



4th

Biological Engineering Society Conference 2020

BESCON 2020

October 02-04, 2020

Theme: Gene & Process Scale Engineering for Consolidated Bioprocessing



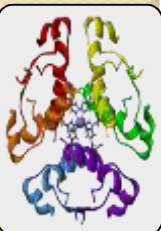
Organized by



**Department of Biotechnology
Indian Institute of Technology Kharagpur
West Bengal, India**

In collaboration with

Biological Engineering Society, India (BESI)



Objectives

Biotechnology has been evolving and shifting its paradigm continuously by riding the waves of technological development and innovation. Societal needs also drive the innovation in this ever-emerging trans-disciplinary areas of study and research that have ushered in a new era of omics-inspired Blue, Green, Red and White Biotechnologies to address the scientific, economic and technological challenges in healthcare, energy, environment and waster industries. Genome, metabolic and process scale engineering strategies have brought about revolutions in the industrial production of biopharmaceuticals, enzymes, biofuels and plethora of other value-added products in biorefineries through consolidated bioprocessing of wastes for viable and sustainable development. Systems and synthetic biology methods are catalyzing the development of designer organisms with desired traits and novel applications. New and advanced biomaterials for biomedical, healthcare, environmental and energy applications are attracting attention of the world scientific community and industry. In order to achieve the Sustainable Development Goals set by the United Nations, it is becoming increasingly essential to bring the Genetic, Metabolic, Bioprocess, Biomaterials and Protein engineering communities together on a single platform called BESCON'2020 under the single umbrella i.e., Biological Engineering Society of India (BESI). Hence, BESCON'2020 is being organized by the Department of Biotechnology, Indian Institute of Technology Kharagpur in collaboration with the Biological Engineering Society (I), a scientific forum of the Biological engineers, scientists and technologists constituted in 2017 for the advancement of blue, green, red and white biotechnology.

BESCON-2020 with its unique theme ***“Gene & Process Scale Engineering for Consolidated Bioprocessing”*** will feature plenary/keynote/invited talks, oral presentations and poster sessions in the areas of Bioprocess and Biochemical Engineering, Genome and Metabolic Engineering, Systems and Synthetic Biology, Biomaterials and Biomedical Engineering, Biorefineries for Biofuels and Sustainable Development. It will serve as a platform to share and show-case one's research findings among the peers in industry and academia. It will also provide us with a very good networking event for the academic and company professionals and students to take their research to the next level.

Thrust Areas

- ❖ **Genome and Metabolic Engineering**
- ❖ **Bioprocess and Biochemical Engineering**
- ❖ **Protein/Enzyme Engineering**
- ❖ **Biorefineries for Biofuels and Value-added Products**
- ❖ **Systems and Synthetic Biology**
- ❖ **Sustainable Development**
- ❖ **Biomaterials and Biomedical Engineering**
- ❖ **Blue, Green, Red & White Biotechnology**

About the Institute

The Indian Institute of Technology Kharagpur (IIT Kharagpur or IIT KGP) was established by the Government of India in 1951. It is the first IIT which was established, and is recognized as an Institute of National Importance by the Government of India. As part of Nehru's dream for a free and self-sufficient India, the Institute was established to train scientists and engineers after our independence in 1947. Among all IITs, IIT Kharagpur has the largest campus ~2100 acres, highest number of Departments, Schools and Centres and the highest student enrolment.

About the Department

Biotechnology activity at IIT Kharagpur was formally initiated in 1986 with the introduction of an M. Tech. course on Biotechnology and Engineering. The program was excellent in the spheres of teaching/training and research. The wide appreciation of the program in the country and abroad led to introduction of an undergraduate course in Biotechnology and Biochemical Engineering in 1994 under Chemical Engineering Department. The Department of Biotechnology was established in 1999 to run the UG program and M. Tech. programs independently.

Presently, the Department is running one 4-Years B. Tech, 5-Years dual degree (B. Tech and M. Tech), 2-Years M. Tech and Ph. D program in Biotechnology and Biochemical Engineering.

Overall, currently there are about 250 undergraduate, 40 postgraduate and 105 doctoral students as well as 15 postdoctoral fellows working in various fields of research encompassed by two major thrust areas namely, healthcare biotechnology and bio-energy. Specifically, there are 14 faculty members conducting research under 13 different subject areas namely, Antimicrobial Chemotherapy, Bioenergy and Bioproduct Development, Bioinformatics, Biomaterials and Tissue Engineering, Bioprocess and Bioseparation Technology, Environmental Biotechnology and Metagenomics, Genomics and Proteomics, Marine Biotechnology, Molecular Biology, Genetics and Recombinant DNA Technology, Molecular Microbiology, Immunotechnology, Plant Tissue Culture, Metabolomics and Transgenic Technology, Structural Biology and Systems Biology.



ORGANIZING COMMITTEE

Patron:

Professor Virendra Kumar Tewari, Director, IIT Kharagpur

Convener and Co-conveners:

Prof. Ramkrishna Sen (Department of Biotechnology, IIT Kharagpur)

Dr. Riddhiman Dhar (Department of Biotechnology, IIT Kharagpur)

Dr. Amit Ghosh (School of Energy Science and Engineering, IIT Kharagpur)

Advisory Committee Members: IIT Kharagpur

Prof. Debabrata Das

Prof. Satyahari Dey

Prof. Ananta Kumar Ghosh

Prof. Tapas Kumar Maiti

Prof. Amit Kumar Das

Prof. Sudip Kumar Ghosh

Prof. Nikhil Kumar Singha

Prof. M. M. Ghangrekar

Prof. Mahitosh Mandal

Prof. Jyotirmoy Chatterjee

Treasurers:

Prof. Anindya Sundar Ghosh

Dr. Somdeb Bose Dasgupta

Local Organizing Committee Members

Prof. Pinaki Sar

Prof. Mrinal Kumar Maiti

Prof. Ranjit P. Bahadur

Dr. Agneyo Ganguly

Dr. Brajesh Dubey

Route Map

Kharagpur is a well known landmark, which has one of the longest railway platforms in Asia and is the former headquarter (HQ) of South-Eastern (SE) Railway. The Kharagpur city has become more prominent after the establishment of the first Indian Institute of Technology (IIT). Kharagpur is situated on National Highway #2 about 120 kms west of Kolkata city. The nearest airport to Kharagpur is the Netaji Subhash Chandra Bose International Airport, Kolkata (CCU). Being the former HQ of SE Railways, Kharagpur is connected to most of the major cities of the country by direct train services. IIT Kharagpur is located 5 kms away from the Kharagpur Railway Station (KGP), 1 km from the Hijli Railway Station and 11 kms from the National Highway #2.

Tourist/Historical places

IIT Kharagpur is a place with historical importance which was earlier known as Hijli detention camp. Nehru Museum and Hijli Prison Cell are the sightseeing places in the campus. Nearby places like Golebazar, Gatebazar and Jagannath Temple may also be visited. In addition, there are many places of tourist's interests, like Digha (sea beach on the Bay of Bengal) is 120 kms and Bishnupur (archeological monuments of terracotta art) is 90 kms from Kharagpur. Also, Kolkata, the City of Joy and the City of Palaces is situated 120 kms away and it is the capital of West Bengal as well as the largest metropolis in the eastern region of the country.



Accommodation

Limited number of rooms are available in the Technology Guest House and Visveswaraya Guest House at IIT Kharagpur on payment basis. Accommodation can be arranged in the Guest Houses after receiving the requests from the participants. Paid accommodations for the research scholars can be arranged in the student hostels.

Registration Details

Registration Types	Important Dates
EARLY BIRD	Available until August 03, 2020
STANDARD	After August 03, 2020 upto September 15, 2020

Registration Fees (INR)		
	On or before 03/08/2020 (Early Bird)	After 03/08/2020 upto 15/09/2020 (Standard)
Research Scholars/Post-Doctoral Fellows	3000	4000
Faculty (Member BESI)	4500	6000
Faculty (Non-Member BESI)	5500	7000
Accompanying Person	3000	4000
Industry Personnel	8000	10000

Spot Registration

Rs. 7500.00

(Without accommodation and breakfast)

Please note: Registration fee includes Registration Material, Suitable Accommodation for 2 nights, and food (breakfast, lunch and dinner). Charges include GST @18% . Spot Registration does not include accommodation and breakfast.

Contact details: Department of Biotechnology, IIT Kharagpur

Prof. Ramkrishna Sen, *Head - Biotechnology & Convener- Administration*

Phone: +91-3222-282248 (Head's office) & Mobile: +91-9474618882

E-mail: rksen@bt.iitkgp.ac.in

Dr. Riddhiman Dhar, *Joint Convener - Technical*

Phone: +91-3222-304562 (office) & Mobile: +91-9051629689

E-mail: riddhiman.dhar@iitkgp.ac.in

Dr. Amit Ghosh, *Joint Convener - Handling and co-ordination*

Phone: +91-3222-260804 (office) & Mobile: +91-8918462398

E-mail: amitghosh@iitkgp.ac.in



Registration form

**4th Biological Engineering Society Conference (BESCON)-2020 in
collaboration with Biological Engineering Society, India (BESI)
(To be submitted online)**

Name: _____

Age: _____ Gender: M/F _____

Present Position: _____

Affiliation: _____

Institute Roll Number/Employee Code: _____

Address for correspondence: _____

E-Mail: _____

Phone/Mobile: _____

Payment Reference Number: _____

Area(s) of interest: _____

Accommodation required: Yes/No _____

Accompanying Person(s): _____

Title of the Abstract: _____

Signature of the Applicant