



Press release

5 December 2018

gPROMS FormulatedProducts 1.3 release includes new Food Manufacture and Mining libraries

New industry-specific capabilities for integrated digitalisation platform

LONDON, 5 December 2018 --- Process Systems Enterprise (PSE), the Advanced Process Modelling company, released version 1.3 of gPROMS FormulatedProducts, the model-based platform for integrated digital design of robust formulated products and their manufacturing processes, and related digital process operation.

This release introduces new industry model libraries for Food Manufacture and Mining, additions to existing model libraries, and enhanced digital design capabilities.

The Food Manufacture libraries were created through the Centre of Excellence (CoE) for Food Product & Process Modelling, in collaboration with NIZO, the world's leading food & nutrition contract research organisation. They include models for membrane filtration, heat treatment, falling film evaporation, and multi-stage spray drying.

The Mining developments include solar pond libraries with downstream processing capability including solar evaporation, leaching, and mining electrolyte systems.

Sherwin Safavi Nic, Process Technologist at Danone, commented, "The Centre of Excellence for Food Product and Process Modelling brings together the unique knowledge of industrial partners, expertise from NIZO and the advanced digitalization platform and expertise from PSE allowing the industry to accelerate sustainable process development, optimize processes and reduce time to market for new products."

The existing libraries are enhanced with a new distillation drum model, updated equipment and configuration options for the plug flow crystallizer, a semi-mechanistic feeder model, jet mill model and an updated tablet press. Oral absorption libraries include dosage forms, enhanced in vivo capabilities, and parenteral formulation physical stability.

"We are excited to see PSE's support for digitalisation of R&D, engineering and commercial manufacture being extended from the pharmaceutical industry to the food and mining industries," says Sean Bermingham, head of PSE Formulated Products. "All of these industries benefit from integrated digital design and operation capability."

Built on PSE's gPROMS® advanced process modelling platform, gPROMS FormulatedProducts provides state-of-the-art digital design and operation capabilities to food, agrochemical and consumer product industries, enabling model-based design and optimisation of process operations such as reaction, crystallization, wet and dry milling, spray drying, wet and dry granulation, blending and tableting. Additionally, it enables pharmaceutical companies to optimise the formulation and manufacture of drug substances and drug products using mechanistic models of materials and unit operations, and provides detailed analysis of in-vivo drug product performance.

Contact

PSE

Kristen Hunter, +44-20-8563-0888, k.hunter@psenterprise.com

Editors: www.psenvironment.com/news/pr181205

NIZO

Martine van der Mast, +31 318 659 648, martine.vandermast@nizo.com

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 within digital design and digital operations initiatives to explore the process decision space rapidly and effectively. This helps them to reduce uncertainty and make better, faster and safer formulation, process and product design and operating decisions based on deep scientific and process knowledge.

PSE provides gPROMS family products built on its gPROMS[®] advanced modelling platform. These include the gPROMS FormulatedProducts modelling suite, which provides mechanistic models for active ingredient manufacture, formulation and product performance as well as specific capabilities for optimising solids and crystallization process design and operation. PSE is committed to defining, developing and driving the adoption of next-generation process modelling software and workflows, and works in close collaboration with its major customers and selected R&D organisations to achieve this.

PSE's global customer base of Fortune 500 process industry companies and some 200 universities is served by operations in the UK, USA, UAE, Japan and Korea, and agencies in China and Taiwan.

About NIZO

NIZO (www.nizo.com) is world leading in contract research for better food and health. NIZO operates one of the most advanced R&D centres in the world and brings the latest food technologies to life in its food grade processing centre. NIZO focuses on the development and applications of innovations for the global food and health industry. NIZO's customers value their gains in product quality, sustainability, cost effectiveness and speed to market. NIZO is continuously looking for new ways of improving food products, and at the same time quality of life. NIZO is a private and independent company, with headquarters in Ede, the Netherlands.

About the Centre of Excellence:

CoE (foodcoe.com) for food Product and Process Modelling, initiated by Process Systems Enterprise Ltd. (PSE) and NIZO food research, aims to: Combine mechanistic modelling and targeted experimentation to help the food industry improve the quality of food products and increase the efficiency and reliability of their manufacturing processes while ensuring food safety.