

2017 ILCEC: Full Agenda

Monday, October 16	
7:30 - 8:00	Breakfast and registration
8:00 - 8:15	R. Verduzco, T. White: opening remarks
8:15 - 9:00	Plenary Keynote: Mark Warner, "Topography from the flash of a lamp?"
9:00 - 12:00	Session: Elasticity and Ordering
9:00 - 9:40	Keynote: Antonio De Simone
9:40 - 10:10	Break
10:10 - 10:30	RLB Selinger, "Modeling perpetual wave motion in a photoactive polymer film"
10:30 - 10:50	F Lancia, "Photo-stiffening of liquid crystal polymer springs"
10:50 - 11:10	CD Modes, "Large deformation effects in shape-responsive nematic solids"
11:10 - 11:30	A Auguste, "Tuning Poisson's ratios through omni-directional soft elasticity"
11:30 - 11:50	Gimenez-Pinto, "Stimulus-responsive boxes and foldable-matter in liquid crystal elastomers: overcoming adjacent-domain unfavorable interactions"
11:50 - 12:10	A Lucantonio, "Coupled swelling and nematic order in liquid crystal gels"
12:10 - 1:30	Lunch
1:30 - 2:10	Keynote: Peter Palffy Muhoray
2:10 - 5:10	Session: Material Physics and Performance
2:10 - 2:40	Invited: Dick James
2:40 - 3:10	Invited: Ryan Hayward, "Photothermally reprogrammable buckling of liquid crystal polymer films"
3:10 - 3:30	Break
3:30 - 4:00	Invited: Kaushik Bhattacharya, "Suppression of wrinkling in liquid crystal elastomers"
4:00 - 4:20	A Jakli, "Thermally Active Liquid Crystal Network Gripper Mimicking the Selfpeeling of Gecko Toe Pads"
4:20 - 4:40	BA Kowalski, "Tailored curvatures in liquid crystal elastomer sheets"
4:40 - 5:00	Hiraoka, "Flexoelectric effect and pyroelectric properties of side-chain type liquid-crystalline elastomers composed of polysiloxane backbone"
5:00 - 5:30	Invited: Tim White, "Programming Elasticity in Liquid Crystalline Elastomers"
6:00 - 8:00	Poster Session and Reception

2017 ILCEC: Full Agenda	
Tuesday, October 17	
7:30 - 8:00	Breakfast and registration
8:00 – 8:40	Keynote: Dick Broer, “Trigger-Induced Oscillatory Dynamics in Liquid Crystal Network Films and Coatings”
8:40 – 12:10	Session: Materials Chemistry: Liquid Crystal Networks and Elastomers
8:40 - 9:10	Invited: Chris Yackaki, “Liquid-Crystal Elastomers for Biomedical Applications”
9:10 – 9:40	Invited: Elda Hegman, “Responsive 3D Spatial Biocompatible LCE with Unique Morphologies as Cell Scaffolds for Tissue Regeneration”
9:40 – 10:00	Break
10:00 – 10:30	Invited Oral: Camilla Parmeggiani: “From microrobots to cell harvesting: one material, multiple applications”
10:30 – 10:50	L Liu, “Organic photothermal conversion reagent/liquid crystal elastomer composites”
10:50 – 11:10	OD Lavrentovich, “Dynamic surface topography of liquid crystalline polymeric coatings with predesigned topological defects”
11:10 – 11:30	PES Silva, “Tuning the curvature and torsion of anisotropic elastic filaments”
11:30 – 11:50	L Cmok, “Magnetically active main-chain liquid crystal elastomers”
11:50 – 12:10	M Babaei, “Indexable Photomotility in Liquid Crystalline Polymers”
12:10 – 12:30	S Yan, “High performance hierarchical photodeformable linear liquid crystal polymer”
12:30 – 1:30	Lunch
1:30 – 2:10	Keynote: Chris Bowman , “Stimuli Responsive Plasticity in Crosslinked Liquid Crystalline Elastomers”
2:10 -	Session: Materials Chemistry – Covalent Adaptive Networks
2:10 – 2:40	Invited: Stuart Rowan , “Disulfide-Based Structurally Dynamic Liquid Crystalline Elastomers as Multi-Stimuli, Multi-Responsive Materials”
2:50 – 3:10	K Yu, “Adaptable Liquid Crystal Elastomer with Dynamic Covalent Bonds”
3:10 – 3:30	NA Traugutt, “Synthesis History of <i>isotropic</i> versus <i>nematic</i> Polydomain Nematic Elastomers Using a Thiol-Acrylate Reaction”
3:30 – 3:50	Break
3:50 – 4:30	Invited: Tomiki Ikeda , “Photomobile polymer materials with programmable functions”
4:30 – 4:50	D Martella, “3D printing for light fueled micro robots”
4:50 – 5:10	Hao Zeng, “Intelligent soft robots”
5:10 – 5:30	M Rogoz, “LCE soft, light-driven robots across (micro)scales”
6:00 – 10:00	Conference Banquet

2017 ILCEC: Full Agenda	
Wednesday, October 18	
7:30 - 8:00	Breakfast and registration
8:00 - 8:40	Keynote: Yanlei Yu: “Electrospinning of Photoresponsive Liquid Crystal Polymers and Bioinspired Adhesion Modulation”
8:40 – 12:00	Session: Advanced Materials and Applications
8:40 - 9:10	Invited: Arri Primagi, “Autonomous, self-regulating liquid-crystal elastomer photoactuators”
9:10 – 9:40	Invited: Nelson Tabiryan, “Technology for producing free-standing thin liquid crystal elastomers patterned with high spatial resolution”
9:40 – 10:10	Break
10:10 – 10:40	Invited: Taylor Ware: “Directed Self-Assembly of Liquid Crystal Hydrogels and Elastomers”
10:40 – 11:00	T Guin, “Photo-Patterned Carbon Nanotube - Liquid Crystal Elastomer Nanocomposites”
11:00 – 11:20	M Prevot, “Preparation of biocompatible, biodegradable, and responsive 3D LCE scaffolds for 3D model tissue”
11:20 – 11:40	AJJ Kragt, “Temperature-responsive reflective coatings based on liquid crystal elastomers and liquid crystalline networks”
11:40 – 12:00	M Saed, “Liquid-Crystalline Elastomers as Substrates for Flexible Electronics”
12:00 – 1:30	Lunch
1:30 -	Session: Shape Programming
1:30 – 2:10	Keynote: Michael Dickey, “Self-folding of Polymer Sheets Using Light ”
2:10 – 2:40	Invited: Shu Yang, “Patterning Topological Defects for Responsive and Foldable Materials”
2:40 – 3:00	MK McBride, “Photoinduced reorganization of alignment in liquid crystalline elastomers: A route to thermoreversible folding and mechano-photopatterning”
3:00 – 3:20	R Verduzco, “Dynamics of LCE robots and their relationship to network properties.”
3:20 – 3:40	Break
3:40 – 4:00	BR Donovan, “LCEs from Thiol-ene Polymerizations”
4:00 – 4:20	D Mistry, “Liquid crystal elastomers – surprising mechanical metamaterial?”
4:20 – 4:40	P Rofouie, “Surface Pattern Formation in Biological Liquid Crystal Membranes”
4:40 – 5:00	OA Khnanchich, “Anisotropic structure in concentrated solutions and gels polymers with different stiffness of the macromolecules”
5:00 – 5:20	A Mukherjee, “Electrical and electro-optical properties of a highly twisted ferroelectric liquid crystal mixture”
5:30 – 7:00	Closing Reception

Posters

1. AR Jennings, "Development of Silicon Based Materials as Nano-inclusions for Liquid Crystalline Elastomers"
2. A Martinez, "Liquid Crystal Elastomer Photo-Origami"
3. JM Boothby, "Controlled actuation in chromonic liquid crystal hydrogels"
4. H Kim, "Tough, light responsive liquid crystal elastomers"
5. NP Godman, "Photopatternable Liquid Crystal Elastomers Prepared via Chain Transfer Agents"
6. CP Ambulo, "3D Printing Reversible Shape-Changing Elastomeric Structures"
7. SK Ahn, "Tailoring Thermomechanical and Actuation Properties of Liquid Crystalline Elastomers"
8. M Leslie, "Shape and Color Tuning in Cholesteric Liquid Crystal Elastomers"
9. S Yan, "High performance hierarchical photodeformable linear liquid crystal polymer"
10. O Wani, "Programming deformation in soft actuators using laser (PICO®) projector"
11. A Mukherjee, "Electrical and electro-optical properties of a highly twisted ferroelectric liquid crystal mixture"