



Dept. of Biotechnology and Medical Engg., and Dept. of  
Mechanical Engg. (NIT Rourkela) in association with  
National Institute of Technology Uttarakhand



# International Conference on Biological Innovation, Technology, Engineering and Sciences (BITES-2024)

18<sup>th</sup> -20<sup>th</sup> December 2024



## Event Highlights



Oral Presentation, Poster Presentation,  
Scientific Photography, Bio Idea Pitch

## Registration

Abstract submission : 30 Oct 2024  
Acceptance of abstract : 15 Nov 2024  
Registration : 20 Nov 2024  
\*late registration charges of 20% extra

Website: <https://bites-2024.nitrkl.ac.in/>  
Registration link –  
<https://forms.gle/s1hdv4Q9s1uoskPu9>  
Abstract submission link –  
<https://forms.gle/YjRAw5J5uQAPjPcUA>

## Team

### PATRON:

Prof. K. Umamaheshwar Rao, Director, NIT Rourkela  
Prof. B.V. Ramana Reddy, I/c Director, NIT Uttarakhand

CHAIRMAN: Prof. Devendra Verma, HoD, BM

CONVENORS: Prof. Ravi Kant Avvari,  
Prof. Dharmendra Tripathy (NIT UK)

CO-CONVENORS: Prof. Prasoon Kumar,  
Prof. Earu Banoth, Prof. Kishore Singh Patel (ME)



CONFERENCE NIT  
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## Publication of extended papers

1. SI – Fluid Dynamics of Life, Physics of Fluids
2. Vector-Borne Diseases, J. of Biological Control
3. Driving Innovation in Biomechanics: Role of Adv. Sensing, Meas. & Instrumentation Systems, Cambridge Scholar Pub.

Physics of Fluids AIP Publishing

Cambridge  
Scholars  
Publishing

INFORMATICS  
A Passage to Knowledge

## About the Conference

The conference aims to provide an excellent platform for engineers, scientists, researchers, and professionals to share knowledge and experiences on the dynamics of the interdisciplinary approaches in solving problems of relevance to bioengineering covering major domains of Biological Innovation, Technology, Engineering and Sciences. The conference will serve as the best platform to learn and share new ideas in the area by connecting the stakeholders involved, particularly students, faculties, engineers, doctors, entrepreneurs, incubators, and enthusiasts. Further, the conference will also inspire the new generation of bioengineers to come up with novel, translatable ideas to meet the needs of the national and international community.

### About NIT Rourkela

NIT Rourkela (the erstwhile Regional Engineering College, renamed on 26th June 2002) is one of the institutes of national importance under the Ministry of Education, Government of India. The government of India has elevated the Regional Engineering College, Rourkela to an autonomous institution under the name of the National Institute of Technology, Rourkela. <https://nitrkl.ac.in>

### About the Department - BM

The Department of Biotechnology and Medical Engineering was established in 2007 to provide a multidisciplinary research and teaching program in Biotechnology and Medical Engineering that advances a fundamental understanding of how biological systems operate and to develop effective biology-based technologies for applications across a wide spectrum of societal needs including innovations in diagnosis, therapy of human diseases, design of novel biomaterials, biomedical devices, and in solving environmental hazard. The faculty members have diverse research interests and they conduct both basic and applied research in diverse areas such as Cell & Molecular Engineering, Tissue Engineering & Biomaterials, Bioprocess Engineering, Environmental & Plant Biotechnology, Biomechanics & Bio transport Engineering, and Medical Electronics & Instrumentation.

### Registration

Please register for the conference using the following link  
#

Participants	Indian	Foreign
UG/PG Students	Rs. 2500	USD 75
Research Scholars	Rs. 4000	USD 100
Academicians	Rs. 6000	USD 150
Industry	Rs. 8000	USD 250

For Attendees Rs. 1000/ USD 25. Registration includes – conference kit, high tea, breakfast and lunch (GST incl.). #registration for student/ staff of NIT Rourkela is free; Accommodation will be arranged at the campus, subject to availability and charges payable by the participant.

**Payment** may be made using QR code (see first page) or using online transfer in favor of “Conference, NIT Rourkela” payable at SBI, NIT Branch to Account No.: 36734418111, IFSC: SBIN0002109, MICR: 769002007, SWIFT: SBININBB137

**For more further details please visit the website**  
<https://bites-2024.nitrkl.ac.in/>

### About NIT Uttarakhand

National Institute of Technology, Uttarakhand (NITUK) is an Institute of National Importance. Since its inception, this Institute has grown in many fields and has established itself as one of the best Technical Educational Institutes. NITUK is established in 2009 under the Act of Parliament by the Ministry of Education (Shiksha Mantralaya). <https://www.nituk.ac.in/>

### About the Department - ME

Mechanical Engineering is often called the mother of all engineering. It covers a host of subjects: properties of materials, structural design, material processing, manufacturing, heat engines, refrigeration and air conditioning, industrial management, robotics and much more. The Mechanical Engineering Department of NIT, Rourkela is known for research in most of these fields. The main foci of research are on mechanical vibration, robotics, CAD/CAM, precision engineering, Metal forming, manufacturing, CFD, Industrial refrigeration and Cryogenics.

### Theme of the Conference

*"The Future of Biological Innovation"* serves as a compelling focal point for the conference, offering a platform to explore a diverse array of topics. This theme delves into emerging technologies and pioneering research, focusing on how technology and engineering are unlocking new potentials in biological research, sharing ideas, and addressing challenges in the field.

The conference covers topics in biosciences and bioengineering area from an interdisciplinary perspective, but not limited to, such as – Cell & Molecular Engineering, Tissue Engineering & Biomaterials, Bioprocess Engineering, Environmental & Plant Biotechnology, Biomechanics & Biotransport Engineering, and Medical Electronics & Instrumentation.

**Note:** Scopus and Web of Science indexed publications will be added after the final consent from the publishers related to the theme of the conference.

### Sponsorship

BITES-2024 will serve as a platform for industries/ start-ups/ sponsors to collaborate with best minds in the field. This platform will help sponsors in building network and promote their products and branding.

### Contact details

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Prof. Kishore Singh Patel | [patelks@nitrkl.ac.in](mailto:patelks@nitrkl.ac.in)

# Keynote Speakers

**Prof. M Sultan Mohamed Ali**

Universiti Teknologi Malaysia

**Prof. T. Bhaskar**

Scientist F, IIP Dehradun

**Prof. Suman Chakraborty**

Shanti Swarup Bhatnagar Awardee,

Professor, IIT Kharagpur

**Prof. Sashikanta Dash**

Dy. Director (Biotech.), S&T Odisha

**Prof. Suresh Kumar Dubey**

Professor, BHU, Varanasi

**Prof. Alan Jeffrey Giacomini**

Editor-in-Chief, Physics of Fluids

**Prof. G.P. Raja Sekhar**

National Mathematician Awardee,

Professor, IIT Kharagpur

**Prof. Mukesh K. Gupta**

Director, ICMR-NARFBR,  
Hyderabad

**Prof. Luís Miguel Grilo**

Professor, Univ. of Evora, Portugal

**Prof. Singam Jayanthu**

National Mineral Awardee, Professor,  
NIT Rourkela

**Dr. Mona Kanso**

PostDoc Assoc, Massachusetts  
Institute of Technology

**Prof. Dharendra S Katti**

Director, IIT Goa

**Prof. Sunil K. Khare**

Director, IISER Kolkata

**Prof. Kh S. Mekheimer**

Prof. & Ex-Vice Dean (PG), Al-  
Azhar University, Cairo

**Prof. Bidyut K Mohanty**

VCOM, USA

**Dr. Sanjib Mohanty**

Ex Director, IGH Rourkela

**Prof. Anuj Mubayi**

Illinois University USA

**Prof. Ashok Pandey**

Executive Director, Centre for Energy  
and Env. Sustainability, Lucknow

**Mr. Dhiren Pattanayak**

Asst. Controller (P&D), IPO Kolkata

**Prof. Minakshi Prasad**

Editor-in-Chief, Indian J. of  
Microbiology

**Dr. Praveen Sahu**

Sr. Scientist, CWS Hospital, Rourkela

**Prof. Kolla Sreedevi**

Chief Editor, J. of Biological Control

**Dr. S. Venkata Mohan**

Chief Scientist, IICT Hyderabad

**Prof. R. Vinu**

Professor, IIT Madras

# Invited Speakers

**Ms. Anna Sappington**

Harvard University and MIT

**Dr. Neha Arya**

Asst. Professor, AIIMS Bhopal

**Prof. Iswar Baitharu**

Asst. Professor, Sambalpur Univ.

**Prof. Anil Kumar Birru**

Head & Assoc. Prof., NIT Manipur

**Prof. Tikam Chand Dakal**

Asst. Prof., Mohanlal Sukhadia Univ.

**Prof. Debasmitta Dubey**

Assoc. Professor, SOA Univ BBS

**Prof. Chandan Goswami**

Professor, NISER Bhubaneswar

**Prof. Raj Kumar Joshi**

Prof. & Head, Rama Devi Women's  
Unv., Bhubaneswar

**Prof. Alok Jain**

Asst. Professor, BIT Mesra

**Prof. Era Jain**

Asst. Prof., Syracuse University

**Prof. Dhruv Kumar**

Prof. & Cluster Head, SoHST  
Dehradun

**Prof. Aradhana Mishra**

Sr. Principal Sc., NBRI, Lucknow

**Prof. Rakesh K. Mishra**

Head & Asst. Prof., NIT UK

**Prof. Danumjaya Palla**

Professor, BITS Pilani, Goa

**Prof. Sirsendu Sekhar Ray**

Professor, North-Eastern Hill Univ.

**Prof. Akhilesh K Shakya**

Asst. Prof. of Prac., Texas T. Univ.

**Prof. Yamini Sudha Sistla**

Assoc. Prof., Shiv Nadar University

**Prof. Anurag Kumar Tiwari**

Asst. Professor, NIT Jalandhar

**Prof. Ruchi Mishra Tiwari**

Asst. Prof., Symbiosis International  
(Deemed Univ.)

**Prof. Jai Prakash Tripathi**

Asst. Prof., Central Univ. Rajasthan

**Prof. Rajesh Vasita**

Asst. Prof., Central Univ. of Gujarat

**Dr. Vaibhav Mohanty**

Harvard University and MIT

**Prof. Vivekanand**

Asst. Professor, MNIT Jaipur

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