

Alumnus to deliver Scholes Lecture

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Alfred University alumnus Dr. Richard K. Brow will return to his alma mater to deliver the Samuel R. Scholes Lecture at 11:20 a.m. Thursday, April 16, in Holmes Auditorium, Harder Hall. The title of his talk is "Engineering the Random Network: Scenes from One Career (so far) in Glass Science." "The aesthetic qualities of glass attract our eye, but the mysteries of structure and the endless engineering opportunities for this material stimulate our mind," wrote Brow in the abstract for his upcoming talk. "For 30 years, from the classrooms and labs in Binns-Merrill Hall (at Alfred University) to collaborations with colleagues from around the world, I have had the great good fortune to study glasses, to develop new compositions and to consider how the details of their molecular-level structures control useful engineering properties." Brow said his talk will focus on how understanding the glass structure led to development of new compositions for different applications, including seals for pacemaker batteries and satellite components, solid-state lasers, and new low-temperature optics. Lessons he first learned as a student at AU can still be applied to current engineering challenges, he said. Brow, who earned both his B.S. (1980) and M.S. (1982) degrees in Glass Science from what is now the Kazuo Inamori School of Engineering at Alfred University, is now the Curators' Professor of Ceramic Engineering in the Department of Materials Science and Engineering at the Missouri University of Science and Technology in Rolla, MO. After earning a Ph.D. in Ceramic Science from Penn State, Brow worked at Sandia National Laboratories in Albuquerque, NM, from 1985 to 1997, rising to become a senior member of the technical staff, developing glasses for a variety of engineering applications. He joined the faculty of Missouri Science and Tech in 1998, and has served as department chair for six years. His current research interests include the structure and properties of inorganic glasses, including the development of new compositions for electronic, optical, biomedical and other applications. Brow has authored more than 150 papers on his research and holds 10 U.S. patents. Among the awards he has received are recognitions from the American Ceramic Society and the International Commission on Glass.