

Organized by Department of Biotechnology and Medical Engineering NIT Rourkela Venue : NIT Rourkela

About Host

Department of Biotechnology and Medical Engineering at National Institute of Technology Rourkela (NIT Rourkela) was established in 2004 to flourish in the emerging areas of biotechnology and Biomedical Engineering. NIT Rourkela provides quality education in a diverse and multi-cultural environment. The mission of the institute is to become an internationally acclaimed institution of higher learning that will serve as a source of knowledge and expertise for the society and be a preferred destination for undergraduate and graduate studies.

Welcome to ICBSEE-India-2022

ICBSEE-India-2022 will enlighten the field of *Energy-Environment-Bioprocess*. The main theme of the conference is *"Bioprocess: From Research to Real Life"* which covers a wide range of critically important sessions. ICBSEE-India-2022 would provide a platform for the interaction between the Scientist communities around the world and aims in establishing pollution free sustainable environment by accelerating the cutting edge Bioprocess Technologies.

ICBSEE-India-2022 provides the combined arena of government-academia-industry to incorporate all potential aspects in approaching one-foot step ahead towards MAKING SWACHHA BHARAT

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Scope of the Conference:

The major thrust of **ICBSEE-India-2022** is to emphasize the recent innovations and development of bioprocess strategies towards *environment and energy*. Keeping this in view, exclusive sessions will be dedicated to personnel from broad area of academia, industry and research on the focussed thematic areas.

The conference will focus on the following topics, but not limited to:

i. Environment

- Bioremediation: solid and liquid wastes
- Hazardous substances: detection and management techniques
- Carbon sequestration and storage
- Green organic synthesis routes
- Product engineering in the Bio-Industries
- Product innovation, development and economics
- Enzymes of environmental importance
- Biomaterials and Nanotechnology
- Recovery and recycling of effluents
- Value added products from wastes

ii. Wastewater treatment

- Municipal wastewater treatment
- Sewage treatment
- Industrial wastewater treatment
- Power plant wastewater treatment
- Nuclear plant wastewater treatment
- Advance technology in wastewater treatment
- Recycle, recovery and reuse of resources from wastewater
- Energy generation from wastewater

iii. Health impact of environmental pollution

- Heavy metal toxicity
- Health effect of radio nucleotides
- Emerging contaminants and their effects on health
- Microbiome analysis for pollutant toxicity
- Carcinogenesis
- Metabolomics for pathway analysis
- System biology approach for toxicity
- Cause and remediation of diseases from environment

iv. Bioprocess

- Bioprocess: advance approaches for better quality product
- Enzymes of Industrial importance
- Biomass Processing
- Biomass to bioresources
- Bioprocess for Food and Fermentation
- Bioplastic
- Biosurfactant
- Biopesticide
- Biochar
- Enzymes for biosensor
- Marine Bioprocess
- Algal biorefinery
- Recombinant biomolecules
- Human therapeutics
- Biomolecules from animal cell
- Production of nutraceuticals and probiotics
- v. Energy
 - > Biofuels
- > Bio-refinery
- Green energy
- Waste-to-energy technology
- Sustainable and renewable energy
- Clean energy systems and technology
- Low cost and innovative technologies
- Advance technologies for alternative fuels
- Renewable energy

vi. Omics for environment and product development

- Metagenomics of environmental samples
- Biodiversity analysis from environmental samples
- Microbiome analysis
- Bioinformatics analysis for whole genome
- Metabolomics for pathway analysis
- Proteomics for improved product and process
- Transcriptomics for improved product and process

Abstract Submission

The final version of the abstract should be mailed to <u>icbsee@gmail.com</u>

Key Dates: 1.Final Abstract submission: 30th May 2022 2.Final Registration deadline: 4th June 2022

Final Registration fees:

National:

Faculties from academic institutions: Rs. 5000/-Participants from industries: Rs. 5000/-Research Scholars: Rs. 4000/-

International:

Research Scholars (International): USD 50 Faculties and Scientists (International): USD 50



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- https://www.instagram.com/icbsee conference nitrkl/
- in <u>https://www.linkedin.com/in/international-conference-on-bioprocess-for-sustainable-environment-and-energy-6a7b32239/</u>

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PAYMENT: All payments should be made through A/c payee Demand Draft in favor of "CONFERENCE NIT ROURKELA", payable at SBI NIT Campus Branch, Rourkela (IFSC Code: SBIN0002109) or through NEFT transfer to A/c No. 36734418111. You can also visit www.nitrkl.ac.in for downloading the registration form and other information.

KEYNOTE Speaker ICBSEE 2022



Prof. Abdul Wahab Mohammad Universiti Kebangsaan Malaysia



Prof. Ji-Dong GU Guangdong Technion - Israel Institute of Technology, China



Prof. Piet Lens IHE Delft, Netherlands



Prof. Ulla lassi University of Oulu, Finland



Prof. Ramkrishna Sen IIT Kharagpur, India



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Prof. Ashok Pandey CSIR-IITR, Lucknow, India



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