Alfred University&#65533;s School of Engineering to dedicate high-temperature materials characterization center
3/31/17

A dedication ceremony for the Center, in the McMahon Engineering building, will be held April 6.

The Inamori School of Engineering at Alfred University will dedicate the Center for High-Temperature Materials Characterization, now located in the McMahon Engineering Building on the Alfred University campus, at 2 p.m. Thursday, April 6.

State Senator Catharine Young (R-Olean), who was instrumental in securing the first New York State grant of $4 million to purchase high-temperature materials characterization and processing equipment, which is used by Alfred University researchers to analyze materials either those that are processed at very high temperatures or those designed to be used in high-temperature or harsh environments. The University subsequently received $2.9 million to purchase additional equipment through the Regional Economic Development Council of Empire State Development.

“We are so grateful for Senator Young&s support for the Center for High-Temperature Materials Characterization and other initiatives to support the School of Engineering&s industrial research partners,” said President Mark Zupan. “She has been a strong advocate for us and the role we play in the economy of New York State.”

“Alfred University advanced this idea of a high-temperature materials characterization lab with the State based on interest from industrial partners,” said W. Richard Stephens, provost, vice president for Academic Affairs and, as interim vice president for Statutory Affairs, head of the New York State College of Ceramics.

“This center offers a unique array of equipment,” said Alastair N. Cormack, dean of the Inamori School of Engineering as well as the Van Derck Frechette Professor of Ceramic Science. “Much of it is built to allow researchers to analyze materials in real-time while they are at temperature, which gives us a much better picture of their properties and how they function and react.”

Initially, some of the high-temperature analytical and processing equipment was located in several different laboratories in McMahon Engineering Building and Binns-Merrill Hall, and installation of other equipment was on hold pending a way to provide vibration-free foundations. Those two needs were met in the McMahon Engineering Building “infill” project. The State University of New York Construction Fund built the $9-million project that fills in courtyard at the rear of the building with a two-story addition.

The addition will house the School&s electron microscopy suite, which requires special vibration-damped rooms that

will researchers to obtain high-resolution images required for nanoscale work. It will also house surface-analysis equipment, including x-ray photoelectron spectroscopy; atomic force microscopy and some of the x-ray diffraction equipment.

Other renovated lab spaces on the second and third floors of McMahon will accommodate thermal analysis equipment and sample preparation areas. An atrium in the infill area will provide flexible space to meet the needs of faculty, students and visitors. The space can be easily reconfigured to accommodate symposia, poster sessions or workshops.

The School of Art & Design and the materials-based engineering programs biomedical materials engineering, ceramic engineering, glass science engineering and materials science are part of the New York State College of Ceramics, created by an act of the State Legislature in 1900. As a statutory college, the College of Ceramics is funded by the State Legislature, and is administered by Alfred University in consultation with the State University of New York.