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- Last date for submission of forms is November 10, 2023
- Registration fee and the other charges may be deposited as cash or Bank Draft in the name of Account Officer NIBGE,FSD.
- 19th National Training Course on Modern Techniques in Bio-technology, National Institute for Biotechnology & Genetic Engineering, NIBGE, P. O. Box 577, Jhang Road, Faisalabad-PAKISTAN. or E. mail: mufathia@yahoo.com
- Application forms can also be downloaded from http://www.nibge.org



National Institute for Biotechnology and Genetic Engineering (NIBGE), has widely been recognized as "Center of Excellence in Biotechnology" at international level. Scientists of NIBGE perform leading-edge research in the discipline of Biotechnology and train human resource for productive and rewarding scientific careers. Keeping emerging and cutting edge technologies in focus, NIBGE harbors state of the art equipment for research and outsource analytical services on commercial level. NIBGE by all means promoting collaboration in research with local and international organizations. It is an affiliated center of the International Center of Genetic Engineering and Biotechnology (ICGEB), Italy and it's library has been designated as National Library of Biological Sciences. Training of manpower at postgraduate and doctorate level is one mandate of NIBGE and it is declared as constituent college of Pakistan Institute of Engineering and Applied Sciences (PIEAS) for the award of M.Phil. and



National Institute for Biotechnology and Genetic Engineering (NIBGE), P.O. Box 577, Jhang Road, Faisalabad– PAKISTAN Tel: 92 41 9201316-22 Web: www.nibge.org

Course Overview

Biotechnology is the field integrating many areas like microbiology, molecular biology, biochemistry, cell biology and immunology. Biotechnology has applications in medicine, agriculture, aquaculture, chemical manufacturing, textile processing and food processing industry. Basic biotechnological information can be learnt without any expensive resources, but the modern techniques have to be learnt by hands-on experience at the bench. Moreover, in response to the expanding frontiers in bio-technology, training and reorientation of the teaching faculty is essentially required to meet the rapidly changing professional and scientific needs of the stakeholders. This training course focuses on basic concepts, theoretical knowledge and hands-on training of skills and in-depth understanding of methods in modern biotechnology by experts in their field.

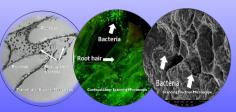
The National Institute for Biotechnology & Genetic Engineering (NIBGE) Faisalabad, being a Federal research body in the country has a mandate to apply modern and innovative research techniques in agriculture, health, industry and environment and routinely offers up-to-date training programs to support the study of most vibrant disciplines of science and technology in the country. Now NIBGE is pleased to announce the 18th training course in the series of short-term training program on "Modern Techniques in Biotechnology".

Topic coverage

- Modern Techniques in Biotechnology
- **DNA based Information Technologies**
- Transformation Technology
- Gene expression and function
- **Proteomics**
- Enzymology/Microbiology
- **Bioinformatics/Data interpretation**
- Imaging Techniques
- Human genome
- Cytogenetics
- Chromatographic Techniques (LC-MS/MS,GC-MS)
- CRISPR technology
- Nanotechnology

Course Faculty:

Kalsoom Akhtar, N. A. Saeed, Samina Igbal, Mazhar Igbal, Hamid Rashid, M Arif, Waheed S. Khan, Fathia Mubeen, M. Afzal, Imran Amin, Sumera Yasmin, Fazali Rabbi, M. Asif, Abdul Tawab, M. Arshad, Asma Imran, Ameena Mobeen, Ayesha Ihsan, Sadia Bajwa, Asma Rehman, Hazrat Ali, M. Imtiaz, Amir Shahzad, M. Faroog, Rubab Zahra, Huma Tarig, Jawaria Hashmi, and M.J. Iqbal.



Detection of Rhizospheric Bacteria

19th National Training Course on Modern Techniques in Biotechnology November 20-24, 2023

Participants: 25

Who can apply

Researchers under 40 years of age with an M. Sc degree in life sciences and working in academia, universities or industrial laboratories. Preference shall be given to permanent employees of the research centers/departments/universities working in biotechnology or planning to initiate work in this area.

| Closing date: | November 10, 2023 |
|---------------|-------------------|
| Duration: | 5 days |
| Venue: | NIBGE, Faisalabad |

Registration fee:

Category of participants

Local participants (With working lunch/tea)

Faculty, Researchers, employees Rs. 8000 (Mandatory on acceptance) students Rs. 4000

Residential participants (with accommodation,

breakfast, lunch, dinner) (Optional)

Faculty, Researchers, employees Students

Rs. 15,000/5 days Rs. 10,000/5 days

* Registered participants will be provided with registration pack including course manual and required stationary.

Note: All dues should be paid before or at the time of registration by the participants in form of cash/bank draft in the name of account officer NIBGE.

Organizers

Chair of the organizing committees: Dr. Zahid Mukhtar DG A&B. PAEC Dr. Kalsoom Akhtar (Director, NIBGE)

Organizing Committee Advisory Committee

- Dr. Fathia Mubeen (Course organizer)
- Dr. Sumera Yasmin
- Dr. Asma Imran
- Dr. Muhammad Imtiaz
- Dr. Nasir A. Saeed Dr. Samina Igbal Dr. Mazhar lobal Dr. Hamid Rasheed



Dr. Fathia Mubeen (DCS) Soil & Environmental Biotechnology **Division (NIBGE)** Tel (Office): +92 41 9201316-22 (3267) +92 41 9201254 Mobile: 0345-7706996 Fax: +92 41 9201322, +92 41 2651472 Email: mufathia@yahoo.com

