

Dear All,

The Department of Chemical Engineering is pleased to invite you to the Industry Lecture Series of the January 2023 semester. The seminar is open to all and mandatory for first-year CHEME MTech students (CH22MTECH).

The time of the first lecture is as follows:

Date: 25/01/2023 (Wednesday)

Time: 4 pm to 5 pm

Venue: A Block - 118

Speaker: Dr. Padmakar Ayyalasomayajula, Vice President, DeGolyer & MacNaughton Corporate

(Please see: <https://www.demac.com/employees/ayyalasomayajula-dr-padmakar/>)

Recent Trends in Petroleum Engineering Technology Development

Abstract: The petroleum engineering discipline has been undergoing major transformation in the last several years. In this talk, we illuminate some of the major issues facing this discipline in terms of energy transition and net-zero GHG emissions initiatives such as carbon-capture and geothermal development. We also highlight the impact to supply and demand due to the pandemic, shale oil and gas development and related issues. The current technology trends as well as the future direction of technology development are outlined in this overview talk.

Brief Bio Sketch of the Speaker: Dr. Padmakar is a petroleum engineering subject matter expert with experience as diverse as international consulting, daily field operations management, industrial research development and deployment, and academic teaching. In my current role as a consultant he appraises reservoir simulation and field development planning projects for several of their international clients including evaluation of several enhanced oil recovery (EOR) projects and carbon (GHG) sequestration projects. He was the technical consultant's lead reservoir simulation engineer evaluating the simulation models of several key Aramco fields as part of Saudi Aramco's recent IPO. Prior to the current role, he acquired nearly three years of daily field operations reservoir engineering support and oversight experience in tight rock heavy oil thermal (steam cycling) operations. Prior to that he attained over eleven years of broad reservoir engineering experience including research (R&D) and technology development. His areas of focus were reservoir simulation and modeling, performance prediction of shale reservoirs, thermal recovery in diatomite reservoirs, recovery mechanisms in naturally fractured reservoirs, multiphase flow in carbonate reservoirs and study of productivity and recovery issues in gas condensates and tight gas reservoirs. He has experience with providing reservoir engineering support for technical evaluation of deals, mergers, and acquisitions.

Thanks & Regards,

Anand (Course Instructor, CH5036)