



## CONTINUING EDUCATION PROGRAM

Sala Barbara – IV Palazzo Uffici  
Via Emilia, 1 - S. Donato M.se  
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### Estimation and Enhancement of Gas Condensate Well Productivity

Dr. Ali Danesh

Ali Danesh is professor of petroleum engineering at Heriot-Watt University in Edinburgh. He received a BSc degree in petroleum engineering and a PhD degree in chemical engineering before joining the National Iranian Oil Company in 1973. He was a Professor at Abadan Institute of Technology in Iran before joining Heriot-Watt University in 1985. His current research includes PVT, modelling of reservoir fluid by equations of state, measurement and modelling of fluid properties, gas condensate recovery, water alternating gas injection, heavy oil reservoirs and recovery mechanisms in fractured reservoirs. He has published over 200 research papers on the above topics. When pressure falls below the dew point in a rich gas reservoir, condensate is formed in all the pores. This phenomenon and the low value of gas-condensate interfacial tension result in a multi-phase flow behaviour that is significantly different to that of conventional gas-oil. A major consequence of this behaviour is the dependency of gas and condensate relative permeability on the flow rate, which will be described in this presentation. The impact of rate effect on the design of perforation and hydraulic fracturing will be described with an emphasis on calculation of well productivity.

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