

20 years of electro-optics kicks off with nano-grant

The electro-optics program began celebrating its 20th anniversary early when Ohio's Third Frontier program this summer awarded a \$773,000 grant to assistant professor Andrew Sarangan. The funding is allocated for a state-of-the-art nano-fabrication facility that will be finished by early 2004.

According to Joe Haus, program chair, having enhanced facilities assists the program by increasing its stature and giving it the ability to leverage additional grants.

While optimism abounds in the program — the only one in Ohio and one of six nationwide — pioneers of the program used this fall's anniversary to reflect on how it reached this point.

In 1981, an anonymous benefactor challenged UD to start a graduate program in high technology. The timing was perfect as several members of the physics and electrical engineering departments, along with the UD Research Institute, had been discussing forming an interdisciplinary academic program based on their respective optics strengths.

The group won a \$300,000 grant, and so it began in 1983 — electro-optics, a graduate program housed in the School of Engineering. The program's major tenet is that graduates have first-hand experience with optics and related technologies.

"We feel it is important for graduates to have theoretical and hands-on knowledge," said Haus. "We are confident that our graduates have the background to succeed in the field. They not only know what the theory is but how to apply it to real-world technologies. Plus, if our grads wish to go into academia, they can go into physics or electrical engineering. The hallmark of this program is being truly interdisciplinary from the start."

At the start, the dean of engineering and a committee called the shots for the program. Current physics department chair Mike O'Hare was a committee member and has witnessed all of the program's young life.

The master's-only program, which started with no faculty dedicated to electro-optics and fewer than 20 students, now has four program-specific faculty members, 40 students and offers a doctoral program.

"To grow the program when we started, we contacted pretty much every physics department in the country and used our contacts. It was all word-of-mouth and grass roots," O'Hare said. "The program has gained much visibility and respectability. It has grown to the point where UD has a great program in the area of electro-optics."

—Shawn Robinson

