

# CSIR-INDIAN INSTITUTE OF PETROLEUM

(Council of Scientific & Industrial Research)





# Basic Skill Development Training on 'Industrial Catalyst, Preparation and Micro Reactor Studies'

#### 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 9000 personnel from India and abroad have been trained on different requirements.

As per the initiatives taken by the institute under 'CSIR-IIP Integrated Skill Development Training Programs' applications are invited from eligible Uttarakhand state residents only for training program on 'Industrial Catalyst, Preparation and Micro Reactor Studies, sponsored by Uttarakhand State Council for Science & Technology (UCOST).

## **Objectives & Scope**

Training is aimed at providing knowledge and hands on experience on catalyst preparations & evaluation to those new to the hydrocarbon & petrochemical industry / R&D institute/academics.

#### **Contents**

# Theory

- Introduction to Catalysts and Catalysis
- General properties of the materials required for catalysis; Pre and post modification of catalytic properties
- Overview of refining process working on catalysts
- Important refining reaction such as
   Reforming and BTX production from low value feedstocks

#### Practicals

- Basic work for catalyst preparation
- Selection of raw materials and their preparation
- Preparation of Alumina/zeolite etc based materials
- Extrudates formation/ shaping of catalyst support
- Thermal treatments involved in catalyst finishing such as Drying and calcination
- Pre and post modification of catalytic materials
- Metal incorporation/ support functionalization in catalyst preparation
- Reaction studies of all the prepared catalyst

#### After successful completion

With exposure to advanced industrial catalyst synthesis, evaluation and reactions studies backed by theoretical clarity a person will be able to work with various catalyst properties/modifications depending upon individual's ability and dedication in learning the skill.

Pre-requisites	Who Should join
No pre requisites beside educational qualification being M.Sc. (Chemistry), B.Tech(Petroleum/ Chemical Engineering)  20 - 35 years of age. (Age/qualification relaxation as per Govt. of India Rules/discretion of Director, CSIR-IIP).	Uttarakhand resident, having desire to excel in the area of Catalytic processes /reaction studies in Refinery R&D/QC/Academics Or wants to acquire broad knowledge of catalysis through exposure to various property modifications and reaction studies.

## 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.

# **How to Apply & Selection**

- Candidates have to apply as per the application format in the given link below along with one set of self-attested documents.
- Selection of the candidates will be based on merit & interview (if required) to meet suitability for the course.
- o All documents in original to be shown at the time of interview / enrolment.

Form download PDF Form19
Form download MS Words Form19

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: <a href="mailto:cdsharma@iip.res.in">cdsharma@iip.res.in</a>, skill@iip.res.in</a>
e-mail: aniljain@iip.res.in

#### Contact phone nos.

Sh C D Sharma, Tel No 0135-2525950(O), M- 9412028789,8630808928 Dr Anil K Jain, Tel 0135- 2525751(O), M-9897119578

## 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 : 08/01/2020

Declaration of participant : 13/01/2020

Enrolment dates : 14/01/2020

Commencement of course : 15/01/2020

**CSIR-Indian Institute of Petroleum, Dehradun**