

Statement of Objective:

India has shifted its focus to the most promising industry of the future, Biotechnology, over the last few years. With its large pool of scientific talent, world-class information technology industry, and vibrant pharmaceutical sector, India is well equipped to emerge as a significant player in the field of Biotechnology. Biotechnology is perceived as key to revolution throughout the world for betterment of the mankind. We have been reaping the benefits of Biotechnology, in our daily life, for the efforts that were invested in research and development by numerous researchers and scientists for decades or even centuries, in the areas of Health and Agriculture. Scientists have developed crops that can withstand adverse environmental conditions, biotic stress factors, and can be grown in limited land area, thereby, helping poor farmers of the developing countries to retain their yield and increase their output several-fold. Researchers have been developing cures for health problems of human and animals. They have been also designing means to protect our environment from innumerable kinds of pollutions with the thought that a healthy and hygienic nature can be maintained. However, to ensure tomorrow's security in areas of agriculture, health and environment, determined involvement of more and more expertise in research & development is required, for Biotechnology to be considered as a boon for the society at large.

With multidisciplinary nature of "Biotechnology" on mind, Department of Biotechnology, National Institute of Technology, Durgapur is going to organise a five-day National Workshop on "Use of

recombinant DNA in modern biotechnological research" during 17th to 21st December, 2013.

The workshop is **intended for junior faculty members**, who have joined various colleges in last three years (starting January, 2011). Beginners lacking necessary basic training in biotechnology but willing to carry out some research work will be benefitted from this workshop. A total 15 participants will be selected through-out India. Young participants with background in biotechnology or any allied area will be preferred.

The objectives of the workshop are: (i) To impart basic training in molecular biological techniques. (ii) To provide web-based training in basic concepts of bioinformatics. (iii) To provide a theoretical knowledge of recently developed biotechnological tools.

The course content of the workshop will be as follows: (i) The course will include practical demonstrations and hands-on-training in Biotechnology techniques such as extractions of DNA, RNA, proteins, horizontal and vertical gel electrophoresis, quantification of biomolecules, quality check of biomolecules, restriction digestion, ligation, screening of recombinant clones, expression analysis, polymerase chain reaction etc. (ii) Bioinformatics training will include database studies, sequence analysis, restriction analysis, primer design etc. (iii) Relevant lectures will be delivered by reputed scientists from all over India.

Dignitaries from renowned Universities and Institutes will deliver their lectures on the areas of (i) Microbial Biotechnology (ii) Medical Biotechnology (iii) Agricultural Biotechnology (iv) Biochemistry (v) Bioinformatics etc.

Regarding **fooding & lodging** of the participants in the workshop: (i) There is no registration fee for this workshop. Candidates will be selected based on their merit. (ii) Accommodation: Shared double-bed accommodation will be provided during the workshop. No claim for any specific type of accommodation and hotel bill (telephone, laundry etc.) will be entertained. (iii) Food: Breakfast, working lunch, snacks & tea, dinner will be provided during the workshop. Pleasant weather during December will make your stay comfortable.

The Institute:

The National Institute of Technology, Durgapur is located at the heart of steel city of Durgapur, one of the fastest growing tier-II city, in the state of West Bengal. The Institute is located about 160 KMs north-west of Kolkata on the Howrah-Delhi Main Railway-Route and overlooking the National Highway No. 2 (the great Grand- Trunk Road). The Institute spreads over an area of 187 acres of land. It is fully residential and co-educational institute. Currently, altogether about 5,000 students have been pursuing their Bachelor's, Master's and Ph.D. programmes at NIT, Durgapur. The institute embarked upon its tireless journey in 1960 as a joint venture between Govt. of India and Govt. of West Bengal in the name of Regional Engineering College. Eventually, the institute got transformed into National Institute of Technology under the Ministry of Human Resource Development, Govt. of India in 2004. Over the last few decades NIT, Durgapur has evolved significantly bringing under its umbrella additional facets of education such as Technology, Science and Research, which are complementary. The institute has now acquired a status of 'Institute of National

Importance” through implementation of NIT Act, 2007. The institute has been declared as the lead institute under TEQIP programme of MHRD, funded by the World Bank.

The Department:

Department of Biotechnology at NIT, Durgapur started its eventful journey in 2005 to cater to the biotechnological needs of the society. B.Tech. and M.Tech. courses in Biotechnology started in 2005 and 2009, respectively. The present annual intake of B.Tech is 92 and M.Tech intake is 20. The department is steadily emerging as a leader in providing excellent education in undergraduate and postgraduate level in Biotechnology and to develop cutting-edge technology through research, training and technical innovation. The department is growing consistently since its inception and now has more than thirty research scholars working in various research projects. The laboratories of the department are equipped to cater to the needs of the UG, PG students and research scholars & faculty members.

Invited Speakers:

- Prof. Bharat B. Chattoo, MSU, Baroda.
- Dr. Malali Gowda, C-CAMP, NCBS-TIFR, Bangalore
- Dr. Shравan Kumar Mishra, IISER, Mohali
- Dr. Angshuman Bagchi, University of Kalyani, Kalyani
- Dr. Utpal Nath, IISc, Bangalore.
- Prof. Udaykumar Ranga, JNCSAR, Bangalore
- Prof. Suman Kumar Dhar, JNU, New Delhi
- Prof. Tapas Kundu, JNCSAR, Bangalore
- Prof. Tapas Ghosh, Bose Institute

Organising Committee:

Patron **Prof. T. Kumar**, Honourble Director, NIT, Durgapur
Chairman **Prof. P.P. Gupta**, Dean, Research & Consultancy, NIT, Durgapur
Convenor **Dr. Subhankar Roy Barman**
Co-Convenor **Dr. Sudit S. Mukhopadhyay**
Members **Prof. Apurba Dey**
Prof. Sudip Chattopadhyay
Dr. Surabhi Chowdhuri
Dr. Kaustav Aikat
Dr. Dalia DasguptaMandal
Dr. Ashish Bhattacharjee
Dr. Debjani Dutta
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Registration form for the Workshop

Name (Dr/Mr/Mrs):.....
Male/Female:.....
Designation:.....
Organisation:.....
Date of Joining the Organisation:.....
Need of Accomodation: Yes/No
Food: Veg/Non-Veg
Address:.....
Contact No.....
Email ID.....
Attachment: C.V. (MUST).

Last date of receiving application (extended): 22nd November, 2013.

A five day National Workshop on

“Use of recombinant DNA in modern Biotechnological research”

December 17th to 21st, 2013



Organised by:



Department of Biotechnology
National Institute of Technology Durgapur
Mahatma Gandhi Avenue
Durgapur – 713209
West Bengal, India
Website: www.nitdgp.ac.in

Sponsored by:

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