

POLYMER FLOODING

Polymer Flooding Course Description

Polymer flooding has experienced remarkable expansion of application in recent years. Beginning with the massive Daqing project that started in Northeast China in 1996 to the impressive use of horizontal wells to recover 1000-10,000-cp oil in Canada (beginning ~2004) to the record-breaking success of the Milne Point project on Alaska's North Slope (beginning in 2018). Although some have claimed that polymer flooding is a "mature" technology, substantial advances have been made in just the past few years that have allowed polymer flooding to be much more cost-effective than it was even 10 years ago. In this course, the attendees will learn the conditions where polymer flooding will provide the greatest impact and hear about the advances that have been made to allow the technology to be cost-effective in recovering oil with viscosities up to 10,000 cp and in reservoirs with temperatures up to 120°C. New records are being broken with the updated version of this technology. For example, in one pattern at Milne Point, produced water cuts dropped from ~70% during waterflooding before the project to less than 5% during polymer injection. This course will describe those advances and help the attendees determine if polymer flooding is right for them. The course will inform the listeners how to avoid the pitfalls that have limited the technology in past applications.



Randy Seright bio

Dr. Randy Seright has developed polymer flooding and gels to improve sweep efficiency in reservoirs since 1978, when he started his career with Exxon. He worked at New Mexico Tech for 36.5 years, making polymer flooding and gel treatments more viable. Randy has been involved with many of the major polymer flooding projects throughout the world, including China, Canada, India,



Argentina, Suriname, Kazakhstan, and Alaska. He provided short courses on Polymer Flooding and Water Shutoff in 19 countries. He received the SPE/DOE IOR Pioneer award in 2008 for his work on using polymer and gels to improve oil recovery. He is an SPE Distinguished Lecturer for 2025-2026 on the topic of "Polymer Flooding Reinvigorated!"