MR. ANTONIO PIETRI, EXECUTIVE VP-FIELD OPERATIONS, ASPENTECH

"India is an emerging market for AspenTech and we are committed to growing here"

S-based Aspen Technology Inc (AspenTech) is a leading supplier of software that optimises process manufacturing for industry segments like oil & gas, energy, chemicals, pharmaceuticals, engineering and construction, etc. Its integrated 'aspen-ONE' solutions help process manufacturers to implement best practices for optimising their engineering, manufacturing and supply chain operations.

In an email interaction with *Chemical Weekly*, Mr. Antonio Pietri, Executive Vice President-Field Operations, AspenTech, spoke about the growth opportunities in India and the company's ability to help companies save money with cutting edge process manufacturing optimisation software.

Excerpts from the interview:

What is AspenTech's assessment of the growth opportunities in India?

India is an emerging market for the company and AspenTech is committed to growing our presence in this market-place.

The country is well positioned to be one of the biggest economies in the world in the foreseeable future with a vibrant economy and favourable demographics. The opportunities for key industries to strive and drive innovation are immense. AspenTech can play a role in partnering Indian companies and the government to achieve well optimised operations with global best practices. To grow this vision operationally, AspenTech will need to continue and drive the education of the company's value position with customers. We will also



be running focused sales and marketing programmes to address the Indian marketplace. Our core sectors include oil & gas, petrochemicals, chemicals, pharmaceuticals, etc. These sectors are pillars of the Indian economy and thus, it is important that our customers know what we can do for them. For existing customers, we want to continue to value add to their operations, while acquiring new customers in both our core and non-core sectors.

In 2011, AspenTech also celebrated its 30th anniversary in India and world-wide. What began in a lab at the Massachusetts Institute of Technology (MIT), as part of the Advanced System for Process Engineering (ASPEN) project has grown to what is now, AspenTech. Joining the likes of Microsoft, IBM, Oracle and SAP, AspenTech is one of the few software companies to reach the 30-year milestone. Today, AspenTech optimises engineering, manufacturing, and supply chain processes for

more than 1,500 customers worldwide, including 19 of the 20 largest chemical companies, as well as all 20 of the largest petroleum companies. Our 'aspen-ONE' solutions are used by virtually every leading company in the process manufacturing industry.

Tell us about your latest global product launches and its significance for the process manufacturing sector in India?

For AspenTech, product innovation rolled out globally impacts India, bringing technology prowess to enable local companies to become world-class process manufacturers.

Recently, AspenTech announced the new release of 'Aspen Plus' software that significantly improves the user experience for leading process simulator in the chemicals industry. The completely redesigned user interface and workflow improves engineering productivity and enables the use of process simulation to a wider range of new users. It is the latest example of AspenTech delivering on its strategy to offer common user interface standards across all 'aspenONE' products.

AspenTech has also announced it has brought enterprise scale search and high performance trending to Manufacturing Execution Systems (MES) with the new release of 'Aspen InfoPlus.21'. Process manufacturers can improve their business performance by quickly finding and analysing their operational data for fast and easy troubleshooting.

Late last year, we announced three new advancements in process optimisation, such as the launch of a redesigned user interface for 'aspenONE Supply Chain', making it easier for customers to navigate supply chain complexity and profitably respond to unexpected market conditions. We had also introduced the search functionality for process optimisation called 'Aspen Search', to enable engineers to find the right models and plant data in seconds. The third functionality introduced was the 'Aspen Online Training', which makes 'aspenONE Engineering' products easier to use and learn.

The latest release of aspenONE software, V7, represents best practices for process optimisation. It redefines ease-of-use in software for the process industries. It makes operational excellence achievable and – even in the face of today's market challenges – easier than you think.

What are the key solutions offered by AspenTech to the chemical and petrochemical industries? What kind of savings can a chemical plant operator hope to typically achieve with AspenTech's solutions?

In the chemical sector, it is essential for companies to maximise and sustain operational performance and profitability with the ability to react quickly to market demands and opportunities. 'aspenONE for Chemicals' drives collaborative manufacturing by providing solutions for each phase of the business

in an integrated environment, providing visibility, sharing and re-use of data and process models. By integrating the overall business processes, companies achieve significant

improvements in performance with payback in months instead of years.

'AspenONE for Chemicals' maximises profitability by:



- Optimising feedstock selection and scheduling;
- Improving and accelerating process innovation;
- Optimising plant performance;
- Standardise manufacturing workflow:
- Improving capital efficiency; and
- Reducing environmental risk.

For instance, SCG Chemicals Thailand frees \$14-mn worth of inventory with integrated supply chain. SCG Chemicals relies on 'aspenONE Supply Chain' to integrate operations and increase market responsiveness, while reducing finished goods inventory by 25%. LG Chem Korea relies on advanced process control to realise

In the polymers sector, AspenTech provides producers with real-time enterprise-wide visibility and control over operations - from asset creation, thorough production planning and execution, to customer delivery. 'AspenONE for Polymers' drives operational excellence by addressing the complexities and inefficiencies end-to-end in plant operations and production control, planning and scheduling, engineering and innovation. Companies deploying 'aspenONE for Polymers' are able to generate bottomline benefits of US\$6mn per year per site, with payback in months instead of years.

In the specialty chemicals sector, AspenTech can help speciality chemi-

cals companies drive product and process innovation, increase margins, maintain regulatory compliance and improve customer supply performance.

'aspenONE for Specialty Chemicals' provides an integrated solution set that gives enterprise-wide visibility and control over industrial operations – from process development through

AspenTech can help speciality chemicals companies drive product and process innovation, increase margins, maintain regulatory compliance and improve customer supply performance

\$4-mn in operational savings. Its ethylene plant's deployment of 'aspenONE APC' significantly reduces energy costs and ensures compliance with operational excellence goals.

Interview

pilot plant scale-up and technology transfer to full-scale manufacturing and supply. Companies deploying 'aspen-ONE for Specialty Chemicals' can realise significant margin improvement of 4-20% by increasing capacity, improving customer service, improving first-quality production and reducing costs.

Dow Chemical turns to 'aspenONE Production Management and Execution' to implement procedural control, efficiently moving raw materials and avoiding process upsets. As a result, Dow Chemical eliminates raw material management errors for two years running. Using the same software, DuPont improves product quality and yield, while reducing IT support costs up to 60%. This is the result of being able to make better, real-time decisions across the enterprise through improved monitoring and analysis of manufacturing operations.

Do you have any tailor made solutions for the SME sector, which comprises the bulk of Indian chemicals industry?

Indeed, small and medium-sized enterprises (SMEs) can benefit from the

same AspenTech integrated tools and engineering workflows used by larger companies.

Both worldwide and in India, SMEs are challenged to do more with less resources and money – and do it faster than their larger competitors. AspenTech offers solutions specifically designed for SMEs. Built to grow with the business, 'aspenONE' SME solutions are affordable, easy to install, and include the essential support and training needed to accelerate value.

The 'aspenONE Engineering Desktop' and 'aspenONE Exchanger Design & Rating Desktop' allow SMEs to take advantage of the same comprehensive, industry-leading process optimisation software used by the world's largest process manufacturers bundled into a convenient, single-license package for individual engineers and small workgroups.

What is your assessment of the developments in the global chemicals industry? Do you see any defining trends in the way the industry operates? How will AspenTech benefit from these trends?

The chemical industry relies heavily on hydrocarbon-based feedstock. As energy and feedstock costs continue to rise, energy efficiency and maximum throughput of existing assets becomes an increasingly critical issue. Other key factors/trends impacting the industry include:

- Increasingly competitive landscape due to globalisation;
- Margin squeeze due to low product pricing power;
- Maintaining asset effectiveness at high plant utilisation rates;
- Increasingly stringent governmental regulations; and
- Increased market volatility and eroding customer loyalty.

AspenTech can value-add to chemical companies facing these trends by providing them an integrated solution set that tackles inefficiencies end-to-end throughout engineering, planning and scheduling, and plant operations processes. For many customers, 'aspen-ONE for Chemicals' can help companies to generate benefits of up to tens of millions of dollars per year per plant, with payback in months instead of years.