

# Department of Petroleum Engineering

Human Resource Development Centre(HRDC)

### organize

Six Days Faculty Development Programme on

## INTRODUCTION TO PETROLEUM ENGINEERING

13<sup>th</sup> - 18<sup>th</sup> December 2021



## Academy of Maritime Education and Training (AMET)

(Deemed to be University) #135, East Coast Road, Kanathur, Chennai - 603 112 Tamil Nadu, India Website : www.ametuniv.ac.in

## ABOUT THE UNIVERSITY

AMET is India's first Deemed to be University in Maritime Education which is ranked as 3rd among Maritime Universities of the World in the PIMET (Performance Indicators in Maritime Education and Training) Ranking of International Association of Maritime Universities (IAMU). Established during 1993, AMET's uncompromising strides of excellence in the field of maritime education and training laced with its capacity to feed the global shipping industry with an unrivalled maritime human resource secured it to have many national and international recognitions, rankings such as NIRF, ARIIA, DGS-CIP, PIMET and accredited by NAAC 'A' Grade.

#### Vision :

To sustain identity as a World Class Leader in Maritime Education and empower learners with wholesome research and development which will render students a unique learning experience and a transformation impact on the Global Society.

#### Mission :

AMET will strive continuously to

- 1. Impart value-based higher education and technical knowledge with uncompromising strides of an outstanding quality.
- 2. Emerge as a Centre of Excellence inculcating skill development in recent technologies in accordance with industrial trends.
- 3. Create World class research capabilities on par with the finest in the world and broaden student's horizons beyond classroom education.
- 4. Nurture talent and entrepreneurship to enable all round personality development among students.
- 5. Empowerstudents across socio economicstrata.

## ABOUT THE DEPARTMENT

The Department of Petroleum Engineering, established in 2008, offers Graduate, Post Graduate and Ph.D. Programmes with the objective of providing skilled workforce to the upstream petroleum industry, research orientation to the students to serve in academic institutions and offer opportunities for developing technologies and innovation in the areas of exploration, exploitation, refining and marketing of petroleum and petroleum products.

The department is equipped with well qualified and industry experienced faculties. The knowledge on the basic principles of petroleum formation, concepts and methodologies in locating the resources in the subsurface, physics and chemistry of oil and gas, various methods and types of drilling operations, hydraulics & equipment, formation evaluation, wire line logging, reserves estimation, testing and production methods, reservoir modelling, simulation and management, hazards, risks and environmental concerns and their mitigation methods, refining processes, petroleum economics, Financial aspects, projectmanagement and decision analysis aspects.

#### Vision :

To be a world class provider of education, research and new technologies to Oil and Gas Industries.

#### **Mission**:

To have a high-quality curriculum in Petroleum Engineering that disseminates knowledge in the discovery, extraction, development and production of hydrocarbons and economicminerals and rocks.

To offer opportunities for developing technologies and innovation in the Petroleum fields.

To create the awareness about the challenges of operational hazards in the areas of health, environment, safety and security.

To have collaboration with researchers, industry, government and the community for sharing the knowledge.

To prepare Petroleum Engineers for lifelong learning and capable of being productive contributors for the Petroleum industries.

## PROGRAMME OBJECTIVES

The primary objective of the Faculty Development Training Programme (FDTP) is to explain the basics of "Introduction on Petroleum Engineering" to faculty members of various technical institutions. This will equip the Faculty Members to teach the subject better and alsoenable them

- Tolearn the fundamental concepts of petroleum engineering
- Toknow the mechanism of oil formation, generation and accumulation.
- To study the production of hydrocarbons
- To understand the transportation of hydrocarbons, gas hydrates and developing models

#### PROGRAMME CONTENT

The following topics will be covered

- Drilling Engineering
- Naturalgas Engineering
- Gas hydrates
- Drilling Fluids
- Rheology of complex Materials
- Thermalenhanced oil Recovery
- EOR using Microbes
- Petroleum Exploration

#### **RESOURCE PERSONS**

Experienced faculty members from Premier Institutions/ Industrial experts will deliver the lectures.

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#### REGISTRATION

- There is No Registration Fee.
- Preference will be given to young and dynamic facultymembers from all Universities.
- Selection will be made on first come first serve basis and is limited to thirty faculty members.
- Selected Candidates will be intimated through E-mail only.
- If selected, faculty members should attend the training program in full.
- Certificates will be issued to candidates who attend the program in full by AMET University, Chennai.

#### **Registration Link:**

https://forms.gle/RTApLCKrWacFefQw7

#### **Google Meeting Link:**

meet.google.com/zwm-fiye-dud

The certificatesshall be issued to the participants who have 80% attendance.

#### RESOURCE PERSON DETAILS AND SCHEDULE FOR FACULTY DEVELOPMENT PROGRAMME

Time : 9.45 am

Inaugural Address : Dr. M. Jayaprakashvel, Registrar (i/c), AMET Welcome Address : Dr. T. Nagalakshmi, Professor, HOD

DAY - 1, 13th December 2021 **TOPIC:** "Thermal Enhanced Oil Recovery" TOPIC : "Sick Wells and Remedial action" Time : 2:00 - 3:30 pm Time : 10:00 – 11:30 am **Resource Person** Resource Person Dr. Srinivasan Reddy Mr. Jayasekaran A Assistant Professor, Department of Chemical Director, Department of Petroleum Engineering Engineering, UPES, Dehradun Academy of Maritime Education and Training DAY – 2, 14th December 2021 **TOPIC:** Devolpement of Emulsion based drilling fluid **TOPIC :** "Accuracies of Reservoir Simulation Model" formulation for shale formation" Time : 2:00 – 3:30 pm Time : 10:00 - 11:30 am Resource Person **Resource Person** Dr. Vivek R Dr. Bhola Kumar Assistant Professor, Department of Petroleum Assistant Professor, Department of Petroleum Engineering, NIMS University, Jaipur Engineering, PDEU, Ahmadabad DAY - 3, 15th December 2021 TOPIC: Separation of Produced Water using Membrane TOPIC : "Numerical Reservoir simulation" Technology" Time : 2:00 - 3:30 pm Time : 10:00 - 11:30 am Resource Person Resource Person Dr. Tousif Ahamed Dr. M. J. A. Prince, Assistant Professor, Department of Petroleum Engineering, Academy of Assistant Professor, Department of Petroleum Maritime Education and Training Engineering, NIMS University, Jaipur DAY - 4, 16th December 2021 TOPIC: "Natural Gas Engineering" TOPIC : "Formation and dissociation of gas Hydrates" Time : 10:00 - 11:30 am Time : 2:00 - 3:30 pm **Resource Person** Resource Person Dr. Gaurav Pandev Mr. V. Pandurangan Assistant Professor Assistant Production Manager Department of Petroleum Engineering, UPES, Dehradun Hardy Oil & Gas DAY – 5, 17th December 2021 TOPIC: "Gas Hydrates – A Sustainable Approach" TOPIC : "Microbial Enhanced Oil Recovery" Time : 10:00 – 11:30 am Time : 2:00 - 3:30 pm Resource Person **Resource Person** Dr. A. Rajesh Kanna, Associate Professor & Dy. HOD, Dr. Deepiyoti Mech Department of Petroleum Engineering Assistant Professor. Presidency University, Bangalore Academy of Maritime Education and Training DAY - 6, 18th December 2021 **TOPIC:** "Downhole Equipments" TOPIC : "Rheology of soft materials" Time : 10:00 - 11:30 am Time : 2:00 - 3:30 pm **Resource Person** Resource Person Mr. Vivek Tamizhmani, Assistant Professor & Head Dr. Jagadeesh Department of Petroleum Engineering Associate Professor. Vels University Department of Chemical Engineering UPES, Dehradun Valedictory Function@ 3.45 pm

Dr. A. Rajesh Kanna, Associate Professor, Dept. of Petroleum Engineering, AMET

#### **Chief Patrons :**

Dr. J. Ramachandran, Chancellor, AMET Dr. Rajesh Ramachandran, Pro-Chancellor, AMET

#### **Patron:**

Col. Dr. G. Thiruvasagam, Vice-Chancellor, AMET

#### **Organizing Committee :**

Dr. M. Jayaprakashvel, Registrar (i/c), AMET Dr. D. Arivazhagan, Director, Ranking and Accreditation, AMET

#### Convener :

Prof . Nagalakshmi T Head of the Department Department of Petroleum Engineering, AMET

#### **Co-ordinators:**

Dr. S. Ponmani Assistant Professor Department of Petroleum Engineering, AMET

Dr. A. Rajesh Kanna Associate Professor and Dy. HOD Department of Petroleum Engineering, AMET

Organizing Department: Department of Petroleum Engineering Academy of Maritime Education and Training Chennai-603112

#### ADMISSIONS FOR THE YEAR 2021-2022 ARE OPEN

Toll Free Number : 1800 108 3030 Contact for Admission : +91-93443 91418 (Whatsapp) Email : admission@ametuniv.ac.in Facebook Link : https://www.facebook.com/AMETInternational/ Instagram : https://www.instagram.com/amet.university/ Youtube : https://www.youtube.com/channel/UC6Jzfz1MSE\_QBObJmMPLzPQ/