

Alfred University to create high-temperature materials testing lab

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Alfred University today announced it is taking the first step in creating a high-temperature materials testing laboratory to support materials-based companies, primarily those located in New York. "We see this initiative as part of an industry-university partnership to cement New York State's position as a leader in materials science, particularly in the glass and ceramic industries that are so important to the state's economy," said Alfred University President Charles M. Edmondson. Among the initial purchases will be additional high-temperature x-ray diffraction equipment, which will allow researchers to use x-rays to understand the relationships between structure and properties of materials at very high temperatures. Such research is critical to the development of advanced materials for a variety of applications. "In partnership with Corning Incorporated, we are working to establish a specialty laboratory with an array of highly sophisticated testing and measurement instruments not readily available elsewhere in the United States," explained Dr. Doreen Edwards, associate dean of the Kazuo Inamori School of Engineering. She developed the proposal in conjunction with Dr. Ralph Truitt, director of Characterization Science and Services and Advanced Materials Processing Labs, and others at Corning Incorporated. "Once it is fully equipped and operational, this facility will be unique," said Edwards. "Companies can gain access to faculty expertise and state-of-the-art facilities for measuring high-temperature behavior all under one roof." "That's a concept that's pretty exciting for us, and for our partners," said Edwards, noting several industries expressed an interest in such a facility. President Edmondson commended Edwards and Truitt, as well as Dr. Scott Mixture, professor of materials science, for their efforts to develop the proposal. "This provides us with a model of collaboration between the University and industry that we would like to see expanded in the future." "The added benefit for us, and ultimately for the companies themselves, is that our students, the next generation of materials scientists, will leave Alfred University already familiar with this equipment and the analyses it makes possible," said Edmondson. Beginning to build the high-temperature materials testing facility with the purchase of additional x-ray diffraction equipment was a logical first step, noted Dr. William C. LaCourse, associate provost for statutory affairs, New York State College of Ceramics at Alfred University. "There is a great deal of demand from industry for these services," said LaCourse. "The high-temperature materials testing laboratory has a huge potential for economic development in New York. "This is a logical first step for us," agreed Mixture, noting he has existing relationships with a number of New York State industries, including Corning, GE, Kodak, Applied Image and Lockheed Martin. The equipment will also be used in research projects to develop materials for high-temperature fuel cells and solar energy applications. Locating the high-temperature testing laboratory at Alfred University represents a major investment in the economy of the Southern Tier, which is historically one of the most depressed regions of the state. "Proximity to such a facility could be an inducement for companies to either expand or locate in the region," Edmondson said. Corning Incorporated, for example, announced last summer that it will invest \$300 million over the next six years to upgrade its Sullivan Park Research and Development Campus. Creation of the high-temperature materials testing laboratory in Alfred "complements our plans for expansion at Sullivan Park," said Charles Craig, vice president, Science and Technology, for Corning Incorporated, in his letter supporting the Alfred lab.