

# ICMR - National Institute for Research in Environmental Health Bhopal Bypass Road, Bhauri, Bhopal - 462 030 (MP), India

## Hands-on Training Programme in Environmental Molecular Sciences (December 1 - 10, 2021)

The "Hands-on Training Programme in Environmental Molecular Sciences" is a ten days long hands-on training course offered by the Department of Molecular Biology, ICMR-National Institute for Research in Environmental Health (ICMR-NIREH), Bhopal. Participants of this programme will experience the excitement of working in a unique academic ambience apt for cutting-edge scientific discourse. During this programme greater emphasis will be laid on the fundamental wet-lab tools and techniques relevant to cell and molecular biology.

**Course Content:** Basic and fundamental techniques pertaining to the field of environmental molecular sciences shall be covered.

- 1) Isolation and Quantification of DNA/RNA
- 2) Multiplex PCR
- 3) Hot Start PCR
- 4) Reverse Transcriptase PCR (RT-PCR)
- 5) Repetitive Sequence-based PCR
- 6) Long-Range PCR
- 7) Real Time PCR
- 8) Multiplex RT-RT PCR
- 9) Methylation-Specific PCR
- 10) Agarose Gel Electrophoresis

- 11) Isolation and Quantification of Proteins
- 12) SDS-PAGE
- 13) Western Blot
- 14) Cell Culture
- 15) Cell Growth and Proliferative Index
- 16) DNA Damage and Apoptosis Assay
- 17) Mitochondrial DNA Mutation Analysis
- 18) Mitochondrial Integrated Stress Response Analysis
- 19) DNA Sequencing

**Eligibility:** Students pursuing post-graduate courses in biological sciences, pharmaceutical sciences and medical sciences are encouraged to apply.

Seats: Only 25 (twenty five) students will be admitted for the course.

**Application Procedure:** Applications in the prescribed format along with necessary enclosures should be submitted through e-mail to academics.nireh@gmail.com on or before 21<sup>st</sup> November, 2021.

**Selection:** Procedure of screening and selection will be based upon academic credentials only. The list of selected candidates will be posted at institute's website on 24<sup>th</sup> November, 2021.

**Fees:** Registration fee of the course is Rs. 3500/= (non-refundable) only. No lodging/boarding/transport shall be provided and the participants have to make their own arrangements for the same.

For application, you are required to use the prescribed format only and send through e-mail to academics.nireh@gmail.com on or before 21<sup>s</sup> November 2021.

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### **Application Form**

Name:

Age/Sex:

### Academic Qualifications (attach copies of mark sheets/certificates):

S. No.	Name of Exam.	Board/College/Univ.	Year	Division	% Obtained / CGPA
01	HSC (Xth)				
02	HSSC (10+2)				
03	B Sc/B Tech/ B Pharm (UG)				
04	M Sc/M Tech/ M Pharm (PG)				

### Address for Correspondence:

E-mail id:

Mobile No.:

Signature of the Candidate:

Date:

Place:

<u>Please send your application only through e-mail to academics.nireh@gmail.com</u> (Last date for submission of application form is November 21, 2021)

### **Course Coordinator**

Hands-on Training Programme in Environmental Molecular Sciences ICMR-National Institute for Research in Environmental Health (ICMR-NIREH) Bypass Road, Bhauri, Bhopal - 462 030 (MP), India e-mail: academics.nireh@gmail.com