

Sunday, Sept 22, 6:30 – 9:00

6:30 – 9:00 Wine & Cheese Reception & Dinner

Monday, Sept 23, 8:00 – 12:00

Photoinitiator Systems, Polymerization Kinetics, and Emerging Applications

Session Chair: Mike Idacavage

- 8:00 – 8:10 **Chris Bowman**, Welcome and Opening Remarks
- 8:10 – 8:40 **Xavier Allonas**, University of Haute Alsace
Novel Series of Photobase Generators for Polymerization Reactions
- 8:40 – 9:10 **Masamitsu Shirai**, Osaka Prefecture University
Surface Functionalization of UV Cured Resin: Application to UV Imprint Lithography
- 9:10 – 9:40 **Jeffrey Stansbury**, University of Colorado - Denver
Simultaneous UV-Vis Photometry and FT-NIR Spectroscopy Applied to Photopolymerization
- 9:40 – 9:55 **Break**
- 9:55 – 10:10 **Darrin Leonhardt**, Heraeus Noblelight Fusion UV
Advancements in UV LED Technology and the Impact on UV Curing Applications
- 10:10 – 10:25 **Bernd Strehmel**, University of Applied Sciences Krefeld
NIR-Sensitized Photoinitiated Photopolymerization of Multifunctional Acrylic Esters in Model Systems and Industrial Coatings
- 10:25 – 10:40 **Alan Aguirre**, University of Colorado
Photo-Activated Redox Initiation of Polymerization via Energy-Storage that Mimics Photosynthesis
- 10:40 – 10:52 **Rong Bao**, IST America Corp.
Using Con-focus RAMAN method to analyze Double Bond Conversion at top 1 micron depth /far from the air in Optical functional hard coating Film
- 10:52 – 11:04 **Kiyoko Kawamura**, Heraeus Noblelight Fusion UV
Influence of Light Sources for Micro Embossed UV Coatings
- 11:04 – 11:16 **Pamela Shapiro**, Netzsch Instruments North America, LLC
Optimizing of UV Coatings and their Curing Behavior by Means of Thermal Analysis
- 11:16 – 11:30 **Kurt Dietliker**, ETH Zurich
Photoinitiators in a Changing Environment
- 11:30 – 12:00 **General Discussion**
- 12:00 – 1:30 **Lunch**

Monday, Sept 23, 1:30 – 6:30

Hybrid Systems and Optical Applications

Session Chair: Allan Guymon

- 1:30 – 1:50 **Marco Driessen**, DSM Ahead
Network Development of Epoxy-Acrylate Hybrids for Stereolithography: A Hyphenated Laser RT-DMA/NIR Study
- 1:50 – 2:05 **Matthias Edler**, University of Leoben
UV-Light Induced Modulation of Materials Properties of ROMP Derived Polymers Bearing Ortho-Nitrobenzyl and Phenyl Ester Groups
- 2:05 – 2:20 **Andreas Oesterreicher**, University of Leoben
Manufacturing of 3D-Polymer Microstructures via Two-Photon Induced Thiol-Ene Reaction
- 2:20 – 2:40 **Robert Liska**, Vienna University of Technology
Advanced Applications of Storage Stable Thiol-Ene Formulations
- 2:40 – 2:55 **Break**
- 2:55 – 3:20 **Robert McLeod**, University of Colorado
A predictive Reaction/Diffusion Model for Two-Component Diffusive Photopolymers
- 3:20 – 3:35 **Martha Baylor**, Carleton
Monolithic Integration of Optical Waveguide and Fluidic Channel Structures Using a Thiol-Ene/Methacrylate Photopolymer
- 3:35 – 4:05 **General Discussion**
- 3:00 – 6:30 **Vendor Exhibit**
- 4:30 – 6:30 **Poster Session I**

Tuesday, Sept 24, 8:00 – 12:00

Adhesion and Novel Applications

Session Chair: Celine Croutxe-Barghorn

- 8:00 – 8:25 **Derek Patton**, University of Southern Mississippi
Bioinspired Design of Functional Films via Thiol-Ene Photopolymerization
- 8:25 – 8:40 **Mike Idacavage**, Esstech Inc.
Achieving Adhesion to Difficult Metal and Plastic Substrates
- 8:40 – 8:55 **Alessandra Vitale**, Politecnico di Torino
Undercuring and Oxygen Inhibition as Strategies for Bonding and Patterning Fluorinated Photopolymers
- 8:55 – 9:20 **Stephanie Bryant**, University of Colorado
Cell-Laden Photopolymerized Hydrogels for Tissue Engineering: From encapsulation to in vivo performance
- 9:20 – 9:35 **Break**

- 9:35 – 9:55 **Paul Ragogna**, Western University
T1.5 FromFire to Ice: Using Phosphonium Salts in UV Curable Formulations as Scaffolds for Functional Materials
- 10:00 – 10:20 **Jeremiah Johnson**, Massachusetts Institute of Technology
T1.6 Photo-Controlled Growth of Telechelic Polymers and Polymer Gels
- 10:20 – 10:35 **Keith Hearon**, Texas A&M University
T1.7 Thiol-Ene and Electron Beam Crosslinked Polyurethane Shape Memory Polymers with Tunable Mechanical Properties
- 10:35 – 10:50 **Devatha Nair**, University of Colorado
T1.8 Dual-Cure (Two-Stage Reactive) Shape Memory Polymer Networks for Arthroscopic Procedures
- 10:50 – 11:05 **Darryl Boyd**, Naval Research Laboratory
T1.9 The Fabrication and Modification of Novel Thiol Click Polymer Microfibers
- 11:05 – 11:30 **Sergei Nazarenko**, University of Southern Mississippi
T1.10 How Thiol-Ene Networks Burn: Recent Results on their Thermal Stability and Flammability
- 11:30 – 12:00 **General Discussion**
- 12:00 – 1:30 **Lunch**

Tuesday, Sept 24, 1:30 – 6:30

Cationic/Hybrid Polymerizations and Structured Polymers

Session Chair: Chris Bowman

- 1:30 – 1:55 **Marco Sangermano**, Politecnico di Torino
Cationically UV-Cured Functional Coatings
- 1:55 – 2:20 **James Crivello**, Rensselaer Polytechnic Institute
Complexation as a Strategy for the Modification of Onium Salt Cationic Photoinitiators
- 2:20 – 2:40 **Ricardo Acosta**, Centro de Investigacion en Quimica Aplicada
Development of a Photopolymerizable System Epoxy-Amine/Thiol-Ene
- 2:40 – 2:55 **Break**
- 2:55 – 3:20 **Celine Croutxe-Barghorn**, University of Haute Alsace
Light Induced Self-Assembly for the Generation of Mesosstructured Films
- 3:20 – 3:45 **Allan Guymon**, University of Iowa
Photopolymerization in Lyotropic Liquid Crystal Templates for Development of Nanostructured Hydrogels
- 3:45 – 4:15 **General Discussion**
- 3:00 – 6:30 **Vendor Exhibit**
- 4:30 – 6:30 **Poster Session II**

Wednesday, Sept 25, 8:00 – 12:00

Emerging Applications

Session Chair: James Crivello

- 8:00 – 8:30 **Christopher Bowman**, University of Colorado
Photopolymerizations Based on the Cu-Catalyzed Azide-Alkyne Reaction
- 8:30 – 9:00 **Christopher Ellison**, University of Texas at Austin
Fiber Manufacturing Using Photopolymerizations
- 9:00 – 9:25 **Xavier Coqueret**, Universite de Reims Champagne Ardenne
Hybrid Free-Radical and Cationic Photo-Polymerization of Monomers Derived from Vegetable Oils – Control of Competitive Processes by Experimental Design
- 9:25 – 9:40 **Break**
- 9:40 – 10:05 **Hadley Sikes**, Massachusetts Institute of Technology
Using Polymerization Reactions in Low-Cost Diagnostics
- 10:05 – 10:30 **Brad Berron**, University of Kentucky
Development of Photopolymer Coatings for Large-Scale, High-Purity, Cellular Isolation
- 10:30 – 10:55 **Paige Buchanan**, University of Southern Mississippi
Application of the Thiol-Ene "Click" Reaction to the Synthesis of Novel Polymer Networks
- 10:55 – 11:10 **Veronika Strehmel**, University of Applied Sciences
Photoinduced Polymerization of Ionic Liquid Monomers Using A Habi-Donor System
- 11:10 – 11:25 **Matthew Libera**, Stevens Institute of Technology
Poly(ethylene glycol) As a Biointeractive E-Beam Photoresist
- 11:25 – 12:00 **General Discussion & Closing Remarks**