



## CSIR-INDIAN INSTITUTE OF PETROLEUM

(Council of Scientific & Industrial Research)

P.O. IIP Mohkampur, Haridwar Road,  
Dehradun-248 005, Uttarakhand (India)

Website: [www.iip.res.in](http://www.iip.res.in)



### Basic Skill Development Training on 'Industrial Aspects of Recombinant Biotechnology'

#### Introduction

With experienced and qualified staff and comprehensive state-of-the-art R&D facilities the institute maintains its leading position in conducting training programs for the personnel from refining, petrochemical, automotive, power and related user industry. More than 8000 personnel from India and abroad have been trained on different requirements.

As per the initiatives taken by the Institute for 'CSIR-IIP Integrated Skill Development Training Programs' applications are invited from eligible Indian nationals for the program on 'Industrial Aspects of Recombinant Biotechnology'.

Our Recombinant Laboratory is equipped with high end instrumentation facilities for genetic modification of bacteria and Yeast.

#### Objective & Scope

Detailed introduction to extensive hands-on practice to enable participants handle genetic modification of bacteria and yeast.

#### Contents

##### Theory :

Fundamental and principles of Recombinant DNA Technology. Genetic modification of host, vector selection and cloning of gene in vector. Transformation of vector in host system. Expression of recombinant protein and characterization.

##### Practical :

- Preparation of chemical and reagents solution for the cloning work to the higher precision.
- Insilico designing of clone and validation using clone manager software.
- Cloning of gene into a plasmid vector and transformation into host
- Techniques involves includes DNA extraction, Gel preparation and analysis, primer designing, PCR amplification and purification, restriction digestion, ligation, bacterial transformation. SDS PAGE

#### After successful completion

Participant will be able to handle the equipment regularly used in Recombinant Biotechnology laboratory for recombinant clone generation and expression like PCR, RT-PCR gel documentation Bio-photometer, vacuum concentrator ,Gene pulser , Electrophoresis unit etc.

#### Pre-requisites

Educational qualification required (Biological area)  
B. Tech/M.Tech/M.Sc/B .Pharm/M.Pharm  
(those appeared in the final exam can also apply).  
**20 – 45** years of age.  
(**Age/qualification** relaxation as per Govt. of India Rules/discretion of Director, CSIR-IIP).

#### Who Should join

Any Indian citizen wish to work and excel in the **genetic modification area within** downstream biotech processing.

### Salient features of the program

- Theory: Practical :: 30 : 70
- Interactive sessions for in-depth knowledge sharing.
- Evaluation of trainees will consist of both Theory & Practical component.
- Certificates will be awarded on successful completion of the training.

### Contact for Registration

Please send hard copy of application and documents at following address:

**Sh C D Sharma**  
Co-ordinator, Skill Development Training Program  
CSIR-Indian Institute of Petroleum  
Mohkampur, Haridwar Road  
Dehradun - 248005

You may also correspond, send soft copy of application at following e-mail:

e-mail: [cdsharma@iip.res.in](mailto:cdsharma@iip.res.in)  
e-mail: [aniljain@iip.res.in](mailto:aniljain@iip.res.in),  
[Form download \(MS Word\)](#)

Contact phone nos.

**Sh C D Sharma**, Tel No 0135-2525950, M- 9412028789,  
8830808928  
**Dr Anil K Jain**, Tel 0135- 2525743(O), M-9897119578

### Course Fees / Terms and Conditions

Course Fee shall be paid through e-payment option.

**Bank Account Details facilitating e-transfer of Funds/Payment**

**Name of Bank** : State Bank of India  
**Name of the account holder** : Director, Indian Institute of Petroleum, Dehradun.  
**Bank Account No** : 30266912400  
**Branch** : IIP Township, Mohkampur Dehradun., India  
**Contact Person** : Dr. Anil K Jain,  
e-mail : [aniljain@iip.res.in](mailto:aniljain@iip.res.in)

**SWIFT Code** : SBININBB380  
**11 Digit IFS Code** : SBIN0002359  
**MICR No.** : 248002007  
**GSTIN** : 05AAATC2716R2ZK

### How to Apply & Selection

- Candidates have to apply as per the application format in the given link below.
- Selection will be made based on criteria after scrutiny of applications.
- All documents in original to be shown on the interview/ selection day and one self-attested set of documents to be submitted on date of interview/selection

**Training venue** : CSIR-Indian Institute Of Petroleum

P.O.: IIP Mohkampur, Haridwar Road, Dehradun-248 005, Uttarakhand (India).

No TA/DA and accommodation for interview will be provided to the candidates.

### Important dates

**Last date for submission of Application** :  
**Declaration of participant** :  
**Enrolment dates** :  
**Commencement of course** :

CSIR-Indian Institute of Petroleum, Dehradun