

All lectures will be held in the Signers Ballroom

Sunday, November 12

Technical Program

3:00 PM REGISTRATION BOOTH OPENS | LOCATION: QUEEN STREET GALLERY

LECTURE SESSION I – DISCUSSION LEADER: KRIS MATYJASZEWSKI

4:00 PM 1. **Bert Klumperman, Stellenbosch University**
The Intricacies of Maleic Anhydride Copolymerizations

4:30 PM 2. **Alexandru Asandei, University of Connecticut**
Photo-Controlled Radical Homo- and Block-Copolymerization of Fluoroalkenes

5:00 PM 3. **Jorge F.J. Coelho, University of Coimbra**
Reversible Deactivation Radical Polymerization: A New Life for Poly(vinyl chloride)

5:30 PM 4. **Eva Harth, University of Houston**
Methodologies to Combine Insertion Polymerization Techniques with Radical Polymerization

6:00 PM OPENING RECEPTION | LOCATION: PLANTERS SUITE

7:00 PM END DAILY SESSION

Monday, November 13

7:30 AM CONTINENTAL BREAKFAST | LOCATION: IRON ROSE

LECTURE SESSION II – DISCUSSION LEADER: BRENT SUMERLIN

8:30 AM 5. **Erin E. Stache, Princeton University**
Cobalt Mediated Radical Polymerizations

9:00 AM 6. **Rinaldo Poli, Laboratoire de Chimie de Coordination**
Limits of OMRP: The Case of Palladium

9:30 AM 7. **Allan Guymon, University of Iowa**
Controlled Radical Photopolymerization and Photoinitiation to Direct Network Structure

10:00 AM BREAK

LECTURE SESSION III – DISCUSSION LEADER: NICK TSAREVSKY

10:30 AM 8. **Masami Kamigaito, Nagoya University**
Synergistic Progress of Living Cationic and Radical Polymerization

11:00 AM 9. **C. Adrian Figg, Virginia Tech**
Using Photoredox Chemistry to Overcome Monomer Limitations in RAFT Polymerization

11:30 AM 10. **Makoto Ouchi, Kyoto University**
Rational Design of Post-Polymerization Modification Monomers for a Library Synthesis of Sequence/Tacticity-Controlled Polymers

12:00 PM LUNCH ON YOUR OWN

Monday, November 13 (continued)

LECTURE SESSION IV - DISCUSSION LEADER: ATHINA ANASTASAKI

- 2:30 PM 11. **Craig Hawker, University of California, Santa Barbara**
Controlled Radical Polymerization of α -Lipoic Acid: A General Route to Degradable Vinyl Copolymers
-
12. **Speaker Cancellation**
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- 3:00 PM 13. **Mingjiang Zhong, Yale University**
Microstructure Engineering of Polymer Chains by Controlled Radical Polymerization
-
- 3:30 PM 14. **Dominik Konkolewicz, Miami University**
Photopolymerization and Photodegradation of Vinyl Ketone Polymers
-
- 4:00 PM 15. **Nathan Gianneschi, Northwestern University**
Backbone Chemistry Matters: Bioactivity of Protein-Like Polymers
-
- 4:30 PM BREAK
-

LECTURE SESSION V - DISCUSSION LEADER: RINALDO POLI

- 5:00 PM 16. **Athina Anastasaki, ETH Zurich**
Photocatalytic ATRP and RAFT Depolymerization; Temporal Regulation at Low Catalyst Loadings
-
- 5:30 PM 17. **Xiangcheng Pan, Fudan University**
Heteroatom Radical Controlled Polymerization
-
- 6:00 PM END DAILY SESSIONS
-
- 6:00 PM POSTER SESSION AND RECEPTION | LOCATION: MIDDLETON ROOM
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Tuesday, November 14

- 7:30 AM CONTINENTAL BREAKFAST | LOCATION: IRON ROSE
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LECTURE SESSION VI - DISCUSSION LEADER: BERT KLUMPERMAN

- 8:30 AM 18. **Steven Bowles, PPG**
Adventures in Commercializing Low Copper (ICAR) Controlled Radical Polymerization (CRP)
-
- 9:00 AM 19. **Joanna Pietrasik, Lodz University of Technology**
Biomedical Applications of Polymers with Diverse Architectures
-
- 9:30 AM 20. **Jung Kwon (John) Oh, Concordia University**
Reactive Block Copolymer Strategy toward Development of Dynamic Poly(hindered urea) Covalent Adaptive Networks for Reprocessable Energy Harvesting Triboelectric Nanogenerators
-
- 10:00 AM BREAK
-

Tuesday, November 14 (continued)

LECTURE SESSION VII - DISCUSSION LEADER: ADRIAN FIGG

- 10:30 AM 21. **Chuanbing Tang, University of South Carolina**
Harnessing Controlled Polymerization towards Robust Antimicrobial Polymers
-
- 11:00 AM 22. **Cyrille Boyer, University of New South Wales**
Using Living/Controlled Radical Polymerization in Photocuring 3D Printing
-
- 11:30 AM 23. **Nico Bruns, Technical University of Darmstadt**
Biocatalytic Radical Polymerizations to Create Artificial Cells and Engineer the Surface of Living Cells
-
- 12:00 PM LUNCH ON YOUR OWN
-

SESSION VIII – DISCUSSION LEADER: ERIN STACHE

- 2:30 PM 24. **Julien Nicolas, University of Paris-Saclay**
Vinyl Polymer Engineering for the Development of New Materials for Biomedical Applications
-
- 3:00 PM 25. **Mathias Destarac, Paul Sabatier University**
Tailored Polyvinylamines by RAFT Polymerization
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- 3:30 PM 26. **Edmondo Benetti, University of Padova**
Opportunities and Challenges in Fabricating and Applying Polymer Brushes
-
- 4:00 PM 27. **Shigeru Yamago, Kyoto University**
Synthesis of Dendritic Hyperbranched Polymers by Controlled Radical Polymerization
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- 4:30 PM BREAK
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SESSION IX – DISCUSSION LEADER: CHRISTIAN PESTER

- 5:00 PM 28. **Michael Cunningham, Queen's University**
Block-Random Copolymers: Self-Assembly Behavior and Role in Stabilizing Nanoparticle Dispersions
-
- 5:30 PM 29. **Chi-How Peng, National Taiwan University**
Reversible-Deactivation Radical Polymerization of Vinyl Acetate Mediated by Schiff Base Derivatives
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- 6:00 PM 30. **Graeme Moad, CSIRO**
Electrochemically Initiated RAFT Polymerization
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- 6:30 PM END DAILY SESSIONS, DINNER ON YOUR OWN
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Wednesday, November 15

7:30 AM CONTINENTAL BREAKFAST | LOCATION: IRON ROSE

LECTURE SESSION X - DISCUSSION LEADER: HAIFENG GAO

8:30 AM 31. **Michael Bockstaller, Carnegie Mellon University**
Copolymer Brush Particle Hybrid Materials with 'Recall-and-Repair' Capability

9:00 AM 32. **Christian Pester, Pennsylvania State University**
Polymer Brush-Based Heterogeneous Photocatalysis

9:30 AM 33. **Nicholas Warren, University of Leeds**
Autonomous Reactor Platforms for Next Generation Polymer Synthesis

10:00 AM BREAK

LECTURE SESSION XI - DISCUSSION LEADER: NICHOLAS WARREN

10:30 AM 34. **Antonina Simakova, BioHybrid Solutions**
NanoArmor® Technology for Delivery of Optimized Biotherapeutics

11:00 AM 35. **Greg Qiao, University of Melbourne**
Latest RAFT Processes Under Temporal Controls

11:30 AM CLOSING REMARKS | MEETING ADJOURNS

MONDAY, NOVEMBER 13, 2023

POSTER PROGRAM

1. **Jacqueline E. Anatoł, Taylor Sheehy, Karan Arora, John T. Wilson**
Vanderbilt University
Macrophage-Targeted Polymer-Drug Conjugates for STING Pathway Activation to Improve Cancer Immunotherapy
2. **Ian C. Anderson and C. Adrian Figg**
Virginia Tech
Protein Photocatalysts for PET-RAFT Polymerization
3. **Jared G. Baker, Richard Zhang, and C. Adrian Figg**
Virginia Tech
Installing A Single Monomer Within Acrylic Polymers Using Photoredox Catalysis
4. **Axel Bossavit, Anthony Kermagoret, Didier Siri, Vincent Monteil, and Didier Gimes**
Aix Marseille University
Experimental and Computational Study of Titanium Complexes towards Controlled Copolymerization of Olefins and Vinyl Polar Monomers
5. **Jared I. Bowman, Cabell B. Eades, Maria A. Vratsanos, Nathan C. Gianneschi, and Brent S. Sumerlin**
University of Florida
Ultrafast Xanthate-Mediated Photoiniferter Polymerization-Induced Self-Assembly (PISA)
6. **Clément Chambrial, Sébastien Maria, Didier Gimes, Marc Ramuz, and Thierry Djenizian**
Aix Marseille University
Synthesis and Characterization of Self-Healing Copolymer Electrolytes for Stretchable Li-Ion Microbatteries
7. **I-Hsiang Chang**
National Tsing Hua University
Exploring the Potential of Organomediator Tropone and its Derivatives for Reversible-Deactivation Radical Polymerization in Aqueous Medium
8. **Samantha M. Clouthier, Jiajia Li, Joji Tanaka, and Wei You**
University of North Carolina
Expanding the Scope of RAFT Step-Growth
9. **Sajjad Dadashi-Silab, Cristina Preston-Herrera, and Erin E. Stache**
Cornell University
Cobalt Catalysis in Atom Transfer Radical Polymerization
10. **Cabell B. Eades, Diba Allameh Zadeh, Jared I. Bowman, Daniel R. Talham, and Brent S. Sumerlin***
University of Florida
Hybrid Polyion Complexes: Application and Advancement
11. **Hui Wang, Chantal J. Abou-Fayssal, Eric Manoury, Rinaldo Poli, and Christophe Fliedel**
University of Toulouse
Core-Crosslinked Micelles and Nanogels with an Anionic Poly(styrene sulfonate)-Based Shell Made by RAFT Polymerization: A New Tool for Aqueous Biphasic Hydrogenation Catalysis
12. **Banruo Huang, Mizhi Xu, and Craig J. Hawker**
University of California, Santa Barbara
Synthesis and Reactivity of Diazirine-Containing Copolymers
13. **Rhys Hughes**
University of Florida
Electrochemical Modification and Degradation of Polymers
14. **Vianna F. Jafari, Ross Wylie, and Greg G. Qiao**
University of Melbourne
Accelerated Photo-Iniferter RAFT Polymerization Using Ionic Liquid-Organic Solvent as Reaction Media

POSTER PROGRAM

15. **Megan E. Lott, Lucca Trachsel, Emmanuelle Schué, Cullen L. G. Davidson, IV, Rebecca A. Olson S., Diego I. Pedro, W. Gregory Sawyer, and Brent S. Sumerlin**
University of Florida
Ultra-High Molecular Weight Triblock Copolymers via Inverse Miniemulsion Photoiniferter Polymerization
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16. **Chantal J. Abou-Fayssal, Hui Wang, Ambra M. Fiore, Christophe Fliedel, K. Philippot, M.M. Dell'Anna, P. Mastroilli, Leonhard Schill, Anders Riisager, Rinaldo Poli, and Eric Manoury**
CNRS
Metallic Nanoparticles in Polymeric Noreactors for Aqueous Biphasic Catalysis
-
17. **Elizabeth A. Murphy, Stephen J. Skala, Yan-Qiao Chen, Dimagi Kottage, Kaitlin Albanese, Jacob R. Blankenship, Allison Abdilla, Morgan W. Bates, Cheng Zhang, Christopher M. Bates, and Craig J. Hawker**
University of California, Santa Barbara
Efficient Creation and Morphological Analysis of Block Copolymers
-
18. **Sofia L. Goodrich, Madison E. Ross, James B. Young, and Brent S. Sumerlin**
University of Florida
Democratization of Sono-RAFT: Reversible-Deactivation Radical Polymerization with Low-Frequency Ultrasound
-
19. **Ariana Tamura**
University of Florida
Stimuli-Responsive Statistical and Block Copolymers as Synthetic Mucin Replacements
-
20. **Lucca Trachsel, Kevin A. Stewart, Jason D. Hillman, and Brent S. Sumerlin**
University of Florida
 β -Triketones as Reactive Handles for Polymer Functionalization via Dynamic Diketoenamides
-
21. **Adam Voelker**
BioHybrid Solutions
Preparation and Characterization of Bioconjugates Using NanoArmor® Technology
-
22. **Mizhi Xu, Banruo Huang, and Craig J. Hawker**
University of California, Santa Barbara
Polymeric Diazirines as Efficient Cross-Linking Agents
-
23. **James B. Young, Rhys W. Hughes, Ariana M. Tamura, Laura S. Bailey, Kevin A. Stewart, and Brent S. Sumerlin**
University of Florida
Bulk Depolymerization of Polymethacrylates for Reversion to Monomer and Thermoplastic Property Augmentation
-
24. **Xiaomeng Li, Yishayah Bension, and Chuanbing Tang**
University of South Carolina
Sustainable Polymer: Mimicking Polystyrene
-
25. **Luis Ramos, Huina Lin, and Chuanbing Tang**
University of South Carolina
Synthesis of Mechanophore-Containing Polymers Derivatives via Atom Transfer Radical Polymerization for Mechanochemistry
-
26. **Stéphane Mazières, Andrii Karpus, Anna Stasiuk, Oleksandr Ivanchenko, Simon Harrisson, Rinaldo Poli, Eric Manoury, and Mathias Destarac**
University of Toulouse
Switchable RAFT Polymerization via Chain-End Chemical Modification