Nitric Acid Industry: Collaboration in Process Simulation between ProSim and Johnson Matthey Plc

Toulouse, France – December 1st 2016 - ProSim collaborates with Johnson Matthey Plc to allow nitric acid manufacturers to further enhance the performance of their plants.

Thanks to this partnership, Johnson Matthey will actively market and support the sales of ProSimPlus HNO3 software, while Johnson Matthey will be ProSim’s exclusive catalyst supplier customer within the nitric acid industry. Both companies will collaborate in flowsheeting simulation work by applying their know-how and expertise in the nitric acid industry as a service for customers, aiming to resolve issues and optimise plant operations. Further joint developments in the catalyst modelling aspect of the simulation will also benefit operating firms and engineering companies.

This collaboration will leverage the strong market positions of Johnson Matthey and ProSim in their separate fields within the nitric acid industry; Johnson Matthey as a catalyst and full service supplier for nitric acid manufacturing, and ProSim as a simulation software house.

"Combining the strength and reputation of both companies has the potential to create a partnership worth more than sum of its parts", says Alexandra French, Global Commercial Director at Johnson Matthey Noble Metals.

ProSimPlus HNO3 allows the easy modelling of complex physical and chemical phenomena involved in the nitric acid production process. The complexity of these phenomena (gas reactions in nearly all pieces of equipment and complex modelling of thermodynamic properties) and the specificity of the equipment used in these units (cooler/condenser, burner and absorption column) make the simulation of these processes nearly impossible with a general-purpose simulation software. ProSimPlus HNO3 was designed specifically for industrial producers of nitric acid or those using nitric acid or absorption of nitrous vapours in their processes. It brings reliable responses during plant design or exploitation phases and enables the user to deepen their knowledge of the processes and of the physical phenomenon involved. Bringing together the experience both companies have in the field will benefit all areas of the nitric acid industry and bring them a high level of expertise.

"Exposure to Johnson Matthey’s knowledge base as well as being associated with their highly regarded technical brand in this field is a promising opportunity for ProSim” says Stéphane Déchelotte, President of ProSim.

Several years of intensive use of ProSimPlus HNO3 software by Johnson Matthey’s engineering team and a mutual recognition as a best in class brand in the nitric acid industry has made signing this partnership possible.
About ProSim

ProSim provides state of the art simulation and optimisation software that allows process industries to improve process design, increase plant efficiency and reduce their environmental impact.

It is an independent company, founded in 1989 and headquartered in Labège (Toulouse – France) with a subsidiary established in Philadelphia (PA - USA), ProSim, Inc.

Thanks to long term partnerships with major research centres and to substantial investment in R&D, ProSim continuously develops innovative software and has become today the premium alternative in process simulation. The success of the company (ProSim has over 880 customers in 71 countries around the world) comes not only from the efficiency, the robustness and the openness of the solutions and calculation packages it proposes, but also from the quality of the services it provides.

ProSim has particularly relevant products, prestigious references and important expertise in the chemical, refining, gas treatment, fertiliser and energy industries as well as in the specialty chemical, pharmaceutical, bio-based chemicals and waste treatment and recycling industries. ProSim clients are operating companies as well as E&C (Engineering & Construction) companies or equipment manufacturers in these fields.

ProSim offers a suite of software with good positions in important market segments (thermodynamic properties calculation, steady-state process simulation) and targetted niche products (batch chemical reactors and distillation column simulation, nitric acid plant simulation, complex plate-fin heat exchangers rating, pinch technology). Its activities also comprise engineering process consulting and custom software development.

Among its complete software suite, ProSim offers ProSimPlus HNO3, the only process simulator fully dedicated to the nitric acid processes. It is today the industry reference software, adopted by key players in the nitric acid industry including Orica, Solvay, Borealis, Covestro, Uhde, Hu-Chems, Espindesa, MECS Inc, Ascend Performance Materials or Eurenco.

About Johnson Matthey

Johnson Matthey is a leading speciality chemicals company. Many of their products enhance the quality of life of millions through their beneficial impact on the environment, human health and wellbeing.

The Noble Metals business unit is a world leader of platinum group metal (pgm) fabrication and refining. They invest in research and development to provide innovative and sustainable technologies, offering customers tailored solutions that meet their needs.

With nearly 200 years’ experience working with precious metals and having sold their first gauze catalyst 100 years ago, they have an enviable reputation as a trusted and dependable partner. Their operational excellence, exceptional sales service and technical expertise is recognised worldwide.

Using a wealth of knowledge and advanced technology, Noble Metals manufacture products of exceptional quality using the unique properties of pgms for a vast range of applications across numerous industries. Applying their 100 years of innovative experience in the nitric acid industry, they supply products and services to maximise plant efficiency:

- Tailored gauze made to meet customers’ specific requirements, including Eco-Cat™ technology, binary gauze catalysts, traditional woven catalyst and catchment, HICON corrugated systems and ACT™ coatings.
- High performance nitrous oxide abatement catalysts.
- Analysis of catalysts using the best available analytical techniques, allowing gauze designs for future campaigns to be enhanced.
- Abatement basket engineering, designed in conjunction with the N₂O catalyst to improve its performance.
- Plant cleaning with maximum precious metal recovery, in partnership with RS Bruce.
- Process modelling in partnership with ProSim.
- Water treatment for cooling and process water through MIOX e-Generators.
- Absorption tower scanning.
- Global, 24 hour precious metal management.
- Secure transportation to ensure gauzes are delivered and collected safety.
- Full precious metal refining.

Contacts

Johnson Matthey
Press Relations
Hannah Frankland
Tel: +44 (0)1763 256061
Hannah.Frankland@matthey.com

ProSim
Press Relations
Isabelle Girard
Tel: +33 (0)5 62 88 24 34
Isabelle.girard@prosim.net