

Thomas Greenbowe

Thomas Greenbowe has developed and implemented a blended guided-inquiry approach to teaching and learning general chemistry using the *Science Writing Heuristic* (SWH) and *Process Oriented Guided Inquiry* (POGIL) formats. Over the past forty years, he has facilitated over seventy workshops for science teachers and chemistry faculty in the USA and internationally, including Canada, New Zealand, Croatia, and United Arab Emirates. His chemical research education group's web-based computer simulations are being used by over 2,000 chemical educators and their students around the world. Over the past twelve years, he has served as a POGIL and SWH workshop facilitator for chemistry faculty across the USA. He has 36 years experience working with chemistry teaching assistants (graduate students) to provide effective classroom and laboratory instruction. Greenbowe and his colleagues have published over 50 papers about chemical education issues and research in the *Journal of Chemical Education*, *Journal of Research in Science Teaching*, *Journal of College Science Teaching* and the *International Journal of Science Education*.

Over the past forty years he has presented over 1000 invited talks at professional meetings. Greenbowe was elected Chair-elect (2007), Chair (2008), and Immediate Past Chair (2009) of the Division of Chemical Education of American Chemical Society. He was elected Chair of the 2009 Gordon Research Conference on Chemical Education Research and Practice. He served as the General Chair of the (2004) 18th Biennial Conference on Chemical Education and is the co-Program Chair for the 2020 26th Biennial Conference on Chemical Education. Greenbowe served as on the ACS Board of Trustees Examination Institute (2007 – 2009), served on several ACS General Chemistry Exam committees, including the Laboratory Practical Exam Committee and served as the Chair of the 1995 ACS General Chemistry Examination and the 2015 ACS General Chemistry Conceptual Examination. He served as a member of the College Board, Advance Placement Chemistry Test Development Committee (2007 – 2012). He has served as an AP Chemistry Reader, Table Leader, and Question Leader (2008 – 2016) including serving as Question Leader on the 2016 AP[®] Chemistry Reading. His efforts in assessment of chemistry have directly impacted over 500 000 students.

Thomas Greenbowe has received several major awards and recognitions for his teaching and contributions to chemistry education: 2014 American Chemical Society George C. Pimentel Award in Chemical Education; 2014 American Chemistry Society Northeast Section James Flack Norris Award for Excellence in the Teaching of Chemistry; 2013 American Chemical Society Fellow; 2013 American Chemistry Society Mid-West Regional Anne McNaley Volunteer Award; 2013 Iowa State University Morrill Professor; 2012 Iowa Regents Faculty Excellence Award; 2009 Iowa State University, College of Liberal Arts and Sciences Master Teacher; 2009 Iowa State University, College of Liberal Arts and Sciences Advising Impact Award; 2008 Carnegie Foundation/CASE Iowa Professor of the Year, 2008 Wakonse Teaching Fellow.