

Corning researcher to deliver Scholes Lecture

4/02/12



Adam Ellison, a Corporate Fellow at Corning Incorporated, will deliver the annual Samuel R. Scholes Sr. Memorial Lecture Thursday, April 19, at 11:20 am in Holmes Auditorium, Harder Hall, on the Alfred University campus. Sponsored by the Kazuo Inamori School of Engineering, his talk, "Glass Breaks: Why?" will explore why glasses "have fabulous strength in compression," but "fail readily under tension," Ellison said. "Experts in fracture mechanics typically ascribe the tendency of glass to fail under tension to flaws, particularly surface flaws, and it is unquestionably the case that mitigation of such flaws can greatly improve the strength of glass objects." Admitting he's no "expert on failure mechanics" leaves Ellison "unfettered to consider the following question: how might I make a glass behave more like a plastic or ductile material under tension?" Ellison, who joined Corning Incorporated in 1996, is "widely recognized for his expertise in glass chemistry and structure. His contributions have resulted in the invention of novel advanced materials for technology applications, development of new synthesis routes for advanced materials, and a better understanding of the relationships between material composition, structure and properties." As a Corporate Fellow, Ellison is considered to be at the pinnacle of technical recognition, "reflecting rare and truly exceptional career achievements." Ellison earned a Ph.D. in geology from Brown University, then spent four years at Princeton University as a postdoctoral fellow. He then spent five and a half years as a staff scientist at Argonne National Laboratory, where he twice received its Pacesetter Award for Excellence in Achievement, and the Director's Outstanding Achievement Award. In 2007, Ellison received the prestigious Stookey Award from Corning Incorporated, which is presented to an individual member of the Corning Science and Technology community in recognition of contributions to "outstanding exploratory research." He is the author or co-author of 36 patents, 48 pending patent applications and 44 peer-reviewed publications. His inventions have paved the way for Corning's commercial success in the Display Technologies and Specialty Materials market segments. The Scholes Lecture honors the memory of Dr. Samuel Scholes Sr., founder of the glass science program in the Inamori School of Engineering at Alfred University. The University is the only U.S. institution, and only the third in the world, to offer a Ph.D. in glass science.