

A five day Continuous Education Program
On
“Molecular Biotechnology: Tools and Techniques”
(MBT²-2018)

On the eve of
Diamond Jubilee Celebrations of NIT (REC), Warangal

22nd - 26th October, 2018

Sponsored by TEQIP - III

Coordinators:

Dr. Prakash Saudagar

Dr. K. Divakar



Organized by

Department of Biotechnology
National Institute of Technology, Warangal – 506 004,
Telangana State, INDIA



Overview of the workshop:

Molecular biotechnology is the emerging field merging many area of study such as molecular biology, microbiology, cell biology, biochemistry and immunology. Molecular biotechnology has applications in agriculture, aquaculture, chemical manufacturing, textile processing and food processing industry. Some information can be obtained at home even by having without any expensive resources, whereas many techniques have to be learnt at the bench. Molecular biotechnology is a field, in which there is an inherent lag in teaching and learning of the concepts due to lack of exposure and opportunity to learn by hands-on experience. Faculty need to update and reorient themselves to meet the rapidly changing professional and scientific needs of the stakeholders. This workshop focuses on teaching several basic concepts, including recombinant DNA, plasmids, restriction enzymes, primer design, DNA/Protein sequencing methods, electrophoresis, in-gel detection of enzymes, enzyme kinetics and functional metagenomics. Both theoretical knowledge and hands-on training of skills by experts in the field will provide an indepth understanding of basic methods in molecular biotechnology.

Topics covered in the Workshop:

Lectures / Hands-on training on

- Primer design & PCR
- Restriction digestion & Gene Cloning
- DNA/Protein Sequencing methods, Sequence submission and analysis
- PAGE, In-gel detection of enzymes / Zymography
- Enzyme assay methods & Enzyme kinetics
- Functional Metagenomics

Resource Persons:

Faculty members from NIT Warangal, IIT's and Centrally funded Institutes/ Universities will deliver lectures and demonstrate the experiments.

Registration is open to:

Faculty members/ Research Scholars of Institutions of higher education in Science, Engineering and Pharmacy who teach/do research in biotechnology/life sciences.

How to Apply:

Interested candidates can download registration form available in the program website (<https://goo.gl/JUrGq7>) and scanned copy of filled-in registration form should be uploaded through online link available (under registration tab) in the program website **on or before 01-10-2018**. As the program is conducted in a workshop mode with hands-on sessions, the number of participants in the workshop is limited to 25. **Candidates are advised to apply early to avoid disappointment. Selected applicants will be intimated through E-mail on or before 03-10-2018.**

Payment of Registration Fee:

After receiving the intimation about the selection, the applicant has to send the required registration fee in the form of Demand Draft in favor of “TEQIP III Funds” payable at Warangal (NIT Warangal Branch) on or before **08-10-2018**. Only after receiving the proof of payment of registration fee from the participants through E-mail, they will be sent confirmation of their participation through E-mail immediately.

Registration Fee:

Category of participants	Local participants (With working lunch)	Residential participants (accommodation, breakfast, lunch, dinner included)
Faculty/Post-doctoral fellow from other institutions	Rs. 1,000/-	Rs. 2,000/-
Internal Faculty	Rs. 500/-	-

Accommodation:

Accommodation for outstation participants will be provided upon request in the Institute Visitors Block or International Students Hostel.

Brief profile of the Department of Biotechnology

The Department of Biotechnology was established in the year 2006 with B.Tech program in Biotechnology. It also offers doctoral program in Biotechnology. The Department has highly motivated, experienced and young faculty members carrying out research in key areas of biotechnology. At present 24 PhD scholars are carrying out their research work under the guidance of faculty in the department. The department has sophisticated instruments such as RT-PCR, HPLC, GC etc.. The department has already executed research projects and at present it has 10 research projects funded by DBT/DST/ICMR/CSIR, Govt. of India.

About NIT Warangal:

National Institute of Technology Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 14 Departments offering eight undergraduate and 32 post-graduate programmes besides doctoral programmes. About 5000 students across the country and about 500 international students study on the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure in the form of state of the art library, seminar halls, guest houses and research laboratories.

Note: Experiments related to the above topics will be demonstrated and the participants will be given opportunity to perform experiments in a team. Participants are encouraged to bring their own laptops (OS: Windows 7 or equivalent version).



About Warangal:

Warangal is the second largest city of the new state of Telangana. It is situated at a distance of 140 km from the state capital Hyderabad (Nearest Airport). It is well connected by Rail (Kazipet Junction is two km away and Warangal Station is 12 km away) and by Road (NH 202). Warangal is renowned for its rich historical and cultural heritage. It was the seat of erstwhile Kakatiya dynasty. It is a seat of tourist attractions with a number of historical monuments like Thousand Pillars Temple, Warangal Fort, Bhadrakali Temple, Ramappa Temple and Lknnavaram Lake located in a radius of 30 kms.



For any queries regarding this workshop, please contact:



[Webpage](#)

Dr. Prakash Saudagar

Dr. K. Divakar

Department of Biotechnology
National Institute of Technology, Warangal
Telangana State, 506004, India.

E-mail: nitwmbt2018@gmail.com

Ph.: 8332969461, 9488013671