1. Selective Metallization of Block Copolymers
   James D. Sievert, Thomas P. Russell, and James J. Watkins
   Presented by: James D. Sievert, Dept. of Polymer Science and Engineering

2. Replication of Block Copolymer Templates by Mineralization in Supercritical Carbon Dioxide
   Rajaram A. Pai, Jason J. Testa, Gaurav Bhatnagar, Sumit Agarwal and James J Watkins
   Presented by: Rajaram A. Pai, Dept. of Chemical Engineering

3. Controlled Placement Of CdSe Nanoparticles In Diblock Copolymer Templates By Electrophoretic Deposition
   Qingling Zhang, Ting Xu, David Butterfield, Matthew J. Misner, Du Yoel Ryu, Todd Emrick and
   Thomas P. Russell
   Presented by: Qingling Zhang, Dept. of Polymer Science and Engineering

4. Polyelectrolyte-Surfactant Microemulsions
   Waiken Wong and Helmut Strey
   Presented by: Waiken Wong, Dept. of Polymer Science and Engineering

5. Self Assembly and Crosslinking of Bio-Nanoparticles at Liquid-Liquid Interfaces
   Yao Lin, Alexander Böker, Su Long, Pappannan Thiyagarajan, Qian Wang, Thomas P. Russell
   Presented by: Yao Lin, Dept. of Polymer Science and Engineering

6. Thermally Cross-linked Nanoporous Diblock Copolymer Films
   Julie M. Leiston-Belanger, Thomas P. Russell (UMass Amherst); Eric Drockenmuller, Craig J.
   Hawker (IBM Almaden Research Center)
   Presented by: Julie M. Leiston-Belanger, Dept. of Polymer Science and Engineering

7. Hydrogels from PLA-PEO-PLA Triblock Copolymers
   Naomi Sanabria DeLong, Sarvesh Agrawal, Khaled A. Aamer, Surita R. Bhatia, and Gregory N. Tew
   Presented by: Naomi Sanabria DeLong, Dept. of Polymer Science and Engineering

8. Polymer Mediated Assembly of Iron Oxide Nanoparticles
   Ben Frankamp, Oktay Uzun, Andy Boal, Mark T. Tuominen, and Vincent M. Rotello
   Presented by: Ben Frankamp, Dept. of Physics

9. Effects of Topographic Features on the Adhesive Properties of Elastomers
   Edwin P. Chan and Alfred J. Crosby
   Presented by: Edwin P. Chan, Dept. of Polymer Science and Engineering

    Utai Klinkesorn, Pairoj Sophandora, Pavinee Chinchot, Eric A. Decker & D. Julian McClements
    Presented by: Utai Klinkesorn, Dept. of Food Science

11. Precursor-Surface Interactions Relevant to Plasma Deposition of Silicon Thin Films
    Tamas Bakos, Mayur Valipa and Dimitrios Maroudas
    Presented by: Tamas Bakos, Dept. of Chemical Engineering

12. Theoretical Modelling of Nanoparticle Formation in the Synthesis of Pure Silica Zeolites
    Miguel Jorge, Scott M. Auerbach and Peter A. Monson
    Presented by: Miguel Jorge, Dept. of Chemical Engineering
13. Modeling Microwave Heating of Fluids in Nanopores
   Aldo Combariza, Ethan Sullivan and Scott M. Auerbach
   Presented by: Aldo Combariza, Dept. of Chemistry

14. Modeling Catalysis in Nanopores with Nanolayers
   Leanna Toy, Justin Fermann and Scott M. Auerbach
   Presented by: Leanna Toy, Dept. of Chemistry

15. Surface Functionalized CdSe and Au Nanoparticles for Controlled Biomolecule-Nanoparticle Interactions
   Rui Hong, Vincent Rotello and Todd Emrick
   Presented by: Rui Hong, Dept. of Chemistry

16. Influence of i-Carrageenan on Droplet Flocculation of β-Lactoglobulin-Stabilized Oil-in-Water Emulsions during Thermal Processing
   Yeun Suk Gu, Eric A. Decker, and D. Julian McClements
   Presented by: Yeun Suk Gu, Dept. of Food Science

17. Atomic-Scale Analysis of SiH3 and H Surface Diffusion on Plasma-Deposited Amorphous Silicon Thin Films
   Mayur S. Valipa, Eray S. Aydil, and Dimitrios Maroudas
   Presented by: Mayur S. Valipa, Dept. of Chemical Engineering

18. Biotinylated Vesicles from Amphiphilic Diblock Copolymers
   Jin Nam and Maria Santore
   Presented by: Jin Nam, Dept. of Polymer Science and Engineering

19. Multicomponent Copolymeric Vesicles: Mechanical Properties and Phase Behavior
   Jessica L. McCoy and Maria M. Santore
   Presented by: Jessica L. McCoy, Dept. of Polymer Science and Engineering

20. Rheology of Laponite Dispersions Containing Poly(ethylene oxide)
   Hossein A. Baghdadi and Surita Bhatia
   Presented by: Hossein A. Baghdadi, Dept. of Chemical Engineering

21. Recognition-Induced Transformation of Microspheres into Vesicles
   Oktay Uzun, Amitav Sanyal, Hiroshi Nakade, Raymond J. Thibault and Vincent M. Rotello
   Presented by: Oktay Uzun, Dept. of Chemistry

22. Polyhedral Oligomeric Silsesquioxane (POSS) Units As Molecular Recognition Elements
   Joseph B. Carroll, Benjamin L. Frankamp, Sudhanshu Srivastava, and Vincent M. Rotello
   Presented by: Joseph B. Carroll, Dept. of Chemistry

23. Semiconductor Nanoparticles In Assemblies And Light Emitting Applications
   Ravisubhash Tangirala, Kevin Sill, Habib Skaff, and Todd Emrick
   Presented by: Ravisubhash Tangirala, Dept. of Polymer Science and Engineering

24. Structure And Properties Of PLA-PEO-PLA Copolymers In Solution And Gels
   Sarvesh K. Agrawal, Surita R. Bhatia, Kaled A. Aamer, Greg N. Tew
   Presented by: Sarvesh K. Agrawal, Dept. of Chemical Engineering

25. Chemical Detection Modules Engineered From Bacterial Signaling Proteins
   Abdalain Asinas, Li Zhi, Anthony L. Shrout, and Robert M. Weis
   Presented by: Anthony L. Shrout, Dept. of Chemistry

26. Supercritical Fluid Deposition of Ruthenium Barrier Layers
   Adam O'Neil and James J. Watkins
   Presented by: Adam O'Neil, Dept. of Chemical Engineering
27. **Formation of Mesoporous Titanium Dioxide Using Supercritical Carbon Dioxide as a Delivery Medium**  
David M. Hess and James J. Watkins  
Presented by: David M. Hess, Dept. of Chemical Engineering

28. **Sacrificial Polymeric Adhesion Promotion Layers for Cu Metallization**  
Yinfeng Zong, Christos F. Karanikas, James J. Watkins  
Presented by: Christos F. Karanikas, Dept. of Chemical Engineering

29. **Modeling Growth and Stability of Nanoporous Materials**  
Matthew H. Ford, Scott M. Auerbach, P.A. Monson  
Presented by: Matthew H. Ford, Dept. of Chemical Engineering

30. **Failure of Nanocomposite Thin Films**  
Jong-Young Lee, Alfred Crosby  
Presented by: Jong-Young Lee, Dept. of Polymer Science and Engineering

31. **Ultrahigh Density Arrays of Nanomagnets**  
Andrei Ursache, Qijun Xiao, James Goldbach, Thomas Russell and Mark Tuominen  
Presented by: Andrei Ursache, Dept. of Physics

32. **Nanomagnetic Clusters: Simulation and Magnetization**  
Qijun Xiao, Ozgur Yavuzcetin, Kyusoon Shin, Jen Misuraca, Thomas Russell and Mark Tuominen  
Presented by: Qijun Xiao, Dept. of Physics

33. **Block Copolymers for Integrated Nanolithography**  
Ozgur Yavuzcetin, Andrei Ursache, Deepak Singh, Qijun Xiao, James Goldbach, Thomas Russell and Mark Tuominen  
Presented by: Ozgur Yavuzcetin, Dept. of Physics

34. **Arrays of Nanoscopic Rings**  
Deepak Singh, Qijun Xiao, Ozgur Yavuzcetin, Thomas Russell and Mark Tuominen  
Presented by: Deepak Singh, Dept. of Physics

35. **Electromechanical Charge Shuttle Transport Physics**  
Kevin McCarthy, Xinyu Wang, Robert Krotkov and Mark Tuominen  
Presented by: Kevin McCarthy, Dept. of Physics

36. **Magnetic Imaging and Electrical Properties of Magnetotransport Devices**  
Jen Misuraca, Kevin McCarthy, Deepak Singh and Mark Tuominen  
Presented by: Jen Misuraca, Dept. of Physics

37. **Electronic Devices by Assembly of Nanoparticles on Conducting Droplets**  
Gunes Soyler, Chris Knutson, Roy Shenhar, Anthony Dinsmore, Mark Tuominen, Vincent Rotello, Todd Emrick and Thomas Russell

38. **Self-Assembly of Semi-Permeable Capsules Composed of Colloidal Particles**  
Ryan McGorty, Yutaka Maki, Kazem Edmond, and Anthony Dinsmore

39. **Easy and Fast Application of Neutral Brushes to Various Surfaces**  
Du Yeol Ryu, Kyusoon Shin, Eric Drockenmuller, Craig J. Hawker, and Thomas P. Russell  
Presented by Du Yeol Ryu, Dept. of Polymer Science and Engineering

40. **Polymers Within Nanopores**  
Kyusoon Shin, Hongqi Xiang, Jiun-Tai Chen, Sung In Moon, Tachyung Kim, Joshua Hornick, David Crain, Jocelyn Nuttall, Thomas J. McCarthy, and Thomas P. Russell  
Presented by Kyusoon Shin, Dept. of Polymer Science and Engineering

41. **Development of a Code to Perform Reactive Molecular Dynamics Calculations**  
Kenneth D. Smith, Stanislav I. Stoliarov, Marc R. Nyden, and Phillip R. Westmoreland  
Presented by Kenneth D. Smith, Dept. of Chemical Engineering