

- 3:50 D-68 *Invited*—Transient Microstructure of Thermoplastic Polyurethane Nanocomposites Under Uniaxial Deformation
H. Koerner, R. Vaia, *Air Force Research Lab, WPAFB, OH*
- 4:20 D-75 Preferred Orientation in Polymer Fibers
C. Burger, B.S. Hsiao, B. Chu, *Stony Brook University, Stony Brook, NY*
- 4:40 D-11 Polymer-Oriented Tools in the *Irena* Package for Small-Angle Scattering Data Analysis
J. Ilavsky, *APS- Argonne National Laboratory, Argonne, IL*
- 5:00 D-99 Relaxation Behaviors of Nanoparticles in Polymer Composites: Influence of Local Frictions by Polymer Chains
B. Lee, P. Thiagarajan, S. Narayanan, A. Sandy, C.-T. Lo, V. Pol, D. Bohnsack, *Argonne National Laboratory, Argonne, IL*

WEDNESDAY PM

XRD

HANAWALT AWARD SESSION

NANOSTRUCTURE STUDIES USING THE ATOMIC PAIR DISTRIBUTION FUNCTION

Chair: E. Bozin, Brookhaven National Laboratory, Upton, NY

EVERGREEN D

All presentations are invited

- 1:20 **Presentation of the 2010 Hanawalt Award**
Presented to Takeshi Egami, University of Tennessee, Knoxville, TN and Simon Billinge, Columbia University, New York, NY
Presented by Robert L. Snyder, Chairman of the Denver X-ray Conference
- 1:30 D-87 **Recent Advances in the PDF Technique (2)**
T. Egami, University of Tennessee, Knoxville, TN
- 2:15 D-100 **Structure at the Nanoscale: Atomic Pair Distribution Function Analysis of Nanostructured Materials**
S. Billinge, Columbia University, New York, NY
- 3:00 **Break**
- 3:30 D-92 **Structure of Crystallographically Challenged Hydrogen Storage Materials**
H.J. Kim, Los Alamos National Laboratory, Los Alamos, NM
- 3:55 D-97 **PDF Analysis of Glassy and Nanocrystalline Metallic Materials**
W. Dwowski, Y. Iwashita, T. Egami, University of Tennessee, Knoxville, TN
S.H. Overbury, ORNL, Oak Ridge, TN
- 4:20 D-89 **Force Measurement of DNA with Pair Distribution Function**
X. Qiu, National Institutes of Health, Bethesda, MD
- 4:45 D-83 **Element-Specific Structure of Nanosized Materials by High-Energy Resonant X-ray Diffraction and Differential Atomic Pair Distribution Functions**
V. Petkov, Central Michigan University, Mt. Pleasant, MI
S. Shastri, APS- Argonne National Laboratory, Argonne, IL
- 5:10 D-98 **Progress with the GSAS-II Software Package for Crystallography**
B.H. Toby, R.B. Von Dreele, APS - Argonne National Lab, Argonne, IL