DANIEL B. KING - Curriculum Vitae

Research Interests

assessment of student use of active learning approaches analysis of the effectiveness of technology use hands-on demonstrations of chemistry applications incorporation of real-world context into chemistry curricula

Employment

Associate Professor – Drexel University – 09/11 – present

Associate Department Head, Chemistry – 09/22 - present

Interim Associate Dean of Graduate Studies, College of Arts and Sciences -01/19 - 08/19

Assistant Professor – Drexel University – 09/05 – 08/11

Instructor – Drexel University – 09/02-08/05

Research Scientist – Univ. of Colorado (NOAA/CMDL) – 01/01–08/02

Postdoctoral Research Associate – Univ. of Colorado (NOAA/CMDL) – 10/97-12/00

Postdoctoral Associate – Univ. of Miami/RSMAS – 02/97-09/97

Graduate Research Assistant – Univ. of Miami/RSMAS – 08/91-01/97

Research Technician – Johns Hopkins Univ. Hospital, Wilmer Eye Institute – 07/90-07/91

Education

University of Miami/RSMAS, FL, Ph.D. in Marine and Atmospheric Chemistry, 1997 Johns Hopkins University, MD, B.A. in Natural Sciences, 1990

Funding

- "Community as a Lever for Change in Undergraduate STEM Education", PI: Jennifer Stanford, co-PI: Adam Fontecchio, Wesley Shumar, Daniel King, Jason Silverman, NSF IUSE, \$1,997,098, 1/1/23 12/31/27; *submitted*.
- "HHMI IE3: LCC5 Collab", PI: Jennifer Stanford, co-PI: Adam Fontecchio, Daniel King, Jason Silverman, HHMI, \$1,154,997, 10/1/22 9/30/28.
- "Co-op Opportunities Program Fund", PI: Daniel King, Drexel University, \$1500, 3/29/21-9/10/21.
- "Creative Interdisciplinary Research in Graduate Education (CIRGE)", PI: Fraser Fleming, co-PI: Paul Gondek, Daniel King, Jennifer Katz-Buonincontro, and Diana Nicholas, NSF NRT-IGE, \$499,175.47, 4/1/2019 3/31/2023.
- "Environmental Science Activity Cultivation (ESAC)", PI: Caryl Fish, co-PI: Daniel King, POGIL Project SPUR+, \$2500, 1/1/18 12/31/19.
- "Increasing STEM Student Persistence through Professional Identity Development", PI: Donna Murasko, co-PI: Jennifer Stanford and Daniel King, HHMI Undergraduate Science Education Grants to Research Universities, \$1,200,000, Grant# 52008094, 9/1/2014-8/31/2020.
- "Scaffolding climate change into general chemistry at UD; Meaningful learning in this election year", PI: Mark Baillie, collaborators: Jacqueline Fajardo, Gary Laverty and Daniel King, UD (University of Delaware) SEPP Integrative Curriculum Development Grant, \$3000, 2016.

- "Collaborative Research: Climate Change Concepts and POGIL," PI: Daniel King, co-PI: Karen Anderson and Jennifer Lewis, NSF-TUES, \$133,307, DUE-1044344, 9/1/2011-8/31/2014.
- "Improving Female Student Achievement and Retention in STEM Disciplines: Strategic Deployment of Collaborative, Guided-Inquiry Instruction across Individual Differences in Learning Approaches," PI: Regina Frey and Mark McDaniel, LUCE Foundation, \$660,000, 01/2012-12/2015.
- "Development of Hands-On, Everyday Chemistry Experiments," PI: Daniel King, Camille and Henry Dreyfus Special Grant Program in the Chemical Sciences, \$20,000, 2/1/09-1/31/11.
- "POGIL-ENVY: POGIL Activities for Environmental Chemistry," PI: Daniel King, POGIL SPUR program, \$875, 6/08-6/09.
- "Upgrading upper level chemistry labs in a guided-inquiry approach," PI: Daniel King, Ocean Optics Educational Products Division, \$12,908.54, one-time award (12/22/04).
- "In Situ Investigation of Tomato Plants as Methyl Halide Sources," CIRES Innovative Research Program, \$18,700, 2000-2002.

Graduate Students

- Anthony Howcroft, PhD (2023): Investigating the Impact of Content Introduction and Self-Efficacy on Student Performance in General Chemistry
- Amal Alanazi, PhD (2021): Quantitative Analysis of Technology Use and Muddiest Point Technique in Undergraduate Chemistry Courses
- Junyang Xian, PhD (2018): Development and Analysis of Active-Learning Techniques in Entrylevel Chemistry Laboratory and Classroom
- Loraine Snead, MS (2016): The Effect of Using the Muddiest Point Technique in a Large General Chemistry Class
- Charles Bowman, PhD (2012): Relationship Between Study Habits and Student Attitudes Towards Science and Technology
- James Rieben, Jr., PhD (2010): An Investigation of the Effects of Relevant Samples and a Comparison of Verification Versus Discovery based Lab Design

Professional Organizations

American Chemical Society (ACS) – Environmental Chemistry and Chemical Education divisions

American Geophysical Union (AGU) – Education, Global Environmental Change, Atmospheric and Ocean sections

National Science Teachers Association

Sigma Xi

Teaching Experience/Training

Instructor – Drexel University (Physical Chemistry Lecture and Laboratory, Environmental Chemistry, General Chemistry Lecture and Laboratory, Everyday Chemistry)

POGIL Climate Justice Symposium (2022)

Drexel University Teaching Academy (2021)

SENCER Summer Institute (2013)

MAALACT (Middle Atlantic Association of Liberal Arts Chemistry Teachers) meeting (2013) Advanced POGIL-IC (Process Oriented Guided Inquiry Learning-In Context) Workshop (2008)

Wiley Faculty Network workshop (2008) – Visualizing the Future of Chemistry Education

MADCP (Middle Atlantic Discovery Chemistry Project) workshops (2003-9, 2013) – workshop on innovative teaching techniques

CUR Workshop on How to Get a Research Program Started at a Primarily Undergraduate Institution (2000), Am. Geophys. Union, Fall Meeting

NAGT-NSF Workshop on Innovative and Effective Techniques for Teaching Geosciences (1998), Am. Geophys. Union, Fall Meeting

Laboratory Experience

quadrupole mass spectrometry with gas chromatography

familiarity with other methods of detection: flame ionization, flame photometric, electron capture, thermal conductivity

uv/vis, infrared, and fluorescence spectroscopy

high performance liquid chromatography with fluorescence detection

preparation of gas and liquid standards

familiarity with high vacuum systems

Awards

Student Organization Advisor of the Year, Drexel University (2017)

Christian R. and Mary F. Lindback Award for Distinguished Teaching, Drexel University (2016)

Third Annual Showcase of Teaching (Drexel) poster session – First place (2015)

Who's Who in Collegiate Faculty (2009)

Allan Rothwarf Award for Teaching Excellence, Drexel University (2007)

Identified as Outstanding Faculty Member by Pi Kappa Alpha, Drexel University (2007)

Who's Who in Sciences Higher Education (2006)

CMDL Director's Award – Outstanding Scientific Support (2002)

CMDL Annual Meeting – Most Artistic Poster Award (2002)

Special award for editing of NOAA/CMDL Summary Report No. 25, 1998-1999 (2000)

Acceptance to Atmos. Chem. Colloquium for Emerging Senior Scientists (ACCESS IV) (1997)

Dean's Award for Excellence in Research and Creativity (1995)

Who's Who Among Students in American Universities and Colleges (1994-1995)

Best Student Seminar Award - Dept. of Mar. and Atmos. Chem./RSMAS (1994)

Bader Memorial Student Research Fund (1993)

Rosenstiel Fellowship (1991-1992)

Service

ACS Division of Chemical Education –Committee on Personnel and Nominations (2024-2026)

ACS Division of Chemical Education – Secretary and Councilor (2017-2022)

ACS Division of Chemical Education – member on Board of Publication and Committee on Personnel and Nomination (2017-2022)

ACS Society Committee on Education – Associate Member (2018-2021); Member (2022-2024)

ACS Philadelphia Section Awards Committee (2020-2025)

ChemAttitudes Partnership ChemLuminary Award Committee (2018-2020)

Student ACS affiliate advisor (2005 – present)

Chemistry Department Undergraduate Affairs Committee (member 2005 – 2013; chair 2013-present)

CoAS Undergraduate Curriculum Committee – Chemistry representative (2013 – 2020; 2021 – present) Chemistry Department Advisory Committee (member 2013 – present) CoAS Non-Tenure Track Faculty Promotion Committee – member (2022) Drexel University Strategic Planning Committee - Program & Curricular Innovation Group member (2021-2022) Chemistry Department Tenure and Promotion Committee – member (2021) CoAS representative – Library Advisory Group (2022-2023) CoAS representative – University Committee on Graduate Affairs (2019) CoAS representative – Committee on Nominations (2016 – 2020) Drexel University Faculty Athletics Advisory Committee (2016 – 2020) Drexel Center for Academic Excellence Faculty Fellow (2009-2016) Honors Faculty Advisory Committee (2010-2015) "in Chemistry" magazine advisory board (2009-2012, 2016) Data Committee – Office of Academic Advising, Retention and Diversity (2010) ACS Division of Chemical Education – New Member Committee (2008-2016; Chair, 2014-2016) attended ACS annual faculty peer review conference (2009-2011, 2016) attended POGIL national meeting (2009, 2010, 2011, 2013, 2014) ACS symposium presider (Fall 2021, Spring 2022, Fall 2023) BCCE symposium presider (2010, 2012, 2022) facilitated workshop as part of STEM Conference for Young Women (2023) facilitated workshop as part of Captivate (2023) facilitated POGIL workshops at Drexel University (2017, 2018(2), 2019(2)) facilitated Birds of a Feather session at National Conference to Advance POGIL Practice! Registration (2021, 2023) facilitated Climate Change POGIL workshop at Biennial Conference on Chemical Education (BCCE) (2014, 2016, 2018, 2022) facilitated Climate Change POGIL workshop at Geological Society of America (GSA) annual conference (2014) facilitated workshops at Mid-Atlantic Regional POGIL meeting (2010, 2011) facilitated clicker workshop at Bloomfield College, NJ (2009) invited panelist – Faculty roles in institutions of higher education, University of Delaware graduate course (2009, 2013) invited participant in focus group on the use of visualizations in general chemistry (2010) participant in ACS Exams Institute Item Alignment Project (2010) participant in Philadelphia Math + Science Coalition (2009-2010) gave talk at Tau Beta Pi Engineering Honor Society (Drexel) event (2008) gave chemistry talk at Wellington at Hershey's Mills retirement community (2009) gave chemistry talks at White Horse Village retirement community (2007, 2008, 2010) served on departmental Teaching Professor search committee (2010, 2014: chair, 2023) reviewed proposals for NSF, NERC (National Environment Research Council) and University of Wisconsin-Milwaukee Research Growth Initiative program reviewed manuscripts for several journals, including JCE, JCST, JGR, GRL, GBC, and ES&T reviewed student affiliate annual reports for ACS (2007-present) served as judge for Lindback Teaching Award (2017-2018)

served as judge for Rothwarf Award (2008-2010)

served as judge for CoAS and University Research Days (2007, 2008, 2010-2015)

reviewed student journals for Signals of Spring (NASA-sponsored activity) (2007) edited NOAA/CMDL Summary Report No. 26, 2000-2001 (2002) edited NOAA/CMDL Summary Report No. 25, 1998-1999 (2000) science judge for National Ocean Science Bowl regional competition (1999-2002) science judge for local science fairs (1999, 2001-2002)

Publications

Hurwich, T., Nicholas, D., Perignat, E., Fleming, F.F., King, D., Katz-Buonincontro, J., and Gondek, P., Designing and Iterating for Interdisciplinary, Creative Research in Graduate Teams, Inter. J. Des. Learn., accepted.

Rosa Tavares Rodrigues, R., King, D. Effect of voluntary clicker participation on General Chemistry performance, J. Coll. Sci. Teach., accepted.

Howcroft, A.W., King, D.B. Impact of the Timing of Content Introduction on Student Exam Performance in General Chemistry, J. Coll. Sci. Teach., accepted.

Shumar, W., Silverman, J., Moyer, A.E., Casino, M., Condon, B., Murasko, D., King, D. and Stanford, J.S. Use of a professional development course to promote student-centered teaching in large STEM courses, Coll. Teach., published online, DOI: 10.1080/87567555.2023.2246618.

Condon, B., Xian, J., Murasko, D., King, D. and Stanford, J.S. Use of the Colorado Learning Attitudes about Science Survey (CLASS) to predict early college success for STEM undergraduates, J. Excell. Coll. Teach., accepted.

King, D.B., 2023, Everyday Chemistry: An Application-Focused Course, in Engaging Chemistry Students with Real-World Context: Volume 2, Editor(s): Daniel B. King and Gail H. Webster, 1461, American Chemical Society, pp 131-145, doi: 10.1021/bk-2023-1461.ch009.

Pesce, A., King, D., 2023, Using a Molecular Modeling Application to Introduce Structural Isomerism, J. Chem. Educ., 100 (9), 3683–3687. DOI:10.1021/acs.jchemed.3c00169.

Perignat, E., Fleming, F.F., Nicholas, D., King, D., Katz-Buonincontro, J. & Gondek, P., 2022, Effective Practices for High Performing Interdisciplinary Faculty Teams, Coll. Teach., 71 (1), 18-27. DOI: 10.1080/87567555.2022.2086525.

Xian, J., and D.B. King, 2020, Teaching Kinetics and Equilibrium Topics Using Interlocking Building Bricks in Hands-on Activities, J. Chem. Educ., 97, 466–470. doi: 10.1021/acs.jchemed.9b00515.

Xian, J., and D.B. King, 2017, The Effectiveness of General Chemistry Lab Experiments on Student Exam Performance, J. Lab. Chem. Educ., 5(5), 95-107. doi: 10.5923/j.jlce.20170505.01.

Butler, J. H., Yvon-Lewis, S. A., Lobert, J. M., King, D. B., Montzka, S. A., Bullister, J. L., Koropalov, V., Elkins, J. W., Hall, B. D., Hu, L., and Liu, Y, 2016, A comprehensive estimate for loss of atmospheric carbon tetrachloride (CCl₄) to the ocean, Atmos. Chem. Phys., 16, 10899-10910, doi:10.5194/acp-16-10899-2016.

King, Daniel B., Jennifer E. Lewis, Karen Anderson, Douglas Latch, Richard Moog, Susan Sutheimer, and Gail Webster, 2015, Choosing Appropriate Models – Incorporating Climate Change into General Chemistry, in Chemistry and the Environment: Pedagogical Models and Practices, Editor(s): Katherine C. Lanigan, Elizabeth S. Roberts-Kirchhoff, Kendra R. Evans, Mark A. Benvenuto, Alexa Rihana-Abdallah, 1214, American Chemical Society, pp 1-15, doi: 10.1021/bk-2015-1214.ch001.

Bowman, C. R., O. Gulacar, D.B. King, 2014, Predicting Student Success via Online Homework Usage, J. Learn. Des., 7 (2), 47-61, doi:http://dx.doi.org/10.5204/jld.v7i2.201.

Hu, L., S. A. Yvon-Lewis, J. H. Butler, J. M. Lobert, and D. B. King, 2013, An improved oceanic budget for methyl chloride, J. Geophys. Res. Oceans., 118, doi:10.1029/2012JC008196.

King, D.B., 2012, Using Multiple-Response Clicker Questions to Identify Student Misunderstanding, Quick Hits for Teaching with Technology, Indiana University Press, Bloomington, IN, 66-67.

King, D., 2011, Sharing Pedagogical Techniques as a Mechanism for Interdisciplinary Contact, J. Coll. Sci. Teach., 41 (2), 10-11.

King, D.B., 2011, Utilization of Clickers to Identify Muddiest Points in Large Classes, J. Chem. Educ., 88 (11), 1485–1488, doi: 10.1021/ed1004799.

King, D.B., 2010, Redesigning the Preexam Review Session, J. Coll. Sci. Teach., 40 (2), 88-95.

King, D.B., and S. Joshi, 2008, Gender differences in the use and effectiveness of personal response devices, J. Sci. Educ. Technol., 17 (6), 544-552, doi: 10.1007/s10956-008-9121-7.

Butler, J.H., D.B. King, J.M. Lobert, S.A. Montzka, S.A. Yvon-Lewis, B.D. Hall, N.J. Warwick, D.J. Mondeel, M. Aydin, and J.W. Elkins, 2007, Oceanic distributions and emissions of short-lived halocarbons, Global Biogeochem. Cycles, 21, GB1023, doi:10.1029/2006GB002732.

Wade, P.A., S.B. Rutkowsky, and D.B. King, 2006, A simple combinatorial experiment based on Fischer esterification, J. Chem. Educ., 83, 927-928.

Saltzman, E.S., M. Aydin, W.J. De Bruyn, D.B. King, and S.A. Yvon-Lewis, 2004, Methyl bromide in pre-industrial air: Measurements from an Antarctic ice core, J. Geophys. Res., 109, D05301, doi:10.1029/2003JD004157.

Yvon-Lewis, S.A., D.B. King, R. Tokarczyk, K.D. Goodwin, E.S. Saltzman, and J.H. Butler, 2004, Methyl bromide and methyl chloride in the Southern Ocean, J. Geophys. Res., 109, C02008, doi:10.1029/2003JC001809.

King, D.B., J.H. Butler, S.A. Yvon-Lewis, and S.A. Cotton, 2002, Predicting oceanic methyl bromide saturation from SST, Geophys. Res. Lett., 29 (24), 2199, doi: 10.1029/2002GL016091.

Yvon-Lewis, S.A., J.H. Butler, E.S. Saltzman, P.A. Matrai, D.B. King, R. Tokarczyk, R.M. Moore, and J.-Z. Zhang, 2002, Methyl bromide cycling in a warm-core eddy of the North Atlantic Ocean, Global Biogeochem. Cycles, 16 (4), 1141, doi:10.1029/2002GB001898.

Bell, N., L. Hsu, D.J. Jacob, M.G. Schultz, D.R. Blake, J.H. Butler, D.B. King, J.M. Lobert, and E. Maier-Reimer, 2002, Methyl iodide: Atmospheric budget and use as a tracer of marine convection in global models, J. Geophys. Res., 107, 4340, doi:10.1029/2001JD001151.

King, D.B., J.H. Butler, S.A. Montzka, S.A. Yvon-Lewis, and J.W. Elkins, 2000, Implications of methyl bromide supersaturations in the temperate North Atlantic Ocean, J. Geophys. Res., 105, 19,763-19,769.

King, D.B., and E.S. Saltzman, 1997, Removal of methyl bromide in coastal seawater: chemical and biological rates, J. Geophys. Res., 102, 18,715-18,721.

Gallagher, M.S., D.B. King, P.-Y. Whung, and E.S. Saltzman, 1997, Performance of the HPLC/fluorescence SO₂ detector during the GASIE instrument intercomparison experiment, J. Geophys. Res., 102, 16,247-16,254.

Pilinis, C., D.B. King, and E.S. Saltzman, 1996, The oceans - a source or a sink of methyl bromide?, Geophys. Res. Lett., 23, 817-820.

King, D.B., W.J. De Bruyn, M. Zheng, and E.S. Saltzman, 1995, Uncertainties in the molecular diffusion coefficient of gases in water for use in the estimation of air-sea exchange, in Air-Water Gas Transfer, edited by B. Jähne and E.C. Monahan, AEON Verlag and Studio, Hanau.

King, D.B., and E.S. Saltzman, 1995, Measurement of the diffusion coefficient of sulfur hexafluoride in water, J. Geophys. Res., 100, 7083-7088.

Saltzman, E.S., D.B. King, K. Holmen, and C. Leck, 1993, Experimental determination of the diffusion coefficient of dimethylsulfide in water, J. Geophys. Res., 98, 16,481-16,486.

Tsay, S.-C., L.C. Lin, P.A. Furth, C.C. Shum, D.B. King, S.F. Yu, B.-L. Chen, and J.R. Hwu, 1993, Direct synthesis of allyl sulfides from allyl alcohols and thiols, Synthesis, 3, 329-334.

Editing

King, D.B., Webster, G.H., 2023, Engaging Chemistry Students with Real-World Context: Volume 1, 1460, American Chemical Society, DOI: 10.1021/bk-2023-1460.

King, D.B., Webster, G.H., 2023, Engaging Chemistry Students with Real-World Context: Volume 2, 1461, American Chemical Society, DOI: 10.1021/bk-2023-1461.

Presentations

King, D.B., 2023, Creating new ways to engage students, 55th Annual Mid-Atlantic Association of Liberal Arts Chemistry Teachers (MAALACT) Meeting, November 10-11.
 King, D.B. (invited), 2023, Does student engagement improve student performance?, St. Joseph's University (PA), September 20.

- <u>Pesce, A.M.</u>, D. King, 2023, Performance gains from a structural isomerism activity, ACS Fall 2023 National Meeting, American Chemical Society, August 13-17.
- <u>King, D.B.</u>, 2023, Evaluation of the impact of a variety of student engagement approaches, ACS Fall 2023 National Meeting, American Chemical Society, August 13-17.
- Howcroft, A., D. King, 2023, Observing Chemistry Self-Efficacy changes after Education and Reflection, 2023 Gordon Conference on Chemistry Education Research & Practice, July 9-14.
- <u>Pesce, A., D. King, 2023, Implementation of a Structural Isomerism Activity in Introductory Organic Chemistry, 2023 Gordon Conference on Chemistry Education Research & Practice, July 9-14.</u>
- <u>King, D.</u>, 2023, Correlation between student engagement and performance, 2023 Gordon Conference on Chemistry Education Research & Practice, July 9-14.
- <u>King, D.</u>, 2023, Creating context-based POGIL activities: An undergraduate research experience, National Conference for Advanced POGIL Practitioners (NCAPP), June 25-28.
- <u>King, D.B.</u> (**invited**), 2023, Screencast Use in General Chemistry: Do the Videos Have to be Short?, The College of New Jersey, April 5.
- <u>Howcroft, A.</u>, D. King, 2023, Self-Efficacy and Student Performance in General Chemistry, ACS Spring 2023 National Meeting, American Chemical Society, March 26-30.
- <u>King, D.</u>, L. Choi, 2023, Collection of student self-reported wellness information in a general chemistry course, ACS Spring 2023 National Meeting, American Chemical Society, March 26-30.
- <u>King, D.B.</u>, 2022, Use of recorded lectures in general chemistry, ACS Fall 2022 National Meeting, American Chemical Society, August 21-25.
- <u>Howcroft, A., D.B. King, 2022</u>, Varying the timing of content introduction to enhance student performance in undergraduate general chemistry, 2022 Biennial Conference on Chemical Education, July 31 August 4.
- <u>Pesce, A.,</u> D.B. King, 2022, Using Distractor Analysis and Backward Design to craft a new activity on Structural Isomerism, 2022 Biennial Conference on Chemical Education, July 31 August 4.
- <u>King, D.B.</u>, 2022, Use of real-world applications to improve in-class activities, 2022 Biennial Conference on Chemical Education, July 31 August 4.
- Howcroft, A., D.B. King, 2022, Modifying when Content is Introduced to Optimize Exam Performance in Undergraduate General Chemistry, 2022 Middle Atlantic Regional Meeting, American Chemical Society, June 1-4.
- <u>Pesce, A., D.B. King, 2022</u>, Using Backward Design to create a short activity to engage students in Structural Isomerism, 2022 Middle Atlantic Regional Meeting, American Chemical Society, June 1-4.
- Rosa Tavares Rodrigues, R., D.B. King, 2022, Comparison of classroom engagement as a function of demographic group, 2022 Middle Atlantic Regional Meeting, American Chemical Society, June 1-4.
- Nicholas, B.G., D.B. King, 2022, Student Gender and the Use of Exam Preparation Resources, ACS Spring 2022 National Meeting, American Chemical Society, March 20-24.
- <u>Howcroft, A., D.B. King, 2022</u>, Impact of the timing of content introduction on student exam and in-class performance, ACS Spring 2022 National Meeting, American Chemical Society, March 20-24.
- <u>Pesce, A.,</u> D.B. King, 2022, Introduction to molecular modelling kits through structural isomerism, ACS Spring 2022 National Meeting, American Chemical Society, March 20-24.

- Rosa Tavares Rodrigues, R., D.B. King, 2022, Correlation between clicker question use and general chemistry course grade, ACS Spring 2022 National Meeting, American Chemical Society, March 20-24.
- <u>King, D.B.</u>, 2022, Creating context-based POGIL activities: An undergraduate research experience, ACS Spring 2022 National Meeting, American Chemical Society, March 20-24.
- King, D.B., 2021, Using POGIL Activities to Develop Process Skills, Abstract ED55F-0338 presented at 2021 Fall Meeting, AGU, New Orleans, LA, 13-17 Dec.
- Howcroft, A., D.B. King, 2021, Impact of recitation timing on student performance in undergraduate general chemistry, ACS Fall 2021 National Meeting, American Chemical Society, August 22-26.
- <u>King, D.B.</u>, 2021, Lessons learned about student engagement during remote instruction, ACS Fall 2021 National Meeting, American Chemical Society, August 22-26.
- <u>King, D.</u>, G. Ibarrola Recalde, 2021, Analysis of the Effects of Climate Change and Environmental Context-Based POGIL Activities on Student Performance, National Conference for Advanced POGIL Practitioners (NCAPP), June 28-30.
- <u>King, D.B.</u>, 2021, Cookie challenge: A unique way to encourage office visits, 2021 Middle Atlantic Regional Meeting, American Chemical Society, June 9-11, 72-73.
- King, D.B., 2021, Using climate change context to engage students in general chemistry, CUNY Conference on Climate Change Education (virtual), April 22-23, 2021.
- Alanazi, A., D.B. King, 2021, Clicker use in a medium-sized undergraduate liberal arts chemistry class, ACS Spring 2021 National Meeting, American Chemical Society, April 5-May 1, https://doi.org/10.1021/scimeetings.1c00808.
- Pesce, A., D.B. King, 2021, Quantitative investigation of non-chemistry majors' difficulties with isomerism using item analysis, ACS Spring 2021 National Meeting, American Chemical Society, April 5-May 1, https://doi.org/10.1021/scimeetings.1c00809.
- <u>Ibarrola Recalde, G., D.B. King, 2021, Evaluating the effects of climate change and environmental context POGIL curricula on student performance in a general chemistry classroom, ACS Spring 2021 National Meeting, American Chemical Society, April 5-May 1, https://doi.org/10.1021/scimeetings.1c00807.</u>
- Rosa Tavares Rodrigues, R., D.B. King, 2021, Effect of clicker questions on exam performance, ACS Spring 2021 National Meeting, American Chemical Society, April 5-May 1, https://doi.org/10.1021/scimeetings.1c00806.
- <u>King, D.B.</u>, 2021, Student use of review session screencasts, ACS Spring 2021 National Meeting, American Chemical Society, April 5-May 1.
- <u>King, D.B.</u>, 2020, Which real-world contexts are most effective in a liberal arts chemistry course?, ACS Fall 2020 Virtual Meeting, August 17-20, doi: https://doi.org/10.1021/scimeetings.0c06870.
- Alanazi, A., D.B. King, 2020, Muddiest point question use in undergraduate general chemistry courses, ACS Fall 2020 Virtual Meeting, August 17-20, doi: https://doi.org/10.1021/scimeetings.0c00054.
- <u>Ibarrola Recalde, G., D.B. King, 2020, Analysis of the effects of climate change and environmental POGIL activities on student performance, ACS Spring 2020 National Meeting & Expo, March 21-25, doi: https://doi.org/10.1021/scimeetings.0c04844.</u>
- Alanazi, A., D.B. King, 2020, Investigating the accuracy of student self-assessment on muddiest point questions, ACS Spring 2020 National Meeting & Expo, March 21-25, doi: https://doi.org/10.1021/scimeetings.0c04554.

- King, D.B., J. Stanford, and D. Murasko, 2019, Incorporation of peer mentors and an introduction to research into a UNIV 101 course, 258th ACS National Meeting, American Chemical Society, August 25-29, CHED 108.
- <u>King, D.</u>, C. Fish and K. Aubrecht, 2019, Developing Environmental POGIL Activities, National Conference for Advanced POGIL Practitioners (NCAPP), June 24-26.
- <u>King, D.B.</u>, A. Alanazi, 2019, Do students know what they don't know?, 2019 Gordon Conference on Chemistry Education Research & Practice, June 16-21.
- <u>Fish, C.</u>, D. King, and K. Aubrecht, 2019, Developing Environmental POGIL Activities, POGIL National Meeting, June 1-4.
- <u>Ibarrola Recalde, G., D.B. King, 2019, Comparing the effects of context-based vs. traditional POGIL activities on students' exam performance, 257th ACS National Meeting, American Chemical Society, March 31-April 4, CHED 181.</u>
- Alanazi, A., D.B. King, 2019, Effect of online exam review session video format on student exam performance in general chemistry courses, 257th ACS National Meeting, American Chemical Society, March 31-April 4, CHED 170.
- <u>King, D.B.</u>, 2019, Correlation between clicker use and student performance, 257th ACS National Meeting, American Chemical Society, March 31-April 4, CHED 189.
- <u>King, D.B.</u>, C.L. Fish, and K. Aubrecht, 2018, Expanding the reach of inquiry-based climate change activities, Abstract ED51G-0715 presented at 2018 Fall Meeting, AGU, Washington, DC, 10-14 Dec.
- <u>King, D.B.</u>, C.L. Fish, and K. Aubrecht, 2018, Environmental science activity cultivation project, 256th ACS National Meeting, American Chemical Society, August 19-23, TECH 122.
- <u>King, D.</u>, 2018, Connecting with students in a large enrollment general chemistry course, 2018 Biennial Conference on Chemical Education, July 29 August 2.
- <u>Fish, C.L.</u>, D.B. King, and K. Aubrecht, 2018, Developing and collating POGIL activities in environmental chemistry, 2018 Biennial Conference on Chemical Education, July 29 August 2.
- King, D., C. Fish and K. Aubrecht, 2018, Developing Environmental POGIL Activities, POGIL Northeast Regional Workshop, July 10-12.
- <u>Fish, C.</u>, D. King, and K. Aubrecht, 2018, Developing Environmental POGIL Activities, POGIL National Meeting, June 23-26.
- <u>King, D.B.</u>, 2018, Encouraging general chemistry students to come to office hours, 255th ACS National Meeting, American Chemical Society, March 18-22, TECH 144.
- <u>King, D.</u>, 2017, What do students think is the most important concept?, 254th ACS National Meeting, American Chemical Society, August 20-24, TECH 125.
- <u>King, D.</u>, 2017, Using scratch cards as formative and summative assessments, 254th ACS National Meeting, American Chemical Society, August 20-24, TECH 125.
- Xian, J., D. King, 2017, Using LEGOs to help students understand kinetics and equilibrium concepts, 254th ACS National Meeting, American Chemical Society, August 20-24, TECH 125.
- <u>King, D.</u>, 2017, Assessing the effectiveness of using climate change activities to teach general chemistry content, National Conference for Advanced POGIL Practitioners (NCAPP), June 26-28.
- <u>King, D.B.</u>, 2017, Student use of course-specific screencasts, 2017 Gordon Conference on Chemistry Education Research & Practice, June 18-23.
- <u>King, D.B.</u>, 2017, In-class experiments in a liberal arts chemistry course, 45th Middle Atlantic Regional Meeting (MARM), American Chemical Society, June 4 6, 52.

- Xian, J., D.B. King, 2017, Enhancing learning by using muddiest point cards with international students, 45th Middle Atlantic Regional Meeting (MARM), American Chemical Society, June 4 6, 52.
- <u>King, D.</u>, 2017, Using screencasts to supplement classroom instruction, 253rd ACS National Meeting, American Chemical Society, April 2-6, TECH 145.
- <u>King, D.</u>, J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2016, Assessing the effectiveness of using climate change activities to teach general chemistry content, 252nd ACS National Meeting, American Chemical Society, August 21-25, TECH 116.
- <u>Ilies, M.</u>, D.B.King, 2016, How to efficiently steer the ship while steering clear of dictatorship, 252nd ACS National Meeting, American Chemical Society, August 21-25, TECH 116.
- <u>King, D.</u>, 2016, Using POGIL and pre-lecture screencasts to engage students in environmental chemistry, 2016 Biennial Conference on Chemical Education, July 31-August 4.
- <u>King, D.</u>, 2016, Does screencast length impact student viewing?, Fourth Annual Showcase of Teaching, Drexel University, May 18.
- <u>King, D.B.</u>, 2016, Does screencast length impact student viewing?, 251st ACS National Meeting, American Chemical Society, March 13-17, TECH 128.
- King, D., J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and
 R.Moog, 2015, Choosing the best climate change models: Key features and future opportunities, 250th ACS National Meeting, American Chemical Society, August 16-20, TECH 111.
- Xian, J., D.B.King, 2015, Do verification labs affect student exam performance?, 250th ACS National Meeting, American Chemical Society, August 16-20, TECH 112.
- <u>King, D.B.</u>, 2015, Student use of screencasts as a study tool, 2015 Gordon Conference on Chemistry Education Research & Practice, June 21-26.
- King, D., J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, <u>G.Webster</u>, C.Middlecamp, and R.Moog, 2015, Incorporation of Socio-scientific Content into Active Learning Activities, POGIL National Meeting, May 30-June 2.
- <u>King, D., U. Kulatunga</u>, 2015, Using an Argumentation Framework to Improve Student Answers, Lilly International Conference College and University Teaching and Learning, May 28-31.
- <u>King, D.</u>, 2015, Using Active Learning and Climate Change to Teach General Chemistry, Third Annual Showcase of Teaching, Drexel University, May 11.
- Stanford, J., D.King, 2015, Course for Faculty: Promoting Student Learning in Large STEM Classrooms, Third Annual Showcase of Teaching, Drexel University, May 11.
- King, D., J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and
 R.Moog, 2015, Using climate change context to engage students in general chemistry,
 249th ACS National Meeting, American Chemical Society, March 22-26, TECH 183.
- Anderson, K., D.King, J.E.Lewis, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2015, Fracking and carbon sequestration, oh my: Connecting general chemistry students to climate change topics, 249th ACS National Meeting, American Chemical Society, March 22-26, TECH 149.
- King, D., J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and
 R.Moog, 2014, Incorporation of Socio-scientific Content into Active Learning Activities,
 Abstract ED13D-3481 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec.
- <u>King, D.</u>, 2014, An Introduction to POGIL (Process Oriented Guided Inquiry Learning) Using Climate Change Activities, GSA 2014 Annual Meeting, October 19-22.

- King, D., J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2014, Climate Change Concepts and POGIL: Classroom activities for general chemistry, 248th ACS National Meeting, American Chemical Society, August 10-14, TECH 103.
- Anderson, K., J.Arjoon, D.King, J.E.Lewis, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2014, Models to connect context to the content: POGIL and climate change concepts, 248th ACS National Meeting, American Chemical Society, August 10-14, TECH 108.
- <u>King, D.</u>, 2014, Why Things Work: A course for all students, 2014 Biennial Conference on Chemical Education, August 3-7.
- Anderson, K., D.King, J.Lewis, , D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2014, Developing climate change activities in general chemistry, 2014 Biennial Conference on Chemical Education, August 3-7.
- <u>King, D.</u>, G.Webster, 2014, The POGIL Project Workshop: Climate Change Concepts in General Chemistry, 2014 Biennial Conference on Chemical Education, August 3-7.
- Latch, D.E., D. King, J. E. Lewis, K. Anderson, S. Sutheimer, G. Webster, C. Middlecamp, and R. Moog, 2014, Creating and using POGIL activities with climate change themes to teach general chemistry concepts. 97th Canadian Chemistry Conference and Exhibition, Vancouver, BC, CA, June 1-5.
- King, D., J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2014, POGIL activities that use climate change to teach general chemistry, POGIL National Meeting, May 31-June 3.
- <u>King, D.B.</u>, 2014, Interpreting muddiest point feedback in general chemistry, 247th ACS National Meeting, American Chemical Society, March 16-20, TECH 137.
- Anderson, K., J.Arjoon, D.King, J.E.Lewis, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2014, Using feedback to revise and improve classroom activities, 247th
 ACS National Meeting, American Chemical Society, March 16-20, TECH 137.
- <u>King, D.</u>, J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2013, Climate Change Concepts and POGIL: Using climate change to teach general chemistry, Abstract ED31C-0756 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.
- Webster, G.H., D.King, J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, C.Middlecamp, R.Moog, 2013, Engaging general chemistry students with POGIL and climate change, Southeastern Regional Meeting (SERMACS), American Chemical Society, November 12-16.
- King, D., J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and
 R.Moog, 2013, Incorporating climate change into general chemistry POGIL activities,
 246th ACS National Meeting, American Chemical Society, September 8-12, TECH 78.
- King, D.B., 2013, Using clicker questions to facilitate the development of process skills, 2013 Gordon Conference on Chemistry Education Research & Practice, June 9-14.
- Anderson, K., J.Arjoon, J.E.Lewis, D.King, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2013, Developing Climate Change Activities in General Chemistry, 2013
 Gordon Conference on Chemistry Education Research & Practice, June 9-14.
- Arjoon, J., J.E.Lewis, D.King, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2013, Climate Change Concepts and POGIL: Student Argumentation in Chemistry, 2013 Gordon Conference on Chemistry Education Research & Practice, June 9-14.

- <u>King, D.</u>, J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2013, POGIL activities that use climate change to teach general chemistry, POGIL National Meeting, June 1-4.
- Anandan, S., D.King, J.Zimmerman, 2013, Applying a Set of Student Learning Priorities in Different Course Formats, Lilly National Conference on College and University Teaching, May 30-June 2.
- <u>King, D.B.</u>, 2013, Using Clickers to Promote Learning in the Chemistry Classroom, MADCP (Middle Atlantic Discovery Chemistry Project) meeting, May 17-18.
- King, D., J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, andR.Moog, 2013, POGIL activities that use climate change to teach general chemistry,MADCP (Middle Atlantic Discovery Chemistry Project) meeting, May 17-18.
- <u>King, D.</u>, J.E.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2013, POGIL activities that use climate change to teach general chemistry, 245th ACS National Meeting, American Chemical Society, April 7-11. TECH 130.
- <u>Sutheimer, S.</u>, D.King, 2012, Global Climate Change: Integrative Curriculum Development for General Chemistry, AASHE 2012 Conference, October 14-17.
- King, D., J.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2012, Global climate change: POGIL activities for the general chemistry curriculum, 244th ACS National Meeting, American Chemical Society, August 19-23. TECH 91.
- <u>King, D.</u>, 2012, Using clickers to scale up a classroom assessment technique to a large classroom, 22nd Biennial Conference on Chemical Education, July 29-August 2.
- <u>King, D.</u>, J.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2012, Global climate change: Integrative curriculum development for general chemistry, 22nd Biennial Conference on Chemical Education, July 29-August 2.
- King, D., 2012, Implementing a classroom assessment technique in a large enrollment course,
 43rd Middle Atlantic Regional Meeting (MARM), American Chemical Society, May 31
 June 2, 217.
- King, D., J.Lewis, K.Anderson, D.Latch, S.Sutheimer, G.Webster, C.Middlecamp, and R.Moog, 2012, Climate change concepts and POGIL, 243rd ACS National Meeting, American Chemical Society, March 25-March 29, TECH-93.
- <u>King, D.B.</u>, 2011 (**invited**), Engaging Students in Chemistry: Is Technology the Answer?, University of Akron, November 1.
- <u>King, D.B.</u>, 2011, Using clickers to identify points of confusion, 242nd ACS National Meeting, American Chemical Society, August 28-September 1, TECH-77.
- <u>King, D.B.</u>, 2011, Collection and Analysis of "Muddiest Points" in Large Enrollment General Chemistry Classes, 2011 Gordon Conference on Chemistry Education Research & Practice, June 26-July 1.
- <u>King, D.B.</u>, 2011, Improving feedback from clicker questions, 42nd Middle Atlantic Regional Meeting (MARM), American Chemical Society, May 21-23, 40.
- <u>King, D.B.</u>, 2010 (**invited**), Engaging Students in Chemistry: Is Technology the Answer?, SUNY Stony Brook, November 18.
- <u>King, D.B.</u>, 2010, Moving Beyond the Standard Multiple Choice Question Format, Turning Technologies User Conference, Boston, MA, October 10-11.
- <u>King, D.B.</u>, 2010, Using multiple response clicker questions to improve student feedback, 240th ACS National Meeting, American Chemical Society, August 22-26, TECH-82.
- <u>King, D.B.</u>, 2010, Clicker use as an indicator of success in general chemistry, 21st Biennial Conference on Chemical Education, August 1-5, 138.

- <u>King, D.B.</u>, 2010, POGIL-ENVY: POGIL activities for environmental chemistry, 21st Biennial Conference on Chemical Education, August 1-5, 76.
- <u>King, D.B.</u>, 2010, New Question Types to Improve Clicker Effectiveness, 2010, Lilly National Conference on College and University Teaching, June 3-5.
- <u>King, D.B.</u>, 2010, Clicker use in general chemistry: Who uses them and is there a benefit?, 41st Middle Atlantic Regional Meeting (MARM), American Chemical Society, April 10-13, 47.
- <u>King, D.B.</u>, 2010, Correlating active clicker use with success in general chemistry, 239th ACS National Meeting, American Chemical Society, March 21-25, TECH-96.
- <u>King, D.B.</u>, 2010, Clickers as an assessment and pedagogical research tool, National Science Teachers Association National Meeting, March 18-21, 2, 114.
- <u>King, D.B.</u>, 2010 (**invited**), Engaging Students in Chemistry: Is Technology the Answer?, Moravian College, March 17.
- <u>King, D.B.</u>, 2010, Gender Differences in the Use of Pre-Exam Review Materials, IWHL Sex and Gender Research Forum, March 4.
- <u>King, D.B.</u>, 2009, Using Research Cruise Data to Improve Group Activities, Eos Trans. AGU, 90 (52), Fall Meet. Suppl., Abstract ED51A-0512.
- <u>King, D.B.</u>, 2009, POGIL-ENVY: POGIL activities for environmental chemistry, 238th ACS National Meeting, American Chemical Society, August 16-20, TECH-143.
- <u>King, D.B.</u>, 2009, Gender Differences in the Use of Pre-Exam Review Materials, 2009 Gordon Conference on Chemistry Education Research & Practice, June 21-25.
- <u>King, D.B.</u>, 2009, Using student response systems (clickers), MADCP (Middle Atlantic Discovery Chemistry Project) meeting, June 7-8.
- <u>King, D.B.</u>, 2009, Providing Multiple Delivery Opportunities for Pre-Exam Review Material, 6th Teaching Professor Conference, June 5-7.
- <u>King, D.B.</u>, 2009 (**invited**), Engaging Students in the Classroom: Is Technology the Answer?, Susquehanna Valley Section ACS awards ceremony, May 6.
- <u>King, D.B.</u>, 2009, Clickers: Not Just for Classroom Engagement Anymore, 2009 Lilly-East Conference on College and University Teaching, April 16-17.
- <u>King, D.B.</u>, and S. Joshi, 2009, Gender differences in the use and effectiveness of personal response devices, 237th ACS National Meeting, American Chemical Society, March 22-26, TECH-21.
- <u>King, D.B.</u>, 2009, Using clickers to assess student learning, Turning Technologies User Conference, Philadelphia, PA, March 12.
- <u>King, D.B.</u>, 2008, In person or online: Testing the effectiveness of general chemistry review sessions, 236th ACS National Meeting, American Chemical Society, August 17-21, TECH-38.
- <u>King, D.B.</u>, 2008, Does student learning from personal response devices increase when use is required?, 20th Biennial Conference on Chemical Education, July 27-31, 265.
- <u>King, D.B.</u>, 2008 (**invited**), Use of "clickers" to increase engagement and student learning, 35th Northeast Regional Meeting (NERM), American Chemical Society, June 29-July 2.
- <u>King, D.B.</u>, 2008, Student Assessment of Engagement in a "Clicker" Classroom, 40th Middle Atlantic Regional Meeting (MARM), American Chemical Society, May 18-21, 124.
- <u>King, D.B.</u>, 2008, Providing multiple delivery opportunities for pre-exam review material, 2008 Lilly-East Conference on College and University Teaching, April 17-18.
- <u>King, D.B.</u>, 2008, Do personal response devices improve student engagement and can we assess it?, 235th ACS National Meeting, American Chemical Society, April 6-10, TECH-39.

- <u>King, D.B.</u>, 2008, Bridging knowledge gaps: Merging content and application in an environmental chemistry course, 235th ACS National Meeting, American Chemical Society, April 6-10, TECH-37.
- <u>King, D.B.</u>, 2008 (**invited**), Penguins and detectors: Climate research in the Southern Ocean, Penn State Brandywine, One Campus One Book, March 25.
- King, D.B., 2008, Clickers in the Classroom: Interactive Pedagogy and Research Tool, 6th Annual e-Learning 2.0 Conference (Drexel University), March 20.
- <u>King, D.B.</u>, and S. Joshi, 2008, Gender Differences in the Use and Effectiveness of Personal Response Devices, IWHL Sex and Gender Research Forum, January 10.
- <u>King, D.B.</u>, 2007, Facilitating student preparation for exams in general chemistry, 234th ACS National Meeting, American Chemical Society, August 19-24, TECH-32.
- <u>King, D.B.</u>, 2007, Using Personal Response Devices in Review Sessions, 2007 Improving University Teaching Conference, July 5-7.
- <u>King, D.B.</u>, 2007, Do science and engineering students approach chemistry questions differently?, 2007 Gordon Conference on Chemistry Education Res. & Pract., June 24-28.
- <u>King, D.B.</u>, 2007 (**invited**), Using Technology to Enhance and Assess Student Learning in Chemistry, MADCP (Middle Atlantic Discovery Chemistry Project) meeting, June 3-4.
- <u>King, D.B.</u>, 2007, Improving the general chemistry review session, 39th Middle Atlantic Regional Meeting (MARM), American Chemical Society, May 16-18, 228-229.
- <u>King, D.B.</u>, 2007, Assessing the effectiveness of personal response devices on student learning and classroom engagement, 2007 Lilly-East Conference on College and University Teaching, April 13-14.
- <u>King, D.B.</u>, 2007, Where is technology most effective: inside or outside of the classroom?, PAETC (Philadelphia Area Educational Technology Conference), February 22-23.
- <u>King, D.B.</u>, 2006, Quantitative measures of personal response device effectiveness, 232nd ACS National Meeting, American Chemical Society, September 10-14, TECH-31.
- <u>King, D.B.,</u> 2006, Teaching environmental chemistry: Which course components are most effective?", 38th Middle Atlantic Regional Meeting (MARM), American Chemical Society, June 4-7, 111-112.
- King, D.B., 2006, Engaging students in the classroom: Is technology the answer?", Dean's Seminar Series, April 5.
- King, D.B., J.H. Butler, M. Aydin, D.J. Mondeel, and S.A. Montzka, 2005, Oceanic contributions of bromine to the atmosphere, Eos Trans. AGU, 86 (52), Fall Meet. Suppl., Abstract A21A-0839.
- <u>King, D.B.,</u> 2005, Changing focus: Becoming a chemical education researcher, Gordon Research Conference: Chemistry Education Research and Practice, June 26-July 1.
- King, D.B., J.H. Butler, S.A. Yvon-Lewis, S.A. Montzka, and D.J. Mondeel, 2004, Fluxes of Short-Lived Organic Halogens Into the Marine Boundary Layer, Eos Trans. AGU, 85 (47), Fall Meet. Suppl., Abstract A43C-0067.
- King, D.B., J.H. Butler, S.A. Yvon-Lewis, and S.A. Montzka, 2003, Estimating the sources and sinks of methyl iodide in the springtime North Atlantic Ocean, Eos Trans. AGU, 84 (46), Fall Meet. Suppl., Abstract A11F-0053.
- <u>King, D.B.</u>, S.A. Yvon-Lewis, and J.H. Butler, 2002, Methyl halide distributions and fluxes in the Southern Ocean, Eos Trans. AGU, 83 (47), Fall Meet. Suppl., Abstract A72C-180.

- <u>King, D.B.</u>, J.H. Butler, J.M. Lobert, and S.A. Yvon-Lewis, 2002 (**invited**), Oceanic halocarbon measurements by in situ GC-MS, FACSS 29th Ann. Meet., Providence, RI, Oct. 14-17.
- <u>King, D.B.</u>, J.H. Butler, and D.J. Mondeel, 2002, In-situ investigation of tomato plants as methyl halide sources, Eos Trans. AGU, 83 (19), Spring Meet. Suppl., Abstract B32A-06.
- King, D.B., April 8, 2002 (**invited**), Research in the Southern Ocean: Icebergs, Penguins, and Atmospheric Chemistry, Penn State Delaware County, Media, PA.
- King, D.B., J.H. Butler, S.A. Yvon-Lewis, S.A. Montzka, and J.W. Elkins, 2001, Identification of Seasonality in Oceanic Methyl Bromide Saturations, NASA Oceanography Scientific Conference, Miami, FL, April 3-5.
- <u>King, D.B.</u>, J.H. Butler, S.A. Yvon-Lewis, S.A. Montzka, and J.W. Elkins, 2000, Measurements of Climatically Important Halocarbons in the North Pacific Ocean, Eos, transactions, Am. Geophys. Union, Fall Meeting, 81 (48), 277.
- King, D.B., J.H. Butler, S.A. Yvon-Lewis, S.A. Montzka, and J.W. Elkins, 2000, Oceanic Measurements of Halocarbons in the North Pacific Ocean in Support of Flux Calculations, CMDL Annual Meeting, Boulder, CO, May 3-4.
- King, D.B., J.H. Butler, J.M. Lobert, S.A. Montzka, S.A. Yvon-Lewis, and J.W. Elkins, 2000, Oceanic Measurements of Halocarbons in Support of Flux Calculations and Model Verification, SOLAS conference, Damp, Germany, February 20-24.
- King, D.B., J.H. Butler, J.M. Lobert, S.A. Montzka, and J.W. Elkins, 2000, Methyl Iodide Supersaturations in the Surface Waters of the Ocean, Eos, transactions, Am. Geophys. Union, Ocean Sciences Meeting, 80 (49), 301.
- King, D.B., J.H. Butler, J.M. Lobert, S.A. Yvon-Lewis, S.A. Montzka, and J.W. Elkins, 1999, Production and Emissions of Methyl Chloride in the Surface Ocean, IUGG XXII General Assembly, A, 110.
- King, D.B., J.H. Butler, S.A. Montzka, and S.A. Yvon-Lewis, 1999, Dependence of Trace Halocarbon Saturation Anomalies on Sea-Surface Properties, Climate Monitoring and Diagnostics Laboratory Annual Meeting, Boulder, CO, May 12-13.
- <u>King, D.B.</u>, April 1, 1999 (**invited**), Ocean to Ozone: Using ocean measurements to understand stratospheric ozone, Mary Washington College, Fredericksburg, VA.
- King, D.B., S.A. Yvon-Lewis, S.A. Montzka, and J.H. Butler, 1998, Dependence of Trace Halocarbon Saturation Anomalies on Sea-Surface Properties, Eos, transactions, Am. Geophys. Union, Fall Meeting, 79 (45), 429-430.
- King, D.B., S.A. Yvon-Lewis, S.A. Montzka, and J.H. Butler, 1998, Observations of Halocarbon Disequilibria, GasEx 98 Data Workshop, Miami, FL, October 26-27.
- <u>King, D.B.</u>, E.S. Saltzman, and C. Pilinis, 1997, Removal of methyl bromide in coastal seawater: chemical and biological rates, Gordon Research Conference on Atmospheric Chemistry, Newport, RI, June 15-20.
- King, D.B., and E.S. Saltzman, 1997, Removal of methyl bromide in coastal seawater: chemical and biological rates, Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS IV), Boston, MA, June 12-14.

- <u>King, D.B.</u>, C. Pilinis, and E.S. Saltzman, 1996, Determination of the biological removal rate of methyl bromide in seawater, Eos, transactions, Am. Geophys. Union, Ocean Sciences Meeting, 76 (3), 7.
- <u>King, D.B.</u>, July 28, 1995, (**invited**), Measurement of the total loss rate of methyl bromide in seawater, Max Planck Institüt für Chemie, Mainz, Germany.
- <u>King, D.B.</u>, W. De Bruyn, M. Zheng, and E.S. Saltzman, 1995 (**invited**), Uncertainties in the diffusivity of a gas for use in the estimation of air-sea exchange, Third International Symposium on Air-Water Gas Transfer, Heidelberg, Germany, July 24-27.
- <u>King, D.B.</u>, C. Pilinis, and E.S. Saltzman, 1995, Measurement of the total degradation rate of methyl bromide in seawater, Eos, transactions, Am. Geophys. Union, Spring Meeting, 76 (17), 162.
- <u>King, D.B.</u>, and E.S. Saltzman, 1994, Measurement of the diffusion coefficient of sulfur hexafluoride in water, Eos, transactions, Am. Geophys. Union, Ocean Sciences Meeting, 75 (3), 69.
- Saltzman, E.S., P.A. Matrai, and <u>D.B. King</u>, 1994, Methyl iodide in the Eastern Pacific Ocean, , Eos, transactions, Am. Geophys. Union, Ocean Sciences Meeting, 75 (3), 97.
- Saltzman, E.S., <u>D.B. King</u>, K. Holmen, and C. Leck, 1992, Experimental determination of the diffusion coefficient of dimethylsulfide in water, Eos, transactions, Am. Geophys. Union, Fall Meeting, 73 (42), 78.