

**July 5, 2004**

Volume 82, Number 27

p. 10

## **PHILLY COURTS A MOLECULAR VALLEY**

Regional initiative seeks advanced chemical firms that feed off established producers

**MARC S. REISCH**, C&EN NORTHEAST NEWS BUREAU

The focus of economic development initiatives in many regions is on biomedical breakthroughs, nanotechnology, or software. While the Philadelphia region is considering those areas in its regional growth plan, it has on other area targeted for growth that doesn't often spring to mind – chemicals.

Early last month at a seminar that examined ways to accelerate innovation, Richard A. Bendis, president and chief executive officer of Innovation Philadelphia, outlined plans for what he called a Molecular Valley to boost the regional chemical industry. **About 20 chemical research commercialization experts attended the meeting in Lafayette Hill, Pa., organized by David C. Gates, president of investment banking and consulting firm Gates and Company.**

Bendis said he is seeking an initial \$840,000 in government, foundation, corporate, and private donations to provide services to chemical-related startup businesses. A Molecular Valley “convergence center” he hopes to launch in 2005 would connect these businesses to incubator facilities, seed capital, consultants, intellectual property lawyers, and university researchers. The center would also raise a \$5 million seed capital fund for early-stage start-ups and a venture-capital fund of \$30 million to \$50 million for later stage firms.

Bendis is a former venture capitalist and president of the Kansas Technology Enterprise Corp., a state-funded economic development group, so he has experience in bringing public and private groups together to help businesses. He said he hopes that over the next 10 years, the Molecular Valley initiative will spawn 100 new companies, create 4,000 jobs, and bring \$2 billion in additional revenue to the Philadelphia region. In addition, he hopes the initiative will attract at least \$50 million in new federal research dollars to area universities and businesses.

The group that Bendis leads, Innovation Philadelphia, is a nearly three-year old public/private development effort supported by city and state money. However, it reaches beyond state borders to southern New Jersey and nearby Delaware to pursue a regional development agenda. “Innovation doesn't understand geography,” Bendis said.

“The region is already a major petroleum refining and chemical center,” he explained, supporting firms such as Sunoco, Atofina, Rohm and Haas, DuPont, FMC, and Hercules. With \$50 billion in chemical revenues, the area accounts for 15% of U.S. chemical industry sales. The Molecular Valley initiative sees to shift the region's focus from older commodity products to the latest generation of specialty materials.

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## **The Molecular Valley initiative could spawn at least 100 new companies, 4,000 jobs, and \$2 billion in additional revenue growth in the Philadelphia region.**

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That means pooling efforts with big business, universities, and start-up firms to support the creation of businesses that rely on new polymers, coatings, and advanced fibers. Bendis envisions the region spawning firms that can meet the demand for next-generation displays based on organic light-emitting diodes. The region's businesses might also churn out components for fuel cells, high-capacity memory chips, or bulletproof fabrics.

Philadelphia-area business, university, and community leaders put together their regional road map almost three years ago, Bendis said. Innovation Philadelphia is supporting other initiatives in the plan, but it took on the lead to "protect and grow" the chemicals and derivative industries in the area.

Working in major corporate research centers – including those of Rohm and Haas, DuPont, and Atofina – the region's scientist generate many more patents than their companies have either the money or the inclination to develop. Bendis would like this "wealth of underutilized commercial intellectual property" to become more of a local resource.

Many of the region's top chemical companies now donate patent portfolios to universities outside the Philadelphia area. Bendis said he would like firms to make more of those donations to local institutions, such as the University of Pennsylvania or Drexel University, forming a resource for spin-off firms around Philadelphia.

The recent economic downturn, and the downsizing of corporate payrolls that accompanied it, left behind a lot of underutilized chemical capability – both physical and intellectual. However, Bendis said this slowdown isn't the reason why business leaders chose to create a road map. It came about because local leaders realized that the region has to create opportunities for innovation if firms are to compete and survive in a global economy.

As part of the Molecular Valley effort, Innovation Philadelphia also wants to create an exchange for trading chemical futures that would be similar to exchanges that now exist for commodity futures. Such a service would not only help companies smooth the cost of building-block chemicals but would also make the region better known as a center for chemistry.

"It's all about churn," Bendis told the group. In economic development, churn is good. Companies grow, mature, and spin off new businesses. "The more churn during the innovation lifecycle of firms, the better a region's economic performance." And the better, too, he hopes, for the area's chemical entrepreneurs. ■