seminars

# The key role of optimisation technology in Oil & Gas process design and operations

**09:00** **Registration**

**09:30** **Introduction to Advanced Process Modelling**
Advanced Process Modelling combines high-fidelity process models and powerful optimisation techniques to help process organisations create competitive advantage. This session explains how it is done and what is now possible.

**10:00** **New technologies for optimising oil & gas production**
New production optimisation techniques that consider well and pipeline routing decisions simultaneously make it possible to improve production value from a typical oil or gas field by hundreds of thousands of dollars per day.

**10:30** **Optimising olefins plants for different gas feedstocks**
By combining detailed furnace models with online plant data using state estimation techniques, it is possible to accurately predict yield and degree of coking in order to significantly improve real-time optimisation as well as de-coking schedule.

**11:00** **Refreshment break**

**11:15** **Invited lecturer – Prof. Jay Hyung Lee, KAIST**
Simulation and optimisation approach to uncertain, multi-Level, multi-stage decision problems in Process and Energy industries

**12:00** **Optimising multi-site natural gas processing to maximise asset utilisation**
New optimisation technologies make it possible to optimise process operation over multiple sites simultaneously, to maximise asset utilisation and minimise energy costs, improving economics by tens of millions of dollars per year.

**12:30** **Lunch**

**14:00** **Using advanced monitoring and optimisation to improve refinery margins**
Refineries lose tens of millions of dollars per year from poor management of feed transitions and preheat train fouling. Advanced monitoring and optimisation technologies now make it possible to reduce costs and boost production.

**14:30** **Optimising utilities for production sites to reduce energy costs**
By applying rigorous optimisation to the supply of steam, fuel gas and electricity it is possible to minimise daily operating costs in the face of fluctuating demand and costs.

**15:00** **Refreshment break**

**15:15** **Invited lecturer – Dr Hokyung Lee, LG Chem**
Advanced analytics and optimisation in LG Chem

**16:00** **Optimising design and operation of wastewater treatment plants**
Model-based optimisation of wastewater treatment plants helps minimise energy costs while maintaining water quality.

**16:30** **Wrap-up discussion**

**17:00** **Finish**


## Acknowledgement

This event is supported by the Future Industry's Leading Technology Development Programme of MOTIE/KEIT.
(10042430, Development of 500 MPa URF & SIL 3 Manifold and Subsea System Engineering for Deepsea Field)


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## When

Tuesday, 27 September 2016

## Where

Hanbit Hall, 3F Daekyo Center
(239, Daedeok-daero, Seo-gu, Daejeon, Korea)
*Change of venue may occur.

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