

Tanner Schaub, PhD

Director, Center for Animal Health, Food Safety & Bio-Security
203 Skeen Hall Rotunda
575-646-5156
Email tschaub@nmsu.edu



Education

- 2004 Florida State University/National High Magnetic Field Laboratory, Ph.D., Analytical Chemistry, 2004 Advisor: Alan Marshall
- 2000 New Mexico State University, Bachelors of Science, Chemistry, 2000

Professional experience

- 7/2012 - Present, Director, Center for Animal Health, Food Safety and Biosecurity, New Mexico State University, Las Cruces, NM
- 2008 – Present, Director, Chemical Analysis and Instrumentation Laboratory, New Mexico State University, Las Cruces, NM
- 2006 – 2008 Associate Scholar/Scientist, National High Magnetic Field Laboratory/Ion Cyclotron Resonance Research Group, Tallahassee, FL
- 2004 – 2006 Post-Doctoral Research Associate, National High Magnetic Field Laboratory/Ion Cyclotron Resonance Research Group, Tallahassee, FL
- 2000 – 2004 Graduate Research Assistant, National High Magnetic Field Laboratory/Ion Cyclotron Resonance Research Group, Tallahassee, FL
- 1994 – 1999 (Intermittent) Intern, Sandia National Laboratories, Albuquerque, NM
- 1999 Explosive Materials and Subsystems Group
- 1998 Analytical Chemistry Division
- 1994-1995 Glass and Electronic Ceramics Division
- 1996 – 1998 Analyst, InterLab, Inc. Las Cruces, NM

Selected Publications

1. Patil, P; Reddy, H; Muppaneni, T., Mannarswamy, A., Holguin, O., Schaub, T., Nirmalakhandan, N., Cooke, P., Deng, S. *Power dissipation in microwave-enhanced in-situ transesterification of algal biomass to biodiesel*. **Green Chemistry** 14, 809. (2012)
2. Schaub, T.M.; Hendrickson, C.L.; Horning, S.P., Quinn, J.P.; Senko, M.W. and Marshall, A.G., *High Performance Mass Spectrometry: Fourier Transform Ion Cyclotron Resonance at 14.5 Tesla*, **Analytical Chemistry**, 80, 3985-3990. (2008)
3. Smith, D.F.; Schaub, T.M.; Kim, S., Rahimi, P.; Teclemariam, A.; Rodgers, R.P. and

5. Marshall, A.G., *Characterization of Acidic Species in Athabasca Bitumen Heavy Vacuum Gas Oil by Negative Ion ESI FT-ICR MS with and without Acidic Ion Exchange Resin Prefractionation*, **Energy & Fuels**, 22, 3118-3125 (2008).
6. Schaub, T.M.; Jennings, D.W.; Kim, S.; Rodgers, R.P. and Marshall, A.G., *Heat Exchanger Deposits in an Inverted Steam Assisted Gravity Drainage Operation. Part 2. Organic Acid Analysis by Electrospray Ionization FT-ICR Mass Spectrometry*, **Energy & Fuels**, 21, 185-194 (2007)
7. He, H.; Conrad, C.; Nilsson, C.L.; Ji, Y.; Schaub, T.; Marshall, A. and Emmett, M., *A Novel Method for Lipidomic Analysis: p53 Expression Modulates Sulfatide, Ganglioside and Phospholipid Composition of U87 MG Glioblastoma Cells*, **Analytical Chemistry**, 79, 8423-8430 (2007)
8. Smith, D.F.; Schaub, T.M.; Rahimi, P.; Tecler, A.; Rodgers, R.P. and Marshall, A.G., *Self-Association of Organic Acids in Petroleum and Canadian Bitumen Characterized by Low and High-Resolution Mass Spectrometry*, **Energy & Fuels**, 21, 1309-1316 (2007)
9. Schaub, T.M.; Rodgers, R.P.; Marshall, A.G.; Qian, K.; Olmstead, W.N., *Speciation of Aromatic Compounds in Petroleum Refinery Streams by Continuous Flow Field Desorption Ionization FT-ICR Mass Spectrometry*, **Energy & Fuels**, 19, 1566-1573 (2005)
10. Schaub, T.M.; Hendrickson, C.L.; Quinn, J.P.; Rodgers, R.P. and Marshall, A.G., *Instrumentation and Method for Ultrahigh Resolution Field Desorption Ionization FT-ICR Mass Spectrometry of Non-Polar Species*, **Analytical Chemistry**, 77 (5), 1317-1324 (2005)
11. Rodgers, R.P.; Schaub, T.M. and Marshall, A.G., *Petroleomics: Mass Spectrometry Returns To Its Roots*, **Analytical Chemistry**, 77 (1), 20-27 (2005)
12. Schaub, T.M.; Hendrickson, C.L.; Qian, K.; Quinn, J.P. and Marshall, A.G., *Field Desorption Ionization Fourier Transform Ion Cyclotron Resonance High-Resolution Mass Analysis of Non-Polar Molecules*. **Analytical Chemistry**, 75, 2172-2176 (2003)