3D Printing of Polymers: Materials and Processes

IPRIME Mid-year Workshop

Tuesday, January 9, 2018
8:20 AM – 3:20 PM, Keller Hall, Rm 3-210
University of MN, Twin Cities East Bank Campus

Description
This workshop will focus on the materials science and processing of polymers in the context of 3D printing. Presentations from academia, national labs and industry will cover a range of 3D Printing methods and materials, and span a variety of applications.

8:00 **Registration, Coffee**

8:15 **Welcome and Introduction**

8:20 **Designing Advanced Materials for Advanced Manufacturing: Polymers for Performance in 3D Printed Objects**
Tim Long, Virginia Tech

9:00 **Advanced Polymer Materials for Additive Manufacturing**
Craig Gorin, Dow Chemical

9:40 **Fundamental Polymer Physics of Materials Extrusion Additive Manufacturing**
Kalman Migler, NIST

10:20 **Break**

10:40 **Moving beyond prototypes: Materials challenges for stereolithography in production applications**
Eric Arndt, Formlabs

11:20 **3D Bioprinting: Processes, Materials, and Tissue Engineering Applications**
Wei Zhu, UCSD

12:00 **Lunch**

12:40 **Innovation in 3D Printing Materials**
Sumeet Jain, Sartomer/Arkema

1:20 **3D Printing Thermosets**
Cora Leibig, Chromatic 3D Materials

2:00 **3D Printing at Stratasys: Introduction to PolyJet technology and FDM of Composites**
Victor Jaker, Stratasys

2:40 **Additive Manufacturing of PTFE**
Per Nelson and Jeff Bartow, 3M

3:20 **Adjourn**