2014
March 3-7
Denver

DPOLY

Division of Polymer Physics

March Meeting Program

APS physics

DPOLY Short Course
Multiscale Computational Approaches for Simulating Polymers from Atomistic to Mesoscale

Saturday, March 1 1:00 p.m. - 5:30 p.m.
Sunday, March 2 9:00 a.m. - 5:00 p.m.

Who Should Attend?
All who are interested in using computer simulations to probe polymers including faculty, industrial scientists, postdoctoral fellows and graduate students will benefit from this course.

Course Description:
The course will present recent advances in simulating polymers capturing the multiple length and time scales that determine their properties. The challenges that arise from the nature of polymers, followed by introduction of computational techniques including Monte Carlo and molecular dynamics simulations carried out on multiple length scales from atomistic simulations to coarse grained models as well as density functional theory methods will be discussed. Coarse graining encapsulating simple bead-spring methods to new approaches which capture the interactions on the atomistic scale and transpose them to a larger length scale will be presented. The basic concepts will be followed by presentations of numerical simulations packages and new computer architectures for practical advice for setting up and running simulations.

Program Topics and Speakers:
Gary Grest (Sandia) – Overview of Methodologies from Atomistic to Mesoscale
Juan de Pablo (U Chicago) – Multi-Length Scale Simulations for Polymers
Roland Faller (UC-Davis) – Coarse Graining Methods for Polymers
Rajiv Kalia (USC) – Atomistic Simulations
Steven Plimpton (Sandia) – Parallel Computing – Tricks of the Trade
Mark Robbins (Johns Hopkins) Modeling Mechanical Properties of Polymer Glasses
M. Scott Shell (UCSB) – Coarse Graining Methods for Fluids/Peptides
Mark Stevens (Sandia) – Membrane Simulations on Multiple Length Scales
Valeriy Ginzburg (Dow) – Computer Modeling in Industry

Organizers:
Gary S. Grest, Sandia National Laboratories
Dvora Perahia, Clemson University

Cover image: Optical micrograph of a diblock copolymer thin film, courtesey of Mark Ilton & Katie Myciak, McMaster University.

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Monday, March 3, 2014, 8:00 am – 11:00 am

Session A14: Invited Session: Industrial Applications of Olefin Block Copolymers

Sponsoring Units: DPOLY
Chair: Brent Neal, Milliken and Company
Room: *301-303*

8:00AM - 8:36AM	A14.00001: (Electro)Mechanical Properties of Olefinic Block Copolymers **Invited Speaker:** Richard Spontak
8:36AM - 9:12AM	A14.00002: Thermoplastic Adhesives based on polyolefin and olefinic copolymers **Invited Speaker:** Rituparna Paul
9:12AM - 9:48AM	A14.00003: The versatility in morphology and physical properties offered by chain shuttled olefin block copolymers **Invited Speaker:** Jeffrey Weinhold
9:48AM - 10:24AM	A14.00004: TBD **Invited Speaker:** Miriam Rafailovitch
10:24AM - 11:00AM	A14.00005: Panel Discussion on Industrial Research for Graduate Students and Postdoctoral Researchers **Invited Speaker:** Brent Neal

Monday, March 3, 2014, 8:00 am – 11:00 am

Session A18: Soft Glassy Materials

Sponsoring Units: DCMP GSNP DPOLY
Chair: Gary Hunter, New York University
Room: *403*

8:00AM - 8:12AM	A18.00001: A Long-Lived Oscillatory Space-Time Correlation Function of Two Dimensional Colloids Jeongmin Kim, Bong June Sung
8:12AM - 8:24AM	A18.00002: Categorizing Dense Attractive 2D Colloidal Packings using Vibrational Modes and Local Structure Matthew Lohr, Tim Still, Kevin Aptowicz, Ye Xu, Matthew Gratale, Arjun Yodh
8:24AM - 8:36AM	A18.00003: Microscopic and mechanical roles of disorder in a jammed polycrystal Nathan Keim, Paulo Arratia
8:36AM - 8:48AM	A18.00004: Flowing properties of quasi-2D emulsions in Couette geometry Carlos Orellana, Eric Weeks
8:48AM - 9:00AM	A18.00005: Equilibrium and non-equilibrium aggregation in two dimensional systems with competing interactions Mahesh Bandi, Tamoghna Das
9:00AM - 9:12AM	A18.00006: Experimental signature of the self-caging in quiescent colloidal glasses Minh Triet Dang, Sanne Loenen, Katharine Jensen, Rojman Zargar, Daniel Bonn, Peter Schall
9:12AM - 9:24AM	A18.00007: Soft Spots in Aging Colloidal Glasses Moyosore Odunsi, Craig Maloney, Eric Weeks
9:24AM - 9:36AM	A18.00008: 3D confinement effect on diffusive behaviors of dense colloidal suspensions Bo Zhang, Xiang Cheng
9:36AM - 9:48AM	A18.00009: Mechanical response of a colloidal glass undergoing repeated local perturbation Tim Still, Ye Xu, Kevin Aptowicz, Arjun Yodh
9:48AM - 10:00AM	A18.00010: Stretched-exponential relaxation in sheared non-Brownian suspensions Joseph Paulsen, Sidney Nagel
10:00AM - 10:12AM	A18.00011: Yielding of glasses -- a dynamic first-order transition? Peter Schall, Triet Dang, Bernd Struth, Dmitry Denisov
10:12AM - 10:24AM	A18.00012: Emergence of cooperativity in plasticity of soft glassy materials Jerome Crassous, Antoine Le Bouil, Axelle Amon, Sean McNamara
10:24AM - 10:36AM	A18.00013: Two step yielding of core-shell microgels: An investigation of ``hard'' and ``soft'' cage yielding mechanisms via Rheo-SANS Javoris Hollingsworth, Zhi Zhou, Song Hong, Guangmin Wei, He Cheng, Charles Han
10:36AM - 10:48AM	A18.00014: Effects of particle softness on shear thickening of microgel suspensions He Cheng, Zhi Zhou, Charles Han
10:48AM - 11:00AM	A18.00015: Tracer motion in a complex environment Vincent Demery, David Dean, Olivier Benichou, Hugo Jacquin

Monday, March 3, 2014, 8:00 am – 11:00 am

Session A19: Focus Session: Theory and Simulations of Macromolecules I - Self Consistent Field Theory

Sponsoring Units: DPOLY
Chair: Roland Faller, University of California, Davis
Room: *404*

8:00AM - 8:12AM	A19.00001: Fluctuating Field-Theoretic Polymer Simulations of Multispecies Melts and Composites Kris Delaney, Wei Li, Dominik Duechs, Glenn Fredrickson
8:12AM - 8:24AM	A19.00002: Theoretical Basis of Monte-Carlo Field Theoretic Simulations David Morse, Mark Matsen, Pawel Stasiak
8:24AM - 8:36AM	A19.00003: Directing the self-assembly of copolymers into a metastable complex network phase via a deep and rapid quench Marcus Mueller, De-Wen Sun
8:36AM - 8:48AM	A19.00004: A massively parallel space-time formulation for SCFT David Ackerman, Baskar Ganapathysubramanian
8:48AM - 9:00AM	A19.00005: Short Polymer Modeling using Self-Consistent Integral Equation Method Yeongyoon Kim, So Jung Park, Jaeup Kim
9:00AM - 9:12AM	A19.00006: Liquid-state integral equations via the self-consistent field approach Issei Nakamura, Zhen-Gang Wang
9:12AM - 9:24AM	A19.00007: Effective potentials for multiscale representations of polymer melts Marina Guenza, James McCarty, Jeremy Copperman, Anthony Clark
9:24AM - 9:36AM	A19.00008: Coherent States Formulation of Polymer Field Theory Xingkun Man, Kris Delaney, Michael Villet, Henri Orland, Glenn Fredrickson
9:36AM - 9:48AM	A19.00009: Semi-flexible polymer brush confined in a nanoslit: A high performance single chain in mean field simulation study Jiuzhou Tang, Xinghua Zhang, Dadong Yan
9:48AM - 10:00AM	A19.00010: Exponential Time Differencing Methods for Numerical Self-Consistent Field Theory Yi-Xin Liu, Hong-Dong Zhang
10:00AM - 10:12AM	A19.00011: DPD with effective pair potential from integral equation theory of molecular liquids Alexander Kobryn, Dragan Nikolic, Olga Lyubimova, Sergey Gusarov, Andriy Kovalenko
10:12AM - 10:24AM	A19.00012: Coarse-grain Tunable Dissipative Particle Dynamics: Droplet Dynamics in Micro- and Nano-emulsions Arman Boromand, Joao Maia
10:24AM - 11:00AM	A19.00013: Self-consistent field theory of wormlike chains and its applications in polymer physics **Invited Speaker:** Jeff Z.Y. Chen

Monday, March 3, 2014, 8:00 am – 11:00 am

Session A20: Focus Session: Microfluidics and Nanofluidics I - The Physics of Confined Fluids

Sponsoring Units: DPOLY DFD GSNP
Chair: German Drazer, Rutgers University
Room: *405*

8:00AM - 8:12AM	A20.00001: Processing Cyclic Peptide-polymer Conjugates in Block Copolymer Thin Films for Sub-nm Porous Membranes Chen Zhang, Ting Xu
8:12AM - 8:24AM	A20.00002: Tunable water desalination across Graphene Oxide Frameworks Adrien Nicolai, Vincent Meunier
8:24AM - 8:36AM	A20.00003: Quantized Water Transport: Ideal Desalination through Graphyne-4 Membrane Chongqin Zhu, Hui Li, Xiao Cheng Zeng, E.G. Wang, Sheng Meng
8:36AM - 8:48AM	A20.00004: Electro-Induced Dewetting and Concomitant Ionic Current Avalanche in Nanopores Xikai Jiang, Jingsong Huang, Bobby Sumpter, Rui Qiao
8:48AM - 9:00AM	A20.00005: Lennard-Jones fluids in two-dimensional nano-pores. Multi-phase coexistence and fluid structure Petr Yatsyshin, Nikos Savva, Serafim Kalliadasis
9:00AM - 9:12AM	A20.00006: Green-Kubo relation and hydrodynamic tails of friction at solid/liquid interfaces Kai Huang, Izabela Szlufarska
9:12AM - 9:24AM	A20.00007: The interplay between apparent viscosity, wettability, and slip in nanoconfined water Elisa Riedo, Deborah Ortiz, Hsiang-Chih Chiu, Suenne Kim
9:24AM - 9:36AM	A20.00008: Unsteady electrokinetic microfluidics with hydrodynamic slippage effect Myung-Suk Chun, Yoona Yang
9:36AM - 9:48AM	A20.00009: Effects of ionic strength on nonlinear electrophoretic mobility of fd virus in solid-state nanopore Wang Miao, Liping Liu, Anna Lu, Hongwen Wu, Prerna Sharma, Zvonimir Dogic, Xinsheng Ling
9:48AM - 10:00AM	A20.00010: Water confinement in three different substances Sahar Mirshamsi, Hai-Ping Cheng
10:00AM - 10:12AM	A20.00011: On the Strong Localization and Rapid Time Scales of Superheating and Vapor Nucleation in Nanopores Edlyn Levine, Gaku Nagashima, David Hoogerheide, Michael Burns, Jene Golovchenko
10:12AM - 10:24AM	A20.00012: Observation of Superheating and Single Bubble Nucleation in Thin, Solid State Nanopores Gaku Nagashima, Edlyn Levine, David Hoogerheide, Michael Burns, Jene Golovchenko
10:24AM - 10:36AM	A20.00013: Escape of water molecular from Carbon Nanotubes Jiaxi Li, Wenfeng Li, Jianwei Zhang
10:36AM - 10:48AM	A20.00014: Multiscale transport concept for nanoporous materials incorporating microstructure and interface properties at nanoconfinement Arturas Ziemys, Miljan Milosevic, Milos Kojic
10:48AM - 11:00AM	A20.00015: Continuum-based multiscale approach to predict the structure and theromdynamic properties of confined fluids S.Y. Mashayak, N.R. Aluru

Monday, March 3, 2014, 8:00 am – 11:00 am

Session A21: Focus Session: Soft Nanoparticles, Block Copolymer Micelles, and Polymersomes I

Sponsoring Units: DPOLY
Chair: Darrin Pochan, University of Delaware
Room: *406*

8:00AM - 8:36AM	A21.00001: Solution Self-Assembly of Globular Protein-Polymer Conjugate Block Copolymers **Invited Speaker:** Bradley Olsen
8:36AM - 8:48AM	A21.00002: Tethered Nanoparticle$-$Polymer Composites: Phase behavior and rheology Rahul Mangal, Lynden A. Archer
8:48AM - 9:00AM	A21.00003: Effect of Protein Surface Potential on Globular Protein-Polymer Block Copolymer Self-Assembly Christopher Lam, Minkyu Kim, Carla Thomas, Dongsook Chang, Gabriel Sanoja, Chimdimma Okwara, Bradley Olsen
9:00AM - 9:12AM	A21.00004: Equilibrium Structure and Miscibility of Soft Nanoparticles in Polymer Melts Debapriya Banerjee, Kenneth Schweizer
9:12AM - 9:24AM	A21.00005: Thiol-Functionalized Gold-Nanoscale Organic Hybrid Materials-Attractive to Soft glasses Akanksha Agrawal, Lynden Archer
9:24AM - 9:36AM	A21.00006: A quick and simple route to form soft Janus colloids Chris Sosa, Rodney Priestley, Robert Prud'homme
9:36AM - 9:48AM	A21.00007: Phase behavior of star-shaped polystyrene-block-poly(methyl methacrylate) copolymer Sangshin Jang, Hong Chul Moon, Dusik Bae, Jongheon Kwak, Youngmin Lee, WonBo Lee, Jin Kon Kim
9:48AM - 10:00AM	A21.00008: Synthesis and characterization of A2B Miktoarm Star Copolymers Composed of Regioregular Poly(3-hexylthiophene) and Poly(methyl methacrylate) containing rigid core Jicheol Park, Hong Chul Moon, Jin Kon Kim
10:00AM - 10:12AM	A21.00009: Polyelectrolyte Microcapsules: Ion Distributions from a Poisson-Boltzmann Model Qiyun Tang, Alan R. Denton, Damith Rozairo, Andrew B. Croll
10:12AM - 10:24AM	A21.00010: Synchrotron Radiation Investigation in Epoxy Resin Modified with Polysiloxane System Wenjun Gan, Weizhen Li, Jindian Ding, Xiaodan Gu, Cheng Wang
10:24AM - 10:36AM	A21.00011: Association of Multi-Chain Pentablock Ionomers in Solutions: A Molecular Dynamics Simulation Study Dipak Aryal, Dvora Perahia, Thusitha Etampawala, Gary Grest
10:36AM - 10:48AM	A21.00012: Structure and Conformation of Ionic Conjugated Polymers: Polydots Naresh Osti, Thusitha Etampawala, Sidath Wijesinghe, Dvora Perahia
10:48AM - 11:00AM	A21.00013: Giant surfactants of poly(ethylene oxide)-b-polystyrene-(molecular nanoparticle): nanoparticle-driven self-assembly with sub-10-nm nanostructures in thin films Chih-Hao Hsu, Zhiwei Lin, Xue-Hui Dong, I-Fan Hsieh, Stephen Z.D. Cheng

Monday, March 3, 2014, 8:00 am – 11:00 am

Session A22: Surfaces, Interfaces and Polymeric Thin Films

Sponsoring Units: DPOLY
Chair: Joshua Sangoro, University of Tennessee-Knoxville
Room: *407*

8:00AM - 8:12AM	A22.00001: The effect of block-copolymer structures on the polymeric liquid-liquid interface: Molecular Dynamic Study Jiho Ryu, Won Bo Lee, Bumjoon Kim
8:12AM - 8:24AM	A22.00002: Relaxation and Intermediate Asymptotics of a Surface Perturbation in a Viscous Film Oliver Bäumchen, Michael Benzaquen, Thomas Salez, Joshua D. McGraw, Matilda Backholm, Paul Fowler, Élie Raphaël, Kari Dalnoki-Veress
8:24AM - 8:36AM	A22.00003: Filling up of a cylindrical hole in a viscous film Matilda Backholm, Michael Benzaquen, Thomas Salez, Élie Raphaël, Kari Dalnoki-Veress
8:36AM - 8:48AM	A22.00004: The Rayleigh-Plateau Instability on a Fiber Revisited - Influence of the Hydrodynamic Boundary Condition Sabrina Haefner, Oliver Bäumchen, Michael Benzaquen, Thomas Salez, Robert Peters, Joshua D. McGraw, Élie Raphaël, Karin Jacobs, Kari Dalnoki-Veress
8:48AM - 9:00AM	A22.00005: Influence of Slip on the Rayleigh-Plateau Rim Instability in Dewetting Viscous Films Ralf Blossey, Oliver Bäumchen, Ludovic Marquant, Sabrina Haefner, Andreas Munch, Dirk Peschka, Barbara Wagner, Karin Jacobs
9:00AM - 9:12AM	A22.00006: Controlling Marangoni induced instabilities in spin-cast polymer films: How to prepare uniform films Paul Fowler, Celine Ruscher, James Forrest, Kari Dalnoki-Veress
9:12AM - 9:24AM	A22.00007: Time and temperature dependent wrinkling of stiff thin films on shape memory polymers Yu Wang, Kai Yu, Jerry Qi, Jianliang Xiao
9:24AM - 9:36AM	A22.00008: Frictional Response of Molecularly Thin Liquid Polymer Films Subject to Constant Shear Stress Charles Tschirhart, Sandra Troian
9:36AM - 9:48AM	A22.00009: Inducing surface morphologies in polymer films through exposure to non-solvents Chad Daley, Zin Tun, James Forrest
9:48AM - 10:00AM	A22.00010: Single-Molecule Tracking of Polymer Surface Diffusion Michael Skaug, Joshua Mabry, Daniel Schwartz
10:00AM - 10:12AM	A22.00011: Diffusion of polyelectrolyte chains within layer-by-layer films: effect of film stratification Victor Selin, Aliaksandr Zhuk, John F. Ankner, Svetlana Sukhishvili
10:12AM - 10:24AM	A22.00012: Nano-rheometry near the free-surface in polystyrene Kurt M. Schreiter, James A. Forrest
10:24AM - 10:36AM	A22.00013: Hydrogen-bond Dynamics at The Interface Between Water and Oxidized Atactic Polystyrene Selemon Bekele, Mesfin Tsige
10:36AM - 10:48AM	A22.00014: Binding kinetics of lock-key colloids: surface diffusion enhancement of the rate of specific binding Laura Colon-Melendez, Daniel J. Beltran-Villegas, Greg van Anders, Jun Liu, Matthew Spellings, Stefano Sacanna, David J. Pine, Sharon C. Glotzer, Ronald G. Larson, Michael J. Solomon
10:48AM - 11:00AM	A22.00015: Importing super-resolution imaging into nanoscale puzzles of materials dynamics John King, Chi Hang Boyce Tsang, William Wilson, Steve Granick

Monday, March 3, 2014, 8:00 am – 11:00 am

Session A25: Focus Session: Organic Electronics and Photonics - Electronic Processes at Interfaces

Sponsoring Units: DMP DPOLY
Chair: Vitaly Podzorov, Rutgers University
Room: *503*

8:00AM - 8:36AM	A25.00001: Interface Energetics and Chemical Doping of Organic Electronic Materials **Invited Speaker:** Antoine Kahn
8:36AM - 8:48AM	A25.00002: Efficient Density Functional Approximation for Electronic Properties of Conjugated Systems Marilia J. Caldas, Jose Maximiano Pinheiro Jr, Volker Blum, Patrick Rinke
8:48AM - 9:00AM	A25.00003: Surface-enhanced Raman spectroscopic studies of the Au-pentacene interface: a combined experimental and theoretical investigation Suchismita Guha, Danish Adil
9:00AM - 9:12AM	A25.00004: Subphthalocyanine on C$_{70}$ Contact Layer Structure and Properties from First Principles Calculations John Kieffer, Hossein Hashemi, Xiao Ma, Michael Waters, Steven Morris, Max Shtein
9:12AM - 9:24AM	A25.00005: The formation of conductive polymer chains from Biphenyl-4,4'-dithiol (BPDT) molecules on rough Ag surfaces Ruqian Wu, V. Ara Apkarian, Yanning Zhang
9:24AM - 9:36AM	A25.00006: Current focussing in organic semiconductors due to high local field, inhomogeneous trap distributions, and fibrous morphologies Kanokkorn Pimcharoen, Phillip Duxbury
9:36AM - 9:48AM	A25.00007: Graphene-Based Polymer Bulk Heterojunction Solar Cells Fei Yu, Vikram Kuppa
9:48AM - 10:00AM	A25.00008: Ferromagnetic-organic interfacial states detected by transient conductivity and their role on low voltage current injection in organic spinvalves Hongtao Zhang, Theo Kreouzis, William Gillin, Alan Drew
10:00AM - 10:12AM	A25.00009: Controlling organic magnetoresistance via interface engineering C.A. Richter, H.-J. Jang, S.J. Pookpanratana, J.I. Basham, C.A. Hacker, O.A. Kirillov, R.J. Kline, O.D. Jurchescu, D.J. Gundlach
10:12AM - 10:24AM	A25.00010: Influence of Interactions between Excited States on Magnetic Field Effects in Organic Semiconducting Materials Lei He, Bin Hu, Mingxing Li, Augustine Urbas
10:24AM - 10:36AM	A25.00011: Engineering hybrid polymer/metal-oxide interfaces by self-assembled molecular interlayers Alessandro Mattoni
10:36AM - 10:48AM	A25.00012: Molecular Ordering of Poly(3-hexylthiophene) on Self-Assembled Monolayers Yeneneh Yimer, Mesfin Tsige
10:48AM - 11:00AM	A25.00013: Charge injection across a metal-organic interface suppressed by thermal diffusion Carlos Monton, Thomas Saerbeck, Ilya Valmianski, Ivan K. Schuller

Monday, March 3, 2014, 8:00 am – 11:00 am

Other 'A' Sessions of potential interest:

Session A10: Focus Session: Mechanics of Cells and Biological Networks I
Sponsoring Units: DBIO DPOLY GSNP
Chair: Daniel Blair, Georgetown University
Room: 201

Session A11: Focus Session: Bacterial Biophysics I
Sponsoring Units: DBIO
Chair: Gerard Wong, University of California, Los Angeles
Room: 203

Session A12: Invited Session: Phase Trasitions in Biology
Sponsoring Units: DBIO
Chair: Cliff Brangwynne, Princeton University
Room: 205

Session A40: Invited Session: Interplay Between Geometry, Organization and Function of Fluid Membranes
Sponsoring Units: DCMP GMAG
Chair: Martin Forstner, Syracuse University
Room: Mile High Ballroom 2B-3B

Monday, March 3, 2014, 11:15 am – 2:15 pm

Session B14: Invited Session: Trends and Perspectives on Fundamental Polymer Physics

Sponsoring Units: DPOLY DFD
Chair: James Forrest, University of Waterloo
Room: *301-303*

11:15AM - 11:51AM	B14.00001: Role of enhanced segmental mobility in the deformation of polymer glasses **Invited Speaker:** Mark Ediger
11:51AM - 12:27PM	B14.00002: Monte Carlo Field-Theoretic Simulations for Melts of Symmetric Diblock Copolymer **Invited Speaker:** Mark Matsen
12:27PM - 1:03PM	B14.00003: A direct quantitative measure of surface mobility in a glassy polymer **Invited Speaker:** Élie Raphaël
1:03PM - 1:39PM	B14.00004: On the Anomalous Diffusion of a Polymer Chain in an Unentangled Melt **Invited Speaker:** Jorg Baschnagel
1:39PM - 2:15PM	B14.00005: New questions in classical polymer physics **Invited Speaker:** Steve Granick

Monday, March 3, 2014, 11:15 am – 2:15 pm

Session B17: Focus Session: Packing of Anisotropic Particles

Sponsoring Units: GSNP DPOLY
Chair: Rob Hoy, University of South Florida
Room: *402*

11:15AM - 11:27AM	B17.00001: Solving the Granular Inverse Packing Problem with Artificial Evolution Marc Miskin, Heinrich Jaeger
11:27AM - 11:39AM	B17.00002: Shape Alloys of Nanorods and Nanospheres from Self-Assembly Jaime Millan, Xingchen Ye, Michael Engel, Jun Chen, Benjamin Diroll, Sharon Glotzer, Chris Murray
11:39AM - 11:51AM	B17.00003: What is the Real Lewis Law? Size-Topology Correlations for Anisotropic Objects Sangwoo Kim, Muyun Cai, Sascha Hilgenfeldt
11:51AM - 12:03PM	B17.00004: Size-Topology Correlations and Crystallization in Tilings and Packings Sascha Hilgenfeldt
12:03PM - 12:15PM	B17.00005: Unified Theoretical Framework for Shape Entropy in Colloids Greg van Anders, N. Khalid Ahmed, Daphne Klotsa, Michael Engel, Sharon C. Glotzer
12:15PM - 12:27PM	B17.00006: Stress supporting structures from interlocking in random packings of granular materials Eric Brown, Shomeek Mukhopadhyay, Alice Nasto, Sulimon Sattari, David Brantley, Kevin Mitchell
12:27PM - 12:39PM	B17.00007: Self-Assembly of Multi-Dimpled Spherical Particles N Khalid Ahmed, Greg van Anders, Elizabeth R. Chen, Michael Engel, Sharon C. Glotzer
12:39PM - 12:51PM	B17.00008: Binary mixtures of polyhedral nanoparticles: from phase separation to superstructures Mihir Khadilkar, Umang Agarwal, Fernando Escobedo
12:51PM - 1:03PM	B17.00009: Assembly precursors in fluids of hard polyhedra M. Eric Irrgang, Michael Engel, Sharon C. Glotzer
1:03PM - 1:15PM	B17.00010: Complexity in surfaces of densest packings for families of polyhedra Daphne Klotsa, Elizabeth R. Chen, Michael Engel, Pablo F. Damasceno, Sharon C. Glotzer
1:15PM - 1:27PM	B17.00011: Pessimal shapes for packing Yoav Kallus
1:27PM - 1:39PM	B17.00012: Mean-field theory of random close packings of axisymmetric particles Lin Bo, Adrian Baule, Romain Mari, Louis Portal, Hernan Makse
1:39PM - 1:51PM	B17.00013: The shape of jams to come: hidden geometric symmetries of jamming Peter Morse, Eric Corwin

Monday, March 3, 2014, 11:15 am – 2:15 pm

Session B18: Focus Session: Liquid Crystals, Nano to Meso Scale Structure in Ordered Matter and Liquid Crystal I: Nanocomposites and Smectics

Sponsoring Units: DCMP GSNP DPOLY
Chair: Joseph MacLennan, University of Colorado, Boulder
Room: *403*

11:15AM - 11:27AM	B18.00001: Dendritic Patterns in Nematic Liquid Crystal Nanocomposites Sebastian Gurevich, Alejandro Rey
11:27AM - 11:39AM	B18.00002: Liquid Crystalline Orientational Control via the Electric Field of Localized Surface Plasmons Makiko Quint, Linda Hirst, Sayantani Ghosh
11:39AM - 11:51AM	B18.00003: Behavior of anisotropic particles at air/nematic interface Iris B. Liu, Mohamed A. Gharbi, Randall D. Kamien, Shu Yang, Kathleen J. Stebe
11:51AM - 12:03PM	B18.00004: True colloids of ferroelectric nanoparticles in liquid crystals: grand challenges and recent breakthroughs Yuriy Garbovskiy, Anatoliy Glushchenko
12:03PM - 12:15PM	B18.00005: Increasing Dispersion of Quantum Dots in Liquid Crystal Using Mesogenic Ligands Zachary Nuno, Andrea Rodarte, Blessing Cao, Ronald Pandolfi, Makiko Quint, Sayantani Ghosh, Jason Hein, Linda Hirst
12:15PM - 12:27PM	B18.00006: Ordered and disordered colloidal particle monolayers at liquid crystal interfaces Wei-Shao Wei, Matthew Lohr, Mohamed Amine Gharbi, Kathleen Stebe, A.G. Yodh
12:27PM - 12:39PM	B18.00007: Electromechanical memory effect in a ferroelectric nanoparticle-suspended liquid crystal Rajratan Basu
12:39PM - 12:51PM	B18.00008: Liquid Crystal properties of Silver (Ag) Nanowires as a Function of Flow Luz J. Martinez-Miranda, Liangbing Hu, Colin D. Preston
12:51PM - 1:03PM	B18.00009: Memory effects of nematic liquid crystals in porous network: the role of geometry Francesca Serra, Shane Eaton, Marco Buscaglia, Roberto Cerbino, Giulio Cerullo, Roberto Osellame, Tommaso Bellini
1:03PM - 1:15PM	B18.00010: Nanoparticle Diffusion and Aggregation in 2D Smectic Membranes Kyle Meienberg, Greg Smith, Cheol Park, Joseph Maclennan, Matthew Glaser, Noel Clark
1:15PM - 1:27PM	B18.00011: Two-Dimensional Diffusion of a Droplet near the Rigid Boundary of a Fluid Smectic Film Zhiyuan Qi, Cheol Park, Joseph Maclennan, Matthew Glaser, Noel Clark, Tatiana Kuriabova, Thomas Powers
1:27PM - 1:39PM	B18.00012: Dynamics of point defects in free-standing smectic films Kirsten Harth, Ralf Stannarius
1:39PM - 1:51PM	B18.00013: Coalescence of fluid droplets in freely-suspended smectic liquid crystal films Cheol Park, Zhiyuen Qi, Joseph Maclennan, Matthew Glaser, Noel Clark
1:51PM - 2:03PM	B18.00014: Brownian Motion of Topological Point Defects in Smectic C Films Kate Wachs, Cheol Park, Zhiyuen Qi, Joseph Maclennan, Noel Clark
2:03PM - 2:15PM	B18.00015: Mutual Diffusion of Inclusions in Freely-Suspended Smectic Liquid Crystal Films Tatiana Kuriabova, Zhiyuen Qi, Zoom Nguyen, Cheol Park, Matthew Glaser, Joseph Maclennan, Noel Clark, Thomas Powers

Monday, March 3, 2014, 11:15 am – 2:15 pm

Session B19: Focus Session: Theory and Simulations of Macromolecules II - From Atomistic to Coarse Grained Models

Sponsoring Units: DPOLY
Chair: Christoph Junghans, Los Alamos National Laboratory
Room: *404*

11:15AM - 11:27AM	B19.00001: Hierarchical Modeling of Polymer/Solid Interfaces: From Ab-initio Calculations to Atomistic up to Coarse-grained Simulations Vagelis Harmandaris, Karen Johnston
11:27AM - 11:39AM	B19.00002: Exploring the Limits of the Iterative Boltzmann Inversion Roland Faller, Beste Bayramoglu
11:39AM - 11:51AM	B19.00003: Coarse graining of atactic polystyrene and its derivatives Anupriya Agrawal, Dvora Perahia, Gary S. Grest
11:51AM - 12:03PM	B19.00004: Coarse Grained Simulations of Entangled Polymer Dynamics Abelardo Ramirez-Hernandez, Marat Andreev, Jay D. Schieber, Juan J. de Pablo
12:03PM - 12:15PM	B19.00005: Systematic coarse-graining of the wormlike chain model for dynamic simulations Elena Koslover, Andrew Spakowitz
12:15PM - 12:27PM	B19.00006: Multiresolution Modeling of Polymer Solutions: Wavelet-Based Coarse-Graining and Reverse-Mapping Ahmed Ismail, Carl Simon Adorf, Animesh Agarwal, Christopher R. Iacovella
12:27PM - 12:39PM	B19.00007: Multi-scale modeling of the phase diagram of Human Immunoglobulin Mark Tuchman, Sergey Buldyrev, Ying Wang, Aleksey Lomakin, George B. Benedek
12:39PM - 12:51PM	B19.00008: Coarse-graining using the relative entropy and simplex-based optimization methods in VOTCA Victor Ruhle, Mara Jochum, Konstantin Koschke, N.R. Aluru, Kurt Kremer, S.Y. Mashayak, Christoph Junghans
12:51PM - 1:03PM	B19.00009: Mesoscale simulation of entangled polymers: Part I. Coarse-Grained level Tunable DPD Joao Maia, Shagahyegh Khani, Mikio Yamanoi
1:03PM - 1:15PM	B19.00010: Mesoscale simulation of entangled polymers: Part II. Lowe-Andersen thermostat Shaghayegh Khani, Mikio Yamanoi, Joao Maia
1:15PM - 1:27PM	B19.00011: Persistent Contacts Along the Primitive Path Scott Milner, Jing Cao
1:27PM - 1:39PM	B19.00012: Viscoelastic hydrodynamic interactions and anomalous CM diffusion in polymer melts Hendrik Meyer, Jean Farago, A.N. Semenov
1:39PM - 1:51PM	B19.00013: Molecular simulation investigation of the nanorheology of an entangled polymer melt Mir Karim, Rajesh Khare, Tsutomu Indei, Jay Schieber
1:51PM - 2:03PM	B19.00014: Estimation of Linear Viscoelasticity of Polymer Melts in Molecular Dynamics Simulations Based on Relaxation Mode Analysis Nobuyuki Iwaoka, Katsumi Hagita, Hiroshi Takano
2:03PM - 2:15PM	B19.00015: Finding the Missing Physics: Simulating Polydisperse Polymer Melts Nichoals Rorrer, John Dorgan

Monday, March 3, 2014, 11:15 am – 2:15 pm

Session B20: Focus Session: Microfluidics and Nanofluidics II - Colloidal Hydrodynamics and Active Particles

Sponsoring Units: DPOLY GSNP DFD
Chair: Steven Hudson, National Institute of Standards and Technology
Room: *405*

11:15AM - 11:27AM	B20.00001: The Role of Inertia in Particle Laden Flows Hamed Haddadi, Jeffrey Morris
11:27AM - 11:39AM	B20.00002: Hydrodynamic Fluctuations in Confined Particle-Laden Fluids Nicolas Desreumaux, Jean-Baptiste Caussin, Raphael Jeanneret, Eric Lauga, Denis Bartolo
11:39AM - 11:51AM	B20.00003: Microscopic origin of drag force: A new mathematical and physical interpretation Changho Kim, George Karniadakis
11:51AM - 12:03PM	B20.00004: Defect Proliferation in Active Nematic Suspensions Prashant Mishra, Mark J. Bowick, Luca Giomi, M. Cristina Marchetti
12:03PM - 12:15PM	B20.00005: Aggregation and segregation of confined self-propelled particles Xingbo Yang, M. Lisa Manning, M. Cristina Marchetti
12:15PM - 12:27PM	B20.00006: Quantitative kinetic theory of active matter Thomas Ihle, Yen-Liang Chou
12:27PM - 12:39PM	B20.00007: Mixing in suspensions of active particles Dmitri O. Pushkin, Julia M. Yeomans
12:39PM - 12:51PM	B20.00008: Rotational manipulation of plasmonic nanoparticles in water by photon angular momentum Peter Johansson, Anni Lehmuskero, Robin Ogier, Tina Gschneidtner, Mikael Kall
12:51PM - 1:03PM	B20.00009: Effective Interactions in Systems of Active Particles Matthew Spellings, Michael Engel, Daphne Klotsa, Wenbo Shen, Greg van Anders, Sharon C. Glotzer
1:03PM - 1:15PM	B20.00010: Confined dynamics of non-aligning self-propelled particles in the small box limit Yaouen Fily, Aparna Baskaran, Michael Hagan
1:15PM - 1:27PM	B20.00011: Distribution of directional change as a signature of complex dynamics Stanislav Burov, Ali Tabei, Toan Hyunh, Michael Murrell, Louis Phillipson, Stuart Rice, Margaret Gardel, Norbert Scherer, Aaron Dinner
1:27PM - 1:39PM	B20.00012: Correlation between rotational and translational diffusion of a Janus nanoparticle in explicit solvent: A molecular dynamics simulation study Ali Kharazmi, Nikolai Priezjev
1:39PM - 1:51PM	B20.00013: Diffusion of Interacting Particles in Discrete Geometries Kwinten Nelissen, T. Becker, Bart Cleuren, B. Partoens, C. Van den Broeck
1:51PM - 2:03PM	B20.00014: Applying Inkjet Technology to Dispense Colloidal Nanoparticle Fluids Annie O, Harjyot Mohar, Victor Hernandez, Arturo Estrada, Leonel Munoz, Sewan Fan, Laura Fatuzzo, Steven Jimenez
2:03PM - 2:15PM	B20.00015: Structural disorder and anomalous water diffusion in random packing of spheres Andrea Gabrielli, Silvia Capuani, Marco Palombo, Vito D.P. Servedio, Giancarlo Ruocco

Monday, March 3, 2014, 11:15 am – 2:15 pm

Session B21: Focus Session: Soft Nanoparticles, Block Copolymer Micelles and Polymersomes I

Sponsoring Units: DPOLY
Chair: Thomas Epps III, University of Delaware
Room: *406*

11:15AM - 11:51AM	B21.00001: Responsive Hydrogels and Ion Gels by Self-Assembly of ABA and ABC Triblock Polymers **Invited Speaker:** Timothy Lodge
11:51AM - 12:03PM	B21.00002: Translocation of a vesicle through a single pore Hamidreza Shojaei, Murugappan Muthukumar
12:03PM - 12:15PM	B21.00003: Towards Deflated Polymersomes Changqian Yu, Steve Granick
12:15PM - 12:27PM	B21.00004: Complex Morphology of Oppositely Charged Block Copolymer Micelles Misook Lee, Kyung Jee Min, Sheng Li, Kookheon Char
12:27PM - 12:39PM	B21.00005: Stereoregularity Drives Precipitation in Polyelectrolyte Complex Formation Matthew Tirrell, Sarah Perry, Lorraine Leon, Matthew Kade, Dimitris Priftis, Katie Black, Kyle Hoffman, Jonathan Whitmer, Jian Qin, Juan de Pablo
12:39PM - 12:51PM	B21.00006: Rapid and Quasi-reversible Poly(vinyl acetate-b-vinyl alcohol) Spherical Micelle Fusion Induced by Poly(ethylene oxide) in Water Mahesh Mahanthappa, Milton Repollet-Pedrosa
12:51PM - 1:03PM	B21.00007: Comparing Fluid and Elastic Block Copolymer Shells Damith Rozairo, Andrew B. Croll
1:03PM - 1:15PM	B21.00008: Polyoxometalate (POM) Macroion Decorated Polymersomes Benxin Jing, Erin Connor, Y. Elaine Zhu
1:15PM - 1:27PM	B21.00009: Tartaric Acid-Assisted Self-Assembly of Hybrid Block Copolymer Composites Li Yao, Ying Lin, James Watkins
1:27PM - 1:39PM	B21.00010: Self-assembled Structures of a Multifunctional, Structured Block Copolymer in Solution; A SANS Study Thusitha Etampawala, Manjula Senanayake, Naresh Osti, Lilin He, William Heller, Dvora Perahia
1:39PM - 1:51PM	B21.00011: Multigeometry Nanoparticle Engineering via Kinetic Control through Multistep assembly Yingchao Chen, Xiaojun Wang, Ke Zhang, Fuwu Zhang, Jimmy Mays, Karen Wooley, Darrin Pochan
1:51PM - 2:03PM	B21.00012: Cluster formation of gold nanoparticles in two dimension Sarika C K, Jaydeep Basu
2:03PM - 2:15PM	B21.00013: On the Effect of TiO2 Nanoparticles on the Crystallization of PEO Jesus Eduardo Saldana, Alin Cristian Chipara, Alejandro Castillo, James Hinthorne, Elamin Ibrahim, Mircea Chipara

Monday, March 3, 2014, 11:15 am – 2:15 pm

Session B22: Focus Session: Organic Electronics and Photonics - Polymer Photovoltaics

Sponsoring Units: GERA DPOLY
Chair: Enrique Gomez, Pennsylvania State University
Room: *407*

11:15AM - 11:27AM	B22.00001: Impact of Resonant Infrared Matrix-Assisted Pulsed Laser Evaporation (RIR-MAPLE) on Morphology and Charge Conduction in Conjugated Polymer and Bulk Heterojunction Thin Films Adrienne Stiff-Roberts, Ryan McCormick, Ayomide Atewologun
11:27AM - 11:39AM	B22.00002: The Role of Aromatic Structural Units of Conjugated Copolymers in Reaching High Solid-State Order and Optoelectronic Performances Chien-Lung Wang, Chain-Shu Hsu, Kuan-Yi Wu, Tien-Hsin Lee
11:39AM - 11:51AM	B22.00003: Photovoltaic Cells involving Nonconjugated Conductive Polymer, Iodine-doped cis-Polyisoprene (Natural Rubber) S. Jaju, M. Thakur
11:51AM - 12:03PM	B22.00004: Engineering Molecular Order for Enhanced Stability of Organic Solar Cells Anne Guilbert, Jenny Nelson, Joao Cabral
12:03PM - 12:15PM	B22.00005: Influence of Amorphous PCPDTBT on the Morphology of Ternary Blend Solar Cell Based on P3HT/PCPDTBT/PCBM Yu Gu, Cheng Wang, Feng Liu, Jihua Chen, Ondrej Dyck, Gerd Duscher, Thomas Russell
12:15PM - 12:27PM	B22.00006: Characterization of solution structure and its importance in thin film ordering of conjugated block copolymers for organic semiconductor devices Michael Brady, Sung-Yu Ku, Justin Cochran, Cheng Wang, Craig Hawker, Edward Kramer, Michael Chabinyc
12:27PM - 12:39PM	B22.00007: Influence of copolymer additives on the morphology and performance of bulk heterojunction organic photovoltaics Anton Li, Jojo Amonoo, Bingyuan Huang, Peter Goldberg, Anne McNeil, Peter Green
12:39PM - 12:51PM	B22.00008: Correlated molecular orientation in all-polymer solar cells and its role in free charge generation Brian A. Collins, Marcel Schubert, Steffen Roland, Riccardo Di Pietro, Robbert Steyrleuthner, Koen Vandewal, Alberto Salleo, Wolfram Schindler, Konstantinos Fostiropoulos, Zhihua Chen, Antonio Facchetti, Harald Ade, Dean Delongchamp, Dieter Neher
12:51PM - 1:03PM	B22.00009: Designing high efficiency organic photovoltaics by controlling the ordering at the donor-acceptor interface Aditya Mohite, Wanyi Nie, Gautam Gupta, Brian Crone, Chenyu Kuo, Hsinhan Tsai, Darryl Smith, Paul Ruden, Feilong Liu, Hsing-lin Wang, Sergei Tretiak
1:03PM - 1:15PM	B22.00010: Origins of Reduced Nongeminate Recombination in P3HT:PCBM Organic Solar Cells Michael Heiber, Julien Gorenflot, Vladimir Dyakonov, Carsten Deibel
1:15PM - 1:27PM	B22.00011: Interpreting impedance spectra of organic photovoltaic cells - Extracting charge transit and recombination rate constants Tyler Mullenbach, Yunlong Zou, Russell Holmes
1:27PM - 1:39PM	B22.00012: Impedance Spectroscopy and Electroabsorption Studies of PCPDTBT-PCBM Bulk-Heterojunction Solar Cells Christopher Green, Zane Cohick, Marian Tzolov
1:39PM - 1:51PM	B22.00013: Large Perturbation Transient Photovoltage for the Study of Lifetime and Order of Recombination in Organic Photovoltaics Lindsay Elliott, James Basham, Kurt Pernstich, Pragya Shrestha, Lee Richter, Dean DeLongchamp, David Gundlach

1:51PM - 2:03PM	B22.00014: Device models for bilayer organic solar cells using interface rate equations Non Thongprong, Phillip Duxbury
2:03PM - 2:15PM	B22.00015: Characterization of phosphorescent organic light-emitting diodes using current noise cross-correlated spectroscopy Thaddee Kamdem Djidjou, Sergey Li, Andrey Rogachev

Monday, March 3, 2014, 11:15 am – 2:15 pm

Other 'B' Sessions of potential interest:

Session B10: Focus Session: Mechanics of Cells and Biological Networks II
Sponsoring Units: DBIO
Chair: Maria Kilfoil, University of Massachusetts
Room: 201

Session B15: Bubbles, Interfaces & Porous Media
Sponsoring Units: DFD
Chair: C. Maldarelli, City University of New York
Room: 304

Session B16: Statistical Mechanics of Social Systems
Sponsoring Units: GSNP
Chair: G Korniss
Room: 401

Monday, March 3, 2014, 2:30 pm – 5:30 pm

Session D19: Focus Session: Theory and Simulations of Macromolecules III - Ionic Polymers

Sponsoring Units: DPOLY
Chair: Amalie Frischknecht, Sandia National Laboratories
Room: *404*

2:30PM - 2:42PM	D19.00001: Conformation of Ionic Conjugated Polymers: Molecular Dynamic Simulations Sidath Wijesinghe, Dvora Perahia, Gary Grest
2:42PM - 2:54PM	D19.00002: Chain Shapes and Ordering of Conjugated Polymers from Atomstic Simulations Wenlin Zhang, Enrique Gomez, Scott Milner
2:54PM - 3:06PM	D19.00003: Atomistic molecular dynamics simulations of the structure of symmetric Polyelectrolyte block copolymer micelle in salt-free aqueous solution Rajalakshmi Chockalingam, Upendra Natarajan
3:06PM - 3:18PM	D19.00004: Coarse-Grained Modeling of Polyelectrolyte Solutions Alan R. Denton, Sylvio May
3:18PM - 3:30PM	D19.00005: Polyelectrolyte complexes and salt: a computational study Hanne Antila, Paul Van Tassel, Maria Sammalkorpi
3:30PM - 3:42PM	D19.00006: Theoretical Study of Polyelectrolyte/homopolymer blends Youhai Sun, Ashkan Dehghan, An-Chang Shi
3:42PM - 3:54PM	D19.00007: Thermodynamic properties of stimuli-responsive hydrogels with intrinsic binding Polina Pine, Gabriel Longo, Igal Szleifer
3:54PM - 4:06PM	D19.00008: The Swelling of Olympic Gels Michael Lang, Jakob Fischer, Marco Werner, Jens-Uwe Sommer
4:06PM - 4:18PM	D19.00009: Highly-correlated Charges in Block Copolyelectrolytes: Charge as a Tool for Morphology Manipulation Charles Sing, Jos Zwanikken, Monica Olvera de la Cruz
4:18PM - 4:30PM	D19.00010: Investigation of the structure of levan polysaccharide chains in water via molecular dynamics simulations Deniz Turgut, Binnaz Coskunkan, Gulcin Cem, Deniz Rende, K. Yalcin Arga, Seyda Bucak, Nihat Baysal, Ebru Toksoy-Oner, Rahmi Ozisik
4:30PM - 4:42PM	D19.00011: Modeling the Transport Properties of CO$_{2}$/Polyamine Reactive Mixtures at Multiple Length-Scales Salomon Turgman-Cohen, Fernando Escobedo
4:42PM - 4:54PM	D19.00012: Simulation of a Small Molecule Analogue of a Lithium Ionomer in an External Electric Field John McCoy, Sara Waters, Amalie Frischknecht, Jonathan Brown
4:54PM - 5:06PM	D19.00013: A simulation study of poly(ethylene glycol) in ionic liquids using a physically motivated ab initio force-field Eunsong Choi, Jesse G. McDaniel, J.R. Schmidt, Arun Yethiraj

Monday, March 3, 2014, 2:30 pm – 5:30 pm

Session D20: Focus Session: Microfluidics and Nanofluidics III - Pattern Formation and Droplets

Sponsoring Units: DPOLY DFD GSNP
Chair: John Royer, NIST
Room: *405*

2:30PM - 3:06PM	D20.00001: Whipping of electrified jets **Invited Speaker:** Alberto Fernandez-Nieves
3:06PM - 3:18PM	D20.00002: Ferrofluid-based reconfigurable optofluidic switch Gianna Valentino, Eric Mongeau, Yu Gu
3:18PM - 3:30PM	D20.00003: Macroscale Boltzmann statistics: Recreating statistical mechanics with a mechanically derived temperature Kyle Welch, Eric Corwin
3:30PM - 3:42PM	D20.00004: Pattern formation of Dictystelium discoideum in the presence of laminar flow and cAMP pulses Azam Gholami, Oliver Steinbock, Vladimir Zykov, Eberhard Bodenschatz
3:42PM - 4:18PM	D20.00005: Microfluidic Droplet Dehydration for Concentrating Processes in Biomolecules **Invited Speaker:** Shelley Anna
4:18PM - 4:30PM	D20.00006: Chiral Double Emulsions: Breaking Symmetry with Microfluidics Laura Adams, Thomas Kodger, Jiawei Yang, David Weitz
4:30PM - 4:42PM	D20.00007: Droplet based microfluidics for high throughput screening of antibody secreting cells Liheng Cai, John Heyman, Linas Mazutis, Lloyd Ung, Rodrigo Guerra, Donald Aubrecht, David Weitz
4:42PM - 4:54PM	D20.00008: Mechanical response of tumor cells flowing through a microfluidic capillary Zeina S. Khan, Nabiollah Kamyabi, Fazle Hussain, Siva A. Vanapalli
4:54PM - 5:06PM	D20.00009: A pressure actuated microfluidic system with real time feedback control of droplet length in a T junction microfluidic channel Wen Zeng
5:06PM - 5:18PM	D20.00010: Effect of surfactant on bubble/liquid transport in a T-junction microchannel with sudden contraction Kuo-Long Pan, Huai-Jhu Chen
5:18PM - 5:30PM	D20.00011: Inversion of the electric field driven by ionic solvation energy Guillermo Guerrero Garcia, Francisco Solis, Monica Olvera de la Cruz

Monday, March 3, 2014, 2:30 pm – 5:30 pm

Session D21: Polymeric Elastomers and Gels

Sponsoring Units: DPOLY
Chair: Bradley Olsen, Massachusetts Institute of Technology
Room: *406*

2:30PM - 2:42PM	D21.00001: Double network physical gels from elastin-like polypeptide block copolymers: nanoscale control of thermoresponsive reinforcement Matthew Glassman, Bradley Olsen
2:42PM - 2:54PM	D21.00002: Mechanical Characterization of Photo-crosslinked, Thermoresponsive Hydrogel Thin Films via AFM Nanoindentation Thao Le, Katherine Aidala, Ryan Hayward
2:54PM - 3:06PM	D21.00003: Mechanical properties of Tetra-PEG gels with supercoiled networks Takuya Katashima, Kenji Urayama, Ung-il Chung, Takamasa Sakai
3:06PM - 3:18PM	D21.00004: Rheology of Hyperbranched Poly(triglyceride)-Based Thermoplastic Elastomers via RAFT polymerization Mengguo Yan, Eric Cochran
3:18PM - 3:30PM	D21.00005: Stability analyses of the model for photosensitive self-oscillating polymer gels Pratyush Dayal, Olga Kuksenok, Anna C. Balazs
3:30PM - 3:42PM	D21.00006: Connecting structural rigidity and dynamical heterogeneity to the rheology of colloidal gels Lilian Hsiao, Heekyoung Kang, Richmond Newman, Sharon Glotzer, Kyung Ahn, Michael Solomon
3:42PM - 3:54PM	D21.00007: Soft and Ultra-soft Elastomers William Daniel, Joanna Burdynska, Sam Kirby, Yang Zhou, Krzysztof Matyjaszewski, Michael Rubinstein, Sergei Sheiko
3:54PM - 4:06PM	D21.00008: Deformation of Unentangled Swollen Gels Ozan Sariyer, Sergey Panyukov, Michael Rubinstein
4:06PM - 4:18PM	D21.00009: Hydrogen Bonding in Poly(butyl acrylate) Melts and Elastomers Mitchell Anthamatten, Christopher Lewis
4:18PM - 4:30PM	D21.00010: Stress--Strain Relationship of Highly Stretchable Dual Cross-Link Gels: Separability of Strain and Time Effect Costantino Creton, Koichi Mayumi, Alba Marcellan, Guylaine Ducouret, Tetsuharu Narita
4:30PM - 4:42PM	D21.00011: Fresh Insights on the mechanical response of methylcellulose hydrogels Joseph Lott, John McAlliser, Frank Bates, Timothy Lodge
4:42PM - 4:54PM	D21.00012: Effect of polydispersity on the phase behavior of soft microgel suspensions Andea Scotti, Urs Gasser, Emily Herman, Akiti Singh, L. Andrew Lyon, Alberto Fernandez-Nieves
4:54PM - 5:06PM	D21.00013: Shapes of drying hydrogel cylinders Etienne Reyssat, Vincent Etienne
5:06PM - 5:18PM	D21.00014: Advantages of Using Soft Materials in Scanning Probe Lithography Keith A. Brown, Daniel J. Eichelsdoerfer, Mary X. Wang, Chad A. Mirkin
5:18PM - 5:30PM	D21.00015: Dilute and Semidilute Solutions of a Nonionic, Rigid, Water-soluble Polymer Paul Russo, Wayne Huberty, Donghui Zhang

Monday, March 3, 2014, 2:30 pm – 5:30 pm

Session D22: Films at Liquid and Solid Interfaces

Sponsoring Units: DPOLY
Chair: Thomas Salez, ESPCI
Room: *407*

2:30PM - 2:42PM	D22.00001: Assembly of Graphene Oxide at Water/Oil Interfaces: Tessellated Nanotiles Thomas Russell, Zhiwei Sun, Tao Feng
2:42PM - 2:54PM	D22.00002: Mechanical vibration of viscoelastic liquid droplets James Sharp, Victoria Harrold
2:54PM - 3:06PM	D22.00003: Water Interaction with Poly (methyl methacrylate) and Polyethylene Films Paul Jones, Thorin Kane, Brian Familo, Ross Netusil, Patrick Howard, Marie Romano, John St. Leger, Carolina C. Ilie
3:06PM - 3:18PM	D22.00004: Poroelastic characterization of ultrathin water purification membrane layers Edwin Chan
3:18PM - 3:30PM	D22.00005: Stretching Ultra-thin Polymer Films on Water Yujie Liu, Alfred J. Crosby
3:30PM - 3:42PM	D22.00006: Perfect mixing of immiscible macromolecules at fluid interfaces Sergei Sheiko, Krzysztof Matyjaszewski, Vladimir Tsukruk, Jan-Michael Carrillo, Michael Rubinstein, Andrey Dobrynin, Jing Zhou
3:42PM - 3:54PM	D22.00007: Measuring the Height of Adsorbed Water Films With Atomic Force Microscopy Via Static Force Curves Jason Giamberardino
3:54PM - 4:06PM	D22.00008: Structure of thin polystyrene films of varying tacticity adsorbed on solid substrates Yergou Tatek, Mesfin Tsige
4:06PM - 4:18PM	D22.00009: Fabrication and Theoretical Evaluation of Microlens Arrays on Layered Polymers Tom Oder, Michael McMaster, Corey Merlo, Camron Bagheri, Clayton Reakes, Joshua Petrus, Dingqiang Li, Michael Crescimanno, James Andrews
4:18PM - 4:30PM	D22.00010: The mechanical properties of supported thin polystyrene films Peter Chung, Emmanouil Glynos, Peter Green
4:30PM - 4:42PM	D22.00011: Structures and Elastic Moduli of Polymer Nanocomposite Thin Films Hongyi Yuan, Alamgir Karim
4:42PM - 4:54PM	D22.00012: Neutron Reflectivity Measurement of Polymer-Surface Interaction Richard Sheridan, Sara Orski, Ronald Jones, Kathryn Beers
4:54PM - 5:06PM	D22.00013: Using multivalency to tailor the superselective binding of polymers on substrates Nicholas Tito, Daan Frenkel
5:06PM - 5:18PM	D22.00014: Enhanced Molecular Dynamics in the Near-Surface Region of Polystyrene Thin Films Observed with β-NMR Iain McKenzie, Chad R. Daley, Robert F. Kiefl, C.D. Phil Levy, W. Andrew MacFarlane, Gerald D. Morris, Matt. R. Pearson, Dong Wang, James A Forrest
5:18PM - 5:30PM	D22.00015: Brewster Angle Microscopy and Characterization of Polyvinylidene Fluoride (PVDF) Based Langmuir Films Timothy Reece

Monday, March 3, 2014, 2:30 pm – 5:30 pm

Other 'D' Sessions of potential interest:

Session D11: Focus Session: Bacterial Biophysics II
Sponsoring Units: DBIO
Chair: Gerard Wong, University of California, Los Angeles
Room: 203

Session D14: Invited Session: Algorithms from Statistical Physics and the Physics of Algorithms
Sponsoring Units: GSNP DCOMP
Room: 301-303

Session D18: Cleverly Creating Colloidal Clusters
Sponsoring Units: GSNP DCMP
Chair: Kazem Edmond, New York University
Room: 403

Session D34: Solar Fuels, Biofuels, and PEC
Sponsoring Units: GERA
Chair: Sue Carter, University of California, San Diego
Room: 704

Tuesday, March 4, 2014, 8:00 am – 11:00 am

Session F11: Focus Session: Active Soft Matter I - Transport, Biomimetics and Dynamic Response

Sponsoring Units: DPOLY GSNP DBIO
Chair: Joanne Budzien, MacMurray College
Room: *203*

8:00AM - 8:36AM	F11.00001: Polymer Prize Break
8:36AM - 9:12AM	F11.00002: Cytoskeletal organization by motor and polymerization forces **Invited Speaker:** Gijsje Koenderink
9:12AM - 9:24AM	F11.00003: Biologically inspired non-equilibrium error correction Arvind Murugan, David Huse, Stanislas Leibler
9:24AM - 9:36AM	F11.00004: Stress activated contractile wavefronts in the mechanically-excitable embryonic heart Kevin Chiou, Stephanie Majkut, Dennis Discher, Tom Lubensky, Andrea Liu
9:36AM - 9:48AM	F11.00005: Photo-induced Mass Transport through Polymer Networks Yuan Meng, Mitchell Anthamatten
9:48AM - 10:00AM	F11.00006: Characterization of Particulate Matter Transport across the Lung-Surfactant Barrier using Langmuir Monolayers Jeremy Eaton, Michael Dennin, Alex Levine, Steven George
10:00AM - 10:12AM	F11.00007: Activating membranes Ananyo Maitra, Pragya Srivastava, Sriram Ramaswamy, Madan Rao
10:12AM - 10:24AM	F11.00008: Protein-Polyelectrolyte Coacervation: Morphology Diagram, Binding Affinity, and Protein Separation David Hoagland, Xiaosong Du, Paul Dubin
10:24AM - 10:36AM	F11.00009: Spontaneous motion and deformation of a droplet driven by chemical reaction Natsuhiko Yoshinaga
10:36AM - 10:48AM	F11.00010: Structural transitions in helical polymers Matthew Williams, Michael Bachmann
10:48AM - 11:00AM	F11.00011: Peptidyl Materials Formed Through Click Chemistry Enhanced Coiled-Coil Interactions Kenneth Koehler

Tuesday, March 4, 2014, 8:00 am – 11:00 am

Session F16: Focus Session: Extreme Mechanics: Filaments and their Assemblies, Elasticity and Defects

Sponsoring Units: GSNP DPOLY
Chair: Christian Santangelo, University of Massachusetts-Amherst
Room: *401*

8:00AM - 8:12AM	F16.00001: Twisted Ribbons: Theory, Experiment and Applications Julien Chopin, Benjamin Davidovitch, Flavio A. Silva, Romildo D. Toledo Filho, Arshad Kudrolli
8:12AM - 8:24AM	F16.00002: Elastocapillarity and the curling of fibers Anupam Pandey, Suzie Protiere, Douglas Holmes
8:24AM - 8:36AM	F16.00003: Handedness and self assembly of chiral rods Efi Efrati
8:36AM - 8:48AM	F16.00004: Spontaneous formation and evolution of kinks in elastic helical structures Shuangping Liu, Zhenwei Yao, Monica Olvera de la Cruz
8:48AM - 9:00AM	F16.00005: Stretchable nanoparticle helical ribbons through asymmetric cross-sectional geometry Alfred Crosby, Jonathan Pham, Jimmy Lawrence, Gregory Grason, Todd Emrick
9:00AM - 9:12AM	F16.00006: Theory of equilibria of elastic braids with applications to DNA supercoiling Gert van der Heijden, Eugene Starostin
9:12AM - 9:48AM	F16.00007: Geometrically frustrated filament assemblies: Unravelling the connection between bundle shape and inter-filament order **Invited Speaker:** Gregory Grason
9:48AM - 10:00AM	F16.00008: Defect-induced shape transitions in filament bundles Isaac Bruss, Gregory Grason
10:00AM - 10:12AM	F16.00009: Optimal packing of curved filaments Luis Cajamarca, Gregory Grason
10:12AM - 10:24AM	F16.00010: 3D Filament Network Segmentation with Multiple Active Contours Ting Xu, Dimitrios Vavylonis, Xiaolei Huang
10:24AM - 10:36AM	F16.00011: Elasticity using Nambu-Goldstone modes of isometries Salem Al Mosleh, Christian Santangelo, Arthur Evans
10:36AM - 10:48AM	F16.00012: Optomechanical elastomeric engine Milos Knezevic, Mark Warner
10:48AM - 11:00AM	F16.00013: Defect interactions in blueprinted Liquid Crystal Polymer Networks Vianney Gimenez-Pinto, Andrew Konya, Robin Selinger, Fangfu Ye

Tuesday, March 4, 2014, 8:00 am – 11:00 am

Session F17: Focus Session: Glass Formation and Crystallization in Anisotropic Particles

Sponsoring Units: GSNP DPOLY
Chair: Corey O'Hern, Yale University
Room: *402*

8:00AM - 8:12AM	F17.00001: Odd-even Effects of Glass Transition Temperature with a Network-forming Ionic Glass Ke Yang, Madhusudan Tyagi, Jeffrey Moore, Yang Zhang
8:12AM - 8:24AM	F17.00002: Phase behavior and crystal nucleation and growth in a system of short semi-flexible chains Bart Vorselaars, David Quigley
8:24AM - 9:00AM	F17.00003: Effect of chain topology and angular interactions on the competition between crystallization and glass-formation **Invited Speaker:** Robert S. Hoy
9:00AM - 9:12AM	F17.00004: Colloidal analogues of spin systems: Order and phase transitions in dense suspensions of magnetic ellipsoids Peter Schurtenberger, Ilya Martchenko, Jerome Crassous
9:12AM - 9:24AM	F17.00005: Structural signatures of dynamic heterogeneities in monolayers of colloidal ellipsoids Yilong Han, Zhongyu Zheng, Ran Ni, Feng Wang, Marjolein Dijkstra, Yuren Wang
9:24AM - 9:36AM	F17.00006: Characterizing the local environment for self-assembly Wenbo Shen, Greg van Anders, Eric Harper, Matthew P. Spellings, Michael Engel, Sharon C. Glotzer
9:36AM - 9:48AM	F17.00007: Jamming transition in hierarchical networks Xiang Cheng, Stefan Boettcher
9:48AM - 10:00AM	F17.00008: The Effect of Particle Shape on the Density of Acoustic Modes in Granular Materials Alex Mauney, Sara Berry, Theodore Brzinski, Karen Daniels
10:00AM - 10:12AM	F17.00009: Stabilizing Liquid Drops in Nonequilibrium Shapes by the Interfacial Jamming of Nanoparticles Mengmeng Cui, Todd Emrick, Thomas Russell
10:12AM - 10:24AM	F17.00010: Tumbling Motion of Interacting U-Shaped Particles in a Uniform Shear Flow Near Jamming Theodore Marschall, Scott Franklin, Stephen Teitel
10:24AM - 10:36AM	F17.00011: Strain-rate and temperature-driven transition in the shear transformation zone Penghui Cao, Xi Lin, Harold S. Park
10:36AM - 10:48AM	F17.00012: An experimental study of the phases of hard squares Lee Walsh, Narayanan Menon
10:48AM - 11:00AM	F17.00013: Tunneling percolation behavior and filling factors in metal-insulator nanocomposites Rupam Mukherjee, Zhi-Feng Huang, Boris Nadgorny

Tuesday, March 4, 2014, 8:00 am – 11:00 am

Session F19: Focus Session: Theory and Simulations of Macromolecules IV

Sponsoring Units: DPOLY
Chair: Anupriya Agarwal, Clemson University
Room: *404*

8:00AM - 8:36AM	F19.00001: POLYMER PHYSICS PRIZE BREAK
8:36AM - 8:48AM	F19.00002: Twinkling Fractal Analysis of PolyVinyl Acetate (PVAc) Yutao Zhang, Richard P. Wool
8:48AM - 9:00AM	F19.00003: Viscoelasticity of crosslinked epoxy networks under extreme conditions from molecular dynamics simulation Timothy Sirk, Mir Karim, Ketan Khare, Rajesh Khare, Jan Andzelm
9:00AM - 9:12AM	F19.00004: Optimization of constant pH replica exchange molecular dynamics method Danial Sabri Dashti, Adrian Roitberg
9:12AM - 9:24AM	F19.00005: Evaluating the Applicability of the Fokker-Planck Equation for Polymer Translocation James Polson, Taylor Dunn
9:24AM - 9:36AM	F19.00006: Ab initio calculations of the atomic and electronic structure of crystalline PEO$_{3}$:LiCF$_{3}$SO$_{3}$ electrolytes Sha Xue, Yingdi Liu, Hongli Dang, Dale Teeters, Daniel Crunkleton, Sanwu Wang
9:36AM - 9:48AM	F19.00007: Cellulose microfibril formation within a coarse grained molecular dynamics Abdolmadjid Nili, Oleg Shklyaev, Vincent Crespi, Zhen Zhao, Linghao Zhong
9:48AM - 10:00AM	F19.00008: Novel and Efficient Methods for Calculating Pressure in Polymer Lattice Models Pengfei Zhang, Qiang Wang
10:00AM - 10:12AM	F19.00009: Statistical Behavior of Polymer Chains in Curved Space Jianfeng Li, An-Chang Shi, Hongdong Zhang, Feng Qiu, Yuliang Yang
10:12AM - 10:24AM	F19.00010: Formation and structural properties of multi-block copolymer vesicles Rong Wang, Shiying Ma
10:24AM - 10:36AM	F19.00011: Diamond-Forming Block Copolymers and Diamond-like Morphologies: a New Route towards efficient Block Copolymer Membranes? Igor Erukhimovich, Yury Kriksin
10:36AM - 10:48AM	F19.00012: The influence of chain length polydispersity of of ABA triblock copolymers on bicontinuous network structures Zhong-Yuan Lu, Yue Li, Hu-Jun Qian, An-Chang Shi
10:48AM - 11:00AM	F19.00013: Phase Behavior of Semiflexible Block Copolymer droplets in isotropic homopolymer matrix Ping Tang, Jie Gao, Jianfeng Li, Yuliang Yang

Tuesday, March 4, 2014, 8:00 am – 11:00 am

Session F20: Focus Session: Organic Electronics and Photonics - Small Molecules

Sponsoring Units: DMP DPOLY
Chair: Rodrigo Noriega, University of California, Berkeley
Room: *405*

8:00AM - 8:36AM	F20.00001: POLYMER PHYSICS PRIZE BREAK
8:36AM - 8:48AM	F20.00002: Effect of mechanical deformation on the electrical properties of organic single crystals Marcos Reyes-Martinez, Alfred Crosby, Alejandro Briseno
8:48AM - 9:00AM	F20.00003: Near Surface Structure of Organic Semiconductor Tetracene Single Crystal Yusuke Wakabayashi, Hazuki Morisaki, Tsuyoshi Kimura, Kazumoto Miwa, Takashi Koretsune, Jun Takeya
9:00AM - 9:12AM	F20.00004: Trap healing and ultra low-noise Hall effect at the surface of organic semiconductors Vitaly Podzorov
9:12AM - 9:48AM	F20.00005: Effect of pressure on electronic charge coherence in organic semiconductor single crystals **Invited Speaker:** Jun Takeya
9:48AM - 10:00AM	F20.00006: Controlling Conformations of Conjugated Polymers and Small Molecules: The Role of Nonbonded Interactions Kevin Kohlstedt, Nicholas Jackson, Brett Savoie, Lin Chen, Monica Olvera de la Cruz, George Schatz, Mark Ratner
10:00AM - 10:12AM	F20.00007: *Ab Initio* Investigation of Conformal and Dipolar Effects on Subphthalocyanine Photovoltaic Properties Michael Waters, Guangsha Shi, Hossein Hashemi, Emmanouil Kioupakis, John Kieffer
10:12AM - 10:24AM	F20.00008: Tunable Molecular Orientation of Organic Semiconductors in Vapor-Deposited Amorphous Solids Diane Walters, Shakeel Dalal, Mark Ediger
10:24AM - 10:36AM	F20.00009: The nanoscale morphology of new types of solar cells based on solution-processed small-molecules Nuradhika Herath, Valeria Lauter, Jim Browning
10:36AM - 10:48AM	F20.00010: Photo-oxidation degradation mechanisms in P3HT for organic solar cells: Insights from first-principles simulations Kevin Leung, Na Sai, Judit Zador, Graeme Henkelman

Tuesday, March 4, 2014, 8:00 am – 11:00 am

Session F21: Focus Session: Polymeric Fibers and Superstructures

Sponsoring Units: DPOLY
Chair: Hyun-Joong Chung, University of Alberta
Room: *406*

8:00AM - 8:36AM	F21.00001: POLYMER PHYSICS PRIZE BREAK
8:36AM - 8:48AM	F21.00002: Edge electrospinning: a facile needle-less approach to realize scaled up production of quality nanofibers J.R. Bochinski, C. Curtis, M.P. Roman, L.I. Clarke, Q. Wang, N.M. Thoppey, R.E. Gorga
8:48AM - 9:00AM	F21.00003: A new method for the alignment of electrospun nanofibers by oxygen plasma treatment Natsumi Kobayashi, Norihisa Miki, Koichi Hishida, Atsushi Hotta
9:00AM - 9:12AM	F21.00004: Molecular dynamics simulations of electron irradiated PVDF nanofibers Jiayuan Miao, Ram Bhatta, Christian Kisielowski, Dinesh Lolla, Darrell Reneker, Mesfin Tsige, Philip Taylor
9:12AM - 9:24AM	F21.00005: Synchrotron X-ray Scattering Studies of Poly(lactide) Electrospun Fibers Containing Carbon Nanotubes Yazhe Zhu, Peggy Cebe
9:24AM - 9:36AM	F21.00006: Nanofibers from Melt Blown Fiber-in-Fiber Polymer Blends Zaifei Wang, Feng Zuo, Dawud Tan, Soondeuk Jeung, Christopher Macosko, Frank Bates
9:36AM - 9:48AM	F21.00007: Multi-scale modeling for the self-assembly of DNA-functionalized nanoparticle into supperlattice and Wulff polydedra Ting Li, Evelyn Auyeung, Chad Mirkin, Monica Olvera de la Cruz
9:48AM - 10:00AM	F21.00008: Giant Polyhedra based on Nano-atoms Stephen Cheng
10:00AM - 10:12AM	F21.00009: Programmable Nanoparticle clusters via DNA linking Xu Ma, Mark J. Bowick, Alisha Lewis, Mathew M. Maye, Rastko Sknepnek
10:12AM - 10:24AM	F21.00010: Fluorinated Polyhedral Oligomeric Silsesquioxane Based Giant Molecular Shape Amphiphiles: Hierarchical Self-Assembly with Unusual Chain Conformation Xue-Hui Dong
10:24AM - 11:00AM	F21.00011: Large-scale electrohydrodynamic organic nanowire printing, lithography, and electronics **Invited Speaker:** Tae-Woo Lee

Tuesday, March 4, 2014, 8:00 am – 11:00 am

Session F22: Focus Session: Biological and Bio-inspired Adhesive Polymers I

Sponsoring Units: DPOLY DBIO GSNP
Chair: Devin Kachan, University of California, Los Angeles
Room: *407*

8:00AM - 8:36AM	F22.00001: POLYMER PHYSICS PRIZE BREAK
8:36AM - 9:12AM	F22.00002: Toughening elastomers with sacrificial bonds and watching them break **Invited Speaker:** Costantino Creton
9:12AM - 9:24AM	F22.00003: Bond-breaking in semiflexible networks and the peeling dynamics of a filament from a random array of pinning sites Christian Vaca, Alex J. Levine
9:24AM - 9:36AM	F22.00004: Mussel Adhesion is Significantly Enhanced Due to the Shape and Mechanics of Its Holdfast Kenneth Desmond, Nicholas Zacchia, Herbert Waite, Megan Valentine
9:36AM - 9:48AM	F22.00005: Equilibrium phase behavior of labile cross inkers in semiflexible networks Devin Kachan, Alex Levine, Robijn Bruinsma
9:48AM - 10:00AM	F22.00006: Actin Foci Adhesion of *D. discoideum* Bret Flanders, Govind Paneru
10:00AM - 10:12AM	F22.00007: The Role of Salts in the Evolution of Modern Orb-Webs. Vasav Sahni, Toshikazu Miyoshi, Kelley Chen, Dharamdeep Jain, Sean J. Blamires, Todd A. Blackledge, Ali Dhinojwala
10:12AM - 10:24AM	F22.00008: Synthetic Adhesive Attachment Discs based on Spider Pyriform Silk Architecture Dharamdeep Jain, Vasav Sahni, Ali Dhinojwala

Tuesday, March 4, 2014, 8:00 am – 11:00 am

Session F56: Invited Session: Polymer Physics Prize Symposium

Sponsoring Units: DPOLY
Chair: Tom Witten, University of Chicago
Room: *Four Seasons Ballroom 4*

8:00AM - 8:36AM	F56.00001: Polymer Prize: The Many Varied Phenomena of Equilibrium Self-assembly/polymerization **Invited Speaker:** Karl Freed
8:36AM - 9:12AM	F56.00002: Polymer dynamics in turbulent flow **Invited Speaker:** Murugappan Muthukumar
9:12AM - 9:48AM	F56.00003: Path-Integration Computation of the Transport Properties of Polymers Nanoparticles and Complex Biological Structures **Invited Speaker:** Jack Douglas
9:48AM - 10:24AM	F56.00004: Temperature Dependence of Structural Relaxation: From ``Super-fragile" Polymers to ``Super-strong" Behavior of Water **Invited Speaker:** Alexei Sokolov
10:24AM - 11:00AM	F56.00005: Interactive Phase Separation and Crystallization: from Dynamically Symmetric to Dynamically Asymmetric Blend Systems **Invited Speaker:** Charles C. Han

Tuesday, March 4, 2014, 8:00 am – 11:00 am

Other 'F' Sessions of potential interest:

Session F12: Biophysical Dynamics and Locomotion
Sponsoring Units: DBIO DFD
Chair: Arpita Upadhyaya, University of Maryland
Room: 205

Session F18: Emulsions and Foams
Sponsoring Units: GSNP
Chair: Stephan Koehler, Harvard University
Room: 403

Tuesday, March 4, 2014, 11:15 am – 2:15 pm

Session G11: Focus Session: Active Soft Matter II - Dynamical Response

Sponsoring Units: DPOLY GSNP DBIO
Chair: Zvonimir Dogic, Brandeis University
Room: *203*

11:15AM - 11:51AM	G11.00001: Active nematics of flat and spherical surfaces **Invited Speaker:** Zvonimir Dogic
11:51AM - 12:03PM	G11.00002: Visualization of the material response in an actomyosin network at the onset of internal motor activity Samantha Stam, Margaret Gardel
12:03PM - 12:15PM	G11.00003: Quantifying actin wave modulation on periodic topography Can Guven, Meghan Driscoll, Xiaoyu Sun, Joshua Parker, John Fourkas, Anders Carlsson, Wolfgang Losert
12:15PM - 12:27PM	G11.00004: Characterizing tunable dynamics in an active gel Gil Henkin, Stephen DeCamp, Daniel Chen, Zvonimir Dogic
12:27PM - 12:39PM	G11.00005: Tuning mechanical relaxation through the regulation of non-equilibrium actin assembly Patrick M. McCall, David R. Kovar, Margaret L. Gardel
12:39PM - 12:51PM	G11.00006: Non-equilibrium States of Active Filament Networks Robert A Blackwell, Meredith D Betterton, Oliver M Sweezy, Matthew A Glaser
12:51PM - 1:03PM	G11.00007: Dynamics and rheological applications of chiral nanostructures Arijit Ghosh, Ambarish Ghosh
1:03PM - 1:15PM	G11.00008: Confocal Rheometry of Active Networks Daniel Chen, Stephen Decamp, Daniel Blair, Zvonimir Dogic
1:15PM - 1:27PM	G11.00009: Chain-configuration dependent rheological properties in transient networks Michelle Sing, Zhen-Gang Wang, Gareth McKinley, Bradley Olsen
1:27PM - 1:39PM	G11.00010: Effects of filament rigidity in myosin II-induced actin network contractility and dynamics Kimberly Weirich, Margaret Gardel
1:39PM - 1:51PM	G11.00011: Defect Dynamics in Active 2D Nematic Liquid Crystals Stephen DeCamp, Gabriel Redner, Michael Hagan, Zvonimir Dogic
1:51PM - 2:03PM	G11.00012: Simulation Study of Defect Dynamics in an Extensile Active Nematic Gabriel Redner, Aparna Baskaran, Michael Hagan
2:03PM - 2:15PM	G11.00013: Living liquid crystal: collective bacteria motion in anisotropic viscoelastic media Shuang Zhou, Andrey Sokolov, Oleg D. Lavrentovich, Igor S. Aranson

Tuesday, March 4, 2014, 11:15 am – 2:15 pm

Session G16: Focus Session: Soft Matter Perspectives on Protein Self-Assembly I

Sponsoring Units: GSNP DBIO DPOLY
Chair: Patrick Charbonneau, Duke University
Room: *401*

11:15AM - 11:27AM	G16.00001: Self-assembly of Model Microtubules: Shape, Chirality and Twist Mark Stevens, Shengfeng Cheng
11:27AM - 11:39AM	G16.00002: Fibril-based, geometrical microtubule - kinetochore attachments Zsolt Bertalan, Caterina La Porta, Helder Maiato, Stefano Zapperi
11:39AM - 11:51AM	G16.00003: Nano-structured metallic amyloid fibril networks Kiersten Batzli, Brian Love
11:51AM - 12:03PM	G16.00004: Electrostatic effects in collagen fibrillization Svetlana Morozova, Murugappan Muthukumar
12:03PM - 12:15PM	G16.00005: Surfaces Self-Assembly and Rapid Growth of Amyloid Fibrils Yichih Lin, E. James Petersson, Zahra Fakhraai
12:15PM - 12:27PM	G16.00006: Surface Mediated Protein Disaggregation Mithun Radhakrishna, Sanat K. Kumar
12:27PM - 12:39PM	G16.00007: Dynamic renormalisation group reveals sequential mechanism of the secondary nucleation of proteins Thomas Michaels, Paolo Arosio, Tuomas Knowles
12:39PM - 12:51PM	G16.00008: The breakup mechanism of biomolecular and colloidal aggregates in a shear flow Breanndán Ó Conchúir, Alessio Zaccone
12:51PM - 1:03PM	G16.00009: Mechanical and Assembly Units of Viral Capsids Identified via Quasi-Rigid Domain Decomposition Guido Polles, Giuliana Indelicato, Raffaello Potestio, Paolo Cermelli, Reidun Twarock, Cristian Micheletti
1:03PM - 1:39PM	G16.00010: Viral genome structures, charge, and sequences are optimal for capsid assembly **Invited Speaker:** Michael Hagan
1:39PM - 1:51PM	G16.00011: Hierarchical, Self-Similar Structure in Native Squid Pen Fei-Chi Yang, Robert Peters, Hannah Dies, Maikel Rheinstadter
1:51PM - 2:03PM	G16.00012: Theoretical model of a soft particle with charged core Dustin Tracy, Anh Phan
2:03PM - 2:15PM	G16.00013: Stochastic Interactions of Two Brownian Spheres in the Presence of Depletants Mehdi Karzar-Jeddi, Remco Tuinier, Takashi Taniguchi, Tai-Hsi Fan

Tuesday, March 4, 2014, 11:15 am – 2:15 pm

Session G18: Focus Session: Liquid Crystals, Nano to Meso Scale Structure in Ordered Matter and Liquid Crystal II: Mostly Smectic and Chromonics

Sponsoring Units: DMCP GSNP DPOLY
Chair: Luz J Martinez-Miranda, University of Maryland, College Park
Room: *403*

11:15AM - 11:27AM	G18.00001: Diastereomeric domains formed by chiral liquid crystals confined in a network of helical nanofilaments Michael Tuchband, Dong Chen, Balazs Horanyi, Eva Korblova, David Walba, Joseph Maclennan, Matthew Glaser, Noel Clark
11:27AM - 11:39AM	G18.00002: Effective theory and simulations of Smectic-A liquid crystals Danilo Liarte, Matthew Bierbaum, Muxin Zhang, Brian Leahy, Itai Cohen, James Sethna
11:39AM - 11:51AM	G18.00003: Field-Induced Alignment of Polar Bent-Ccore Smectic A Liquid Crystals Yongqiang Shen, Lisa Goodhew, Renfan Shao, Joseph Maclennan, Noel Clark, Per Rudquist
11:51AM - 12:03PM	G18.00004: Rich Variety of Smectic Phases in an Achiral Bent-Core Liquid Crystal Renfan Shao, Cheol Park, Joseph Maclennan, Carlson Tschierske, Noel Clark
12:03PM - 12:15PM	G18.00005: Double twist helical nanofilaments in bent-core liquid crystals Cuiyu Zhang, Nicholas Diorio, Oleg D Lavrentovich, Antal Jakli
12:15PM - 12:27PM	G18.00006: Liquid Crystal Phase Transitions and Defects to Sort and Soft-Assemble Microstructures Andrea Rodarte, L.S. Hirst, S. Ghosh
12:27PM - 12:39PM	G18.00007: Light guiding and lasing in Smectic-A liquid crystal fibers Venkata Subba Rao Jampani, Karthik Reddy Peddireddy, Shashi Thutupalli, Christian Bahr, Igor Musevic, Stephan Herminghaus
12:39PM - 12:51PM	G18.00008: An upper-bound on the discontinuity at the smectic A-nematic phase transition in octylcyanobiphenyl (8CB): A high-resolution birefringence study Mehmet Can Çetinkaya, Sevtap Yildiz, Haluk Ozbek, Patricia Losada-Pérez, Jan Leys, Jan Thoen
12:51PM - 1:03PM	G18.00009: Myelin structures formed by thermotropic smectic liquid crystals Karthik Reddy Peddireddy, Pramoda Kumar, Shashi Thutupalli, Stephan Herminghaus, Christian Bahr
1:03PM - 1:15PM	G18.00010: Thermotropic Liquid Crystalline Side Chain Elastomers David Thomas, Matthew Cardarelli, Peggy Cebe, Badel Mbanga, Timothy Atherton, Antoni Sanchez-Ferrer
1:15PM - 1:27PM	G18.00011: Lyotropic Chromonic Liquid Crystal Droplets, Faceted and Squeezed Zoey Davidson, Joonwoo Jeong, Matthew Lohr, Peter Collings, Tom Lubensky, Arjun Yodh
1:27PM - 1:39PM	G18.00012: Phase behavior of chromonic liquid crystal mixtures of Sunset Yellow and Disodium Cromoglycate Akihiro Yamaguchi, Gregory Smith, Youngwoo Yi, Charles Xu, Silvia Biffi, Francesca Serra, Tommaso Bellini, Noel Clark
1:39PM - 1:51PM	G18.00013: Chirality Amplification in Tactoids of Lyotropic Chromonic Liquid Crystals Chenhui Peng, Oleg Lavrentovich
1:51PM - 2:03PM	G18.00014: Orientations of Chromonic Liquid Crystals by Imprinted or Rubbed Polymer Films Youngwoo Yi, Aya Mcguire, Noel Clark
2:03PM - 2:15PM	G18.00015: Escaped-radial configuration with a twist: lyotropic chromonic liquid crystals confined to cylindrical cavities Joonwoo Jeong, Louis Kang, Zoey S. Davidson, Matthew Lohr, Daniel A. Beller, Randall D. Kamien, Tom C. Lubensky, A.G. Yodh, Peter J. Collings

Tuesday, March 4, 2014, 11:15 am – 2:15 pm

Session G19: Polymer Composites

Sponsoring Units: DPOLY
Chair: Mircea Chipara, University of Texas Pan American
Room: *404*

11:15AM - 11:27AM	G19.00001: Critical Effect of Segmental Dynamics in Polybutadiene / Clay Nanocomposites Characterized by Solid State 1H NMR Spectroscopy Xiaoliang Wang, Rongchun Zhang, Pingchuan Sun, H. Henning Winter, Gi Xue
11:27AM - 11:39AM	G19.00002: Percolation Threshold in Polycarbonate Nanocomposites Suresh Ahuja
11:39AM - 11:51AM	G19.00003: Path-Integration Computation of the Transport Properties of Nanoparticles Jack Douglas
11:51AM - 12:27PM	G19.00004: Entropy Driven Self-Assembly in Polymer Nanocomposites **Invited Speaker:** Michael Hore
12:27PM - 12:39PM	G19.00005: Field-theoretic simulations of polymer nanocomposites containing grafted nanoparticles Robert Riggleman, Huikuan Chao, Jason Koski
12:39PM - 12:51PM	G19.00006: Effect of interfacial entanglement density on the melt and glassy properties of attractive polymer nanocomposites Erkan Senses, Pinar Akcora
12:51PM - 1:03PM	G19.00007: Dynamics of nanoparticles in an entangled polymer matrix Subas Dhakal, Radhakrishna Sureshkumar
1:03PM - 1:15PM	G19.00008: Field Theoretic Simulations of Polymer Nanocomposites Jason Koski, Huikuan Chao, Rob Riggleman
1:15PM - 1:27PM	G19.00009: Micro-Scale Polymer Matrix Elastic Properties in Composites using Inelastic Light Scattering Measurements and Molecular Dynamics Simulations Michael Aldridge, Katherine Sebeck, Anthony Waas, John Kieffer
1:27PM - 1:39PM	G19.00010: Reinforcement in Natural Rubber Elastomer Nanocomposites: Breakdown of Entropic Elasticity Paul Sotta, Roberto Perez-Aparicio, Arnaud Vieyres, Pierre-Antoine Albouy, Loic Vanel, Didier R. Long, Olivier Sanseau
1:39PM - 1:51PM	G19.00011: Enhanced electromagnetic wave shielding effectiveness of Fe doped carbon nanotubes/epoxy composites Zhou Wang, John Ejembi, Ifeanyi Nwigboji, Guang-Lin Zhao
1:51PM - 2:03PM	G19.00012: Thermal Investigations on PVDF-BaTiO$_{3}$ Nanocomposites Mircea Chipara, David Garza, Dorina M Chipara, Armando Salinas, Steven C. Tidrow, Jerry Contreras
2:03PM - 2:15PM	G19.00013: Dielectric Performance of Polymer Nanocomposites: Matrix Free, Hairy Nanoparticle Assemblies and Amorphous Polymer-Nanoparticle Blends Christopher Grabowski, Elizabeth Opsitnick, Hilmar Koerner, Jeffrey Meth, Michael Bockstaller, Michael Durstock, Richard Vaia

Tuesday, March 4, 2014, 11:15 am – 2:15 pm

Session G20: Focus Session: Theory and Simulations of Macromolecules V

Sponsoring Units: DPOLY
Chair: Mesfin Tsige, University of Akron
Room: *405*

11:15AM - 11:27AM	G20.00001: Using thermodynamic integration to simulate the free-energy of bicontinuous phases formed by block copolymer/homopolymer blends Poornima Padmanabhan, Francisco Martinez-Veracoechea, Fernando Escobedo
11:27AM - 11:39AM	G20.00002: Binding large globular particles to long polymer chains Anton Souslov, Jennifer E. Curtis, Paul M. Goldbart
11:39AM - 11:51AM	G20.00003: Depletion induced coil-globule transition of a generic macromolecule: simulations and theory Martin Bertrand, Tyler N. Shendruk, Hendrick de Haan, James L. Harden, Gary W. Slater
11:51AM - 12:03PM	G20.00004: Coil-globule transition of macromolecules in mixed solvent: A semi-grand canonical molecular dynamics approach Debashish Mukherji, Kurt Kremer
12:03PM - 12:15PM	G20.00005: Unified View on the Mean-Field Order of Coil-Globule Transition Delian Yang, Qiang Wang
12:15PM - 12:27PM	G20.00006: Electrophoresis of composite objects: effect of shape, topology and polymer stiffness Mykyta V. Chubynsky, Gary W. Slater
12:27PM - 1:03PM	G20.00007: New perspectives for molecular field simulations of complex fluids **Invited Speaker:** Friederike Schmid
1:03PM - 1:15PM	G20.00008: Effects of dipolar interactions on thermodynamic stabilities of polymer blends and diblock copolymer melts Rajeev Kumar, M. Muthukumar, Bobby Sumpter
1:15PM - 1:27PM	G20.00009: Confined ring polymers as a model nucleoid Bae-Yeun Ha, C. Jeon, J. Kim, H. Jeong, S. Jun, Y. Jung
1:27PM - 1:39PM	G20.00010: The influence of topology on the free energy and metric properties of ring polymer confined in a slit Zhao-Yan sun, Bing Li, Li-Jia An, Zhen-Gang Wang
1:39PM - 1:51PM	G20.00011: Shear-induced desorption of isolated polymer molecules from a planar wall Sarit Dutta, Kevin Dorfman, Satish Kumar
1:51PM - 2:03PM	G20.00012: Evidence of random copolymer adsorption at fluctuating selective interfaces from Monte-Carlo simulation studies Igor Gazuz, Jens-Uwe Sommer
2:03PM - 2:15PM	G20.00013: Adsorption of Polymers on Rough Surfaces Abishek Venkatakrishnan, Vikram Kuppa

Tuesday, March 4, 2014, 11:15 am – 2:15 pm

Session G21: Physics of Copolymers: Ordering and Application of Block Copolymers

Sponsoring Units: DPOLY
Chair: Issei Nakamura, Changchun Institute of Applied Chemistry
Room: *406*

11:15AM - 11:27AM	G21.00001: Complex Ordering of Soft Spheres in Block Polymer Melts Sangwoo Lee, Jingwen Zhang, Frank S. Bates
11:27AM - 11:39AM	G21.00002: Chirality Effect on Self-Assembly of Chiral Block Copolymers Hsiao-Fang Wang, Ming-Chia Li, Rong-Ming Ho
11:39AM - 11:51AM	G21.00003: Control of Block Copolymer Morphology through End-functional Groups Gyuha Jo, Moon Jeong Park
11:51AM - 12:03PM	G21.00004: Increase in the Domain Spacing from ARB-Type Triblock Copolymer Sanghoon Woo, Hyunjung Jung, June Huh, Du Yeol Ryu, Soo-Hyung Choi, Joona Bang
12:03PM - 12:15PM	G21.00005: The Order-Disorder Transition in Short Diblock Copolymers: Relaxation Calorimetry Experiments Timothy Gillard, Daniel Phelan, Sangwoo Lee, Chris Leighton, Frank Bates
12:15PM - 12:27PM	G21.00006: Alignment pathways and the effect of a Nematic-Smectic A transition on the orientational order of an LC block copolymer under magnetic fields Manesh Gopinadhan, Youngwoo Choo, Pawel Majewski, Chinedum Osuji
12:27PM - 12:39PM	G21.00007: Self-Assembly of Pluronic Block Copolymers in Solutions: Simulation and Neutron Scattering Zhe Zhang, Kunlun Hong, Changwoo Do
12:39PM - 12:51PM	G21.00008: Chain exchange in block copolymer micelles Jie Lu, Frank Bates, Timothy Lodge
12:51PM - 1:03PM	G21.00009: A Theoretically Informed Model for the Rheology of Entangled Block Copolymer Nanocomposites Yongrui Su, Abelardo Ramirez-Hernandez, Brandon Peters, Juan J. de Pablo
1:03PM - 1:15PM	G21.00010: Baroplastic Behavior in Block Copolymer Blends Yonghoon Lee, Hyungju Ahn, Hoyeon Lee, Eunhye Kim, Young Soo Han, Du Yeol Ryu
1:15PM - 1:27PM	G21.00011: Diblock copolymer bridges: the break-up dynamics and enhanced stability of structured liquids Robert Peters, Kari Dalnoki-Veress
1:27PM - 1:39PM	G21.00012: Phase Transitions of Polystyrene-b-Polydimethylsiloxane in Solvents of Varying Selectivity Ting-Ya Lo, Chia-Cheng Chao, Rong-Ming Ho, Prokopios Georgopanos, Apostolos Avgeropoulos, Edwin L. Thomas
1:39PM - 1:51PM	G21.00013: Controlled orientation and ordering of nanostructured thin films from degradable block copolymer. Rong-Ming Ho, Ming-Shiuan She, Ting-Ya Lo, Yi-Hsiu Wu
1:51PM - 2:03PM	G21.00014: Investigation of the self-healing mechanism of poly (ethylene co-methacrylic acid) copolymers utilizing ultrasonic time dependent resonant spectroscopy Nicholas R. Bowers, Kenneth A. Pestka II, Stephen J. Kalista, Jr.
2:03PM - 2:15PM	G21.00015: The Effect of Long Range Order on Ionic Conductivity in a Solid Block Copolymer Electrolyte Mahati Chintapalli, Jacob Thelen, Alexander Teran, Nitash Balsara

Tuesday, March 4, 2014, 11:15 am – 2:15 pm

Session G22: Focus Session: Padden Award Symposium

Sponsoring Units: DPOLY
Chair: Stephen Cheng, University of Akron
Room: *407*

11:15AM - 11:27AM	G22.00001: Exploring conditions for craze initiation and for absence of crazing in polymer glasses Shiwang Cheng, Panpan Lin, Shi-Qing Wang
11:27AM - 11:39AM	G22.00002: Traversing the crystalline phase space of contorted hexabenzocoronene to maximize charge transport Anna Hiszpanski, Arthur Woll, Nan Yao, Yueh-Lin Loo
11:39AM - 11:51AM	G22.00003: High Modulus, High Conductivity Nanostructured Polymer Electrolyte Membranes via Polymerization-Induced Phase Separation Lucas McIntosh, Morgan Schulze, Marc Hillmyer, Timothy Lodge
11:51AM - 12:03PM	G22.00004: Physical Aging of Thin and Ultrathin Free-Standing Polymer Films: Effect of Stress and Reduced Glass Transitions Justin Pye, Connie Roth
12:03PM - 12:15PM	G22.00005: The Origin of Hyperdiffusive Relaxations in Soft Glasses Samanvaya Srivastava, Donald Koch, Lynden Archer
12:15PM - 12:27PM	G22.00006: On the crossover from Odijk to de Gennes in tube-confined semiflexible polymers Douglas Tree, Kevin Dorfman
12:27PM - 12:39PM	G22.00007: Polymer Structure and Dynamics under Cylindrical Confinement: Experiments, Simulations and Theory Wei-Shao Tung, Daniel Sussman, Nigel Clarke, Russell Composto, Kenneth Schweizer, Robert Riggleman, Karen Winey
12:39PM - 12:51PM	G22.00008: Dynamics of entangled rod-coil block copolymers Muzhou Wang, Ksenia Timachova, Alfredo Alexander-Katz, Alexei E. Likhtman, Bradley D. Olsen

Tuesday, March 4, 2014, 11:15 am – 2:15 pm

Other 'G' Sessions of potential interest:

Session G14: Invited Session: Toys and Mechanisms
Sponsoring Units: GSNP
Chair: James Hanna, Virginia Polytechnic Institute and State University
Room: 301-303

Session G15: Membranes: Biological and Synthetic
Sponsoring Units: DBIO
Chair: Mark Bowick, Syracuse University
Room: 304

Session G25: Focus Session: Organic Electronics and Photonics - Novel Devices and Fabrication
Sponsoring Units: DMP
Chair: David Gundlach, National Institute of Standards and Technology
Room: 503

Tuesday, March 4, 2014, 2:30 pm – 5:30 pm

Session J16: Focus Session: Soft Matter Perspectives on Protein Self-Assembly II

Sponsoring Units: GSNP DBIO DPOLY
Chair: Michael Hagan, Brandeis
Room: *401*

2:30PM - 2:42PM	J16.00001: Arrest scenarios in concentrated protein solutions - from hard sphere glasses to arrested spinodal decomposition Anna Stradner, Saskia Bucciarelli, Lucia Casal, Giuseppe Foffi, George Thurston, Bela Farago, Peter Schurtenberger
2:42PM - 2:54PM	J16.00002: The bacterial cytoplasm has glass-like properties and is fluidized by metabolic activity Brad Parry, Ivan Surovtsev, Matthew Cabeen, Corey O'Hern, Eric Dufresne, Christine Jacobs-Wagner
2:54PM - 3:06PM	J16.00003: Dynamic clusters in highly concentrated lysozyme solutions S.D. Hudson, P.D. Godfrin, L. Porcar, P. Falus, K. Hong, N.J. Wagner, Y. Liu
3:06PM - 3:42PM	J16.00004: An overview of protein phase behavior **Invited Speaker:** Neer Asherie
3:42PM - 3:54PM	J16.00005: A residue level protein-protein interaction model in electrolyte solutions Xueyu Song
3:54PM - 4:06PM	J16.00006: The role of crystal contacts in protein crystallization: soft matter characterization of two protein families Diana Fusco, Jeffrey Headd, Alfonso De Simone, Jun Wang, Patrick Charbonneau
4:06PM - 4:18PM	J16.00007: Getting Closer to Real Proteins: Asymmetric and Competing Interactions in Patchy Models Patrick Charbonneau, Diana Fusco
4:18PM - 4:30PM	J16.00008: Design rules for the self-assembly of a protein crystal Stephen Whitelam, Thomas Haxton
4:30PM - 4:42PM	J16.00009: Shifting Phases for Patchy Particles -- Effect of mutagenesis and chemical modification on the phase diagram of human gamma D crystallin Jennifer J. McManus, Susan James, Ruth McNamara, Michelle Quinn
4:42PM - 4:54PM	J16.00010: Phase Transitions in Antibody Solutions: from Pharmaceuticals to Human Disease Ying Wang, Aleksey Lomakin, George Benedek
4:54PM - 5:06PM	J16.00011: Structure of biological graded refractive index materials, and possible routes to self-assembly Jing Cai, Paul Heiney, Alison Sweeney
5:06PM - 5:18PM	J16.00012: Effects of scars on crystalline shell pressure stability Duanduan Wan, Rastko Sknepnek, Mark Bowick
5:18PM - 5:30PM	J16.00013: How Single-site Mutation Affects HP Lattice Proteins Guangjie Shi, David P Landau, Thomas Vogel, Thomas Wüst, Ying Wai Li

Tuesday, March 4, 2014, 2:30 pm – 5:30 pm

Session J19: Focus Session: Theory and Simulations of Macromolecules VI - Block Copolymers

Sponsoring Units: DPOLY
Chair: Sean Paradiso, University of California, Santa Barbara
Room: *404*

2:30PM - 3:06PM	J19.00001: DILLON MEDAL SYMPOSIUM BREAK
3:06PM - 3:42PM	J19.00002: Simulations of self-assembly in polymeric systems **Invited Speaker:** Alfredo Alexander-Katz
3:42PM - 3:54PM	J19.00003: Nucleation of ordered microphases in fluctuation-induced first-order phase transitions Michael Carilli, Glenn Fredrickson, Kris Delaney
3:54PM - 4:06PM	J19.00004: Universal phenomenology of the order-disorder transition in symmetric diblock copolymers Pavani Medapuram, Jens Glase, David Morse
4:06PM - 4:18PM	J19.00005: Molecular Interaction Control in Diblock Copolymer Blends and Multiblock Copolymers with Opposite Phase Behaviors Junhan Cho
4:18PM - 4:30PM	J19.00006: Computational study of solvated block-copolymer microphases Wei Li, Kris Delaney, Glenn Fredrickson
4:30PM - 4:42PM	J19.00007: Structure and Phase Behavior of Tapered Diblock Copolymers from Self-Consistent Field Theory Jonathan R. Brown, Scott W. Sides, Lisa M. Hall
4:42PM - 4:54PM	J19.00008: Microphase Separation and Interfacial Behavior of Model Tapered Diblock Copolymers Lisa M. Hall, Youngmi Seo, Jonathan R. Brown
4:54PM - 5:06PM	J19.00009: Block Copolymer Compatibilizers for Morphological Control on the Equilibrium Structural Characteristics of Polymer/Fullerene Blends Dylan Kipp, Venkat Ganesan
5:06PM - 5:18PM	J19.00010: Self-Consistent Field Theoretical Study on the Crossed Cylinder Morphology of Block Copolymers Jaeup Kim, So Jung Park, Yeongyoon Kim

Tuesday, March 4, 2014, 2:30 pm – 5:30 pm

Session J20: Focus Session: Microfluidics and Nanofluidics IV: Hydrodynamics, Separations and Slip

Sponsoring Units: DPOLY DFD GSNP
Chair: Vivek Sharma, University of Illinois at Chicago
Room: *405*

2:30PM - 3:06PM	J20.00001: DILLON MEDAL SYMPOSIUM BREAK
3:06PM - 3:18PM	J20.00002: Drainage and Stratification Kinetics of Foam Films Yiran Zhang, Vivek Sharma
3:18PM - 3:30PM	J20.00003: Hydrodynamically enforced entropic trapping of Brownian particles Steffen Martens, Gerhard Schmid, Arthur Straube, Lutz Schimansky-Geier, Peter Hänggi
3:30PM - 3:42PM	J20.00004: First clues to understand red blood cell interactions: numerical studies of vesicle suspensions Marine Thiébaud, Chaouqi Misbah
3:42PM - 4:18PM	J20.00005: Separation in microfluidics using periodic structures **Invited Speaker:** German Drazer
4:18PM - 4:30PM	J20.00006: Slip effects in dewetting polymer microdroplets Joshua D. McGraw, Thomas Salez, Simon Maurer, Tak Shing Chan, Michael Benzaquen, Martin Brinkmann, Élie Raphaël, Karin Jacobs
4:30PM - 4:42PM	J20.00007: Imbibition dynamics on surfaces of legs of a small animal and on artificial surfaces mimicking them Marie Tani, Daisuke ISHII, Shuto Ito, Takahiko Hariyama, Masatsugu Shimomura, Ko Okumura
4:42PM - 4:54PM	J20.00008: Wall Driven Cavity Approach to Slug Flow Modeling In a Micro channel Avinash Sahu, Shekhar Kulkarni, Subramaniam Pushpavanam
4:54PM - 5:06PM	J20.00009: Some scaling laws for fluid dynamics in a confined space Ko Okumura
5:06PM - 5:18PM	J20.00010: First-Principles Investigation on Water dynamics at Functionalized Silicon surface Donghwa Lee, Eric Schwegler, Yosuke Kanai

Tuesday, March 4, 2014, 2:30 pm – 5:30 pm

Session J21: Focus Session: Polymers for Energy Storage and Conversion I- Capacitors and Fuel Cells

Sponsoring Units: DPOLY GERA
Chair: Michael Chabinyc, University of California, Santa Barbara
Room: *406*

2:30PM - 3:06PM	J21.00001: DILLON MEDAL SYMPOSIUM BREAK
3:06PM - 3:18PM	J21.00002: Effect of Dipolar Orientational Polarization on Electronic Conductivity in Ferroelectric Polymer Electrets Lianyun Yang, Lei Zhu
3:18PM - 3:30PM	J21.00003: Structural and Interfacial Effects on the Dielectric Properties of PVDF and its Composites for Energy Storage Jennifer Jones, Anthony Mayo, Lei Zhu, Norman Tolk, Richard Mu
3:30PM - 3:42PM	J21.00004: Multiscale simulations of polyurea-based dielectrics for capacitive energy storage Rui Dong, Vivek Ranjan, Marco Buongiorno Nardelli, Jerzy Bernholc
3:42PM - 3:54PM	J21.00005: Effect of Organic Blocking Layer on the Energy Storage Characteristics of High-Permittivity Sol-Gel Thin Film Based on Neat 2-Cyanoethyltrimethoxysilane Yunsang Kim, Mohanalingam Kathaperumal, Ming-Jen Pan, Joseph Perry
3:54PM - 4:06PM	J21.00006: Structured block copolymer thin film composites for ultra-high energy density capacitors Saumil Samant, Shimelis Hailu, Christopher Grabowski, Michael Durstock, Dharmaraj Raghavan, Alamgir Karim
4:06PM - 4:18PM	J21.00007: Development of In-situ Resonant Soft X-ray Scattering for Soft Materials at Advanced Light Source Cheng Wang, Alexander Hexemer, Anthony Young, Howard Padmore
4:18PM - 4:30PM	J21.00008: Structure and Water Transport in Nafion Nanocomposite Membranes Eric Davis, Kirt Page
4:30PM - 4:42PM	J21.00009: Role of Substrate/Film interactions in Controlling Structure and Swelling of Nafion Thin Films Adam Weber, Ahmet Kusoglu, Michael Hickner, Kunal Karan
4:42PM - 4:54PM	J21.00010: Analytical model describes ion conduction in fuel cell membranes Daniel Herbst, Steve Tse, Thomas Witten
4:54PM - 5:06PM	J21.00011: Thermal-induced changes in Transport Properties of PFSA Ionomers Ahmet Kusoglu, Adam Weber

Tuesday, March 4, 2014, 2:30 pm – 5:30 pm

Session J22: Focus Session: Biological and Bio-Inspired Adhesive Polymers II

Sponsoring Units: DPOLY DBIO GSNP
Chair: Devin Kachan
Room: *407*

2:30PM - 3:06PM	J22.00001: DILLON MEDAL SYMPOSIUM BREAK
3:06PM - 3:18PM	J22.00002: Switchable adhesion of liquid crystalline elastomers James Adams, Andrew Brown
3:18PM - 3:30PM	J22.00003: Measurement of depletion-induced force in microtubule bundles Fiodar Hilitski, Andrew Ward, Zvonimir Dogic
3:30PM - 3:42PM	J22.00004: Hybrid metal-coordinate transient networks: using bio-inspired building blocks to engineer the mechanical properties of physical hydrogels Scott Grindy, Devin Barrett, Phillip Messersmith, Niels Holten-Andersen
3:42PM - 4:18PM	J22.00005: Predictive relationships between crosslinker unbinding kinetics, gel stiffness, and plasticity in adhesive biopolymers **Invited Speaker:** Megan Valentine
4:18PM - 4:30PM	J22.00006: DNA Gel with dynamic cross-links Chang-Young Park, Deborah Fygenson, Omar Saleh
4:30PM - 4:42PM	J22.00007: Bio-inspired adhesion: local chemical environments impact adhesive stability Matthew A. Gebbie, Michael V. Rapp, Jing Yu, Wei Wei, J. Herbert Waite, Jacob N. Israelachvili
4:42PM - 4:54PM	J22.00008: Multi-scale models for cell adhesion Yinghao Wu, Jiawen Chen, Zhong-Ru Xie
4:54PM - 5:30PM	J22.00009: Semiflexible networks with labile crosslinkers: Bundling, rheology, ripping, and healing **Invited Speaker:** Alex Levine

Tuesday, March 4, 2014, 2:30 pm – 5:30 pm

Session J32: Focus Session: Physics of Proteins I

Sponsoring Units: DBIO DPOLY
Chair: Donghua Zhou, Oklahoma State University
Room: *708-712*

2:30PM - 2:42PM	J32.00001: Copper and Zinc Chelation as a Treatment of Alzheimer's Disease Miroslav Hodak, Jerry Bernholc
2:42PM - 2:54PM	J32.00002: Structural Transitions and Aggregation in Amyloidogenic Proteins Timothy Steckmann, Prem Chapagain, Bernard Gerstman
2:54PM - 3:06PM	J32.00003: Computational stability ranking of mutated hydrophobic cores in staphylococcal nuclease and T4 lysozyme using hard-sphere and stereochemical constraints Alejandro Virrueta, Alice Zhou, Corey O'Hern, Lynne Regan
3:06PM - 3:42PM	J32.00004: Single-Molecule Ion Channel Conformational Dynamics in Living Cells **Invited Speaker:** H. Peter Lu
3:42PM - 3:54PM	J32.00005: Thermal response of alpha-synuclein structure with knowledge-based residue-residue interactions Peter Mirau, Barry Farmer, Ras Pandey
3:54PM - 4:06PM	J32.00006: Simulation Model of Protein Transport and Stabilization Apichart Linhananta
4:06PM - 4:18PM	J32.00007: The heat released in single catalytic events locally enhances enzyme diffusion Konstantinos Tsekouras, Clement Riedel, Christian Wilson, Kambiz Hamadani, Susan Marqusee, Steve Presse, Carlos Bustamante
4:18PM - 4:30PM	J32.00008: Measuring Conformational Dynamics of Single Biomolecules Using Nanoscale Electronic Devices Maxim V. Akhterov, Yongki Choi, Patrick C. Sims, Tivoli J. Olsen, O. Tolga Gul, Brad L. Corso, Gregory A. Weiss, Philip G. Collins
4:30PM - 4:42PM	J32.00009: Observation of Protein Structural Vibrational Mode Sensitivity to Ligand Binding Katherine Niessen, Mengyang Xu, Edward Snell, Andrea Markelz
4:42PM - 4:54PM	J32.00010: Using engineered intra-molecular disulfide bonds to identify FIMs that matter Wouter Hoff, Masato Kumauchi, Eefei Chen
4:54PM - 5:06PM	J32.00011: Live cell FLIP: anomalous protein diffusion and its fluctuation Minghao Guo, Martin Gruebele
5:06PM - 5:18PM	J32.00012: Molecular Dynamic Study to Determine the Ammonia Conduction Mechanisms in Human RhCG and Bacterial Homoloques Ugur Akgun
5:18PM - 5:30PM	J32.00013: Conformational Transition Mechanism of Adenylate Kinase: A Comparison of All-Atom Molecular Dynamics Simulation to Coarse-Grained Methods Mustafa Tekpinar, Ahmet Yildirim
5:30PM - 5:42PM	J32.00014: Conformational Analysis of Single Polymer Chain by Super-resolution Fluorescence Microscopy Hiroyuki Aoki, Kazuki Mori, Akihiko Shin, Shinzaburo Ito

Tuesday, March 4, 2014, 2:30 pm – 5:30 pm

Session J56: Invited Session: Dillon Medal Symposium

Sponsoring Units: DPOLY
Chair: Thomas Russell, University of Massachusetts Amherst
Room: *Four Seasons Ballroom 4*

2:30PM - 3:06PM	J56.00001: John H. Dillon Medal Lecture: Buckling Instabilities of Polymer Multilayers **Invited Speaker:** Ryan Hayward
3:06PM - 3:18PM	J56.00002: Light-induced sequential self-folding of pre-strained polymer sheets Jan Genzer, Ying Liu, Brandi Shaw, Michael Dickey
3:18PM - 3:30PM	J56.00003: Snap-through instabilities of curved folds on curved, polymer shells Christian Santangelo, Nakul Bende, Sarah Innes-Gold, Art Evans, Jesse Silverberg, Itai Cohen, Ryan Hayward
3:30PM - 3:42PM	J56.00004: Capillary leveling of stepped films with inhomogeneous molecular mobility Kari Dalnoki-Veress, Joshua D. McGraw, Thomas Salez, Oliver Bäumchen, Élie Raphaël
3:42PM - 3:54PM	J56.00005: Wrinkling vs. scarring: Stress collapse in surface-confined assemblies Gregory Grason
3:54PM - 4:06PM	J56.00006: Using theory and simulation to link molecular features of nanoscale fillers to morphology in polymer nanocomposites Arthi Jayaraman, Tyler Martin
4:06PM - 4:18PM	J56.00007: Entropically-Driven Destabilization of Nanoparticle Crystals Sanat Kumar
4:18PM - 4:30PM	J56.00008: Anomalous Kinetics in Reactive Polymer Glasses Gila Stein
4:30PM - 4:42PM	J56.00009: Regular and Irregular Mixing in Hydrocarbon Block Copolymers Richard Register, Bryan Beckingham
4:42PM - 4:54PM	J56.00010: Thermally Switchable Aligned Nanopores by Magnetic-Field Directed Self-Assembly of Block Copolymers Chinedum Osuji
4:54PM - 5:06PM	J56.00011: Tuning the theta temperature and critical micellization temperature of polymers in ionic liquids Timothy Lodge, Megan Hoarfrost
5:06PM - 5:18PM	J56.00012: Design of P3HT-g-P2VP Graft Copolymers as Efficient Compatibilizers for Stable Operation of Polymer Solar Cells (PSCs) Bumjoon Kim, Hyeong-Jun Kim, Jin-Seong Kim, Hyun-Seung Yang

Tuesday, March 4, 2014, 2:30 pm – 5:30 pm

Other 'J' Sessions of potential interest:

Session J17: Granular Materials
Sponsoring Units: GSNP
Chair: Robert Behringer, Duke University
Room: 402

Session J18: Liquid Crystals III: Mostly Nematics and Cholesterics
Sponsoring Units: DCMP GSNP
Chair: Matthew Glaser, University of Colorado, Boulder
Room: 403

Tuesday, March 4, 2014, 5:45 pm – 6:45 pm

Session K21: DPOLY Business Meeting
Room: *406*

Wednesday, March 5, 2014, 8:00 am – 11:00 am

Session L11: Focus Session: Physics of Proteins II

Sponsoring Units: DBIO DPOLY
Chair: Corey O'Hern, Yale University
Room: *203*

8:00AM - 8:12AM	L11.00001: Thermal stability and folding kinetics analysis of intrinsically disordered protein, securin Chia-Ching Chang, Hsueh-Liang Chu, Li-Ping Ho
8:12AM - 8:24AM	L11.00002: Predicting the conformational preferences of proteins using a physics-based free energy method Arijit Roy, Alberto Perez, Justin Maccallum, Ken A. Dill
8:24AM - 8:36AM	L11.00003: Investigating the mechanisms leading to protein aggregation Ruth McNamara, Jennifer J McManus
8:36AM - 9:12AM	L11.00004: Novel insights into protein signaling by high-resolution structural biology **Invited Speaker:** Ilme Schlichting
9:12AM - 9:24AM	L11.00005: Bioinformatic prediction and in vivo validation of residue-residue interactions in human proteins Daniel Jordan, Erica Davis, Nicholas Katsanis, Shamil Sunyaev
9:24AM - 9:36AM	L11.00006: Study on the Dynamics of Influenza Hemagglutinin Based on Energy Landscape Theory Xingcheng Lin, Nathanial Eddy, Jeffrey Noel, Paul Whitford, Jianpeng Ma, Jose Onuchic
9:36AM - 9:48AM	L11.00007: Investigation of protein fluctuations via Anisotropic Network Model and Molecular Dynamics Osman B. Okan, Deniz Turgut, Aravind Rammohan, Angel E. Garcia, Rahmi Ozisik
9:48AM - 10:00AM	L11.00008: Ensemble Activation of G-Protein$-$Coupled Receptors Revealed by Small-Angle Neutron Scattering Xiang-qiang Chu, Suchithranga Perera, Utsab Shrestha, Udeep Chawla, Andrey Struts, Shuo Qian, Michael Brown
10:00AM - 10:12AM	L11.00009: Conformational entropic maps of functional coupling domains in GPCR activation: A case study with beta2 adrenergic receptor Fan Liu, Ravinder Abrol, William Goddard III, Dennis Dougherty
10:12AM - 10:24AM	L11.00010: A theory for protein dynamics: Global anisotropy and a normal mode approach to local complexity Jeremy Copperman, Pablo Romano, Marina Guenza
10:24AM - 11:00AM	L11.00011: TBD **Invited Speaker:** Haw Yang

Wednesday, March 5, 2014, 8:00 am – 11:00 am

Session L14: Invited Session: Understanding Ion Containing Polymer Systems using Computer Simulations

Sponsoring Units: DPOLY DCOMP
Chair: Gary Grest, Sandia National Laboratories
Room: *301-303*

8:00AM - 8:36AM	L14.00001: Complexation of Oppositely Charged Polyelctrolytes and Diblock Polyampholytes **Invited Speaker:** Michael Rubinstein
8:36AM - 9:12AM	L14.00002: Where Scattering and Computations Meet: Structure and Dynamics of Ionic Co-Polymers **Invited Speaker:** Dvora Perahia
9:12AM - 9:48AM	L14.00003: Atomistic Simulations of Aggregation in Ionomer Melts **Invited Speaker:** Amalie L. Frischknecht
9:48AM - 10:24AM	L14.00004: Molecular Dynamics Simulations of Polyelectrolyte Solutions **Invited Speaker:** Andrey Dobrynin
10:24AM - 11:00AM	L14.00005: Effective interactions and aggregation of rodlike polyelectrolytes **Invited Speaker:** Erik Luijten

Wednesday, March 5, 2014, 8:00 am – 11:00 am

Session L16: Focus Session: Extreme Mechanics: Origami and Structural Metamaterials

Sponsoring Units: GSNP DPOLY
Chair: Jose Bico, ESPCI
Room: *401*

8:00AM - 8:36AM	L16.00001: Talk 1 **Invited Speaker:** Michael De Volder
8:36AM - 8:48AM	L16.00002: Bad origami Scott Waitukaitis
8:48AM - 9:00AM	L16.00003: 3D Buckligami: Digital Matter Martin Van Hecke, Koen de Reus, Bastiaan Florijn, Corentin Coulais
9:00AM - 9:12AM	L16.00004: Metallurgy of Miura-ori: lattice theory for inhomogeneous deformations of origami tessellations Arthur Evans, Jesse Silverberg, Lauren McLeod, Itai Cohen, Christian Santangelo
9:12AM - 9:24AM	L16.00005: Mechanics of Miura-ori Origami Lattice Defects Jesse Silverberg, Lauren McLeod, Arthur Evans, Jessica Ginepro, Christian Santangelo, Thomas Hull, Itai Cohen
9:24AM - 9:36AM	L16.00006: Cutting and Folding for Tunable Materials Properties Pablo Damasceno, Paul Dodd, Terry Shyu, Matthew Shlian, Max Shtein, Nicholas Kotov, Sharon Glotzer
9:36AM - 9:48AM	L16.00007: Non-dissipative shapable sheet Naomi Oppenheimer, Thomas Witten
9:48AM - 10:00AM	L16.00008: Folding by Design Paul Dodd, Pablo Damasceno, Sharon Glotzer
10:00AM - 10:12AM	L16.00009: Auto-origami with defects: modeling blueprinted liquid crystal polymer networks Robin Selinger, Andrew Konya, Vianney Gimenez-Pinto
10:12AM - 10:24AM	L16.00010: Measuring mechanical properties of thin hydrogel sheets by elasto-capillary origami. Jinhye Bae, Ryan Hayward
10:24AM - 10:36AM	L16.00011: Auto-Origami and Soft Programmable Transformers: Simulation Studies of Liquid Crystal Elastomers and Swelling Polymer Gels Andrew Konya, Christian Santangelo, Robin Selinger
10:36AM - 10:48AM	L16.00012: Targeting Fold Stiffness to Design Enhanced Origami Structures Philip Buskohl, Giorgio Bazzan, Andrew Abbott, Michael Durstock, Richard Vaia
10:48AM - 11:00AM	L16.00013: Tunable Helical Origami Zi Chen, Eric Dai, Huang Zheng

Wednesday, March 5, 2014, 8:00 am – 11:00 am

Session L20: Focus Session: Dynamics of Glassy Polymers under Nanoscale Confinement I

Sponsoring Units: DPOLY
Chair: Connie Roth, Emory University
Room: *405*

8:00AM - 8:12AM	L20.00001: Elastic modulus and surface tension of a polyurethane rubber in nanometer thick films Meiyu Zhai, Gregory McKenna
8:12AM - 8:24AM	L20.00002: Effect of Microstructural Order on Plasticity in Thin PS-P2VP Films Bekele Gurmessa, Andrew B. Croll
8:24AM - 8:36AM	L20.00003: Theory of Activated Relaxation in Nanoscale Confined Liquids Stephen Mirigian, Kenneth Schweizer
8:36AM - 8:48AM	L20.00004: Dynamics and mechanical properties of glassy polymers under cylindrical confinement Amit Shavit, Robert Riggleman
8:48AM - 9:00AM	L20.00005: Role of free surface and interface effects on viscoelastic properties of ultrathin polystyrene films Heedong Yoon, Gregory McKenna
9:00AM - 9:12AM	L20.00006: Molecular weight dependence of surface flow near the bulk glass transition temperature Yu Chai, Thomas Salez, Michael Benzaquen, Élie Raphaël, James A. Forrest
9:12AM - 9:48AM	L20.00007: Viscosity of Polymer Nanometer Films **Invited Speaker:** Ophelia Tsui
9:48AM - 10:00AM	L20.00008: Surface Dynamics and Structures of Swollen Polymer Brushes Mark Foster, Liang Sun, Bulent Akgun, Suresh Narayanan, Jim Browning
10:00AM - 10:12AM	L20.00009: Solvent-polymer thin films drying below Tg Didier Long, Gregoire Julien, Elian Masnada
10:12AM - 10:24AM	L20.00010: Dynamics of bound polymer layers in CO2 Naisheng Jiang, Levent Sendogdular, Mani Sen, Maya K. Endoh, Tadanori Koga, Bulent Akgun, Michael Dimitriou, Sushil Satija
10:24AM - 10:36AM	L20.00011: Confinement for Thin Film on Substrates with Different Geometric Curvatures Jie Xu, Jiao Chen, Gi Xue
10:36AM - 10:48AM	L20.00012: The effect of nanoconfinement on network topology and thermo-mechanical properties of glassy polymers dynamically reacted using MD simulation Katherine Sebeck, John Kieffer
10:48AM - 11:00AM	L20.00013: A Simple Model of Dynamic Heterogeneity: Connection with Experimental Results Jane Lipson, Nicholas Tito, Scott Milner

Wednesday, March 5, 2014, 8:00 am – 11:00 am

Session L21: Focus Session: Polymers for Energy Storage and Conversion II - Photovoltaics

Sponsoring Units: DPOLY GERA
Chair: Brian Collins, National Institute of Standards and Technology
Room: *406*

8:00AM - 8:36AM	L21.00001: Expanded Morphological Paradigm of Polymeric Solar Cells: Contributions by Soft X-ray Methods **Invited Speaker:** Harald Ade
8:36AM - 8:48AM	L21.00002: Understanding the Role of Additives in Improving the Performance of Polymer:Fullerene Bulk Heterojunction Solar Cells Wei Chen
8:48AM - 9:00AM	L21.00003: High molecular weight insulating polymers can improve the performance of molecular solar cells Ye Huang, Wen Wen, Edward Kramer, Guillermo Bazan
9:00AM - 9:12AM	L21.00004: Suppressing intermolecular charge recombination in photovoltaics through conjugated block copolymer architectures Hao Kuang, Enrique Gomez, Michael Janik
9:12AM - 9:24AM	L21.00005: Solvent Annealing in Selective Solvents: A Novel Method to Tune the Morphology of Low Band Gap Polymer:Bis-Fullerene Heterojunctions Mark Dadmun, Huipeng Chen, Yu-Che Hsiao, Bin Hu
9:24AM - 9:36AM	L21.00006: Using Molecular Simulations to Link Chemical and Physical Features of Conjugated Polymers and Fullerene Derivatives to Bulk Heterojunction Morphology for Organic Photovoltaics Hilary Marsh, Eric Jankowski, Arthi Jayaraman
9:36AM - 9:48AM	L21.00007: Phase Behavior of Polymer Blends for Organic Photovoltaic Applications Jillian Emerson, Eric Furst, Thomas Epps, III
9:48AM - 10:00AM	L21.00008: Solvent-Polarity-Induced Active Layer Morphology Control in Crystalline Diketopyrrolopyrrole-Based Low Band Gap Polymer Photovoltaics Sunzida Ferdous, Feng Liu, Dong Wang, Thomas Russell
10:00AM - 10:12AM	L21.00009: Synthesis, Morphology, and Optoelectronic Properties of All-Conjugated Block Copolymers Kendall Smith, Rafael Verduzco, Yen-Hao Lin, Jorge Mok
10:12AM - 10:24AM	L21.00010: Improving the performance of All-Polymer Solar Cells Yan Jin, Fei Yu, Vikram Kuppa
10:24AM - 10:36AM	L21.00011: Role of Domain Size and Phase Purity on Charge Carrier Density, Mobility and Recombination in P3HT:PC$_{61}$BM Devices Bingyuan Huang, Jojo Amonoo, Anton Li, Chelsea Chen, Peter Green
10:36AM - 10:48AM	L21.00012: Morphology Development During Deposition in OPV Low Band Gap Polymer:Bis-Fullerene Heterojunctions: Effect of a Second Solvent Huipeng Chen, Yu-Che Hsiao, Bin Hu, Mark Dadmun
10:48AM - 11:00AM	L21.00013: Modifying growth of perylene diimide nanocrystals with poly(3-hexyl thiophene) as additives Laju Bu, Ryan Hayward

Wednesday, March 5, 2014, 8:00 am – 11:00 am

Session L22: Focus Session: Directed Assembly of Hybrid Materials I - Crystallization and Multicomponent Systems

Sponsoring Units: DPOLY
Chair: Christopher Li, Drexel University
Room: *407*

8:00AM - 8:12AM	L22.00001: Manipulating the morphologies and lamellar orientations of substrate-supported polyester films using end-grafted poly(methacrylate) brushes Ya-Ting Hsieh, Eamor M. Woo, Atsushi Takahara, Yuji Higaki
8:12AM - 8:24AM	L22.00002: Crystallization in sequence-defined peptoid diblock copolymers induced by microphase separation Jing Sun, Nitash Balsara, Ronald Zuckermann
8:24AM - 8:36AM	L22.00003: Polymer Crystallization at Liquid-Liquid Interface Christopher Li, Wenda Wang, Hao Qi, Ziyin Huang
8:36AM - 9:12AM	L22.00004: Kinetics of nucleation and crystallization of poly(epsilon-caprolactone) - multiwalled carbon nanotube composites **Invited Speaker:** Christoph Schick
9:12AM - 9:24AM	L22.00005: Two-dimensional folded chain crystals composed of a single isotactic poly(methyl methacrylate) chain observed by atomic force microscopy Jiro Kumaki, Takahiro Anzai
9:24AM - 9:36AM	L22.00006: Structure Formation of Spinning Polymer Fibers Studied by Monte Carlo Simulations Wenbing Hu, Qi Liu
9:36AM - 9:48AM	L22.00007: Precise Tetrahedral Giant Molecules Based on Polyhedral Oligosilsesquioxane (POSS) Nano-atoms Mingjun Huang, Chih-Hao Hsu, Shan Mei, Wen-bin Zhang, Stephen Z.D. Cheng
9:48AM - 10:24AM	L22.00008: Novel Polymer Ferroelectric Behavior via Crystal Isomorphism and Nanoconfinement Effect **Invited Speaker:** Lei Zhu
10:24AM - 10:36AM	L22.00009: When Do Semi-crystalline Polymer Fold during Crystallization? Toshikazu Miyoshi, You-Lee Hong
10:36AM - 10:48AM	L22.00010: Chain-Folding Structures of a Semi-crystalline Polymer in Bulk and Single Crystals Elucidated by 13C--13C Double Quantum NMR You-lee Hong, Toshikazu Miyoshi
10:48AM - 11:00AM	L22.00011: Torsional Tapping atomic force microscopy for molecular resolution imaging of semicrystalline polymers Jamie Hobbs, Nic Mullin, Rebecca Savage

Wednesday, March 5, 2014, 8:00 am – 11:00 am

Other 'L' Sessions of potential interest:

Session L10: Focus Session: Single Molecule Studies of Enzymes
Sponsoring Units: DBIO
Chair: Jennifer Ross
Room: 201

Session L12: Invited Session: The Physics of Cell Division
Sponsoring Units: DBIO
Chair: M. Betterton, University of Colorado Boulder
Room: 205

Session L17: Focus Session: Friction and Adhesion
Sponsoring Units: GSNP
Chair: Gianpietro Moras, Affiliation: Fraunhofer IWM
Room: 402

Session L18: Vesicles and Membranes
Sponsoring Units: DCMP GSNP
Chair: E Lyman, University of Delaware
Room: 403

Wednesday, March 5, 2014, 11:15 am – 2:15 pm

Session P1: Joint Poster Session - DPOLY, DCP, DBIO, GSNP
Chemical Physics: Posters 2-40
Biological Physics: Posters 42-105
Polymers and Soft Matter Physics: Posters 107-246
Statistical and Non-linear Physics: Posters 248-368
Room: *Exhibit Hall F*

P1.00107: Transport Properties and Crossection Dependence on PEDOT (Poly(3,4-ethylenedioxythiophene)) Nanoribones
Omar Vega, Jeileen Luciano, Eduardo Vega, Nicholas Pinto, Luis Rosa

P1.00108: Modeling of Nonlinear Mechanical Response in CFRP Angle-Ply Laminates
Shinji Ogihara

P1.00109: One-pot fabrication of graphene oxide-patched hollow-structured microgel particles in a microcapillary device
Aram Byun, Eun Seon Jeong, Jin Woong Kim

P1.00110: Physical Immobilization Liposomes in Uniform Zwitterionic Microgel Particles Fabricated in Microcapillary Device
Eun Seon Jeong, Aram Byun, Jin Woong Kim

P1.00111: In Situ X ray scattering for investing morphology of bottle brush BCP with Solvent annealing
Gajin Jeong, Thomas P. Russell, Benjamin R. Sveinbjornsson, Robert H. Grubbs

P1.00112: PVDF:TiO$_{2}$ Composite Thin Films for Capacitive Energy Storage
Crystal Ewen, Randy Dillingham, Terry Stufflebeam, Eric Brickley

P1.00113: The Glass Transition of Nanoconfined Polycyanurate: Intrinsic Size and Surface Effects
Evelyn Lopez, Sindee L. Simon

P1.00114: Rotational and Translational Diffusion of Glass-Forming Ionic Liquids Confined in Nanoporous Silica
Ciprian Iacob, Joshua Sangoro, James Runt, Friedrich Kremer

P1.00115: Measurement and Modeling of the Effect of Aging on the Compressive Yield of Epoxy
Caitlyn Clarkson, John D. McCoy, Jamie M. Kropka, Robert S. Chambers

P1.00116: Adsorption of HP Lattice Proteins on Patterned Surfaces
Matthew Wilson, Guangjie Shi, David P. Landau, Ying Wai Li, Thomas Wuest

P1.00117: Cell Dynamics Simulations of Cylinder-Forming Diblock Copolymers in Thin Films on Topographical and Chemically Patterned Substrates
Andrei Zvelindovsky, Roberta Dessi, Marco Pinna, Maria Serral, Josep Bonet

P1.00118: Photocrosslinking induced phase separation in evaporating solvents: formation of skin layers and microspheres
Liang Wang, Yifu Ding

P1.00119: Mechanical behavior of polymer-grafted iron oxide nano particles under large shear deformation
Yang Jiao, Erkan Senses, Pinar Akcora

P1.00120: Effective slippage on superhydrophobic trapezoidal grooves
Jiajia Zhou, Evgeny Asmolov, Friederike Schmid, Olga Vinogradova

P1.00121: Electro-Induced Dewetting and Concomitant Ionic Current Avalanche in Nanopores
Xikai Jiang, Jingsong Huang, Bobby Sumpter, Rui Qiao

P1.00122: Microfluidic-SANS: insitu molecular insight into complex fluid processing and high throughput characterisation
Carlos Lopez, Takaichi Watanabe, Joao Cabral, Peter Graham, Lionel Porcar, Anne Martel

P1.00123: SCFT Studies on the Phase Transitions and Domain Spacing of the Bottlebrush Copolymers
Dachuan Sun, Junhan Cho

P1.00124: Molecular Dynamics Simulations of Microphase Separating Tapered Diblock Copolymers
Youngmi Seo, Jonathan R. Brown, Lisa M. Hall

P1.00125: Self-assembly of Giant Molecular Shape Amphiphiles Studied by Dissipative Particle Dynamics
Shiying Ma, Rong Wang

P1.00126: Towards a Predictive Model of Elastomer seals
Musab Khawaja, Arash Mostofi, Adrian Sutton, John Stevens

P1.00127: Coarse-grained molecular dynamics simulations linking molecular features of polycations to polycation-polyanion complexation for gene delivery
Anna McLeland, Daniel Johnson, Arthi Jayaraman

P1.00128: Dynamics and kinetics of single-molecule pulling experiments
Jutta Luettmer-Strathmann, Eric Copenhaver

P1.00129: On the Dynamics of Polymer Brushes
Michael Lang, Ron Dockhorn, Marco Werner, Torsten Kreer, Jens-Uwe Sommer

P1.00130: Petascale Molecular Dynamics Simulations of Polymers and Liquid Crystals
Trung Dac Nguyen, Jan-Michael Carrillo, W. Michael Brown

P1.00131: Thermal conductivity of polymer nanocomposites
Di Xu, Dilip Gersappe

P1.00132: Molecular Dynamics simulations of Hydrogels
Di Xu, Divya Bhatnagar, Miriam Rafailovich, Dilip Gersappe

P1.00133: Identification of transition from disordered to hexagonal ordered phase in simulations of asymmetric diblock copolymers
Pavani Medapuram, David Morse

P1.00134: Systematic and Simulation-Free Coarse-Graining of Polymer Melts using Soft Potentials
Delian Yang, Qiang Wang

P1.00135: Phase separation of biphasic mixture of active Janus colloids
Cong Xu, Jing Yan, Steve Granick

P1.00136: Utilizing ATRP to Design Self-Regenerating Polymer Gels
Xin Yong, Saadyah Averick, Olga Kuksenok, Krzysztof Matyjaszewski, Anna Balazs

P1.00137: Oscillating particles in passive concentrated suspensions
Juan Luis Aragones, Joshua Steimel, Alfredo Alexander-Katz

P1.00138: Nonequilibrium dynamics of active matter with correlated noise: A dynamical renormalization group study
Devin Kachan, Alex Levine, Robijn Bruinsma

P1.00139: Loop polymer brushes from polymer single crystals
Tian Zhou, Christopher Li

P1.00140: Polymer single crystal membranes from curved liquid/liquid interface
Wenda Wang, Christopher Li

P1.00141: Molecular Dynamics of Poly(L-Lactic Acid) at around Glass Transition Temperature Elucidated by Solid-state NMR
Wei Chen, Toshikazu Miyoshi

P1.00142: Macroscale Janus polymer single crystal film and its wettability analysis
Hao Qi, Wenda Wang, Tian Zhou, Christopher Li

P1.00143: Inducing crystallization of poly(3-hexylthiophene) nanowires by well-defined nucleation sites
Daniel Acevedo-Cartagena, Yue Zhang, Elvira Trabanino, Alejandro Briseno, Ryan Hayward

P1.00144: The effects of irreversible polymer adsorbed layers induced by CO2 annealing on recrystallization/dewetting of ultrathin PEO films
Levent Sendogdular, Mitsunori Asada, Naisheng Jiang, Maya K. Endoh, Tadanori Koga, Bulent Akgun, Sushil Satija

P1.00145: Reversible Shape Memory
Jing Zhou, Qiaoxi Li, Sara Turner, Sarah Brosnan, Cary Tippets, Jan-Michael Carrillo, Dmytro Nykypnachuk, Oleg Gang, Andrey Dobrynin, Rene Lopez, Valerie Ashby, Sergei Sheiko

P1.00146: Confined Crystallization in Poly(3-alkylthiophene)-containing Diblock Copolymers
Emily Davidson, Victor Ho, Bryan Beckingham, Rachel Segalman

P1.00147: Nano-architectures of flattened polymer chains at solid-polymer melt interface
Xiaoyu Di, Jiaxun Wang, Naisheng Jiang, Maya K. Endoh, Tadanori Koga, Masafumi Fukuto, Takamichi Shinohara, Atsushi Takahara

P1.00148: Slowing down of accelerated physical aging in ultrathin polymer films
Qiyun Tang, Wenbing Hu, Simone Napolitano

P1.00149: Temperature Step Dewetting Method for Determination of Thin Film T$_{\mathrm{g}}$
Astrid Torres Arellano, Gregory McKenna

P1.00150: Equilibrium chain conformations of bound polymers at the polymer melt/solid interface
Mani Sen, Naisheng Jiang, Levent Sendogdular, Maya Endoh, Tadanori Koga

P1.00151: Influence of Irreversible Adsorption on the Glass Transition Temperature of Polymer Thin Films as Measured by Fluorescence
Mary Burroughs, Rodney Priestley

P1.00152: Evaluation of nanoindentation model for viscoelastic model: Improvements to current model
Meiyu Zhai, Gregory McKenna

P1.00153: Characterization of actin filament deformation in response to actively driven microspheres propagated through entangled actin networks
Tobias Falzone, Savanna Blair, Rae Robertson-Anderson

P1.00154: Designing a Poly (N-isopropylacrylamide) Nanocapsule for Magnetic Field-assisted Drug Delivery
Daniel Denmark, Pritish Mukherjee, Sarath Witanachchi

P1.00155: Block Copolymer Droplets: The Interplay of Surface Energy and Ordering
Su-Mi Hur, Abelardo Ramirez-Hernandez, M. Serdar Onses, Paul Nealey, John A. Rogers, Juan J. de Pablo

P1.00156: Inertia- and deformation drive soft particle migration in finite Reynolds number flow
Yeng-Long Chen

P1.00157: Polymeric nanoparticle formation by non-solvent introduction
Dona Foster, Zhengnan Yang, Ali Dhinojwala

P1.00158: Distribution of short block copolymer chains in Binary Blends of Block Copolymers Having Hydrogen Bonding
Jongheon Kwak, Sunghyun Han, Jin Kon Kim

P1.00159: The Phase Behavior of Polystyrene-b-Poly(2-vinylpyridine) System in Thin Film Geometry
Yoonkeun Kim, Kyosung Koo, Kyunginn Kim, Hyungju Ahn, Du Yeol Ryu

P1.00160: Fabrication of Network Structure in Block Copolymer Thin Films by Solvent Annealing and Ultrafiltration Ability
Sungmin Park, Hyungju Ahn, Young Hun Kim, Pil J. Yoo, Byeongdu Lee, Du Yeol Ryu

P1.00161: Directed Self-Assembly of Cylinder Forming Block Copolymers over Large Areas Using Minimal Topographic Patterning
Jaewon Choi, Kenneth Carter, Thomas Russell

P1.00162: Spin-On Organic Polymer Dopants for Silicon
Bhooshan Popere, Megan Hoarfrost, Andrew Heitsch, Peter Trefonas, Rachel Segalman

P1.00163: Highly Loaded Mesoporous Silica/Nanoparticle Composites and Patterned Mesoporous Silica Films
Rohit Kothari, Nicholas R. Hendricks, Xinyu Wang, James J. Watkins

P1.00164: Alignment and Reordering of a Block Copolymer by Solvent-Enhanced Laser Thermal Direct Write
Jonathan Singer, Kevin Gotrik, Jae-Hwang Lee, Steven Kooi, Caroline Ross, Edwin Thomas

P1.00165: Solution Processing of Ordered Thin Film Nanowire Composites by Magnetic Field Alignment
Jonathan Singer, Candice Pelligra, Su Huang, Chinedum Osuji

P1.00166: Controlling Lateral Ordering of Block Copolymer Micelles on Nano-patterned Surface
Dong-Eun Lee, Dong Hyun Lee

P1.00167: Rapid thermal processing of self-assembling block copolymer thin films on flat surfaces and topographically defined patterns
Michele Perego, Federico Ferrarese Lupi, Tommaso J. Giammaria, Gabriele Seguini, Valentina Gianotti, Diego Antonioli, Katia Sparnacci, Michele Laus, Emanuele Enrico, Natascia De Leo, Luca Boarino, Christopher K. Ober

P1.00168: Flash Grafting of Functional Random Copolymers for Surface Neutralization
Michele Perego, Federico Ferrarese Lupi, Tommaso J. Giammaria, Gabriele Seguini, Monica Ceresoli, Diego Antonioli, Valentina Gianotti, Katia Sparnacci, Michele Laus

P1.00169: New approach for producing chemical templates over large area by Molecular Transfer Printing
Takejiro Inoue, Dustin Janes, Jiaxing Ren, Grant Willson, Christopher Ellison, Paul Nealey

P1.00170: Control over block copolymer interfaces and profiles in thin films for pattern transfer applications
Chunlin He, Mark Stoykovich

P1.00171: Ionic Conductivity and Gas Permeability of Polymerized Ionic Liquid Block Copolymer Membranes
Christopher Evans, Gabriel Sanoja, Yanika Schneider, Miguel Modestino, Rachel Segalman

P1.00172: Highly Conductive, Stretchable, and Transparent Solid Polymer Electrolyte Membrane
Ruixuan He, Mauricio Echeverri, Thein Kyu

P1.00173: Flexible solid polymer electrolyte membran formed by photopolymerization
Jinwei Cao, Thein Kyu

P1.00174: Quantifying the Solid State Charge Transport Characteristics of Radical Polymers
Aditya Baradwaj, Lizbeth Rostro, Bryan Boudouris

P1.00175: Organotin polymeric dielectrics for energy-storage applications
Huan Tran, Arun Kumar, Chenchen Wang, Aaron Baldwin, Rui Ma, Gregory Sotzing, Rampi Ramprasad

P1.00176: Fast Polymer Dynamics and Ion Aggregates in a Model Single Ion Conductor
Christopher Soles, Madhusan Tyagi, Huagen Peng, Jenny Kim, Jim Runt

P1.00177: The Effect of Nanoparticles on the Thermal Transitions of Hydrated Layer-by-Layer Assemblies
Joseph Puhr, Jodie Lutkenhaus

P1.00178: Effect of Matrix Polydispersity on Morphology of Hybrid Materials Consisting of Homopolymer Grafted Nanoparticles in a Homopolymer Matrix
Tyler Martin, Arthi Jayaraman

P1.00179: A Random Approach to Co-Continuous Packing of Dissimilar Nanoparticles
Xiaobo Shen, Irem Kosif, Todd Emrick, Dhandapani Venkataraman, Thomas Russell

P1.00180: Assembly of Acid-Functionalized Single-Walled Carbon Nanotubes at Oil/Water Interfaces
Tao Feng, David Hoagland, Thomas Russell

P1.00181: Self-Assembly of Ordered Hybrid Materials with over 100 nm Domain Spacings and up to 15 nm Nanoparticles using Bottle Brush Block Copolymers
Dongpo Song, Ying Lin, Gang Qian, Xinyu Wang, Xiaohui Liu, Cheng Li, James Watkins

P1.00182: Additive-Driven Assembly of Well-Ordered Block Copolymer/Carbon nanotube Membranes
Feyza Dundar, Ying Lin, James Watkins

P1.00183: Tin-based inorganic-organic hybrid polymers for high energy-density applications
Huan Tran, Arun Kuma, Ghanshyam Pilania, Rampi Ramprasad

P1.00184: Capillary Interactions Among Spherical Particles at Cylindrical Air/Liquid Interfaces
Paul Kim, Thomas Russell, David Hoagland

P1.00185: Stimuli-Responsive Block Copolymer Nanoporous Template by Magnetic-Field Alignment
Youngwoo Choo, Manesh Gopinadhan, Prashant Deshmukh, Pawel Majewski, Olgica Bakajin, Menachem Elimelech, Rajeswari Kasi, Chinedum Osuji

P1.00186: Effect of the mechanical deformation on the electrical properties of the polymer/CNT fiber
Hyun Woo Cho, Bong June Sung

P1.00187: Harnessing Active Fins to Segregate Nanoparticles from Binary Mixtures
Ya Liu, Olga Kuksenok, Amitabh Bhattacharya, Yongting Ma, Ximin He, Joanna Aizenberg, Anna Balazs

P1.00188: Polymer structure in SWCNT/PS nanocomposites with aligned SWCNTs
Wei-Shao Tung, Nigel Clarke Clarke, Russell Composto Composto, Karen Winey

P1.00189: Nanoparticle Brush Architecture Controls Polymer Diffusion in Nanocomposites
Jihoon Choi, Michael J.A. Hore, Nigel Clarke, Karen I. Winey, Russell J. Composto

P1.00190: Effects of O2 plasma treatment of PDMS on the deposition of electrospun PVA nanofibers
Natsumi Kobayashi, Norihisa Miki, Koichi Hishida, Atsushi Hotta

P1.00191: Inelastic behavior in polycarbonate blends
Suresh Ahuja

P1.00192: AFM force measurement on nano scale Polystyrene
Guoyu Yang

P1.00193: The Structural Change of Buckling Depending on the Directional Mechanical Heterogeneity of Top Thin Films
Dokyeong Kwon, Hyo Seon Suh, Kookheon Char

P1.00194: Shape Memory Behaviors of Micro- and Nano-Particles
Lewis Cox, Jason Killgore, Zhengwei Li, Zheng Zhang, Donna Hurley, JianLiang Xiao, Yifu Ding

P1.00195: Halogenated contorted hexabenzocoronenes as electron acceptors in organic solar cells
Anna Hiszpanski, Leo Shaw, Matthew Bruzek, Jonathan Saathoff, Laura Kraya, Fransizka Leuttich, Michael Brady, Michael Chabinyc, Antoine Kahn, Paulette Clancy, John Anthony, Yueh-Lin Loo

P1.00196: Nanostructure Formation of Regioregular Poly(3-octylthiophene) in Thin Films: Effects of Solvents, Concentration and Temperature
Ruttayapon Potai, Rakchart Traiphol, Dvora Perahia

P1.00197: Resonant Infrared Matrix-Assisted Pulsed Laser Evaporation (RIR-MAPLE): An Enabling Technology for Polymeric Thin Films
Adrienne Stiff-Roberts

P1.00198: Temperature and intensity dependent quenching of light emission in Alq$_{3}$ films
Niranjala Wickremasinghe, Ahamed M Ajward, Xiaosheng Wang, Hans Peter Wagner

P1.00199: High Resolution Nanoimprint of Organic Photovoltaics with Bulk Metallic Glass Molds
Manesh Gopinadhan, Jonathan Singer, Zhen Shao, Su Huang, Jan Schroers, Chinedum Osuji

P1.00200: Binding of solvated peptide (EPLQLKM) with a graphene sheet: all-atom-to-all residue hierarchical approach
Aerial Camden, Zhifeng Kuang, Rajiv Berry, Rajesh Naik, Barry Farmer, Nadia Dragneva, Wely Floriano, Oleg Rubel, Ras Pandey

P1.00201: Bio-inspired Self-healing Composite Hydrogel with Iron Oxide Nanoparticle as Coordination Crosslinker
Qiaochu Li, Devin G. Barret, Phillip B. Messersmith, Niels Holten-Andersen

P1.00202: Study of crystalline morphologies of polymer films deposited via matrix assisted pulsed laser evaporation
Hyuncheol Jeong, Craig Arnold, Rodney Priestley

P1.00203: Flow Induced Crystallization in Polyolefins
Kalman Migler

P1.00204: Correlation between state of water and reinforcement mechanism in Poly(lactic acid)
Omkar Vyavahare, David Ng, Henry Dunn, Shaw Ling Hsu

P1.00205: Simultaneous determination of the interaction parameter and topological features of polymers in dilute solutions
Durgesh Rai, Gregory Beaucage, Ramanth Ramachandran, Kedar Ratkanthwar, Nikos Hadjichristidis, Hong Kunlun, David Uhrig, Andy Tsou

P1.00206: Soft Semicrystalline Thermoplastic Elastomers by Arrested Crystallization
Adam Burns, Richard Register

P1.00207: Elastomeric Properties of Poly(glycerol sebacate) (PGS) Based Nanoparticle Composites
Hyun-Joong Chung, Xinda Li, Albert T.-L. Hong

P1.00208: Structure and mechanical properties of dried syndiotactic polypropylene gels formed at different cooling temperatures
Sawako Mizuno, Atsushi Hotta

P1.00209: Comparison of Polyurethanes with Polyhydroxyurethanes: Effect of the Hydroxyl Group on Structure-Property Relationships
Emily K. Leitsch, Vince M. Lombardo, Karl A. Scheidt, John M. Torkelson

P1.00210: Soft solvent-free elastomers and elastomer composites
William Daniel, Yang Zhou, Sam Kirby, Sergei Sheiko

P1.00211: Thermal Transitions in Layer-by-Layer Assemblies Observed Using Electrochemical Impedance Spectroscopy
Choonghyun Sung, Katelin Hearn, Jodie Lutkenhaus

P1.00212: Ionic Effect on the Conformations of Weak Polyelectrolyte Brushes: from Monovalent, Multivalent to Macro ions
Chen Qu, Zhongli Zheng, Y. Elaine Zhu

P1.00213: Simulation of complexes between linear polyelectrolyte and charged dendrimer
Gunja Pandav, Venkat Ganesan

P1.00214: Electrostatic Persistence Length in Polymeric and Biological Systems
Jan-Michael Carrillo, Andrey Dobrynin, Zhen Cao

P1.00215: Effect of Electric Field Alignment on Morphology and Ionic Conductivity of Polymerized Ionic Liquid Block Copolymers
Sharon Sharick, Jacob Nykaza, Yossef A. Elabd, Karen I. Winey

P1.00216: Local Structure and Ion Transport in Glassy Poly(ethylene oxide styrene) Copolymers
Han-Chang Yang, Jimmy Mays, Alexei P. Sokolov, Karen I. Winey

P1.00217: Study of Low Molecular Weight Impurities in Pluronic Triblock Copolymers using MALDI, Interaction Chromatography, and NMR
Z. Helming, D. Zagorevski, C.Y. Ryu

P1.00218: Anomalous Micellization of Pluronic Block Copolymers
Amanda Leonardi, Chang Y. Ryu

P1.00219: Blends involving random copolymers designed for fast crystallization
Onyenkachi Wamuo, Ying Wu, Shaw Hsu, Charles (Chuck) Paul, Andrea Eodice

P1.00220: Molecular Complexation and Phase Diagrams of Urea/PEG Mixtures
Guoepeng Fu, Thein Kyu

P1.00221: Band Bending in Polymer Blends of PVDF-TrFE/P3HT by Poling the Ferroelectric Component
Freddy Wong, Godohaldo Perez, Manuel Bonilla, Daniel Colon, Juan Colon, Ihor Ketsman, Alexi Gruverman, Peter Dowben, Luis Rosa, P. Sharma

P1.00222: Structure of PS/PMMA Blends with Interfacially Active Janus Particles Derived from ABC Triblock Copolymers
Kyle Bryson, Tina Löbling, Axel Müller, Ryan Hayward, Thomas Russell

P1.00223: Band structure and device fabrication using thin-films of p-benzoquinonemonoimine zwitterion/P3HT blends
Gerson Diaz, Freddy Wong, Eduardo Vega, Luis Rosa

P1.00224: Effect of particle incorporation on mechanical properties of carbon fiber textile composites
Satoshi Kobayashi, Jun Kitagawa

P1.00225: Measurements of thermal and healing properties of nanoclay modified asphalt binders using molecular dynamics simulations
Dustin Baker, Takumi Hawa, Zahid Hossain, Mrinal Saha, Musharraf Zaman

P1.00226: Dispersion and Alignment of CdSe Nanorods in Polymer Nanocomposites
Boris Rasin, Amalie Frischknecht, Benjamin Diroll, Lindsay Tsai, Christopher Murray, Russell Composto

P1.00227: Viscoelastic properties of polycarbonate, poly(methyl methacrylate) and their nanocomposites via nanoindentation experiments
Kenneth Noll, Maranda Wong, Erin Evke, Deniz Rende, Rahmi Ozisik

P1.00228: Effect of Hydrolysis on Mechanical Behavior of TCP/PLLA Composites
Satoshi Kobayashi, Shusaku Yamaji

P1.00229: Influence of Light Absorption on the Chain Conformation of Conjugated Polymers
Brian Morgan, Mark Dadmun

P1.00230: Degrafting of covalently grafted polyelectrolyte and polybetaine systems from flat surfaces
Casey Galvin, Jan Genzer

P1.00231: Brownian dynamics simulations of electrostatic adsorption and ordering of charged colloidal nanoparticles
Jennifer Luna-Singh, Enrique Barrera, Vikas Varshney, John Kelley, Richard Vaia

P1.00232: On-demand degrafting of polymer brushes prepared by controlled radical polymerization on flat silica substrates
Rohan Patil, Jiri Srogl, Douglas Kiserow, Jan Genzer

P1.00233: Novel structures and properties of bound polymer layers formed on planar substrates
Tad Koga, Naisheng Jiang, Mani Sen, Levent Sendogdular, Xiaoyu Di, Jiaxun Wang, Alexander Saeboe, Maya Endoh

P1.00234: Nanoporous Membranes with Chemically-Tailored Pore Walls from Triblock Terpolymer Templates
Ryan Mulvenna, Jacob Weidman, John Pople, Bryan Boudouris, William Phillip

P1.00235: Analysis of desorption species from MOS structure surfaces induced by gate voltages
Nozomu Hirota, Ken Hattori, Hiroshi Daimon

P1.00236: Morphology of Microscopic Thin Rubber Films
Xin Zhang, Robert Briber, Howard Wang

P1.00237: Effect of Sequence Blockiness on the Morphologies of Surface-grafted Elastin-like Polypeptides
Julie Albert, Kornkanok Sintavanon, Robin Mays, Sarah MacEwan, Ashutosh Chilkoti, Jan Genzer

P1.00238: Formation of gold nanoparticle assemblies in responsive polymer brushes
Stephanie Christau, Regine von Klitzing, Jan Genzer

P1.00239: Influence of external pressure and surface energies on the phase evolution of ultrathin blend films under symmetrical confinement
Zheng Zhang, Zhen Wang, Yifu Ding

P1.00240: Friction of ring-polymer brushes
Aykut Erbas, Jaroslaw Paturej

P1.00241: Nanoparticle adhesion on soft substrates
Zhen Cao, Andrey Dobrynin, Andrew Oyer, Mark Stevens

P1.00242: Mechanical properties of photo-polymerized sustainable epoxy materials from vegetable oils
Chang Ryu, Matthew Ravalli, Zheqin Yang, James Crivello

P1.00243: Oxidatively Responsive Chain Extension to Topologically Entangle Engineered Protein Hydrogels
Bradley Olsen, Shengchang Tang, Matthew Glassman, Shuaili Li, Simona Socrate

P1.00244: Viscoelastic properties of levan polysaccharides
Kenneth Noll, Deniz Rende, Rahmi Ozisik, Ebru Toksoy-Oner

P1.00245: Viscoelastic Properties of Entangled DNA Solutions: Dependence on Molecular Length and Concentration
Patrick Smith, Veselin S. Dobrev, Jeff Urbach, Rae Anderson

P1.00246: Cellular Automata Simulations of Thermal and Electrical Transport Properties of Thin-Film Polymer/CNTs Nanocomposites
Alex Casey, Germano Iannacchione, Georgi Georgiev, Peggy Cebe

Wednesday, March 5, 2014, 2:30 pm – 5:30 pm

Session Q19: Focus Session: Theory and Simulations of Macromolecules VII - Chain Conformation

Sponsoring Units: DPOLY
Chair: Ting Ge, The University of North Carolina at Chapel Hill
Room: *404*

2:30PM - 2:42PM	Q19.00001: Evolution of chain conformation and entanglements as related to the origin of stress overshoot during startup shear of entangled polymer melts Zhen-Gang Wang, Yuyuan Lu, Lijia An, Shi-Qing Wang
2:42PM - 2:54PM	Q19.00002: Effects of Bond Stiffness on Structural Transitions of Flexible Polymers Tomas Koci, Michael Bachmann
2:54PM - 3:06PM	Q19.00003: Ordering transitions in confined melts of semiflexible polymers: A Monte Carlo simulation Wolfgang Paul, Viktor Ivanov, Marcus Mueller, Kurt Binder
3:06PM - 3:18PM	Q19.00004: Stress-strain relation of K4 phenolic resins by classical MD simulation Katsumi Hagita
3:18PM - 3:30PM	Q19.00005: Zip-DNA: A Novel DNA Structure Formed Under Mechanical Stress Alexander Balaeff, Ivan Mikhailov, Malakhat Turabekova, Stephen Craig, David Beratan
3:30PM - 3:42PM	Q19.00006: Excluded-volume interaction induced stiffness of comb polymer with densely grafted side-chains Feng Qiu
3:42PM - 3:54PM	Q19.00007: Effect of bending stiffness and confinement on a polymer chain under tension Peter Poier, Christos N. Likos, Richard Matthews
3:54PM - 4:06PM	Q19.00008: Molecular mechanics modeling of compressible polymer solutions based on an isobaric-isothermal ensemble. Moeed Shahamat, Alejandro Rey
4:06PM - 4:18PM	Q19.00009: Frank elastic constants in LC mesophases of polymeric semiconductors Patrick Gemuenden, Kurt Kremer, Kostas Ch. Daoulas
4:18PM - 4:30PM	Q19.00010: Stability of Polymeric Crystalline Polymorphs Daniel W. Sinkovits, Sanat K. Kumar
4:30PM - 4:42PM	Q19.00011: Crosslinking Coarse-Grained Polymers in Multiple Strain States Joanne Budzien
4:42PM - 4:54PM	Q19.00012: \textit{A priori }Determination of the Rheological Properties and Slip Phenomena of Polymer Melts John Dorgan, Nicholas Rorrer
4:54PM - 5:06PM	Q19.00013: Autocorrelation study for a coarse-grained polymer model Kai Qi, Michael Bachmann
5:06PM - 5:18PM	Q19.00014: The Configuration and Dynamics of Self-Attractive Flexible and Semi-Flexible Polymers Ronald Larson, Indranil Saha Dalal, Miqiu Kong
5:18PM - 5:30PM	Q19.00015: Floquet-Bloch theory for polymers in a periodic Ricardo Pablo Pedro, David Tempel, Alfredo Alexander-Katz

Wednesday, March 5, 2014, 2:30 pm – 5:30 pm

Session Q20: Focus Session: Organic Electronics and Photonics - Charge Transport

Sponsoring Units: DMP DPOLY
Chair: Brian Collins, National Institute of Standards and Technology
Room: *405*

2:30PM - 2:42PM	Q20.00001: Role of fluctuations on electron transport in soft materials Enrique Gomez
2:42PM - 2:54PM	Q20.00002: Temperature activated transport tuned by libration in the charge-transfer salt trans-stilbene -- 2,3,5,6-tetrafluoro-7,7,8,8-tetracyanoquinodimethane (STB-F$_{4}$TCNQ) Katelyn P. Goetz, Derek Vermeulen, Margaret E. Payne, Jiang Hui, Hu Peng, Cynthia S. Day, Christian Kloc, Veaceslav Coropceanu, Laurie E. McNeil, Oana D. Jurchescu
2:54PM - 3:06PM	Q20.00003: Incorporating Decoherence in the Dynamic Disorder Model of Organic Semiconductors Wei Si, Yao Yao, Chang-Qin Wu
3:06PM - 3:18PM	Q20.00004: Two extreme limits of carrier injection in organic semiconductor FETs Thangavel Kanagasekaran, Hidekazu Shimotani, Yoichi Tanabe, Satoshi Heguri, Katsumi Tanigaki
3:18PM - 3:30PM	Q20.00005: Gate Voltage Dependent Resistance across Interspherulite Boundaries in Solution-Processed Organic Semiconductor Thin Films Anna Hailey, Marcia Payne, John Anthony, Yueh-Lin Loo
3:30PM - 3:42PM	Q20.00006: Charge Energy Transport in Hopping Systems with Rapidly Decreasing Density of States Dan Mendels
3:42PM - 3:54PM	Q20.00007: Field-induced low temperature transport in polythiophene thin films Evan Kang, Eunseong Kim
3:54PM - 4:06PM	Q20.00008: Low trap density of states in solution-deposited organic semiconductors by Vibration Assisted Crystallization Peter Diemer, Christopher Lyle, Yaochuan Mei, Christopher Sutton, Marcia Payne, John Anthony, Veaceslav Coropceanu, Jean-Luc Bredas, Oana Jurchescu
4:06PM - 4:18PM	Q20.00009: Dynamical- and static-disorder effects on charge transport property of organic semiconductors Hiroyuki Ishii, Nobuhiko Kobayashi, Kenji Hirose
4:18PM - 4:54PM	Q20.00010: A general relationship between disorder, aggregation and charge transport in conjugated polymers **Invited Speaker:** Rodrigo Noriega
4:54PM - 5:06PM	Q20.00011: Low-Temperature Structural Phase Transition in a Soluble Oligoacene and Its Effect on Charge Transport Jeremy W. Ward, Abdulmalik Obaid, Cynthia S. Day, John E. Anthony, Oana D. Jurchescu
5:06PM - 5:18PM	Q20.00012: Characterization of charge motion in Poly(3-alkylthiophene) field effect transistors with Scanning Probe Microscopy Jason P. Moscatello, Morgen Patterson, Andrew R. Davis, Kenneth R. Carter, Katherine E. Aidala
5:18PM - 5:30PM	Q20.00013: Photo-Patterned Ion Gel Electrolyte-Gated Thin Film Transistors Jae-Hong Choi, Yuanyan Gu, Kihyun Hong, C. Daniel Frisbie, Timothy P. Lodge

Wednesday, March 5, 2014, 2:30 pm – 5:30 pm

Session Q21: Focus Session: Polymers for Energy Storage and Conversion III - Ion Transport

Sponsoring Units: DPOLY GERA
Chair: Dan Hallinan, Florida State University
Room: *406*

2:30PM - 2:42PM	Q21.00001: Probing Structural Changes in Poly(3-hexylthiophene) (P3HT) During Electrochemical Oxidation with In Situ X-ray Scattering Jacob L. Thelen, Shrayesh N. Patel, Anna E. Javier, Nitash P. Balsara
2:42PM - 2:54PM	Q21.00002: Design of superionic polymers for energy storage applications Yangyang Wang, Fei Fan, Alexander Agapov, Kunlun Hong, Tomonori Saito, Jimmy Mays, Alexei Sokolov
2:54PM - 3:06PM	Q21.00003: Effects of Confinement and Interface on Ion Transport Properties of Block Copolymer Electrolytes Moon Jeong Park, Onnuri Kim, Gyuha Jo
3:06PM - 3:42PM	Q21.00004: Using Tapered Block Copolymers to Create Conducting Nanomaterials **Invited Speaker:** Thomas Epps, III
3:42PM - 3:54PM	Q21.00005: Mechanisms Underlying Ionic Mobilities in Nanocomposite Polymer Electrolytes Venkat Ganesan, Benjamin Hanson, Victor Pryamitsyn
3:54PM - 4:06PM	Q21.00006: Characterization of PEO-b-P(STFSILi) as a Single-Ion Block Copolymer Electrolyte for Lithium Batteries Adriana Rojas, Sebnem Inceoglu, Nitash Balsara
4:06PM - 4:18PM	Q21.00007: Morphology and Ionic Associations in Polyphosphazene Ionomers Joshua Bartels, Andrew Hess, Harry Allcock, Ralph Colby, James Runt
4:18PM - 4:30PM	Q21.00008: Dynamics and morphologies of course-grained ionomer melts under an external electric field Christina Ting, Mark Stevens, Amalie Frischknecht
4:30PM - 4:42PM	Q21.00009: Ion distributions in electrolyte confined by multiple dielectric interfaces Yufei Jing, Jos W. Zwanikken, Vikram Jadhao, Monica de la Cruz
4:42PM - 4:54PM	Q21.00010: How does crystalline structure affect ionic conductivity in solid polymer electrolyte? Shan Cheng, Derrick Smith, Christopher Li
4:54PM - 5:06PM	Q21.00011: Decoupling of ionic conductivity from structural dynamics in polymerized ionic liquids Ciprian Iacob, Joshua Sangoro, James Runt, Friedrich Kremer
5:06PM - 5:18PM	Q21.00012: Conductivity and Stability of Photopolymerized Polymer Electrolyte Network Thein Kyu, Ruixuan He, Yu-Ming Chen, Jialin Mao, Yu Zhu
5:18PM - 5:30PM	Q21.00013: Holographic polymerization for highly conductive robust electrolyte membranes Derrick Smith, Wenda Wang, Timothy Bunning, Christopher Li

Wednesday, March 5, 2014, 2:30 pm – 5:30 pm

Session Q22: Focus Session: Directed Assembly of Hybrid Materials II

Sponsoring Units: DPOLY
Chair: Sanat Kumar, Columbia University
Room: *407*

2:30PM - 3:06PM	Q22.00001: N/A **Invited Speaker:** Michael Bockstaller
3:06PM - 3:18PM	Q22.00002: Ordering Nanoparticles with Polymer Brushes Shengfeng Cheng, Mark Stevens, Gary Grest
3:18PM - 3:30PM	Q22.00003: Nonisotropic Assembly of Single-Component Hairy Nanoparticles R. Vaia, H. Koerner, L. Drummy, B. Benicewicz, Y. Li
3:30PM - 3:42PM	Q22.00004: Study of Rigid Polymers Grafted on Silica Nanoparticle as a Function of Coverage using Molecular Dynamics Simulations Sabina Maskey, J. Matthew D. Lane, Gary S. Grest, Dvora Perahia
3:42PM - 3:54PM	Q22.00005: Polymer Conformation and Topological Defects in Systems of Hairy and DNA hybridized Nanoparticles Chris Knorowski, Alex Travesset
3:54PM - 4:06PM	Q22.00006: Polymer-Grafted Nanoparticles in Polymer Melts: Modeling using Combined SCFT-DFT Approach Valeriy Ginzburg
4:06PM - 4:18PM	Q22.00007: Self-Assembly of Supramolecular Composites under Cylindrical Confinement Peter Bai, Kari Thorkelsson, Peter Ercius, Ting Xu
4:18PM - 4:54PM	Q22.00008: Polymer Structure and Dynamics in Polymer / Layered-Silicate Nanocomposites **Invited Speaker:** Spiros H. Anastasiadis
4:54PM - 5:06PM	Q22.00009: Sulfonated Poly(styrene) Chains Grafted on Magnetic Nanoparticles Yang Jiao, Anton Yevelev, Javier Parra, Pinar Akcora
5:06PM - 5:18PM	Q22.00010: Assembly of diblock copolymer grafted nanoparticles in a homopolymer blend matrix Cara Estridge, Arthi Jayaraman
5:18PM - 5:30PM	Q22.00011: Additive-Driven Self-Assembly of Well Ordered Mesoporous Carbon/Iron Oxide Nanoparticle Composites for Supercapacitors Ying Lin, Xinyu Wang, Gang Qian, James Watkins

Wednesday, March 5, 2014, 2:30 pm – 5:30 pm

Session Q23: Invited Session: Dynamics of Fluids at Interfaces

Sponsoring Units: DFD DPOLY
Chair: Joshua McGraw, Saarland University
Room: *505-507*

2:30PM - 3:06PM	Q23.00001: Fluid transport at the nanoscale: application to osmotic energy harvesting **Invited Speaker:** Lydéric Bocquet
3:06PM - 3:42PM	Q23.00002: Directed Assembly at Interfaces of Isotropic and Anisotropic Fluids **Invited Speaker:** Kathleen Stebe
3:42PM - 4:18PM	Q23.00003: Coalescence of drops on a substrate **Invited Speaker:** Jacco Snoeijer
4:18PM - 4:54PM	Q23.00004: Correlation between surface topography and slippage **Invited Speaker:** Marcus Mueller
4:54PM - 5:30PM	Q23.00005: Contact-line dynamics of colloidal interfaces **Invited Speaker:** Dirk Aarts

Wednesday, March 5, 2014, 2:30 pm – 5:30 pm

Other 'Q' Sessions of potential interest:

Session Q14: Invited Session: Physics of Proteins: New Insights on Hydrogen Bonding and Proton Transfer
Sponsoring Units: DBIO DCOMP
Chair: Wouter Hoff, Oklahoma State University
Room: 301-303

Session Q15: Pattern Formation & Nonlinear Dynamics
Sponsoring Units: DFD
Chair: Sandra Troian, California Institute of Technology
Room: 304

Session Q16: Extreme Mechanics: (more) Toys, Theory, and Fluid-Structure Interaction
Sponsoring Units: GSNP
Chair: Pedro Reis, Massachusetts Institute of Technology
Room: 401

Session Q18: Disordered and Glassy Systems I
Sponsoring Units: DCMP GSNP
Chair: Alexei Sokolov, University of Tennessee/Knoxville
Room: 403

Session Q24: Novel Instrumentation and Measurements for Biomedical Research
Sponsoring Units: GIMS
Chair: Larry Nagahara, Office of Physical Scinences - Oncology, National Cancer Institute
Room: 504

Session Q40: Invited Session: Cell Motility in Three-Dimensions
Sponsoring Units: DBIO DFD
Chair: Moumita Das, Rochester Institute of Technology
Room: Mile High Ballroom 2B-3B

Session Q45: Bionanotechnology and Applications of Polymers and Biomaterials
Sponsoring Units: FIAP
Room: Mile High Ballroom 4D

Thursday, March 6, 2014, 8:00 am – 11:00 am

Session S11: Focus Session: Physics of Proteins III

Sponsoring Units: DBIO DPOLY
Chair: Andrea Markelz, SUNY Buffalo
Room: *203*

8:00AM - 8:12AM	S11.00001: What is the Origin of Internal Friction in Unfolded Proteins? Garegin Papoian, Ignacia Echeverria
8:12AM - 8:24AM	S11.00002: Photoinduced Localized Unfolding of Tubulin Dimers Bound to a Water Soluble Porphyrin and the Search for Binding Location Using Docking Simulations Guided by a Combination of Resonance Raman Spectroscopy and Density Functional Theory Brady McMicken, Lorenzo Brancaleon, Robert Thomas
8:24AM - 8:36AM	S11.00003: Structure and DNA-binding of meiosis-specific protein Hop2 Donghua Zhou, Hem Moktan, Roberto Pezza
8:36AM - 9:12AM	S11.00004: Metal ion coupled protein folding and allosteric motions **Invited Speaker:** Wei Wang
9:12AM - 9:24AM	S11.00005: Direct Probing of Solvent Accessibility and Mobility at the Binding Interface of Polymerase (Dpo4)-DNA Complex Yangzhong Qin, Dongping Zhong
9:24AM - 9:36AM	S11.00006: Accessible surface area of proteins from purely sequence information and the importance of global features Eshel Faraggi, Yaoqi Zhou, Andrzej Kloczkowski
9:36AM - 9:48AM	S11.00007: Excited State Electronic Structure of Fluorescent Proteins Revealed by Two-Dimensional Double Quantum Coherence Spectroscopy Patrick Konold
9:48AM - 10:00AM	S11.00008: Spectroscopic Monitoring of Proton Transfer in Green Fluorescent Protein J. Timothy Sage, Mannis O'Brien, Bridget Salna, Benabbas Abdelkrim, Paul M. Champion, Jasper van Thor
10:00AM - 10:12AM	S11.00009: Correlated Protein Motion Measurements of Dihydrofolate Reductase Crystals Mengyang Xu, Katherine Niessen, James Pace, Vivian Cody, Andrea Markelz
10:12AM - 10:24AM	S11.00010: Structure-based simulations of kinesin motor domain for the study and characterization of its different microtubule and ligand-binding states Srirupa Chakraborty, Wenjun Zheng
10:24AM - 11:00AM	S11.00011: Allosteric Ligand Binding and Anisotropic Energy Flow in Albumin **Invited Speaker:** Brian Dyer

Thursday, March 6, 2014, 8:00 am – 11:00 am

Session S14: Invited Session: Dynamics of Polymers at Interfaces and in Confinement

Sponsoring Units: DPOLY DFD
Chair: Oliver Bäumchen, Max Planck Institute for Dynamics and Self-Organization
Room: *301-303*

8:00AM - 8:36AM	S14.00001: Polymer dynamics and stress transmission at polymer interfaces **Invited Speaker:** Frederic Restagno
8:36AM - 9:12AM	S14.00002: Welding and healing of polymer interfaces: Connecting structure, dynamics and strength **Invited Speaker:** Mark Robbins
9:12AM - 9:48AM	S14.00003: Submicron flow of polymer solutions: slippage reduction due to confinement **Invited Speaker:** Hugues Bodiguel
9:48AM - 10:24AM	S14.00004: The instabilities of a polymer sheet floating at a fluid interface **Invited Speaker:** Narayanan Menon
10:24AM - 11:00AM	S14.00005: Nanoscale Confinement in Single-Layer and Multilayer Supported Polymer Films: Effects on Glass Transition Temperature and Surface Capillary Wave Dynamics near the Glass Transition **Invited Speaker:** John Torkelson

Thursday, March 6, 2014, 8:00 am – 11:00 am

Session S15: Focus Session: Active Soft Matter III - Soft, Self-Propelled Particles

Sponsoring Units: DPOLY DBIO GSNP
Chair: Juan Aragones, Massachusetts Institute of Technology
Room: *304*

8:00AM - 8:12AM	S15.00001: Surprises in the nonequilibrium self-organization of active Janus particles Jie Zhang, Jing Yan, Steve Granick
8:12AM - 8:24AM	S15.00002: Self-propelled Janus particles in an asymmetric channel: Effects of rectification and autonomous pumping Vyacheslav R. Misko, Pulak K. Ghosh, Fabio Marchesoni, Franco Nori
8:24AM - 8:36AM	S15.00003: Territory Covered by N Self-Propelled Brownian Agents in 2 dimensions Francisco J. Sevilla, Luis Alberto Gómez Nava
8:36AM - 8:48AM	S15.00004: Self-propelling microswimmer made of a bi-faced hydrogel Alexander Alexeev, Svetoslav V. Nikolov, Peter Yeh
8:48AM - 9:00AM	S15.00005: Phase separation of biphasic mixture of active Janus colloids Jing Yan, Ming Han, Erik Luijten, Steve Granick
9:00AM - 9:12AM	S15.00006: Optimal hydrodynamic synchronization of colloidal rotors Pietro Cicuta, Jurij Kotar, Nicolas Bruot, Luke Debono, Stuart Box, Stephen Simpson, David Phillips, Simon Hanna
9:12AM - 9:24AM	S15.00007: Mode-coupling theory for the glassy dynamics of self-propelled particles Grzegorz Szamel, Elijah Flenner, Ludovic Berthier
9:24AM - 9:36AM	S15.00008: Accelerated Self-Replication under Non-Equilibrium, Periodic Energy Delivery Rui Zhang, Monica Olvera de la Cruz
9:36AM - 9:48AM	S15.00009: Dynamics and Jamming for Run-and-Tumble Swimmers in the Presence of Quenched Disorder Cynthia Olson Reichhardt, Charles Reichhardt
9:48AM - 10:00AM	S15.00010: Microscopic walkers in concentrated colloidal monolayers: Oscillators, rollers and spinners Juan Luis Aragones, Joshua Steimel, Alfredo Alexander-Katz
10:00AM - 10:12AM	S15.00011: Microscopic Tribotactic Walkers Joshua Steimel, Juan Aragones, Alfredo Alexander-Katz
10:12AM - 10:24AM	S15.00012: Swimming bacteria in liquid crystal Andrey Sokolov, Shuang Zhou, Igor Aranson, Oleg Lavrentovich
10:24AM - 10:36AM	S15.00013: ``Casimir effect'' with active swimmers Dipanjan Ray, Lena Lopatina, Cynthia Olson Reichhardt, Charles Reichhardt
10:36AM - 10:48AM	S15.00014: Stokesian dynamics optimization of three linked spheres microswimmers V.I. Marconi, I. Berdakin, A.J. Banchio
10:48AM - 11:00AM	S15.00015: Swimming against the flow - An orientational disorder to order transition Chih-kuan Tung, Florencia Ardon, Alyssa G. Fiore, Lian Hu, Susan S. Suarez, Mingming Wu

Thursday, March 6, 2014, 8:00 am – 11:00 am

Session S16: Extreme Mechanics: Morigami, Metamaterials, and Elasticity

Sponsoring Units: GSNP DPOLY
Chair: Gregory Grason, University of Massachusetts-Amherst
Room: *401*

8:00AM - 8:12AM	S16.00001: Surface patterning by using plastic deformation Atsushi Takei, Lihua Jin, Hiroyuki Fujita
8:12AM - 8:24AM	S16.00002: Programmable Mechanical Metamaterials: BiHolar Networks Bastiaan Florijn, Corentin Coulais, Martin van Hecke
8:24AM - 8:36AM	S16.00003: Dynamics of Geometrically Reconfigurable 1D and 2D Magneto-Elastic Lattices Marshall Schaeffer, Massimo Ruzzene
8:36AM - 8:48AM	S16.00004: Complex ordered patterns in mechanical instability induced geometrically frustrated triangular cellular structures Sung Kang, Sicong Shan, Andrej Kosmrlj, Wim Noorduin, Samuel Shian, James Weaver, David Clarke, Katia Bertoldi
8:48AM - 9:00AM	S16.00005: Negative post-buckling stiffness of meta-beams Corentin Coulais, Johannes Overvelde, Katia Bertoldi, Martin van Hecke
9:00AM - 9:12AM	S16.00006: Instability and Wave Propagation in Structured 3D Composites Narges Kaynia, Nicholas X. Fang, Mary C. Boyce
9:12AM - 9:24AM	S16.00007: Capillary Origami with a Twist Timothy Farmer, James Bird
9:24AM - 9:36AM	S16.00008: Shape Selection in Chiral Ribbons - From Seed Pods to Supramolecular Assemblies Hillel Aharoni, Shahaf Armon, Eran Sharon
9:36AM - 9:48AM	S16.00009: Metric Description of Defects in Amorphous Elastic Materials Michael Moshe, Eran Sharon, Raz Kupferman
9:48AM - 10:00AM	S16.00010: Inverse Design of Materials by Multi-Objective Differential Evolution(IM^2ODE) Yue-Yu Zhang, Z.L. Li, H.J. Xiang, X.G. Gong
10:00AM - 10:12AM	S16.00011: Changing shape of elastic shells via electrostatic interactions Vikram Jadhao, Creighton Thomas, Monica Olvera de la Cruz
10:12AM - 10:24AM	S16.00012: Buckling of liquid crystal elastomers in confined geometries Thanh-Son Nguyen, Andrew Konya, Robin Selinger, Jonathan Selinger
10:24AM - 10:36AM	S16.00013: Mechanical properties of warped membranes Andrej Kosmrlj, Kechao Xiao, James C. Weaver, Joost J. Vlassak, David R. Nelson
10:36AM - 10:48AM	S16.00014: The Influence of Order and Disorder on Buckling 2D granular layers Andrew B. Croll, Bekele Gurmessa, Antoinette Tordisillas, David Carey, Jingyu Shi
10:48AM - 11:00AM	S16.00015: The Buckling-Fracture Transition in Non-Euclidean Plates Eran Sharon, Yael Klein

Thursday, March 6, 2014, 8:00 am – 11:00 am

Session S19: Focus Session: Thin Films of Block Copolymers and Hybrid Materials I - Solvent Vapor Annealing

Sponsoring Units: DPOLY
Chair: Mark Stoykovich, Chemical and Biological Engineering, University of Colorado
Room: *404*

8:00AM - 8:12AM	S19.00001: Self-assembly kinetics in Symmetric Diblock Copolymer Thin Films during solvent assisted thermal treatments Michele Perego, Federico Ferrarese Lupi, Monica Ceresoli, Tommaso J. Giammaria, Gabriele Seguini, Diego Antonioli, Valentina Gianotti, Katia Sparnacci, Michele Laus, Luca Boarino
8:12AM - 8:24AM	S19.00002: Thin Film Morphologies of Bulk-Gyroid Polystyrene-block-Polydimethylsiloxane under Solvent Vapor Annealing Wubin Bai, Adam Hannon, Kevin Gotrik, Hong Kyoon Choi, Karim Aissou, George Liontos, Konstantinos Ntetsikas, Alfredo Alexander-Katz, Apostolos Avgeropoulos, Caroline Ross
8:24AM - 8:36AM	S19.00003: Design, construction, and testing a purpose-built climate-controlled solvent vapor annealing chamber for guided self-assembly of block polymer thin films Ryan Gnabasik, Rustin Haase, Andrew Baruth
8:36AM - 9:12AM	S19.00004: Block copolymer alignment by shear induced during solvent vapor annealing with a crosslinked elastomer capping layer **Invited Speaker:** Bryan Vogt
9:12AM - 9:24AM	S19.00005: Optimization of long-range order in solvent-annealed polystyrene-b-polylactide block polymer thin films for nanolithography A. Baruth, M. Seo, C.-H. Lin, K. Walster, A. Shankar, M.A. Hillmyer, C. Leighton
9:24AM - 9:36AM	S19.00006: Unidirectional alignment of block copolymer templated porous films using solvent vapor annealing with soft shear Zhe Qiang, Kevin Cavicchi, Bryan Vogt
9:36AM - 9:48AM	S19.00007: Highly enhanced dynamics of microdomains ordering by solvent vapor annealing of thin block copolymer films on polymer network supports Larisa Tsarkova, Anja Stenbock-Fermor, Alexander Böker, Armin Knoll
9:48AM - 10:00AM	S19.00008: Direct Immersion Annealing (DIA) of Block Copolymer Thin Film Arvind Modi, Alamgir Karim
10:00AM - 10:12AM	S19.00009: Dynamical SCFT Simulations of Solvent Annealed Thin Films Sean Paradiso, Kris Delaney, Hector Ceniceros, Carlos Garcia-Cervera, Glenn Fredrickson
10:12AM - 10:24AM	S19.00010: Solvent-Assisted Self-Assembly of Block Copolymer Films: A Simulation Approach Su-Mi Hur, Gurdaman S. Khaira, Paul Nealey, Marcus M\"uller, Juan J. de Pablo
10:24AM - 10:36AM	S19.00011: An in-situ Study of Kinetics of Rapid Self- assembly in Lamellar Forming Poly (styrene-b- lactic acid) (PS-b-PLA) Block Copolymer during Microwave Annealing Parvaneh Mokarian-Tabari, Cian Cummins, Michael A. Morris
10:36AM - 10:48AM	S19.00012: An in situ GISAXS study of BCP thin films during annealing in selective solvent vapor: Solvent removal effects in films of different initial thickness Ilja Gunkel, Xiaodan Gu, Alexander Hexemer, Thomas Russell
10:48AM - 11:00AM	S19.00013: An \textit{in situ} grazing incidence x-ray scattering study of block copolymer thin films during solvent vapor annealing Xiaodan Gu, Ilja Gunkel, Alexander Hexemer, Thomas Russell

Thursday, March 6, 2014, 8:00 am – 11:00 am

Session S20: Polymer Glasses

Sponsoring Units: DPOLY
Chair: Rodney Priestly
Room: *405*

8:00AM - 8:12AM	S20.00001: From adhesion to wetting of a soft particle Thomas Salez, Michael Benzaquen, Élie Raphaël
8:12AM - 8:24AM	S20.00002: Segmental mobility measured during constant strain rate deformation of poly(methyl methacrylate) glasses Kelly Christison, Benjamin Bending, Josh Ricci, Mark Ediger
8:24AM - 8:36AM	S20.00003: Multi-step loading/unloading experiments that challenge constitutive models of glassy polymers James Caruthers, Grigori Medvedev
8:36AM - 8:48AM	S20.00004: Challenges in predicting non-linear creep and recovery in glassy polymers Grigori Medvedev, James Caruthers
8:48AM - 9:00AM	S20.00005: Interplay of deformation and relaxation in a thin glassy polymer film under flat punch in uniaxial strain Mithun Chowdhury, Johann de Silva, Graham Cross
9:00AM - 9:12AM	S20.00006: Stress relaxation behavior of polymer glasses in uniaxial extension Panpan Lin, Shiwang Cheng, Jianning Liu, Shi-Qing Wang
9:12AM - 9:24AM	S20.00007: The effect of normal stress on the rheology of sub-micron thick polymer melt Janet Wong, Aleks Ponjavic
9:24AM - 9:36AM	S20.00008: Scalar softness field correlates to molecular rearrangements for a thermal polymer glass Anton Smessaert, Jörg Rottler
9:36AM - 9:48AM	S20.00009: Pressure-induced rheological transition of polymer melt Luca di Mare, Janet Wong
9:48AM - 10:00AM	S20.00010: Developing a molecular picture for polymer glasses under large deformation Shi-Qing Wang, Shiwang Cheng, Panpan Wang
10:00AM - 10:12AM	S20.00011: Enhancing polymer T$_{\mathrm{g}}$ and tuning mechanical properties with stiff molecular additives Jayachandra Hari Mangalara, David Simmons
10:12AM - 10:24AM	S20.00012: Disorder-driven glass transition of polymers Alessio Zaccone, Eugene Terentjev
10:24AM - 10:36AM	S20.00013: Exploring chain tension in cold drawing of polymer glasses Shiwang Cheng, Panpan Lin, Mesfin Tsige, Shi-Qing Wang
10:36AM - 10:48AM	S20.00014: Nonlinear mechanics of thermoreversibly associating dendrimer glasses Arvind Srikanth, Robert S. Hoy, Berend C. Rinderspacher, Jan W. Andzelm
10:48AM - 11:00AM	S20.00015: Measuring the nanoscale properties of laser-deposited glassy polymer nanodroplets Kimberly Shepard, Craig Arnold, Rodney Priestley

Thursday, March 6, 2014, 8:00 am – 11:00 am

Session S21: Focus Session: Polymer Nanocomposites I - Active Particles and Dynamics

Sponsoring Units: DPOLY GSNP
Chair: Nigel Clarke, University of Sheffield
Room: *406*

8:00AM - 8:36AM	S21.00001: Engineering polymer-fullerene thin films and solar cells with external fields **Invited Speaker:** Joao Cabral
8:36AM - 8:48AM	S21.00002: Spatial temperature mapping in polymer nanocomposites due to ultrafast photothermal heating of gold nanorods Somsubhra Maity, Colin Curtis, Wei-Chen Wu, Chao Xu, Joseph Tracy, Kenan Gundogdu, Jason Bochinski, Laura Clarke
8:48AM - 9:00AM	S21.00003: Photothermal heating and mechanical properties of Au/PEO and Ag/PEO nanocomposites Merve Seyhan, Katherine Rickard, U. Ecem Yarar, Deniz Rende, Nihat Baysal, Rahmi Ozisik, Seyda Bucak
9:00AM - 9:12AM	S21.00004: Annealing polymer nanofibrous nanocomposite mats via photothermal heating: effects on overall crystallinity, morphology, and mechanical properties Russell Gorga, Laura Clarke, Jason Bochinski, Vidya Viswanath, Somsubhra Maity
9:12AM - 9:24AM	S21.00005: Harnessing Interfacially-Active Nanorods to Regenerate Severed Polymer Gels Xin Yong, Olga Kuksenok, Krzysztof Matyjaszewski, Anna Balazs
9:24AM - 9:36AM	S21.00006: Translational and Rotational Motion of Nanocrystals in Rubber Yuya Shinohara, Akira Watanabe, Hiroyuki Kishimoto, Yoshiyuki Amemiya
9:36AM - 9:48AM	S21.00007: Directed Assembly of Polymeric Films Filled with Gold Nanoparticles Ren Zhang, Gurpreet Singh, Michael Bockstaller, Alamgir Karim
9:48AM - 10:00AM	S21.00008: Dynamic gold nanoparticle, polymer-based composites Millicent Firestone, Ann Junghans, Steven Hayden, Jaroslaw Majeski
10:00AM - 10:12AM	S21.00009: Self-Assembly of Supramolecular Nanocomposite in Thin Film: A Kinetic Study Joseph Kao, Kari Thorkelsson, Peter Bai, Ting Xu
10:12AM - 10:24AM	S21.00010: Segmental dynamics and atomistic motions in PMMA/SWNT composites Rana Ashkar, Mansour AbdulBaki, Madhusudan Tyagi, Antonio Faraone, Paul Butler, Ramanan Krishnamoorti
10:24AM - 10:36AM	S21.00011: Fast Electromechanical Response in Liquid Crystal Elastomer Nanocomposites Rafael Verduzco, Aditya Agrawal, Jeff Jacot, Tomi Adetiba
10:36AM - 10:48AM	S21.00012: Dynamics of responsive polypeptide composite particle suspended in a liquid crystal matrix and jamming Cornelia Rosu, Lu Zou, Chanjoong Kim, Paul S. Russo
10:48AM - 11:00AM	S21.00013: Untangling colloidal caging in entangled PEG solutions Subhalakshmi Kumar, Tsang Chi Hang Boyce, Steve Granick

Thursday, March 6, 2014, 8:00 am – 11:00 am

Session S22: Charged and Ion-Containing Polymers

Sponsoring Units: DPOLY
Chair: Yossef Elabd, Drexel University
Room: *407*

8:00AM - 8:12AM	S22.00001: Chain Dynamics and Layering within Spin-Assisted versus Dip-Assisted Polyelectrolyte Multilayer Assemblies Aliaksandr Zhuk, Victor Selin, John F. Ankner, Svetlana Sukhishvili
8:12AM - 8:24AM	S22.00002: Temperature-triggered transformations in shape of layer-by-layer microtubes in aqueous media Choonghyun Sung, Ajay Vidyasagar, Katelin Hearn, Jodie Lutkenhaus
8:24AM - 8:36AM	S22.00003: Dynamics of Precise Ethylene-Acrylic Acid Copolymers and Ionomers Using Dielectric Spectroscopy James Runt, U Hyeok Choi, Hanqing Masser, C. Francisco Buitrago, L. Robert Middleton, Karen Winey, Joseph Cordaro, Amalie Frischknecht
8:36AM - 8:48AM	S22.00004: Plastic Deformation and Morphological Evolution of Precise Acid Copolymers L. Robert Middleton, Jason Azoulay, Dustin Murtagh, Joseph Cordaro, Karen Winey
8:48AM - 9:00AM	S22.00005: Morphology and Water Uptake in Block Copolymer Electrolyte Membranes Xi Chen, David Wong, Sergey Yakovlev, Keith Beers, Nitash Balsara
9:00AM - 9:12AM	S22.00006: Morphology and Ionic Conductivity of Humidity-Responsive Polymerized Ionic Liquid Block Copolymers Sharon Sharick, Kelly Meek, Yuesheng Ye, Yossef A. Elabd, Karen I. Winey
9:12AM - 9:24AM	S22.00007: Conformation of cellulose based polyelectrolyte NaCMC in solution: Effect of concentration and solvent quality Carlos Lopez, Joao Cabral, Peter Graham, Ralph Colby
9:24AM - 9:36AM	S22.00008: A new insight into the counterion distribution of charged polymer brushes Xiao Chu, Guangming Liu, Jiang Zhao
9:36AM - 9:48AM	S22.00009: Macroion induced dehydration of weak polyelectrolyte brushes Zhongli Zheng, Y. Elaine Zhu
9:48AM - 10:00AM	S22.00010: Self-assembly of polyelectrolyte surfactant complexes using large scale MD simulation Monojoy Goswami, Bobby Sumpter
10:00AM - 10:12AM	S22.00011: Surface tension of polyelectrolyte coacervates Jian Qin, Dimitrios Priftis, Robert Farina, Sarah Perry, Lorraine Leon, Jonathan Whitmer, Kyle Hoffman, Matthew Tirrell, Juan J. de Pablo
10:12AM - 10:24AM	S22.00012: Multiscale simulation of complex coacervates Kyle Q. Hoffmann, Jonathan K. Whitmer, Jian Qin, Dimitris Priftis, Sarah Perry, Lorraine Leon, Matthew Kade, Matthew Tirrell, Juan J. de Pablo
10:24AM - 10:36AM	S22.00013: Polyelectrolyte (PE) induced interactions between Charged and zwitterionic Colloids Victor Pryamitsyn, Venkat Ganesan
10:36AM - 10:48AM	S22.00014: Dispersing Functionalized Nanoparticles in PEO-based Single Ion Conductors Michael O'Reilly, Karen Winey
10:48AM - 11:00AM	S22.00015: Dramatic Changes in Polyelectrolyte Blend Phase Behavior due to Charge Correlations Monica Olvera de la Cruz, Jos Zwanikken, Charles Sing

Thursday, March 6, 2014, 8:00 am – 11:00 am

Other 'S' Sessions of potential interest:

Session S12: Invited Session: Impacts of Physics Research on the Economy
Sponsoring Units: FPS
Chair: Pushpalatha Bhat, Fermi National Accelerator Laboratory
Room: 205

Session S18: Disordered and Glassy Systems II
Sponsoring Units: DCMP GSNP
Chair: Sindee Simon, Texas Tech University
Room: 403

Session S23: Invited Session: Industrial Physics Forum: Frontiers of Nanomaterials and Interfaces
Sponsoring Units: FIAP
Chair: Ichiro Takeuchi, University of Maryland, Luigi Colombo, Texas Instruments Incorporated
Room: 505-507

Thursday, March 6, 2014, 11:15 am – 2:15 pm

Session T15: Focus Session: Active Soft Matter IV- Locomotion and Collective Behavior

Sponsoring Units: DPOLY GSNP DBIO
Chair: Alfredo Alexander-Katz, Massachusetts Institute of Technology
Room: *304*

11:15AM - 11:51AM	T15.00001: to be determined by you **Invited Speaker:** Davide Marenduzzo
11:51AM - 12:03PM	T15.00002: Dynein's C-terminal Domain Plays a Novel Role in Regulating Force Generation Arne Gennerich, Matthew Nicholas, Sibylle Brenner, Caitlin Lazar, Sarah Weil, Richard Vallee, Peter Hook
12:03PM - 12:15PM	T15.00003: Active Jamming Jeremie Palacci, Stefano Sacanna, David Pine, Paul Chaikin
12:15PM - 12:27PM	T15.00004: Colloidal Dancers: Designing networks of DNA-functionalized colloids for non-random walks Emily W. Gehrels, W. Benjamin Rogers, Zorana Zeravcic, Vinothan N. Manoharan
12:27PM - 12:39PM	T15.00005: Cell crawling on filamentous tracks Jorge Lopez, Jennifer Schwarz, Moumita Das
12:39PM - 12:51PM	T15.00006: Hydrodynamics and control of microbial locomotion Jorn Dunkel, Vasily Kantsler, Marco Polin, Hugo Wioland, Raymond Goldstein
12:51PM - 1:03PM	T15.00007: Enhancement of microbial motility due to advection-dependent nutrient absorption Carlos A. Condat, Mario E. Di Salvo
1:03PM - 1:15PM	T15.00008: Collective behavior of chemotactic colloids: clusters, asters and oscillations Suropriya Saha, Ramin Golestanian, Sriram Ramaswamy
1:15PM - 1:27PM	T15.00009: Collective motion in populations of colloidal robots Denis Bartolo, Antoine Bricard, Jean-Baptiste Caussin, Olivier Dauchot, Nicolas Desreumaux
1:27PM - 1:39PM	T15.00010: Emergent collective phenomena in a mixture of hard shapes through active rotation Michael Engel, Nguyen Nguyen, Daphne Klotsa, Sharon Glotzer
1:39PM - 1:51PM	T15.00011: The flocking-laning transition in systems of self-propelled rods Hui-Shun Kuan, Robert Blackwell, Matthew A. Glaser, Meredith D. Betterton
1:51PM - 2:03PM	T15.00012: Emergence of collective motion in a model of interacting passive Brownian particles Victor Dossetti, Francisco J. Sevilla, Alexandro Heiblum-Robles
2:03PM - 2:15PM	T15.00013: Flocking at a distance in active granular matter Harsh Soni, Nitin Kumar, Sriram Ramaswamy, Ajay Sood

Thursday, March 6, 2014, 11:15 am – 2:15 pm

Session T19: Focus Session: Thin Films of Block Copolymers and Hybrid Materials II - Directed Self Assembly

Sponsoring Units: DPOLY
Chair: Chaitanya Ullal, Rensselaer Polytechnic Institute
Room: *404*

11:15AM - 11:27AM	T19.00001: Impact of stereocomplexation on the directed self-assembly poly (styrene-b-\textit{(rac)}-lactide) on chemically patterned surfaces Xiao Li, Yadong Liu, Abelardo Ramirez-Hernandez, Juan J. de Pablo, Shengxiang Ji, Paul Nealey
11:27AM - 11:39AM	T19.00002: Directed Assembly of Lamellae Forming Block Copolymer Thin Films near the Order-Disorder Transition Sangwon Kim, Paul Nealey, Frank Bates
11:39AM - 11:51AM	T19.00003: Directed self-assembly (DSA)of block copolymer-based supramolecular materials on chemically patterned surfaces Guangpeng Wu, Paul Nealey
11:51AM - 12:03PM	T19.00004: Dynamics of Defect Annihilation in Directed Self-Assembly of Block Copolymers Using Optical Inspection of Fully Patterned Wafers Paulina Rincon Delgadillo, Roel Gronheid, Paul Nealey
12:03PM - 12:15PM	T19.00005: Finding Optimal Templates for the Directed Self-Assembly of Thin Film Block Copolymers with Inverse Self-Consistent Field Theory Simulations Adam Hannon, Yi Ding, Wubin Bai, Caroline Ross, Alfredo Alexander-Katz
12:15PM - 12:27PM	T19.00006: Directed self-assembly of ABA triblock copolymer on chemical contrast pattern for sub-10nm nanofabrication by solvent annealing Shisheng Xiong, Lei Wan, Yves-Andre Chapuis, Thomas Albrecht, Ricardo Ruiz, Paul F. Nealey
12:27PM - 1:03PM	T19.00007: Measurement of the Buried Structure of Sub-30 nm Block Copolymer Lithography Patterns Using Resonant X-ray Scattering **Invited Speaker:** Joseph Kline
1:03PM - 1:15PM	T19.00008: Directed self-assembly of lamellae-forming block copolymer with density multiplication for high aspect ratio structures Xuanxuan Chen, Paulina Rincon Delgadillo, Zhang Jiang, Jin Wang, Joseph Strzalka, Paul Nealey
1:15PM - 1:27PM	T19.00009: Wetting Transition and Directed Assembly of Block Copolymers on UVO Tunable Nanopatterned Elastomeric Substrates Arzu Hayirlioglu, Manish Kulkarni, Alamgir Karim
1:27PM - 1:39PM	T19.00010: Fabrication of large-area arrays of hybrid nanostructures on polymer-derived chemically patterned surfaces Xiaoying Liu, Dhriti Nepal, Sushmita Biswas, Kyoungweon Park, Richard Vaia, Paul Nealey
1:39PM - 1:51PM	T19.00011: Templated Co-assembly of PS-b-PDMS Block Copolymer and Inorganic Nanoparticles Yi Ding, Kevin Gotrik, Ou Chen, Moungi Bawendi, Caroline Ross, Alfredo Alexander-Katz

Thursday, March 6, 2014, 11:15 am – 2:15 pm

Session T20: Focus Session: Organic Electronics and Photonics - Photophysics

Sponsoring Units: DMP DPOLY
Chair: Sahar Sharifzadeh, Lawrence Berkeley National Laboratory
Room: *405*

11:15AM - 11:51AM	T20.00001: Exciton fission and solar energy conversion beyond the limit **Invited Speaker:** Xiaoyang Zhu
11:51AM - 12:03PM	T20.00002: Probing inter- and intrachain coupling in P3HT using time resolved spectroscopy Bhoj Gautam, Robert Younts, Cong Mai, Harald Ade, Christoph Hellmann, Natalie Stingelin, Kenan Gundogdu
12:03PM - 12:15PM	T20.00003: Charge transfer in rare earth oxide hybrid solar cells revealed through ultrafast spectroscopic measurement Bill Pandit, Kasun Fernando, Bruce Alphenaar, Jinjun Liu
12:15PM - 12:27PM	T20.00004: Charge Photogeneration (CPG) in Low-Band-Gap (LBG) Donor-Acceptor (D-A) Copolymers: Higher Efficiency in LBG Polymer-Fullerene Solar Cells Karan Aryanpour, Sumit Mazumdar
12:27PM - 1:03PM	T20.00005: Exciton dynamics in organic molecular crystals and nanostructures **Invited Speaker:** Chris Bardeen
1:03PM - 1:15PM	T20.00006: Poly-(3-hexylthiophene) Aggregate Formation in Binary Solvent Mixtures: An Excitonic Coupling Analysis David Boucher, Calynn Johnson
1:15PM - 1:27PM	T20.00007: How the structures of salts involve in the optical properties of Pyrene (C$_{16}$H$_{10})$? Hyun-Sook Jang, Jing Zhao, Mu-Ping Nieh
1:27PM - 1:39PM	T20.00008: Polymer Films with Enhanced Light Emission Adam Thomas, Zachary Barcikowski, Marian Tzolov
1:39PM - 1:51PM	T20.00009: Interaction of Poly(3-hexylthiophene) (P3HT) with NiO (100) Surface: A First-Principles Study Longhua Li, Oleg Kontsevoi, Arthur Freeman
1:51PM - 2:03PM	T20.00010: Electronic Structure Investigation of Doping C$_{60}$ with Metal Oxide Chenggong Wang, Yongli Gao

Thursday, March 6, 2014, 11:15 am – 2:15 pm

Session T21: Focus Session: Polymer Nanocomposites II - Dynamics

Sponsoring Units: DPOLY GSNP
Chair: Jason Bochinski, North Carolina State University
Room: *406*

11:15AM - 11:27AM	T21.00001: Fundamental Principles on the Dynamics in Polymer Melts and Nanocomposites Gerald Schneider, Thomas Glomann, Juergen Allgaier, Dieter Richter
11:27AM - 11:39AM	T21.00002: Direct Neutron Scattering Measurements of Grafted Polymer Chain Conformations from Functionalized Nanoparticles Michael J.A. Hore, Boualem Hammouda
11:39AM - 11:51AM	T21.00003: Many Body Effects on Particle Diffusion in Polymer Nanocomposites Zachary E. Dell, Kenneth S. Schweizer
11:51AM - 12:03PM	T21.00004: Enhanced Nanorod Diffusion in Polymer Melts Russell J. Composto, Nigel Clarke, Karen I. Winey, Jihoon Choi
12:03PM - 12:15PM	T21.00005: The Dynamics of Nanoparticles in Polymer Solutions and Melts Ashis Mukhopadhyay, Sharmine Alam, Indermeet Kohli
12:15PM - 12:27PM	T21.00006: Dynamics at the Polymer/Nanoparticle Interface in Poly(2-vinylpyridine) Nanocomposites Adam Holt, Vera Bocharova, Philip Griffin, Alexander Agaprov, Adam Imel, Mark Dadmun, Joshua Sangoro, Alexei Sokolov
12:27PM - 1:03PM	T21.00007: Nanoscale Organic Hybrid Materials (NOHMs) -- Structure and Dynamics **Invited Speaker:** Lynden Archer
1:03PM - 1:15PM	T21.00008: Dynamics of entangled polymers in the presence of obstacles Nigel Clarke, Karen Winey, Russell Composto
1:15PM - 1:27PM	T21.00009: The Effect of Nanoparticle Radius of Gyration on the Diffusion of Polystyrene in a Nanocomposite Adam Imel, Brad Miller, Wade Holly, Durairaj Baskaran, J.W. Mays, Mark D. Dadmun
1:27PM - 1:39PM	T21.00010: XPCS Studies of Nanoparticle Motion within Glassy Polymer Melts Hongyu Guo, S.K. Ghosh, S.K. Sinha, M. Cui, T.P. Russell, W. Cha, J. Carnis, H. Kim, z. Jiang, S. Narayanan
1:39PM - 1:51PM	T21.00011: Microscopic Theory for Entangled Polymer Dynamics in Rod-Sphere Nanocomposites Umi Yamamoto, Kenneth Schweizer
1:51PM - 2:03PM	T21.00012: Polymer Diffusion in Nanocomposites with Nanorods: Bridging the Gap between Nanosphere and Nanotube fillers Jihoon Choi, Nigel Clarke, Karen I. Winey, Russell J. Composto
2:03PM - 2:15PM	T21.00013: The structure and dynamics of polymer nanocomposites containing anisotropic nanoparticles Chia-Chun Lin, Kohji Ohno, Nigel Clarke, Karen Winey, Russell Composto, Michael Hore

Thursday, March 6, 2014, 11:15 am – 2:15 pm

Session T22: Focus Session: Dynamics of Glassy Polymers under Nanoscale Confinement II

Sponsoring Units: DPOLY
Chair: Daniel Sussman, University of Pennsylvania
Room: *407*

11:15AM - 11:27AM	T22.00001: Extended Tg Gradient Profile Across a Glassy-Rubbery Polymer-Polymer Interface with an 80 K Tg Difference Roman Baglay, Connie Roth
11:27AM - 11:39AM	T22.00002: Soft spots in amorphous thin films: a structural signature of free surfaces Daniel Sussman, Andrea Liu, Sidney Nagel
11:39AM - 11:51AM	T22.00003: Free surface facilitation of the dynamics of entangled polymer films Ethan Glor, Zahra Fakhraai
11:51AM - 12:27PM	T22.00004: Molecular simulation of the dynamics in thin polymer films **Invited Speaker:** Robert Riggleman
12:27PM - 12:39PM	T22.00005: A simple view of T_g measurements in thin polymer films James Forrest, Kari Dalnoki-Veress
12:39PM - 12:51PM	T22.00006: Instrumentation origin of the glass transition temperature depression in thin films measured by ellipsometry Mikhail Efremov, Paul Nealey
12:51PM - 1:03PM	T22.00007: Dependence of Tg on interfacial energy and ``hardness" of confinement in multi-nanolayered polymers David Simmons, Ryan Lang, Weston Merling
1:03PM - 1:15PM	T22.00008: Methacrylate-Based Polymer Films Exhibit Different Tg-Confinement Effects at High and Low Molecular Weight Tian Lan, John Torkelson
1:15PM - 1:27PM	T22.00009: A Thermodynamic Model for Glass Transition Shifts in Freestanding and Supported Films Chris Price, Ronald White, Jane Lipson
1:27PM - 1:39PM	T22.00010: Physical Aging of Polymer Glasses Vitrified under Stress Laura A.G. Gray, Connie B. Roth
1:39PM - 1:51PM	T22.00011: Structural Recovery of Single Polystyrene Ultrathin Films Yung P. Koh, Sindee L. Simon
1:51PM - 2:03PM	T22.00012: Understanding the Physical Aging Behavior of Glassy Polystyrene Layers in Close Contact with Rubbery Domains Connie Roth, Phil Rauscher, Justin Pye, Roman Baglay
2:03PM - 2:15PM	T22.00013: Limitations in interpretation of Quartz Crystal Microbalance (QCM) beyond the rigid (Sauerbrey) to viscoelastic (lossy) transition Clinton Wiener, Robert Weiss, Christopher White, Bryan Vogt

Thursday, March 6, 2014, 11:15 am – 2:15 pm

Other 'T' Sessions of potential interest:

Session T1: Focus Session: Physics of Behavior I
Sponsoring Units: DBIO
Chair: Greg Stephens, Vrije University Amsterdam
Room: 103/105

Session T2: Surfaces, Nanoparticles, and Materials
Sponsoring Units: DCP
Chair: Gilbert Nathanson, University of Wisconsin-Madison
Room: 102

Session T12: Invited Session: Functional Dynamics of Protein from Physics to Biology
Sponsoring Units: DBIO
Chair: Xiang-qiang Chu, Wayne State University
Room: 205

Session T16: Focus Session: Extreme Mechanics: Buckling, Wrinkling, and Poking
Sponsoring Units: GSNP
Chair: Dominic Vella, University of Oxford
Room: 401

Session T17: Focus Session: Jamming and the Glass Transition
Sponsoring Units: GSNP
Chair: Corey O'Hern, Yale University
Room: 402

Session T18: Colloids: Charged, Clustered, and/or Sticky
Sponsoring Units: DCMP GSNP
Chair: Carlos Orellana, Emory University
Room: 403

Thursday, March 6, 2014, 2:30 pm – 5:30 pm

Session W14: Invited Session: Patterns in Polymers: Elasticity, Fluids, and Surfaces

Sponsoring Units: DPOLY GSNP
Chair: Kari Dalnoki-Veress, McMaster University
Room: *301-303*

2:30PM - 3:06PM	W14.00001: Exotic nanoparticles with block copolymer design and solution construction with kinetic control **Invited Speaker:** Darrin Pochan
3:06PM - 3:42PM	W14.00002: Exploiting Elasticity with Thin Polymer Films **Invited Speaker:** Andrew Croll
3:42PM - 4:18PM	W14.00003: Transition Pathways Connecting Stable and Metastable Ordered Phases **Invited Speaker:** An-Chang Shi
4:18PM - 4:54PM	W14.00004: Pattern formation and control in polymeric systems: From Minkowski measures to in situ AFM imaging **Invited Speaker:** Karin Jacobs
4:54PM - 5:30PM	W14.00005: Nonequilibrium patterns in nanocomposite films and fluids **Invited Speaker:** Erik K. Hobbie

Thursday, March 6, 2014, 2:30 pm – 5:30 pm

Session W19: Focus Session: Thin Films of Block Copolymers and Hybrid Materials III - Surface, Wetting, and Confinement Interactions

Sponsoring Units: DPOLY
Chair: Bradley D. Olsen, Massachusetts Institute of Technology
Room: *404*

2:30PM - 2:42PM	W19.00001: Understanding the surface chemistry of amphiphilic copolymer thin films in aqueous environments Hilda Buss, Nathaniel Lynd, Ronald Zuckermann, Ed Kramer, Rachel Segalman
2:42PM - 2:54PM	W19.00002: Effects of Substrate Interactions on Out-of-Plane Order in Thin Films of Lamellar Copolymers Indranil Mitra, Nikhila Mahadevapuram, Alona Bozhchenko, Joseph Strzalka, Gila Stein
2:54PM - 3:06PM	W19.00003: Evolution of directed and self-assembled structure in free standing and confined PS-b-PMMA thin films Lingshu Wan, Hyo Seon Suh, Xuanxuan Chen, Paulina Delgadillo, Zhang Jiang, Paul Nealey
3:06PM - 3:18PM	W19.00004: Self-Assembly of Diblock Copolymers in Half-Ellipsoid-Shape Confinements So Jung Park, Myong-Hyun Kim, Dagam Lee, Jin Kon Kim, Jaeup Kim
3:18PM - 3:30PM	W19.00005: Manipulating Nanoscale Morphologies in Block Copolymer Thin Films Using Gradient Approaches Ming Luo, Jonathan Seppala, Julie Albert, Ronald Lewis, III, Nikhila Mahadevapuram, Gila Stein, Thomas Epps, III
3:30PM - 3:42PM	W19.00006: Patterning square and rectangular arrays using shear-aligned block copolymer thin films So Youn Kim, Raleigh L. Davis, Richard A. Register, Jessica Gwyther, Adam Nunns, Ian Manners, Paul M. Chaikin
3:42PM - 3:54PM	W19.00007: Capillary instabilities of non-axisymmetric stripe arrays atop a viscous medium Zheng Zhang, Yifu Ding
3:54PM - 4:06PM	W19.00008: Capillary wrinkling in thin film polymer annuli David J. Farmer, James S. Sharp
4:06PM - 4:18PM	W19.00009: Tension Amplification and Structural Rearrangement in Tethered Bottle-Brush Layers via Molecular Dynamics Simulation Gary Leuty, Mesfin Tsige, Michael Rubinstein, Gary S. Grest
4:18PM - 4:30PM	W19.00010: A single liquid on a homogeneous substrate can lead to quantized contact angles and running droplets Mark Ilton, Pawel Stasiak, Mark Matsen, Kari Dalnoki-Veress
4:30PM - 4:42PM	W19.00011: Morphology Development and In-situ Crosslinking in Electrosprayed Thin Films Hanqiong Hu, Jonathan Singer, Chinedum Osuji
4:42PM - 4:54PM	W19.00012: Protonation-induced microphase separation in thin films of a polyelectrolyte-hydrophilic diblock copolymer Charlotte Stewart-Sloan, Bradley Olsen
4:54PM - 5:06PM	W19.00013: Factors Influencing Shear Alignment of Cylinder-Forming Block Copolymer Thin Films Raleigh Davis, Richard Register, Paul Chaikin
5:06PM - 5:18PM	W19.00014: Direct Write Thermocapillary Dewetting of Polymer Thin Films by a Laser-Induced Thermal Gradient Jonathan Singer, Pao-Tai Lin, Steven Kooi, Jurgen Michel, Lionel Kimerling, Edwin Thomas
5:18PM - 5:30PM	W19.00015: Patterning Thin Polymer Films by Photodirecting the Marangoni Effect Christopher Ellison, Chae Bin Kim, Dustin Janes, Joshua Katzenstein

Thursday, March 6, 2014, 2:30 pm – 5:30 pm

Session W20: Focus Session: Membranes and Confinement

Sponsoring Units: DPOLY
Chair: Pullickel Ajayan, Rice University
Room: *405*

2:30PM - 2:42PM	W20.00001: Poly(styrene-b-dimethylsiloxane-b-styrene) Membranes in Pervaporation for In Situ Product Recovery during Fermentation Chaeyoung Shin, Zachary Baer, Ali Evren Ozcam, Douglas Clark, Nitash Balsara
2:42PM - 2:54PM	W20.00002: Microphase Separated Block Copolymers in Pervaporation Membranes for Biofuels Processing Douglas Greer, Chae-Young Shin, Evren Ozcam, Jeffrey Skerker, Thalita Basso, Dacia Leon, Stefan Bauer, Nitash Balsara
2:54PM - 3:06PM	W20.00003: Controlling Solution Self-assembly and Non-Solvent Induced Microphase Separation of Triblock Terpolymers to Generate Nanofiltration Membranes with Chemically-Tailored Pore Walls Bryan Boudouris, Ryan Mulvenna, Jacob Weidman, William Phillip
3:06PM - 3:42PM	W20.00004: Phase Behavior and Mixing of Nanoparticle Grafted Polymers with Homopolymers **Invited Speaker:** Ramanan Krishnamoorti
3:42PM - 3:54PM	W20.00005: Mechanical Properties of Two-Dimensional Alkanethiol-Coated Gold Nanoparticle Membranes K. Michael Salerno, Dan S. Bolintineanu, J. Matthew D. Lane, Gary S. Grest
3:54PM - 4:06PM	W20.00006: Nanoparticle Encapsulation in Diblock Copolymer/Homopolymer Blend Thin Film Mixtures Junnan Zhao, Xi Chen, Peter Green
4:06PM - 4:18PM	W20.00007: Bicontinuous Porous Carbon Films Templated with ABC Triblock Copolymers Kevin Cavicchi, Guodong Deng, Bryan Vogt
4:18PM - 4:54PM	W20.00008: Crystallization and Phase Transitions in Polymer Nanolayered Systems under Confinement **Invited Speaker:** Eric Baer
4:54PM - 5:06PM	W20.00009: Estimation of the Thickness of the Interface in Polyoctenamer-Single Walled Carbon Nanotube Composites by Thermogravimetric Analysis Alin Cristian Chipara, Robert Vajtai, Pulickel M Ajayan, Dorina M. Chipara, Elamin Ibrahim, James Hinthorne, Mircea Chipara
5:06PM - 5:18PM	W20.00010: Programmable Crafting of Hierarchically Structured Block Copolymer/Nanoparticles (and Nanorods) via Flow Enabled Self-Assembly Zhiqun Lin, Bo Li, Wei Han
5:18PM - 5:30PM	W20.00011: On the Glass Transition in Polystyrene-TiO2 Nanocomposites Jorge Alarcon, Dorina M. Chipara, Karen Lozano, Mircea Chipara, Alin Cristian Chipara, Robert Vajtai, Pullickel M. Ajayan

Thursday, March 6, 2014, 2:30 pm – 5:30 pm

Session W21: Polymer Melts and Solutions

Sponsoring Units: DPOLY
Chair: Rob Hoy, University of South Florida
Room: *406*

2:30PM - 2:42PM	W21.00001: Multi-level slip-link modeling Jay Schieber
2:42PM - 2:54PM	W21.00002: Synthesis of amphiphilic diblock copolymer for surface modification of Ethylene-Norbornene Copolymers Simon Levinsen, Winnie Edith Svendsen, Andy Horsewell, Kristoffer Almdal
2:54PM - 3:06PM	W21.00003: Pulling a Polymeric Chain through Tiny Grommets Xiaorong Wang, Yongli Mi
3:06PM - 3:18PM	W21.00004: Unravelling Popular Myths in the Rheology of Entangled Polymer Melts Richard P. Wool
3:18PM - 3:30PM	W21.00005: Shear and extensional rheology of model branched polymer melts (H shaped and grafted) Gengxin Liu, Konstantinos Ntetsikas, Kostas Misichronis, Namgoo kang, Jimmy Mays, Apostolos Avgeropoulos, Shi-Qing Wang
3:30PM - 3:42PM	W21.00006: Visualize space-dependence of viscosity Lingxiang Jiang, Boyce Tsang, Steve Granick
3:42PM - 3:54PM	W21.00007: Synthesis and rheological behavior of atactic polypropylene molecular bottlebrushes Samuel Dalsin, Frank Bates, Marc Hillmyer
3:54PM - 4:06PM	W21.00008: Structure of a bottlebrush melt Jaroslaw Paturej, Sergei Sheiko, Sergey Panyukov, Michael Rubinstein
4:06PM - 4:18PM	W21.00009: Role of the Entanglements and Bond Scission in High Strain-Rate Fracture of Polymer Melts Yelena Sliozberg, Robert Hoy, Randy Mrozek, Joseph Lenhart, Jan Andzelm
4:18PM - 4:30PM	W21.00010: Controlling solubility of pNIPAM in aqueous solutions using hydrophobic and photoresponsive molecular units Rahul Singh, Sanket Deshmukh, Subramanian Sankaranarayanan, Ganesh Balasubramanian
4:30PM - 4:42PM	W21.00011: Effect of Chain Architecture on the Structural and Rheological Properties of Dilute Polymer Solutions: A Molecular Simulation Study Fardin Khabaz, Rajesh Khare
4:42PM - 4:54PM	W21.00012: Direct observation of polymer dynamics in semi-dilute solutions Kai-Wen Hsiao, Christopher Brockman, Charles M. Schroeder
4:54PM - 5:06PM	W21.00013: Locality of entangled polymer dynamics Chi Hang Boyce Tsang, Lingxiang Jiang, Steve Granick
5:06PM - 5:18PM	W21.00014: Shear-induced irreversible breakdown of shear thickening fluids Jonathan Seppala, Kirk Rice, Gale Holmes
5:18PM - 5:30PM	W21.00015: Application of scaling model to investigate solvent quality and functionality in star polymers Durgesh Rai, Gregory Beaucage, Ramanth Ramachandran, Kedar Ratkanthwar, Nikos Hadjichristidis, Hong Kunlun, David Uhrig, Andy Tsou

Thursday, March 6, 2014, 2:30 pm – 5:30 pm

Session W22: Focus Session: Dynamics of Polymers Under Nanoscale Confinement III

Sponsoring Units: DPOLY
Chair: Robert Riggleman, University of Pennsylvania
Room: *407*

2:30PM - 2:42PM	W22.00001: Physical Aging within Hairy NanoParticle Assemblies H. Koerner, M. Bockstaller, A. Dang, C. Mahoney, K. Matyjaszewski, C.-M. Hui, R. Vaia
2:42PM - 2:54PM	W22.00002: Glassy structural relaxation of star-shaped polymers Bradley Frieberg, Emmanouil Glynos, Georgios Sakellariou, Peter Green
2:54PM - 3:06PM	W22.00003: Glass transition of star-shaped thin polymer films Emmanouil Glynos, Bradley Frieberg, Georgios Sakellariou, Peter Green
3:06PM - 3:18PM	W22.00004: Dynamics of Hyperbranched Polymers in the Bulk and under Confinement: Effect of Dendritic Generation Kiriaki Chrissopoulou, Krystalenia Androulaki, Spiros H. Anastasiadis, Daniele Prevosto, Massimiliano Labardi
3:18PM - 3:30PM	W22.00005: Confinement Effects on Molten Thin Cyclic Polystyrene Films Qiming He, Suresh Narayanan, David Wu, Mark Foster
3:30PM - 3:42PM	W22.00006: Chain configurations, glass transition and polymer dynamics in polymer nanoparticles under 3D-confinement Aurora Nogales, Daniel E. Martinez-Tong, Michelina Soccio, Alejandro Sanz, Tiberio A. Ezquerra
3:42PM - 4:18PM	W22.00007: Structural Relaxations in Bulk and Thin Film Polymers: Role of Macromolecular Architecture **Invited Speaker:** Peter Green
4:18PM - 4:30PM	W22.00008: Effect of Confinement on Glass Transition Behavior in Polymeric Nanotubes and Nanorods: Comparison of DSC and Fluorescence Measurements Anthony Tan, John Torkelson
4:30PM - 4:42PM	W22.00009: Glass Transitions in Polymer Nanocomposites Dong Meng, Sanat Kumar
4:42PM - 4:54PM	W22.00010: Different Effects of Confinement on the Glass Transition Behavior of Supported Polymer Films and Model Polymer Nanocomposites Made with Carbon Based vs. Silica Based Substrates Lawrence Chen, John Torkelson
4:54PM - 5:06PM	W22.00011: Creating monodisperse polyacrylamide free-radically via thermal frontal polymerization in confined geometries Preeta Datta, Kirill Efimenko, Jan Genzer
5:06PM - 5:18PM	W22.00012: The Effect of Nanoconfinemnt on Methyl Methacrylate Polymerization: Reactivity and Resulting Properties Haoyu Zhao, Ziniu Yu, Ronald Hedden, Sindee Simon
5:18PM - 5:30PM	W22.00013: Finite size effects on irreversible chain adsorption: a new probe of dynamics under nanoscale confinement Simone Napolitano, Caroline Housmans, Michele Sferrazza

Thursday, March 6, 2014, 2:30 pm – 5:30 pm

Session W25: Focus Session: Organic Electronics and Photonics - Thermoelectric Properties of Polymers

Sponsoring Units: DMP DPOLY
Chair: Bryan Boudouris, Purdue University
Room: *503*

2:30PM - 3:06PM	W25.00001: The Prospects of Organic Semiconductors for Thermoelectrics **Invited Speaker:** Michael Chabinyc
3:06PM - 3:18PM	W25.00002: Investigation of the Wiedemann-Franz law in the conducting polymer PEDOT Annie Weathers, Li Shi, Zia Ullah Khan, Olga Bubnova, Xavier Crispin
3:18PM - 3:30PM	W25.00003: Optimization of thermoelectric performance in semiconducting polymers for understanding charge transport and flexible thermoelectric applications Anne Glaudell, Michael Chabinyc
3:30PM - 3:42PM	W25.00004: Power factor enhancement in solution-processed organic n-type thermoelectric materials through side chain design Boris Russ, Maxwell J. Robb, Fulvio G. Brunetti, Levi Miller, Shrayesh Patel, Victor Ho, Jeffrey J. Urban, Michael L. Chabinyc, Craig J. Hawker, Rachel A. Segalman
3:42PM - 3:54PM	W25.00005: Thermoelectric Properties of Conjugated Polyelectrolytes Cynthia Chen, Cheng-Kang Mai, Michael Chabinyc, Jeffrey Urban, Guillermo Bazan, Rachel Segalman
3:54PM - 4:06PM	W25.00006: Synthesis and Solid State Charge Transport in Radical Polymers Lizbeth Rostro, Aditya Baradwaj, Bryan Boudouris
4:06PM - 4:18PM	W25.00007: Anisotropic Thermal Conduction in Polymers and its Molecular Origins David Nieto Simavilla, David Venerus, Jay Schieber
4:18PM - 4:54PM	W25.00008: Thermal Conductivities of Crystalline Organic Semiconductors **Invited Speaker:** Joseph Brill
4:54PM - 5:06PM	W25.00009: Measurements of In-Plane Thermal Diffusivities of Layered Organic Semiconductors by ac-Calorimetry Hao Zhang, Yulong Yao, Joseph Brill
5:06PM - 5:18PM	W25.00010: Polymer Thermoelectric Generators: Device Considerations Shannon Yee

Thursday, March 6, 2014, 2:30 pm – 5:30 pm

Other 'W' Sessions of potential interest:

Session W10: Focus Session: Physics of Behavior II
Sponsoring Units: DBIO
Chair: Joshua Shaevitz, Princeton University
Room: 201

Session W11: Assembly and Function of Biomimetic and Bioinspired Materials
Sponsoring Units: DMP DBIO
Chair: Elaine Zhu, University of Notre Dame
Room: 203

Session W12: Invited Session: Active Matter and the Cytoskeleton
Sponsoring Units: DBIO
Chair: Daniel Chen, Brandeis University
Room: 205

Session W15: Instabilities & Turbulence
Sponsoring Units: DFD
Chair: James Brasseur, Pennsylvania State University
Room: 304

Session W16: General Statistical and Nonlinear Physics I
Room: 401

Session W17: Jamming and the Glass Transition
Chair: Kai Zhang, Yale University
Room: 402

Session W18: Colloidal Particles at Interfaces
Chair: Matthew Lohr, University of Pennsylvania
Room: 403

Friday, March 7, 2014, 8:00 am – 11:00 am

Session Y11: Focus Session: Physics of Proteins IV

Sponsoring Units: DBIO DPOLY
Chair: Timothy Sage, Northeastern University
Room: *203*

8:00AM - 8:12AM	Y11.00001: Beating the Heat: Fast Scanning Melts Beta Sheet Crystals Peggy Cebe, Xiao Hu, David Kaplan, Evgeny Zhuravlev, Andreas Wurm, Daniella Arbeiter, Christoph Schick
8:12AM - 8:24AM	Y11.00002: Sterically allowed configuration space for amino acid dipeptides Diego Caballero, Jukka Maatta, Maria Sammalkorpi, Corey O'Hern, Lynne Regan
8:24AM - 8:36AM	Y11.00003: Generation of protein-like structures via simple rules imposed on a cubic lattice Rahmi Ozisik, Deniz Turgut, Osman B. Okan, Aravind Rammohan, Angel E. Garcia
8:36AM - 9:12AM	Y11.00004: Monitoring Single-Molecule Protein Dynamics with a Carbon Nanotube Transistor **Invited Speaker:** Philip G. Collins
9:12AM - 9:24AM	Y11.00005: Novel computational methods to design protein-protein interactions Alice Qinhua Zhou, Corey O'Hern, Lynne Regan
9:24AM - 9:36AM	Y11.00006: Structural basis underlying the metallic-like conductivity of microbial nanowires Nikhil Malvankar, Madeline Vargas, Mark Tuominen, Derek Lovley
9:36AM - 9:48AM	Y11.00007: Relaxation dynamics of proteins Martin Wolf, Rudolf Gulich, Peter Lunkenheimer, Alois Loidl
9:48AM - 10:00AM	Y11.00008: Protein dynamics, solvation, and quasielastic scattering Paul Fenimore
10:00AM - 10:12AM	Y11.00009: Why the observed mean square motional displacement depends on wave vector Q Derya Vural, Henry R. Glyde
10:12AM - 10:24AM	Y11.00010: Continuum model of non-conformational allosteric regulation Michael S. Dimitriyev, Paul M. Goldbart, T.C.B. McLeish
10:24AM - 10:36AM	Y11.00011: Minimal Mechanochemical Model for the Processivity of Myosin VI Yubo Yang, Ian Lowe, Riina Tehver
10:36AM - 10:48AM	Y11.00012: Comparison of Side-Chain Motion of Calbindin D-9k in Its Four Calcium Binding States by Molecular Dynamics Simulation Mahendra Thapa, Mark Rance

Friday, March 7, 2014, 8:00 am – 11:00 am

Session Y14: Invited Session: Dynamics of Polymer Nanocomposites

Sponsoring Units: DPOLY DBIO
Chair: Russell Composto, University of Pennsylvania
Room: *301-303*

8:00AM - 8:36AM	Y14.00001: Dynamics of nanoparticles in models of soft and hard porous media **Invited Speaker:** Jacinta Conrad
8:36AM - 9:12AM	Y14.00002: X-ray photon correlation spectroscopy studies of nanoparticle motion in glassy polymer melts and entangled polymer solutions **Invited Speaker:** Robert Leheny
9:12AM - 9:48AM	Y14.00003: Microscopic Theories of Diffusion, Tube Localization and Slow Relaxation in Polymer Nanocomposites **Invited Speaker:** Kenneth Schweizer
9:48AM - 10:24AM	Y14.00004: Rotational diffusion in polymer nanocomposites as probed by anisotropic particles **Invited Speaker:** Laura Clarke
10:24AM - 11:00AM	Y14.00005: Polymer Diffusion in the Presence of Nanoparticles **Invited Speaker:** Karen Winey

Friday, March 7, 2014, 8:00 am – 11:00 am

Session Y19: Polymer Blends

Sponsoring Units: DPOLY
Chair: Hengxi Yang, University of Michigan
Room: *404*

8:00AM - 8:12AM	Y19.00001: What Drives Blend Miscibility? Ronald White, Jane Lipson
8:12AM - 8:24AM	Y19.00002: Miscibility of Polymers in Supercritical Carbon Dioxide Jeffrey DeFelice, Jane Lipson
8:24AM - 8:36AM	Y19.00003: Effect of supercritical carbon dioxide on the thermodynamics of miscible polymer blends Nicholas Young, Sebnem Inceoglu, Andrew Jackson, Stéphane Costeux, Nitash Balsara
8:36AM - 8:48AM	Y19.00004: Composition Dependency of the Flory-Huggins $\chi $ Parameter in Isotopic Polymer Blends Travis Russell, Brian Edwards, Bamin Khomami
8:48AM - 9:00AM	Y19.00005: Controlling Morphology in Coatings Made from Polyolefin Dispersions Jodi Mecca, Jeffrey Wilbur, Rick Lundgard, Sean Tang, Bernhard Kainz
9:00AM - 9:12AM	Y19.00006: Tuning the Miscibility of Polystyrene / Poly(vinyl methyl ether) Blends with Electric Fields Annika Kriisa, Connie Roth
9:12AM - 9:24AM	Y19.00007: Efficacy of Different Block Copolymers in Facilitating Microemulsion Phases in Polymer Blend Systems Gunja Pandav, Venkat Ganesan
9:24AM - 9:36AM	Y19.00008: Effective Blending of Ultrahigh Molecular Weight Polyethylene with High-Density Polyethylene via Solid-State Shear Pulverization (SSSP) Mirian Diop, John Torkelson
9:36AM - 9:48AM	Y19.00009: Component Dynamics and the Corresponding Compositional Heterogeneity in Bulk and Thin Film Miscible Polymer Blends Hengxi Yang, Peter Green
9:48AM - 10:00AM	Y19.00010: Biodegradability and mechanical properties of poly(butylene succinate) composites with finely dispersed hydrophilic poly(acrylic acid) Sawako Mizuno, Atsushi Hotta
10:00AM - 10:12AM	Y19.00011: Block copolymer toughened epoxy: Theory and experiment Carmelo Declet-Perez, Lorraine Francis, Frank Bates
10:12AM - 10:24AM	Y19.00012: Collective dynamic response of bound polymer chains to nanofillers in a good solvent Tad Koga, Naisheng Jiang, Maya Endoh, Tomomi Masui, Hiroyuki Kishimoto, Takashi Taniguchi, Michihiro Nagao
10:24AM - 10:36AM	Y19.00013: Fluctuation/Correlation Effects on the Phase Behavior of Incompressible Polymer Blends Quantified by Fast Lattice Monte Carlo Simulations Pengfei Zhang, Qiang Wang

Friday, March 7, 2014, 8:00 am – 11:00 am

Session Y20: Semi Crystalline Polymers

Sponsoring Units: DPOLY
Chair: Kari Dalnoki-Veress, McMaster University
Room: *405*

8:00AM - 8:12AM	Y20.00001: Nanoscale alignment of interfacial crystallites and effects on electrical properties on oCVD PEDOT polymer Asli Ugur, Ferhat Katmis, Kripa K. Varanasi, Karen K. Gleason
8:12AM - 8:24AM	Y20.00002: Manipulation of P3AT Crystallization Behavior Bryan S. Beckingham, Victor Ho, Rachel A. Segalman
8:24AM - 8:36AM	Y20.00003: Fabrication of a Conjugated Polymer on Surfaces Studied by Electron Microscopy Hiroshi Jinnai, Takeshi HIguchi, Daiki Murakami, Mitsuo Suga, Atsushi Takahara
8:36AM - 8:48AM	Y20.00004: Formation and Characterization of Lyotropic Liquid Crystal Phase in Poly(3-hexylthiophene) Solutions Nabil Kleinhenz, Karthik Nayani, Sourav Chatterjee, Xujun Zhang, Jung Ok Park, Mohan Srinivasarao, Paul Russo, Elsa Reichmanis
8:48AM - 9:00AM	Y20.00005: Controlling the Thermal and Optoelectronic Properties in Poly(3-alkylthiophene) Random Copolymers Victor Ho, Hoi Ng, Rachel Segalman
9:00AM - 9:12AM	Y20.00006: Quantifying Order in Poly(3-hexylthiophene) Chad Snyder, Ryan Nieuwendaal, Dean DeLongchamp, Christine Luscombe, Prakash Sista, Shane Boyd
9:12AM - 9:24AM	Y20.00007: Counit Inclusion in Hydrogenated Polynorbornene Copolymer Crystals Adam Burns, Michael Showak, Andrew Stella, Richard Register
9:24AM - 9:36AM	Y20.00008: Curvature-directed crystallization of polymer dielectrics in nanopores Dariya Reid, Bridget Ehlinger, Lin Shao, Jodie Lutkenhaus
9:36AM - 9:48AM	Y20.00009: SAXS/WAXS studies of flow-induced crystallization of poly(1-butene) in shear flow Binbin Luo, Wesley Burghardt
9:48AM - 10:00AM	Y20.00010: Extensional Flow Induced Crystallization of Polyethylene David Nicholson, C. Rebecca Locker, Andy Tsou, Gregory Rutledge
10:00AM - 10:12AM	Y20.00011: SAXS/WAXS studies of flow-induced crystallization of poly(1-butene) in uniaxial extensional flow Erica McCready, Wesley Burghardt
10:12AM - 10:24AM	Y20.00012: Probing the interlamellar amorphous phase in semicrystalline polyolefins using vapor flow and neutron scattering Amanda McDermott, Chad Snyder, Ronald Jones
10:24AM - 10:36AM	Y20.00013: An Integrated Ultrafast Scanning Calorimetric and Micro Raman Spectroscopic Investigation of Polymer Crystallization Dongshan Zhou, Lai Wei, Jing Jiang, Gi Xue, Xiaoliang Wang
10:36AM - 10:48AM	Y20.00014: Molecular mechanism of viscoelasticity in aligned polyethylene Ali Hammad, Hikmatyar Hasan, Thomas Swinburne, Stefano Del Rosso, Lorenzo Iannucci, Adrian Sutton
10:48AM - 11:00AM	Y20.00015: Holographic reconstruction from electron diffraction patterns: true atom images of thousands of atoms Carsten Westphal, Tobias Luehr

Friday, March 7, 2014, 8:00 am – 11:00 am

Session Y21: Elastic Instabilities and Pattern Formation

Sponsoring Units: DPOLY GSNP DFD
Chair: Andrew Croll, North Dakota State University
Room: *406*

8:00AM - 8:12AM	Y21.00001: Combined Bending, Stretching, and Wrinkling of Thin Sheets Katia Bertoldi, Michael Taylor, Benny Davidovitch
8:12AM - 8:24AM	Y21.00002: The role of substrate pre-stretch on post-wrinkling bifurcations Anesia Auguste, Lihua Jin, Zhigang Suo, Ryan Hayward
8:24AM - 8:36AM	Y21.00003: Viscoelastic instability and detachment folds in soft elastomer interfaces Koushik Viswanathan, Anirban Mahato, Srinivasan Chandrasekar
8:36AM - 8:48AM	Y21.00004: Shape transitions in soft spheres regulated by elasticity Craig Fogle, Amy Rowat, Alex Levine, Joseph Rudnick
8:48AM - 9:00AM	Y21.00005: Elastic instabilities in a model cerebral cortex David Mayett, Oksana Manyuhina, J.M. Schwarz
9:00AM - 9:12AM	Y21.00006: Interaction of two cracks in plastic sheets Stephane Santucci, Marie-Julie Dalbe, Juha Koivisto, Loic Vanel, Osvanny Ramos, Mikko Alava
9:12AM - 9:24AM	Y21.00007: Hierarchically UVO patterned elastomeric and thermoplastic structures Ying Chen, Manish Kulkarni, Allan Marshall, Alamgir Karim
9:24AM - 9:36AM	Y21.00008: Axi-symmetric patterns of active polar filaments on spherical and composite surfaces Pragya Srivastava, Madan Rao
9:36AM - 9:48AM	Y21.00009: Tuning Surface Wettability Using Single Layered and Hierarchically Ordered Arrays of Spherical Colloidal Particles Ali Dhinojwala, Ila Badge, Sarang Bhawalkar, Li Jia
9:48AM - 10:00AM	Y21.00010: Active Polar Two-Fluid Macroscopic Dynamics Harald Pleiner, Daniel Svensek, Helmut R. Brand
10:00AM - 10:12AM	Y21.00011: Shape Programming through Hierarchic Crystallization of Semicrystalline Elastomers Qiaoxi Li, Jing Zhou, Sara Turner, Valerie Ashby, Jan-Michael Carrillo, Andrey Dobrynin, Sergei Sheiko

Friday, March 7, 2014, 8:00 am – 11:00 am

Other 'Y' Sessions of potential interest:

Session Y10: Emerging Biophysical Techniques
Sponsoring Units: DBIO
Chair: Wolfgang Losert
Room: 201

Session Y12: Invited Session: Novel Modeling Approaches to Cell Motility
Sponsoring Units: DCMP GSNP
Chair: Lev Tsimring, University of California, San Diego
Room: 205

Session Y17: Flow Near Jamming
Room: 402

Session Y18: Self- and Directed Assembly
Sponsoring Units: GSNP DCMP
Chair: Tom Truskett, University of Texas at Austin
Room: 403

Friday, March 7, 2014, 11:15 am –2:15 pm

Session Z19: Supercooled Polymer Liquids and Glasses

Sponsoring Units: DPOLY
Chair: Zahra Fakhraai, University of Pennsylvania
Room: *404*

11:15AM - 11:27AM	Z19.00001: Nano-composites obtained by phase separation of polymer blends close to and below Tg Gregoire Julien
11:27AM - 11:39AM	Z19.00002: Effect of Counteranion on Caged-like Dynamics of 1-alkyl-3-methylimidazolium-based Ionic Liquids Jenny Kim, Cheol Jeong, Madhu Tyagi, Chrisopher Soles
11:39AM - 11:51AM	Z19.00003: Dynamical Heterogeneities in Glasses from Fluctuating Mobility Generation and Transport: Two Equilibration Mechanisms in Glasses Apiwat Wisitsorasak, Peter G. Wolynes
11:51AM - 12:03PM	Z19.00004: Plastic Flow of Polymer Chains below T_{g} Induced by Jamming Transition Chao Teng, Gi Xue
12:03PM - 12:15PM	Z19.00005: Dynamical heterogeneity and structural relaxation in periodically deformed polymer glasses Nikolai Priezjev
12:15PM - 12:27PM	Z19.00006: Dramatic alteration of Tg of polystyrene confined in cylindrical nanopores Gi Xue, Chao Teng, Jie Xu, Linling Li
12:27PM - 12:39PM	Z19.00007: Structural and Dynamical Heterogeneities in Thin FIlms of a Generic Glass-forming Liquid Amir Haji-Akbari, Pablo G. Debenedetti
12:39PM - 12:51PM	Z19.00008: Study of physical vapor deposited glasses of tris-naphthyl benzene based organic molecules Yue Zhang, Tianyi Liu, Ethan Glor, Guoyu Yang, Yi-Chih Lin
12:51PM - 1:03PM	Z19.00009: Glasses and Liquids Low on the Energy Landscape Prepared by Physical Vapor Deposition Shakeel Dalal, Zahra Fakhraai, Mark Ediger
1:03PM - 1:15PM	Z19.00010: Resolving the Puzzle of Two Glass Transitions in Miscible Polymer Blends Jacek Dudowicz, Jack Douglas, Karl Freed
1:15PM - 1:27PM	Z19.00011: Unified Theory of Activated Relaxation in Cold Liquids over 14 Decades in Time Kenneth Schweizer, Stephen Mirigian
1:27PM - 1:39PM	Z19.00012: Effects of hydrophobic aggregation on the charge transport mechanism of quaternary ammonium ionic liquids Philip Griffin, Adam Holt, Yangyang Wang, Vladimir Novikov, Joshua Sangoro, Alexei Sokolov

Friday, March 7, 2014, 11:15 am –2:15 pm

Session Z20: Focus Session: Organic Electronics and Photonics - Photonic and Electronic Properties

Sponsoring Units: DMP DPOLY
Chair: Bryan Boudouris, Purdue University
Room: *405*

11:15AM - 11:27AM	Z20.00001: Properties of guided modes in plasmonic aluminum quinoline waveguides Niranjala Wickremasinghe, Jonathan Thompson, Xiaosheng Wang, Heidrun Schmitzer, Hans Peter Wagner
11:27AM - 11:39AM	Z20.00002: Bragg Reflectors Based on Block Copolymer/ Polyhedral Oligomeric Silsesquioxanes (POSS) and TiO$_{2}$ Hybrid Nanocomposites Cheng Li, Nicholas Colella, James Watkins
11:39AM - 11:51AM	Z20.00003: Gain enhancement in photorefractive polymers Carl Liebig, Steven Buller, Partha Banerjee, Sergey Basun, Pierre Blanche, Jayan Thomas, Corey Christenson, Nasser Peyghambarian, Dean Evans
11:51AM - 12:03PM	Z20.00004: Large Area Printing of 3D Photonic Crystals James J. Watkins, Michael R. Beaulieu, Nicholas R. Hendricks, Rohit Kothari
12:03PM - 12:15PM	Z20.00005: Tunable photonic multilayer sensors from photo-crosslinkable polymers Maria Chiappelli, Ryan Hayward
12:15PM - 12:27PM	Z20.00006: Positional Isomer Effects on Photomechanical Response of Azobenzene Functionalized Polyimides Jeong Jae Wie, David Wang, Kyung Min Lee, Loon-Seng Tan, Timothy White
12:27PM - 12:39PM	Z20.00007: Enhanced dielectric properties of electrically poled poly(vinylidene fluoride) (PVDF) and polycarbonate (PC) multilayer films via interfacial polarization Jung-Kai Tseng, Matthew Mackey, Zheng Zhou, Joel Carr, Donald E. Schuele, Eric Baer, Lei Zhu

Friday, March 7, 2014, 11:15 am –2:15 pm

Session Z21: Polymer Composites: Nanocomposites

Sponsoring Units: DPOLY
Chair: Laura Clarke, North Carolina State University
Room: *406*

11:15AM - 11:27AM	Z21.00001: Molecular Simulation and Microstructure Characterization of Poly(p-phenylene/m-phenylene) Copolymers Robert Bubeck, Steven Keinath
11:27AM - 11:39AM	Z21.00002: Synergy, Effect and Mechanism on Different Scale of organoclay Filled an Elastomer Blends by Rheological Method Xia Dong, Xianggui Liu, Charles C. Han, Dujin Wang
11:39AM - 11:51AM	Z21.00003: Polymer-polymer and hybrid clay-polymer complexes at liquid-liquid interfaces Yuhao Wang, Svetlana Sukhishvili
11:51AM - 12:03PM	Z21.00004: Controlled assembly of nanorods in block copolymer thin films Huikuan Chao, Dongliang Wang, Russell Composto, Robert Riggleman
12:03PM - 12:15PM	Z21.00005: Block copolymer templated growth of ZnO nanorod arrays with controlled size and spatial density Candice Pelligra, Chinedum Osuji
12:15PM - 12:27PM	Z21.00006: Hybrid Thin Films Based Upon Polyoxometalates-Polymer Assembly Na Qi, Benxin Jing, Yingxi Zhu
12:27PM - 12:39PM	Z21.00007: Two-dimensional networks of nanowires with large-scale continuity and connectivity patterned by the self-assembly of block copolymers Mark Stoykovich, Ian Campbell
12:39PM - 12:51PM	Z21.00008: Preparation of Low Band Gap Fibrillar Structures by Solvent Induced Crystallization Hsin-Wei Wang, Emily Pentzer, Todd Emerick, Thomas Russell
12:51PM - 1:03PM	Z21.00009: Controlling the thermomechanical behavior of nanoparticle/polymer films Dan Zhao, Dirk Schneider, George Fytas, Sanat K. Kumar
1:03PM - 1:15PM	Z21.00010: Synthesis of Biomimetic Branched Polymer Architectures Amanda Marciel, Danielle Mai, Charles Schroeder
Friday, March 7, 2014 1:15PM - 1:27PM	Z21.00011: Nanoscale phase separation in ultra-tough hydrogels Ryan Nixon, Jan Bart ten Hove, Adrian Orozco, W. Gregory Sawyer, Thomas Angelini

Friday, March 7, 2014, 11:15 am –2:15 pm

Other 'Z' Sessions of potential interest:

Session Z18: Non-spherical Colloids and Complex Fluids
Chair: Ye Xu, University of Pennsylvania
Room: 403

Session Z27: Focus Session: Friction and Wear at the Nano- and Micro-Scales
Sponsoring Units: DCOMP
Chair: Michael Chandros, Sandia National Laboratories
Room: 501

Monday

Session	**A14**	**A18**	**A19**	**A20**	**A21**	**A22**	**A25**
Room	*301-303*	*403*	*404*	*405*	*406*	*407*	*503*
Chair	*Neal*	*Hunter*	*Faller*	*Drazer*	*Pochan*	*Sangoro*	*Podzorov*
8:00 AM		Kim	Delaney	Zhang		Ryu	
8:12 AM	**Spontak**	Lohr	Morse	Nicolai	**Olsen**	Bäumchen	**Kahn**
8:24 AM		Keim	Mueller	Zhu		Backholm	
8:36 AM		Orellana	Ackerman	Jiang	Mangal	Haefner	Caldas
8:48 AM	**Paul**	Bandi	Kim	Yatsyshin	Lam	Blossey	Guha
9:00 AM		Dang	Nakamura	Huang	Banerjee	Fowler	Kieffer
9:12 AM		Odunsi	Guenza	Riedo	Agrawal	Wang	Wu
9:24 AM	**Weinhold**	Zhang	Man	Chun	Sosa	Tschirhart	Pimcharoen
9:36 AM		Still	Tang	Miao	Jang	Daley	Yu
9:48 AM		Paulsen	Liu	Mirshamsi	Park	Skaug	Zhang
10:00 AM	**Rafailovitch**	Schall	Kobryn	Levine	Tang	Selin	Richter
10:12 AM		Crassous	Boromand	Nagashima	Gan	Schreiter	He
10:24 AM		Hollingsworth		Li	Aryal	Bekele	Mattoni
10:36 AM	**Neal**	Cheng	**Chen**	Ziemys	Osti	Colon-Melendez	Yimer
10:48 AM		Demery		Mashayak	Hsu	King	Monton

Session	**B14**	**B17**	**B18**	**B19**	**B20**	**B21**	**B22**
Room	*301-303*	*402*	*403*	*404*	*405*	*406*	*407*
Chair	*Forrest*	*Hoy*	*MacLennan*	*Junghans*	*Hudson*	*Epps*	*Gomez*
11:15 AM		Miskin	Gurevich	Harmandaris	Haddadi		Stiff-Roberts
11:27 AM	**Ediger**	Millan	Quint	Faller	Desreumaux	**Lodge**	Wang
11:39 AM		Kim	Liu	Agrawal	Kim		Jaju
11:51 AM		Hilgenfeldt	Garbovskiy	Ramirez-Herna	Mishra	Shojaei	Guilbert
12:03 PM	**Matsen**	van Anders	Nuno	Koslover	Yang	Yu	Gu
12:15 PM		Brown	Wei	Ismail	Ihle	Lee	Brady
12:27 PM		Ahmed	Basu	Tuchman	Pushkin	Tirrell	Li
12:39 PM	**Raphaël**	Khadilkar	Martinez-Miranda	Ruhle	Johansson	Mahanthappa	Collins
12:51 PM		Irrgang	Serra	Maia	Spellings	Rozairo	Mohite
1:03 PM		Klotsa	Meienberg	Khani	Fily	Jing	Heiber
1:15 PM	**Baschnagel**	Kallus	Qi	Milner	Burov	Yao	Mullenbach
1:27 PM		Bo	Harth	Meyer	Kharazmi	Etampawala	Green
1:39 PM		Morse	Park	Karim	Nelissen	Chen	Elliott
1:51 PM	**Granick**		Wachs	Iwaoka	Annie O	Sarika C K	Thongprong
2:03 PM			Kuriabova	Rorrer	Gabrielli	Eduardo	Djidjou

Session	**D19**	**D20**	**D21**	**D22**
Room	*404*	*405*	*406*	*407*
Chair	*Frischknecht*	*Royer*	*Olsen*	*Salez*
2:30 PM	Wijesinghe	**Fernandez-Nieves**	Glassman	Russell
2:42 PM	Zhang		Le	Sharp
2:54 PM	Chockalingam		Katashima	Jones
3:06 PM	Denton	Valentino	Yan	Chan
3:18 PM	Antila	Welch	Dayal	Liu
3:30 PM	Sun	Gholami	Hsiao	Sheiko
3:42 PM	Pine	**Anna**	Daniel	Giamberardino
3:54 PM	Lang		Sariyer	Tatek
4:06 PM	Sing		Anthamatten	Oder
4:18 PM	Turgut	Adams	Creton	Chung
4:30 PM	Turgman-Cohen	Cai	Lott	Yuan
4:42 PM	McCoy	Khan	Scotti	Sheridan
4:54 PM	Choi	Zeng	Reyssat	Tito
5:06 PM		Pan	Brown	McKenzie
5:18 PM		Garcia	Russo	Reece

A14: Industrial Applications of Olefin Block Copolymers
A18: Soft Glassy Materials
A19: Theory and Simulations of Macromolecules I - Self Consistent Field Theory
A20: Microfluidics and Nanofluidics I - The Physics of Confined Fluids
A21: Soft Nanoparticles, Block Copolymer Micelles, and Polymersomes I
A22: Surfaces, Interfaces and Polymeric Thin Films
A25: Organic Electronics and Photonics - Electronic Processes at Interfaces

B14: Trends and Perspectives on Fundamental Polymer Physics
B17: Packing of Anisotropic Particles
B18: Liquid Crystals, Nano to Meso Scale Structure in Ordered Matter and Liquid Crystal I: Nanocomposites and Smectics
B19: Theory and Simulations of Macromolecules II - From Atomistic to Coarse Grained Models
B20: Microfluidics and Nanofluidics II - Colloidal Hydrodynamics and Active Particles
B21: Soft Nanoparticles, Block Copolymer Micelles and Polymersomes I
B22: Organic Electronics and Photonics - Polymer Photovoltaics

D19: Theory and Simulations of Macromolecules III - Ionic Polymers
D20: Microfluidics and Nanofluidics III - Pattern Formation and Droplets
D21: Polymeric Elastomers and Gels
D22: Films at Liquid and Solid Interfaces

Tuesday

Session	F11	F16	F17	F19	F20	F21
Room	*203*	*401*	*402*	*404*	*405*	*406*
Chair	*Budzien*	*Santangelo*	*O'Hern*	*Agarwal*	*Noriega*	*Chung*
8:00 AM	**Polymer Prize Break**	Chopin	Yang	**Polymer Prize Break**		
8:12 AM		Pandey	Vorselaars			
8:24 AM		Efrati	**Hoy**			
8:36 AM	**Koenderink**	Liu		Zhang	Reyes-Martinez	Bochinski
8:48 AM		Crosby		Sirk	Wakabayashi	Kobayashi
9:00 AM		van der Heijden	Schurtenberger	Dashti	Podzorov	Miao
9:12 AM	Murugan	Grason	Han	Polson	**Takeya**	Zhu
9:24 AM	Chiou		Shen	Xue		Wang
9:36 AM	Meng		Cheng	Nili		Li
9:48 AM	Eaton	Bruss	Mauney	Zhang	Kohlstedt	Cheng
10:00 AM	Maitra	Cajamarca	Cui	Li	Waters	Ma
10:12 AM	Hoagland	Xu	Marschall	Wang	Walters	Dong
10:24 AM	Yoshinaga	Mosleh	Cao	Erukhimovich	Herath	**Lee**
10:36 AM	Williams	Knezevic	Walsh	Lu	Leung	
10:48 AM	Koehler	Gimenez-Pinto	Mukherjee	Tang		

Session	F22	F56
Room	*407*	Four Seasons Ballroom 4
Chair	*Kachlan*	*Witten*
8:00 AM	**Polymer Prize Break**	**Freed**
8:12 AM		
8:24 AM		
8:36 AM	**Creton**	**Muthukumar**
8:48 AM		
9:00 AM		
9:12 AM	Vaca	**Douglas**
9:24 AM	Desmond	
9:36 AM	Kachan	
9:48 AM	Flanders	**Sokolov**
10:00 AM	Sahni	
10:12 AM	Jain	
10:24 AM		**Han**
10:36 AM		
10:48 AM		

F11: Active Soft Matter I - Transport, Biomimetics and Dynamic Response
F16: Extreme Mechanics: Filaments and their Assemblies, Elasticity and Defects
F17: Glass Formation and Crystallization in Anisotropic Particles
F19: Theory and Simulations of Macromolecules IV
F20: Organic Electronics and Photonics - Small Molecules
F21: Polymeric Fibers and Superstructures
F22: Biological and Bio-inspired Adhesive Polymers I
F56: Polymer Physics Prize Symposium

G11: Active Soft Matter II - Dynamical Response
G16: Soft Matter Perspectives on Protein Self-Assembly I
G18: Liquid Crystals, Nano to Meso Scale Structure in Ordered Matter and Liquid Crystal II: Smectic and Chromonics
G19: Polymer Composites
G20: Theory and Simulations of Macromolecules V
G21: Physics of Copolymers: Ordering and Application of Block Copolymers
G22: Padden Award Symposium

Session	**G11**	**G16**	**G18**	**G19**	**G20**	**G21**	**G22**
Room	*203*	*401*	*403*	*404*	*405*	*406*	*407*
Chair	*Dogic*	*Charbonneau*	*Martinez-Miranda*	*Chipara*	*Tsige*	*Nakamura*	*Cheng*
11:15 AM	**Dogic**	Stevens	Tuchband	Wang	Padmanabhan	Lee	Cheng
11:27 AM		Bertalan	Liarte	Ahuja	Souslov	Wang	Hiszpanski
11:39 AM		Batzli	Shen	Douglas	Bertrand	Jo	McIntosh
11:51 AM	Stam	Morozova	Shao	**Hore**	Mukherji	Woo	Pye
12:03 PM	Guven	Lin	Zhang		Yang	Gillard	Srivastava
12:15 PM	Henkin	Radhakrishna	Rodarte		Chubynsky	Gopinadhan	Tree
12:27 PM	McCall	Michaels	Jampani	Riggleman	**Schmid**	Zhang	Tung
12:39 PM	Blackwell	Ó Conchúir	Çetinkaya	Senses		Lu	Wang
12:51 PM	Ghosh	Polles	Peddireddy	Dhakal		Su	
1:03 PM	Chen	**Hagan**	Thomas	Koski	Kumar	Lee	
1:15 PM	Sing		Davidson	Aldridge	Ha	Peters	
1:27 PM	Weirich		Yamaguchi	Sotta	Sun	Lo	
1:39 PM	DeCamp	Yang	Peng	Wang	Dutta	Ho	
1:51 PM	Redner	Tracy	Yi	Chipara	Gazuz	Bowers	
2:03 PM	Zhou	Karzar-Jeddi	Jeong	Grabowski	Venkatakrishna	Chintapalli	

Session	**J16**	**J19**	**J20**	**J21**	**J22**	**J32**	**J56**
Room	*401*	*404*	*405*	*406*	*407*	*708-712*	*Four Seasons Ballroom 4*
Chair	*Hagan*	*Paradiso*	*Sharma*	*Chabinyc*	*Kachan*	*Zhou*	*Russell*
2:30 PM	Stradner	**Dillon Medal Break**				Hodak	**Hayward**
2:42 PM	Parry					Steckmann	
2:54 PM	Hudson					Virrueta	
3:06 PM	**Asherie**	**Alexander-Katz**	Zhang	Yang	Adams	**Lu**	Genzer
3:18 PM			Martens	Jones	Hilitski		Santangelo
3:30 PM			Thiébaud	Dong	Grindy		Dalnoki-Veress
3:42 PM	Song	Carilli	**Drazer**	Kim	**Valentine**	Mirau	Grason
3:54 PM	Fusco	Medapuram		Samant		Linhananta	Jayaraman
4:06 PM	Charbonneau	Cho		Wang		Tsekouras	Kumar
4:18 PM	Whitelam	Li	McGraw	Davis	Park	Akhterov	Stein
4:30 PM	McManus	Brown	Tani	Weber	Gebbie	Niessen	Register
4:42 PM	Wang	Hall	Sahu	Herbst	Wu	Hoff	Osuji
4:54 PM	Cai	Kipp	Okumura	Kusoglu	**Levine**	Guo	Lodge
5:06 PM	Wan	Kim	Lee			Akgun	Kim
5:18 PM	Shi					Tekpinar	
5:30 PM						Aoki	

J16: Soft Matter Perspectives on Protein Self-Assembly II
J19: Theory and Simulations of Macromolecules VI - Block Copolymers
J20: Microfluidics and Nanofluidics IV: Hydrodynamics, Separations and Slip
J21: Polymers for Energy Storage and Conversion I- Capacitors and Fuel Cells
J22: Biological and Bio-Inspired Adhesive Polymers II
J32: Physics of Proteins I
J56: Dillon Medal Symposium

Tuesday, 5:45 pm, DPOLY Business Meeting, Room 406

Wednesday

Session	**L11**	**L14**	**L16**	**L20**	**L21**	**L22**
Room	*203*	*301-303*	*401*	*405*	*406*	*407*
Chair	*O'Hern*	*Grest*	*Bico*	*Roth*	*Collins*	*Li*
8:00 AM	Chang	**Rubinstein**	**De Volder**	Zhai	**Ade**	Hsieh
8:12 AM	Roy			Gurmessa		Sun
8:24 AM	McNamara			Mirigian		Li
8:36 AM	**Schlichting**	**Perahia**	Waitukaitis	Shavit	Chen	**Schick**
8:48 AM			Van Hecke	Yoon	Huang	
9:00 AM			Evans	Chai	Kuang	
9:12 AM	Jordan	**Frischknecht**	Silverberg	**Tsui**	Dadmun	Kumaki
9:24 AM	Lin		Damasceno		Marsh	Hu
9:36 AM	Okan		Oppenheimer		Emerson	Huang
9:48 AM	Chu	**Dobrynin**	Dodd	Foster	Ferdous	**Zhu**
10:00 AM	Liu		Selinger	Long	Smith	
10:12 AM	Copperman		Bae	Jiang	Jin	
10:24 AM	**Yang**	**Luijten**	Konya	Xu	Huang	Miyoshi
10:36 AM			Buskohl	Sebeck	Chen	Hong
10:48 AM			Chen	Lipson	Bu	Hobbs

Session	**Q19**	**Q20**	**Q21**	**Q22**	**Q23**
Room	*404*	*405*	*406*	*407*	*505-507*
Chair	*Ge*	*Collins*	*Hallinan*	*Kumar*	*McGraw*
2:30 PM	Wang	Gomez	Thelen	**Bockstaller**	**Bocquet**
2:42 PM	Koci	Goetz	Wang		
2:54 PM	Paul	Si	Park		
3:06 PM	Hagita	Kanagasekaran	**Epps**	Cheng	**Stebe**
3:18 PM	Balaeff	Hailey		Vaia	
3:30 PM	Qiu	Mendels		Maskey	
3:42 PM	Poier	Kang	Ganesan	Knorowski	**Snoeijer**
3:54 PM	Shahamat	Diemer	Rojas	Ginzburg	
4:06 PM	Gemuenden	Ishii	Bartels	Bai	
4:18 PM	Sinkovits	**Noriega**	Ting	**Anastasiadis**	**Mueller**
4:30 PM	Budzien		Jing		
4:42 PM	Dorgan		Cheng		
4:54 PM	Qi	Ward	Iacob	Jiao	**Aarts**
5:06 PM	Larson	Moscatello	Kyu	Estridge	
5:18 PM	Pedro	Choi	Smith	Lin	

L11: Physics of Proteins II
L14: Understanding Ion Containing Polymer Systems using Computer Simulations
L16: Extreme Mechanics: Origami and Structural Metamaterials
L20: Dynamics of Glassy Polymers under Nanoscale Confinement I
L21: Polymers for Energy Storage and Conversion II - Photovoltaics
L22: Directed Assembly of Hybrid Materials I - Crystallization and Multicomponent Systems

P1: Joint Poster Session, Exhibit Hall F - DPOLY, DCP, DBIO, GSNP

Q19: Theory and Simulations of Macromolecules VII - Chain Conformation
Q20: Organic Electronics and Photonics - Charge Transport
Q21: Polymers for Energy Storage and Conversion III - Ion Transport
Q22: Directed Assembly of Hybrid Materials II
Q23: Dynamics of Fluids at Interfaces

P1: Joint Poster Session - DPOLY, DCP, DBIO, GSNP			
Exhibit Hall F, DPOLY posters 107-246			
107 Vega	142 Qi	177 Puhr	212 Qu
108 Ogihara	143 Acevedo-Cartagena	178 Martin	213 Pandav
109 Byun	144 Sendogdular	179 Shen	214 Carrillo
110 Jeong	145 Zhou	180 Feng	215 Sharick
111 Jeong	146 Davidson	181 Song	216 Yang
112 Ewen	147 Di	182 Dundar	217 Helming
113 Lopez	148 Tang	183 Tran	218 Leonardi
114 Iacob	149 Arellano	184 Kim	219 Wamuo
115 Clarkson	150 Sen	185 Choo	220 Fu
116 Wilson	151 Burroughs	186 Cho	221 Wong
117 Zvelindovsky	152 Zhai	187 Liu	222 Bryson
118 Wang	153 Falzone	188 Tung	223 Diaz
119 Jiao	154 Denmark	189 Choi	224 Kobayashi
120 Zhou	155 Hur	190 Kobayashi	225 Baker
121 Jiang	156 Chen	191 Ahuja	226 Rasin
122 Lopez	157 Foster	192 Yang	227 Noll
123 Sun	158 Kwak	193 Kwon	228 Kobayashi
124 Seo	159 Kim	194 Cox	229 Morgan
125 Ma	160 Park	195 Hiszpanski	230 Galvin
126 Khawaja	161 Choi	196 Potai	231 Luna-Singh
127 McLeland	162 Popere	197 Stiff-Roberts	232 Patil
128 Luettmer-Strathmann	163 Kothari	198 Wickremasinghe	233 Koga
129 Lang	164 Singer	199 Gopinadhan	234 Mulvenna
130 Nguyen	165 Singer	200 Camden	235 Hirota
131 Xu	166 Lee	201 Li	236 Zhang
132 Xu	167 Perego	202 Jeong	237 Albert
133 Medapuram	168 Perego	203 Migler	238 Christau
134 Yang	169 Inoue	204 Vyavahare	239 Zhang
135 Xu	170 He	205 Rai	240 Erbas
136 Yong	171 Evans	206 Burns	241 Cao
137 Aragones	172 He	207 Chung	242 Ryu
138 Kachan	173 Cao	208 Mizuno	243 Olsen
139 Zhou	174 Baradwaj	209 Leitsch	244 Noll
140 Wang	175 Tran	210 Daniel	245 Smith
141 Chen	176 Soles	211 Sung	246 Casey

Thursday

Session	S11	S14	S15	S16	S19	S20	S21
Room	*203*	*301-303*	*304*	*401*	*404*	*405*	*406*
Chair	*Markelz*	*Bäumchen*	*Aragones*	*Grason*	*Stoykovich*	*Priestly*	*Clarke*
8:00 AM	Papoian	**Restagno**	Zhang	Takei	Perego	Salez	**Cabral**
8:12 AM	McMicken		Misko	Florijn	Bai	Christison	
8:24 AM	Zhou		Sevilla	Schaeffer	Gnabasik	Caruthers	
8:36 AM	**Wang**	**Robbins**	Alexeev	Kang	**Vogt**	Medvedev	Maity
8:48 AM			Yan	Coulais		Chowdhury	Seyhan
9:00 AM			Cicuta	Kaynia		Lin	Gorga
9:12 AM	Qin	**Bodiguel**	Szamel	Farmer	Baruth	Wong	Yong
9:24 AM	Faraggi		Zhang	Aharoni	Qiang	Smessaert	Shinohara
9:36 AM	Konold		Reichhardt	Moshe	Tsarkova	di Mare	Zhang
9:48 AM	Sage	**Menon**	Aragones	Zhang	Modi	Wang	Firestone
10:00 AM	Xu		Steimel	Jadhao	Paradiso	Hari	Kao
10:12 AM	Chakraborty		Sokolov	Nguyen	Hur	Zaccone	Ashkar
10:24 AM	**Dyer**	**Torkelson**	Ray	Kosmrlj	Mokarian-Tabari	Cheng	Verduzco
10:36 AM			Marconi	Croll	Gunkel	Srikanth	Rosu
10:48 AM			Tung	Sharon	Gu	Shepard	Kumar

Session	S22
Room	*407*
Chair	*Elabd*
8:00 AM	Zhuk
8:12 AM	Sung
8:24 AM	Runt
8:36 AM	Middleton
8:48 AM	Chen
9:00 AM	Sharick
9:12 AM	Lopez
9:24 AM	Chu
9:36 AM	Zheng
9:48 AM	Goswami
10:00 AM	Qin
10:12 AM	Hoffmann
10:24 AM	Pryamitsyn
10:36 AM	O'Reilly
10:48 AM	Olvera de la Cruz

S11: Physics of Proteins III
S14: Dynamics of Polymers at Interfaces and in Confinement
S15: Active Soft Matter III - Soft, Self-Propelled Particles
S16: Extreme Mechanics: Morigami, Metamaterials, and Elasticity
S19: Thin Films of Block Copolymers and Hybrid Materials I - Solvent Vapor Annealing
S20: Polymer Glasses
S21: Polymer Nanocomposites I - Active Particles and Dynamics
S22: Charged and Ion-Containing Polymers

Session	**T15**	**T19**	**T20**	**T21**	**T22**
Room	*304*	*404*	*405*	*406*	*407*
Chair	*Alexander-Katz*	*Ullal*	*Sharifzadeh*	*Bochinski*	*Sussman*
11:15 AM	**Marenduzzo**	Li	**Zhu**	Schneider	Baglay
11:27 AM		Kim		Hore	Sussman
11:39 AM		Wu		Dell	Glor
11:51 AM	Gennerich	Delgadillo	Gautam	Composto	**Riggleman**
12:03 PM	Palacci	Hannon	Pandit	Mukhopadhyay	
12:15 PM	Gehrels	Xiong	Aryanpour	Holt	
12:27 PM	Lopez	**Kline**	**Bardeen**	**Archer**	Forrest
12:39 PM	Dunkel				Efremov
12:51 PM	Condat				Simmons
1:03 PM	Saha	Chen	Boucher	Clarke	Lan
1:15 PM	Bartolo	Hayirlioglu	Jang	Imel	Price
1:27 PM	Engel	Liu	Thomas	Guo	Gray
1:39 PM	Kuan	Ding	Li	Yamamoto	Koh
1:51 PM	Dossetti		Wang	Choi	Roth
2:03 PM	Soni			Lin	Wiener

Session	**W14**	**W19**	**W20**	**W21**	**W22**	**W25**
Room	*301-303*	*404*	*405*	*406*	*407*	*503*
Chair	*Dalnoki-Veress*	*Olsen*	*Ajayan*	*Hoy*	*Riggleman*	*Boudouris*
2:30 PM	**Pochan**	Buss	Shin	Schieber	Koerner	**Chabinyc**
2:42 PM		Mitra	Greer	Levinsen	Frieberg	
2:54 PM		Wan	Boudouris	Wang	Glynos	
3:06 PM	**Croll**	Park	**Krishnamoorti**	Wool	Chrissopoulou	Weathers
3:18 PM		Luo		Liu	He	Glaudell
3:30 PM		Kim		Jiang	Nogales	Russ
3:42 PM	**Shi**	Zhang	Salerno	Dalsin	**Green**	Chen
3:54 PM		Farmer	Zhao	Paturej		Rostro
4:06 PM		Leuty	Cavicchi	Sliozberg		Simavilla
4:18 PM	**Jacobs**	Ilton	**Baer**	Singh	Tan	**Brill**
4:30 PM		Hu		Khabaz	Meng	
4:42 PM		Stewart-Sloan		Hsiao	Chen	
4:54 PM	**Hobbie**	Davis	Chipara	Hang	Datta	Zhang
5:06 PM		Singer	Lin	Seppala	Zhao	Yee
5:18 PM		Ellison	Alarcon	Rai	Napolitano	

T15: Active Soft Matter IV- Locomotion and Collective Behavior
T19: Thin Films of Block Copolymers and Hybrid Materials II - Directed Self Assembly
T20: Organic Electronics and Photonics - Photophysics
T21: Polymer Nanocomposites II - Dynamics
T22: Dynamics of Glassy Polymers under Nanoscale Confinement II

W14: Patterns in Polymers: Elasticity, Fluids, and Surfaces
W19: Thin Films of Block Copolymers and Hybrid Materials III - Surface, Wetting, and Confinement Interactions
W20: Membranes and Confinement
W21: Polymer Melts and Solutions
W22: Dynamics of Polymers Under Nanoscale Confinement III
W25: Organic Electronics and Photonics - Thermoelectric Properties of Polymers

Friday

Session	**Y11**	**Y14**	**Y19**	**Y20**	**Y21**
Room	*203*	*301-303*	*404*	*405*	*406*
Chair	*Sage*	*Composto*	*Yang*	*Dalnoki-Veress*	*Croll*
8:00 AM	Cebe		White	Ugur	Bertoldi
8:12 AM	Caballero	**Conrad**	DeFelice	Beckingham	Auguste
8:24 AM	Ozisik		Young	Jinnai	Viswanathan
8:36 AM			Russell	Kleinhenz	Fogle
8:48 AM	**Collins**	**Leheny**	Mecca	Ho	Mayett
9:00 AM			Kriisa	Snyder	Santucci
9:12 AM	Zhou		Pandav	Burns	Chen
9:24 AM	Malvankar	**Schweizer**	Diop	Reid	Srivastava
9:36 AM	Wolf		Yang	Luo	Dhinojwala
9:48 AM	Fenimore		Mizuno	Nicholson	Pleiner
10:00 AM	Vural	**Clarke**	Declet-Perez	McCready	Li
10:12 AM	Dimitriyev		Koga	McDermott	
10:24 AM	Yang		Zhang	Zhou	
10:36 AM	Thapa	**Winey**		Hammad	
10:48 AM				Westphal	

Session	**Z19**	**Z20**	**Z21**
Room	*404*	*405*	*406*
Chair	*Fakhraai*	*Boudouris*	*Clarke*
11:15 AM	Julien	Wickremasinghe	Bubeck
11:27 AM	Kim	Li	Dong
11:39 AM	Wisitsorasak	Liebig	Wang
11:51 AM	Teng	Watkins	Chao
12:03 PM	Priezjev	Chiappelli	Pelligra
12:15 PM	Xue	Wie	Qi
12:27 PM	Haji-Akbari	Tseng	Stoykovich
12:39 PM	Zhang		Wang
12:51 PM	Dalal		Zhao
1:03 PM	Dudowicz		Marciel
1:15 PM	Schweizer		Nixon
1:27 PM	Griffin		

Y11: Physics of Proteins IV
Y14: Dynamics of Polymer Nanocomposites
Y19: Polymer Blends
Y20: Semi Crystalline Polymers
Y21: Elastic Instabilities and Pattern Formation

Z19: Supercooled Polymer Liquids and Glasses
Z20: Organic Electronics and Photonics - Photonic and Electronic Properties
Z21: Polymer Composites: Nanocomposites

DPOLY SPECIAL EVENTS

DPOLY Reception:

Time: Sunday, March 2, 5:30 – 9:00 pm
Venue: Jazz@Jack's
Location: Denver Pavilions, 500 16th Street Mall #320, Denver, CO
Third level across from United Artists Movie Theater

DPOLY Award Lectures:

Polymer Physics Prize Symposium:

Karl Freed: "The Many Varied Phenomena of Equilibrium Self assembly / polymerization"
Session F56: Tuesday, March 4, 8:00 am – 11:00 am
Room: Four Seasons Ballroom 4

Padden Prize Symposium:

Session G22: Tuesday, March 4, 11:15 am – 12:51 pm
Room: 407

Dillon Medal Symposium:

Ryan Hayward: "Buckling Instabilities of Polymer Multilayers"
Session J56: Tuesday, March 4, 2:30 pm – 5:30 pm
Room: Four Seasons Ballroom

DPOLY Business Meeting:
Session K21: Tuesday, March 4, 5:45 pm – 6:45 pm
Room: 406

Disclaimer: The information provided in this booklet is unofficial and is accurate as of 24.01.2014. For all official information please refer to the APS March Meeting Proceedings (http://meetings.aps.org/Meeting/MAR14). If there is any discrepancy between this booklet and the APS website, trust the APS website.