

## Alberto Striolo

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### **Education**

2002: Ph.D. in Chemical Engineering at the University of Padova, Italy.  
Tutors: A. Bertucco, University of Padova, Italy  
J.M. Prausnitz, University of California at Berkeley.  
1998: B.S. in Chemical Engineering at the University of Padova, Italy.

### **Professional Experience**

- August 2005 to present: Assistant Professor, University of Oklahoma, School of Chemical, Biological and Materials Engineering.
- September 2003 to July 2005: Research Associate at Vanderbilt University.
- January 2002 to August 2003: Post-doctoral appointment at North Carolina State University.
- July 2001 to September 2001: Visiting Scholar, University of California, Berkeley.
- June 2000 to September 2000: Visiting Scholar, University of California, Berkeley.
- November 1998 to February 2000: Visiting Scholar, University of California, Berkeley.

### **Honors**

- 2010: Invited as 'External Evaluator' for Ph.D. defenses at the University of Manchester, England.
- 2009: Invited to teach the course 'Porous Materials: Properties and Applications' at the Petroleum and Petrochemical College, Chulalongkorn University, Bangkok, Thailand.
- 2008: Junior Faculty Research Program Award, University of Oklahoma.
- 2007: ACS PRF type G grant.
- 2007: Program for Instructional Innovation, Integrating Technology to Enhance Student Learning award, University of Oklahoma.
- 2006: Junior Faculty Research Program Award, University of Oklahoma.

### *Fellowships*

- 1998: Fondazione 'Ing. Aldo Gini'. Via Portello, 35100 Padova.
- 1997: Education Abroad Program, Centro Studi Università di California, Via Oberdan, 10, 35100 Padova.
- 1997: Fondazione 'Ing. Aldo Gini'. Via Portello, 35100 Padova.

### **Synergistic Activities**

#### *Professional Societies*

- American Institute of Chemical Engineers: Senior Member
- American Chemical Society: Member
- International Adsorption Society: Member
- American Physical Society: Member
- Materials Research Society: Member
- SIGMA XI: Member
- 2008: elected as CoMSEF Liaison Director

### Reviewer

- National Science Foundation panelist
- Physical Review Letters
- Molecular Simulation
- Fluid Phase Equilibria
- Molecular Physics
- Macromolecules
- Physical Review E
- Polymer
- The Journal of Chemical Physics
- The Journal of Physical Chemistry A/B/C
- Atmospheric Environment
- Nano Letters
- The Journal of the American Chemical Society
- Nanotechnology
- Journal of Materials Research
- ACS Nano
- Europhysics Letters
- Applied Physical Letters
- Physical Review B
- Journal of Membrane Science
- Chemistry of Materials
- Physics Letters A
- Adsorption
- Physica A
- Physical Chemistry Chemical Physics

### Advising

Oklahoma Academic Team (Academic Year 2008-2009, 2009-2010)

Chemical Engineering Graduate Students Association, CheGS (Academic Year 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010)

Adopt-A-Prof, Academic Year 2008-2009: Delta Upsilon fraternity (Braton Danielson, bpdanielson@ou.edu)

### Service

Chair of the session 'Computational Studies of Self-Assembly', 2009 AIChE Annual Meeting, Nashville, TN.

Chair of the session 'Carbon Nanotubes V: Adsorption and Transport', 2009 AIChE Annual Meeting, Nashville, TN.

Co-chair of the session 'Polymer Thin Films at Interfaces I', 2009 AIChE Annual Meeting, Nashville, TN.

Co-chair of the session 'Molecular Simulation of Adsorption II', 2009 AIChE Annual Meeting, Nashville, TN.

Co-chair of the session 'Carbon Nanotubes III: Adsorption and Transport', 2009 AIChE Annual Meeting, Nashville.

Co-chair of the session 'Thermodynamic Properties and Phase Behavior III', 2009 AIChE Annual Meeting, Nashville.

Chair of the 'Focus Session: Hierarchically Ordered Systems', 2009 APS March Meeting, Pittsburgh.

Co-chair of the session 'Computational Studies of Self-Assembly I', 2008 AIChE Annual Meeting, Philadelphia

Co-chair of the session 'Nonlinear Dynamics and Pattern Formation', 2008 AIChE Annual Meeting, Philadelphia

Chair of the session 'Computational Studies of Self-Assembly II', 2008 AIChE Annual Meeting, Philadelphia

Co-chair of the session 'Computational Studies of Self-Assembly III', 2008 AIChE Annual Meeting, Philadelphia

Reviewer for 39 papers, 2 NSF panels, 1 NSF 'at home' review in 2008

Co-chair of the session 'Molecular Simulation of Adsorption', 2007 AIChE Annual Meeting, Salt Lake City

### Research Interests and Collaborators

- Experimental investigation of solvent adsorption in polymeric materials and of effective interactions between macromolecules in dilute solution. In my research group we are customizing various experimental techniques to investigate the behavior of macromolecules (e.g. surfactants, proteins, lipids) adsorbed on surfaces. I have experience in using gravimetric apparatus for adsorption measurement, membrane and vapor pressure osmometer, quartz crystal microbalance, static light scattering, and viscosimeter. I have also customized and used UV and IR spectrophotometers to monitor the conformation of proteins.
- Theoretical investigation (Monte Carlo and molecular dynamics simulation algorithms) of the interactions between macromolecules in solution, the thermodynamic behavior of water in confined geometries, and the conformation of macromolecules and/or metal clusters adsorbed at liquid-solid or vapor-liquid interfaces.
- Experimental and theoretical investigation of possible health and environmental issue related to nanotechnology.
- Among my current and former advisors and collaborators are John M. Prausnitz, UC Berkeley, Keith E. Gubbins, NC State, Peter T. Cummings, Vanderbilt, Dusan Bratko, Virginia Commonwealth University, Ariel Chialvo, ORNL, Sharon Glotzer, University of Michigan, Matt Neurock, University of Virginia.

## Students Advised

### a. Graduate

1. Camille Gutig, Masters, graduated December 2007.
2. Suwimol Wongsakulphasatch, Visiting Scientist, Summer 2008.
3. Brian H. Morrow, Ph.D. candidate, starting date Fall 2005.
4. Naga Rajesh Tummala, Ph.D. candidate, starting date Fall 2005.
5. Dimitrios Argyris, Ph.D. candidate, starting date Fall 2006.
6. Deepthi Konatham, Ph.D. candidate, starting date Fall 2007.
7. Liu Shi, Ph.D. candidate, starting date Fall 2007.
8. Tuan A. Ho, Ph.D. candidate, starting date Fall 2009.
9. Heng Fan, Ph.D. candidate, starting date Fall 2009.

### b. Undergraduate

1. Ismail Nohd Farid, Fall 2005, MC surfactants
2. Paolo Solda, Winter 2005, Internship, QCMD
3. Leann Johnson, Spring 2006, QCMD
4. Samameh Noor-Mohammadi, Spring 2006, QCMD
5. Nina Wright, Spring 2006, QCMD
6. Brian Knapp, Summer and Fall 2006, System Administrator
7. Mandona Luhila, Summer 2006, light scattering
8. Andrea Dal Cin, Summer 2006, Internship, QCMD
9. Denise Catapano, Summer 2006, REU (Cornell), MD simulations
10. Maryline Peysson, Summer 2006, (Montpellier, France), cartilage harvesting
11. Mary Page, Fall 2006, light scattering
12. Maria Josefina Fernandez, Winter 2007 Internship, light scattering
13. Chong Liang, Summer 2007 Internship, QCM
14. Manuel Ghezzi, Winter 2008 internship, QCM
15. Massimo Riello, Summer 2008 Internship, MD simulations

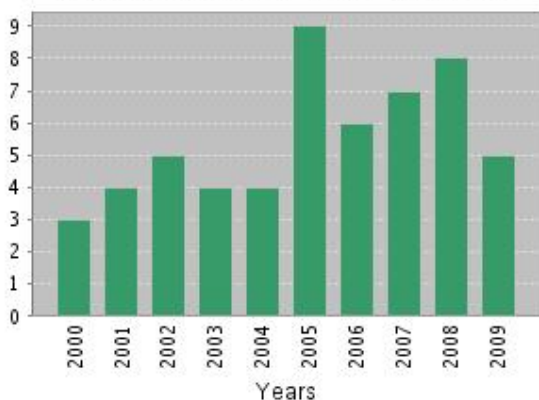
### c. High School

1. Peter Luo, Summer 2009, MD simulations on aqueous carbon nanotube – surfactant systems

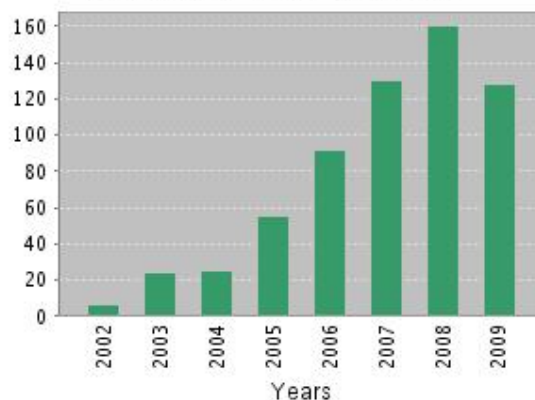
## Bibliography

a. ISI Citation Report (as of September 25<sup>th</sup>, 2009)

**Published Items in Each Year**



**Citations in Each Year**



**Results Found:** 55  
**Sums of the Times Cited:** 621 (422 citing articles, 378 citing articles excluding self-citations)  
**Average Citations per Item:** 11.29  
**h-index:** 14

b. Peer-reviewed journal articles

1. D. Argyris, D.R. Cole, and A. Striolo, *Ion-Specific Effects Under Confinement: Separation of Aqueous Mono-Valent Electrolyte Mixtures*, in preparation.
2. B.H. Morrow and A. Striolo, *Morphology of Platinum-Gold Nanoparticles Supported on Carbon Nanotube Bundles Via Molecular Dynamics Simulations*, in preparation.
3. D. Konatham and A. Striolo, *On the Microscopic Structure of Graphene Nano-Sheets Composites*, in preparation.
4. L. Shi and A. Striolo, *Testing-Configuration Effects in Assessing Cartilage Lubrication*, in preparation.
5. L. Shi, N.R. Tummala, and A. Striolo, *A Molecular Dynamics Study for C12E6 and SDS Surfactants at the Water-Vacuum Interface*, in preparation.
6. D. Konatham and A. Striolo, *Thermal Boundary Resistance at the Graphene-Oil Interface*, **Applied Physics Letters** (2009) in Press.
7. D. Argyris, D.R. Cole, and A. Striolo, *Dynamics Behavior of Interfacial Water at the Silica Surface*, **Journal of Physical Chemistry C**, (2009) in Press.
8. N.R. Tummala and A. Striolo, *Curvature Effects on the Adsorption of Aqueous SDS Surfactants on Carbonaceous Substrates: Structural Features and Counterion Dynamics*, **Physical Review E** 80 (2009) 021408. Also featured in **Virtual Journal of Nanoscale Science & Technology**, Vol. 20, Issue 11, September 14<sup>th</sup>, 2009.
9. B.H. Morrow and A. Striolo, *Assessing How Metal-Carbon Interactions Affect the Structure of Supported Platinum Nanoparticles*, **Molecular Simulation** 35 (2009) 795-803.
10. D. Argyris, D.R. Cole, and A. Striolo, *Hydration Structure on Silica Crystalline Substrates*, **Langmuir** 25 (2009) 8025-8035.
11. L. Shi, M. Ghezzi, G. Caminati, P. Lo Nostro, B.P. Grady, A. Striolo, *Adsorption Isotherms of Aqueous C<sub>12</sub>E<sub>6</sub> and CTAB Surfactants on Solid Surfaces in the Presence of Low-Molecular-Weight Co-Adsorbents*, **Langmuir** 25 (2009) 5536-5544.
12. N.R. Tummala and A. Striolo, *SDS Surfactants on Carbon Nanotubes: Aggregate Morphology*, **ACS Nano** 3 (2009) 595-602.
13. D. Konatham and A. Striolo, *Molecular Design of Stable Graphene Nano-Sheets Dispersions*, **Nano Letters** 8 (2008) 4630.

14. C. Gutig, B.P. Grady, and A. Striolo, *Erratum: "Experimental Studies on the Adsorption of Two Surfactants on Solid Surfaces: Adsorption Isotherms and Kinetics, Langmuir, 24 (2008) 4806"*, **Langmuir** 24 (2008) 13814.
15. A. Striolo, *On the Solution Self-Assembly of Colloidal Brushes: Insights from Simulations*, **Nanotechnology** 19 (2008) 445606.
16. D. Argyris, N.R. Tummala, A. Striolo, and D.R. Cole, *Molecular Structure and Dynamics in Thin Water Films at the Silica and Graphite Surfaces*, **Journal of Physical Chemistry C**, 112 (2008) 13587-13599. Also featured in the cover art of **J. Phys. Chem. C**, issue # 35, September 4<sup>th</sup>, 2008.
17. N.R. Tummala and A. Striolo, *Hydrogen-Bond Dynamics for Water Confined in Carbon Tetrachloride–Acetone Mixtures*, **Journal of Physical Chemistry B**, 112 (2008) 10675-10683.
18. C. Gutig, B.P. Grady, and A. Striolo, *Experimental Studies on the Adsorption of Two Surfactants on Solid Surfaces: Adsorption Isotherms and Kinetics*, **Langmuir**, 24 (2008) 4806.
19. B.H. Morrow and A. Striolo, *Platinum Nanoparticles on Carbonaceous Materials: Effect of Support Geometry on Nanoparticle Mobility, Morphology, and Melting*, **Nanotechnology**, 19 (2008) 195711.
20. N.R. Tummala and A. Striolo, *Role of Counter-Ion Condensation on the Self-Assembly of SDS Surfactants at the Water–Graphite Interface*, **Journal of Physical Chemistry B**, 112 (2008) 1987.
21. B.H. Morrow and A. Striolo, *Morphology and Diffusion Mechanism of Platinum Nanoparticles Supported on Carbon Nanotube Bundles*, **Journal of Physical Chemistry C**, 111 (2007) 17905.
22. A. Striolo, *Water Self Diffusion Through Narrow Oxygenated Carbon Nanotubes*, **Nanotechnology**, 18 (2007) 475704.
23. E.R. Chan, A. Striolo, C. McCabe, S.C. Glotzer, and P.T. Cummings, *A Coarse-Grained Force Field for Simulating Polymer-Tethered Silsesquioxane Self-Assembly in Solution*, **Journal Chemical Physics**, 127 (2007) 114102. Also featured in **Virtual Journal of Nanoscale Science & Technology**, Vol. 16, Issue 14, October 1<sup>st</sup>, 2007. Also featured in **Virtual Journal of Biological Physics Research**, Vol. 14, Issue 7, October 1<sup>st</sup>, 2007.
24. A. Striolo, C. McCabe, P. T. Cummings, E. R. Chan, and S. C. Glotzer, *Aggregation of POSS Monomers in Liquid Hexane: A Molecular-Simulation Study*, **Journal of Physical Chemistry B**, 111 (2007) 12248.
25. H.-C. Li, C.Y. Lee, C. McCabe, A. Striolo, and M. Neurock, *Ab Initio Analysis of the Structural Properties for Alkyl-Substituted Polyhedral Oligomeric Silsesquioxanes*, **Journal of Physical Chemistry A**, 111 (2007) 3577.
26. A. Striolo, *Controlled Assembly of Spherical Nanoparticles: Nanowires and Spherulites*, **Small**, 3 (2007) 628.
27. A. Striolo and S.A. Egorov, *Sterical Stabilization of Colloidal Particles: Implicit and Explicit Solvent*, **Journal of Chemical Physics**, 126 (2007) 014902.
28. A. Striolo, *Colloidal Brushes in Complex Solutions: Existence of a Weak Mid-Range Attraction Due To Excluded-Volume Effects*, **Physical Review E**, 74 (2006) 041401. Also featured in **Virtual Journal of Nanoscale Science & Technology**, Vol. 14, Issue 18, October 30<sup>th</sup>, 2006.
29. A. Striolo, C. McCabe, and P.T. Cummings, *Organic-Inorganic Telechelic Molecules: Solution Properties from Simulations*, **Journal of Chemical Physics** 125 (2006) 104904. Also featured in **Virtual Journal of Nanoscale Science & Technology**, Vol. 14, Issue 13, September 25<sup>th</sup>, 2006. Also featured in **Virtual Journal of Biological Physics Research**, Vol. 12, Issue 6, September 15<sup>th</sup>, 2006.
30. A. Striolo, *Adsorption of Model Surfactant-Like Copolymers on Nano-Patterned Surfaces*, **Journal of Chemical Physics** 125 (2006) 094709. Also featured in **Virtual Journal of Nanoscale Science & Technology**, Vol. 14, Issue 12, September 18<sup>th</sup>, 2006. Also featured in **Virtual Journal of Biological Physics Research**, Vol. 12, Issue 6, September 15<sup>th</sup>, 2006.
31. A. Striolo, *The Mechanism of Water Diffusion in Narrow Carbon Nanotubes*, **Nano Letters**, 6 (2006) 633-639.
32. A. Striolo, A.A. Chialvo, K.E. Gubbins, and P.T. Cummings, *Simulated Water Adsorption in Chemically Heterogeneous Carbon Nanotubes*, **Journal of Chemical Physics**, 124 (2006) 074710.
33. T.C. Ionescu, F. Qi, C. McCabe, A. Striolo, J. Kieffer, and P.T. Cummings, *Evaluation of Force Fields for Molecular Simulation of Polyhedral Oligomeric Silsesquioxanes*, **Journal of Physical Chemistry B**, 110 (2006) 2502.
34. X. Zhao, A. Striolo, and P.T. Cummings, *C<sub>60</sub> Binds to and Deform Nucleotides*, **Biophysical Journal**, 89 (2005) 3856.
35. A. Striolo, K.E. Gubbins, T.D. Burchell, J.M. Simonson, D.R. Cole, M.S. Gruskiewicz, A.A. Chialvo, and P.T. Cummings, *Effect of Temperature on the Adsorption of Water in Porous Carbons*, **Langmuir**, 21 (2005) 9457.
36. A. Striolo, C. McCabe, and P.T. Cummings, *Effective Interactions between Polyhedral Oligomeric Silsesquioxanes in Hexadecane from Molecular Simulation*, **Macromolecules**, 38 (2005) 8950.

37. A. Striolo, P.K. Naicker, A.A. Chialvo, P.T. Cummings, and K.E. Gubbins, *Simulated Water Adsorption Isotherms in Hydrophilic and Hydrophobic Cylindrical Nanopores*, **Adsorption**, 11 (2005) 397.
38. A. Striolo, K.E. Gubbins, A.A. Chialvo, and P.T. Cummings, *Effect of Pore Connectivity on Water Adsorption Isotherms in Non-Activated Graphitic Nanopores*, **Adsorption**, 11 (2005) 337.
39. A. Striolo, A. Jayaraman, J. Genzer, and C.K. Hall, *Adsorption of Comb Copolymers on Weakly-Attractive Solid Surfaces*, **Journal of Chemical Physics**, 123 (2005) 064710. Also featured in **Virtual Journal of Biological Physics Research**, September 1<sup>st</sup>, 2005
40. A. Striolo, C. McCabe, and P.T. Cummings, *Thermodynamic and Transport Properties of Polyhedral Oligomeric Silsesquioxanes in Poly(Dimethyl Siloxane)*, **Journal of Physical Chemistry B**, 109 (2005) 14300-14307.
41. A. Striolo, A.A. Chialvo, K.E. Gubbins, and P.T. Cummings, *Water in Carbon Nanotubes: Adsorption Isotherms and Thermodynamic Properties from Molecular Simulation*, **Journal of Chemical Physics**, 122 (2005) 234712; Also featured in **Virtual Journal of Nanoscale Science & Technology**, Vol. 12, Issue 1, July 4<sup>th</sup>, 2005. Also featured in **Virtual Journal of Biological Physics Research**, Vol. 10, Issue 1, July 1<sup>st</sup>, 2005
42. A. Striolo, C.C. Colina, K.E. Gubbins, N. Elvassore, and L. Lue, *The Depletion Attraction between Pairs of Colloids in Polymer Solution*, **Molecular Simulation**, 30 (2004) 437.
43. F.W. Tavares, D. Bratko, A. Striolo, H.W. Blanch, and J.M. Prausnitz, *Phase Behavior of Aqueous Solutions Containing Dipolar Proteins from Second-Order Perturbation Theory*, **Journal of Chemical Physics**, 120 (2004) 9859.
44. A. Striolo, K.E. Gubbins, A.A. Chialvo, and P.T. Cummings, *Simulated Water Adsorption Isotherms in Carbon Nanopores*, **Molecular Physics**, 102 (2004) 243.
45. A. Striolo, N. Elvassore, T. Parton, and A. Bertucco, *Relationship Between Volume Expansion, Solvent Power, and Precipitation in GAS Processes*, **AIChE Journal**, 49 (2003) 2671-2679.
46. A. Striolo, F.W. Tavares, D. Bratko, H.W. Blanch, and J.M. Prausnitz, *Analytic Calculation of Phase Diagrams for Charged Dipolar Colloids with Orientation-Averaged Pair Potentials*, **Physical Chemistry Chemical Physics**, 5 (2003) 4851-4857.
47. A. Striolo, A. Favaro, N. Elvassore, A. Bertucco, and V. Di Noto, *Evidence of Conformational Changes for Protein Films Exposed to High-Pressure CO<sub>2</sub> by FT-IR Spectroscopy*, **Journal of Supercritical Fluids**, 27 (2003) 283-295.
48. A. Striolo, A.A. Chialvo, P.T. Cummings, and K.E. Gubbins, *Water Adsorption in Carbon-Slit Nanopores*, **Langmuir**, 19 (2003) 8583-8591.
49. A. Striolo, J. Ward, J.M. Prausnitz, W.J. Parak, D. Zanchet, D. Gerion, D. Milliron, and A.P. Alivisatos, *Molecular Weight, Osmotic Second Virial Coefficient, and Extinction Coefficient of Colloidal CdSe Nanocrystals*, **Journal of Physical Chemistry B**, 106 (2002) 5500-5505.
50. A. Striolo, D. Bratko, J. Wu, N. Elvassore, H.W. Blanch, and J.M. Prausnitz, *Forces between Aqueous non-Uniformly Charged Colloids from Molecular Simulation*, **Journal of Chemical Physics**, 116 (2002) 7733-7743.
51. D. Bratko, A. Striolo, J. Wu, H.W. Blanch, and J.M. Prausnitz, *Orientation-Averaged Pair Potential between Dipolar Proteins or Colloids*, **Journal of Physical Chemistry B**, 106 (2002) 2714-2720.
52. N. Elvassore, A. Striolo, and A. Bertucco, *Thermodynamic Modeling of High-Pressure Equilibria in the McMillan-Mayer Framework*, **Fluid Phase Equilibria**, 194-197 (2002) 587-598.
53. A. Striolo, D. Bratko and J.M. Prausnitz, *Pair-Wise Additivity for Potentials of Mean Force in Dilute Polymer Solutions*, **Polymer** 43 (2002) 591-597.
54. A. Striolo and J.M. Prausnitz, *Adsorption of Branched Homopolymers on a Solid Surface*, **Journal of Chemical Physics**, 114 (2001) 8565-8572.
55. A. Striolo, D. Bratko, J.M. Prausnitz, N. Elvassore, and A. Bertucco, *Influence of Polymer Structure upon Active-Ingredient Loading: a Monte Carlo Simulation Study for Design of Drug-Delivery Devices*, **Fluid Phase Equilibria**, 183-184 (2001) 341-350.
56. A. Striolo and J.M. Prausnitz, *Osmotic Second Virial Coefficient for Linear and Star Poly(ethylene oxide)*, **Polymer** 42 (2001) 4773-4775.
57. A. Striolo, J.M. Prausnitz, A. Bertucco, R.A. Kee, and M. Gauthier, *Dilute-Solution Properties of Arborescent Polystyrenes: Further Evidence for Perturbed-Hard-Sphere Behavior*, **Polymer** 42 (2001) 2579-2584.
58. A. Striolo, J.M. Prausnitz and A. Bertucco, *Osmotic Second Virial Coefficient, Intrinsic Viscosity and Molecular Simulation for Star and Linear Polystyrenes*, **Macromolecules** 33 (2000) 9583-9586.
59. A. Striolo and J.M. Prausnitz, *Osmotic Second Virial Cross Coefficients for Star and Linear Polystyrenes*, **Journal of Chemical Physics** 113 (2000) 2927-2931.

60. A. Striolo and J.M. Prausnitz, *Vapor-Liquid Equilibria for Some Concentrated Aqueous Polymer Solutions*, **Polymer** 41 (2000) 1109-1117.

c. Books and Book Chapter

1. E.R. Chan, A. Striolo, C. McCabe, P.T. Cummings, S.C. Glotzer, *A Coarse-Grained Force Field for Simulating Polymer-Tethered Nanoparticle Self-Assembly in Solution*, in 'Coarse-Graining of Condensed Phase and Biomolecular Systems', G.A. Voth Editor, CRC Press: Boca Raton, FL, 2009.
2. A. Striolo, *Nano-Confined Water*, in 'Nanomaterials: Design and Simulation', J.M. Seminario and P.B. Balbuena Editors, Elsevier: Amsterdam, 2006.
3. A. Striolo, F. Zanette and A. Bertuccio, *Precipitation by Supercritical Anti-Solvent*, in 'High Pressure Process Technology: Fundamentals and Applications', A. Bertuccio and G. Vetter Editors, Elsevier: Amsterdam, 2001.

d. Invited Talks

1. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, Macromolecular Science and Engineering Department, **Case Western Reserve University**, Cleveland, OH, **November 20<sup>th</sup>**, 2009.
2. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, Department of Energy, Environmental and Chemical Engineering, **Washington University in St. Louis**, Saint Louis, MO, **October 2<sup>nd</sup>**, 2009.
3. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, Thailand Research Fund – RGJ PhD Scholarship Program, **Chulalongkorn University**, Bangkok, Thailand, **August 7<sup>th</sup>**, 2009.
4. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, Chemical Engineering Department, **The University of Washington**, Seattle, **July 17<sup>th</sup>**, 2009.
5. A. Striolo, D. Argyris, N.R. Tummala, *Aqueous Solutions on Silica Substrates: Structure and Dynamics from Simulations*, **17<sup>th</sup> Symposium on Thermophysical Properties**, Boulder, CO, **June 21<sup>st</sup>-26<sup>th</sup>**, 2009.
6. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, Chemistry Department, **University of Oklahoma**, Norman, OK, **May 1<sup>st</sup>**, 2009.
7. A. Striolo, *Fundamental Studies at Interfaces: From First Principles to Practical Applications*, **Molecular Foundry, LBNL**, Berkeley, CA, **April 29<sup>th</sup>**, 2009.
8. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, School of Earth Sciences, **Stanford University**, Stanford, CA, **April 28<sup>th</sup>**, 2009.
9. A. Striolo, *Modeling Graphene Sheets Composites*, **NanoFocus and Bioenergy – Oklahoma EPSCoR Annual State Conference**, Oklahoma City, OK, **March 31<sup>st</sup>-April 1<sup>st</sup>**, 2009.
10. A. Striolo, *On the Relationship between the Atomic Water Structure and Macroscopic Interfacial Properties*, Department of Chemistry, **The University of Firenze**, Florence, Italy, **January 8<sup>th</sup>**, 2009.
11. A. Striolo, *Surfactants at Solid-Aqueous Interfaces: Surface Roughness and Co-Adsorbent Effects*, Department of Chemical Engineering, **The University of Padova**, Padova, Italy, **January 7<sup>th</sup>**, 2009.
12. A. Striolo, *From the Atomic Water Structure at Solid-Liquid Interfaces to Macroscopic Properties*, Department of Chemical Engineering, **The University of Manchester**, Manchester, England, **December 22<sup>nd</sup>**, 2008.
13. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, Department of Chemical Engineering, **Northeastern University**, Boston, MA, **December 2<sup>nd</sup>**, 2008.
14. A. Striolo, *Surfactants at Solid-Aqueous Interfaces: Surface Roughness and Co-Adsorbent Effects*, **Institute for Applied Surfactant Research**, The University of Oklahoma, Norman, OK, **November 13<sup>th</sup>**, 2008.
15. A. Striolo, *On the Structure and Dynamics of Water at Solid-Liquid Interfaces*, Department of Chemistry, **The University of Texas at Dallas**, Dallas, TX, **February 26<sup>th</sup>**, 2008.
16. A. Striolo, *On the Structure and Dynamics of Water at Solid-Liquid Interfaces*, Department of Chemical and Biomolecular Engineering, **Notre Dame University**, Notre Dame, IN, **January 29<sup>th</sup>**, 2008.
17. A. Striolo, *Self-Assembly at Solid-Aqueous Interfaces: A Molecular Perspective*, Department of Chemical Engineering, **Kansas State University**, Manhattan, KS, **November 15<sup>th</sup>**, 2007.

18. A. Striolo, *Self-Assembly at Solid-Aqueous Interfaces: A Molecular Perspective*, **Institute for Applied Surfactant Research**, The University of Oklahoma, Norman, OK, **November 1<sup>st</sup>, 2007**.
19. A. Striolo, *The New Frontier in Catalysis: 100% Selectivity*, Department of Chemical Engineering, **Politecnico di Milano**, Milan, Italy, **June 6<sup>th</sup>, 2007**.
20. A. Striolo, *Aqueous Systems at Interfaces: Insights from Molecular Simulations*, Department of Chemistry, **University of Florence**, Florence, Italy, **June 5<sup>th</sup>, 2007**.
21. A. Striolo, *Carbon Nanotubes: What is Limiting their Applications?*, Department of Chemical Engineering, **University of Padova**, Padova, Italy, **June 4<sup>th</sup>, 2007**.
22. A. Striolo, *Nano-Confined Water: Properties from Molecular Simulation*, **Oklahoma EPSCoR**, Annual State Conference, Norman, OK, **May 18<sup>th</sup>, 2006**.
23. A. Striolo, *Molecular Simulations: An Effective Microscope to Develop Nano-Engineering Applications*, **OSCER Annual Symposium**, Norman, OK, **October 4<sup>th</sup>, 2005**.

#### e. International Conferences

(\* indicates the speaker)

1. N.R. Tummala, B.H. Morrow, P. Luo and A. Striolo\*, *Potential of Mean Force between Aqueous Single Walled Carbon Nanotubes in Surfactant Solutions*, **MRS Fall Meeting**, Boston, MA, November 30<sup>th</sup>-December 4<sup>th</sup>, **2009**.
2. D. Konatham and A. Striolo\*, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **MRS Fall Meeting**, Boston, MA, November 30<sup>th</sup>-December 4<sup>th</sup>, **2009**.
3. D. Argyris and A. Striolo\*, *Aqueous Solutions on Silica Surfaces: Structure and Dynamics from Simulations*, **MRS Fall Meeting**, Boston, MA, November 30<sup>th</sup>-December 4<sup>th</sup>, **2009**.
4. D. Argyris\* and A. Striolo, *Interfacial Aqueous Systems: Ion-Ion Correlations and the Electric Double Layer*, **AICHE Annual Meeting**, Nashville, TN, November 8<sup>th</sup>-13<sup>th</sup>, **2009**.
5. D. Argyris\*, P.D. Ashby, and A. Striolo, *Structural and Dynamic Properties of Interfacial Water at the Silica Surface*, **AICHE Annual Meeting**, Nashville, TN, November 8<sup>th</sup>-13<sup>th</sup>, **2009**.
6. B. Morrow\* and A. Striolo, *Support Effects on the Catalytic Properties of Pt-Au and Pt-Ni Bimetallic Nanoparticles: A Multi-Scale Simulation Study*, **AICHE Annual Meeting**, Nashville, TN, November 8<sup>th</sup>-13<sup>th</sup>, **2009**.
7. D. Konatham\* and A. Striolo, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **AICHE Annual Meeting**, Nashville, TN, November 8<sup>th</sup>-13<sup>th</sup>, **2009**.
8. L. Shi\* and A. Striolo, *Testing-Configuration Effects in Assessing Cartilage Lubrication*, **AICHE Annual Meeting**, Nashville, TN, November 8<sup>th</sup>-13<sup>th</sup>, **2009**.
9. L. Shi,\* N.R. Tummala and A. Striolo, *A Molecular Dynamics Study of C<sub>12</sub>E<sub>6</sub> and SDS Surfactants at the Silica-Water and Air-Water Interfaces*, **AICHE Annual Meeting**, Nashville, TN, November 8<sup>th</sup>-13<sup>th</sup>, **2009**.
10. N.R. Tummala\* and A. Striolo, *Potential of Mean Force between Aqueous Single Walled Carbon Nanotubes in Surfactant Solutions*, **AICHE Annual Meeting**, Nashville, TN, November 8<sup>th</sup>-13<sup>th</sup>, **2009**.
11. D. Konatham and A. Striolo\*, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **17<sup>th</sup> Symposium on Thermophysical Properties**, Boulder, CO, **June 21<sup>st</sup>-26<sup>th</sup>, 2009**.
12. A. Striolo,\* D. Argyris, and N.R. Tummala, *Aqueous Solutions on Silica Surfaces: Structure and Dynamics from Simulations*, **APS March Meeting**, Pittsburgh, Pennsylvania, March 16-20<sup>th</sup>, **2009**.
13. L. Shi, A. Striolo, and B.P. Grady\*, *Quartz crystal microbalance investigations of co-adsorption of aqueous surfactants and low-molecular-weight solutes on gold*, **237<sup>th</sup> ACS National Meeting**, Salt Lake City, UT, March 22-26<sup>th</sup>, **2009**.
14. A. Striolo\* and D. Konatham, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **MRS Fall Meeting**, Boston, MA, December 1<sup>st</sup>-5<sup>th</sup>, **2008**.
15. A. Striolo,\* *Simulation Studies for the Adsorption of Colloidal Brushes on Flat Surfaces: Steric Repulsion vs. Bridge Attraction*, **AICHE Annual Meeting**, Philadelphia, PA, November 16<sup>th</sup>-21<sup>st</sup>, **2008**.
16. D. Argyris\* and A. Striolo, *Molecular Dynamics Study for a Novel AFM Application*, **AICHE Annual Meeting**, Philadelphia, PA, November 16<sup>th</sup>-21<sup>st</sup>, **2008**.
17. B.H. Morrow\* and A. Striolo, *Support Effects on the Catalytic Properties of Pt-Au Bimetallic Nanoparticles: A Multi-Scale Simulation Study*, **AICHE Annual Meeting**, Philadelphia, PA, November 16<sup>th</sup>-21<sup>st</sup>, **2008**.

18. D. Konatham\* and A. Striolo, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **AICHE Annual Meeting**, Philadelphia, PA, November 16<sup>th</sup>-21<sup>st</sup>, **2008**.
19. N.R. Tummala\* and A. Striolo, *A Molecular Dynamics Study of Sodium Dodecyl Sulfate (SDS) at the Silica-Water Interface: pH Effect*, **AICHE Annual Meeting**, Philadelphia, PA, November 16<sup>th</sup>-21<sup>st</sup>, **2008**.
20. L. Shi,\* B.P. Grady, and A. Striolo, *Effects of Low Molecular Weight Compounds on Surfactants Adsorption Isotherms: An Experimental Investigation Based on QCM Measurements*, **AICHE Annual Meeting**, Philadelphia, PA, November 16<sup>th</sup>-21<sup>st</sup>, **2008**.
21. D. Argyris, N.R. Tummala, and A. Striolo,\* *Structural and Dynamic Properties of Water on Hydrophobic and Hydrophilic, Solid and Fluid Interfaces*, **Gordon Research Conference on Water & Aqueous Solutions**, Holderness School, Holderness, NH, July 27<sup>th</sup> – August 1<sup>st</sup>, **2008**
22. A. Striolo,\* *Emerging Structures for Colloidal Brushes: from Dispersions and Agglomerates to Spherulites, Wires, and Beyond*, **APS March Meeting**, New Orleans, LA, March 9<sup>th</sup>-14<sup>th</sup> **2008**.
23. N.R. Tummala\* and A. Striolo, *Monomer Partition Between Surfactant Surface Aggregates and Bulk Aqueous Solutions: Influence of Monomer Lyophilicity*, **AICHE Annual Meeting**, Salt Lake City, Utah, November **2007**.
24. D. Argyris\* and A. Striolo, *Water Structure and Dynamics in Thin Interfacial Layers at SiO<sub>2</sub> and Graphite Surfaces*, **AICHE Annual Meeting**, Salt Lake City, Utah, November **2007**.
25. B.H. Morrow\* and A. Striolo, *Morphology and Diffusion Mechanism of Pt Nanoparticles in Carbon Nanotube Bundles*, **AICHE Annual Meeting**, Salt Lake City, Utah, November **2007**.
26. C. Gutig\*, B.P. Grady, and A. Striolo, *Adsorption Isotherms and Dynamics of Adsorption for Aqueous CTAB and C12E6 Surfactants on Three Surfaces: Experimental Data and Theoretical Interpretation*, **AICHE Annual Meeting**, Salt Lake City, Utah, November **2007**.
27. E.R. Chan\*, A. Striolo, C. McCabe, S.C. Glotzer, P.T. Cummings, *A Coarse-Grained Force Field for Simulating Tethered Nanoparticle Self-Assembly in Solution*, **AICHE Annual Meeting**, Salt Lake City, Utah, November **2007**.
28. B.H. Morrow and A. Striolo, *Morphology and Diffusion Mechanism of Pt Nanoparticles in Carbon Nanotube Bundles*, **National Science Foundation EPSCoR National Conference**, Waikoloa, Hawai'i, November 6<sup>th</sup>-9<sup>th</sup>, **2007** (poster presented by Dr. Warren Ford of Oklahoma State University).
29. A. Striolo\* and B.H. Morrow, *Towards 100% Selectivity in Heterogeneous Catalysis: Support Design*, **Gordon Research Conference**, Clusters, Nanocrystals & Nanostructures, Mount Holyoke College, South Hadley, MA, July 29<sup>th</sup> – August 3<sup>rd</sup>, **2007**.
30. C. Gutig, N.R. Tummala, B.P. Grady, and A. Striolo\*, *Surfactant Adsorption on Solid Surfaces: A Synergistic Experimental-Simulation Approach to Unveil the Aggregates Molecular Structure*, **StatPhys 23**, Genova, Italy, July 8<sup>th</sup>-13<sup>th</sup>, **2007**.
31. A. Striolo\* and N.R. Tummala, *Water in hydrophobic environments. Molecular dynamics simulations in aid of the interpretation of experimental data*, Eleventh International Conference on Properties and Phase Equilibria for Product and Process Design, **PPEPPD 2007**, Hersonissos, Crete, Greece, May 20<sup>th</sup>-25<sup>th</sup>, **2007**.
32. B.H. Morrow\* and A. Striolo, *Morphology and Diffusion of Platinum Nanoparticles on Carbon Nanotube Bundles: A Molecular Dynamics Study*, **APS March Meeting**, Denver, CO, March **2007**.
33. N.R. Tummala\*, C. Gutig, B.P. Grady, and A. Striolo, *Aqueous Surfactant Self-Assembly at Solid-Liquid Interfaces*, **APS March Meeting**, Denver, CO, March **2007**.
34. A. Striolo\*, *On The Mechanism of Water Diffusion in Narrow Carbon Nanotubes*, **AICHE Annual Meeting**, San Francisco, CA, November **2006**.
35. A. Striolo\*, *Nanowires, Spheroids, Dispersions: the Self-Assembly of Colloidal Nanoparticles*, **AICHE Annual Meeting**, San Francisco, CA, November **2006**.
36. N.R. Tummala\* and A. Striolo, *Molecular Dynamics Study of Aqueous Solutions in Heterogeneous Environments: Water Traces in Organic Media*, **OSCEP Annual Symposium**, Norman, OK, **October 4<sup>th</sup>, 2006**.
37. A. Striolo\*, *Effective Interactions in Colloidal Systems: Directing the Self-Assembly of One-Dimensional Wires, Multiscale Simulation of Surfactants at the Graphite-Water Interface*, **2006 Industrial Fluid Properties Simulation Collective (IFPSC) Workshop**, 3M Corporate Headquarters and Research Center, St. Paul, Minnesota, September 18<sup>th</sup> and 19<sup>th</sup>, **2006**.
38. A. Striolo\* and N.R. Tummala, *Multiscale Simulation of Surfactants at the Graphite-Water Interface*, **2006 Industrial Fluid Properties Simulation Collective (IFPSC) Workshop**, 3M Corporate Headquarters and Research Center, St. Paul, Minnesota, September 18<sup>th</sup> and 19<sup>th</sup>, **2006**.

39. A. Striolo\*, E.R. Chan, S.C. Glotzer, C. McCabe, and P.T. Cummings, *Multiscale Simulation of Organic-Inorganic Polyhedral Nano-Materials*, **16<sup>th</sup> Symposium on Thermophysical Properties**, Boulder, CO, July 30-August 4, **2006**.
40. A. Striolo\*, *Multi-Scale Simulation for the Adsorption of Model Polymers and Proteins on Nano-Patterned Surfaces*, **16<sup>th</sup> Symposium on Thermophysical Properties**, Boulder, CO, July 30-August 4, **2006**.
41. A. Striolo\* and N.R. Tummala, *Aniline Partition between Aqueous Solution and Adsorbed Surfactants*, **Gordon Research Conference**, Chemistry at Interface, University of New England, Biddeford, ME, July 9-14, **2006**.
42. A. Striolo, E.R. Chan\*, S.C. Glotzer, C. McCabe, and P.T. Cummings, *Multiscale Simulation of Organic-Inorganic Polyhedral Nano-Materials*, **Foundations of Molecular Modeling and Simulation, FOMMS**, Semiahmoo Resort, WA, July 9-14, **2006**.
43. A. Striolo\*, S.K. Jain, J.P. Pikunic, R.J.-M. Pellenq, A. Chialvo, K.E. Gubbins, and P.T. Cummings, *Water Adsorption Isotherms in Molecularly Reconstructed Models of Activated and Un-Activated Carbons Obtained from Saccharose*, **AICHe Annual Meeting**, Cincinnati, OH November **2005**.
44. A. Striolo\*, and S.A. Egorov, *Nano-Colloidal Brushes in Non-Adsorbing Polymer Solutions*, **AICHe Annual Meeting**, Cincinnati, OH November **2005**.
45. A. Striolo\*, C. McCabe, and P.T. Cummings, *Polyhedral Oligomeric Silsesquioxanes in Solution: Insights from All-Atom Molecular Dynamics Simulations*, **AICHe Annual Meeting**, Cincinnati, OH November **2005**.
46. X. Zhao\*, A. Striolo, and P.T. Cummings, *Interaction between DNA Molecules and Fullerenes: Molecular Dynamics Study*, **AICHe Annual Meeting**, Cincinnati, OH November **2005**.
47. E.R. Chan\*, A. Striolo, C. McCabe, P.T. Cummings, and S.C. Glotzer, *Development of Coarse-Grained Force Fields for Polymer-Tethered Silsesquioxanes*, **AICHe Annual Meeting**, Cincinnati, OH November **2005**.
48. P.S. Redmill\*, A. Striolo, C. McCabe, and P.T. Cummings, *Determining the Octanol-Water Partition Coefficient for POSS Systems*, **AICHe Annual Meeting**, Cincinnati, OH November **2005**.
49. A. Striolo\*, C. McCabe, and P.T. Cummings, *Molecular Simulations for Polyhedral Oligomeric Silsesquioxanes Dissolved in Aqueous and in Organic Solutions*, Italian Conference on Chemical and Process Engineering, **ICheaP-7**, Giardini Naxos, Italy, May **2005**.
50. A. Striolo\*, C. McCabe, and P.T. Cummings, *Thermodynamic and Transport Properties of Polyhedral Oligomeric Silsesquioxanes in Hexadecane and in Poly(Dimethyl Siloxane)*, **AICHe Annual Meeting**, Austin, TX, November **2004**.
51. A. Striolo\*, P.L. Paricaud, P.T. Cummings, S.A. Egorov, and L. Lue, *Interactions between Pairs of Colloidal Particles in Polymer Solutions*, **AICHe Annual Meeting**, Austin, TX, November **2004**.
52. C. McCabe\*, H. Barkley, T.C. Ionescu, A. Striolo, and P.T. Cummings, *Molecular Simulations for Mono-Substituted Polyhedral Oligomeric Silsesquioxanes either Pure or Dissolved in Water and in normal Hexane*, **AICHe Annual Meeting**, Austin, TX, November **2004**.
53. A. Striolo\*, P.K. Naicker, A.A. Chialvo, K.E. Gubbins, and P.T. Cummings, *Simulated Water Adsorption and Diffusion in Carbon Nanotubes*, **AICHe Annual Meeting**, Austin, TX, November **2004**.
54. A. Striolo\*, P.T. Cummings, A. Jayaraman, J. Genzer, and C.K. Hall, *Adsorption of Comb Copolymers on Solid Surfaces*, **AICHe Annual Meeting**, Austin, TX, November **2004**.
55. A. Striolo\*, A.A. Chialvo, P.T. Cummings, and K.E. Gubbins, *Adsorption and Diffusion of Water in Activated Carbon Nanopores*, **3<sup>rd</sup> Int. Conf. Computational Modeling and Simulation of Materials**, Acireale, Italy, June **2004**.
56. A. Striolo\*, P.K. Naicker, A.A. Chialvo, P.T. Cummings, and K.E. Gubbins, *Simulated Water Adsorption Isotherms in Hydrophilic and Hydrophobic Cylindrical Nanopores*, **8<sup>th</sup> International Conference on Fundamental of Adsorption**, Sedona, Arizona, May **2004**.
57. A. Striolo\*, K.E. Gubbins, A.A. Chialvo, and P.T. Cummings, *The Effect of Pore Connectivity on Water Adsorption Isotherms in Non-Activated Graphitic Nanopores*, **8<sup>th</sup> International Conference on Fundamental of Adsorption**, Sedona, Arizona, May **2004**.
58. D.R. Cole\*, J.M. Simonson, M.S. Gruskiewicz, A.A. Chialvo, G.D. Wignall, Y.B. Melnichenko, J.S. Lin, G.W. Lynn, B. Gu, K.L. More, T.D. Burchell, P.T. Cummings, Y. Leng, K.E. Gubbins, A. Striolo, W.T. Cooper, M. Schilling, and A. Habenschuss, *Structure and Dynamics of Fluids in Confined Geometries*, **227<sup>th</sup> ACS National Meeting**, Anaheim, CA, March **2004**.
59. A. Striolo\*, C.M. Colina, K.E. Gubbins, and L. Lue, *MC Simulations for the Effective Attraction between Pairs of Colloids in Non-Adsorbing Polymer Solutions*, **AICHe Annual Meeting**, San Francisco, California, November **2003**.

60. A. Striolo\*, K.E. Gubbins, A.A. Chialvo, and P.T. Cummings, *Simulated Water Adsorption in Carbon Nanopores*, **AIChE Annual Meeting**, San Francisco, California, November **2003**.
61. A. Striolo\*, K.E. Gubbins, A.A. Chialvo, and P.T. Cummings, *Diffusion of Water in Activated Carbon Nanopores*, **AIChE Annual Meeting**, San Francisco, California, November **2003**.
62. A. Striolo\*, C.C. Colina, K.E. Gubbins, N. Elvassore, and L. Lue, *The Depletion Attraction between Pairs of Colloids in Polymer Solution*, **FOMMS 2003**, Colorado, July **2003**.
63. A. Striolo\*, K.E. Gubbins, A.A. Chialvo, and P.T. Cummings, *Simulated Water Adsorption Isotherms in Carbon Nanopores*, **FOMMS 2003**, Colorado, July **2003**.
64. A. Striolo\*, K.E. Gubbins, T.D. Burchell, D.E. Cole, M. Gruszkiewicz, A.A. Chialvo, and P.T. Cummings, *Temperature Effect on Water Adsorption in Porous Carbons*, **15<sup>th</sup> Symposium on Thermophysical Properties**, Boulder, Colorado, June, **2003**.
65. A. Striolo\*, K.E. Gubbins, D.E. Cole, M. Gruszkiewicz, A.A. Chialvo, and P.T. Cummings, *Water Adsorption in Porous Carbon*, **AIChE Annual Meeting**, Indianapolis, Indiana, November **2002**.
66. A. Striolo\* and N. Elvassore, *Phase-Coexistence Calculations for Non-Uniformly-Charged Colloids in Electrolyte Solutions*, **AIChE Annual Meeting**, Indianapolis, Indiana, November **2002**.
67. N. Elvassore\*, A. Striolo, A. Favaro, A. Bertucco, and V. Di Noto, *Experimental and Theoretical Investigation of Conformational Changes in Thin Polymer Films Under High Pressure*, **High Pressure in Venice**, Venice, Italy, September **2002**.
68. N. Elvassore\*, A. Striolo, and A. Bertucco, *UV-vis Spectroscopy for the Investigation of Supercritical Antisolvent Processes*, **6<sup>th</sup> Conference on Supercritical Fluids and Their Applications**, Maiori, Italy, September **2001**.
69. N. Elvassore\* and A. Striolo, *Forces between Non-Uniformly Charged Spherical Colloids in Electrolyte Solutions*, **5<sup>th</sup> Italian Conference on Chemical Engineering**, ICHEAP-5, Florence, Italy, May **2001**.
70. A. Striolo, N. Elvassore, M. Calligaro, and A. Bertucco\*, *Modeling of Solid-Fluid and Solid-Liquid-Fluid Equilibria Related to Supercritical-Fluid Processes*, **3<sup>rd</sup> European Congress of Chemical Engineering**, ECCE, Nuremberg, Germany, June **2001**.
71. A. Striolo\*, N. Elvassore and A. Bertucco, *Thermodynamic Modeling of High-Pressure Equilibria in the McMillan-Mayer Framework*, **9<sup>th</sup> International Conference on Properties and Phase Equilibria for Product and Process Design**, PPEPPD, Kurashiki, Japan, May **2001**.
72. A. Striolo\*, D. Bratko, J.M. Prausnitz, N. Elvassore, and A. Bertucco, *Influence of Polymer Structure upon Active-Ingredient Loading: a Monte Carlo Simulation Study for Design of Drug-Delivery Devices*, **14<sup>th</sup> Symposium on Thermophysical Properties**, Boulder, Colorado, June **2000**.

*e. Outreach Seminars*

1. A. Striolo, *Very Small Chemical Engineering: Carbon Nanotubes and Liposomes*, **Norman High School**, Norman, December 10<sup>th</sup>, **2009**.
2. A. Striolo, *From Solid-Water Interfaces To Nuclear Waste Management: Molecular Insights*, Department of Natural Sciences, **Northeastern State University**, Tahlequah, OK, **October 21<sup>st</sup>, 2009**.
3. A. Striolo, *Modern Chemical Engineering and the Molecular Beauty of Water*, **Norman High School**, Norman, March 26<sup>th</sup>, **2009**.
4. A. Striolo, *Molecular Simulations and Computer Graphics: Modern Tools for Chemical Engineering Research*, **Northeastern State University**, Tahlequah, OK, **November 12<sup>th</sup>, 2008**.
5. A. Striolo, *Use of Molecular Simulation and Computer Graphics to Uncover the Behavior of Water in Confined Geometries*, **Northeastern State University**, Tahlequah, OK, **March 1<sup>st</sup>, 2006**.
6. A. Striolo, *Research in the School of Chemical, Biological, and Materials Engineering of the University of Oklahoma: How is Chemical Engineering Indebted to Computational Scientists*, **Northeastern State University**, Tahlequah, OK, **November 9<sup>th</sup>, 2005**.
7. A. Striolo, *Research in the School of Chemical, Biological, and Materials Engineering of the University of Oklahoma*, **Cameron University ACS Student Affiliated Chapter**, Lawton, OK, **September 29<sup>th</sup>, 2005**.
8. A. Striolo, *Molecular Simulations: The Theoretical Tool for Developing Nano-Technological Applications*, **Cameron University ACS Student Affiliated Chapter**, Wichita Falls, TX, **September 29<sup>th</sup>, 2005**.

*f. Non-Refereed Publications*

1. A. Striolo, *Modern Applications of Molecular Thermodynamics: Solving Bigger Challenges*, OK EPSCoR NewsLetter, **October 2008**.