Scholes lecturer will explain emerging, practical applications for glass surfaces
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Dr. Carlo G. Pantano, distinguished professor of materials science and engineering at Penn State University and director of the Penn State Materials Research Institute, will deliver Alfred University&s (AU) annual Samuel R. Scholes Sr. Lecture at 11:20 a.m. Thursday, May 1, in Harder Hall auditorium on campus. The event is open to the public free of charge.

Pantano&s talk, “Glass Surfaces: At the Cutting Edge of Functionality,” will focus on required characteristics and surface properties for current and emerging glass applications that demand new or improved “functionality” from glass. Functionality, Pantano explains, is “The quality of being functional or having practical use.” He says that we value the transparency of glass, but keeping it clean is still a challenge. Glass can be stronger than steel until the surface becomes scratched or weathered, he notes.

Pantano will discuss surface reactivity, adhesion, and strength in terms of glass surface characteristics and how these properties both improve the engineering performance and expand the application space for glass.

Each year, the Inamori School of Engineering at AU selects an expert in the field of glass science to deliver the Scholes Lecture, which honors the memory of Samuel R. Scholes Sr., who founded the glass science program at the University more than 80 years ago.

Pantano earned a bachelor&s degree in engineering science from Newark (NJ) College of Engineering and master&s and doctoral degrees in materials science and Engineering from the University of Florida, Gainesville, primarily focusing on surface science and bioglass.

After earning his Ph.D., Pantano spent almost three years at the University of Dayton (Ohio) Research Institute before joining Penn State&s Department of Materials Science and Engineering in 1979, where he has focused on glass, surfaces, and coating.

Throughout his career, Pantano has written more than 285 journal publications and six book chapters. He is a Fellow of both the American Ceramic Society (ACerS) and the American Vacuum Society. He is a former chair of the Glass and Optical Materials Division of the ACerS, a former U.S. council representative for the International Commission on

Glass, and was elected to membership in the World Academy of Ceramics.

Pantano is the recipient of a Wilson Award for Excellence in Research and in Outstanding Service and was a Corning Faculty Fellow from 1990-00. He also received the Ross Coffin Purdy Award for the most valuable technical contribution in the field of glass science and technology. In 2012, he was named the Kreidl Memorial Lecturer and was the recipient of a Distinguished Alumnus Award from the University of Florida.