

CNM Workshop 2: Current Trends and Opportunities in Nanobiointerface Materials

Wednesday, May 4

- 9:00 – 9:20 Introduction
- 9:20 – 10:00 Darrin Pochan (University of Delaware)
Biomolecules for Non-biological Things: Polymer Construction through Peptide 'Bundlemer' Design and Solution Assembly
- 10:00 – 10:40 Rohit Batra (Center for Nanoscale Materials, Argonne National Laboratory)
Artificial Intelligence-guided Discovery of Self-assembly Peptide Sequences Using Monte Carlo Tree Search and Coarse-grained Simulations
- 10:40 – 11:20 Byeongdu Lee (Advanced Photon Source, Argonne National Laboratory)
Use of X-ray Scattering for Assemblies of DNA Functionalized Nanoparticles
- 11:20 – 12:00 Murali Ghantasala (Western Michigan)
3D Printed PLA and ABS Lab-on-chip Structures for Cell Growth Studies
- 12:00 – 1:00 Break
- 1:00 – 1:40 Adam Gormley (Rutgers University)
Machine Learning-guided Robotics for the Data-driven Design of Soft Materials
- 1:40 – 2:20 Jie Xu (Center for Nanoscale Materials, Argonne National Laboratory)
Autonomous Robotic Platform (PolyBot) for Controlled Conjugated Polymer Processing
- 2:20 – 3:00 Julia Ortony (Massachusetts Institute of Technology)
Reactive Supramolecular Nanostructures
- 3:00 – 3:40 Peter Maurer (University of Chicago)
Quantum Sensing: Probing Biological Systems in a New Light
- 3:40 Closing Statements