

**“Five-day Workshop on Bioengineering in
Healthcare & Environment”
July 30- August 3, 2026 (Hybrid Mode)**

WOBHE - 2026



Convenors

Dr. Nivedita Patra & Dr. Nandini Sarkar

**Department of Biotechnology and
Medical Engineering
National Institute of Technology
Rourkela**

About the Workshop

WOBHE 2026 theme is “*Bioengineering in Healthcare & Environment*”. The goal of the WOBHE-2026 is to train students, faculty and industry personnel in various areas such as:

- Drug discovery tools
- Biowaste treatment and Biorefinery tools
- Bioprocessing of phytopharmaceuticals in a bioreactor
- Proteomics and genomics tools
- Mathematical modelling of bioprocesses, among others

Call for abstracts: Please send abstract (within 250 words) to bioengineering26@gmail.com on any of the following topics:

Bioprocess Engineering, Genetic Engineering, Protein Engineering, Genomics and Proteomics, Environmental Biotechnology, Agriculture and Plant Biotechnology, Bioenergy, Marine Biotechnology, Medicinal Plant Biotechnology, Metabolic Engineering, IPR in Bioengineering, AI/ML in Biotechnology, Others

- **Awards will be given for Best Poster and Oral Presentations**
- **Online oral presentation also permitted after registration**
- **All the abstract will be published in the workshop proceedings and selected papers will be published in a special issue of Scopus indexed Journal after peer review.**

Chief Guest & Guest of Honour

Prof. H. S. Chawla, Retired Professor, GBPUAT, Pantnagar, Uttarakhand

Dr. Alok Kalra, Ex Director, CSIR-CIMAP

Keynote Speakers

Dr. MVRK Sarma, Scientist E, CSIR-CFTRI Mysuru

Prof. Chandan Goswami, NISER Bhubaneswar

Dr. Shri Ram Yadav, Professor, IIT Roorkee

Dr. Gunjan Prakash, Associate Professor, UDCT Mumbai

Dr. Nandita Banerjee, Senior Scientist, ICAR-NISST, Mau, among others

Workshop Objectives

Train the delegates in the area of • Bioinformatics tools for drug discovery such as retrieving of chemical structure of compounds from PubChem, DRUGBANK and Protein Data Bank, molecular docking using AutoDock and visualization of results of molecular docking using PYMOL, Drug-Likeness and Toxicity analysis using molinspiration and PROTOX • Biowaste treatment and biorefinery tools such as demineralization, deproteinization and chitin extraction from shrimp shells and analysis of FTIR data for calculation of degree of acetylation of chitin • Molecular Biology tools such as PCR, plasmid DNA isolation, gel electrophoresis to familiarize non-biology engineering students with basic techniques of biotechnology • Modelling of bioprocesses using computer programs such as study of batch kinetics parameters, simulation of batch kinetics data, design of fed-batch strategy using mathematical model. This workshop will give an idea of advanced tools of genomics, proteomics (2-D gel electrophoresis) also. This comprehensive workshop tools will enable the delegates to design experiments for advanced research as well as arrive at novel workplan for start-ups on pharmaceutical search, production and finally, scale-up with reduced experiments. This workshop will bring together experts of various fields such as Bioprocess Engineering, Plant Biotechnology, Bioinformatics as well as advanced fields such as Artificial Intelligence and Machine Learning. The students will find the lectures and the practical and hands-on training sessions very interesting and engaging. This workshop will try to bridge the existing gaps in Biotechnology education by providing demonstration of working of a bioreactor for pharmaceutical production, parts and probes of a bioreactor, estimation of k_La and mixing time in the bioreactor. The advanced facilities of our department will be utilized for giving the delegates an idea of Engineering aspects of Biotechnology.

The Institute

National Institute of Technology, Rourkela is one of the top-ranking Institute for technical education established by the Government of India. NIT Rourkela is a prestigious institute with a reputation for excellence in research and education at undergraduate, postgraduate and doctoral levels.



The Departments

The Department of Biotechnology and Medical Engineering was established in 2007. The department is presently offering B. Tech. and M. Tech. degrees (in Biotechnology as well as Biomedical Engineering) and Ph. D. degree. The faculty members conduct research in diverse areas related to biotechnology and Medical Engineering. The department has state of art laboratories that are well equipped for basic and applied research.



Who should attend

- Students and Research scholars
- Young faculty and scientists
- Industry personnel

Important dates

Abstract submission deadline: July 15th, 2026

Communication of acceptance: July 20th, 2026

Early Bird Registration : July 20th, 2026

Normal Registration : July 25th, 2026

Registration fees:

Participants	Early Bird registration ends on 20 th July 2026	Registration ends on 25 th July 2026
Students	Rs. 2500 (including GST)	Rs. 3000/- (including GST)
Academicians	Rs. 4500/- (including GST)	Rs. 5000/- (including GST)
Industrialists/ R&Ds	Rs. 5500/- (including GST)	Rs. 6000/- (including GST)

Indian nationals

Students	Rs. 2500 (including GST)	Rs. 3000/- (including GST)
Academicians	Rs. 4500/- (including GST)	Rs. 5000/- (including GST)
Industrialists/ R&Ds	Rs. 5500/- (including GST)	Rs. 6000/- (including GST)

Foreign nationals/Exchange participants

Students	100 USD	120USD
Academicians	200USD	250USD
Industrialists/ R&Ds	350USD	400USD

For Registration click below:

[Registration form.pdf](#)

The registration fees can be paid directly by account transfer. **Bank name:** SBI, **Branch Name :** NIT Rourkela Campus, **IFSC code :** SBIN0002109 **Account Name :** CONTINUING EDUCATION NIT ROURKELA, **Account Number:** 10138951784, **Account type:** Savings
Email ID: srice@nitrrkl.ac.in

Organizing Committee

Patron:

Prof. K. Umamaheshwar Rao, Director,
NIT Rourkela

Chairman:

Prof. Devendra Verma,
Head, Department of Biotechnology and
Medical Engineering, NIT Rourkela

Advisor :

Prof. A. Thirugnanam
Department of Biotechnology and Medical
Engineering, NIT Rourkela

Conveners:

Dr. Nivedita Patra & Dr. Nandini Sarkar
Department of Biotechnology and Medical
Engineering, NIT Rourkela

Organizing Committee:

All Faculty of Department of Biotechnology and
Medical Engineering, NIT Rourkela

Student Co-ordinators:

Nethra
Ajaya
Rashmi
Debashmita
Neha
Anita

Contact us:

Dr. Nivedita Patra
Tel: +91-9717675633
Dr. Nandini Sarkar
Tel: +91-7873092599
Department of Biotech. & Medical
Engg., NIT, Rourkela-769008.
E-mail: bioengineering26@gmail.com
Website: <https://www.nitrkl.ac.in/Home/AllEvents/>