



Dr B R AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY, JALANDHAR  
DEPARTMENT OF BIO-TECHNOLOGY

Ref. No. : NITJ/BT/2022/674

Date: 15<sup>th</sup> September 2022



Dear Colleagues,

**International  
Short Term  
Course**

On

**Biotechnology  
and  
Biovalorisation  
of  
Extremophiles**

**November 04-  
13, 2022**

**Organizing  
Committee:**

Chief Patron

**Shri S C  
Ralhan  
Chairperson,  
BOG,  
NIT Jalandhar**

Patron

**Prof. (Dr) B K  
Kanaujia,  
Director,  
NIT Jalandhar**

Co-Patron

**Prof. A.K.Jana,  
Department of  
Biotechnology**

Course

Coordinators

**Dr. Nitai  
Basak,  
Associate  
Professor and  
Head,  
Department of  
Biotechnology**

This is to bring to your kind notice that Department of Biotechnology, NIT Jalandhar is organizing 2 weeks (10 days) International Short Term Course on "**Biotechnology and Biovalorisation of Extremophiles**", under GIAN, Ministry of Education, Govt. of India. The course is for Faculty, Staff, Students and research Scholar of Biotechnology and relevant disciplines from Institutions/Universities. Maximum allowed participant is 50, to be filled on first come first serve basis.

International Faculty includes:

- **Professor Rajesh Sani**, Distinguished Professor, Department of Chemical and Biological Engineering and Applied Biological Sciences, South Dakota School of Mines and Technology, South Dakota, USA

Indian Professor includes:


- **Professor Subir Kundu**, School of Biochemical Engineering, IIT BHU
- **Dr. Nitai Basak**, Department of Biotechnology, NIT Jalandhar

This course will cover following topics:

- Basic concepts of extremophilic processes design and development
- Emerging contaminants: Health, Ecological, and Social Impacts
- Challenges in the safe disposal of hazardous nuclear wastes and emerging pollutants
- Biovalorisation of agricultural wastes and industrial effluents
- Fate and transport of emerging pollutants in biological systems
- Specify engineering principles to extremophilic processes for disposal of hazardous pollutants
- Microbial, Enzymatic, Chemical Processes, and their Scale-up study using Extremophiles
- Dark and Photo fermentative molecular biohydrogen production from secondary organic wastes
- Case studies on: Uranium Detoxification project of the US-DoE, Crew Wastes Disposal project of NASA, Greenhouse gas conversion project of the National Science Foundation (NSF), Food Wastes to Biofuels project of the US-DoD
- Techno-economical and life cycle assessments for an integrated process

Please find enclosed herewith Brochure and Registration form of the programme. It is requested to give wide circulation among your colleagues, research scholars and other interested Fraternity. We will appreciate if the application of interested participants can be sent latest by November 02, 2022.

With warm regards,

  
15/9/2022

Dr. Nitai Basak,  
Associate Professor and Head, Department of Biotechnology  
Host Faculty and Course Coordinator

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