



# *Fall Polymer Workshop Event*

## *University of Massachusetts Amherst*

### Soft Material Adhesion

**Tuesday October 10<sup>th</sup> – Thursday October 12<sup>th</sup> 2023**

**Conte Building Seminar Room A110/111**



POLYMER SCIENCE AND ENGINEERING  
UNIVERSITY OF MASSACHUSETTS AMHERST



### ***Tuesday October 10, 2023***

**TIME:**

12:00 pm - 1:00 pm

1:00 pm - 3:00 pm

3:00 pm - 3:30 pm

3:30 pm - 5:00 pm

5:30 pm - 7:30PM

**SESSION:**

Arrival and Check-In

*Introductory Lecture on Polymer Adhesion*

Professor Al Crosby, University of Massachusetts - Amherst

Break

Laboratory Tours

Buffet Dinner and Refreshments (Conte Atrium)



# *Fall Polymer Workshop Event*

## *University of Massachusetts Amherst*

**Wednesday October 11, 2023**

| <b>TIME:</b>        | <b>SESSION:</b>  |
|---------------------|--|
| 8:30 am - 9:00 am   | Arrival, Check-In, and Continental Breakfast (Conte Atrium)  |
|                     | <b>Session Chair: Al Crosby, Polymer Science &amp; Engineering</b>   |
| 9:00 am - 9:45 am   | <i>Peeling in Extreme Environments: From Roadways to Human Skin</i><br>Professor Chelsea Davis, University of Delaware   |
| 9:45am - 10:30 am   | <i>Using ROMP to Control the Mechanics of Bottlebrush Elastomers</i><br>Professor Greg Tew, University of Massachusetts – Amherst  |
| 10:30 am - 10:45 am | Break  |
| 10:45 am – 11:30 am | <i>Exploration of Stimuli Responsive Chemistry and Materials for Industrial Adhesive Systems</i><br>Dr Jason Clapper, 3M   |
| 11:30 am - 12:15 pm | <i>Multifunctional Hydrogel Fibers for Neural Modulation and Recordings</i><br>Professor Siyuan Rao, Binghamton University, SUNY   |
| 12:15 pm - 1:15 pm  | Buffet Lunch in the Conte Atrium   |
|                     | <b>Session Chair: David Hoagland, Polymer Science &amp; Engineering</b>  |
| 1:15 pm - 2:00 pm   | <i>Fun and Profit with Polymers</i><br>Professor Steve Granick, University of Massachusetts - Amherst  |
| 2:00 pm - 2:10 pm   | Break  |
|                     | <b>Session Chair: Melody Morris, Polymer Science &amp; Engineering</b>   |
| 2:10 pm - 2:30 pm   | <i>Designing Polyelectrolyte Complex Adhesives</i><br>Isaac Ramirez Marrero, University of Massachusetts - Amherst   |
| 2:30 pm - 2:50 pm   | <i>Extreme Plasticity, Adhesion, and Nanostructural Changes of Diblock Copolymer Microparticles in Cold Spray Additive Manufacturing</i><br>Ara Kim, University of Massachusetts – Amherst |
| 2:50 pm - 3:10 pm   | <i>Hydrodynamic Flows Decide the Fate of Colloidal Filaments</i><br>Bipul Biswas, University of Massachusetts – Amherst  |
| 3:10 pm - 3:30 pm   | <i>Untangling the Morphology and Properties of Bioinspired Fibrillar, Adhesive Mesoscale Polymer Ribbon Arrays</i><br>Demi Moed, University of Massachusetts – Amherst                     |
| 4:00 pm – 5:30 pm   | Poster Session   |
| 6:00 pm             | Banquet Dinner – Top of the Campus Center – Amherst Room – 10 <sup>th</sup> Floor  |



# *Fall Polymer Workshop Event*

## *University of Massachusetts Amherst*

***Thursday October 12, 2023***

**TIME:**

**SESSION:**

8:30 am - 9:00 am

Arrival, Check-In, and Continental Breakfast (Conte Atrium)

9:00 am - 9:30 am

**Session Chair: Greg Tew, Polymer Science & Engineering**

*Mechanical Aspects of Bacterial Adhesion and Their Consequences*

Professor Maria Santore, University of Massachusetts - Amherst

9:30am - 10:00 am

*Wetting Translucency of Ultrathin Polymer Films*

Professor Reika Katsumata, University of Massachusetts - Amherst

10:30 am - 12:00 pm

Poster Session

12:00 pm

Grab and Go Lunch