Sunday, November 8 **TECHNICAL PROGRAM**

3:00 PM	REGISTRATION OPENS (remains open through meeting)	
4:00 PM	**Opening Wine Reception - Marriott Lobby Bar**	

Monday, November 9

7:00 AM	MORNING COFFEE WITH LIGHT PASTRIES AND FRUIT	
	Industry Perspective and Practices **Kat Knauer, Discussion Leaders**	
8:00 AM	OPENING REMARKS	
8:15 AM	**KEYNOTE:** Taylor Uekert, National Laboratory of the Rockies *Systems analysis to guide emerging plastic recycling strategies*	**1**
9:00 AM	Jill Martin, Dow Chemical Company *Moving from Commitments to Value-Added Implementation: Opportunities for the evolving plastics circular economy*	**2**
9:30 AM	Timothée Roux, ExxonMobil Global Services Company *Understanding the potential environmental drivers of plastic packaging usage across its lifecycle*	**3**
10:00 AM	Greg Mulholland, Citrine Informatics - **CANCELED** *Making Chemical and Mechanical Recycling More Productive Using AI*	**4**
10:30 AM	**BREAK**	
11:00 AM	Ali Chamas, Lila Sciences *Accelerating Materials Discovery with AI and High-Throughput Experimentation*	**5**
11:30 AM	Carol Shu, The North Face *Designing for the Future: The North Face's Journey Toward Circular and Sustainable Products*	**6**
	SPEAKER CANCELLATION	**7**
12:00 PM	**LUNCH**	

Monday, November 9, cont'd

	Mechanistic Insights in Plastics Recycling **Megan Robertson, Discussion Leader**	
2:00 PM	**POSTER SESSION**	
3:15 PM	**BREAK**	
4:00 PM	Nancy Sottos, University of Illinois Urbana-Champaign *Regenerative Manufacturing of Thermoset Polymeric Materials*	**8**
4:30 PM	Shira Haber, Bar-Ilan University *Molecular Insights into Enzymatic PLA Deconstruction by Solid-State NMR*	**9**
5:00 PM	Chris Tassone, SLAC National Accelerator Laboratory *Polymer Physics for Polymer Upcycling: Solvent and Catalyst Accessibility During Deconstruction and Strain-Induced Structural Evolution in Redesigned Plastics*	**10**
5:30 PM	Sara Orski, NIST *Machine Learning-Enhanced Near-Infrared Spectroscopy for Advanced Polyolefin Differentiation*	**11**
6:00 PM	**DINNER ON YOUR OWN**	

Tuesday, November 10

7:30 AM	MORNING COFFEE WITH LIGHT PASTRIES AND FRUIT	
	Innovation in Plastics Recycling **LaShanda Korley, Discussion Leader**	
8:30 AM	Gregg Beckham, National Laboratory of the Rockies *Recent efforts in chemical recycling of C–C-linked polymers and thermosets*	**12**
9:00 AM	Guoliang (Greg) Liu, Virginia Tech *Upcycling of PVC and other Plastic Waste into Lubricants*	**13**
9:30 AM	Arzu Sandikci, Rhea's Factory *Building Where the Waste Already Is: A Co-located Path to Scaling Enzymatic PET Recycling*	**14**
10:00 AM	**BREAK**	
10:30 AM	Will Dichtel, Northwestern University *Derivatives Enable Mechanical and Chemical Recycling of Polyurethanes*	**15**
11:00 AM	Erin Stache, Princeton University *Visible Light-Driven Recycling for Commodity Chemical Production*	**16**
11:30 AM	Massimiliano Delferro, Argonne National Laboratory *Chemical Recycling and Upcycling of Polyolefin Waste*	**17**
12:00 PM	***OFF-SITE WORKSHOP LUNCH*, Hosted by Cell Press** **D'Argenzio Winery - 1301 Cleveland Ave Ste a, Santa Rosa, CA**	

Tuesday, November 10, cont'd

	Recyclable-by-Design Plastics **Brett Helms, Discussion Leader**	
3:00 PM	Timothy Long, Arizona State University *Printing polyesters: Sustainability from a convergence of form factor and functionality*	**18**
3:30 PM	Brent Sumerlin, University of Florida *Depolymerization as a Design Tool for Next-Generation Polymer Materials*	**19**
4:00 PM	**BREAK**	
4:30 PM	SPEAKER CANCELLATION	**20**
5:00 PM	Wei Zhang, University of Colorado Boulder *From Bond Exchange Principles to Recyclable Thermoset Design*	**21**
5:30 PM	Nicholas Rorrer, National Laboratory of the Rockies *From Beakers to BMCs: Redesigning Bulk Moulding Compounding for Performance and Recyclability*	**22**
6:00 PM	**DINNER ON YOUR OWN**	

Wednesday, November 11

7:00 AM	MORNING COFFEE WITH LIGHT PASTRIES AND FRUIT	
	Sustainable-by-Design Plastics **Kat Knauer, Discussion Leader**	
8:00 AM	Letian Dou, Emory University *Topochemical Polydienes as Next-Generation Sustainable Materials*	**23**
8:30 AM	Andrew Dove, University of Birmingham *From Contaminated Waste to Circular Materials: Selective Chemical Recycling and Upcycling Strategies for PET-Based Plastics*	**24**
9:00 AM	Jia Niu, Boston College *Bioinspired Strategies toward Recycling and Reuse of Synthetic Polymers*	**25**
9:30 AM	**BREAK**	
10:00 AM	Samantha Kristufek, Texas Tech University *Sugar, Polyphenolic, and Catechol Motifs for Sustainable Polymeric Materials*	**26**
10:30 AM	Ty Christoff–Tempesta, University of California, Irvine *Looping monomer design into vinyl polymer circularity*	**27**
11:00 AM	Brooks Abel, University of California, Berkeley *Deconstructable Polymers Synthesized by Cationic Ring-Opening Polymerization*	**28**
11:30 PM	**Closing Remarks**	
	Hotel Checkout 11 AM	

Monday, November 9

POSTER PROGRAM

1. Abdulrahman Alzailaie (George Hube)
   Closing the Inorganics Mass Balance in Plastic Pyrolysis: Addressing Phase Coverage and Analytical Reliability for Contaminant Quantification
2. Nicholas B. Ames (Clemson University), Athira Babu, Ashlyn D. Smith, & Rhett C. Smith
   Sulfur-Canola Oil-Wood Composite Panels with High Flexural Strength and Dimensional Recovery
3. Bahar Aslan (Middle East Technical University), A. Suerkan, B. Erkmen, A. Alparslan, & G. Celik
   Pt-based Heterogeneous Catalysts for Hydrogenolysis of Polyethylene
4. Athira Babu (Clemson University) & Rhett C. Smith
   Thiocracking of Polypropylene-Rich Mixed Plastic Waste
5. Hoda Shokrollahzadeh Behbahani (University of Pennsylvania), Jamie R. Polonet, Aayush Singh, E. Bryan Coughlin, and Karen I. Winey
   Leveraging Reactive Extrusion to Upcycle HDPE via Citraconic Anhydride Grafting
6. Viral Chauhan (University of Houston), Rosalie Berg, & Megan L. Robertson
   Understanding Structure-Property Relationships in Epoxy Thermosets Synthesized from Lignin-Derivable Monomers
7. POSTER CANCELLATION

8. Jason S. DesVeaux (National Laboratory of the Rockies), Stephen H. Dempsey, Kevin P. Sullivan, Ciaran W. Lahive, Hannah M. Alt, Kelsey J. Ramirez, Joel Miscall, Katherine R. Stevenson, Nishka E. Edalbadkar, Elisabeth C. Van Roijen, Taylor Uekert, Katrina M. Knauer, & Gregg T. Beckham
   Comparative Techno-Economic Analysis, Life Cycle Assessment, and Experimental Validation of Post-Consumer Poly(ethylene terephthalate) Recycling by Autoxidation and Acetolysis
9. Alison K. Duckworth (University of Minnesota - Twin Cities), Shao-Yu Lo, & Ian A. Tonks
   LLDPE-like Keto-PE via the Chain-Straightening, Non-Alternating Copolymerization of α-Olefins and CO
10. Clayton Francis (Lawrence Berkeley National Laboratory), Jeremy Demarteau, Mutian Hua, & Brett A. Helms
    Segmented Polyurethane Recycling via Cleavable Bond Integration
11. Mercie N. Hodges (University of Houston), Ronard Herrera Monegro, Ramanan Krishnamoorti, & Megan Robertson
    Upcycling Polypropylene and Bio-Derived Alcohols into Tunable and Processable Polyurethanes
12. Rashmi N. Jayasinghe (Clemson University), Ykok B. Ksor, & Rhett C. Smith
    Two-Stage Synthesis of Poly(alkylene-co-sulfur) from Dithiols and Elemental Sulfur
13. Naba K. Kalita (University of Minnesota)
    Enzyme-Embedded Polyesters for Programmable Degradation and Organic Recycling
14. Dachey Lin (Northwestern University), Francesca D. Eckstrom, Shivani S. Kozarekar, Eugene Y.-X. Chen, & Linda J. Broadbelt
    Mechanistic Modeling of the Thermal Depolymerization of the copolymer of Poly(methyl methacrylate) and Poly(α-methylene-δ-decalactone)

POSTER PROGRAM

15. Sudip Maiti (Lawrence Berkeley National Laboratory), Zachary Fink, Summit K. Shrestha, Cristian P. Woroch, John F. Hartwig, Ashok Ajoy, Cheng Wang, & Brett A. Helms
Selective C−H Nitrene Insertion of Polyolefins

16. Megan C. Murphy (University of California, Santa Barbara), Mizhi Xu, Banruo Huang, Elizabeth A. Murphy, Christopher M. Bates, & Craig J. Hawker
Diazirine-Functionalized Norbornenes Enable Low-Loading Crosslinking for Durable ROMP-Derived Materials

17. Tung Nguyen (Northwestern University), Zhiqi He, Alex Shaw, Dylan Walsh, Linda Broadbelt, Ive Hermans, & Shannon Stahl
Upcycling Polyolefins via Oxidation: Mechanistic Modeling of Decane Oxidation as a Model Compound

18. Mina Oh (University of California, Berkeley), Julia Musumeci, Eric A. Dailing, Frank A. Leibfarth, & Brett A. Helms
Polyolefin Blends with Flexible Crosslinkers Enabled by C–H Activation

19. Katrina Puffer (National Laboratory of the Rockies), Kevin Topolski, Sophia Hofmann, Jason DesVeaux, & Katrina Knauer
Developing e-waste plastic recycling strategies

20. David Santiago (University of Minnesota), Mara Kuenen, Brenden Hoehn, & Marc Hillmyer
Scalable approach to recyclable and reprocessable crosslinked polyethylene utilizing hydroxy telechelic precursors

21. Daniel Seyedebrahimi (University of Massachusetts, Amherst), Sam Chen, Hoda Shokrollahzadeh Behbahani, Karen I. Winey, & E. Bryan Coughlin
Functionalization of polyolefins towards improved polarity and ionomeric properties

22. Carson B. Shivers (Clemson University) & Rhett C. Smith
Thiocracking for e-Waste Upcycling

23. Rhett C. Smith (Clemson University)
Thiocracking of Mixed Waste

24. Kenzie E. Stewart (Colorado School of Mines), Scott R. Cleary, Wyatt F. Brooks, & C. Michael McGuirk
Synthesis of Phase-Pure Sulfated Zirconia Towards Efficient Polyolefin Depolymerization

25. Xavier Westworth (Colorado State University), Yunpeng Gao, & Eugene Chen
Universal dynamic compatibilization enhances recycling of mixed plastics

26. Mason L. Witko (Lawrence Berkeley National Laboratory), Rodney R. Ridley, Clayton Francis, Yicheng Zhou, Zachary Fink, Clarissa Wong, Cheng Wang, & Brett A. Helms
One-Pot Two-Step Deconstruction to Unlock Broad Deconstructability of High-Performance Polydiketoenamine Thermoplastics