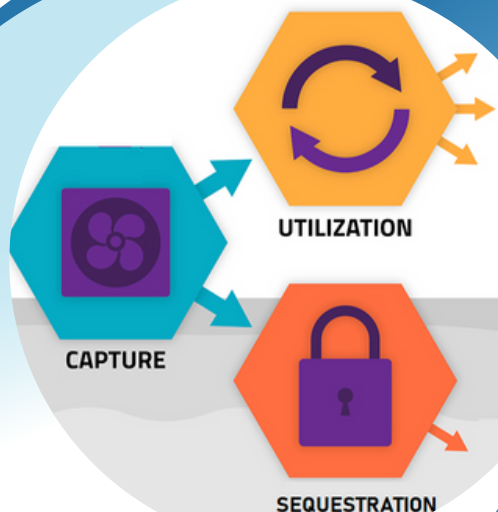


# ABOUT CHEMICAL ENGINEERING DEPARTMENT AT IIFE

The Department of Chemical Engineering aims to provide the extensive knowledge to the students that they need to be a part of the Energy Sector in the Indian Industrial space. The Department currently offers B.Tech. and Ph.D. programs. The courses provided are a balanced mix of traditional areas like reaction engineering, thermodynamics, process control etc. and emerging area like waste management, renewable energy, machine learning, nanoscience, carbon capture and utilization etc. Students are given hands-on experience with various simulation software (MATLAB, Aspen, Fluent and COMSOL), along with access to laboratories which have the latest equipment.



## ABOUT IIFE

The Indian Institute of Petroleum and Energy (IIFE), Visakhapatnam, is an autonomous institute under the Ministry of Petroleum and Natural Gas, Govt. of India. In 2017, with the passing of the IIFE Bill in the Indian Parliament, IIFE was declared an 'Institution of National Importance.' Today, it is widely considered to be at par with the Indian Institutes of Technology (IITs) and the Indian Institutes of Management (IIMs). IIFE has achieved this prestigious status by joining hands with the major oil corporations such as HPCL, ONGC, GAIL, OIL and IOCL. The Chairpersons and Managing Directors of these companies constitute the Governing Council of IIFE along with the Directors of IISc, Bangalore, and IICT, Hyderabad.

## ABOUT THE WORKSHOP

The workshop is aimed at fostering industry-academic interaction and to educate the industry and academia on recent cutting edge innovative carbon capture, utilization, and sequestration techniques.

## REGISTRATION FEES

₹ 15,000, Industry Delegates and Bureaucrats  
₹ 4,000, Academic Faculty and scientists  
₹ 2,000, Post docs and Research associates  
₹ 1,500, Research Scholars and Students

## HOW TO APPLY

Please fill the Google form below to complete the registration,

<https://forms.gle/wQGQ2q1Bv6q6VWSp8>



## Workshop on Technologies for Abatement of Pre/Post (TAP) Carbon Emissions

23-25 January, 2023

**Organized by,**

Department of Chemical Engineering  
Indian Institute of Petroleum and Energy  
Visakhapatnam

(An institute of National importance under the  
Ministry of Petroleum and Natural Gas)

**Patron**

Prof. Shalivahan  
Director  
IIFE Visakhapatnam

**Organizing Committee**

Prof. M. Ravi Kiran      Prof. Sridhar Palla  
Prof. P. Venkata Reddy      Prof. T. Hemanth Kumar

## SCHEDULE

**Day1:** Introduction, Post, Pre and Oxy fuel carbon capture techniques, Carbon capture by Absorption and Chemical looping Combustion, Carbon capture by Adsorption

**Day 2:** Hands-on session with ASPEN simulation software ,Carbon Utilization by catalysis

**Day3:** Carbon sequestration through gas, Accelerated Product and Process Design through AI-ML framework

## OBJECTIVE OF THE WORKSHOP

Climate change is real. Are we acting fast enough? Through Glasgow COP-26, most countries agreed to reduce the temperature rise by 1.5 Deg C. However, several nations are concerned about their greenhouse gas emissions. Carbon Capture, Utilization, and Storage technologies aim to reduce carbon dioxide by capturing it from industrial emissions or the atmosphere. The captured carbon dioxide can either be stored or reused for other applications. Enhanced climate objectives and cutting-edge technologies drive the CCUS to achieve net zero emissions by 2050. CCUS technologies will play a crucial role in achieving India's net-zero emission goals by controlling atmospheric gas emissions or by sustainably utilising released gases. The objective of the course is to provide various perspectives on CCUS technologies and future goals, resulting in the reduction of carbon dioxide gas emissions.

## CHIEF GUEST

**Shri. Ratanraj**

Executive Director  
HPCL

Visakhapatnam Refinery

## SPEAKERS



Dr. P.V Suresh  
NIT Warangal



Dr. P. Koteswara Rao  
GCH2Sol, Norway



Dr. Valavarasu  
HPCL R&D



Dr. P. Sudeep  
IITC Bangalore



Dr. Ramachandra Rao  
HPCL R&D



Dr. U. Sreedevi  
IIT Delhi



Dr. Rajnish Kumar  
IIT Madras



Dr. Reddi Kamesh  
IICT, Hyderabad



Dr. D.Bhattacharya  
West Virginia  
University  
USA



Dr. Aldo Steinfeld  
ETH Zürich  
Zürich, Switzerland



Shri U. K. Bhattacharya  
Director (Projects),  
NTPC

## REGISTRATION PROCESS

- Go to SBI Collect (<https://www.onlinesbi.sbi/sbicollect>)
- Select State of Corporate / Institute: **All India**
- Select Type of Corporate / Institute: **Educational Institute**
- Select Educational Institutions Name: **Indian Institute of Petroleum and Energy**
- Select Payment Category: IIPE Workshop TAPCE and complete the payment process
- Please upload the receipt in the Registration Form

## ACCOMODATION

Shared accommodation will be provided for student delegates on a first-come, first-serve basis. To avail, please choose the corresponding option in the SBI collect and fill out the accommodation requirement in the Google form.

**Registration closes by 22<sup>nd</sup>  
January, 2023**



## VENUE

Indian Institute of Petroleum and Energy  
AU Engg College Main Block  
Andhra University  
Visakhapatnam  
Andhra Pradesh-530003

## CONTACT

For any queries on the registration and course related matters please Email: [orps.ce@iipe.ac.in](mailto:orps.ce@iipe.ac.in), +91-8919674612, [hod.che@iipe.ac.in](mailto:hod.che@iipe.ac.in), Phone: 0891-2856045,+91-9940330878