Eastern NY ASM Awards Night Dinner Meeting  
Thursday, March 20, 2014  

Join us for networking, dinner, and a technical presentation at the Century House in Latham, NY. Invited speaker Dr. Liping Huang will present her work on Understanding Glass Structure from Its Elastic Response to External Stimuli.

Understanding Glass Structure from Its Elastic Response to External Stimuli  

Liping Huang  

Department of Materials Science and Engineering, Rensselaer Polytechnic Institute, Troy, NY 12180, USA

On the microscopic level, glass is structurally and chemically heterogeneous, a grand challenge for any existing tool to characterize. On the macroscopic level, glass is structurally homogenous and isotropic; only two independent elastic constants are needed to characterize its elasticity. Elastic constants are simple to define and easy to measure, and are directly related to the interatomic forces and potentials, embodying the local structure and bonding information. Therefore, perturbing the glass with thermal or mechanical agitation (e.g., temperature, pressure or strain) and measuring the changes in elastic moduli, can be used as a probe to gain insights into the atomic level structure of glass. A fundamental understanding of glass structure will enable the predictive design of damage resistant glass, which is of paramount interest today with the increasing demand for light-weight and durable glass for applications in buildings, automobiles and touch screen displays.

Dr. Liping Huang did her postdoctoral work at the University of Michigan and North Carolina State University before joining the faculty at RPI in 2008. She won the Norbert J. Kreidl Award, the highest honor bestowed upon a student by the Glass and Optical Materials Division of the American Ceramic Society, in 2003. Dr. Huang has published many articles and given numerous lectures at conferences and symposia. She also serves as a technical reviewer for journals and books, including Physical Review Letters, Physical Review, The Journal of Physical Chemistry, Journal of Physics: Condensed Matter, Molecular Simulation, Ceramic Transactions, and Science of Advanced Materials.

Century House  
977 New Louden Rd, Latham, NY

Cocktail / Networking hour 5:30 pm  
Dinner 6:30 pm  
Technical presentation to follow

RSVP dinner choice by Monday, March 17, 2014  
To Jennifer Kruk, 518-395-4401 or Jennifer.Kruk@gmail.com  
Dinner Choice (pick one): Lemon Dill Buerre Blanc Salmon, Sirloin Steak, or Vegetarian Tortellini Maribou  

$20/professionals and guests; $15/retirees; $10/students

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