Building on a Foundation
Mechanical engineering alumnus now heads Silicon Valley company
By Mary Reed

When David Lazovsky, B.S.M.E. ’95, returns to campus for homecoming weekend this fall, it will be the first time the 1995 grad has been in Athens since graduation. From Europe to Silicon Valley, he’s been busy in the interim with a career that has led to the creation of a multi-million-dollar high-tech company.

Shortly after earning his bachelor’s degree in mechanical engineering, Lazovsky was hired by Applied Materials, where he got into the business side of the company and worked his way up to director of business management for Europe (he was based in Grenoble, France, for a couple of years). By the time he left the company, he was managing $1.2 billion of Applied’s semiconductor manufacturing equipment business.

Lazovsky says that the Russ College can claim quite a bit of credit for his early success. “I certainly had the tools that I needed coming out with a bachelor’s to ensure success at Applied.”

Building on his experience and industry connections, Lazovsky founded Intermolecular in 2004, where he serves as president and CEO. Based in San Jose, California, Intermolecular conducts materials processing research and development for the semiconductor and clean energy industries. Using their proprietary High Productivity Combinatorial (HPC) technology to test up to 100 different semiconductor devices at a time, Intermolecular drastically reduces R&D costs and time to market for manufacturers.

“High productivity combinatorial technology is basically massively parallel experimentation,” Lazovsky explains, noting that the technology is not particularly new; rather, it’s borrowed from the pharmaceutical and biotechnology industries. In order to launch Intermolecular, Lazovsky developed a team with core competencies in the semiconductor industry. “We’re the only company in the world that’s applying these combinatorial technologies in earnest in semiconductor and green energy applications.”

Intermolecular in turn earns royalties on products sold using their HPC technology. A large percentage of the company’s revenues—estimated to be more than $100 million annually by 2013—come from royalties. Lazovsky says his objective is to take the company public within the next 24 months.

“The only way to take new ideas and make them into next generation, higher performance devices is to run experiments. You have to grind it out; there are no shortcuts. There’s a lot of complexity and a lot of uncertainty. What we’ve done is created a capability for running those experiments about 100 times faster than anybody else in the world,” says Lazovsky, who can claim 16 filed and issued U.S. patents to his name.

While he’s largely working in the business end of things, Lazovsky relies regularly on the technical foundations he gained during his time at the Russ College. “My company employs about 150 people, 50 percent of whom have Ph.D.s, so I have to maintain my understanding of core scientific principles. The base of that came from my undergraduate (mechanical engineering degree) at OU.”

When he visits campus in October, Lazovsky will speak to students enrolled in an entrepreneurship seminar in the College of Business about business startup and venture capital.

He also plans to reconnect with his Phi Kappa Tau fraternity brothers and kick around the brick streets of Athens and campus. “(If) you lived through OU, you know how romantic an experience it is. I loved it. I fell in love with the campus and with the people there.”