	Dr. Jhuma Ganguly	Dipika Pan	30.11.2022
5	Dr. Ajit Kumar Mahapatra Dr. Arik Kar	Moumi Mandal	26.09.2022
6	Dr. Jhuma Ganguly	Nira Parshi	14.06.2022
7	Dr. Sudip Kumar Chattopadhyay Dr. Bhibutosh Adhikary	Papri Mondal	03.08.2022
8	Dr. Nanda Dulal Paul	Rakesh Mondal	17.10.2022
9	Dr. Papu Biswas	Rumeli Banerjee	24.11.2022
10	Dr. Shyamal Kumar Chattopadhyay Dr. Jayati Datta	Sayantani Bhattacharya	18.10.2022
Department of Civil Engineering			
11	Dr. Subrata Chakraborty	Atin Roy	08.08.2022
12	Dr. Ambarish Ghosh	Champakali Das	24.11.2022
13	Dr. Soumya Bhattacharjya Dr. Subrata Chakraborty	Gaurav Datta	23.09.2022
14	Dr. Anirban Gupta	Neelanjan Dutta	06.06.2022
15	Dr. Debabrata Mazumder	P.Sanghamitra	28.10.2022
16	Dr. Sujit Kumar Dalui	Rony Kar	06.07.2022
17	Dr. Debabrata Mazumder	Roumi Bhattacharya	31.10.2022
18	Dr. Sudip Kumar Roy	Saptarshi Sen	22.11.2022
19	Dr. Kalyan Kumar Chattopadhyay Dr. Ambarish Ghosh	Tanumaya Mitra	10.08.2022
Department of Computer Science and Technology			
20	Dr. Apurba Sarkar	Ajit Kumar Das	09.11.2022
21	Dr. Sekhar Mandal Dr. Saptarshi Ghosh	Arpan Mandal	05.05.2022
22	Dr. Jaya Sil	Isha Ganguli	24.05.2022
23	Dr. Biplab Kumar Sikdar	Nilanjana Das	16.11.2022
24	Dr. Jaya Sil	Rajat Subhra Bhowmick	21.11.2022
25	Dr. Jaya Sil	Sayan Das	01.07.2022
26	Dr. Sipra Das Bit Dr. Sushmita Ruj	Tanusree Chatterjee	01.07.2022
27	Dr. Asit Kumar Das	Chirantana Mallick	10.02.2023

Sl.	Supervisor (s)	Name of the Candidate	PhD Awarded with Effect From
28	Dr. Sipra Das Bit Dr. Sushmita Ruj	Jayasree Sengupta	14.12.2022
29	Dr. Biplab Kumar Sikdar Dr. Mousumi Saha	Sutapa Sarkar	17.03.2023
Department of Electrical Engineering			
30	Dr. Mainak Sengupta	Pinaki Mukherjee	15.11.2022
31	Dr. Ashoke Sutradhar Dr. Anindita Sengupta	Shouvik Chakraborty	03.11.2022
32	Dr. Chandan Kumar Samanta	Shouvik Kumar Samanta	12.09.2022
33	Dr. Chandan Kumar Chanda Dr. Jagadish Pal	Shubhranshu Kumar Tiwary	13.09.2022
34	Dr. Paramita Chattopadhyay	Subhrajit Mitra	10.10.2022
35	Dr. Mainak Sengupta	Janardan Kundu	29.12.2022
Department of Earth Science			
36	Dr. Ananya Mukhopadhyay	Priyanka Mazumdar	18.05.2022
37	Dr. Bhabani Prasad	Amit Bera	16.02.2023
Department of Electronics and Telecommunication Engineering			
38	Dr. Chirasree Roy Chaudhuri	Bhaswati Chakraborty	31.05.2022
39	Dr. Chirasree Roy Chaudhuri	Nirmalya Samanta	18.08.2022
40	Dr. Monojit Mitra Dr. Kamakhya Prasad Ghatak	Rajashree Paul	01.12.2022
41	Dr. Debasis Mitra	Soumyadeep Das	25.05.2022
42	Dr. Susanta Kumar Parui Dr. Jawad Yaseen Siddique	Suparna Ballav	01.07.2022
43	Dr. Monojit Mitra Dr. Laxmi P. Mishra	Anupa Chatterjee	11.01.2023
44	Dr. Susanta Kumar Parui Dr. Debasis Mitra	Pujayita Saha	27.12.2022
Department of Humanities and Social Sciences			
45	Self . Guided	Mallika Ghosh Sarbadhikary	15.06.2022
46	Dr. Partha Sarathi Roy	Anirban Chaudhuri	11.01.2023
Department of Information Technology			
47	Dr. Hafizur Rahaman	Anirban Bhattacharjee	24.05.2022
48	Dr. Surajit Kumar Roy	Dilip Kumar Maity	02.11.2022
49	Dr. Tuhina Samanta	Judhajit Sanyal	23.06.2022
50	Dr. Tuhina Samanta	Khokan Mondal	04.05.2022
51	Dr. Tuhina Samanta	Priyajit Biswas	22..08.2022
52	Dr. Sukanta Das	Sukanya Mukherjee	16.09.2022
Department of Mathematics			
53	Dr. Smita Pal Sarkar	Saroj Mondal	23.09.2022

Sl.	Supervisor (s)	Name of the Candidate	PhD Awarded with Effect From
54	Dr. Guruprasad Samanta	Priti Mondal	25.07.2022
55	Dr. Binayak Samadder Choudhury	Priyam Chakraborty	02.12.2022
56	Dr. Pritha Das Dr. Debasis Mukherjee	Ritwick Banerjee	01.08.2022
57	Dr. Tapan Kumar Roy	Rumi Roy	16.09.2022
58	Dr. Guruprasad Samanta	Sarada Ghosh	25.05.2022
59	Dr. Guruprasad Samanta Dr. Alakes Maity	Sudeshna Mondal	15.07.2022
60	Dr. Tapan Kumar Kar	Kanisha Pujaru	17.02.2023
61	Dr. Shariful Alam	Narayan Mondal	29.03.2023
62	Dr. Guruprasad Samanta Dr. Alakesh Maiti	Sangeeta Saha	06.01.2023
63	Dr. Asoke Kumar Dhar	Shibam Manna	19.12.2022
Department of Mechanical Engineering			
64	Dr. Shyamal Chatterjee	Joy Mondal	11.11.2022
65	Dr. Aritra Ganguly	Ramen Kanti De	16..08.2022
66	Dr. Bijan Kumar Mandal	Ranendra Roy	22.07.2022
Department of Metallurgy & Materials Engineering			
67	Dr. Amitava Basu Mallick	Angshuman Sarkar	12.08.2022
68	Dr. Debdulal Das Dr. Tapatee Kundu Roy	Samarpita Roy	10.08.2022
69	Dr. Manojit Ghosh Dr. Jaideep Maity	Samata Saha	19.04.2022
70	Dr. P.P.Chattopadhyay Dr. Arunanshu Haldar	Sumanta Mandal	28.09.2022
71	Dr. Debdulal Das Dr. Subhabrata Dutta	Tanusree Dutta	13.05.2022
Department of Mining Engineering			
72	Dr. Pratik Dutta	Ankita Mukherjee	10.10.2022
73	Dr. Pratik Dutta	Atanu Chatterjee	19.08.2022
74	Dr. Suranjan Sinha Dr. Biswajit Samanta	Gopinath Samanta	22.04.2022
75	Dr. Netai Ch.Dey	Sumit Banerjee	26.05.2022
Department of Physics			
76	Dr. Abhijit Bisoi	Ananya Das	22.07.2022
77	Dr. Samar Jana	Ashoke Maity	11.07.2022
78	Dr. Syed Minhaz Hossain Dr. Mallar Ray	Bhaskar Das	07.11.2022
79	Dr. Dipali Banerjee	Mukulika Jana Chatterjee	02.12.2022
80	Dr. Mousumi Basu	Roshmi Chatterjee	21.10.2022
81	Dr. Dwipesh Mazumder	Saswata Sahu	21.10.2022

Sl.	Supervisor (s)	Name of the Candidate	PhD Awarded with Effect From
School of Advanced Materials, Green Energy and Sensor Systems			
82	Dr. Hiranmay Saha Dr. Chirasree Roy Choudhuri	Indranil Das	20.07.2022
83	Dr. Anup Mondal Dr. Utpal Gangopadhyay	Kaustuv Dasgupta	18.08.2022
84	Dr. Debdulal Das Dr. Shubhabrata Datta	Titov Banerjee	25.11.2022
School of Community Science and Technology			
85	Dr. Jayati Bhowal Dr. Sudip Kumar Chattopadhyay	Saheli Ghosal	02.11.2022
School of Ecology, Infrastructure and Human Settlement Management			
86	Dr. Sudip Kumar Roy Dr. Suranjan Sinha	Tarun Chowdhury	04.11.2022
School of VLSI Technology			
87	Dr. Hafizur Rahaman Dr. Kasturi Ghosh	Manas Kumar Parai	22.11.2022
Centre for Health Care Science and Technology			
88	Dr. Amit Roy Chowdhury Dr. Pallab Datta	Ranjit Barua	29.03.2023

10 Picture Gallery

10.1 Institutional Programs / Events

Celebration of World Intellectual Property Day, 26 April 2022

Celebration of Rabindra Jayanti, 9 May 2022

Celebration of World Environment Day, 5 June 2022

DST-IIEST Solar PV Hub Technical Review Committee Meeting, 16 June 2022

Celebration of International Day of Yoga at Belur Math, 21 June 2022

MoU Signing, 15 July 2022

Celebration of Birthday of Acharya Prafulla Chandra Ray and National Chemistry Day, 2 August 2022


Indian Institute of Engineering Science and Technology, Shibpur
भारतीय अभियांत्रिकी विज्ञान एवं प्रौद्योगिकी संस्थान, शिबपुर
Celebrates
75 Years of Independence
from 11th - 15th August, 2022
Azadi Ka Amrit Mahotsav
आज़ादी का अमृत महोत्सव
A PROGRAMME ON THE OCCASION OF
Azadi Ka Amrit Mahotsav

Celebration of 75 Years of Independence, Azadi ka Amrit Mahotsav, 11-15 August 2022

Celebration of Engineers Day, 15 September 2022

ERP Training Program, 20-21 October 2022

Celebration of Vigilance Awareness Week, 31 October to 6 November 2022

Orientation Program, 11-14 November 2022

Celebration of Constitution Day, 26 November 2022

Celebration of Birthday of Acharya Jagadish Chandra Bose, 30 November 2022

Commemoration of Dr. B.R. Ambedkar, 6 December 2022

9th Annual Convocation, 16 December 2022

Celebration of National Youth Day, Birthday of Swami Vivekananda, 12 January 2023

Celebration of Start-up Day, 16 January 2023

Celebration of Birth Anniversary of Netaji Subhas Chandra Bose, 23 January 2023

Celebration of Republic Day, 26 January 2023

Inauguration of Institute Innovation Laboratory, 26 January 2023

Pariksha Pe Charcha, 27 January 2023

Celebration of National Science Day, 28 February 2023

10.2 Seminars

Recent Development on Millet Based Technology, 7 November 2022

Recent Trends in Eletromagnetics and Optics, 17-20 January 2023

Management Education: A Definite Career Booster for Engineering & Science Graduates, 20 January 2023

10.3 Students' Programs / Events

Celebration of Ugadi Festival, 2 April 2022

Freshers' Welcome Ceremony, 28 April 2022

AKAM Cultural Nights (Freshers' Welcome Ceremony), 28 April 2022

Annual Athletic Meet, 16 February 2023

Victory of IIEST Football Team at IIT(ISM) Dhanbad, March 2023

11 Students' Amenities

11 Students' Amenities

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 principal objective 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.

11.1 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.

11.2 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).

11.3 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 participate 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 is open 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 have recently been added to the facilities. Activities relating to Sports and Games are overseen by the Institute Sports Board.

11.4 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.

11.5 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, and 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 Institute campus.

In the last session, the NSS unit of the Institute have undertaken 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. A total of 20 girls were actively engaged in this programme.
- Organized one Women's Self-Defence workshop in the campus.

11.6 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.

As of now, the Institute Sports Board registered 40 students' cadet in the 41 Bengal Bn NCC. The unit is supported 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. In the coming year, it is planned to register more than 40 students as NCC cadets to the unit. A programme is organized 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.

11.7 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.

11.8 Students' Clubs/Societies

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

1)	Camera Buff	The Cine Club
2)	Catharsis	The Photographic Society
3)	Code IIEST	The Coding Club
4)	Debsoc	The Debating Society
5)	Euphony	The Music Club
6)	Les Thespiens	The Drama Club
7)	Lit Soc	The Literary Society
8)	Quiz Maniac Being	The Quiz club
9)	Reflex-o Beta	The Dance Club
10)	Robodarshan	The Robotic Society
11)	SCAGE	The Society for Creative Arts and Green Environment
12)	Entrepreneurship Development Cell	The Society for Entrepreneurship Development and Innovation
13)	Society of Games and Sports	The Society for Games and Sports activities
14)	Club on Engineering Safety (ENSAFE)	The Club for addressing Engineering Safety
15)	Vivekananda Youth Circle	The Club for promoting eternal ideals preached by Swami Vivekananda
16)	Animal Welfare Club	The Club for taking care of stray animals staying and moving inside the institute campus

At the 'Students' Centre for Creative Expression', the students practise 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 inter-

collegiate techno-management festival and the REBECA, the Annual Students' Social are the inter-collegiate events that cause reverberations in the campus through hundreds of foot-falls.

- **Camera Buff**

Camerabuff is the official film club of IIEST, Shibpur. In this club, the knowledge and ideas of different aspects of cinema are reviewed. Apart from that the knowledge about the technicalities of a cinema is also imparted to the students of this college. As a whole, students enjoy every bit of what thet do and what they watch for creating a good bond and togetherness with the today's society.

- **Catharsis**

It is a family of engineers, who found their solace in photography, their passion, their expression, their catharsis. They say, there are things that nobody would see, had a photographer not captured them, and at Catharsis, the young shutterbugs try to freeze those moments with their shutters and bring out the greater truths of life. While Catharsis is now decade-old club, this student's society began its journey as BECPhos – B.E. College Photographic Society back in 1971. The club welcomes all photography enthusiasts among college students, beginners and old-timers alike, to explore this field of art and bring out their creative gifts.

- **CodeIIEST**

In this age of increasing automation, programming is not limited to only computer science and related fields. Every competent engineer needs to know how to program. This makes Code IIEST one of the most important clubs in the institute. As of now it has four different chapters - Competitive Programming, Machine Learning, Security, and Open Source. A platform is created, which allows students to gain assistance and mentorship to come together to learn and solve algorithmic challenges, participate in various contests all over the globe, develop web and system applications and solve intriguing problems enhancing their coding ability. Aim of the club is to propagate the enthusiasm for coding in the Institute and especially amongst freshmen. The secret of getting ahead is getting started and this club provides every student with the right start.

- **DebSoc**

The aim of the society is to serve as a platform for avid orators and help build a debating culture on campus. The activities hone speaking skills, instil confidence and helps develop public speaking abilities.

- **Euphony**

Music: the word that brings to our memory the reverberations of our favourite songs and artists. It is much more than a few vocal melodies or instrumental rhythms. It is an art; it is an emotional expression. And at Euphony, the joy, respect, love, practice are spread. It isn't just a place for guitarists, drummers, or singers; it consists of an assortment of people who love music, who find passion in music and enjoy it. From folk songs to electronic compositions, a multitude of music styles are housed. So, while our namesake may be synonymous to pleasing sounds, the music society, at the end of the day, also becomes a music learning school, a family, a home that nurtures talents of young musicians and helps them flourish.

- **Les Thespians**

Les Thespians, the official dramatics society of IIEST Shibpur was founded back in 2009. It has produced many successful and tremendously praised theatrical productions. The society

helps the theatre enthusiasts of the Institute to build a common platform. Les Thespians produces many home production dramas throughout the year and invites professional drama groups as well to perform on various occasions.

- **LitSoc**

LitSOC, the Literary Society of IIEST Shibpur was established as a sanctuary, a safe haven for all its students, where everyone is free to express themselves. LitSoc aims to provide a platform, not to just creative writers and avid readers, but to all the like-minded individuals to come together and learn the art of expression. The very root of the Society is in creating an atmosphere of creativity and out-of-the-box thinking through countless successful events.

- **Quizmanic BEings**

Quizmaniac BEings started in 2008 with regular sessions being conducted in N-235 Classroom and since then it has grown in size. It is aimed to change the way people think about quizzing and shed their redundant ideas about it as its questions have come to privilege not just memory but also breadth, deduction and lateral thinking. This new shape was a response to the rise of the internet. By conducting regular open quiz sessions in college create a conducive atmosphere for quizzing. The biggest trick to succeed in a quiz isn't just knowledge or memorizing facts but the inherent curiosity to find out The Why.

- **Reflexo-Beta**

The dance club is a hub for all the dancers in the campus to dance out their motivations. The club has members starting from freshers to research scholars - who practise a wide range of dance form from Indian classicals like Kathak, Bharatnatyam, Kathakali to western forms like hip hop, dubsteps, contemporary, Bollywood and several other dance forms. The club is focused in the art and is interested in promoting message through concept expression forms and its compositions.

- **Robodarshan**

Robodarshan is a club founded in 2009 to invoke interest in students about robotics. Robodarshan's motto is 'there is nothing a bot can't do. The primary activities of Robodarshan includes conducting lecture sessions on robotics, the lecture sessions are followed by hands-on sessions, where Robodarshan mentors in making a robot for specific tasks. Robodarshan conducts DIY, exclusively for the first-year students of IIEST and a plethora of fun robotics competitions, which goes by the name Automaton, a part of Instruo – the techno-management fest of IIEST. Robodarshan also collaborates with other departments of IIEST Shibpur to organise Robotics events**.**

- **SCAGE (Society for Creative Arts and Green Environment)**

SCAGE is a platform where students get to express themselves in all forms of Art domains. The club intends to nurture Creativity within oneself, while keeping in mind one's responsibility towards conserving Green Environment.

- **Entrepreneurship Development Cell**

Entrepreneurship Development Cell, IIEST Shibpur (EDC IIESTS) was set up in the year 2009 under the AICTE initiative and is working under the guidance of the Department of Human Resources Management, IIEST Shibpur in coordination with NRDC-IIEST IFC, TCGTBI and now with IIC IIESTS. With the sole aim of enhancing the standard of innovations around the region of IIEST Shibpur, Entrepreneurship Development Cell focuses on fostering the corporate culture onto the pool of IIEST students through several external activities like raising

the awareness on the field of Medium, Small and Medium Enterprises with the involvement of the students from IIEST & Non-IIEST and faculty under a single pool of working community.

- **Society of Games and Sports**

Since the inception of this glorious Institute, the two major wonders of the campus is the Oval and Lords Ground and the Gymnasium formed in the later years. Fostering the sporting culture, this society has been serving the Institute right from its very establishment. Firstly, known as the Athletic Club of IIEST, Shibpur had a unique structure which got renamed as the Sports Board of IIEST, Shibpur. It boasts of its age-old traditions and never ceases to stop excelling.

- **Club on Engineering Safety (ENSAFE)**

The ENSAFE is said to be dedicated to address the burning issues of safety across various engineering domains and spread awareness of the same in the society.

- **Vivekananda Youth Circle**

The Vivekananda Youth Circle is said to provide excellent opportunity to those students of the institute, who are striving to work, think and build their characters on the eternal ideals preached by Swami Vivekananda by reading and organizing appropriate literature.

- **Animal Welfare Club**

The Animal Welfare Club is said to take care of stray animals staying and moving inside the institute campus systematically and efficiently as a self-less job.

11.9 Infrastructural Development in Sports Board

The global pandemic (Covid-19) not only affected Academic fields but also ruined the participatory actions in the field of games and sports too. Like other academic institutes, the IIEST Shibpur Sports Board had no scope to conduct/organize any activities during the session 2020-21.

Moreover, in spite of adversities, the institute authority helped a lot to develop the Students' Sports infrastructure in this crisis. For Sports Facility development programme, the Sports Board has taken few steps:

1. Installation of Electronic LED Cricket score board at OVAL.
2. Renovation of the existing wooden heritage cricket score board at OVAL.
3. Installation of 1000 L PVC water tank at OVAL.
4. Installation of Glow-sign board at the entrance of OVAL.
5. Renovation of the galleries of the OVAL ground.
6. Renovation work of the gymnasium is in progress.

Moreover, the Alumni Association of the Institute also developed an international standard synthetic poly -grass coated volleyball court. It is to be handed over to Sports Board shortly.

12 Annual Accounts

ANNUAL ACCOUNTS FOR THE YEAR 2022-23

C O N T E N T S

BALANCE SHEET AS ON 31ST MARCH, 2023

Amount in Rupees

SOURCES OF FUNDS	Schedule	Current Year	Previous Year
CORPUS / CAPITAL FUND	1	2,69,99,70,394	2,52,30,69,220
DESIGNATED / EARMARKED / ENDOWMENT FUNDS	2	99,80,23,563	93,24,03,176
CURRENT LIABILITIES & PROVISIONS	3	40,08,65,281	50,49,25,191
TOTAL		**4,09,88,59,238**	**3,96,03,97,587**

APPLICATION OF FUNDS	Schedule		Current Year	Previous Year
FIXED ASSETS	4		1,35,07,86,812	1,32,41,53,099
- Tangible Assets		1,30,78,83,962		-
- Capital Work in Progress		-		
- Intangible Assets		4,29,02,850		-
INVESTMENTS FROM EARMARKED / ENDOWMENT FUN	5		81,05,37,356	75,10,18,761
- Long Term		26,84,86,855		
- Short Term		54,20,50,501		
INVESTMENTS - OTHERS	6		1,25,00,000	2,62,56,034
CURRENT ASSETS	7		1,46,22,93,101	1,58,00,77,640
LOANS, ADVANCES & DEPOSITS	8		46,27,41,969	27,88,92,053
TOTAL			**4,09,88,59,238**	**3,96,03,97,587**

SIGNIFICANT ACCOUNTING POLICIES	23
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS	24

Joint Registrar (Finance) Registrar Director

For DEBASIS BANDYOPADHYAY & CO.

Chartered Accountant
(Debasis Bandyopadhyay)
Proprietor
Membership No. - 057861

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2023

Amount in Rupees

Particulars	Schedule	Current Year	Previous Year
INCOME			
Academic Receipts	9	22,00,72,308	20,47,79,480
Grants / Subsidies	10	1,48,36,20,353	1,39,27,86,078
Income from Investments	11	47,73,163	76,18,252
Interest Earned	12	2,83,05,776	93,18,218
Other Income	13	2,49,64,060	73,19,596
Prior Period Income	14	80,50,302	35,30,871
TOTAL (A)		1,76,97,85,962	1,62,53,52,495
EXPENDITURE			
Staff Payments & Benefits (Establishment expenses)	15	1,18,84,39,111	1,16,11,78,442
Academic Expenses	16	22,25,09,589	19,02,47,741
Administrative Expenses	17	10,94,53,150	9,77,54,082
Transportation Expenses	18	5,38,646	2,37,701
Repairing & Maintenance	19	3,07,58,872	3,85,18,890
Depreciation	4	17,50,34,967	16,22,27,849
Finance Costs	20	94,903	38,900
Other Expenses	21	38,800	-
Prior Period Expenses	22	28,828	5,53,455
TOTAL (B)		1,72,68,96,866	1,65,07,57,060
Balance being excess of Income over Expenditure (A-B)		4,28,89,096	(2,54,04,565)
Transfer to / from Designated Fund			
Building fund			
Others (specify)			
Balance being Surplus / (Deficit) carried to Capital Fund		4,28,89,096	(2,54,04,565)

Significant Accounting Policies	23
Contingent Liabilities and Notes to Accounts	24

Joint Registrar (Finance) Registrar Director

For DEBASIS BANDYOPADHYAY & CO.

Chartered Accountant
(Debasis Bandyopadhyay)
Proprietor
Membership No. - 057861

RECEIPTS AND PAYMENTS ACCOUNTS FOR THE YEAR ENDED 31st MARCH 2023

	RECEIPTS	CURRENT YEAR	PREVIOUS YEAR		PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
I	Opening Balances			I	Expenses		
	a) Cash Balances	-	-		a) Establishment Expenses	1,17,99,75,455	1,15,65,28,462
	b) Bank Balances				b) Academic Expenses	21,38,02,786	19,02,76,674
	i. in Current Accounts	18,63,50,539	18,64,81,076		c) Administrative Expenses	10,58,33,158	9,65,06,377
	ii. Savings Accounts	1,12,74,76,655	1,07,95,51,996		d) Transporatation Expenses	5,38,646	2,37,701
					e) Repairs & Maintenance	2,90,31,156	3,75,77,510
	c) Cheques in hand	-	-		f) Prior Period Expenses	-	-
					g) Other Expenses	-	38,880
II	Grants Received			II	Payments against Earmarked/Endowment Funds	92,76,892	12,35,734
	a) From Govt. of India	1,78,52,20,353	1,42,21,86,078				
	b) From State Govt.	-	-	III	Payments againsts Sponsored	20,24,42,171	20,90,77,481
	c) From UGC-Non Plan	-	-				
	c) Form Other Sources (Details)	-	-	IV	Payments against Sporsored Fellowship/Scholarship	2,03,12,507	2,16,96,087
III	Academic Receipts	22,80,42,501	21,19,64,126	V	Investments and Deposits made		
					a) Out of Earmarked/Endowments Funds	89,84,421	70,00,000
IV	Receipts against Earmarked/Endowment Funds	1,60,33,318	2,03,79,307		b) Out of Own Funds (Investments-Others)	-	-
V	Receipts againsts Sponsored Schemes	11,75,46,749	17,20,49,310	VI	Term Deposits with Schedule Banks	-	-
VI	Receipts against Sporsored Fellowship/Scholarship	2,30,67,939	1,75,01,326	VII	Expenditure on Fixed Assets and Capital Works-in-progress		
					a) Fixed Assets	12,69,82,189	9,95,94,933
VII	Income on Investments from				b) Capital Works-in-Progress		
	a) Earmarked/Endowment Funds	3,02,58,414	1,00,84,211				
	b) Other Investments	6,19,038	12,28,013	VIII	Other Payments including Statutory Payments	37,56,95,635	47,09,80,589

..... Contd.

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
VIII Interest Received on			IX Refunds of Grants	-	-
a) Bank Deposits	-	-			
b) Loans & Advances	-	-	X Deposit and Advances	24,75,08,941	1,28,92,879
c) Savings Bank Accounts	2,83,05,776	93,18,218			
d) Providend Fund	-	-	XI Other Payments (including Finance Cost)	1,29,834	-
			XII Other Payments (including prior period /write off)	-	-
IX Investments Encashed	-	1,75,129			
X Other Income (Including Prior Period Income)	1,35,37,260	70,45,177			
			XIII Closing Balances		
XI Deposit and Advances	1,94,64,761	1,58,96,669	a) Cash Balances		-
			b) Bank Balances		
XII Miscellaneous Receipts including Statutory Receipts	36,89,03,352	46,36,09,865	i. in Current Accounts	20,94,62,239	18,63,50,539
			ii. Savings Accounts	1,22,02,59,460	1,12,74,76,655
XIII Any Other Receipts	54,08,835	-			
			c) Cheques in hand	-	-
	3,95,02,35,490	**3,61,74,70,501**		**3,95,02,35,490**	**3,61,74,70,501**

Joint Registrar (Finance) Registrar Director

For DEBASIS BANDYOPADHYAY & CO.

Chartered Accountant
(Debasis Bandyopadhyay)
Proprietor
Membership No. - 057861

SCHEDULE - 1 CORPUS FUND / CAPITAL FUND

Particulars		Current Year	Previous Year
	Balance at the beginning of the year	2,52,30,69,220	2,48,56,13,429
Add :	Contributions towards Corpus / Capital Fund	-	-
Add :	Grants from UGC, Government of India and State Government to the extent utilized for capital expenditure (including deposit with CPWD)	33,10,00,000	-
Add :	Assets Purchased out of Earmarked Funds\Assets Purchased out of Sponsored Projects, where ownership vests in the institutions	5,25,16,335	6,33,34,716
Add :	Assets Donated / Gifts received	-	-
Add :	Other Additions / (Deletions)	18,03,086	(4,74,360)
Add :	Excess of Income over Expenditure transferred from the Income & Expenditure Account	4,28,89,096	(2,54,04,565)
	Total	**2,95,12,77,737**	**2,52,30,69,220**
Deduct :	Over Expenditure of grant, no longer receivable from MoE now being adjusted	25,09,51,812	-
Deduct :	Adjustment of Excess Grant reflected in previous IE a/c	3,55,531	
Deduct :	Deficit transferred from the Income & Expenditure Account	-	-
	Balance at the end of the year	**2,69,99,70,394**	**2,52,30,69,220**

SCHEDULE - 2 DESIGNATED / EARMARKED / ENDOWMENT FUNDS

		A. Particulars							B. Utilization / Expenditure towards objective funds				
Fund wise breakup		a) Opening balance	b) Additions during the year	c) Income from investments made of the funds	d) Accrued interest on investments/ advances	e) Interest on Savings Bank a/c	f) Other additions (specify nature)	Total (A)	i) Capital Expenditure	ii) Revenue Expenditure	iii) Transferred to Schedule 3(a)	Total (B)	Closing balance at the year end (A-B)
1	Fund - NSS	3,34,318	-	-	-	10,759	-	3,45,077	-	-	-	-	3,45,077
2	Corpus Fund - Future Development	51,54,71,949	-	-	2,30,32,310	-	-	53,85,04,259	-	-	-	-	53,85,04,259
3	Institutional Development Fund	26,17,75,182	1,44,58,916	2,72,52,046	-	-	24,401	30,35,10,545	-	87,06,803	-	87,06,803	29,48,03,742
4	Students' Welfare Fund	4,89,867	-	-	-	34,662	-	5,24,529	-	1,00,000	-	1,00,000	4,24,529
5	Corpus Fund - a/c Teqip	1,69,98,349	-	-	7,01,396	97,188	-	1,77,96,933	-	-	-	-	1,77,96,933
6	Faculty Development	8,24,745	-	-	32,748	966	-	8,58,459	-	-	-	-	8,58,459
7	Equipment Replacement	8,18,480	-	-	(13,636)	2,005	-	8,06,849	-	-	-	-	8,06,849
8	Maintenance Fund - a/c	2,16,77,757	-	-	11,94,285	79	-	2,28,72,121	-	-	-	-	2,28,72,121
9	Depreciation Fund - a/c	88,98,657	-	-	4,66,982	2,573	-	93,68,212	-	-	-	-	93,68,212
10	Staff Development	1,01,87,918	-	-	5,35,334	75	-	1,07,23,327	-	-	-	-	1,07,23,327
11	Digital Education Hub	93,42,082	-	-	3,91,098	-	-	97,33,180	-	-	-	-	97,33,180
12	L&T Deep Donation	-	1,50,000	-	-	-	-	1,50,000	-	-	-	-	1,50,000
13	Endowment Funds	8,55,83,872	29,00,000	-	28,53,333	8,69,760	-	9,22,06,965	-	5,70,090	-	5,70,090	9,16,36,875
Current Year		93,24,03,176	1,75,08,916	2,72,52,046	2,91,93,850	10,18,067	24,401	1,00,74,00,456	-	93,76,893	-	93,76,893	99,80,23,563
Previous Year		87,51,84,999	2,10,60,309	15,94,194	3,48,87,156	8,43,740	-	93,35,70,399	4,80,000	6,87,223	-	11,67,223	93,24,03,176

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

Sr. No.	Name of the Endowment	Opening Balance		Additions during the year		Total		Expenditure on the object during the year	Closing Balance		
		Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)		Endowment	Accumulated Interest	Total (10+11)
1	2	3	4	5	6	7	8	9	10	11	12
1	Von Newman Scholarship Fund	53,747	29,904		2,950	53,747	32,854		53,747	32,854	86,601
2	Dr. S. P. Brambha Memorial Merit Sch	1,06,895	57,946		5,866	1,06,895	63,812		1,06,895	63,812	1,70,707
3	Prabir Sengupta Memorial Prize Fund	7,599	6,944		517	7,599	7,461		7,599	7,461	15,060
4	Renu Chakraborty V. L. Fund	55,737	32,499		2,508	55,737	35,007		55,737	35,007	90,744
5	Dr. Fazlue Kader Memorial Scholarshi	1,15,629	1,05,307		(27,829)	1,15,629	77,478		1,15,629	77,478	1,93,107
6	J. N. Neogi Students' Benefit Fund	72,248	66,495		7,638	72,248	74,133		72,248	74,133	1,46,381
7	Sunita Memorial Prize Fund	15,407	14,180		1,629	15,407	15,809		15,407	15,809	31,216
8	Dr. B. N. Dey Scholarship Fund	37,519	34,529		3,967	37,519	38,496		37,519	38,496	76,016
9	Kunja Kusum Scholarship Fund	77,444	41,983		4,250	77,444	46,233		77,444	46,233	1,23,677
10	Sanat Kanta Nirmalya Basini Biswas Gc	20,087	11,713		900	20,087	12,613		20,087	12,613	32,700
11	Prof. N. N. Sen Memorial Scholarship	39,432	21,940		2,165	39,432	24,105		39,432	24,105	63,537
12	Acharya P. C. Roy Scholarship	91,587	49,688		5,026	91,587	54,714		91,587	54,714	1,46,301
13	Ramlal Nandy & Ganoda Sundari Nanc	46,928	25,439		2,575	46,928	28,014		46,928	28,014	74,942
14	Liluah Iron Works Ltd. Scholarship	46,928	26,878		1,810	46,928	28,688		46,928	28,688	75,616
15	R & K Ahmed Merit Scholarship	56,769	31,584		3,116	56,769	34,700		56,769	34,700	91,469
16	The President of India Gold Medal	56,769	6,627		3,116	56,769	9,743	9,631	56,769	112	56,881
17	Alumni Donation Seminar Series	3,52,521	3,09,370		22,624	3,52,521	3,31,994		3,52,521	3,31,994	6,84,515
18	Jogesh Chandra Banerjee Memorial Sc	4,78,376	2,66,133		26,253	4,78,376	2,92,386		4,78,376	2,92,386	7,70,762
19	Anir Burnwal Memorial Merit cum Me	1,07,110	59,978		3,265	1,07,110	63,243		1,07,110	63,243	1,70,353

Sr. No.	Name of the Endowment	Opening Balance		Additions during the year		Total		Expenditure on the object during the year	Closing Balance		
		Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)		Endowment	Accumulated Interest	Total (10+11)
20	Jaya Smriti Puroskar (BESUS)	24,189	10,691	-	922	24,189	11,613	1,000	24,189	10,613	34,801
21	Jaya Smriti Puroskar	21,374	16,993	-	1,899	21,374	18,892		21,374	18,892	40,266
22	BEC (55) Scholarship Fund	2,81,033	2,67,801	-	29,145	2,81,033	2,96,946		2,81,033	2,96,946	5,77,979
23	BEC Sholarship	1,00,592	25,369	-	31,743	1,00,592	57,112		1,00,592	57,112	1,57,704
24	BECA - 1964	2,30,040	2,12,678	-	27,189	2,30,040	2,39,867		2,30,040	2,39,867	4,69,907
25	Prof. S. C. Dasgupta Gold Medal	1,43,098	88,971	-	30,835	1,43,098	1,19,806	9,631	1,43,098	1,10,175	2,53,273
26	Siddhananada Memorial Lecture	53,875	67,683	-	6,638	53,875	74,321		53,875	74,321	1,28,196
27	BESU Endowment Fund	50,00,000	35,34,574	-	4,53,172	50,00,000	39,87,746		50,00,000	39,87,746	89,87,746
28	Prabodh Chandra Mitra Scholarship Fu	1,53,625	27,037	-	5,734	1,53,625	32,771		1,53,625	32,771	1,86,396
29	Dhaibat Ghosh Memorial Scholarship	4,33,732	3,81,612	-	35,674	4,33,732	4,17,286		4,33,732	4,17,286	8,51,018
30	Prof. P. C. Mitra Memorial Award	51,458	4,363	-	6,155	51,458	10,518		51,458	10,518	61,977
31	Bijoy Ashu Chair Professor Fund	1,00,48,394	64,50,152	-	8,19,433	1,00,48,394	72,69,585		1,00,48,394	72,69,585	1,73,17,979
32	Prabodh Kumar Chatterjee Fund	1,94,000	63,083	-	6,607	1,94,000	69,690		1,94,000	69,690	2,63,690
33	Rai Sahib Amulya Chandra Mitra Endo	3,00,000	1,41,906	-	(2,280)	3,00,000	1,39,626		3,00,000	1,39,626	4,39,626
34	Rai Sahib Amulya Chandra Mitra Endo	2,00,000	1,94,285	-	11,693	2,00,000	2,05,978		2,00,000	2,05,978	4,05,978
35	S. C. Dasgupta Memorial Fund	11,00,000	11,82,882	-	97,180	11,00,000	12,80,062		11,00,000	12,80,062	23,80,062
36	Prabodh Kumar Chatterjee Fund	50,000	94,411	-	4,604	50,000	99,015		50,000	99,015	1,49,015
37	Madhusudan Bhattacharjee Memorial	2,15,000	25,630	-	23,516	2,15,000	49,146	12,000	2,15,000	37,146	2,52,146
38	B. K. Bose Lecture Fund	2,25,000	71,008	-	-	2,25,000	71,008		2,25,000	71,008	2,96,008
39	Students Reward Programme Fund	16,50,000	3,31,243	-	70,995	16,50,000	4,02,238	2,39,169	16,50,000	1,63,069	18,13,069
40	Sougata Mukherjee Memo. Award for	5,09,507	1,45,992	-	51,414	5,09,507	1,97,406	26,750	5,09,507	1,70,656	6,80,163
41	Suhas Choudry Swimming Excellence	1,22,132	19,633	-	14,468	1,22,132	34,101	8,076	1,22,132	26,025	1,48,157
42	Ujjal Dasgupta Scholarship Corpus Fur	13,61,590	1,89,475	-	1,38,035	13,61,590	3,27,510	78,000	13,61,590	2,49,510	16,11,100
43	GAABESU Admission Grant - 2	5,82,400	2,80,726	-	33,459	5,82,400	3,14,185		5,82,400	3,14,185	8,96,585
44	Prof A K Seal Gold Medal	1,00,000	33,634	-	26,740	1,00,000	60,374	19,260	1,00,000	41,114	1,41,114

Sr. No.	Name of the Endowment	Opening Balance		Additions during the year		Total		Expenditure on the object during the year	Closing Balance		
		Endowment	Accumulated Interest	Endowment	Interest	Endowment (3+5)	Accumulated Interest (4+6)		Endowment	Accumulated Interest	Total (10+11)
45	BEC Prize	2,07,870	35,087			2,07,870	35,087		2,07,870	35,087	2,42,957
46	TATA Steel Chair Professor	7,19,080	-			7,19,080	-		7,19,080	-	7,19,080
47	Besus Foundation (GAABESU)	81,66,380	70,17,767		7,60,598	81,66,380	77,78,365	5,764	81,66,380	77,72,601	1,59,38,981
48	K K Pal Chaudhuri Arch	50,000	45,056		5,912	50,000	50,968		50,000	50,968	1,00,968
49	Prof. P. C. Mitra Memorial Award - 2	1,00,000	71,224		11,469	1,00,000	82,693		1,00,000	82,693	1,82,693
50	Amiya Basu Endowment Fund	64,44,262	12,19,772		2,49,275	64,44,262	14,69,047	1,20,690	64,44,262	13,48,357	77,92,619
51	Arun Ch Mitra, Ganesh Mitra, Sindhubala Mitra Memorial Fund	2,00,000	-		13,905	2,00,000	13,905	20,857	2,00,000	(6,952)	1,93,048
52	Alpona Banerjee	99,02,719	22,76,732		5,14,904	99,02,719	27,91,636		99,02,719	27,91,636	1,26,94,355
53	Aveek Guha Memorial Gold	1,15,000	-		9,631	1,15,000	9,631	9,631	1,15,000	-	1,15,000
54	Provat Chandra Neogi	27,00,000	4,06,628		1,29,600	27,00,000	5,36,228		27,00,000	5,36,228	32,36,228
55	Tarun Kanti Ghosh Memorial	3,47,532	14,690		20,852	3,47,532	35,542		3,47,532	35,542	3,83,074
56	Sayantan Biswas Memorial	1,60,000	-		9,631	1,60,000	9,631	9,631	1,60,000	-	1,60,000
57	Ganesh Ch. Mukherjee Memorial Fund	50,00,000	3,33,333			50,00,000	3,33,333		50,00,000	3,33,333	53,33,333
58	Ria Ghosh Memorial	-	-	14,00,000		14,00,000	-		14,00,000	-	14,00,000
59	BEC (1984) Changemaker Student Awa	-	-	15,00,000		15,00,000	-		15,00,000	-	15,00,000
		-	-	-		-	-	-	-	-	-
	Total	**5,91,02,614**	**2,64,81,258**	**29,00,000**	**37,23,093**	**6,20,02,614**	**3,02,04,351**	**5,70,090**	**6,20,02,614**	**2,96,34,261**	**9,16,36,875**

SCHEDULE -3 CURRENT LIABILITIES & PROVISIONS

		Current Year	Previous Year
A	**CURRENT LIABILITIES**		
	1. Deposits from staff	-	-
	2. Deposit from students	2,05,02,900	1,78,44,400
	3. Sundry Creditors		
	a) For Goods and Services		
	b) Others		
	4. Deposit - Others (including EMD, Security Deposit)	53,99,087	40,42,011
	5. Statutory Liabilities (TDS, WC Tax, CPF, GIS, NPS)		
	a) Overdue		
	b) Others	40,58,652	67,27,400
	6. Other Current Liabilities		
	a) Salaries	-	-
	b) Receipts against sponsored projects	32,02,96,339	40,11,79,313
	c) Receipts against sponsored fellowships and scholarships	1,23,43,692	1,45,03,656
	d) Unutilized Grants	46,851	2,94,46,851
	e) Grants in advance	-	-
	f) Other funds	-	-
	g) Audit Fees	14,00,000	7,00,000
	h) Other liabilities [Miscellaneous Recoveries]	35,50,283	24,79,234
	i) Other liabilities [Professional Charges]	2,83,200	2,83,200
	j) Other liabilities [Electricity Charges]	25,14,871	22,99,122
	k) Other liabilities [E-Journal / E-Books]	-	-
	l) Other liabilities [Manpower Hiring]	36,31,116	31,21,593
	m) Other liabilities [Security Service]	43,10,753	23,71,207
	n) Other liabilities [Tuition Fees refundable]	2,25,27,537	1,99,27,204
	Total (A)	**40,08,65,281**	**50,49,25,191**
B	**PROVISIONS**		
	1. For taxation		
	2. Gratuity		
	3. Superannuation Fund		
	4. Accumulated Leave Encashment		
	5. Trade Warranties / Claims		
	6. Others (Specify)		
	Total (A)	**-**	**-**
	Total (A + B)	**40,08,65,281**	**50,49,25,191**

SCHEDULE - 3(a) SPONSORED PROJECTS

Sr. No.	Name of the Project	Opening Balance		Receipts / Recoveries during the year	Total	Expenditure during the year	Closing Balance	
		Credit	Debit				Credit	Debit
1	2	3	4	5	6	7	8	9
1	Research Project Accounts	32,47,21,326	-	7,11,06,510	39,58,27,836	13,98,37,205	25,59,90,631	-
2	Consultancy Fund	6,99,31,366	-	5,02,58,831	12,01,90,197	6,26,04,966	5,75,85,231	-
3	Testing Fees Fund	65,26,620	-	1,93,856	67,20,476	-	67,20,476	-
		-	-		-		-	-
	Total	**40,11,79,313**	**-**	**12,15,59,197**	**52,27,38,510**	**20,24,42,171**	**32,02,96,339**	**-**

SCHEDULE - 3(b) SPONSORED FELLOWSHIPS AND SCHOLARSHIPS

Sr. No.	Name of Sponsor	Opening Balance		Transactions during the year		Closing Balance	
		Credit	Debit	Credit	Debit	Credit	Debit
1	2	3	4	5	6	7	8
1	CSIR - Fellowship and Contingency	7,02,923	-	2,81,668	1,61,450	8,23,141	-
2	Inspire Faculty -DST	5,20,290	-	32,84,999	31,92,572	6,12,717	-
3	Inspire Fellowship -DST	49,79,128	-	27,88,918	46,91,189	30,76,857	-
4	QIP Contingency	-	-	3,56,251	1,20,029	2,36,222	-
5	UGC Fellowship Post Doctoral	7,60,058	-			7,60,058	-
6	UGC Raman Fellowship Post Doctoral	43,02,068	-			43,02,068	-
7	Other Miscelleneous Grant - DST	2,92,614	-	1,99,758	2,92,658	1,99,714	-
8	Other Misc. Receipts	-	-	-	-	-	-
9	Faculty Recharge Program / BSR Research Fellowship (UGC)	-	(1,32,72,870)	1,58,35,360	1,09,19,964	-	(83,57,474)
10	INSA Scientist (Others)	29,918	-			29,918	-
11	Visvesvaraya Phd Fellowship	7,53,162	-	3,16,732	9,34,645	1,35,249	-
12	UGC D S Kothari Fellowship	7,77,846	-			7,77,846	-
13	GIAN Course	1,50,724	-	4,253		1,54,977	-
14	Stipend - Means cum Merit Scholarship	30,790	-			30,790	-
15	NREF	12,04,136	-			12,04,136	-
		-	-			-	-
	Total	**1,45,03,656**	**(1,32,72,870)**	**2,30,67,939**	**2,03,12,507**	**1,23,43,692**	**(83,57,474)**

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

		Current Year	Previous Year
A	**Grants : Government of India**		
	Balance b/f	(22,15,51,812)	(25,09,51,812)
	Add : Grants during the year		
	Non-Recurring (for creation of capital assets)	30,16,00,000	2,94,00,000
	Recurring	1,48,36,20,353	1,39,27,86,078
	Add : Interest earned on grant	-	-
	Total (a)	1,56,36,68,541	1,17,12,34,266
	Less : Refunds	-	-
	Less : Utilized for Capital Expenditure	33,10,00,000	-
	Less : Utilized for Revenue Expenditure	1,48,36,20,353	1,39,27,86,078
		1,81,46,20,353	1,39,27,86,078
	Less : Excess Expenditure transferred to Corpus Fund	25,09,51,812	-
	Total (b)	1,56,36,68,541	1,39,27,86,078
	Unutilized balance carried forward (a-b)	0	(22,15,51,812)

Note : The Deposit with the CPWD amounting Rs. 40.31 crore has been shown under Schedule 8 Sl 3(a); out the same Rs. 18.34 crore has been considered as utilized of Non-Recurring Grant from the MoE as the grant is no longer available with the Institute and hence, stands utilized from the Institute's side.

B	**UGC Grants - Plan**		
	Balance b/f		
	Add : Receipts during the year		
	Total (c)	-	-
	Less : Refunds		
	Less : Utilized for Revenue Expenditure		
	Less : Utilized for Capital Expenditure		
	Total (d)	-	-
	Unutilized carried forward (c-d)	-	-

C	**UGC Grants - Non Plan**		
	Balance b/f	-	-
	Add : Receipts during the year	-	-
	Total (e)	-	-
	Less : Refunds		-
	Less : Utilized for Revenue Expenditure	-	-
	Less : Utilized for Capital Expenditure	-	-
	Total (f)	-	-
	Unutilized carried forward (e-f)	-	-

D	**Grants from State Government**			
	Balance b/f	46,851		46,851
	Add : Receipts during the year	-		-
			Total (g)	46,851
	Less : Refunds			-
	Less : Utilized for Revenue Expenditure		-	
	Less : Utilized for Capital Expenditure			
			Total (h)	-
	Unutilized carried forward (g-h)			46,851
	Grand Total (A+B+C+D)		**46,851**	**(22,15,04,961)**

SCHEDULE - 4 FIXED ASSETS

S. No.	Assets Heads	Gross Block				Depreciation					Net Block	
		Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31-03-2022	31-03-2023
1	Land [leasehold]	3,85,170	-	-	3,85,170		-	-	-	-	3,85,170	3,85,170
2	Site Development	3,10,181	-	-	3,10,181		-	-	-	-	3,10,181	3,10,181
3	Buildings	57,75,92,527	3,17,36,390	-	60,93,28,917	2%	8,10,03,398	1,21,96,066	28,826	9,32,28,290	49,65,89,128	51,61,00,626
4	Roads and Bridges	9,02,405	-	-	9,02,405	2%	1,03,234	18,048	-	1,21,282	7,99,171	7,81,123
5	Tubewells & Water Supply	1,42,40,353	35,56,137	-	1,77,96,490	2%	12,82,285	3,55,930	-	16,38,215	1,29,58,068	1,61,58,275
6	Sewerage & Drainage				-					-	-	-
7	Electrical Installation and Equipme	17,67,81,232	50,34,208	-	18,18,15,440	5%	5,35,79,390	90,90,772	-	6,26,70,162	12,32,01,842	11,91,45,278
8	Plant & Machinery	15,90,11,606	-	-	15,90,11,606	5%	6,36,04,643	79,50,580	-	7,15,55,223	9,54,06,964	8,74,56,384
9	Scientific & Laboratory Equipment	63,80,90,531	8,08,13,281	-	71,89,03,812	8%	23,32,57,043	5,75,12,305	-	29,07,69,348	40,48,33,488	42,81,34,464
10	Office Equipments	5,40,21,950	36,44,285	-	5,76,66,235	7.5%	1,69,49,455	43,24,968	-	2,12,74,423	3,70,72,495	3,63,91,812
11	Audio Visual Equipments	12,22,600	3,74,321	-	15,96,921	7.5%	3,66,164	1,19,769	-	4,85,933	8,56,436	11,10,988
12	Computers & Peripherals	16,70,03,323	1,08,32,765	-	17,78,36,088	20%	13,73,13,142	1,97,47,205	-	15,70,60,347	2,96,90,181	2,07,75,741
13	Furniture, Fixtures & Fittings	11,34,81,209	52,06,678	-	11,86,87,887	7.5%	5,14,32,100	89,01,591	-	6,03,33,691	6,20,49,110	5,83,54,197
14	Vehicles	3,75,838	-	-	3,75,838	10%	3,00,671	37,584	-	3,38,255	75,168	37,584
15	Library Books & Scientific Journals	10,77,18,405	1,02,883	-	10,78,21,288	10%	7,42,97,023	1,07,82,129	-	8,50,79,152	3,34,21,382	2,27,42,136
16	Small Value Assets	4,08,815	-	-	4,08,815		4,08,812	-	-	4,08,812	3	3
	Total (A)	2,01,15,46,146	14,13,00,948	-	2,15,28,47,094		71,38,97,359	13,10,36,947	28,826	84,49,63,132	1,29,76,48,787	1,30,78,83,962
17	Capital Work in Progress (B)	-	-	-	-			-		-	-	-

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	
											31-03-2022	31-03-2023
18	Computer Software	3,34,33,715	2,15,46,100	-	5,49,79,815	40%	3,26,53,613	91,40,174	-	4,17,93,787	7,80,102	1,31,86,028
19	E-Journals	17,16,00,043	3,88,50,458	-	21,04,50,501	40%	14,58,75,833	3,48,57,846	-	18,07,33,679	2,57,24,209	2,97,16,821
20	Patents	-			-					-	-	-
	Total (C)	20,50,33,758	6,03,96,558	-	26,54,30,316		17,85,29,446	4,39,98,020	-	22,25,27,466	2,65,04,312	4,29,02,850
	Grand Total (A + B +C)	**2,21,65,79,904**	**20,16,97,506**	**-**	**2,41,82,77,410**		**89,24,26,805**	**17,50,34,967**	**28,826**	**1,06,74,90,598**	**1,32,41,53,099**	**1,35,07,86,812**

SCHEDULE - 4A NON-RECURRING (CREATION OF CAPITAL ASSETS OUT OF NON-RECURRING GRANT)

S. No.	Assets Heads	Gross Block				Depreciation					Net Block	
		Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31-03-2022	31-03-2023
1	Land [leasehold]	3,85,170	-	-	3,85,170		-	-	-	-	3,85,170	3,85,170
2	Site Development	-	-	-	-		-	-	-	-	-	-
3	Buildings	54,64,61,765	3,02,95,010	-	57,67,56,775	2%	7,72,67,707	1,15,44,623	-	8,88,12,330	46,91,94,058	48,79,44,445
4	Roads and Bridges	9,02,405		-	9,02,405	2%	1,03,234	18,048	-	1,21,282	7,99,171	7,81,123
5	Tubewells & Water Supply	1,34,40,353	35,56,137	-	1,69,96,490	2%	11,86,284	3,39,930	-	15,26,214	1,22,54,069	1,54,70,276
6	Sewerage & Drainage	-		-	-	2%	-	-	-	-	-	-
7	Electrical Installation and Equipme	15,36,52,226	50,34,208	-	15,86,86,434	5%	4,62,31,975	79,34,322	-	5,41,66,297	10,74,20,251	10,45,20,137
8	Plant & Machinery	15,84,06,181		-	15,84,06,181	5%	6,33,62,473	79,20,309	-	7,12,82,782	9,50,43,709	8,71,23,400
9	Scientific & Laboratory Equipment	23,42,13,903	3,03,52,580	-	26,45,66,483	8%	8,26,84,998	2,11,65,319	-	10,38,50,317	15,15,28,905	16,07,16,166
10	Office Equipments	5,31,06,350	36,44,285	-	5,67,50,635	7.5%	1,65,49,975	42,56,298	-	2,08,06,273	3,65,56,375	3,59,44,362
11	Audio Visual Equipments	12,22,600	3,74,321	-	15,96,921	7.5%	3,66,164	1,19,769	-	4,85,933	8,56,436	11,10,988
12	Computers & Peripherals	14,75,01,184	87,01,670	-	15,62,02,854	20%	11,94,28,774	1,83,41,421	-	13,77,70,195	2,80,72,410	1,84,32,659
13	Furniture, Fixtures & Fittings	10,26,82,123	52,06,678	-	10,78,88,801	7.5%	4,57,51,007	80,91,660	-	5,38,42,667	5,69,31,116	5,40,46,134
14	Vehicles	3,75,838		-	3,75,838	10%	3,00,671	37,584	-	3,38,255	75,168	37,584
15	Library Books & Scientific Journals	10,62,46,793	44,089	-	10,62,90,882	10%	7,34,39,420	1,06,29,088	-	8,40,68,508	3,28,07,373	2,22,22,374
16	Small Value Assets	4,08,815	-	-	4,08,815	100%	4,08,812	-	-	4,08,812	3	3
	Total (A)	1,51,90,05,707	8,72,08,978	-	1,60,62,14,685		52,70,81,495	9,03,98,371	-	61,74,79,866	99,19,24,212	98,87,34,819
17	Capital Work in Progress (B)	-	-		-					-	-	-

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	
											31-03-2022	31-03-2023
18	Computer Software	3,32,69,990	2,15,46,100	-	5,48,16,090	40%	3,24,89,889	91,40,174		4,16,30,063	7,80,101	1,31,86,027
19	E-Journals	17,16,00,043	3,88,50,458	-	21,04,50,501	40%	14,58,75,833	3,48,57,846		18,07,33,679	2,57,24,209	2,97,16,821
20	Patents	-			-		-	-		-	-	-
	Total (C)	20,48,70,033	6,03,96,558	-	26,52,66,591		17,83,65,722	4,39,98,020	-	22,23,63,742	2,65,04,311	4,29,02,849
	Grand Total (A + B +C)	**1,72,38,75,740**	**14,76,05,536**	**-**	**1,87,14,81,276**		**70,54,47,217**	**13,43,96,391**	**-**	**83,98,43,608**	**1,01,84,28,523**	**1,03,16,37,668**

SCHEDULE - 4B NON-PLAN

S. No.	Assets Heads	Gross Block				Depreciation					Net Block	
		Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31-03-2022	31-03-2023
1	Land	-	-	-	-		-	-		-	-	-
2	Site Development	-	-	-	-		-	-		-	-	-
3	Buildings	3,11,30,762	14,41,380	-	3,25,72,142	2%	37,35,692	6,51,443	28,826	44,15,961	2,73,95,070	2,81,56,181
4	Roads and Bridges	-	-	-	-		-	-		-	-	-
5	Tubewells & Water Supply	8,00,000	-	-	8,00,000	2%	96,000	16,000	-	1,12,000	7,04,000	6,88,000
6	Sewerage & Drainage	-	-	-	-		-	-		-	-	-
7	Electrical Installation and Equipme	1,88,69,238	-	-	1,88,69,238	5%	56,60,771	9,43,462	-	66,04,233	1,32,08,467	1,22,65,005
8	Plant & Machinery	-	-	-	-		-	-		-	-	-
9	Scientific & Laboratory Equipment	-	-	-	-		-	-		-	-	-
10	Poffice Equipments	-	-	-	-		-	-		-	-	-
11	Audio Visual Equipments	-	-	-	-		-	-		-	-	-
12	Computers & Peripherals	-	-	-	-		-	-		-	-	-
13	Furniture, Fixtures & Fittings	-	-	-	-		-	-		-	-	-
14	Vehicles	-	-	-	-		-	-		-	-	-
15	Library Books & Scientific Journals	-	-	-	-		-	-		-	-	-
16	Small Value Assets	-	-	-	-		-	-		-	-	-
	Total (A)	5,08,00,000	14,41,380	-	5,22,41,380		94,92,463	16,10,905	28,826	1,11,32,194	4,13,07,537	4,11,09,186
17	Capital Work in Progress (B)				-					-	-	-

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	
											31-03-2022	31-03-2023
18	Computer Software				-					-	-	-
19	E-Journals				-					-	-	-
20	Patents				-					-	-	-
	Total (C)	-	-	-	-		-	-	-	-	-	-
	Grand Total (A + B +C)	**5,08,00,000**	**14,41,380**	**-**	**5,22,41,380**		**94,92,463**	**16,10,905**	**28,826**	**1,11,32,194**	**4,13,07,537**	**4,11,09,186**

SCHEDULE - 4C INTANGIBLE ASSETS

S. No.	Assets Heads	Gross Block					Depreciation / Amortization Block				Net Block	
		Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Opening Balance	Depreciation / Amortization or the year	Deduction / Adjustments	Total Depreciation / Amortization	31-03-2022	31-03-2023
1	Patents & Copyrights				-					-	-	-
2	Computer Software				-					-	-	-
3	E-Journals				-					-	-	-
		-	-	-	-		-	-	-	-	-	-

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

Particulars		Opening Balance	Additions	Gross	Amortization	Net Block 31/03/2019	Net Block 31/03/2021
A 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		-	-	-	-	-	-

Particulars		Opening Balance	Additions	Gross	Patents Granted / Rejected	31-03-2022	31-03-2023
B 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		-	-	-	-	-	-

SCHEDULE - 4D OTHERS

S. No.	Assets Heads	Gross Block					Depreciation				Net Block	
		Opening Balance	Additions	Deductions	Closing Balance	Rate of Depreciation	Opening Balance	Depreciation for the year	Deduction / Adjustments	Total Depreciation	31-03-2022	31-03-2023
1	Land	-			-		-	-		-	-	-
2	Site Development	3,10,181	-	-	3,10,181		-			-	3,10,181	3,10,181
3	Buildings	-	-	-	-		-			-	-	-
4	Roads and Bridges	-	-	-	-		-			-	-	-
5	Tubewells & Water Supply	-	-	-	-		-			-	-	-
6	Sewerage & Drainage	-	-	-	-		-			-	-	-
7	Electrical Installation and Equipme	42,59,768	-	-	42,59,768	5%	16,86,644	2,12,988		18,99,632	25,73,124	23,60,136
8	Plant & Machinery	6,05,425	-	-	6,05,425	5%	2,42,170	30,271		2,72,441	3,63,255	3,32,984
9	Scientific & Laboratory Equipment	40,38,76,628	5,04,60,701	-	45,43,37,329	8%	15,05,72,045	3,63,46,986		18,69,19,031	25,33,04,583	26,74,18,298
10	Office Equipments	9,15,600	-	-	9,15,600	7.5%	3,99,480	68,670		4,68,150	5,16,120	4,47,450
11	Audio Visual Equipments	-	-	-	-		-			-	-	-
12	Computers & Peripherals	1,95,02,139	21,31,095	-	2,16,33,234	20%	1,78,84,368	14,05,784		1,92,90,152	16,17,771	23,43,082
13	Furniture, Fixtures & Fittings	1,07,99,086	-	-	1,07,99,086	7.5%	56,81,093	8,09,931		64,91,024	51,17,993	43,08,062
14	Vehicles	-	-	-	-		-			-	-	-
15	Library Books & Scientific Journals	14,71,612	58,794	-	15,30,406	10%	8,57,603	1,53,041		10,10,644	6,14,009	5,19,762
16	Computer Software	1,63,725	-	-	1,63,725	40%	1,63,724	-	-	1,63,724	1	1
17	E Journals	-	-		-	40%	-	-		-	-	-
	Total	44,19,04,164	5,26,50,590	-	49,45,54,754		17,74,87,126	3,90,27,671	-	21,65,14,797	26,44,17,038	27,80,39,957
18	Capital Work in Progress				-					-	-	-
	Grand Total	**44,19,04,164**	**5,26,50,590**	**-**	**49,45,54,754**		**17,74,87,126**	**3,90,27,671**	**-**	**21,65,14,797**	**26,44,17,038**	**27,80,39,957**

SCHEDULE - 5 INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS

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	81,05,37,356	75,10,18,761
7	Others (to be specified)		
Total		**81,05,37,356**	**75,10,18,761**

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

Sl. No.	Funds	Current Year	Previous Year
1	Endowment Funds **(vide Annexure I)**	5,58,32,873	5,41,77,955
2	Earmarked Funds / Sponsored Projects **(vide Annexure II)**	75,47,04,483	69,68,40,806
Total		**81,05,37,356**	**75,10,18,761**

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 **(vide Annexure - III)**	1,25,00,000	2,62,56,034
7	Others (to be specified)	-	-
	Total	**1,25,00,000**	**2,62,56,034**

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		
f) Electrical Materials		
g) Stationery		
2. Sundry Debtors :		
a) Debts outstanding for a period exceeding six months		
b) Others		
MOE Grant receivables [over and above sanctioned for the year]	-	25,09,51,812
c) MOE Grant receivables [sanctioned for the year]	-	-
d) Any Other Receivables [from Mess Section]	25,10,955	38,800
3. Cash and Bank balances :		
a) **With Scheduled Banks**		
- in Current Account (vide Annexure - V)	20,94,62,239	18,63,50,539
- in Term Deposit Accounts (vide Annexure IV)	3,00,60,447	1,52,59,834
- in Savings Accounts (vide Annexure VI)	1,22,02,59,460	1,12,74,76,655
b) **With Non-Scheduled Banks**		
c) Cash in hand	-	-
d) Cheques in hand	-	-
4. Post Office - Savings Accounts		
Total	**1,46,22,93,101**	**1,58,00,77,640**

Note : A separate Annexure is being enclosed showing the bank details, nomenclature of accounts showing the fund for which the bank accounts are being dedicated and the balance as on 31/03/2023

a) Balance in Savings Bank a/c for Earmarked Fund - Rs. 45,35,80,567	45,35,80,567
b) Balance in Savings Bank a/c for Endowment Fund - Rs. 52,52,573	32,52,573
c) Balance in Savings & Current Bank a/c for Genera Fund - Rs. 97,28,88,559	97,28,88,559

SCHEDULE - 8 LOANS AND ADVANCES

	Current Year	Previous Year
1. Advance to employee : (Non interest bearing)		
a) Salary	-	-
b) Festival	-	-
c) Medical Advance	43,12,277	30,84,475
d) Other (to be specified)		
- Advance to employees (vide Annexure - VII)	9,15,691	2,93,357
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	40,31,54,151	18,27,11,501
b) to Suppliers (vide Annexure VIII)	1,00,000	1,00,000
c) Other (to be specified) - Advance Student Research Scholars	-	1,00,000
d) Other (to be specified) - Advance for Research Projects	3,95,719	-
e) Other (to be specified) - Advance for Consultancy	-	-
f) Other (to be specified) - Institute Development Fund	-	10,000
g) Other-Miscellaneous	-	-
h) Other-E Journals	5,47,027	1,36,58,118
4. Prepaid Expenses	-	-
a) Insurance	-	-
b) Other Expenses	-	-
5. Deposits	-	-
a) Telephone	-	-
b) Lease Rent	-	-
c) Electricity	84,26,856	84,53,246
d) AICTE, if applicable	-	-
e) Other (to be specified) - against research projects	-	-
f) Other (to be specified) - against consultancy	-	-
6. Income Accrued		
a) On investments from Earmarked / Endowment Funds	1,50,44,228	3,76,17,512
b) On investments - Others	20,13,216	23,63,721
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	83,57,474	1,32,72,870
c) Grants Receivables	-	-
d) Other Receivables from UGC	-	-
8. Claim Receivable		
Advance Tax / Income Tax Deducted at Source receivable	1,94,75,330	1,72,27,253
Total	**46,27,41,969**	**27,88,92,053**

SCHEDULE - 9 ACADEMIC RECEIPTS

	Current Year	Previous Year
FEES FROM STUDENTS		
A. Academic		
1. Tuition Fees	17,64,24,432	17,78,22,719
2. Admission Fees	35,37,482	32,23,600
3. Enrolment Fees		
4. Library Admission Fees		
5. Laboratory Fees		
6. Art & Craft Fees		
7. Registration Fees		
8. Course Fees	21,86,834	29,06,750
Total (A)	**18,21,48,748**	**18,39,53,069**
B. Examinations		
1. Admission Test Fees	-	-
2. Annual Examination Fees	72,37,000	59,57,000
3. Mark sheet, Certificate Fees	-	-
4. Entrance Examination Fees	-	-
Total (B)	**72,37,000**	**59,57,000**
C. Other Fees		
1. Identity Card Fees		
2. Fine / Miscellaneous Fees	31,90,879	19,71,062
3. Medical Fees	-	-
4. Transportation Fees	-	-
5. Hostel Development Fees	76,49,700	-
Total (C)	**1,08,40,579**	**19,71,062**
D. Sale of Publications		
1. Sale of Admission Forms	-	-
2. Sale of Syllabus, Question Papers etc		
3. Sale of prospectus including admission forms		
Total (D)	**-**	**-**
E. Other Academic Receipts		
1. Registration fee for workshops, programmes, Student Activities Fees	64,17,225	20,32,599
2. Registration fees (Academic Staff College)	-	-
3. External Examination Fees Receipts	-	-
4. Convocation fees	29,84,750	29,93,250
5. Tuition Fees - Self Financing Course	-	-
6. Infrastructure Maintenance Fees	1,04,44,006	78,72,500
Total (E)	**1,98,45,981**	**1,28,98,349**
GRAND TOTAL (A+B+C+D+E)	22,00,72,308	20,47,79,480

SCHEDULE - 10 GRANTS / SUBSIDIES (IRREVOCABLE GRANTS RECEIVED)

Particulars	Grant-in-aid			Total Grant-in-aid	Current Year Total	Previous Year Total
	Govt of India	UGC Plan	State Govt Grant			
Balance B/F	(25,09,51,812)	-	46,851	(25,09,04,961)	(25,09,04,961)	(25,09,04,961)
Add : Receipts during the year plus reversal	1,78,52,20,353		-	1,78,52,20,353	1,78,52,20,353	1,42,21,86,078
Total	1,53,42,68,541	-	46,851	1,53,43,15,392	1,53,43,15,392	1,17,12,81,117
Add : Excess Expenditure transferred to Corpus Fund and adjustment of deficit shown in earlier accounts	28,03,51,812		-		-	-
Balance	1,81,46,20,353	-	46,851	1,53,43,15,392	1,53,43,15,392	1,17,12,81,117
Less : Utilized for Capital expenditure (A)	33,10,00,000			33,10,00,000	33,10,00,000	2,94,00,000
Balance	1,48,36,20,353	-	46,851	1,20,33,15,392	1,20,33,15,392	1,14,18,81,117
Less : Utilized for Revenue expenditure (B)	1,48,36,20,353		-	1,48,36,20,353	1,48,36,20,353	1,39,27,86,078
Balance C/F (C)	0	-	46,851	(28,03,04,961)	(28,03,04,961)	(25,09,04,961)

SCHEDULE - 11 INCOME FROM INVESTMENTS

Particulars	Earmarked / Endowment Funds		Other Investments	
	Current Year	Previous Year	Current Year	Previous Year
1. Interest				
a. On Government Securities				
b. Other Bonds / Debentures				
2. Interest on Term Deposits	2,72,52,046	15,56,422	40,22,559	12,28,013
3. Income accrued but not due on Term Deposits / Interest bearing advances to employees	2,91,93,850	3,45,95,798	1,52,303	57,73,331
4. Interest on Savings Bank Accounts	8,69,760	8,43,740	-	-
5. Interest on Security Depsoits with CESC	-	-	5,90,517	6,16,908
6. Others (Specify) - Dividend	-	-	7,784	-
Total	5,73,15,656	3,69,95,960	47,73,163	76,18,252
Transferred to Earmarked / Endowment Funds	5,73,15,656	3,69,95,960	-	-
Balance	Nil	Nil		

SCHEDULE - 12 INTEREST EARNED

Particulars	Current Year	Previous Year
1. On Savings Accounts with scheduled banks	2,83,05,776	93,18,218
2. On Loans		
a. Employees / Staff	-	-
b. Others	-	-
3. On Debtors and Other Receivables	-	-
Total	2,83,05,776	93,18,218

SCHEDULE - 13 OTHER INCOME

	Current Year	Previous Year
A. Income from Land and Buildings		
1. Hostel Room Rent	40,78,350	-
2. Licence Fees	11,25,335	13,06,383
3. Hire Charges of Auditorium / Play ground / Convention Centre / Guest House etc.	14,29,351	8,12,099
4. Electricity Charges recovered	40,62,953	43,55,372
5. Water Charges recovered	-	-
Total (A)	**1,06,95,989**	**64,73,854**
B. 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	-	-
- Centre Fees for External Exams	-	4,27,400
- Seminar Programme Fees receipts	6,32,398	-
- Refund of Processing Fees paid to UGC	-	-
Total (C)	**6,32,398**	**4,27,400**
D. Others		
1. Income from Consultancy and Instituional Development Fund	87,06,803	16,335
2. RTI Fees		
3. Income from Royalty		
4. Miscellaneous Receipts (Sale of tender forms, application form, waste paper etc.)	20,04,455	2,05,547
5. Sale / Disposal of Assets / Scraps		
a. Owned Assets		
b. Assets received free of costs		
6. Grants / Donations from Institutions, Welfare Bodies and International Organizations		
7. Others (specify) - liabilities written back/adjustment of Input GST/TDS	29,24,415	1,96,460
Total (D)	**1,36,35,673**	**4,18,342**
GRAND TOTAL (A+B+C+D))	2,49,64,060	73,19,596

SCHEDULE - 14 PRIOR PERIOD INCOME

Particulars	Current Year	Previous Year
1. Academic Receipts (Hostel Development Fees)	63,51,700	-
2. Other Income (Hostel Seat Rent)	7,56,600	
3. Other Income (Hostel Electricity Charges)	3,77,700	
4. Academic Receipts (Fine/Miscellaneous Receipts)	3,88,084	
5. Income from Investments	1,76,218	-
6. Interest earned	-	-
7. Income from MOE Grant	-	4,74,360
8. Depreciation	-	-
9. Other Income	-	30,56,511
Total	**80,50,302**	**35,30,871**

SCHEDULE - 15 STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)

Particulars	Current Year			Previous Year		
	Recurring Grant	Others	Total	Recurring Grant	Others	Total
a) Salaries and Wages			-			-
- Central	99,58,46,284	-	99,58,46,284	90,02,32,549	4,73,67,885	94,76,00,434
- UGC	-		-	-		-
- Own sources and out of State Government Grant	-		-	-		-
b) Allowances and Bonus	-	-	-	4,500	-	4,500
c) Contribution to Provident Fund	20,42,772	-	20,42,772	20,12,793	-	20,12,793
d) Contribution to Other Fund (specify) - NPS	83,59,496		83,59,496	92,34,195		92,34,195
e) Staff Welfare Expenses - Medical Expenses [Recovery of CMS Fund Rs. 44,98,350 and Medical Expenditure reimbursed Rs. 1,91,93,543]	-	1,46,95,193	1,46,95,193	62,10,934	-	62,10,934
f) Retirement and Terminal Benefits	2,51,49,330	-	2,51,49,330	4,53,42,019	-	4,53,42,019
g) LTC Facility	34,33,857	-	34,33,857	57,20,131	-	57,20,131
h) Leave Salary	3,30,60,334	-	3,30,60,334	2,64,85,690	-	2,64,85,690
i) Children Education Allowance	62,85,680	-	62,85,680	69,39,000	-	69,39,000
j) Honorarium	2,44,000	3,38,399	5,82,399	2,87,950	10,80,462	13,68,412
k) Others (Specify) - CVP Payment	3,20,06,117	-	3,20,06,117	6,06,29,700	-	6,06,29,700
l) Others (Specify) - Pension Payment	6,69,77,649	-	6,69,77,649	4,96,30,634	-	4,96,30,634
Total	**1,17,34,05,519**	**1,50,33,592**	**1,18,84,39,111**	**1,11,27,30,095**	**4,84,48,347**	**1,16,11,78,442**

SCHEDULE - 16 ACADEMIC EXPENSES

Particulars	Current Year			Previous Year		
	Recurring Grant	Others	Total	Recurring Grant	Others	Total
a) Laboratory expenses	51,57,121	-	51,57,121	14,20,576	1,98,570	16,19,146
b) Field work / Participation in Conferences	1,95,625	-	1,95,625	-	-	-
c) Expenses on Seminars / Workshops	5,55,550	3,69,463	9,25,013	53,642	51,681	1,05,323
d) Payment to visiting faculty	15,59,250	-	15,59,250	10,31,610	-	10,31,610
e) Examination	13,65,418	-	13,65,418	14,74,314	-	14,74,314
f) Student Welfare expenses		49,93,886	49,93,886	-	13,06,721	13,06,721
g) Admission expenses			-		-	-
h) Convocation expenses	46,21,395	-	46,21,395	12,76,679	-	12,76,679
i) Publications			-			-
j) Stipend / means cum merit scholarship			-		-	-
k) Subscription expenses	9,21,165	3,76,410	12,97,575	2,41,600	3,03,453	5,45,053
l) Others (sports/cultural/medal etc)	-	5,62,718	5,62,718	3,98,772	2,13,427	6,12,199
m) Departmental Contingencies	89,74,285	8,10,303	97,84,588	48,92,910	19,88,217	68,81,127
n) Inaugural/Special Pograme	20,63,519	24,900	20,88,419	47,866	18,000	65,866
o) PHD and Other Fellowships (Institute)	17,59,25,288	22,42,338	17,81,67,626	13,44,93,929	4,06,47,439	17,51,41,368
p) Research Expenditure	-	-	-	-	-	-
q) Institute Development Expenditure - Research Support	-	87,06,803	87,06,803	-	16,335	16,335
r) Travelling And Conveyance	28,59,259	2,24,893	30,84,152	1,72,000	-	1,72,000
Total	20,41,97,875	1,83,11,714	22,25,09,589	14,55,03,898	4,47,43,843	19,02,47,741

SCHEDULE - 17 ADMINISTRATIVE AND GENERAL EXPENSES

Particulars	Current Year			Previous Year		
	Recurring Grant	Others	Total	Recurring Grant	Others	Total
A. Infrastructure						-
a) Electricity and power	2,46,09,084	52,86,298	2,98,95,382	1,91,52,151	-	1,91,52,151
b) Water Charges			-	-	-	-
c) Insurance			-	-	-	-
d) Rent, Rates and Taxes (including property tax)	15,650	-	15,650	18,780	-	18,780
B. Communication			-			-
e) Postage and Stationery	3,74,618		3,74,618	2,51,622		2,51,622
f) Telephone, Fax and Internet Charges	18,05,782	-	18,05,782	13,57,121	2,36,504	15,93,625
C. Others						-
g) Printing and Stationery (consumption)	5,84,374	-	5,84,374	4,56,755	-	4,56,755
h) Travelling and Conveyance Expenses	20,83,809	-	20,83,809	2,97,950	-	2,97,950
i) Hospitality	-		-	-	-	-
j) Auditors Remuneration	7,00,000	32,587	7,32,587	7,29,088	-	7,29,088
k) Professional Charges	10,99,660	-	10,99,660	20,11,770	-	20,11,770
l) Advertisement and Publicity	83,623	-	83,623	1,39,382	-	1,39,382
m) Magazines and Journals	-		-	-	-	-
n) Others (specify) - Hiring of Manpower	2,10,04,676	1,84,54,597	3,94,59,273	3,93,09,971	-	3,93,09,971
o) Guest House Expenses	23,84,200	-	23,84,200	23,79,326	-	23,79,326
p) Remuneration to Experts	-	-	-	-	-	-
q) Security Services	1,74,39,191	94,45,379	2,68,84,570	2,74,56,435	-	2,74,56,435
r) Others (specify) - Contingencies	24,41,859	-	24,41,859	19,76,997	18,11,424	37,88,421
s) Others (specify) - Administrative Charges - EPF	-	-	-	-	-	-
n) Meeting Expenses	15,89,877	17,886	16,07,763	1,46,876	21,930	1,68,806
Total	**7,62,16,403**	**3,32,36,747**	**10,94,53,150**	**9,56,84,224**	**20,69,858**	**9,77,54,082**

SCHEDULE - 18 TRANSPORTATION EXPENSES

Particulars	Current Year			Previous Year		
	Recurring Grant	Others	Total	Recurring Grant	Others	Total
1 Vehicles (owned by institution)			-			-
a) Running expenses	5,17,746	11,552	5,29,298	1,40,451		1,40,451
b) Repair & Maintenance	9,348	-	9,348	97,250	-	97,250
c) Insurance expenses			-			-
2 Vehicles taken on rent / lease						-
Rent / lease and Running expenses			-			-
3 Vehicle (Taxi) hiring expenses	-		-	-		-
4 Others			-		-	-
Total	**5,27,094**	**11,552**	**5,38,646**	**2,37,701**	**-**	**2,37,701**

SCHEDULE - 19 REPAIRS & MAINTENANCE

Particulars	Current Year			Previous Year		
	Recurring Grant	Others	Total	Recurring Grant	Others	Total
a) Buildings (including Electrical maintenance)	1,95,31,087	11,19,610	2,06,50,697	2,66,54,292	-	2,66,54,292
b) Furniture & Fixtures	-	-	-	-	-	-
c) Plant & Machinery	-	-	-		-	-
d) Office Equipment	-	-	-	3,54,851	-	3,54,851
e) Computers & Softwares	14,31,513	-	14,31,513	90,549	-	90,549
f) Laboratory & Scientific Equipments	12,28,795	-	12,28,795	4,87,536	-	4,87,536
g) Audio Visual Equipments	-	-	-	-	-	-
h) Cleaning Material & Services	-	-	-	-	-	-
i) Book Binding Charges	-	-	-	-	-	-
j) Gardening	-	-	-	-	-	-
k) Estate Maintenance	69,77,944	3,65,800	73,43,744	50,84,369	-	50,84,369
l) Others (specify) - PHE maintenance	1,04,123	-	1,04,123	58,47,293	-	58,47,293
Total	2,92,73,462	14,85,410	3,07,58,872	3,85,18,890	-	3,85,18,890

SCHEDULE - 20 FINANCE COSTS

Particulars	Current Year			Previous Year		
	Recurring Grant	Others	Total	Recurring Grant	Others	Total
a) Bank Charges	-	94,903	94,903	32,175	6,725	38,900
b) Interest on Term Loan		-	-		-	-
c) Others (specify)			-			-
Total	**-**	**94,903**	**94,903**	**32,175**	**6,725**	**38,900**

SCHEDULE - 21 OTHER EXPENSES

Particulars	Current Year			Previous Year		
	Recurring Grant	Others	Total	Recurring Grant	Others	Total
a) Provision for Bad and Doubtful Debts / Advances			-			-
b) Irrecoverable Balance written off		38,800	38,800			-
c) Grants / Subsidies to other institutions / organizations			-			-
d) Others (specify) - Fees and Interest on Sttautory Payment	-	-	-	-	-	-
	-	-	-			-
Total	**-**	**38,800**	**38,800**	-	-	-

SCHEDULE - 22 PRIOR PERIOD EXPENSES

Particulars	Current Year			Previous Year		
	Recurring Grant	Others	Total	Recurring Grant	Others	Total
1 Establishment expenses	-	-	-	-	-	-
2 Academic expenses	-	-	-	4,74,360	-	4,74,360
3 Administrative expenses	-	-	-	-	-	-
4 Transportation expenses	-	-	-	-	-	-
5 Repairs & Maintenance - Civil	-	-	-	-	-	-
6 Finance Cost - Bank Charge	-	-	-	79,095	-	79,095
7 Depreciation	-	28,828	28,828	-	-	-
Total	**-**	**28,828**	**28,828**	**5,53,455**	**-**	**5,53,455**

PROVIDENT FUND ACCOUNT

Balance Sheet as at 31.03.2023

Liabilities		Amount	Assets	Amount
GPF			Recoverable Advance	12,25,02,404
Opening balance		61,85,64,721		
Add : Subscription received		8,18,38,673	Howrah Treasury a/c	56,51,36,273
Add : Interest		-		
Less : Withdrawal		2,82,89,688	Interest accrued as on 31/03/2023	6,92,59,617
	(A)	67,21,13,706		
CPF				
Opening balance		72,96,082		
Add : Subscription received		11,20,243		
Add : Interest		-		
Less : Withdrawal		-		
	(B)	84,16,325		
CPF (Institute Contribution)				
Opening balance		62,85,007		
Add : Subscription received		8,23,639		
Add : Interest		-		
Less : Withdrawal		-		
	(C)	71,08,646		
Interest Reserve Account		6,92,59,617		
		75,68,98,294		**75,68,98,294**

Joint Registrar (Finance) Registrar Director

For DEBASIS BANDYOPADHYAY & CO.

Chartered Accountant
(Debasis Bandyopadhyay)
Proprietor
Membership No. - 057861

PROVIDENT FUND ACCOUNT

Receipts and Payments Account for the year ended 31.03.2023

Receipts	Amount	Payments	Amount
Opening Balance [11020301]	53,21,04,406	GPF Advance [07040100]	2,24,61,000
GPF Subscription [07010503]	8,07,19,873	GPF Withdrawal [07040300]	2,82,89,688
CPF Subscription [07010509]	11,20,243		
CPF Contribution by Employers [20030200]	8,23,639		
GPF Advance refund [07010504]	11,18,800		
Interest received [03020200]	NIL	Closing Balance [11020301]	56,51,36,273
	61,58,86,961		**61,58,86,961**

Income and Expenditure Account for the year ended 31.03.2023

Expenditure	Amount	Income	Amount
Interest credited to PF a/c	NIL	Interest accrued for the year	3,70,68,859
		Interest received for the year	NIL
Surplus / (Deficit)	3,70,68,859		
	3,70,68,859		**3,70,68,859**

Joint Registrar (Finance) Registrar Director

For DEBASIS BANDYOPADHYAY & CO.

Chartered Accountant
(Debasis Bandyopadhyay)
Proprietor
Membership No. - 057861

(Corresponding to Annual Accounts 2022-2023)

SCHEDULE-23

Significant Accounting Policies:

Indian Institute of Engineering Science and Technology is an Autonomous body. The Institute is financed by the Ministry of Education, Government of India through Revenue Grant (Creation of Capital Assets, Recurring and Non-Recurring purpose). 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 these 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 2022. 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 has 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. Fees actually paid to the mess authority, but not received by the Institute as on year end has been considered as receivable from mess authority.

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:

Sl. No.	Particulars	Rate of Depreciation (p.a)
I	Building	2%
II	Roads & Bridges	2%
III	Tube wells and Water Supply	2%
IV	Electrical Installations & Equipment	5%
V	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 asset 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.

Fixed Asset procured for sponsored projects – Fixed Assets created out of Earmarked Funds and funds of sponsored projects, where the ownership of such asset vests in the Institute, are set up by credit to Capital Fund and merged with the Fixed Assets of the Institute and depreciation is being charged on the said fixed assets at prescribed rates. 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 Expenditure	Rs.14,76,05,536
Own Fund	Rs. 15,75,635
Sponsored Projects	Rs. 5,25,16,335

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. Corpus Fund for Future Development- A new earmarked fund has been created during the year 2019-20, out of the fixed deposits made out of general funds over the year and the balance as on 31/03/2019 stood at Rs. 45,23,722.40.
8. The Institute pursued with the MHRD/MoE to receive the deficit on account of capital expenditure upon utilization of non-recurring grant. The deficit was Rs. 25.09 crore as on 31/03/2022. However, there is no further possibility to receive the same, it has been decided to write off the deficit and the same has now being adjusted with the Corpus Fund of the Institute.
9. Capital Expenditure Commitment –
   The major capital expenditure commitment for the Institute are as follows –

   a. 1000 capacity hostel for boys – Estimated cost Rs. 129.43 crore
      Implementing Agency – CPWD
      Present Status – work under progress
      Advance made – Rs. 28.17 crore as on 31/03/2023

   b. G+5 Academic Building – Estimated cost Rs. 29.40 crore
      Implementing Agency – CPWD
      Present Status – work under progress
      Advance made – Rs. 5.88 crore as on 31/03/2023

10. Schedules 1 to 24 are annexed to and form an integral part of the balance sheet as on 31st March 2023 and the Income and Expenditure account for the year ended as on that date.

Joint Registrar (Finance) Registrar Director

For DEBASIS BANDYOPADHYAY & CO.

Chartered Accountant
(Debasis Bandyopadhyay)
Proprietor
Membership No. – 057861

ANNEXURE - I

ENDOWMENT FUND FIXED DEPOSITS AS AT 31.03.2023

Sl. No.	Name of Endowment Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2023			Date of Maturity	Maturity Value
					Principal Amt.	Accumulated Int.	TOTAL		
1	Von Newman Scholarship Fund	12-09-2018	12-09-2018	6.00%	53,747		53,747	12-09-2023	54,623
2	Dr. S. P. Brambha Memorial Merit Scholarship Fund	12-09-2018	12-09-2018	6.00%	1,06,895		1,06,895	12-09-2023	1,08,638
3	Probir Sengupta Memorial Prize Fund	31-10-2017	31-10-2017	6.00%	11,302	3,758	15,060	31-10-2022	15,223
4	Renu Chakraborty V. L. Fund	31-10-2017	31-10-2017	6.00%	55,737		55,737	31-10-2022	55,737
5	Dr. Fazlur Kader Memorial Scholarship Fund	12-09-2018	12-09-2018	6.00%	1,80,880	12,226	1,93,106	12-09-2023	2,43,619
6	J. N. Neogi Students' Benefit Fund	12-09-2018	12-09-2018	6.00%	1,13,020	33,361	1,46,381	12-09-2023	1,52,221
7	Sunita Memorial Prize Fund	12-09-2018	12-09-2018	6.00%	24,101	7,115	31,216	12-09-2023	32,461
8	Dr. B. N. Dey Scholarship Fund	12-09-2018	12-09-2018	6.00%	58,692	17,324	76,016	12-09-2023	79,049
9	Kunja Kusum Scholarship Fund	12-09-2018	12-09-2018	6.00%	77,444		77,444	12-09-2023	78,706
10	Sarat Kanta Nirmalya Basini Biswas Golden Jubilee Scholarship Fund	01-11-2022	01-11-2017	6.00%	20,087		20,087	17-05-2028	20,380
11	Prof. N. N. Sen Memorial Scholarship Fund	12-09-2018	12-09-2018	6.00%	39,432		39,432	12-09-2023	40,075
12	Acharya P. C. Roy Scholarship	12-09-2018	12-09-2018	6.00%	91,587		91,587	12-09-2023	93,080
13	Ramlal Nandy & Genoda Sundari Memorial Scholarship Fund	12-09-2018	12-09-2018	6.00%	46,928		46,928	12-09-2023	47,693
14	Liluah Iron Works Ltd. Scholarship	12-09-2018	12-09-2018	6.00%	47,693		47,693	12-09-2023	47,693
15	R & K Ahmed Merit Scholarship	12-09-2018	12-09-2018	6.00%	56,769		56,769	12-09-2023	57,694
16	The President of India Gold Medal	12-09-2018	12-09-2018	6.00%	56,769		56,769	12-09-2023	57,694
17	Alumni Donation Seminar Series	31-10-2022	31-10-2017	6.00%	6,66,197	18,317	6,84,514	17-15-2028	9,33,102
	C/F				**17,07,280**	**92,101**	**17,99,381**		

ANNEXURE - I

ENDOWMENT FUND FIXED DEPOSITS AS AT 31.03.2023

Sl. No.	Name of Endowment Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2023			Date of Maturity	Maturity Value
					Principal Amt.	Accumulated Int.	TOTAL		
	B/F.				**17,07,280**	**92,101**	**17,99,381**		
18	Jogesh Chandra Banerjee Memorial Scholarship Fund	0171100443081	6.00%	6%	4,78,376		4,78,376	12-09-2023	4,86,174
19	Anil Burnwal Merit cum Means Scholarship Fund	0171100303499	6.50%	6%	1,09,469		1,09,469	08-08-2022	1,09,469
20	Jaya Smriti Puroskar (BESUS)	0171100404736	6.00%	6%	33,205	11,594	44,799	08-08-2022	44,409
21	BECA - 1964	0171100441964	6.00%	6%	3,58,558	1,11,349	4,69,907	12-09-2023	4,82,925
22	Prof. S. C. Dasgupta Gold Medal	1532100009461	6.50%	6%	2,84,695	4,653	2,89,348	17.05.2028	3,92,373
23	Jaya Smriti Puroskar	1532100009478	6.50%	6%	40,601	664	41,265	17.05.2028	55,959
24	Dhaibat Ghosh Memorial Scholarship	1532100058113	5.25%	6%	8,32,158	18,860	8,51,018	23-04-2027	10,80,106
25	Prabodh Kumar Chatterjee Fund - 1	1532100047560	5.36%	5.36%	2,54,125		2,54,125	17-04-2024	2,54,125
26	Prabodh Kumar Chatterjee Fund - 2	1532100058122	5.20%	5.20%	50,000		50,000	23-04-2024	50,000
27	Rai Sahib Amulya Chandra Mitra Endowment Fund	1532100047588	5.36%	5.36%	4,09,963	22,173	4,32,136	17-05-2024	4,80,967
28	Rai Sahib Amulya Chandra Mitra Endowment Fund	1532100047579	5.36%	5.36%	3,05,689		3,05,689	17-05-2024	3,05,689
29	S. C. Dasgupta Memorial Fund	1532100047384	5.36%	5.36%	22,54,351	2,28,225	24,82,576	17-05-2024	26,44,797
30	Madhusudan Bhattacharjee Memorial Fund	1532100062116	5.10%	5.10%	2,00,000		2,00,000	12-07-2024	2,00,000
31	Sougata Mukherjee Memo. Award for Excellence Fund	1532100089751	5.25%	5.25%	5,09,507		5,09,507	13-06-2022	5,09,507
32	Students Reward Programme Fund	1532100089760	5.10%	5.25%	16,50,000		16,50,000	13-03-2024	16,50,000
33	Suhas Choudry Swimming Excellence Prize Fund	1532100055888	5.00%	5.10%	1,27,549		1,27,549	22-04-2023	1,27,549
34	Ujjal Dasgupta Scholarship Corpus Fund	1532100055912	5.00%	5.10%	14,21,977		14,21,977	22-04-2023	14,21,977
35	GAABESU Admission Grant - 2	1532100055930	5.20%	5%	5,82,400		5,82,400	14-03-2024	5,82,400
	C/F				**1,16,09,903**	**4,89,619**	**1,20,99,522**		

ANNEXURE - I

ENDOWMENT FUND FIXED DEPOSITS AS AT 31.03.2023

Sl. No.	Name of Endowment Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2023			Date of Maturity	Maturity Value
					Principal Amt.	Accumulated Int.	TOTAL		
	B/F.				**1,16,09,903**	**4,89,619**	**1,20,99,522**		
36	Prof. P. C. Mitra Memorial Award	1532100070364	03-12-2022	6.10%	1,03,812	4,724	1,08,536	03-12-2027	1,40,510
37	Prof. P. C. Mitra Memorial Award	1532100090632	26-09-2018	6.00%	1,51,594	46,721	1,98,315	26-09-2023	2,04,175
38	K. K. Pal Chaudhuri Arch.	1532100084640	02-07-2018	6.00%	77,077	23,891	1,00,968	02-07-2023	1,03,812
39	Prof. A. K. Seal Gold Medal	23690310006207	26-08-2022	4.40%	1,70,192	4,419	1,74,611	26-05-2023	1,75,870
40	Prof. Amiya Basu Endowment Fund - 1	23690310011904	23-11-2021	5.00%	31,50,000		31,50,000	23-11-2024	31,50,000
41	Prof. Amiya Basu Endowment Fund - 2	1532100194853	26-12-2022	6.30%	16,58,787		16,58,787	26-12-2023	16,58,787
42	B.E.C. (55) Scholarship Fund	23690310006481	27-06-2022	5.30%	5,53,193	22,452	5,75,645	27-06-2023	5,83,100
43	Prabodh Chandra Mitra Scholarship Fund	2369031006504	27-06-2022	5.30%	1,09,297	4,435	1,13,732	27-06-2023	1,15,206
44	Siddhananda Memorial Lecture Fund	23690310006573	03-07-2022	5.30%	1,26,780	5,131	1,31,911	03-07-2023	1,33,634
45	BESU Endowment Fund	23690310006498	27-06-2022	5.30%	86,01,065	3,49,095	89,50,160	27-06-2023	90,66,062
46	BESU Endowment Fund	23690310011584	09-09-2022	5.30%	36,444	1,141	37,585	09-09-2023	38,414
47	B.E.C. (55) Scholarship Fund	23690310011577	09-09-2022	5.30%	2,344	73	2,417	09-09-2023	2,344
48	Bijoy Ashu Chair Professor Fund	10382034315	30-08-2022	5.60%	1,13,490	5,990	1,19,480	30-08-2025	1,13,490
49	Bijoy Ashu Chair Professor Fund	34205796198	15-06-2022	5.30%	82,10,064	3,16,444	85,26,508	15-06-2023	86,53,922
50	Bijoy Ashu Chair Professor Fund	34205799520	15-06-2022	5.30%	82,10,065	3,16,444	85,26,509	15-06-2023	86,53,923
51	Alpona Banerjee Memorial Endowment Fund	1532100196833	08-02-2017	6.50%	99,02,000		99,02,000	08-02-2027	99,02,000
52	Provat Chandra Neogi Memorial Endowment Fund - 1	1532100243766	02-06-2018	6.00%	4,50,000		4,50,000	02-06-2028	4,50,000
53	Provat Chandra Neogi Memorial Endowment Fund - 2	1532100255615	26-09-2018	6.00%	22,50,000		22,50,000	26-09-2028	22,50,000
54	Tarun Kanti Ghosh Memorial	1532100286817	30-07-2019	6.00%	3,47,532		3,47,532	30-07-2024	3,47,532
GRAND TOTAL :					**5,58,32,873**	**15,90,579**	**5,74,23,452**		

ANNEXURE - II

EARMARKED FUND FIXED DEPOSITS AS AT 31.03.2023

Sl. No.	Name of Endowment Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2023			Date of Maturity	Maturity Value
					Principal Amt.	Accumulated Interest	Total		
1	BESUS Project Fund	153220QPU0000561	17-03-2023	7.25%	25,12,020		25,12,020	11-01-2025	25,12,020.00
2	BESUS Project Fund	153220QPU0000552	17-03-2023	7.25%	25,12,020		25,12,020	11-01-2025	25,12,020.00
3	BESUS Project Fund	153220QPU0000545	17-03-2023	7.25%	25,12,020		25,12,020	11-01-2025	25,12,020.00
4	BESUS Project Fund	153220QPU0000539	17-03-2023	7.25%	25,12,020		25,12,020	11-01-2025	25,12,020.00
5	BESUS Project Fund	153220QPU0000507	16-03-2023	7.25%	25,12,020		25,12,020	10-01-2025	25,12,020.00
6	BESUS Project Fund	153220PU00005766	17-03-2023	7.25%	1,75,66,324	6,15,943	1,81,82,267	11-01-2025	2,00,18,884.00
7	BESUS Project Fund	153220PU00005623	16-03-2023	7.25%	1,76,04,196	6,44,718	1,82,48,914	10-01-2025	2,00,62,044.00
8	BESUS Project Fund	153220PU00005757	17-03-2023	7.25%	1,76,06,122	6,46,646	1,82,52,768	11-01-2025	2,00,64,238.00
9	BESUS Project Fund	153220QPU0000525	17-03-2023	7.25%	90,85,810		90,85,810	11-01-2025	90,85,810.00
10	BECE International Symposium	153220PU00005863	23-03-2023	7.25%	3,20,739		3,20,739	17-01-2025	3,65,520.00
11	BECE International Symposium	153220PU00005872	23-03-2023	7.25%	12,28,186		12,28,186	17-01-2025	13,99,662.00
	SUB TOTAL				**7,59,71,477**	**19,07,307**	**7,78,78,784**		
12	BESUS Overhead Fund	153220QPU0000570	20-03-2023	7.00%	5,00,000		5,00,000	20-03-2026	5,00,000.00
13	BESUS Overhead Fund	1532100036795	09-03-2023	7.00%	5,00,000		5,00,000	09-03-2026	5,00,000.00
14	BESUS Overhead Fund	1532100036801	09-03-2023	7.00%	5,00,000		5,00,000	09-03-2026	5,00,000.00
15	BESUS Overhead Fund	1532100036810	09-03-2023	7.00%	5,00,000		5,00,000	09-03-2026	5,00,000.00
16	BESUS Overhead Fund	1532100036829	09-03-2023	7.00%	5,00,000		5,00,000	09-03-2026	5,00,000.00
17	BESUS Overhead Fund	1532100036838	09-03-2023	7.00%	5,00,000		5,00,000	09-03-2026	5,00,000.00
18	BESUS Overhead Fund	153220QPU0000589	20-03-2023	7.25%	5,24,988		5,24,988	14-01-2025	5,24,988.00
19	BESUS Overhead Fund	153220QPU0000516	19-03-2023	7.25%	5,25,036		5,25,036	11-01-2025	5,25,036.00
20	BESUS Overhead Fund	153220QPU00005933	31-03-2023	7.00%	90,85,342	3,92,199	94,77,541	31-03-2026	1,11,88,047.00
	C/F.				**1,31,35,366**	**3,92,199**	**1,35,27,565**		

ANNEXURE - II

EARMARKED FUND FIXED DEPOSITS AS AT 31.03.2023

Sl. No.	Name of Endowment Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2023			Date of Maturity	Maturity Value
					Principal Amt.	Accumulated Interest	Total		
	B/F.				**1,31,35,366**	**3,92,199**	**1,35,27,565**		
21	BESUS Overhead Fund	153220PU00065748	17-03-2023	7.25%	10,68,631	44,150	11,12,781	11-01-2025	12,17,830.00
22	BESUS Overhead Fund	153220PU00005687	17-03-2023	7.25%	21,37,270	88,304	22,25,574	11-01-2025	24,35,670.00
23	BESUS Overhead Fund	153220PU00065748	17-03-2023	7.25%	55,30,341	2,08,089	57,38,430	11-01-2025	63,02,471.00
24	BESUS Overhead Fund	153220PU00005632	16-03-2023	7.25%	55,22,898	2,08,089	57,30,987	10-01-2025	62,93,989.00
25	BESUS Overhead Fund	153220PU00005784	20-03-2023	7.00%	75,81,824	3,65,165	79,46,989	20-03-2026	93,36,556.00
26	BESUS Overhead Fund	153220PU00005605	16-03-2023	7.25%	98,69,641	3,65,166	1,02,34,807	10-01-2025	1,12,47,612.00
27	BESUS Overhead Fund	153220PU00005349	16-03-2023	7.25%	98,69,641	2,98,560	1,01,68,201	10-01-2025	1,12,47,612.00
28	BESUS Overhead Fund	153220PU00005614	16-03-2023	7.25%	19,25,743	71,250	19,96,993	10-01-2025	21,94,610.00
29	BESUS Overhead Fund	153220PU00005793	20-03-2023	7.00%	81,91,823	3,68,714	85,60,537	20-03-2026	1,00,87,733.00
30	BESUS Overhead Fund	1532100105484	31-03-2023	7.00%	36,27,624	1,75,601	38,03,225	31-03-2026	44,67,199.00
31	BESUS Overhead Fund	153220PU00005739	17-03-2023	7.25%	1,23,74,468	5,26,733	1,29,01,201	11-01-2025	1,41,02,156.00
	SUB TOTAL				**8,08,35,270**	**31,12,920**	**8,39,48,190**		**9,41,71,509**
32	BESUS Foundation	23690310007990	28-04-2020	5.85%	21,12,302	23,182	21,35,484	19-10-2025	25,07,097.98
33	BESUS Foundation	23690310011676	12-04-2021	5.00%	9,218	99	9,317	22-12-2024	10,383.00
34	Corpus Fund	23690310006405	17-06-2021	4.90%	1,26,14,163	5,39,241	1,31,53,404	17-06-2023	1,32,96,119.38
35	Corpus Fund	1532100142847	28-06-2021	5.10%	9,03,914	33,652	9,37,566	13-07-2023	9,52,782.00
36	Maintenance Fund	23690310006436	17-06-2021	4.90%	2,04,56,518	9,36,136	2,13,92,654	17-06-2023	2,16,41,318.37
37	Maintenance Fund	1532100142816	28-06-2021	5.10%	13,48,367	50,193	13,98,560	13-07-2023	14,21,263.00
38	Equipment Replacement Fund	1532100142823	17-05-2021	5.20%	7,29,324	4,544	7,33,868	17-05-2024	7,84,906.00
39	Faculty Development Fund	1532100142830	28-06-2021	5.10%	7,94,990	29,550	8,24,540	13-07-2023	8,37,969.00
40	Staff Development Fund	23690310006412	17-06-2021	4.90%	1,01,67,406	4,34,644	1,06,02,050	17-06-2023	1,07,17,084.34
41	Depreciation Fund	23690310006429	17-06-2021	4.90%	88,69,206	3,33,767	92,02,973	17-06-2023	93,48,698.64
42	B.E. College - General Fund A/c	1532100046932	14-09-2020	5.25%	1,00,00,000		1,00,00,000	14-09-2023	1,00,00,000.00
43	BEC General Fund	23690310008157	13-05-2020	5.75%	1,07,415	775	1,08,190	03-11-2025	1,27,468.66
44	BEC General Fund	23690310011669	27-05-2021	5.00%	2,227	212	2,439	16-04-2023	2,445.00
	C/F.				**6,81,15,050**	**23,85,995**	**7,05,01,045**		

ANNEXURE - II

EARMARKED FUND FIXED DEPOSITS AS AT 31.03.2023

Sl. No.	Name of Endowment Fund	Account No.	Date of Deposit / Reinvestment	Rate of Interest	Closing Balance as on 31.03.2023			Date of Maturity	Maturity Value
					Principal Amt.	Accumulated Interest	Total		
	B/F.				**6,81,15,050**	**23,85,995**	**7,05,01,045**		
45	BEC General Fund	23690310008140	13-05-2020	5.75%	88,53,972	97,835	89,51,807	03-11-2025	1,05,07,019.00
46	BEC General Fund	23690310011515	23-05-2021	5.00%	18,062	1,721	19,783	10-04-2023	19,827.00
47	BEC General Fund	23690310008133	13-05-2020	5.75%	77,02,947	85,116	77,88,063	03-11-2025	91,41,097.00
48	BEC General Fund	23690310033456	28-04-2020	3.60%	7,21,16,684	5,58,323	7,26,75,007	23-02-2024	7,74,50,970.00
49	BEC General Fund	23690310011645	08-04-2021	5.00%	1,77,239	1,991	1,79,230	14-12-2024	1,99,576.00
50	BEC General Fund	23690310033487	28-04-2020	3.60%	2,66,03,044	2,05,959	2,68,09,003	23-02-2024	2,85,70,803.00
51	BEC General Fund	23690310011638	08-04-2021	5.00%	65,381	734	66,115	14-12-2024	73,621.00
52	BEC General Fund	23690310033449	28-04-2020	3.60%	6,05,78,015	4,68,991	6,10,47,006	23-02-2024	6,50,58,815.00
53	BEC General Fund	23690310011621	08-04-2021	5.00%	1,48,881	1,673	1,50,554	14-12-2024	1,67,644.00
54	BEC General Fund	23690310033470	28-04-2020	3.60%	3,20,51,860	2,48,143	3,23,00,003	23-02-2024	3,44,22,654.00
55	BEC General Fund	23690310011614	08-04-2021	5.00%	78,772	885	79,657	14-12-2024	88,699.00
56	BEC General Fund	23690310007945	28-04-2020	5.85%	1,69,82,650	2,33,624	1,72,16,274	12-01-2025	2,01,56,758.00
57	BEC General Fund	23690310033463	28-04-2020	3.60%	2,72,44,082	2,10,922	2,74,55,004	23-02-2024	2,92,59,257.00
58	BEC General Fund	23690310011591	08-04-2021	5.00%	66,957	752	67,709	14-12-2024	75,395.00
59	Institute General Fund	23690310033425	13-05-2021	3.50%	4,65,60,557		4,65,60,557	23-02-2024	5,00,04,522.00
60	Institute General Fund	23690310011324	07-12-2021	4.40%	1,00,969	1,349	1,02,318	18-10-2023	1,04,756.00
61	IIEST-Student Fee Collection Fun	23690310033432	31-10-2020	3.25%	15,68,22,709	22,96,316	15,91,19,025	23-02-2024	16,85,87,988.00
62	BESU	34087266649	05-02-2022	5.10%	91,32,955	95,242	92,28,197	05-02-2024	97,65,210.00
63	BESU	34087253584	05-02-2022	5.10%	91,32,955	95,242	92,28,197	05-02-2024	97,65,210.00
64	BESU	34087265125	05-02-2022	5.10%	91,32,955	95,242	92,28,197	05-02-2024	97,65,210.00
65	BESU	34087241863	05-02-2022	5.10%	91,32,954	95,242	92,28,196	05-02-2024	97,65,209.00
66	BESU	34087247413	05-02-2022	5.10%	91,32,954	95,242	92,28,196	05-02-2024	97,65,209.00
67	BESU	34087250572	05-02-2022	5.10%	91,32,954	95,242	92,28,196	05-02-2024	97,65,209.00
68	BESU	31688180670	08-03-2022	5.20%	6,76,663	72,129	7,48,792	02-12-2024	7,79,282.00
69	BESU	31744729481	29-07-2019	5.20%	1,11,36,520	5,52,030	1,16,88,550	18-01-2025	1,28,27,222.00
70	Digital Education Hub	40821107056	02-03-2022	5.45%	70,00,000	3,91,098	73,91,098	02-03-2025	82,34,283.00
	SUB TOTAL				**59,78,98,741**	**83,87,038**	**60,62,85,779**		**64,59,68,980**
	GRAND TOTAL :				**75,47,04,483**	**1,34,07,265**	**76,81,12,753**		**74,01,40,489**

ANNEXURE - III & IV

GENERAL FUND FIXED DEPOSITS AS AT 31.03.2023

Sl. No.	Name of Fund	Account No.	Date of Deposit / Reinvestment (Current)	Rate of Interest (Current)	Closing Balance as on 31.03.2023			Date of Maturity	Maturity Value
					Principal Amt.	Accumulated Int.	TOTAL		
1	BECSOMS	23690310006399	17-06-2022	5.30%	34,83,709.40	1,49,062.88	36,32,772.28	17-06-2023	36,72,048.40
2	BECSOMS	1532100058900	07-11-2021	5.25%	99,00,000.00	-	99,00,000.00	07-08-2026	99,00,000.00
3	BECSOMS	1532100058919	07-11-2021	5.10%	26,00,000.00	-	26,00,000.00	07-11-2024	26,00,000.00
4	PDSIT	003414136321	06-04-2020		1,37,56,034.00	17,27,724.00	1,54,83,758.00	07-04-2023	1,64,49,668.00
5	PDSIT	003414101445	30-08-2019		-	-	-	27-03-2023	
6	PDSIT	003414151586	05.04.2022		-	-	-	27-03-2023	
7	IIEST,SHIBPUR	3578315512	20-03-2023	5.77%	1,00,34,965	18,816	1,00,53,781	20-10-2023	1,03,74,343
8	IIEST,SHIBPUR	38471491524	20-08-2022	5.10%	21,60,392	95,569	22,55,961		
9	IIEST,SHIBPUR	38692442983	16-08-2022	5%	6,25,342	22,044	6,47,386		
	GRAND TOTAL :				**4,25,60,442.40**	**20,13,215.88**	**4,45,73,658.28**		**4,29,96,059.40**

ANNEXURE - V

CURRENT BANK ACCOUNT

Sl. No.	Name of the Bank	Account No.	Type of Account	Head of Account	Closing Balance as on 31.03.2023
1	P.N.B.	0171050031501	C/A	BEC General Fund	1,07,74,377.01
3	P.N.B.	0171050031510	C/A	BEC Development Fund	12,80,751.14
5	P.N.B.	0171050031528	C/A	BEC Employees Benefit Fund	5,57,343.87
7	P.N.B.	0171050031536	C/A	BEC Miscellaneous Fund	5,17,248.78
2	P.N.B.	Sweep A/c E/150	C/A	BEC General Fund	7,57,70,000.00
4	P.N.B.	Sweep A/c E/151	C/A	BEC Development Fund	2,06,50,000.00
6	P.N.B.	Sweep A/c E/152	C/A	BEC Employees Benefit Fund	72,50,000.00
8	P.N.B.	Sweep A/c E/153	C/A	BEC Miscellaneous Fund	8,23,90,000.00
9	P.N.B.	171050031293	C/A	QIP	3,20,926.91
10	S.B.I., Howrah	31906556458	C/A	Prof. Tax	99,51,591.00
					20,94,62,238.71

ANNEXURE - VI

SAVINGS BANK ACCOUNT

Sl. No.	Name of the Bank	Account No.	Type of Account	Head of Account	Closing Balance as on 31.03.2023
1	P.N.B.	171010375799	S.B.	Corpus Fund	35,89,893.05
2	P.N.B.	1532010020688	S.B.	Faculty Development	36,919.00
3	P.N.B.	1532010020679	S.B.	Equipment Replacement	75,980.93
4	P.N.B.	0171010375829	S.B.	Maintenance Fund	3,509.00
5	P.N.B.	0171010375811	S.B.	Depreciation Fund	97,309.00
6	P.N.B.	0171010375802	S.B.	Staff Development	3,344.00
7	P.N.B.	1532010006354	S.B.	BESUS Foundation	62,523.91
8	P.N.B.	Sweep A/c	S.B.	BESUS Foundation	2,16,00,000.00
9	I.C.I.C.I.	003401010516	S.B.	P.D.S.I.T.	32,284.00
10	P.N.B.	0171010348333	S.B.	B.E.C. Scholarship	12,12,806.14
11	P.N.B.	0171010348350	S.B.	B.E.C. Prize	2,43,790.67
12	P.N.B.	1532010029740	S.B.	BESUS - NSS A/C	4,04,585.30
13	P.N.B.	1532010077288	S.B.	Visvesvaraya PHD Fellowship	16,83,237.52
14	P.N.B.	1532010079772	S.B.	GIAN Courses	1,60,477.20
15	P.N.B.	1532010079763	S.B.	Students Welfare Fund	12,80,718.25
16	U.C.O.	23690110000489	S.B.	Tuition Fees	25,88,585.00
17	U.C.O.	Sweep A/c	S.B.	Tuition Fees	63,59,80,230.00
18	U.C.O.	23690110000960	S.B.	Academic Services	5,26,033.56
19	U.C.O.	Sweep A/c	S.B.	Academic Services	69,43,782.00
20	U.C.O.	23690110091845	S.B.	IIEST, Shibpur General A/c	7,74,102.36
21	U.C.O.	23690110040461	S.B.	Prof. Amiya Basu Endowment	8,40,339.24
22	S.B.I. Shalimar	1381942908	S.B.	Bijou Ashu Prof.	9,55,636.85
23	S.B.I., BESUS	33725727857	S.B.	I.I.E.S.T.	11,45,76,674.98
24	S.B.I., BESUS	39212800500	S.B.	Alumni Cell IIEST, Shibpur	23,25,555.00
25	P.N.B.	1532010005180	S.B.	Research & Consultancy Fund	(1,92,14,141.75)
26	P.N.B.	Sweep A/c-5180	S.B.	Research & Consultancy Fund	20,55,00,000.00
27	P.N.B.	0171010301001	S.B.	BE College Testing Fees Fund	99,331.30
28	P.N.B.	Sweep A/c -1001	S.B.	BE College Testing Fees Fund	49,00,000.00
29	P.N.B.	1532010005173	S.B.	Institutional Development Fund	1,22,07,333.90
30	P.N.B.	Sweep A/c -5173	S.B.	Institutional Development Fund	10,62,00,000.00
31	P.N.B.	1532010084491	S.B.	BCMFRL of Homoeopathy	2,83,76,018.92
32	P.N.B.	1532010011963	S.B.	Continuing Education Centre (CEC)	11,30,408.66
33	UCO	23690110091852	S.B.	IIEST SHIBPUR R&C MISC. A/C	16,15,045.00
34	UCO	Sweep A/c-1852	S.B.	IIEST SHIBPUR R&C MISC. A/C	8,34,11,653.00
35	P.N.B.	1532010089955	S.B.	ISDCS	35,494.41
				TOTAL:	**1,22,02,59,460.40**

ANNEXURE - VII

LIST OF UNADJUSTED ADVANCE GIVEN TO EMPLOYEES AS ON 31.03.2023

Sl. No.	Name of the Employees	Closing Balance as on 31.03.2023
1	Golden Jubilee Celebration Committee of E & TC	2,00,000.00
2	Prasanta Kumar Nandi	67,357.00
3	Santi Prasad Maity	6,000.00
4	Ankita Pramanik	40,000
5	Ashoke Sutradhar	1,54,366
6	Debdulal Das	1,00,000
7	Monojit Mitra	1,25,568
8	Nanda Dulal Paul	30,000
9	Prasun Ghosal	1,18,000.00
10	Rabi Nayak	5,700.00
11	Rajat Mukhopadhyay	32,000.00
12	Sudipta Mukhopadhyay	36,700.00
		9,15,691.00

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ANNEXURE - VII

LIST OF UNADJUSTED ADVANCE GIVEN TO SUPPLIERS AS ON 31.03.2023

Sl. No.	Name of the Suppliers	Closing Balance as on 31.03.2023
1	India Tourism Development Corporation Ltd.	1,00,000.00
	TOTAL :	**1,00,000.00**

सत्यमेव जयते

O/O THE DIRECTOR GENERAL OF AUDIT (CENTRAL), KOLKATA
महानिदेशक लेखा परीक्षा का कार्यालय (केंद्रीय) , कोलकाता
8 K S Roy Road
GIP Building
Kolkata , West Bengal
PIN 700001

लोकहितार्थ सत्यनिष्ठा
Dedicated to Truth in Public Interest

Ltr No: INSPECTION WING/2023-2024/DIS-1258424
Date: 07 Nov 2023

To,

The Director,
Indian Institute of Engineering Science and Technology, Howrah,
Botanical Garden, Dist.-Howrah, West Bengal-711103

Subject: Separate Audit Report on the accounts of the Indian Institute of Engineering Science and Technology, Howrah, for the financial year 2022-23

Sir/Madam,

A copy of the Separate Audit Report, alongwith Annexure, on the accounts of the Indian Institute of Engineering Science and Technology, Howrah, for the financial year 2022-23, is forwarded to the Director, Indian Institute of Engineering Science and Technology, Howrah, Botanical Garden, Dist.-Howrah, West Bengal-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 for sending the same directly to the Ministry.

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

A copy of the printed Annual Report, for the financial year 2022-23 (both English and Hindi Version), containing the Audited Accounts and the Separate Audit Report, along with Annexure, as laid before the Parliament, may please be forwarded to this office, for necessary action at this end.

Yours faithfully,

Encls: As above

TANUSHREE BISWAS
Deputy Director

Copy to:-

Ltr No : INSPECTION WING/2023-2024/DIS-1258424/C1
1 Finance and Accounts Section, O/o the Director, IIEST Shibpur for kind information and further necessary action
Ltr No : INSPECTION WING/2023-2024/DIS-1258424/C2
2 OAD-AB Section, O/o the DGA, Central, Kolkata for kind information

Separate Audit Report on the accounts of the Indian Institute of Engineering Science and Technology, Shibpur, Howrah, West Bengal for the year ended 31 March 2023

We have audited the attached Balance Sheet of the Indian Institute of Engineering Science and Technology, Shibpur, Howrah, as at 31 March 2023, 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:

i. 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 Education, 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.

iv. We further report that:

Comments on Accounts

A Balance Sheet

1.1 Liabilities

1.1.1 Corpus/ Capital Fund (Schedule 1): ₹269.99 crore

a) The above head was overstated by an amount of ₹26.40 crore (₹23.46 crore paid during 2022-23 and ₹2.94 crore paid during 2021-22) due to booking of the amount as capital grants utilized (included in ₹33.10 crore) but actually paid to CPWD as advance yet to be adjusted. This further resulted in understatement of 'Current Liabilities and Provisions' (Schedule 3) by ₹26.40 crore.

b) The above head was overstated by an amount of ₹5.25 crore due to booking of the assets purchased out of the fund pertaining to the sponsored projects without transferring the ownership to the Institute. This further resulted in overstatement of the 'Fixed Assets' (Schedule 4), by ₹5.25 crore

B General Comments

2.1 The Institute, during the financial year 2022-23, had received an amount of ₹30.16 crore as capital grants. Out of which, it paid advance for an amount of ₹23.46 crore to CPWD. The remaining amount of ₹6.70 crore was available for creation of fixed assets during the financial year which the Institute had created. However, the Institute had added an amount of ₹14.76 crore as fixed assets during the financial year. Out of ₹14.76 crore, e-Journals amounting to ₹3.88 crore was purchased from Institute's own fund, ₹1.24 crore was adjusted from previous year's advance amount and ₹6.70 crore was capitalised from the current year grants. The remaining amount of ₹2.94 crore (₹14.76 crore - ₹6.70 crore -₹3.88 crore - ₹1.24 crore) needs reconciliation.

2.2 The Institute had not accounted for ₹5.56 lakh, being value of the 466 gifted books during the financial year 2022-23.

2.3 The Institute showed an amount of ₹0.47 lakh as unutilized grants under 'Current Liabilities and Provisions' (Schedule 3) which is lying idle since 2017-18 and the institute earned interest of ₹0.12 lakh on the unutilized fund. This needs to be reviewed and the interest along with the principal should be refunded to the Government of West Bengal.

2.4 The Institute had showed an amount of ₹28.04 crore as adjustment of deficit from Corpus Fund under 'Grants/ Subsidies' (Schedule 10). However, it actually adjusted an amount of ₹25.10 crore from Corpus Fund. Resulting discrepancy of ₹2.94 crore needs to be reconciled.

2.5 The Institute had raised an amount of ₹11.28 lakh towards Guest House charges during the financial year 2022-23. Out of which an amount of ₹9.91 lakh was received and the remaining amount of ₹1.36 lakh has not been accounted as receivables. This needs to be reconciled.

2.6 Despite mention in the previous year's Audit Report, the Institute had booked an amount of ₹3 crore as 'Term Deposit' under the head 'Current Assets' (Schedule 7), which was not accounted for in Receipts and Payments Accounts as Closing Balances, in contravention to the guidance issued by the MoE for compilation of Financial Statement of Central Education Institutions.

2.7 The Institute had not showed the fund balance of ₹99.80 crore under the 'Designated/ Earmarked/ Endowment Funds' which needs to be represented on the Assets side by Bank Balance, Investments and Income Accrued but not due, in contravention to the prescribed format of accounts.

2.8 Despite mention in earlier audit reports, Retirement Benefits in respect of eligible employees were not provided as per the Actuarial method of valuation, in terms of AS-15 and the Format of Accounts prescribed by the MoE.

2.9 The Institute showed an amount of ₹6.21 crore as interest earned during the financial year 2022-23 in Schedule 11. However, as per the bank certificates made available to audit it was noticed that an amount of ₹4.23 crore was earned as interest. The discrepancy of ₹1.97 crore needs to be reconciled.

2.10 The Institute had showed an amount of ₹8.70 lakh as interest earned on savings accounts in respect of Earmarked /Endowment Funds in Schedule 11 of the Income and Expenditure Accounts. However, under 'Designated/ Earmarked/ Endowment Funds' (Schedule 2) of the Balance Sheet, the same had been showed as ₹10.18 lakh. This needs to be reconciled.

2.11 The Institute did not furnish the original bank certificates in respect of three investments (Account No.: 003414136321 (PDSIT); 38471491524 (IIEST Shibpur) and 38692442983 (IIEST Shibpur)) to the audit.

2.12 The Institute is maintaining one dormant account (Account No.: 0171010348350) which needs to be reviewed.

C Grants in Aid

The Indian Institute of Engineering Science and Technology is mainly financed by grants-in-aid from the Government of India (GoI). The Institute had an opening balance of Grants of ₹10.01 crore as per previous year's SAR. During the financial year 2022-23, Grants-in-aids received by the Institute was ₹178.52 crore (GIA-General: ₹42.66 crore, GIA-Capital: ₹30.16 crore and GIA-Salaries: ₹105.70 crore). Out of the total grants of ₹188.53 crore, so available, the Institute spent ₹155.06 crore (Revenue Expenditure: ₹148.36 crore and Capital Expenditure: ₹6.70 crore), leaving an overall unspent balance of ₹33.47 crore (including unspent balance of ₹10.01 crore and ₹23.46 crore paid as advance).

D Net Effect

The net impact of the comments given in the preceding paragraphs is that both the Assets and Liabilities were overstated by ₹5.25 crore as at 31 March 2023.

E Management Letter

Deficiencies not included in the Audit Report have been brought to the notice of the Director, IIEST, Shibpur, Howrah, through a management letter, issued separately, for remedial/corrective action.

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 2023 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

(Debolina Thakur)
Director General of Audit
(Central), Kolkata

Place: Kolkata
Date: 07.11.2023

Annexure

A. Adequacy of the Internal Audit System

The Internal Audit System of the Institute is inadequate, on account of the following:

i. The Institute does not have any Internal Audit manual.

B. Adequacy of the Internal Control System

The Internal Control System of the Institute is inadequate, on account of the following:

i. The Institute does not have any plan for rotation of duties of employees dealing with Cash, Stocks and other valuables.

ii. Cheque Protectors are not being used.

iii. Identity Cards of the employees are not being periodically renewed. They are also not being received back at the time the employees cease to be in service, or prior to final payments being made to them.

iv. The Institute does not have any Centralized Purchase Department, neither it is being ensured that purchases are made only from approved suppliers.

v. None of the purchase departments in the Institute is compiling a list of pending purchase orders, at least once every quarter.

vi. Receipts of material is not being evidenced by pre-numbered Goods Received Notes.

vii. Confirmation of the balances under 'Loans & Advances' is not being obtained periodically.

C System of Physical Verification of Fixed Assets and Inventories

The Institute had conducted Phyical Verification of fixed assets and Inventories for the financial year 2022-23.

D Regularity in payment of Statutory Dues:

The Institute was regular in payment of its Statutory Dues.


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उत्तिष्ठत जाग्रत प्राप्य वरान निबोधत
INDIAN INSTITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY, SHIBPUR
भारतीय अभियांत्रिकी विज्ञान एवं प्रौद्योगिकी संस्थान, शिवपुर