
Timothy D'Andrea

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Education

- B.S. Chemistry, *summa cum laude*~Spring 2003
Ursinus College, Collegeville, PA
- Ph. D. Chemistry and Biochemistry~Summer 2008
University of Colorado, Boulder, CO

Academic Experience

- Assistant Professor, Colorado Mesa University~Fall 2009 – Present
- Instructor of Chemistry, Mesa State College~Fall 2008-2009
- Head Teaching Assistant, University of Colorado~Fall 2006-Spring 2007
- NSF GK-12 Fellow~May 2005-June 2006
- Research Assistant, University of Colorado~Fall 2003-Summer 2008
- Teaching Assistant, University of Colorado~Fall 2003-Spring 2004

Highlighted Service Activities

- Chair of Chemistry lab coordinator search committee.
- Member of four Chemistry faculty search committees.
- Chemistry Club faculty advisor (2012-present).
- Head of department scheduling and budget (2012-present).
- Head of the Early Scholars Program for the CMU Chemistry Department (2010-present).
- Secretary of the library committee (2013-present).
- Member of the library committee (2009-present).
- Faculty facilitator at the Student Showcase (2013-present)
- Participated in several community service events including the development of a chemistry family night at the John McConnell Math and Science Center.
- Developed a strong relationship with the Junior Scientist Series at The Mesa County Public Library.
 - Performed demonstrations to introduce kids to basic topics in chemistry on two separate occasions.
- Regional science fair finals judge (2008-2012).
- Participated in numerous Mesa Experience and student orientation events.
- Invited Ph.D. scientists to the CMU campus to give research talks
 - Three talks were presented since 2010

Recent Publications and Presentations

- Timothy M. D'Andrea, James Ayers. General Chemistry Lab Manual. *Fountainhead Press*, 2013.
- Timothy M. D'Andrea, Xu Zhang, Evan B. Jochnowitz, T.G. Lindeman, C.J.S.M. Simpson, Don David, Tom Curtiss, John R. Morris, G. Barney Ellison. Oxidation of Organic Films by Beams of Hydroxyl Radicals. *J. Phys. Chem. B*; 2008; 112(2) pp 535 – 544.
- Summer 2014
 - “Thermal Decomposition Kinetics of Iso-alpha Acids” to be presented at the American Society of Brewing Chemists annual conference. Chicago, IL.
- Spring 2014
 - “Molecular Beams of Highly Reactive Species” presented at the Physics Seminar Series. Colorado Mesa University, Grand Junction, CO.
- Spring 2014
 - “Chemistry in Action” presented at the Mesa County Library for the Junior Scientist Series. Grand Junction, CO.
- Spring 2013
 - “Energy and The Magical World of Chemistry” presented at the Mesa County Library for the Junior Scientist Series. Grand Junction, CO.
- Spring 2009
 - “The Physics of Heterogeneous Chemistry and the Applications to Our Atmosphere” presented at the Physics Seminar Series. Mesa State College, Grand Junction, CO.
- Spring 2008
 - “Oxidation of Organic Films by Beams of Hydroxyl Radicals” presented at the Gas Phase Ion Chemistry Seminar. University of Colorado, Boulder, CO.
- Summer 2007
 - “Oxidation of Organic Films by Beams of Hydroxyl Radicals” presented at the 62nd International Symposium on Molecular Spectroscopy. Ohio State University, Columbus, OH.

- Spring 2007
 - “Interactive Student Learning is Just a Click Away” presented at the First-Year International Chemistry Conference. Boulder, CO.
 - Discussed how classroom response systems can be used in the classroom to create an interactive and dynamic learning environment.

Recent Student Presentations

- Spring 2014
 - “Thermal Decomposition Kinetics of Iso-alpha Acids” presented by Jenna Short, Kara OP’Brien, and Chase Li at the Colorado Mesa University Student Showcase. Grand Junction, CO.
- Spring 2013
 - “Analysis of Iso-Alpha Acids in order to Quantify Beer Bitterness” presented by Zach Vincent at the Colorado Mesa University Student Showcase. Grand Junction, CO.
- Spring 2012
 - “Quantifying the Bitterness of Beer: The Analysis of Iso-Alpha Acids” presented by Alan Felix at the Colorado Mesa University Student Showcase. Grand Junction, CO.

Grants Submitted

- January 23, 2014
 - NSF MRI Grant Submitted as supporting researcher. MRI: Acquisition of an LCMS-ELSD System for Undergraduate Research and Instruction at Colorado Mesa University
- April 21, 2010
 - NSF MRI Grant Submitted as **P.I.**, \$139,572, MRI: Acquisition of a pyrolysis gas chromatograph/mass spectrometer at Mesa State College
- August 10, 2009
 - NSF MRI² Grant Submitted as **P.I.**, \$144,983, MRI-R²: Acquisition of a pyrolysis gas chromatograph/mass spectrometer at Mesa State College

Professional Development Activities

- NSF GK-12 Fellow~May 2005-June 2006