

Publications - 2009

R. E. Belford, Book and Media Review, “Conquering the Content: A Step-by-Step Guide to Online Course Design.” (Jossey-Bass Guides to Online Teaching and Learning) (by Robin M. Smith), *J. Chem. Educ.*, 2009, 86 (8), p 926.

Yager, K.G.; Fredin, N.J.; Zhang, X.; **Berry, B.C.**; Karim, A.; Jones, R.L. “Evolution of block-copolymer order through a moving thermal zone”, *Soft Matter*, **2010**, 6, 92-99.

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K. Yager, **B.C. Berry**, K.A. Page, D.L. Patton, A. Karim, E.J. Amis “Disordered Nanoparticle Interfaces for Directed Self-Assembly”, *Soft Matter*, **2009**, 5(3), 622 (Cover).

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N. A. Marley, **J. S. Gaffney**, T. Castro, A. Salcido, and J. Frederick “Measurements of Aerosol Absorption and Scattering in Mexico City during the MILAGRO field campaign: A Comparison of Results from the T0 and T1 sites.” *Atmos. Chem. Phys.* 9, 189-206, 2009. <http://www.atmos-chem-phys.net/9/189/2009/acp-9-189-2009.pdf>

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N. A. Marley, **J. S. Gaffney**, M. J. Tackett, N. C. Sturchio, L. Heraty, N. Martinez, K. D. Hardy, A. Machany-Rivera, T. Guilderson, A. MacMillan, and K. Steelman “The impact of biogenic carbon sources on aerosol absorption in Mexico City” *Atmos. Chem. Phys.* 9, 1537-1549, 2009. <http://www.atmos-chem-phys.net/9/1537/2009/acp-9-1537-2009.pdf>

Villanueva-Fierro, I., Popp, C.J., Dixon, R.W., Martin, R.S., **Gaffney, J.S.**, Marley, N.A., Harris, J.M. “Ground level chemical analysis of air transported from the 1998 Mexican-Central

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Bourdo, Shawn E.; Cole, Celeste; Biris, Alexandru S.; **Viswanathan, Tito** “Graphite-polyaniline composites: surface area and magnetic susceptibility studies.” *PMSE Preprints* (2009), 100, 657-658.

Bourdo, Shawn E.; Taylor, Kimberley K.; Cole, Celeste; Biris, Alexandru S.; **Viswanathan, Tito** “Catalytic effects of transition metal ions on the synthesis of tanninsulfonic acid-doped polyaniline.” *PMSE Preprints* (2009), 100, 659-660.

H. Bian, **W. Zhao**, J. Zheng, "Intermolecular Vibrational Energy Exchange Directly Probed with Ultrafast Two Dimensional Infrared Spectroscopy." *J. Chem. Phys.* 131 (2009) 124501.

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W. Zhao, "Lighting up H₂O₂: The Molecule that Is a "Necessary Evil" in the Cell." *Angew. Chemie Int. Ed.*, 48 (17) (2009) 3022-3024.

Presentations at National Meetings – 2009

Belford, R.E., Moore, J.W., Berleant, D., Bauer, M.A., Holmes, J.L., Yancey, K.E., "Chem Ed DL WikiHyperGlossary" (invited), 238th ACS National Meeting, Washington D.C., August 19, 2009.

Belford, R.E., Moore, J.W., Berleant, D., Bauer, M.A., Holmes, J.L., Yancey, K.E., "Chem Ed DL WikiHyperGlossary" Sci-Mix Poster, 238th ACS National Meeting, Washington D.C., August 17, 2009.

Belford, R.E., Moore, J.W., Berleant, D., Bauer, M.A., Holmes, J.L., Yancey, K.E., "Developing a WikiHyperGlossary for ChemEd DL", (invited). Gordon Research Conference on Chemistry Education Research and Practice, Colby College, Maine, June 21-26, 2009.

Belford, R.E., Moore, J.W., Van Bramer, S., Holmes, J.L., Yancey, K.E., "ConfChem 2.0", (invited). Gordon Research Conference on Chemistry Education Research and Practice, Colby College, Maine, June 21-26, 2009.

Yancey, K.E. & **Belford, R.E.** "Use of Automated Hypertext Markup to Access the Periodic Table of ChemEd DL", student poster, 237th ACS National Meeting, Salt Lake City, March 22-26, 2009.

Nancy A. Marley and **Jeffrey S. Gaffney** "Formation and transformation of Humic-Like Substances (HULIS) in atmospheric aerosols: Relation to climate forcing" Oral presentation at the Eleventh Conference on Atmospheric Chemistry, January 11-15, 2009, Phoenix, AZ at the 89th National Meeting of the American Meteorological Society.

Jeffrey S. Gaffney and Nancy A. Marley, "Absorbing Aerosols from Agricultural Burning and Biomass Emissions." Oral presentation at the Eleventh Conference on Atmospheric Chemistry, January 11-15, 2009, Phoenix, AZ at the 89th National Meeting of the American Meteorological Society.

Nancy A. Marley, **Jeffrey S. Gaffney**, Kristy L. Kelley, Amrita Sarkar, and Gail L. Bridges, "The Determination of Humic Like Substance (HULIS) Content in Absorbing Aerosols by FTIR Spectroscopy". Poster Presentation at the Fall Meeting of the American Geophysical Union, December 14-18, 2009, San Francisco, California, Symposium on Aging of Atmospheric Soot.

Jeffrey S. Gaffney, Nancy A. Marley, Gail L. Bridges, Angie Marchany-Rivera, Mahuba Begum “Carbonaceous Aerosol Removal During Precipitation Events: Climate Implications” Poster Presentation at the Fall Meeting of the American Geophysical Union, December 14-18, 2009, San Francisco, California, Symposium on Aging of Atmospheric Soot.

Jian Wang, Michael Cubison, Allison Aiken, Jose-Luis Jimenez, Don Collins, **Jeffrey Gaffney**, and Nancy Marley The importance of aerosol composition and mixing state on predicted CCN concentration and the variation of the importance with atmospheric processing of aerosol” Poster Presentation at the Fall Meeting of the American Geophysical Union, December 14-18, 2009, San Francisco, California, Symposium on Aerosol Properties and Physical Processes.

Aaron J. Kelkhoff, Samea N. Lone and **Robert C. Steinmeier**, “Characterization of cellulases from *Penicillium funiculosum* and organic solvent effects on activity”. Presented at the ACS National Meeting (Division of Biological Chemistry), Salt Lake City, UT, March 22-26, 2009.