



# 2015 Poster List

1.	<b>Structure, Rheology and Transport Properties of Binary Soft Colloids</b> <i>Akanksha Agrawal and Professor Lynden Archer*</i>
2.	<b>Hierarchically-Structured Hematite (<math>\alpha</math>-Fe<sub>2</sub>O<sub>3</sub>) Architectures Achieved by Growth in a Silica Hydrogel</b> <i>Emily Asenath-Smith and Professor Lara Estroff*</i>
3.	<b>Structure-Function Relationships and Failure Mechanics in Articular Cartilage</b> <i>Lena Bartell, Corinne Henak, Jesse Silverberg, Moumita Das, Professor Lawrence Bonassar, and Professor Itai Cohen*</i>
4.	<b>Synthesis and Electrospinning of Block Copolymers</b> <i>Larissa Buttaró, Edurne González, and Professor Margaret Frey*</i>
5.	<b>Investigation of Polycarbonates as a Vaporizable Scaffold for Transient Electronics</b> <i>Katherine Camera and Professor Christopher Ober*</i>
6.	<b>Synthesis and Assembly of 2D COF-like Macrocycles</b> <i>Anton Chavez, Brian Smith, and Professor William Dichtel*</i>
7.	<b>Nanostructured Polymer Brush</b> <i>Wei-Liang Chen and Professor Christopher Ober*</i>
8.	<b>Prescribed Matrix Environments within 3D Tissue Printed Tri-Leaflet Heart Valves Promote Differentiated Phenotypes of Mesenchymal Stem Cell</b> <i>Bin Duan, Laura Hockaday, Kevin Kang, Daniel Cheung, and Professor Jonathan Butcher*</i>
9.	<b>Fluoride Salt Additives for Highly Reversible Metal Batteries</b> <i>Snehashis Choudhury and Professor Lynden Archer*</i>
10.	<b>Synthesis of Ordered Nickel-Molybdenum Compounds for Hydrogen Evolution</b> <i>Peter Csernica, James R. McKone, Professor Francis J. DiSalvo, and Professor Héctor D. Abruña*</i>
11.	<b>Redox-Active Covalent Organic Framework Thin Films for Pseudocapacitive Energy Storage</b> <i>Catherine DeBlase, Kenneth Hernández-Burgos, Katharine Silberstein, Gabriel Rodríguez-Calero, Ryan Bisbey, Professor Héctor Abruña, and Professor William Dichtel*</i>
12.	<b>Highly Stable, High Capacity Li-ion Batteries based on Si Nanoparticle/Nanostructured Graphene/Carbon Hybrids</b> <i>Ling Fei, Yong Seok Kim, Ghazal Shoorideh, and Professor Yong Lak Joo*</i>

13.	<b>Healable Polyhydroxyurethane Thermosets</b> <i>David Fortman, Jacob Brutman, Marc Hillmyer, and Professor William Dichtel*</i>
14.	<b>Asymmetric Organic-Inorganic Hybrid Membrane Formation via Block Copolymer-Nanoparticle Co-assembly</b> <i>Yibei Gu, Rachel Dorin, and Professor Ulrich Wiesner*</i>
15.	<b>One-Pot Synthesis of Hierarchically Macro- and Mesoporous Carbon Materials with Graded Porosity</b> <i>Sarah Hesse, Jörg Werner, and Professor Ulrich Wiesner*</i>
16.	<b>PS-<i>b</i>-PMMA Order to Disorder Transition Kinetics Determination by Laser Induced Millisecond Heating and Micro-Beam GISAXS</b> <i>Alan Jacobs, Clemens Liedel, Professor Christopher Ober, and Professor Michael Thompson*</i>
17.	<b>Thermal Swing Regeneration of Li-Air Battery Cathodes</b> <i>Jangwoo Kim and Professor Yong Lak Joo*</i>
18.	<b>Halogenated Nanographenes: A Bottom-Up Approach To Nanostructured Materials</b> <i>Dan Lehnherr, Samuel Hein, and Professor William Dichtel*</i>
19.	<b>Supported Block Copolymer Membranes for Dynamically Responsive Materials</b> <i>Yuk Mun Li, Yibei Gu, Rachel Dorin and Professor Ulrich Wiesner*</i>
20.	<b>Enhanced Lithium Sulfur Battery with Amine-Functionalized Cathode</b> <i>Lin Ma and Professor Lynden Archer*</i>
21.	<b>Structure and Dynamics of Entangled Polymer Nano-Composites</b> <i>Rahul Mangal, Samanvaya Srivastava, and Professor Lynden Archer*</i>
22.	<b>Charge Transport in Confined Environments of Self-Assembled Stable Radical Polymers</b> <i>Austin M. Moehle, Alicia Cintora, Clemens Liedel, Professor Christopher K. Ober, and Professor Gregory D. Fuchs*</i>
23.	<b>Non-Edible Starch Based Resin for Application in Composites</b> <i>Namrata V. Patil and Professor Anil N. Netravali*</i>
24.	<b>Directed Assembly for Block Copolymer Lithography</b> <i>Shubham Pinge, Jihoon Kim, Durairaj Baskaran, Guanyang Lin, and Professor Yong Lak Joo*</i>
25.	<b>Organic Electrolytes for Symmetric Redox Flow Batteries</b> <i>Rebecca Potash, James McKone, and Professor Hector Abruña*</i>
26.	<b>Polymer/Ceramic Hybrids and Mesoporous Carbon Nanofibers for Energy Applications</b> <i>Soshana Smith, Brian Williams, Joseph Carlin, and Professor Yong Lak Joo*</i>
27.	<b>Self-Assembly Mechanisms and Stability of Covalent Organic Frameworks</b> <i>Brian Smith, Nicky Hwang, Anton Chavez, and Professor William Dichtel*</i>

28.	<b>Understanding Formation Processes of Nanostructured Hybrid Materials by Cryo-TEM</b> <i>Katherine Spoth, Michael Zachman, and Professor Lena Kourkoutis*</i>
29.	<b>Retaining the Activities of Proteins and Fluorophores Attached to Graphene Oxide</b> <i>Chao Sun, Katherine Walker, Devin Wakefield, and Professor William Dichtel*</i>
30.	<b>Design of Mechanochemically Active Interfaces</b> <i>Meenakshi Sundaram and Professor Meredith Silberstein*</i>
31.	<b>Autocatalytic Self-polymerization of Biorenewable Monomers</b> <i>Brandon Tiegs and Professor Geoffrey Coates*</i>
32.	<b>Copper Mediated Surface Initiated Polymerization: A Simple, Oxygen Friendly Method for Preparing Polymer Brushes</b> <i>Hai Quang Tran, Ihsan Amin, Clemens Liedel, Wei-Liang Chen, Aibar Nurmukhanov, Roselynn Cordero, Tao Zhang, Rainer Jordan, and Professor Christopher Ober*</i>
33.	<b>Starch Based "Green" Resin from Raw Plantain Fruit</b> <i>Vaibhavi R. Vaidya and Professor Anil N. Netravali*</i>
34.	<b>Alternating Copolymerization of Propylene Oxide with Biorenewable Terpene-Based Cyclic Anhydrides: A Sustainable Route to Aliphatic Polyesters with High Glass Transition Temperatures</b> <i>Nathan Van Zee and Professor Geoffrey Coates*</i>
35.	<b>Controlling Block Copolymer Composition and Architecture in Functionalized Siloxane-Based Antifouling Coatings</b> <i>Brandon Wenning, Nanette Matos, John Finlay, Nick Aldred, Anthony Clare, and Professor Christopher Ober*</i>
36.	<b>Cylindrical and Gyroidal Mesoporous Carbons with Tunable Properties from Block Copolymer Structure-Direction in Lithium-Sulfur Batteries</b> <i>Joerg Werner, Samuel S. Johnson, Vishal Vijay, and Professor Uli Wiesner*</i>
37.	<b>Hierarchical Porous Carbons Prepared from Resorcinol Formaldehyde Using a Freeze-Casting Method</b> <i>Tiffany Williams and Professor Emmanuel Giannelis*</i>
38.	<b>Controlling Placement of Nanofillers in Electrically Driven Polymer Jets and Its Application to Li-ion Battery Anodes</b> <i>Yevgen Zhmayev, Ghazal Shoorideh, Shubham Pinge, and Professor Yong Lak Joo*</i>
39.	<b>Nanophotonics Enables Spectroscopy on TiO<sub>2</sub> Surfaces</b> <i>Christopher C. Evans, Chengyu Liu, Professor Michal Lipson, and Professor Jin Suntivich*</i>
40.	<b>Sequence-defined Oligothioetheramides</b> <i>Mintu Porel, Joseph Brown, Dana Thornlow, and Professor Christopher Alabi*</i>

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