

Materials Science & Engineering Graduate Seminar

Wednesday, January 8, 2020, 4:10 – 5:00 PM, FASB 295

Dr. Alexis Clare

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Optical Properties of Glass

“Glass” is not just a vessel that you drink cold drinks from, or the stuff you make windows from, or what you look through to see things better. Glass is a state of matter; something that acts like a solid but has an atomic structure more similar to a snapshot of a liquid; the difference being that a second snapshot of the glass moments later would look the same as the one before; no detectable flow would have happened. This renders glass as an ultimate design material, whose properties can be, in most cases tweaked to behave unlike other solids. One of the distinct advantages of this tweaking is in the optical properties; on which this talk will focus.



Alix Clare gained her PhD in Physics in 1986 from the University of Reading UK on the Structure of Glasses by Neutron Diffraction. She worked as a Post-Doctoral Researcher at the University of Sheffield UK on fluoride glasses for long-range telecommunications and for active optical applications. In 1989 she moved to Alfred University USA to become a Professor of Glass Science where she has continued to work on the structure property relations of glasses. She is a Fellow of both the Society of Glass Technology UK and the American Ceramic Society.