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Education

2008	Duke University, PhD Chemistry
2001	Southern Methodist University, MS Chemistry
1999	Texas Christian University, BS Chemistry

Professional Experience

2009-Present	Research Staff Scientist, Oak Ridge National Laboratory (ORNL)
2008-2009	Postdoctoral Research Associate, Center for Molecular Biophysics, ORNL

Selected Publications

- Parks, J.M., A. Johs, M. Podar, R. Bridou, R. A. Hurt, S.D. Smith, S.J. Tomanicek, Y. Qian, S.D. Brown, C.C. Brandt, A.V. Palumbo, J.C. Smith, J.D. Wall, D.A. Elias, L. Liang. 2013, The Genetic Basis for Bacterial Mercury Methylation. Science. In press
- R. Chaudret, J.M. Parks and W.T. Yang, Pseudobond parameters for QM/MM studies involving nucleosides, nucleotides and their analogs, *J. Chem. Phys.*, In press.
- Riccardi, D., H-B Guo, J.M. Parks, B. Gu, L. Liang, and J.C. Smith, Cluster-Continuum Calculations of Hydration Free Energies of Anions and Group 12 Divalent Cations. *J. Chem. Theory Comput*. 2013, 9, 555-569.
- Tschaplinski, T.J., Standaert, R.F., N.L. Engle, M.Z. Martin, A. K. Sangha, J.M. Parks, J.C. Smith, R. Samuel, N. Jiang, Y. Pu, A.J. Ragauskas, C.Y. Hamilton, C.X. Fu, Z.-Y. Wang, B.H. Davison, R.A. Dixon and J.R. Mielenz, Down-regulation of the caffeic acid *O*-methyltransferase gene in switchgrass reveals a novel monolignol analog, *Biotechnol. Biofuels*, 2012, 5:71.
- K. Sangha, J. M. Parks, R. F. Standaert, A. Ziebell, M. Davis, and J. C. Smith, Radical Coupling Reactions in Lignin Synthesis: A Density Functional Theory Study, *J. Phys. Chem. B*, 2012, 116, 4760–4768
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