

Course Code

GE05

Course Name

Stratigraphic - Structural Evolution and Oil / Source Rock Geochemistry of the Northern Arabian Plate

Instructor

Dr. Do an Perinçek and Dr. Kadir Gürgey



Professional Career

Dr. Perinçek is currently working for Merty Energy Inc. and devoping new prospects using seismic and sequence stratigraphy tools. His has an excellent professional carrier which is summarized as follows: 1978 PhD in Petroleum Geology, Istanbul University, Faculty of Science 1972 MSc in Geology, Istanbul University, Faculty of Science 1977-1998 Short Courses, Attended 28 professional courses in several disciplines of petroleum geology and geophysics.

- December 2006 June-September; LUKSAR Oil Company, Saudi Arabia, International Projects Group
- December 2004 - 2006; Turkish Oil Company, International Projects Group
- June 2004 - May 2006; Yildiz Technical University, Natural Sciences Research Center
- Sept. 1999 - 2004 June; Kuwait University, Dept. of Earth and Environmental Sciences
- 1996 - 1997 World Geoscience & OPES International; Australia and Indonesia
- 1994 - 1996 Geological Survey of Western Australia, "Basin Studies Section", Australia
- 1991 - 1994 Geological Survey of Victoria, "Basin Studies Section", Australia
- 1990 - 1991 Mobil Exploration Med. Inc., Ankara, Turkey

Turkish Petroleum Corporation, Ankara, Turkey

- 1986-1990 Project Leader, Supervised exploration activities of the Southeast Turkey.
- 1976-1980 Exploration Geologist/Stratigrapher, Turkish Petroleum Corp.
- 1975-1976 Well-Site Geologist, Turkish Petroleum Corp., Ankara, Turkey
- Exploration and wildcat wells in Southeast Turkey and the Black Sea region
- Istanbul University, Istanbul, Turkey

Dr. Gürgey is an emeritus Professor of Petroleum Geochemistry from the University of Pamukkale in 2009 where he used to teach several petroleum and natural gas related courses. He gained his main experience while he was working for TPAO between 1986 and 2004 in various localities in Turkey (SE-Turkey, Thrace and Ala ehir Graben basins), Kazakishtan (Pre-Caspian basin), Azerbaijan (South Caspian Basin), Cuba, Spain (Galicia Basin) and South Korea (Songlia Basin). His research area basically covers geochemistry of crude oil, natural, condensate and source rocks. He has a number of published papers and presentations in national and international journals and meetings in addition to giving several seminars for oil companies and universities. Dr. Gürgey, currently, is working for Merty Energy as a coordinator involving mainly petroleum geochemistry and training and education related studies.

Course Objective and Description

- During this course, participants will learn paleogeographic development of northern Arabian plate; structural stratigraphical, geological and geochemical. Geochemically, participants will take their benefit on how the main source rocks of Arabian plate generate, expel and migrate their hydrocarbons.

Who Should Attend

Exploration and development geologists and geophysicists without geological and chemical training, information technology personnel, managers, land personnel, attorneys, secretaries, technicians, investors, petroleum service personnel, financial ventures personnel, business administrators and executives, human resources personnel, economists and engineers are welcome.

Prerequisite

Sufficient geology background

Learning Level

Intermediate

Duration

4 days

Course Material

Handouts, material of full slides

Course Outline

Day One - Part 1

- Stratigraphic evolution of the Arabian Plate
- Structural evolution of the Arabian Plate
- Arabian Plate's structural styles and their plate-tectonic habitats
- Facies distribution of the units in Northern Arabian Plate that deposited from Cambrian to Miocene
- Tectonostratigraphic and stratigraphic correlation of the Zagros-Taurus Thrust Belt and Arabian Platform emphasizing Northern Arabian platform.
 - o Timing of the traps on the Arabian Plate
 - o Pre-Permian event
 - o Campanian event
 - o Pre-Eocene event
 - o Post-Middle Eocene event
 - o Miocene – Pliocene event

Day Two

- Structural events and their effect on depositional environment
- Time of the structural events, stress direction, related structural style and orientation.
- Taurus stress direction
- Oman stress direction
- Zagros stress direction
- Najd Fault System and its stress direction

Day Three - Part 2

- Organic Chemistry Background
 - o Oil composition
- Naming of the organic compounds (IUPAC)
- Source rocks & depositional environments
- Petroleum generation, migration & accumulation
- Most commonly used organic geochemical techniques
 - o Biomarkers
- Oil habitat in northern Arabian Plate
- Source rock distribution in northern Arabian Plate
 - o Paleozoic
 - o Cretaceous
 - o Cenozoic
- Southeastern Turkey petroleum geochemistry
 - o Trap type, reservoir and seals
 - o Genetic oil types
 - o Source rock types
 - o Timing of oil generation
 - o Exploration trend

Day Four

- Northeastern Syria petroleum geochemistry
 - o Trap type, reservoir and seals
 - o Genetic oil types
 - o Source rock types
 - o Timing of oil generation
 - o Exploration trend
- Northern Iraq petroleum geochemistry
 - o Trap type, reservoir and seals
 - o Genetic oil types
 - o Source rock types
 - o Timing of oil generation
 - o Exploration trend

Antalya, Turkey
22-25 Mar
US\$ 2,450

stanbul, Turkey
13-16 Sep
US\$ 2,450
