EUCI is authorized by IACET to offer 1.1 CEUs for the course.

FUNDAMENTALS OF RESERVOIR ENGINEERING

April 17 – 18, 2019
EUCI Conference Center
Denver, CO
OVERVIEW

This one and a half day short course presents an overview of the fundamental concepts used in petroleum reservoir engineering. Starting with the definition and classification of petroleum reservoirs, and with the presentation of fundamental rock and fluid properties, the instructor will guide the participants in the application of engineering methods for estimation of initial fluid distribution in a reservoir and the estimation of initial volume of hydrocarbons in place. Additionally, this short course will include a brief introduction to unconventional reservoirs, and the application of engineering methods to the estimation of reserves of unconventional reservoirs.

LEARNING OUTCOMES

- Define petroleum reservoirs (conventionals and unconventional)
- Classify petroleum reservoirs (conventionals and unconventional)
- Identify reservoir primary drive mechanisms
- Classify petroleum resources using up to date definition systems (SPE PRMS)
- Apply volumetric method for estimation of reserves in petroleum reservoirs
- Apply material balance method for estimation of reserves in petroleum reservoirs
- Recognize principles behind decline curve analysis to estimate reservoir performance and recovery
- Identify differences of reservoir engineering methods to unconventional reservoirs

WHO SHOULD ATTEND

- Leadership
- Managers
- Technicians
- Administrators
- Accountants
- Any one who needs an understanding of the fundamentals of reservoir engineering

COURSE INSTRUCTOR

Luis Zerpa
Assistant Professor at the Petroleum Engineering Department, Colorado School of Mines

Luis Zerpa is an Assistant Professor at the Petroleum Engineering Department of the Colorado School of Mines. Before joining Mines, Luis was a Professor at the University of Zulia, Venezuela, and worked as consultant for the Venezuelan National Oil Company (PDVSA) in reservoir engineering and EOR related projects. He has a Ph.D. degree in Petroleum Engineering from the Colorado School of Mines, and B.S. and M.S. degrees in Mechanical Engineering from the University of Zulia. His research interests are in the areas of reservoir engineering, fluid flow in porous media, enhanced oil recovery, flow assurance and multiphase flow modeling, and natural gas hydrates as potential energy resource.
AGENDA

WEDNESDAY, APRIL 17, 2019

8:00 – 8:30 am  Registration and Continental Breakfast

8:30 am – 5:00 pm  Course Timing

12:00 – 1:00 pm  Group Luncheon

Introduction: Reservoir Engineering Definition and Description
- What is a Reservoir?
  - Basic structures
  - Hydrocarbon traps
  - Depositional environments
  - Classification based on types of fluids contained
- Review of Rock and Fluid Properties
  - Properties of reservoir rock
    - Porosity
    - Fluid saturation
    - Permeability
    - Wettability
    - Capillary pressure
  - Reservoir fluid properties
    - API gravity
    - Formation volume factor
    - Gas solubility
    - Density
    - Viscosity
- Reservoir Fluid Distribution
  - Pressure gradient calculations
- How Does a Reservoir Produce Oil and Gas?
  - Primary reservoir drive mechanisms.
  - Solution gas drive
  - Gas cap drive
  - Natural water drive
  - Compaction drive
  - Gravity drainage
  - Combination drive
- Definition of Reserves using the Petroleum Resources Management System (PRMS).
  - Reserves, contingent resources, prospective resources

THURSDAY, APRIL 18, 2019

8:00 – 8:30 am  Continental Breakfast

8:30 am – 12:00 pm  Course Timing

- Methods of Estimation of Reserves
  - Estimate Oil-in-Place and Gas-in-Place
  - Analogy and volumetrics
  - Material balance
  - Decline curve analysis
- Introduction to unconventional reservoirs
- Decline curve analysis for unconventional reservoirs
INSTRUCTIONAL METHODS

PowerPoint presentation and classroom discussion, followed by assessments

REQUIREMENTS FOR SUCCESSFUL COMPLETION

Participants must sign in/out each day and be in attendance for a minimum of four hours to be eligible for any continuing education credit.

IACET CREDITS

EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

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EVENT LOCATION

EUCI Conference Center
4601 DTC Blvd., B-100
Denver, CO 80237

NEARBY HOTELS

Preferred Hotel
Hyatt Place Denver Tech Center
8300 E. Crescent Parkway, Greenwood Village, CO 80111 (0.9 miles away)
Call Central Reservations at 1-888-492-8847 and ask for the corporate rate of $168 under the Group Code: EUCI.
or visit https://denvertechcenter.place.hyatt.com/en/hotel/home.html?corp_id=102338 for the corporate rate using the Group Code: EUCI. (Hot Breakfast included and Free Shuttle to and from EUCI)

Other Nearby Hotels
Hyatt Regency Denver Tech Center
7800 E. Tufts Ave
Denver, CO 80237
Phone: 303-779-1234
0.3 miles away

Hilton Garden Inn Denver Tech Center
7675 E. Union Ave
Denver, CO 80237
Phone: 303-770-4200
0.6 miles away

Denver Marriott Tech Center
4900 S. Syracuse St
Denver, CO 80237
Phone: 303-779-1100
0.7 miles away

REGISTER 3, SEND THE 4TH FREE

Any organization wishing to send multiple attendees to this course may send 1 FREE for every 3 delegates registered. Please note that all registrations must be made at the same time to qualify.
EUCI Offices
4601 DTC Blvd, B-100
Denver, CO

See nearby hotels on page 4

PLEASE REGISTER

FUNDAMENTALS OF RESERVOIR ENGINEERING COURSE
APRIL 17 – 18, 2019: US $1395
Early bird on or before March 29, 2019: US $1195

How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

Print Name
Job Title

Company

What name do you prefer on your name badge?

Address

City
State/Province
Zip/Postal Code
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Phone
Email

List any dietary or accessibility needs here

CREDIT CARD INFORMATION

Name on Card

Billing Address

Account Number

Exp. Date

Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx)

Billing City
Billing State

OR Enclosed is a check for $ _______ to cover ________ registrations.

Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before March 15, 2019 in order to be refunded and will be subject to a US $195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of course cancellation, EUCI’s liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices at (201) 871-0474.