New high-technology optics facility at the College of Optical Sciences at the University of Arizona, Tucson.

UA College of Optical Sciences

A New Name for an Old Friend

[Arizona's Optical Sciences Center Becomes the College of Optical Sciences]

Richard L. Shoemaker

This past May, the Arizona Board of Regents acknowledged a new college at the University of Arizona: the College of Optical Sciences. For more than 40 years, the College was known as the Optical Sciences Center (OSC). Its new name reflects the important role it has played in optics education in the state of Arizona, across the country and around the world.

According to Professor James C. Wyant, dean of the new college, "Our new name—The College of Optical Sciences —is a reflection of our commitment to provide the world's highest-quality graduate and undergraduate education in the optical sciences."

Through the years

The Center was founded in 1964 by Aden Meinel. At that time, it was intended to be a graduate center for research and teaching in the optical sciences. It differed from most university centers in that it was not located within any specific department or college. Rather, it was an independent entity within the university whose staff reported directly to the provost. The academic program began operation in the fall of 1965 with four students and a curriculum of seven graduate courses in optics.

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Dean Wyant hoods another new Ph.D. in Optical Sciences at graduation.

Since then, the Center—now the College—has grown into an academic unit with about 200 graduate students and 85 faculty. It offers more than 88 graduate courses leading to M.S. or Ph.D. degrees in optical sciences or to graduate professional certificates. Another 140 students are taking graduate courses remotely via Web streaming or DVD.

In addition, the College now offers an ABET (Accreditation Board of Engineering and Technology)-accredited B.S. degree in optical sciences and engineering, with 33 undergraduate optics courses and an enrollment of about 200 undergraduate optics majors. This fall, optical sciences will increase its laboratory and office space by 50 percent with the completion of its new building.

This makes the College of Optical Sciences the largest optics educational and research program in the United States. It is also larger than several other colleges at the University of Arizona, including the College of Nursing and the College of Architecture.

In addition, the research program at the College of Optical Sciences is larger than those at many other colleges at the University of Arizona, with more than 120 research projects typically in progress at any one time. During the past three years, approximately 40 percent of all the patents that the University applied for came from Optical Sciences.

Considering the College's large size and broad scope of activities, its new name seems entirely appropriate. For the past 40 years, the Optical Sciences Center was listed in the university academic structure as the Committee on Optical Sciences in the Graduate College—a designation that has appeared on the title page of all theses and dissertations as the degree-granting entity.

A clearer identity

Now that it has its own status as a College, Optical Sciences will enjoy increased visibility and exert more influence within the university. Because the university mainly organizes its activities, committees and councils by college, Optical Sciences will have more of a presence as a College than it had as a Center.

For example, many university committees and councils base their membership on college representatives. In the past, faculty and staff from the Optical Sciences Center were sometimes included on these committees on an ad hoc basis, but other times not. The same is true with regard to announcements and participation in university activities: Notices went out to the various colleges for internal distribution, and the Center was not always included.

The name change will put to rest any attempts by the University to force OSC to join another existing college. Such a move would have had very negative effects on faculty recruitment and retention, because of the diverse nature of the Optical Sciences teaching and research staff. Indeed, many faculty who focus on

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A graduate student sets up an experiment in the Laser Cooling and Trapping Laboratory.

optical engineering and photonics regard themselves as optical engineers, while another large fraction work in optical and semiconductor physics, and identify themselves as physicists. If the faculty had had to join either the College of Engineering or of Science, one or the other of these groups would have been greatly upset.

The last time the University asked OSC to join another college, the provost told the Center's director that OSC could join any existing college that they wish—and he ultimately regretted the wording of his request. Peter Franken—the Center's director at the time—responded that OSC would like to join the College of Medicine, with salaries adjusted to be commensurate with those of the well-paid faculty there. Franken's reply effectively ended that attempt!

Making its mark

The name change should also help the College to communicate who they are and what they do outside the university. Because the word "Center" can mean different things to different people, in the past potential students and organizations outside of the optics community didn't really know what Optical Sciences was, and they often assumed it was part of some other department. Every year in the past, the University has seen students who want to study optics apply to the physics or electrical engineering departments instead of to Optical Sciences, because they assumed the Center was not a separate academic unit.

Tucson, Arizona, home to the College of Optical Sciences, is a major international center for the optics industry. Tucson optics firms design, develop and manufacture products ranging from auto headlights to X-ray machines to high-speed Internet connections. The educational programs at the College of Optical Sciences have been—and will continue to be—a driving force behind the growth of this vibrant industry.

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