

Press release



FOR IMMEDIATE RELEASE

2 April 2014

PSE invests in wastewater treatment system optimisation Advanced Process Modelling brings major energy savings to urban waste plants

LONDON, 2 April 2014 --- Process Systems Enterprise (PSE), the Advanced Process Modelling company, today announced that it has acquired a significant equity stake in Swiss university technology spin-out BlueWatt Engineering Sàrl, a company with unique technology for wastewater systems optimisation. The operation will be integrated as PSE's Wastewater Treatment business unit.

BlueWatt specialises in energy optimisation using high-fidelity predictive models of biological wastewater treatment plants built on PSE's gPROMS[®] advanced process modelling platform. Using BlueWatt technology it is possible to identify up to 40% savings on energy costs for treatment plants, as well as to significantly improve design and operation – for example, by minimising consumption of chemicals and power and reducing environmental impact while improving water quality. The technology also allows benchmarking of process performance and provides an effective and efficient troubleshooting tool for treatment plant operators.

Mark Matzopoulos, PSE's Marketing Director, said "We identified wastewater treatment as an area where there are still many opportunities for optimisation. By combining BlueWatt's expertise with our advanced process modelling framework, we can radically change the way treatment plants are designed and operated."

The BlueWatt technology was originally developed at École Polytechnique Fédérale de Lausanne (EPFL). Prof. François Maréchal, who directed the research at EPFL's Industrial Energy Systems Laboratory, said "Wastewater treatment accounts for 15-20% of the urban energy usage; it is therefore a key untapped area for energy savings. We are pleased to see our research in this important area being commercialised in a way that it will make a real impact on society". An academic partnership agreement between PSE and EPFL will ensure continuing research and development in this field.

Leandro Salgueiro, head of the new business unit and a founder of BlueWatt, says "We are very pleased to be commercialising our technology via one of the world's leading process modelling technology and service suppliers."

PSE's gPROMS software is the world's leading advanced process modelling platform for the process industries. gPROMS models are used to explore the process decision space rapidly and effectively, in order to reduce uncertainty and make better, faster and safer design and operating decisions.

Matzopoulos says, "One of PSE's aims is to transform practice in every sector that we enter, often by working with leading universities and research organisations to bring important new technology to industry. We believe that with this development we bring unique technology and novel approaches to wastewater treatment."

Editors

Contact: Kate Burness, +44-20-8563-0888, k.burness@psenterprise.com

'About' information and images: www.psenterprise.com/news/pr140402b.html

About Process Systems Enterprise Ltd (PSE)

PSE (www.psenderprise.com) is the world's foremost provider of Advanced Process Modelling software and services to the process industries. Companies apply advanced process models to explore the process decision space rapidly and effectively, in order to reduce uncertainty and make better, faster and safer design and operating decisions.

Use of PSE's technology and services results in faster innovation, improved process and product designs, enhanced operations, reduced risk, more effective R&D and experimental campaigns and better capture and transfer of corporate knowledge across the organisation. Results are achieved with relatively low investment compared to alternative approaches, with rapid returns on investment.

PSE's global customer base of process manufacturing companies is served by operations in the UK, USA, Japan and Korea, and agencies in Abu Dhabi, China, Thailand, Malaysia and Taiwan. PSE is a spin-out of Imperial College London, and its software is used in over 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 UK's highest engineering prize.

About gPROMS

gPROMS[®] is the world's leading Advanced Process Modelling platform. It provides the underlying modelling, solution and optimisation engine for PSE's gPROMS family of products: general process engineering tools that include gPROMS ModelBuilder and the Advanced Process Libraries for catalytic reaction and gas-liquid separation; and domain-specific gPROMS platform products that include gSOLIDS[®], gCRYSTAL[®], gFUELCELL[®], gCCS[®], gWATER[®] and gFLARE[®].

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.

gPROMS family products are applied in all sectors of the process industries, with particular focus on modelling of complex operations such as reaction, separation, and polymerisation, and across the 'process lifecycle' at multiple scales, from laboratory experimentation through process and detailed design to online operation.

PSE is committed to maintaining the gPROMS platform and the products built on it at the forefront of process modelling technology.