

Eastman Executives Have Funding To Pursue Ambitious Growth Plan

Executives Will Comb Upcoming eChem Expo in Kingsport For Technology to Help Achieve Expansion and Cut Costs

December 21, 2007 by eChem Expo

When the 5th eChem Expo Solutions Marketplace opens May 1, 2008, in Kingsport, Tenn., conference anchor Eastman Chemical Co. will be searching the aisles for vendors that can help the company realize ambitious plans for growth. Other companies from the region, who send buying teams to the show, also will benefit.

The trade show's 2008 theme, "Innovative Technology as the Strategic Enabler of Future Growth," reflects Eastman's quest for suppliers that can help fuel the company's expansion by providing technology products that solve problems and reduce costs. "We need to look at radically different design approaches to meet the challenges of the future" says Ron Lindsay, Eastman's senior vice president and chief technology officer, who proposed the 2008 theme adopted by the eChem Expo planning team.

Eastman is embarking upon "Project Reinvest," which calls for investing \$1.3 billion in Kingsport over 5 years, plus additional capital investment in Texas and Louisiana. For all of the projects combined, the company is pouring more than \$600 million into capital investment in 2008 and a similar amount in 2009, says Bill Wetherholt, company planning and real estate manager. In 2010, Eastman expects capital investment to surpass \$1 billion, he says.

In comparison, capital spending came to some \$500 million in 2007, \$400 million in 2006, and \$360 million in 2005. A commitment to industrial gasification plants in Texas and Louisiana will account for much of the increased spending, Eastman executives say.

But more investment will not guarantee success, notes Jim Harlan, Eastman vice president of worldwide polymer operations and worldwide engineering & construction. In some areas, the dollar does not go as far as in the recent past, he notes. Oil prices increased 50% in the last year, for example. He also cites the daunting challenge of procuring materials in sufficient quantity, especially metals, such as stainless steel and nickel.

Materials handling related to petroleum coke, or petcoke, a relatively new materials handling process for Eastman with its expanding application of industrial gasification technology, will present hurdles for the company, notes Parker Smith, company vice president and general manager of worldwide manufacturing support.

Now, Eastman needs to handle petcoke "both as a raw material and spent material as it comes out of the gasifier," says Smith. "There might be some differences there as compared to using coal as the feedstock." However, materials and materials handling do not constitute the company's most pressing dilemma, says Harlan. "Labor is our biggest concern," he asserts. So often, he notes, companies build in close proximity, putting craft labor at a premium.

Then there's the need to keep improving, says Wetherholt, adding that reliability warrants never-ending attention.

In response to interviews with Eastman executives and managers in October and November 2007, exhibitors at the 2008 show will

NEWS RELEASE

be challenged to demonstrate breakthrough developments that improve energy efficiency, capital intensity, capability enhancement and "greener" process.

Chief technology officer Ron Lindsay points to the need for the supplier community to provide innovative solutions for separations processes in higher temperature and harsher operating environments. He says Eastman also seeks vendors that can provide innovations in wireless technology that solve security and reliability issues, energy-efficiency breakthroughs that make quantum-leap improvements, breakthroughs in process operations, process modeling that supports those breakthroughs, and new developments in metallurgy and materials of construction.

"We need different alternatives to the current technical processes," says Kingsport-based Alan Hobbs, project director of Eastman's industrial gasification project in Beaumont, Texas. "We have optimized and debottlenecked for decades. Now, we need to look at how to approach things differently." He points to the need for innovation in petcoke handling, thick-walled vessels, online measurement, modeling and the impacts of high-pressure gasification processes.

Technical equipment suppliers, especially those with the newest ideas, can help Eastman meet those challenges, company executives say.

At eChem Expo, Eastman will stay on the lookout for the newest in instrumentation, distributed control, reciprocating equipment, process equipment, column design, tray design, heat exchangers, pumps, valves, valve control, hydraulics, pneumatics, refrigeration and air compression, Smith says.

"We're beginning to talk a lot about wireless controls," Smith notes. Speakers at the last eChem Expo, held in October of 2006, addressed wireless in two presentations and on the exhibit floor. Eastman decision-makers indicate they would like to see more on the subject this time, conference planners say.

Eastman will also scan the exhibition for robotics, company executives say. "That's

always of interest," Smith says of robotics. "We have some robotics in some areas. We don't have a lot. It's of particular interest in our fibers areas." Robotics could gain importance as the company works to become more efficient, says Cheri Morgan, group leader in the specialty polymer analytical services lab. "The use of robotics can increase throughput, productivity and consistency," she says.

Other types of technology that could help Eastman comply with environmental regulations would interest expo-goers, says Smith. "With all the talk about greenhouse gases and ozone, that's going to become a challenge for all of industry," he says. Until greenhouse gases were implicated as possible contributors to global warming, officials did not consider release of carbon dioxide an issue, notes John Sanders, manager of Eastman's cellulose esters & fibers analytical services. Now, companies are looking to reduce carbon production and recover the carbon they still produce, he says.

Smith also wants to explore technology that keeps production in North America. "It's not a bad idea," he says. "We've seen so much manufacturing move offshore that it would be nice to focus on what it takes to keep it here." Meanwhile, Eastman produces energy from its own utilities and would have an interest in technology that supports that function, he notes.

Jerry Cole, Eastman engineering associate in advanced process controls surveyed his group members and is looking for 2008 eChem Expo exhibitors to demonstrate new developments in remote diagnostics capability for instruments and analyzers, including Internet linked diagnostics, wireless instrumentation and communication systems, safety PLC's for SIS systems, and distributed control system developments. "Leveraging new technologies in order to move analytics farther upstream in the chemical process enables tighter control and quicker insight into the state of the process, both of which can directly impact product quality and overall cost," says Sanders.

"We have an emerging need for major dryers for upcoming plant expansions," says Jerry

NEWS RELEASE

Bewley, Eastman process technology director. "It has been a long time since we have needed to purchase these," he says. Bewley also points to emerging needs for new extraction equipment, vacuum boosters, vacuum pumps, high-capacity distillation trays and structured distillation packing. The company also is evaluating the latest in process modeling developments.

Besides searching the exhibit floor for innovation that could increase productivity, reduce costs, improve reliability and help the company realize its ambition for growth, eChem Expo attendees will have the opportunity to hear speakers address a range of subjects that concern Eastman and other companies in the region.

At the last expo in October 2006, Jim Harlan took to the keynote podium to describe a world of borderless business, where India and China are growing rapidly in market power. Meanwhile, the chemical industry, he told attendees, is concentrating on efficiency and productivity, coping with shorter product life cycles, and clinging to difficult-to-sustain competitive advantages.

Suppliers to the chemical industry, Harlan said at the last expo, have consolidated and, consequently, can charge higher prices. At the same time, he said, chemical industry customers have grown in market power and thus push for lower prices. Chemical companies were responding by becoming more global, more market-driven and more conscious of financial performance, Harlan said.

Besides hearing talks at the last expo (October 2006) from Eastman executives Harlan and Wetherholt, attendees listened to briefings by Jim Davis, vice president of Chanhassen, Minn.-based Emerson Process Management, a global provider of process improvement technology, and by Norman Diegnan on behalf of Sam Croll, president of Croll Reynolds Co. Inc., a Parsippany, N.J.-based supplier of vacuum and air-pollution control systems.

Other featured speakers at the most recent show represented Wellesley, Mass.-based

Perkin Elmer Inc., Santa Clara, Calif.-based Agilent Technologies Inc., Waltham, Mass.-based Thermo Electron Corp, and Mansfield, Ohio-based IDEX Corp. IDEX Corp. was also an important contributor to a featured session on "Leveraging LEAN Manufacturing for Competitive Advantage."

Topics of the process sessions at the last expo included high-capacity distillation trays, pump reliability, pressure-relief valves, the function of steam jet injectors in the CPI, efficiency in liquid-ring pumps, online real-time corrosion monitoring, capitalizing on equipment's potential and using alternative sources to motive fluids to drive ejector vacuum systems.

Special topics and analytical technology sessions covered industrial wireless, Wi-Fi, the role of evolving gas analysis, exploiting the physics and chemistry of rapid optimization in HPLC method development, the thermo LTQ orbitrap mass spectrometer in today's research lab, headspace gas chromatography mass spectrometry, an innovative and rapid approach to chemical imaging, optimization of difficult HPCL separations, and process development and scale-up using automated parallel reactors.

The May 1, 2008, eChem Expo Solutions Marketplace will be the 5th in a series of expositions that began in October 2000. The eChem Expo Solutions Marketplace was first held in conjunction with the Eastman Worldwide Technology Conference (EWTC) and replaced two other trade shows that had been in existence for nearly two decades.

In March 2005, eChem Expo introduced its 1st Technology Innovations Conference in a "Meet the Experts" format that included participating suppliers. For the 2006 event, the 2nd in this continuing series of "Meet the Experts" conferences, the organizers convened 18 technical sessions, plus a keynote session titled "Supplying on a Global Basis." Professional organizations providing support in 2006 included local chapters of AIChE, ACS-NETS, ASQ 1106 and ASME. ASQ 1106 and AIChE co-sponsored a featured session on "Lean Manufacturing for Competitive Advantage."

NEWS RELEASE

"Engineers seeking Professional Development Hour (PDH) credit for recertification have found these presentations to be especially attractive," says Gene Skates, an Eastman procurement associate who serves on the eChem Expo planning team. "PDH credit was offered for many of the sessions in 2005 and 2006. We are making plans to continue PDH availability in 2008. In 2005, we found that 83 participating engineers accumulated an average of 2.5 professional development hours for renewal of their state licenses," he says.

A community of more than 600 professionals participated in each of the past two eChem Expo events. That includes exhibitors, Eastman staff and personnel from other companies in the region. A partial list of regional companies attending the last eChem Expo, in addition to Eastman attendees and exhibitors includes Nuclear Fuel Services, BAE Systems, Oak Ridge National Laboratory, Day & Zimmerman, ITS, King Pharmaceuticals, Roan Industries, Markes International, East Tennessee State University, King College, Amerace-Microporous Products, Aerojet Ordnance Tennessee, City of Kingsport, Tempur Production, Superior Industries, BioInventions, Melaleuca Inc., Exide Technologies, Minco and more.

eChem Expo planners indicate they intend to expand their efforts in 2008 to attract attendees from companies other than Eastman. "As eChem Expo has grown, we have realized the potential benefit for other industry in the region," says Bruce Lyttle, a member of the eChem Expo planning team since its inception in the year 2000. "Beginning in 2006, we made a conscious effort to make other companies aware of the eChem Expo opportunity. In 2008, we will expand our efforts," says Lyttle, an environmental engineer with Bristol Compressors and a 30-year Eastman veteran.

"From a capital procurement perspective," says Skates, "we saw promises in 2005 and 2006 that Eastman's capital program would be growing in the future. The future is here, and the promises are real."

For more details visit www.eChemExpo.com

eChem Expo Solutions Marketplace and Knox Publishing are part of Winchester Solutions LLC
E-mail: Kingsport@eChemExpo.com
Phone: (626) 396-9470 Cell: (626) 255-6462