



We met with representatives initially in the USF Small Business Development Center. They were phenomenal. I got help with market research, business plan development and even financial planning.” • **DAVID ANGLEWICZ, LED INTERNATIONAL**

way down to 10 percent. And it can be as simple as motion sensors making it happen. You can't dim industrial fluorescent or HID lights,” Anglewicz explains.

In addition to the environmental benefits, through a partnership with a CPA firm, the company will help clients research local and state rebate offerings to maximize energy and financial savings, even provide assistance in how to properly handle the government paperwork. The Energy Policy Act of 2005 includes a Federal Tax deduction for installing energy efficient lighting. And more power companies are offering rebates, as well.

As a new kid on the block in Hernando, LED International has been made to feel welcome. “The synergy here is fantastic with companies wanting to work together,” says Anglewicz. Two local companies, ICTC and Sparton Electronics, provide additional



components for his fixtures (73 percent of his products are made in Florida). And in early 2012, LED International partnered with Neubert Aero Corp., another local company, which is a leading supplier of airport safety products. Together, they replaced halogen bulbs with LEDs for the giant Xs that signal runway closures.

“The technology for LEDs is getting better every day,” says Anglewicz. “Part of our challenge is to keep up with it.”

All indicators point to the future of this company being a very bright one.

In addition to inherent environmental benefits, LED International helps clients research local and state rebate offerings to maximize energy and financial savings.



Dr. Alexei Glebov, CEO, with his father Dr. Leonid Glebov, UCF professor and founder of OptiGrate. The optics company holds more than 10 patents and has trademarked its BragGrate™ of high-efficiency VBGs.



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• **DR. ALEXEI GLEBOV, OPTIGRATE**

## SOMETHING TO BRAGG ABOUT

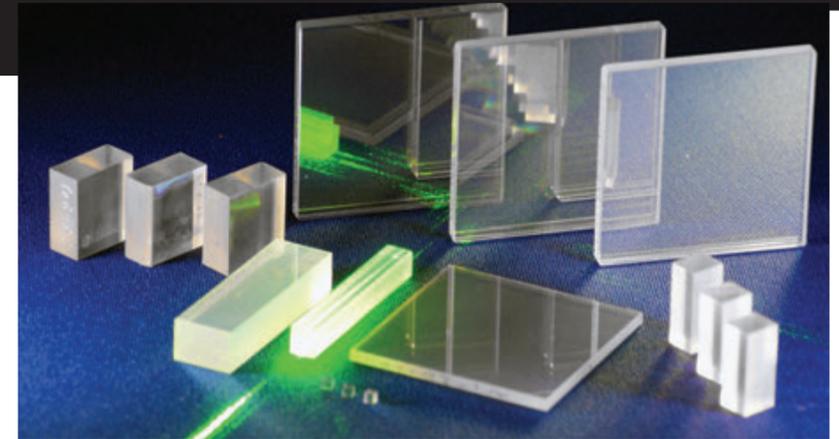
OptiGrate / Seminole County

A shining example of academic and industrial collaboration is OptiGrate Corp., an optics company that specializes in the volume Bragg grating (VBG) technology that its founder, Dr. Leonid Glebov, a UCF professor, perfected in the campus lab at CREOL (The College of Optics & Photonics). The cutting-edge technology for optical filters (BragGrate™) includes transmitting (TBG), reflecting (RBG) and chirped (CBG) volume Bragg gratings from special multi-component silicate glass (BragGlass™).

The Oviedo-based company was established in 1999 and is a major success story for the UCF Business Incubation Program, which provides a variety of business development services and resources to local start-up companies. Dr. Alexei Glebov, president and CEO of the company, comments: “CREOL is one of the best schools worldwide in photonics. There are very few schools that offer photonic programs.”

As the company grew with federal funding and grants (NASA, U.S. Air Force and U.S. Navy, among others), it developed the technology for implementation in a number of high-end military systems and began converting the government-funded research into commercial products.

Apparently, the world has taken notice. OptiGrate supplies customized and volume orders of holographic optical components to more than 400 customers on six continents in optoelectronic, analytical, medical, defense and semiconductor industries. In July 2012, the company moved into a new 10,000-square-foot facility, making it the only vertically integrated volume Bragg



grating production plant in the world. Also on site is a photosensitive glass production area, a holographic area and a laser development facility.

The Glebovs are one of only two father-and-son duos to receive the prestigious honor of being named Fellows by SPIE, The International Society for Optical Engineering. Fellows are members of distinction who have made significant scientific and technical contributions in the multidisciplinary fields of optics, photonics and imaging. It's estimated that Fellows comprise 1 percent of the total global membership (hundreds of thousands) of SPIE.

Alexei Glebov, who previously worked in Silicon Valley, feels the cost efficiencies of being in Central Florida are particularly beneficial to his company. In addition to the attractive economic costs of doing business here, the advantages of being in close proximity to UCF and other industry organizations are significant. “We have access to highly educated university graduates, and we employ eight people who hold doctorates. More than 50 percent of our employees came out of UCF,” he says.

Glebov also cited the resources

available to his company through the Florida Photonics Cluster, a not-for-profit organization devoted to networking and educational support for his industry. “They provide an open forum that brings us together and creates a unified force,” he notes.

With Alexei Glebov at the helm and his father serving as head of the research and development arm of the company, OptiGrate is well positioned for growth. Sales have increased 30 percent, and the company holds more than 10 patents. “The VBG technology provides a huge advantage in integration of this component in industrial laser products,” says Glebov.

Last winter, OptiGrate received the Small Manufacturer of the Year Award from the Manufacturer's Association of Central Florida.

Glebov emphatically asserts that if someone told him he had to move his company, he would say, no: “Central Florida offers brain power and a very strong infrastructure that simplifies our lives tremendously.”

Simplification for some very complex technology.

## TEAMWORK APPROACH

Casey Barnes is a big believer in regional teamwork. As vice president of business development for the Metro Orlando Economic Development Commission, Barnes is responsible for attracting, retaining and growing jobs throughout four counties. Prior to joining the EDC in 2013, he worked at Enterprise Florida, a statewide organization, for 10 years. In eight years there, he recruited and retained 101 companies across Florida, totaling 22,215 new and existing jobs and more than \$1.8 billion in new capital investment.

So, when it comes to collaboration, Barnes should know.

He explains.

**In what ways does collaboration fit in with your EDC's efforts to grow high tech in the region?**

“Collaboration is a huge deal. It's everything for us. The EDC encompasses four counties: Orange, Seminole, Osceola and Lake. Our region is all about partnerships. We work very closely with each of the counties, as well as educational providers; we work very closely with inventory providers, such as brokers and owners; and pretty much anybody that has a role to play in economic development. We like to say that economic development is a team sport.”

**At present, are there one or two particular areas of emphasis in the high-tech recruiting process?**

“High tech is a really broad brush. You can find areas of high tech in just about anything we do. You look at biomed—at what they're doing at Florida Hospital and Sanford Burnham and others. You look at business services, where they're

doing great things with Verizon. A third major sector we focus on is more advanced technology. That's more manufacturing, digital media and military simulations and training, where, of course, we possess much strength. So, almost everything we do has a high-tech component.”

**Is there a recent example of success?**

“The Verizon project is kind of the poster child. Verizon was looking at more than 250 communities in the U.S.. They narrowed their search field down to a number of locations, and fortunately our region was among them. We did a lot of things right as we worked with that company. “Number one, we got in contact very early on with our educational providers; the University of Central Florida, Seminole State College, Valencia College and Lake-Sumter State College, to validate the pipeline of talent that was coming through. [Verizon] wanted to understand the pipeline, and they wanted to know about the current structure of the employment here. ... We validated what turned out to be the critical issue for Verizon. Also, those university partners—UCF, Seminole State, Valencia and Lake-Sumter State—offered in-state tuition for out-of-state relocation. When a company needs to relocate key personnel, sometimes the cost of sending their kids to school is a major decision factor. So, the schools “took a bite” in order to be a good partner and help make the project happen for Florida.”

— Michael Candelaria

