# Press release

**IMMEDIATE RELEASE**
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# The inagural 2012 Advanced Process Modelling Forum

## Shell, Pfizer keynotes on Gas-to-Liquid conversion, Systems-based Pharmaceutics

LONDON, 27 March 2012 --- Process Systems Enterprise (PSE), providers of the world-leading gPROMS advanced process modelling platform and related ModelCare services, will host the inaugural 2012 Advanced Process Modelling Forum in London on 18 and 19 April.

The forum is a key event for process industry companies focused on creating sustainable value through the application of high-accuracy predictive modelling. It is aimed at senior business and technology decision makers in process industries such as pharmaceuticals, oil & gas, power generation, chemicals, petrochemicals, food and minerals & mining.

Organiser Mark Matzopoulos, PSE's COO, says "advanced process modelling is about using predictive models to explore the design space rapidly, reduce uncertainty and make better, faster and safer decisions. Traditionally this has been the preserve of the large-scale process industries, but we have a very strong Life Sciences element at the Forum, with Pfizer, GSK and Eli Lilly presenting. Expect some exciting announcements in this area." Pharma companies are adopting the technology rapidly to accelerate value creation, in particular by facilitating the move from batch to continuous processing and optimising solids process design and operation.

The two keynote speakers will be **Jan van Schijndel**, Manager of XTL Development at **Shell**, and **Ravi Shanker**, Senior Research Fellow at **Pfizer**. Van Schijndel will describe how Shell is developing model-based synthesis tools to support development of the next generation of Gas-to-Liquid (GTL) plants, based on experience from the huge Pearl development in Qatar. Shanker's focus will be Systems-based Pharmaceutics, a revolutionary model-based approach for optimising drug manufacturing by taking a holistic view that encompasses both biological effects in the human body and drug process and product engineering.

**GSK**, **Eli Lilly**, **SABIC**, **SASOL**, **Süd-Chemie** and **Sulzer Chemtech** will also be presenting, as will research organisations **TNO**, **Rutgers University** and **Imperial College London**, and the **Energy Technologies Institute (ETI)**. Presentations will cover the application of model-based techniques to enhance process design and scale-up, optimise operations, accelerate process innovation and manage new technology risk, with a focus on laboratory-to-industrial-plant workflows for large-scale new process development.

Other highlights include presentations on the ETI's investment in a system-wide modelling tool-kit to accelerate and de-risk the development of carbon capture & storage (CCS) in the UK, and on recent developments in **SAFT** advanced thermodynamics techniques that makes it possible to achieve unprecedented accuracy in thermodynamic predictions with little or no data.

Prof. Costas Pantelides, MD of PSE says "The diversity and scale of applications that generate real value show that advanced process modelling is becoming a key technology for process industry innovators. We believe that this will drive a step change in value creation across all process sectors, which should capture the attention not only of practitioners but also operating executives with P&L responsibility."

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## About Process Systems Enterprise Ltd

PSE (www.psenterprise.com) is the world's foremost provider of Advanced Process Modelling software and services to the process industries. Advanced Process Modelling is transforming the way that process companies design and operate processes by enabling better, faster and safer design and operating decisions and reducing uncertainty.

Use of PSE's technology and services results in faster innovation, improved designs of processes and products, enhancement of existing operations and more effective R&D and experimental campaigns. It also facilitates capture and transfer of corporate knowledge across the organisation. Results are achieved with relatively low investment compared to alternative approaches – where these exist – with rapid return on investment.

PSE's global customer base of Fortune 500 process industry companies is served by operations in the UK, USA, Germany, Japan and Korea, and agencies in Saudi Arabia, India, China, Thailand, Malaysia and Abu Dhabi. PSE is a spin-out of Imperial College London, and its software is also used in some 200 universities around the world.

The company's own ability to innovate was recognised with the award of the prestigious Royal Academy of Engineering MacRobert Award for Engineering Innovation, the highest UK engineering prize.

## About gPROMS

gPROMS® is the world's leading advanced process modelling environment. gPROMS models are used to explore the design or operational decision space to provide accurate predictive information for decision support. This helps companies reduce time-to-market for new processes or products, manage development risk, improve designs, enhance production, reduce capital and operating expenditure and ensure better compliance with safety, health and environmental requirements.

The package is applied in all sectors of the process industries, with particular focus on modelling of complex operations such as reaction, separation, and polymerisation. PSE also supplies a range of process engineering tools built on the gPROMS platform, including gFUELCELL®, gSOLIDS®, gCRYSTAL® and gFLARE®.

gPROMS is applied across the 'process lifecycle' and at multiple scales, from laboratory experimentation, through process and detailed design, to online operation, and is central to a model-based engineering approach. PSE is committed to maintaining gPROMS at the leading edge of process modelling technology