

Alberto Striolo

Office:

University of Oklahoma
Chemical Biological and Materials Engineering
Sarkeys Energy Center Room T-235
Norman, OK 73019
Phone: 1 405 325 5716
Fax: 1 405 325 5813
Email: astriolo@ou.edu

Home:

1201 Ann Arbor Drive
Norman, OK 73069
Phone: 1 615 254 3485

Education

2002: Ph.D. in Chemical Engineering from 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 from 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, Vanderbilt University (PI: P.T. Cummings).
- January 2002 to August 2003: Post-Doctoral Associate at North Carolina State University (PI: K.E. Gubbins).
- July 2001 to September 2001: Visiting Scholar, University of California, Berkeley (PI: J.M. Prausnitz).
- June 2000 to September 2000: Visiting Scholar, University of California, Berkeley (PI: J.M. Prausnitz).
- November 1998 to February 2000: Visiting Scholar, University of California, Berkeley (PI: J.M. Prausnitz).

Honors

- 2010: Invited to teach the short course 'Properties and Applications of Porous Materials' at the Summer School on Nanotechnology organized by the 'Instituto de Investigacion en Materiales' of the Universidad Nacional Autonoma de México, Morelia, Michoacan, Mexico, October 4th-8th 2010.
- 2010: 1st Price on the College of Engineering – wide competition on engaging students (ChE 5843 – Advanced Chemical Engineering Thermodynamics – taught in the spring 2010 semester) with activities pertaining to the College of Engineering Centennial Symposium.
- 2010: Invited as 'External Evaluator' for Ph.D. defenses at the University of Manchester, England.
- 2009: Mr. Dimitrios Argyris was the winner of the 2009 CoMSEF Graduate Student Award, nominated in occasion of the Annual Meeting of the American Institute of Chemical Engineers, Nashville, TN, November 2009.
- 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 (top 25% of reviewers in 2009)
- Physical Review E
- Polymer
- The Journal of Chemical Physics
- The Journal of Physical Chemistry A/B/C (top 20% of reviewers in 2009)
- Atmospheric Environment
- Nano Letters
- The Journal of the American Chemical Society
- Nanotechnology
- Journal of Materials Research
- ACS Nano (top 10% of reviewers in 2009)
- 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
- Langmuir (top 20% of reviewers in 2009)
- Chemical Physics Letters

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', 2010 AIChE Annual Meeting, Salt Lake City, UT.

Chair of the session 'Thermophysical Properties and Phase Behavior I', 2010 AIChE Ann. Meet., Salt Lake City, UT.

Co-Chair of the session 'Computational Studies of Self-Assembly II', 2010 AIChE Ann. Meeting, Salt Lake City, UT.

Co-Chair of the session 'Carbon Nanotubes III: Engineering of CNTs, Graphene, and VGCFs', 2010 AIChE Annual Meeting, Salt Lake City, UT.

Co-Chair of the session 'Thermodynamics at the Nanoscale', 2010 AIChE Annual Meeting, Salt Lake City, UT.

Reviewer for 50 papers, 4 NSF panels, 2 NSF 'mail-in' reviews in 2009

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 'mail-in' 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 current and former advisors and collaborators are John M. Prausnitz, UC Berkeley, Keith E. Gubbins and Carol K. Hall, NC State, Peter T. Cummings and Clare McCabe, Vanderbilt University, Dusan Bratko, Virginia Commonwealth University, Ariel Chialvo and David Cole, ORNL, Sharon Glotzer, University of Michigan, Matt Neurock, University of Virginia, Paul Ashby, LBNL.

Students Advised

a. Graduate

1. **Camille Gutig**, Masters, **graduated** December 2007. Author of 2 peer-reviewed journal articles.
2. **Suwimol Wongsakulphasatch**, Visiting Ph.D. Student, Summer 2008. Graduated from the University of Manchester, Spring 2010.
3. **Brian H. Morrow**, Ph.D. candidate, starting date Fall 2005. Author of 4 peer-reviewed journal articles.
4. **Naga Rajesh Tummala**, Ph.D., starting date Fall 2005. Author of 6 peer-reviewed journal articles.
5. **Dimitrios Argyris**, Ph.D. candidate, starting date Fall 2006. Author of 4 peer-reviewed journal articles.
6. **Deepthi Konatham**, Ph.D. candidate, starting date Fall 2007. Author of 2 peer-reviewed journal articles.
7. **Liu Shi**, Ph.D. candidate, starting date Fall 2007. Author of 2 peer-reviewed journal articles.
8. **Tuan A. Ho**, Ph.D. candidate, starting date Fall 2009.
9. **Heng Fan**, Ph.D. candidate, starting date Fall 2009.
10. **Raja Kirthi Kalluri**, Ph.D. candidate, starting date Spring 2010.
11. **Carol Pena Montenegro**, Ph.D. candidate, starting date Spring 2010.

b. Undergraduate

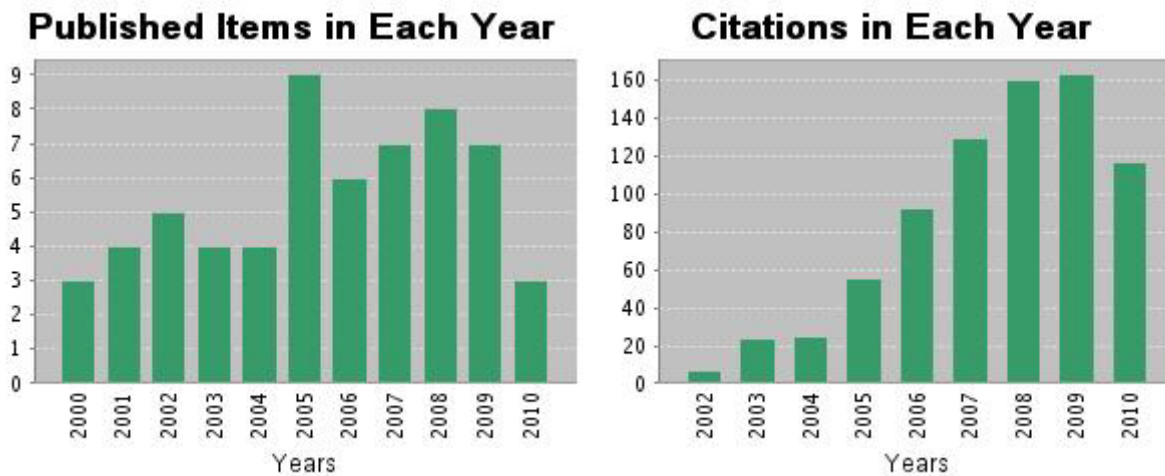
1. **Ismail Nohd Farid**, Fall 2005, Monte Carlo simulations of surfactant systems. **Now Ph.D. candidate** in Chemistry, University of Oklahoma.
2. **Paolo Solda**, Winter 2005, Quartz-crystal microbalance with dissipation monitoring experim. (QCM-D).
3. **Leann Johnson**, Spring 2006, QCM-D. **Now Ph.D. candidate** in Materials Science and Engin., Wisconsin.
4. **Samameh Noor-Mohammadi**, Spring 2006, QCM-D. **Now Ph. D. Candidate** in Chemical Engineering, University of Tulsa, Oklahoma.
5. **Nina Wright**, Spring 2006, QCM-D
6. **Brian Knapp**, Summer and Fall 2006, System Administrator
7. **Mandona Luhila**, Summer 2006, light scattering experiments.
8. **Andrea Dal Cin**, Summer 2006, QCM-D
9. **Denise Catapano**, Summer 2006, REU (from Cornell University). Molecular dynamics (MD) simulations of carbon nanotubes
10. **Maryline Peysson**, Summer 2006, (from Montpellier, France). Cartilage harvesting experiments.
11. **Mary Page**, Fall 2006, light scattering experiments.
12. **Maria Josefina Fernandez**, Winter 2007, light scattering experiments.
13. **Chong Liang**, Summer 2007, QCM-D.
14. **Manuel Ghezzi**, Winter 2008, QCM-D. **Now graduate student** in Chemistry, University of Florence.
15. **Massimo Riello**, Summer 2008, MD simulations of carbon nanotube systems. **Now Ph.D. candidate** in Physics, Kings College, UK.
16. **John R. Thompson**, Summer 2010, MD simulations of aqueous surfactants on carbon nanotubes.

c. High School

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

Bibliography

a. ISI Citation Report (as of July 24th, 2010)



Results Found:	60
Sums of the Times Cited:	773 (530 citing articles, 480 citing articles excluding self-citations)
Average Citations per Item:	12.88
h-index:	17

b. Peer-reviewed journal articles

1. N.R. Tummala, A. Striolo, *On the Structure and Dynamics of Interfacial Water On Amphiphilic Surfaces*, in preparation.
2. H. Fen, D.E. Resasco, A. Striolo, *Amphiphilic Silica Nanoparticles at the Water-Decane Interface: Insights from Atomistic Simulations*, in preparation.
3. K. Bui, H.M. Duong, A. Striolo, D.V. Papavassiliou, *Heat Transfer Properties of Graphene Sheet Nanocomposites and Comparison to Carbon Nanotube Nanocomposites*, in preparation.
4. B.H. Morrow, D.E. Resasco, A. Striolo, M. Buongiorno Nardelli, *CO Adsorption on Noble Metal Clusters: Local-Environment Effects*, **Journal of Physical Chemistry A** (2010) to be submitted.
5. D. Argyris, P.D. Ashby, A. Striolo, *Assessing the Structure of Interfacial Water via AFM: Insights from Simulations*, **Nano Letters** (2010) to be submitted.
6. A. Striolo, *Adsorption of Colloidal Brushes on Flat Surfaces: The Effect of Solvent Quality*, **Journal of Chemical Physics** (2010) to be submitted.
7. N.R. Tummala, B.H. Morrow, D.E. Resasco, A. Striolo, *Stabilization of Aqueous Carbon Nanotube Dispersions using Surfactants: Insights from Molecular Dynamics Simulations*, **ACS Nano** (2010) submitted.
8. D. Konatham, K. Bui, D.V. Papavassiliou, A. Striolo, *Thermally Conductive Graphene-Based Nanocomposites Nanocomposites*, **Molecular Physics** (2010) submitted.
9. L. Shi, V.I. Sikavitsas, and A. Striolo, *Experimental Friction Coefficients for Bovine Cartilage Measured with a Pin-On-Disc Tribometer: Testing-Configuration and Lubricant Effects*, **Annals of Biomedical Engineering** (2010) submitted.
10. T.A. Ho, D. Argyris, D.V. Papavassiliou, A. Striolo, L.L. Lee, D.R. Cole, *Interfacial Water on Crystalline Silica: A Comparative Molecular Dynamics Simulation Study*, **Molecular Simulation** (2010) in press.
11. N.R. Tummala, B.P. Grady, and A. Striolo, *Lateral Confinement Effects on the Structural Properties of Surfactant Aggregates: SDS on Graphene*, **Physical Chemistry Chemical Physics** (2010) in press.
12. B.H. Morrow and A. Striolo, *Supported Bimetallic Pt-Au Nanoparticles: Structural Features Predicted by Molecular Dynamics Simulations*, **Physical Review B** 81 (2010) 155437. Impact Factor (2009): 3.475.
13. D. Argyris, D.R. Cole, and A. Striolo, *Ion-Specific Effects Under Confinement: The Role of Interfacial Water*, **ACS Nano** 4 (2010) 2035-2042. Impact Factor (2009): 7.493.

14. L. Shi, N.R. Tummala, and A. Striolo, *A Molecular Dynamics Study for $C_{12}E_6$ and SDS Surfactants at the Water-Vacuum Interface*, **Langmuir** 26 (2010) 5462-5474. Impact Factor (2009): 3.898.
15. D. Argyris, D.R. Cole, and A. Striolo, *Dynamic Behavior of Interfacial Water at the Silica Surface*, **Journal of Physical Chemistry C**, 113 (2009) 19591-19600. Impact Factor (2009): 4.224.
16. D. Konatham and A. Striolo, *Thermal Boundary Resistance at the Graphene-Oil Interface*, **Applied Physics Letters** 95 (2009) 163105. Also featured in **Virtual Journal of Nanoscale Science & Technology**, Vol. 20, Issue 18, November 2nd, 2009. Impact Factor (2009): 3.554.
17. 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 14th, 2009. Impact Factor (2009): 2.400.
18. B.H. Morrow and A. Striolo, *Assessing How Metal-Carbon Interactions Affect the Structure of Supported Platinum Nanoparticles*, **Molecular Simulation** 35 (2009) 795-803. Impact Factor (2009): 1.028.
19. D. Argyris, D.R. Cole, and A. Striolo, *Hydration Structure on Silica Crystalline Substrates*, **Langmuir** 25 (2009) 8025-8035. Impact Factor (2009): 3.898.
20. L. Shi, M. Ghezzi, G. Caminati, P. Lo Nostro, B.P. Grady, A. Striolo, *Adsorption Isotherms of Aqueous $C_{12}E_6$ and CTAB Surfactants on Solid Surfaces in the Presence of Low-Molecular-Weight Co-Adsorbents*, **Langmuir** 25 (2009) 5536-5544. Impact Factor (2009): 3.898.
21. N.R. Tummala and A. Striolo, *SDS Surfactants on Carbon Nanotubes: Aggregate Morphology*, **ACS Nano** 3 (2009) 595-602. Impact Factor (2009): 7.493.
22. D. Konatham and A. Striolo, *Molecular Design of Stable Graphene Nano-Sheets Dispersions*, **Nano Letters** 8 (2008) 4630. Impact Factor (2008): 10.371.
23. 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. Impact Factor (2008): 4.097.
24. A. Striolo, *On the Solution Self-Assembly of Colloidal Brushes: Insights from Simulations*, **Nanotechnology** 19 (2008) 445606. Impact Factor (2008): 3.446.
25. 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 4th, 2008. Impact Factor (2008): 3.396.
26. 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. Impact Factor (2008): 4.189.
27. 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. Impact Factor (2008): 4.097.
28. 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. Impact Factor (2008): 3.446.
29. 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. Impact Factor (2008): 4.189.
30. 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. Impact Factor (2008): 3.396.
31. A. Striolo, *Water Self Diffusion Through Narrow Oxygenated Carbon Nanotubes*, **Nanotechnology**, 18 (2007) 475704. Impact Factor (2008): 3.446.
32. 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 1st, 2007. Also featured in **Virtual Journal of Biological Physics Research**, Vol. 14, Issue 7, October 1st, 2007. Impact Factor (2008): 3.149.
33. 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. Impact Factor (2008): 4.189.
34. 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. Impact Factor (2008): 2.871.

35. A. Striolo, *Controlled Assembly of Spherical Nanoparticles: Nanowires and Spherulites*, **Small**, 3 (2007) 628. Impact Factor (2008): 6.525.
36. A. Striolo and S.A. Egorov, *Sterical Stabilization of Colloidal Particles: Implicit and Explicit Solvent*, **Journal of Chemical Physics**, 126 (2007) 014902. Impact Factor (2008): 3.149.
37. 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 30th, 2006. Impact Factor (2008): 2.508.
38. 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 25th, 2006. Also featured in **Virtual Journal of Biological Physics Research**, Vol. 12, Issue 6, September 15th, 2006. Impact Factor (2008): 3.149.
39. 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 18th, 2006. Also featured in **Virtual Journal of Biological Physics Research**, Vol. 12, Issue 6, September 15th, 2006. Impact Factor (2008): 3.149.
40. A. Striolo, *The Mechanism of Water Diffusion in Narrow Carbon Nanotubes*, **Nano Letters**, 6 (2006) 633-639. Impact Factor (2008): 10.371.
41. 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. Impact Factor (2008): 3.149.
42. 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. Impact Factor (2008): 4.189.
43. X. Zhao, A. Striolo, and P.T. Cummings, *C₆₀ Binds to and Deform Nucleotides*, **Biophysical Journal**, 89 (2005) 3856. Impact Factor (2008): 4.683.
44. A. Striolo, K.E. Gubbins, T.D. Burchell, J.M. Simonson, D.R. Cole, M.S. Gruszkiewicz, A.A. Chialvo, and P.T. Cummings, *Effect of Temperature on the Adsorption of Water in Porous Carbons*, **Langmuir**, 21 (2005) 9457. Impact Factor (2008): 4.097.
45. A. Striolo, C. McCabe, and P.T. Cummings, *Effective Interactions between Polyhedral Oligomeric Silsesquioxanes in Hexadecane from Molecular Simulation*, **Macromolecules**, 38 (2005) 8950. Impact Factor (2008): 4.407.
46. 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.
47. 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.
48. 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 1st, 2005. Impact Factor (2008): 3.149.
49. 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. Impact Factor (2008): 4.189.
50. 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 4th, 2005. Also featured in **Virtual Journal of Biological Physics Research**, Vol. 10, Issue 1, July 1st, 2005. Impact Factor (2008): 3.149.
51. 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. Impact Factor (2008): 1.325.
52. 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. Impact Factor (2008): 3.149.
53. A. Striolo, K.E. Gubbins, A.A. Chialvo, and P.T. Cummings, *Simulated Water Adsorption Isotherms in Carbon Nanopores*, **Molecular Physics**, 102 (2004) 243. Impact Factor (2008): 1.478.
54. 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. Impact Factor (2008): 1.883.

55. 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. Impact Factor (2008): 4.064.
56. A. Striolo, A. Favaro, N. Elvassore, A. Bertuccio, and V. Di Noto, *Evidence of Conformational Changes for Protein Films Exposed to High-Pressure CO₂ by FT-IR Spectroscopy*, **Journal of Supercritical Fluids**, 27 (2003) 283-295. Impact Factor (2008): 2.428.
57. A. Striolo, A.A. Chialvo, P.T. Cummings, and K.E. Gubbins, *Water Adsorption in Carbon-Slit Nanopores*, **Langmuir**, 19 (2003) 8583-8591. Impact Factor (2008): 4.097.
58. 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. Impact Factor (2008): 4.189.
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63. A. Striolo and J.M. Prausnitz, *Adsorption of Branched Homopolymers on a Solid Surface*, **Journal of Chemical Physics**, 114 (2001) 8565-8572. Impact Factor (2008): 3.149.
64. A. Striolo, D. Bratko, J.M. Prausnitz, N. Elvassore, and A. Bertuccio, *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. Impact Factor (2008): 1.699.
65. A. Striolo and J.M. Prausnitz, *Osmotic Second Virial Coefficient for Linear and Star Poly(ethylene oxide)*, **Polymer** 42 (2001) 4773-4775. Impact Factor (2008): 3.331.
66. A. Striolo, J.M. Prausnitz, A. Bertuccio, R.A. Kee, and M. Gauthier, *Dilute-Solution Properties of Arborescent Polystyrenes: Further Evidence for Perturbed-Hard-Sphere Behavior*, **Polymer** 42 (2001) 2579-2584. Impact Factor (2008): 3.331.
67. A. Striolo, J.M. Prausnitz and A. Bertuccio, *Osmotic Second Virial Coefficient, Intrinsic Viscosity and Molecular Simulation for Star and Linear Polystyrenes*, **Macromolecules** 33 (2000) 9583-9586. Impact Factor (2008): 4.407.
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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. D. Argyris, T.A. Ho, and A. Striolo*, *Equilibrium Properties of Aqueous Electrolytes within Narrow Slit-Shaped Silica Pores: Molecular Dynamics Simulation Results to Design Separation Strategies*, **ACS 240th National Meeting**, Boston, MA, **August 22nd-26th, 2010**.

2. D. Argyris* and A. Striolo, *Structural and Dynamic Behavior of Aqueous Electrolyte Solutions in Silica Nanopores*, Division of Geochemistry, Session: Predicting Molecular Properties of the Mineral-Water Interface: Challenges and Opportunities for High Performance Computing, **American Chemical Society Spring 2010 National Meeting**, San Francisco, CA, **March 21st-25th, 2010**.
3. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, Department of Chemical Engineering, **The University of Manchester**, Manchester, England, **January 13th, 2010**.
4. 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 20th, 2009**.
5. 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 2nd, 2009**.
6. 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 7th, 2009**.
7. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, Chemical Engineering Department, **The University of Washington**, Seattle, **July 17th, 2009**.
8. A. Striolo, D. Argyris, N.R. Tummala, *Aqueous Solutions on Silica Substrates: Structure and Dynamics from Simulations*, **17th Symposium on Thermophysical Properties**, Boulder, CO, **June 21st-26th, 2009**.
9. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, Chemistry Department, **University of Oklahoma**, Norman, OK, **May 1st, 2009**.
10. A. Striolo, *Fundamental Studies at Interfaces: From First Principles to Practical Applications*, **Molecular Foundry, LBNL**, Berkeley, CA, **April 29th, 2009**.
11. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, School of Earth Sciences, **Stanford University**, Stanford, CA, **April 28th, 2009**.
12. A. Striolo, *Modeling Graphene Sheets Composites*, **NanoFocus and Bioenergy – Oklahoma EPSCoR Annual State Conference**, Oklahoma City, OK, **March 31st-April 1st, 2009**.
13. A. Striolo, *On the Relationship between the Atomic Water Structure and Macroscopic Interfacial Properties*, Department of Chemistry, **The University of Firenze**, Florence, Italy, **January 8th, 2009**.
14. A. Striolo, *Surfactants at Solid-Aqueous Interfaces: Surface Roughness and Co-Adsorbent Effects*, Department of Chemical Engineering, **The University of Padova**, Padova, Italy, **January 7th, 2009**.
15. 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 22nd, 2008**.
16. A. Striolo, *How Does the Atomic Water Structure at Solid-Liquid Interfaces Determine Macroscopic Properties?*, Department of Chemical Engineering, **Northeastern University**, Boston, MA, **December 2nd, 2008**.
17. 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 13th, 2008**.
18. 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 26th, 2008**.
19. 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 29th, 2008**.
20. A. Striolo, *Self-Assembly at Solid-Aqueous Interfaces: A Molecular Perspective*, Department of Chemical Engineering, **Kansas State University**, Manhattan, KS, **November 15th, 2007**.
21. A. Striolo, *Self-Assembly at Solid-Aqueous Interfaces: A Molecular Perspective*, **Institute for Applied Surfactant Research**, The University of Oklahoma, Norman, OK, **November 1st, 2007**.
22. A. Striolo, *The New Frontier in Catalysis: 100% Selectivity*, Department of Chemical Engineering, **Politecnico di Milano**, Milan, Italy, **June 6th, 2007**.
23. A. Striolo, *Aqueous Systems at Interfaces: Insights from Molecular Simulations*, Department of Chemistry, **University of Florence**, Florence, Italy, **June 5th, 2007**.
24. A. Striolo, *Carbon Nanotubes: What is Limiting their Applications?*, Department of Chemical Engineering, **University of Padova**, Padova, Italy, **June 4th, 2007**.
25. A. Striolo, *Nano-Confined Water: Properties from Molecular Simulation*, **Oklahoma EPSCoR**, Annual State Conference, Norman, OK, **May 18th, 2006**.

26. A. Striolo, *Molecular Simulations: An Effective Microscope to Develop Nano-Engineering Applications*, **OSCER Annual Symposium**, Norman, OK, **October 4th, 2005**.

e. International Conferences

(* indicates the speaker)

1. N.R. Tummala,* D.E. Resasco, M.U. Nollert and A. Striolo, *A Molecular Dynamics Study of Carbon-Based Nanoparticles Interacting with DOPC Bilayers: Emergent Behavior*, **AICHE Annual Meeting**, Salt Lake City, UT, November 7th-12th, **2010**.
2. B. Morrow,* D.E. Resasco and A. Striolo, *Support Effects on the Catalytic Properties of Pt-Au Bimetallic Nanoparticles: A Multi-Scale Simulation Study*, **AICHE Annual Meeting**, Salt Lake City, UT, November 7th-12th, **2010**.
3. T.A. Ho,* D. Argyris, D.V. Papavassiliou, A. Striolo, L.L. Lee, and D.R. Cole, *Interfacial Water Structure on Silica Surface: Force Field Effects*, **AICHE Annual Meeting**, Salt Lake City, UT, November 7th-12th, **2010**.
4. H. Fan,* J.F. Albanese, D.E. Resasco, and A. Striolo, *Silica-Based Janus Nanoparticles at the Water-Decane Interface: Evidence of Emergent Behavior from Equilibrium Molecular Dynamics Simulations and Experimental Observations*, **AICHE Annual Meeting**, Salt Lake City, UT, November 7th-12th, **2010**.
5. D. Argyris,* N.R. Tummala, T.A. Ho, A. Striolo, and D.R. Cole, *Equilibrium Properties of Aqueous Electrolytes within Narrow Slit-Shaped Silica Pores: Molecular Dynamics Simulation Results to Design Separation Strategies*, **AICHE Annual Meeting**, Salt Lake City, UT, November 7th-12th, **2010**.
6. D. Konatham,* K.N. Bui, D.V. Papavassiliou, and A. Striolo, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **AICHE Annual Meeting**, Salt Lake City, UT, November 7th-12th, **2010**.
7. R.K. Kalluri,* D. Konatham, and A. Striolo, *Molecular Simulations of Graphene-Based Electric Double-Layer Capacitors*, **AICHE Annual Meeting**, Salt Lake City, UT, November 7th-12th, **2010**.
8. L. Shi* and A. Striolo, *Lubricant Effects on Injured Cartilage*, **AICHE Annual Meeting**, Salt Lake City, UT, November 7th-12th, **2010**.
9. H. Fan and A. Striolo*, *Silica-Based Janus Nanoparticles at the Water-Decane Interface: Evidence of Emergent Behavior*, **ACS 240th National Meeting**, Boston, MA, August 22nd-26th, **2010**.
10. A. Striolo*, *Simulation-Informed Predictions of Interfacial Phenomena*, **ACS 240th National Meeting**, Boston, MA, August 22nd-26th, **2010**.
11. L. Shi* and A. Striolo, *Testing-Configuration and Lubricant Effects in Cartilage Lubrication*, **2010 Biomedical Engineering Society (BEMS) Annual Meeting**, Austin, TX, October 6th-9th, **2010**.
12. D. Argyris,* T.A. Ho, N.R. Tummala, A. Striolo, *Aqueous Electrolyte Solutions on Silica Surfaces: Structure and Dynamics from Simulations*, **Gordon Research Conference: Water and Aqueous Solutions**, Holderness School, Holderness, NH, August 8th-13th, **2010**.
13. H. Fan* and A. Striolo, *Silica-Based Janus Nanoparticles Simulated at the Water-Decane Interface*, **Gordon Research Conference: Water and Aqueous Solutions**, Holderness School, Holderness, NH, August 8th-13th, **2010**.
14. D. Konatham and A. Striolo*, *Graphene Sheets – Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulations*, **Eight Liblice Conference on the Statistical Mechanics of Liquids**, Hotel Myslivna, Brno, Czech Republic, June 13th-18th, **2010**.
15. D. Argyris, T.A. Ho, and A. Striolo*, *Aqueous Solutions on Silica Surfaces: Structure and Dynamics from Simulations*, **Eight Liblice Conference on the Statistical Mechanics of Liquids**, Hotel Myslivna, Brno, Check Republic, June 13th-18th, **2010**.
16. N.R. Tummala, B.H. Morrow, and A. Striolo*, *Potential of Mean Force between Aqueous Single Walled Carbon Nanotubes in Surfactant Solutions*, **Eight Liblice Conference on the Statistical Mechanics of Liquids**, Hotel Myslivna, Brno, Check Republic, June 13th-18th, **2010**.
17. D. Argyris and A. Striolo*, *Adsorption of Electrolytes within Narrow Slit-Shaped Silica Pores: Molecular Dynamics Simulation Results to Design Separation Strategies*, **10th International Conference on Fundamentals of Adsorption, FOA10**, Awaji, Hyogo, Japan, May 23rd-28th, **2010**.
18. N.R. Tummala, B.H. Morrow, and A. Striolo*, *Potential of Mean Force between Aqueous Single Walled Carbon Nanotubes in Surfactant Solutions*, **APS March Meeting**, Portland, OR, March 15th-19th, **2010**.

19. D. Argyris and A. Striolo*, *Adsorption of Electrolytes within Narrow Slit-Shaped Silica Pores: Molecular Dynamics Simulation Results to Design Separation Strategies*, **APS March Meeting**, Portland, OR, March 15th-19th, **2010**.
20. 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 30th-December 4th, **2009**.
21. D. Konatham and A. Striolo*, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **MRS Fall Meeting**, Boston, MA, November 30th-December 4th, **2009**.
22. D. Argyris and A. Striolo*, *Aqueous Solutions on Silica Surfaces: Structure and Dynamics from Simulations*, **MRS Fall Meeting**, Boston, MA, November 30th-December 4th, **2009**.
23. D. Argyris* and A. Striolo, *Interfacial Aqueous Systems: Ion-Ion Correlations and the Electric Double Layer*, **AIChE Annual Meeting**, Nashville, TN, November 8th-13th, **2009**.
24. 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 8th-13th, **2009**.
25. 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 8th-13th, **2009**.
26. D. Konatham* and A. Striolo, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **AIChE Annual Meeting**, Nashville, TN, November 8th-13th, **2009**.
27. L. Shi* and A. Striolo, *Testing-Configuration Effects in Assessing Cartilage Lubrication*, **AIChE Annual Meeting**, Nashville, TN, November 8th-13th, **2009**.
28. L. Shi*, N.R. Tummala and A. Striolo, *A Molecular Dynamics Study of C₁₂E₆ and SDS Surfactants at the Silica-Water and Air-Water Interfaces*, **AIChE Annual Meeting**, Nashville, TN, November 8th-13th, **2009**.
29. 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 8th-13th, **2009**.
30. B.H. Morrow* and A. Striolo, *Support Effects on the Catalytic Properties of Pt-Au Bimetallic Nanoparticles: A Multi-Scale Simulation Study*, **Foundations of Molecular Modeling and Simulations, FOMMS 2009**, Blaine, WA, **July 12th-16th, 2009**.
31. D. Konatham* and A. Striolo, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **Foundations of Molecular Modeling and Simulations, FOMMS 2009**, Blaine, WA, **July 12th-16th, 2009**.
32. D. Argyris* and A. Striolo, *Molecular Dynamics Study for a Novel AFM Application*, **Foundations of Molecular Modeling and Simulations, FOMMS 2009**, Blaine, WA, **July 12th-16th, 2009**.
33. N.R. Tummala* and A. Striolo, *SDS Surfactants on Carbon Nanotubes: Aggregate Morphology*, **Foundations of Molecular Modeling and Simulations, FOMMS 2009**, Blaine, WA, **July 12th-16th, 2009**.
34. L. Shi*, N.R. Tummala, and A. Striolo, *A Molecular Dynamics Study of SDS and C₁₂E₆ Surfactants at the Silica-Water and Air-Water Interfaces*, **Foundations of Molecular Modeling and Simulations, FOMMS 2009**, Blaine, WA, **July 12th-16th, 2009**.
35. D. Konatham and A. Striolo*, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **17th Symposium on Thermophysical Properties**, Boulder, CO, **June 21st-26th, 2009**.
36. A. Striolo*, D. Argyris, and N.R. Tummala, *Aqueous Solutions on Silica Surfaces: Structure and Dynamics from Simulations*, **APS March Meeting**, Pittsburgh, Pennsylvania, March 16-20th, **2009**.
37. 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*, **237th ACS National Meeting**, Salt Lake City, UT, March 22-26th, **2009**.
38. A. Striolo* and D. Konatham, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **MRS Fall Meeting**, Boston, MA, December 1st-5th, **2008**.
39. A. Striolo*, *Simulation Studies for the Adsorption of Colloidal Brushes on Flat Surfaces: Steric Repulsion vs. Bridge Attraction*, **AIChE Annual Meeting**, Philadelphia, PA, November 16th-21st, **2008**.
40. D. Argyris* and A. Striolo, *Molecular Dynamics Study for a Novel AFM Application*, **AIChE Annual Meeting**, Philadelphia, PA, November 16th-21st, **2008**.
41. 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 16th-21st, **2008**.
42. D. Konatham* and A. Striolo, *Graphene Sheets-Oil Nanocomposites: Equilibrium and Transport Properties from Molecular Simulation*, **AIChE Annual Meeting**, Philadelphia, PA, November 16th-21st, **2008**.

43. 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 16th-21st, **2008**.
44. 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 16th-21st, **2008**.
45. 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 27th – August 1st, **2008**
46. A. Striolo,* *Emerging Structures for Colloidal Brushes: from Dispersions and Agglomerates to Spherulites, Wires, and Beyond*, **APS March Meeting**, New Orleans, LA, March 9th-14th **2008**.
47. 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**.
48. D. Argyris* and A. Striolo, *Water Structure and Dynamics in Thin Interfacial Layers at SiO₂ and Graphite Surfaces*, **AICHE Annual Meeting**, Salt Lake City, Utah, November **2007**.
49. 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**.
50. 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**.
51. 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**.
52. 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 6th-9th, **2007** (poster presented by Dr. Warren Ford of Oklahoma State University).
53. 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 29th – August 3rd, **2007**.
54. 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 8th-13th, **2007**.
55. 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 20th-25th, **2007**.
56. 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**.
57. 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**.
58. A. Striolo*, *On The Mechanism of Water Diffusion in Narrow Carbon Nanotubes*, **AICHE Annual Meeting**, San Francisco, CA, November **2006**.
59. A. Striolo*, *Nanowires, Spheroids, Dispersions: the Self-Assembly of Colloidal Nanoparticles*, **AICHE Annual Meeting**, San Francisco, CA, November **2006**.
60. N.R. Tummala* and A. Striolo, *Molecular Dynamics Study of Aqueous Solutions in Heterogeneous Environments: Water Traces in Organic Media*, **OSCEr Annual Symposium**, Norman, OK, **October 4th, 2006**.
61. 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 18th and 19th, **2006**.
62. 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 18th and 19th, **2006**.
63. A. Striolo*, E.R. Chan, S.C. Glotzer, C. McCabe, and P.T. Cummings, *Multiscale Simulation of Organic-Inorganic Polyhedral Nano-Materials*, **16th Symposium on Thermophysical Properties**, Boulder, CO, July 30-August 4, **2006**.

64. A. Striolo*, *Multi-Scale Simulation for the Adsorption of Model Polymers and Proteins on Nano-Patterned Surfaces*, **16th Symposium on Thermophysical Properties**, Boulder, CO, July 30-August 4, **2006**.
65. 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**.
66. 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**.
67. 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**.
68. A. Striolo*, and S.A. Egorov, *Nano-Colloidal Brushes in Non-Adsorbing Polymer Solutions*, **AIChE Annual Meeting**, Cincinnati, OH November **2005**.
69. 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**.
70. X. Zhao*, A. Striolo, and P.T. Cummings, *Interaction between DNA Molecules and Fullerenes: Molecular Dynamics Study*, **AIChE Annual Meeting**, Cincinnati, OH November **2005**.
71. 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**.
72. 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**.
73. 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**.
74. 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**.
75. 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**.
76. 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**.
77. 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**.
78. 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**.
79. A. Striolo*, A.A. Chialvo, P.T. Cummings, and K.E. Gubbins, *Adsorption and Diffusion of Water in Activated Carbon Nanopores*, **3rd Int. Conf. Computational Modeling and Simulation of Materials**, Acireale, Italy, June **2004**.
80. 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*, **8th International Conference on Fundamental of Adsorption**, Sedona, Arizona, May **2004**.
81. 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*, **8th International Conference on Fundamental of Adsorption**, Sedona, Arizona, May **2004**.
82. D.R. Cole*, J.M. Simonson, M.S. Gruszkiewicz, 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*, **227th ACS National Meeting**, Anaheim, CA, March **2004**.
83. 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**.
84. 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**.

85. 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**.
86. 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**.
87. A. Striolo*, K.E. Gubbins, A.A. Chialvo, and P.T. Cummings, *Simulated Water Adsorption Isotherms in Carbon Nanopores*, **FOMMS 2003**, Colorado, July **2003**.
88. 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*, **15th Symposium on Thermophysical Properties**, Boulder, Colorado, June, **2003**.
89. 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**.
90. A. Striolo* and N. Elvassore, *Phase-Coexistence Calculations for Non-Uniformly-Charged Colloids in Electrolyte Solutions*, **AIChE Annual Meeting**, Indianapolis, Indiana, November **2002**.
91. 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**.
92. N. Elvassore*, A. Striolo, and A. Bertucco, *UV-vis Spectroscopy for the Investigation of Supercritical Antisolvent Processes*, **6th Conference on Supercritical Fluids and Their Applications**, Maiori, Italy, September **2001**.
93. N. Elvassore* and A. Striolo, *Forces between Non-Uniformly Charged Spherical Colloids in Electrolyte Solutions*, **5th Italian Conference on Chemical Engineering**, ICHEAP-5, Florence, Italy, May **2001**.
94. A. Striolo, N. Elvassore, M. Calligaro, and A. Bertucco*, *Modeling of Solid-Fluid and Solid-Liquid-Fluid Equilibria Related to Supercritical-Fluid Processes*, **3rd European Congress of Chemical Engineering**, ECCE, Nuremberg, Germany, June **2001**.
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96. 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*, **14th 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 10th, **2009**.
2. A. Striolo, *From Solid-Water Interfaces To Nuclear Waste Management: Molecular Insights*, Department of Natural Sciences, **Northeastern State University**, Tahlequah, OK, **October 21st, 2009**.
3. A. Striolo, *Modern Chemical Engineering and the Molecular Beauty of Water*, **Norman High School**, Norman, March 26th, **2009**.
4. A. Striolo, *Molecular Simulations and Computer Graphics: Modern Tools for Chemical Engineering Research*, **Northeastern State University**, Tahlequah, OK, **November 12th, 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 1st, 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 9th, 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 29th, 2005**.
8. A. Striolo, *Molecular Simulations: The Theoretical Tool for Developing Nano-Technological Applications*, **Cameron University ACS Student Affiliated Chapter**, Wichita Falls, TX, **September 29th, 2005**.

f. Non-Refereed Publications

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