

UMASS AMHERST SPRING 2021 VIRTUAL POSTER SYMPOSIUM

Gather.town Poster Session 1: October 13, 2021, 1:40 PM - 2:55 PM

| | Presenter(s) LAST NAME | Presenter(s) FIRST NAME | Author(s) | Poster Title | Advisor(s) |
|------------|---------------------------|----------------------------|---|--|-------------------------|
| A01 | McGlasson | Alex | Alex McGlasson and Laura Bradley | Investigating Time-Dependent Active Motion of Janus Micromotors using Dynamic Light Scattering | Bradley |
| A02 | Mineo | Autumn | Autumn M. Mineo, Maren E. Buck, Reika Katsumata | Molecular Design of "Stress-Free" Films via Dynamic Bond Exchange | Katsumata |
| A03 | Young | Walter | Walter W. Young, Joseph P. Saez, and Reika Katsumata | Rationalizing the Composition Dependence of Glass Transition Temperatures in Amorphous Polymer/POSS Composites | Katsumata |
| A04 | Hamilton | Heather | Heather S.C. Hamilton and Laura C. Bradley | One-Step Synthesis of Responsive Cavity-Forming Zwitterionic Colloids | Bradley |
| A05 | Moed | Demi | Demi E. Moed, Alfred J. Crosby | Controlling the Morphology of Fibrillar Surfaces | Crosby |
| A06 | Xin | Weiyue | Weiyue Xin, Maria Santore | Elastically Control the Positions of Solid Microplates on 2D Fluid Material | Santore |
| A07 | Zhou | Ying | Ying Zhou, Daniel Camarda, Takuya Onishi, Alan Lesser | Sintering of Ultra-High-Molecular-Weight Polymers | Lesser |
| A08 | Thomas | Elayne | Elayne M. Thomas, Ryan C. Hayward, and Alfred J. Crosby | Expanding the deformation mode map for soft-soft adhesive interfaces | Al Crosby, Ryan Hayward |
| A09 | Daguerre-Bradford | John | John Daguerre-Bradford, Alan Lesser | Next Generation Foam Generated Through Frontal Polymerization | Alan Lesser |
| A10 | Enright | Robert | Robert N. Enright and Laura C. Bradley | Self-Wrinkling Polymer Films via Initiated Chemical Vapor Deposition | Bradley |
| A11 | Wei | Xiaoshuang (June) | Xiaoshuang (June) Wei, Laura C. Bradley | Simultaneous Synthesis and Assembly of Polymer Materials at Fluid Interfaces | Bradley |
| A12 | Chethalen, Radzanowski | Roshni, Anne | Roshni Chethalen, Anne Radzanowski, E. Bryan Coughlin | Strategies for the Chemical Upcycling of Polymers | Coughlin |
| A13 | Hackney | Nicholas | Nick Hackney, Chris Amey, Greg Grason | Dispersion, Aggregation and Condensation in Geometrically Frustrated Assembly | Grason |

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|------------|-------------|---------------|--|--|-------------------|
| A14 | Du | Yuhui (Helen) | Yuhui Du, Yifeng Du, Bryan Coughlin | Investigation of the Reaction Kinetics and Mechanisms of Cyclic Ketene AcetalsHomo and Copolymerization | Coughlin |
| A15 | Ghosh, Wong | Ria, Wen-Wei | Ria Ghosh, Wen-Wei Wong, E. Bryan Coughlin | Effect of Chemical Identity and Morphology on Water and Salt Transport in Amphiphilic-Zwitterionic Copolymer Membranes | Coughlin |
| A16 | Petek | Evon | Evon Petek, Zac Ahmad, Reika Katsumata | Wetting Transparency of Ultrathin Polymer Films | Katsumata |
| A17 | Reddy | Abhiram | Abhiram Reddy*, Michael S. Dimitriyev*, Gregory M. Grason | Chain packing "beneath the surface" in complex block copolymer morphologies | Grason |
| A18 | Pagaduan | James | James Nicolas Pagaduan, Sadaki Samitsu, Jordan Varma, Todd Emrick, and Reika Katsumata | Burn-Dry: Fabrication of Porous Carbon Networks via Polymer-Templated Rapid Thermal Annealing | Emrick, Katsumata |
| A19 | Niu | Wuqi | Wuqi Amy Niu, Maria Santore, Sylvia Rivera, Sloan Siegrist | The influence of Depletion Force on Bacterial Surface Adhesion and Cell Growth | Santore |

Gather.town Poster Session 2: October 13, 2021, 3:45 PM - 5:00 PM

| | Presenter(s) LAST NAME | Presenter(s) FIRST NAME | Author(s) | Poster Title | Advisor(s) |
|------------|-----------------------------------|------------------------------------|---|---|-----------------------------------|
| B01 | Meissner | Cornelia | Cornelia Meissner, Todd Emrick, Alfred J. Crosby | Polymer Ribbons as Hierarchically Ordered Mesoscale Building Blocks | Emrick, Crosby |
| B02 | Zhou | Mingjun | Mingjun Zhou, Sarah Perry, Maria Santore | Polymer-Nanoparticle Complex Coacervates | Santore |
| B03 | Wang | Michael | Michael Wang, Kyle Sullivan, Doug M. Hall, Greg M. Grason | From Small to Large: Engineering Geometrically Frustrated Self-Assembly from the Particle Scale | Grason |
| B04 | Kim | Hyemin | Hyemin Kim, James Watkins and Alfred Crosby | Adhesion and Mechanical Properties of Bottlebrush Elastomers | Crosby and Watkins |
| B05 | Srivastava | Satyam | Satyam Srivastava, David A. Hoagland, Thomas P. Russell | Assembly of Anisotropic Nanoparticles on Liquid Surfaces | Thomas Russell and David Hoagland |
| B06 | Bukowski | Cynthia | Cynthia Bukowski, Tianren Zhang, Robert A. Riggleman, Alfred J. Crosby | Relating mechanical response and morphology of ultrathin block copolymer films | Crosby |
| B07 | Trevenen | Sam | Sam Trevenen, Heather S. C. Hamilton, Peter J. Beltramo, Laura C. Bradley | Nanoscale Surface Roughness Decreases Interfacial Capillary Interactions | Beltramo |

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| B08 | Hight-Huf | Nick | Nicholas Hight-Huf, Yehiel Nagar, Adi Levi, James Nicolas Pagaduan, Avdhoot Datar, Reika Katsumata, Todd Emrick, Ashwin Ramasubramaniam, Doron Naveh, and Michael D. Barnes | 2D Hybrid Materials, a Platform for Next Generation Devices | Barnes |
| B09 | Margossian | Khatcher | Khatcher O. Margossian, Cynthia Wang, Siao-Fong Li, Xuhong Chen, Samuel Hoover, Sherri Jin, Pranav Viswanathan, Shibananda Das, Tapas Singha, Kuo Chen, J.P. Mahalik, and Murugappan Muthukumar | Putting entropy to work: how we use disorder to create order in charged polymeric systems | Muthukumar |
| B10 | Sacligil | Ipek | Ipek Sacligil, Christopher W. Barney, Alfred J. Crosby, Gregory N. Tew | Stress-Relaxation of Metal-Ligand Dynamic Networks | Tew |
| B11 | Kizhakkepura | Sonu | Sonu Kizhakkepura, Le Zhou, Miranda Diaz-Infante, John Klier, Todd Emrick, Shelly Peyton | Strain-stiffening Hydrogel as a Dynamic Extracellular Matrix Model | Peyton |
| B12 | Wan | Hao | Hao Wan, Maria Santore | Solid Domain on Giant Lipid Vesicles: Size Effect on Domain Pattern | Santore |
| B13 | Hu | Mingqiu | Mingqiu Hu, Xindi Li, Javid Rzayev, and Thomas P. Russell | Hydrolysis Induced Self-Assembly of High X - Low N Bottlebrush Copolymers | Russell |
| B14 | Chen | Zhan | Zhan Chen, Mingqiu Hu, Xindi Li, Darren Smith, Hong-Gyu Seong, Javid Rzayev, Thomas P. Russell | in-situ hydrolysis of block copolymer at water-oil interface | Russell |
| B15 | Montz | Brian | Brian Montz, Shizhao Lu, Arthi Jayaraman, Derek Lovley, Stephen Nonnenmann, Todd Emrick | Natural and Designer Peptide Nanowires: Conductive 1D Composites and Assemblies | Emrick |
| B16 | Taghon | Meredith | Meredith M. Taghon, Alfred J. Crosby | Using PADMA to understand high-speed contact adhesion dynamics | Crosby |
| B17 | Heng | Joseph | Joseph Heng, Prof. Jiakai Lu | Direct numerical simulation of caking of amorphous food powders | Lu |