

Victoria DiStefano

◆ University of Tennessee, Knoxville ◆

◆ The Bredesen Center: 443 Greve Hall, 821 Volunteer Blvd, Knoxville, TN 37996 ◆

◆ Email: distefanovh@ornl.gov ◆

Education

University of Tennessee

Ph.D. in Energy Science and Engineering
Advisor: Dr. Lawrence Anovitz

Knoxville, TN
Expected: May 2018
GPA: 3.92/4.0

University of Notre Dame

B. S. with Honors in Environmental Geosciences
Minor: Energy Studies
Dean's List- Fall 2009, Spring 2010

Notre Dame, IN
May 2013
GPA: 3.597/4.0

University of Western Australia

Study Abroad, Fall 2011

Perth, Australia

Research Experience

Graduate Research Assistant

January 2014 – Present

Oak Ridge National Laboratory, TN
University of Tennessee, TN

- ◆ Neutron scattering on shales to assess pore size distribution and location of organic matter
- ◆ Neutron imaging on shales analyzing fluid uptake rate
- ◆ Extracting organic and inorganic material from shales
- ◆ Microquartz (SiO₂) synthesis

Summer Graduate Research Intern

June 2013 – August 2013

Oak Ridge National Laboratory, TN

- ◆ Worked in the Center for Nanophase Material Science (CNMS) fabricating nano-devices for flow experiments

Summer Research Intern

May 2013 – June 2013

University of Tennessee, TN

- ◆ Worked for Dr. Terry Hazen in the Hazen Lab through the UT-ORNL Joint Institute for Biological Sciences assisting with PLFA extractions
- ◆ Received Radworker II Training

Undergraduate Research Assistant

April 2010 – May 2013

University of Notre Dame, IN

- ◆ Worked for Dr. Thomas Albrecht-Schmitt and Dr. Peter C. Burns in the Center for Materials Science of Actinides: A National Energy Frontier Research Center
- ◆ Ran reactions with uranium and other actinides to synthesize new crystals

Policy Experience

Intern with Tennessee State Representative John Ragan

May 2015 – February 2016

- ◆ Worked on drafting bill, HB 2151 (later HB 0438), for an Energy Policy Council for the State of Tennessee that was signed into law on June 1, 2017
- ◆ Helped plan a meeting of the House Energy Task Force and introduced HB 2151 to the task force
- ◆ Helped lead the effort to communicate with state legislators the impact of HB 2151
- ◆ Attended a meeting of the National Conference of State Legislators' (NCSL) Nuclear Legislative Workgroup (NLWG) which informs the NCSL's policies on nuclear related issues affecting the U.S.
- ◆ Attended Committee hearings and radio interviews with Representative Ragan

Victoria DiStefano

◆ University of Tennessee, Knoxville ◆

◆ The Bredesen Center: 443 Greve Hall, 821 Volunteer Blvd, Knoxville, TN 37996 ◆

◆ Email: distefanovh@ornl.gov ◆

Publications

- ◆ **DiStefano, V. H.**, Cheshire, M.C., McFarlane, J., Kolbus, L. M., Hale, R. E., Perfect, E., Bilheux, H. Z., Santodonato, L. J., Hussey, D. S., Jacobson, D. L., LaManna, J. M., Bingham, P. R., Starchenko, V., & Anovitz, L. M. (2017). Spontaneous Imbibition of Water and Determination of Effective Contact Angles in the Eagle Ford Shale Formation using Neutron Imaging. *Journal of Earth Sciences*. (submitted).
- ◆ **DiStefano, V. H.**, McFarlane, J., Anovitz, L. M., Stack, A. G., Gordon, A. D., Littrell, K. C., Chipera, S. J., Hunt, R. D., Lewis, S. A., Hale, R. E., and Perfect, E. (2016) Extraction of Organic Compounds from Representative Shales and the Effect on Porosity. *Journal of Natural Gas Science and Engineering*, 35, 646-660.
- ◆ Donnelly, B., Perfect, E., McKay, L. D., Lemiszki, P. J., **DiStefano, V. H.**, Anovitz, L. M., McFarlane, J., Hale, R. E., & Cheng, C. L. (2016). Capillary pressure–saturation relationships for gas shales measured using a water activity meter. *Journal of Natural Gas Science and Engineering*, 33, 1342-1352.
- ◆ Cheng, C. L., Perfect, E., Donnelly, B., Bilheux, H. Z., Tremsin, A. S., McKay, L. D., **DiStefano, V. H.**, Cai, J., & Santodonato, L. J. (2015). Rapid imbibition of water in fractures within unsaturated sedimentary rock. *Advances in Water Resources*, 77, 82-89.
- ◆ Diwu, J., Good, J. J., **DiStefano, V. H.**, & Albrecht-Schmitt, T. E. (2011). Self-Assembly of Hexanuclear Clusters of 4f and 5f Elements with Cation Specificity. *European Journal of Inorganic Chemistry*, 2011(9), 1374-1377.
- ◆ Diwu, J., Wang, S., Good, J. J., **DiStefano, V. H.**, & Albrecht-Schmitt, T. E. (2011). Deviation Between the Chemistry of Ce (IV) and Pu (IV) and Routes to Ordered and Disordered Heterobimetallic 4f/5f and 5f/5f Phosphonates. *Inorganic Chemistry*, 50(11), 4842-4850.

Abstracts and Presentations

- ◆ **DiStefano, V. H.**, McFarlane, J., Anovitz, L. M., Stack, A. G., Gordon, A. D., Littrell, K. C., Chipera, S. J., Hunt, R. D., Lewis, S. A., Hale, R. E., and Perfect, E. (2015, December). *Porosity evolution in shales with organic solvent extraction*. Presented at the annual meeting of the American Geophysical Union.
- ◆ **DiStefano, V. H.**, McFarlane, J., Anovitz, L. M., Stack, A. G., Gordon, A. D., Littrell, K. C., Chipera, S. J., Hunt, R. D., Lewis, S. A., Hale, R. E., and Perfect, E. (2015, November). *Porosity evolution in shales with organic solvent extraction*. Presented at the Combined Southeastern Regional Meeting and the Southwest Regional Meeting of the American Chemical Society.
- ◆ **DiStefano, V. H.**, Kolbus, L. K., McFarlane, J., Anovitz, L. M., Hale, R. E., Perfect, E., Cheshire, C. C., Bilheux, H. Z., Bingham, P.R., Hussey, D.S., and Jacobson, D. L. (2015, October) *Neutron Imaging of Spontaneous Imbibition of Water in Shales*. Poster presented at the Biannual SNS/HFIR User Group Meeting.
- ◆ McFarlane, J., **DiStefano, V. H.**, Anovitz, L. M., Stack, A. G., Gordon, A. D., Littrell, K. C., Chipera, S. J., Hunt, R. D., Lewis, S. A., Hale, R. E., and Perfect, E. (2015, October) *Porosity evolution in shales with organic solvent extraction*" Presented at the Biannual SNS/HFIR User Group Meeting.
- ◆ Cheng, C. L., Perfect, E., Donnelly, B., Bilheux, H., Tremsin, A., McKay, L., **DiStefano, V. H.**, Cai, J., & Santodonato, L. (2015). Neutron Imaging of Rapid Water Imbibition in Fractured Sedimentary Rock Cores. *Bulletin of the American Physical Society*, 60.
- ◆ Gordon, A. D., Stack, A. G., **DiStefano, V. H.**, Anovitz, L. M., McFarlane, J., Delmau, L. H., & Littrell, K. (2014, August). *Pore size manipulation in Eagle Ford and Marcellus shales: Applications for radioactive contaminant sequestration*. In *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY* (Vol. 248). 1155 16TH ST, NW, WASHINGTON, DC 20036 USA: AMER CHEMICAL SOC.

Victoria DiStefano

◆ University of Tennessee, Knoxville ◆

◆ The Bredesen Center: 443 Greve Hall, 821 Volunteer Blvd, Knoxville, TN 37996 ◆

◆ Email: distefanovh@ornl.gov ◆

Conferences Attended

- ◆ **American Geophysical Union (AGU) Fall Meeting** **December 14 – 18, 2015**
San Francisco, California, USA
- ◆ **2015 SERMACS - SWRM Meeting** **November 4 – 7, 2015**
Combined Southeastern Regional Meeting and the Southwest Regional Meeting of the American Chemical Society
Memphis, Tennessee, USA
- ◆ **Biannual SNS/HFIR User Group Meeting** **October 26 – 27, 2015**
Oak Ridge, Tennessee, USA

Professional Awards and Activities

- ◆ **Energy Science and Engineering Fellowship** **August 2013 – Present**
The Bredesen Center for Interdisciplinary Research
University of Tennessee
- ◆ **Semi-Finalist UTK 3MT[®] Competition** **March 2017**
Semi-Finalist in the University of Tennessee's Three Minute Thesis (3MT[®]) Competition
Thesis work presented in 3 minutes for an educated, non-specialist audience
- ◆ **CIRTL Associate Level of Certification** **November 2016**
Center for the Integration of Research, Teaching, and Learning (CIRTL) Associate Level of Certification
Attended a series of classes on teaching undergraduate Science, Technology, Engineering, and Mathematics (STEM) courses
- ◆ **President of the FOSEP at the University of Tennessee** **January 2016 – February 2017**
FOSEP- Forum on Science, Ethics, and Policy
Student organization which hosts speakers and professional development at the intersection of science, ethics, and policy for students at the University of Tennessee
- ◆ **Selected for HERCULES European School** **March 2016 – April 2016**
HERCULES- Higher European Research Course for Users of Large Experimental Systems
Five-week course on neutron and synchrotron radiation for science
- ◆ **Received a Travel Award from the University of Tennessee GSS** **December 2016**
GSS- Graduate Student Senate
Travel award was to attend the American Geophysical Union (AGU) Fall Meeting to present a talk on graduate research.
- ◆ **Selected for NIST NCNR Summer School** **July 2014**
National Institute of Standard and Technology (NIST)
NIST Center for Neutron Research (NCNR)
Week long course on the Fundamentals of Neutron Scattering