Don’t miss this SPE Distinguished Lecturer!

The Science and Economics of Multiphase Flow

Mack Shippen

Monday, May 15, 2017 2 p.m.

Hungarian Section Budapest, Hungary

MOL Headquarter (Meeting Room #342-348 on the 3rd floor)
OKTOBER HUSZONHARMADIKA u. 18, Budapest XI, Hungary

An Extra 45 Minutes Can Provide a World of Knowledge

Abstract:

We are all familiar with the production systems through which reservoir fluids flow to reach our processing facilities. This is a journey characterized by complex multiphase flow phenomena that govern pressure and temperature changes along the way. A monumental amount of research and development work has been invested towards better understanding multiphase flow behavior over the past fifty years. Yet, many challenges remain as we strive to optimize ever more complex production systems fraught with difficult flow assurance issues.

Just how good is the science? And more importantly, how does this impact our bottom line?

This lecture will discuss key concepts of multiphase flow leading to the current "state-of-the-art" models used today. Looking towards the future, the science must be advanced to address areas of greatest uncertainty and align with trends in field development strategies. Recommendations will be presented covering the top 5 areas of research necessary for these purposes. The economic impact of multiphase operations will be illustrated using two examples that provide insight towards maximizing asset value.

Biography:

Mack Shippen is a Principal Engineer with Schlumberger in Houston, where he is responsible for the global business of the PIPESIM multiphase flow simulation software. He has extensive experience in well and network simulation studies, ranging from flow assurance to dynamic coupling of reservoir and surface simulation models. He has served on a number of SPE committees and chaired the SPE Reprint Series on Offshore Multiphase Production Operations. He holds BS and MS degrees in Petroleum Engineering from Texas A&M University, where his research focused on multiphase flow modelling.