

Course RM5: Unconventional Oil Recovery Techniques

Thermal recovery methods are currently being taught as the only means of producing heavy, viscous and challenged oil. However, with the current emphasis on environmental impacts and minimizing carbon footprint, non-thermal methods are being pursued as alternative methods. In this course, both the thermal and non-thermal methods will be discussed.

Contents:

- The Challenge of Viscous and Heavy Oil Recovery
- Unconventional Oil Recovery Methods
- o Reservoir and Fluid Characterization
- Cold primary production
- Cold enhanced recovery
- o Enhanced Steam injection
- o Enhanced In-situ combustion
- Other methods of heating reservoirs
- How to increase the Efficiency of low-energy processes
- o Challenges in Reservoir Simulation of Unconventional technologies
- o Facilities and Operations