

DAVID T. ALLEN
Biographical Sketch

Dr. David Allen is the Norbert Dittich-Welch Chair in Chemical Engineering, the Director of the Center for Energy and Environmental Resources, and the co-Director of the Energy Emissions Modeling and Data Lab at the University of Texas at Austin. He is the author of seven books and over 300 papers, primarily in the areas of urban air quality, the engineering of sustainable systems, and the development of materials for environmental and engineering education. Dr. Allen has been a lead investigator for multiple air quality measurement and modeling studies, which have had a substantial impact on the direction of air quality policies. He directs the Air Quality Research Program for the State of Texas, and he was the founding Editor-in-Chief of the American Chemical Society's journal *ACS Sustainable Chemistry & Engineering*. He has developed environmental educational materials for engineering curricula and for the University's core curriculum, as well as engineering education materials for high school students. He led the development of a year-long high school engineering course, *Engineer Your World*, which is used in hundreds of high schools nationwide. The quality of his work has been recognized by the National Science Foundation, the AT&T Foundation, the American Institute of Chemical Engineers, the Association of Environmental Engineering and Science Professors, and the State of Texas; he was elected to the National Academy of Engineering in 2017. In 2020 he was recognized with the ENI Energy Transition Award, which has been referred to as the Nobel Prize in energy. He has served on a variety of governmental advisory panels and from 2012 to 2015 chaired the U.S. Environmental Protection Agency's Science Advisory Board. He has won teaching awards at the University of Texas and UCLA and the Lewis Award in Chemical Engineering Education, from the American Institute of Chemical Engineers.

Dr. Allen received his B.S. degree in Chemical Engineering, with distinction, from Cornell University in 1979. His M.S. and Ph.D. degrees in Chemical Engineering were awarded by the California Institute of Technology in 1981 and 1983. He has held visiting faculty appointments at the California Institute of Technology, the University of California, Santa Barbara, the National University of Singapore, Sichuan University, Wuhan University, and the Department of Energy.

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Academic Positions

1999 - present	Director, Center for Energy and Environmental Resources, University of Texas
1995 - present	Professor of Chemical Engineering, The University of Texas at Austin
1993 - 1995	Professor and Chair of Chemical Engineering, UCLA
1992 - 1995	Chair, Chemical Engineering, UCLA
1991 - 1992	Vice Chair, Chemical Engineering, UCLA
1988 - 1993	Associate Professor of Chemical Engineering, UCLA
1989 - 1990	Visiting Associate Professor of Chemical Engineering, California Institute of Technology
1983 - 1988	Assistant Professor of Chemical Engineering, UCLA

Service to the State of Texas

2010 – present	Director, Texas Air Quality Research Program
2001 - 2005	Chairman, Texas Council on Environmental Technology

Education

1979	B.S., with distinction, Chemical Engineering, Cornell University
1981	M.S., Chemical Engineering, California Institute of Technology
1983	Ph.D., Chemical Engineering, minor concentration in Applied Math, California Institute of Technology

Research Activities

- Air quality
- Engineering for sustainability and industrial ecology

Teaching Experience

Dr. Allen has taught courses in unit operations, fluid mechanics, heat transfer, mass transfer, process design, pollution control technology, pollution prevention, the fundamentals of air pollution, chemical kinetics, engineering applications of molecular spectroscopy, introductory engineering, industrial ecology, and technology and the environment.

Industrial Experience

Department of Energy, Pittsburgh Energy Technology Center, Summer 1985; Gulf Research and Development Company, Summers 1981, 1982; Chevron Research Company, Fall 1977, Summers 1978, 1979.

Consulting Activities

Dr. Allen has served as a consultant to dozens of companies and multiple government agencies.

Advisory Committees

National Research Council, Report Review Committee (2022-2025)
National Research Council, Committee on Offshore Science and Assessment for Ocean Energy Management (2017-2022)
National Research Council, Board on Energy and Environmental Systems, 2014-2020
Texas Emissions Reduction Program (TERP) Advisory Board, Appointed by Governor Perry (2013-2017)
U.S. Environmental Protection Agency (EPA) Science Advisory Board (2008-2015; 2021-2024)
U.S. EPA, Science Advisory Board, Chair (2012-2015)
U. S. EPA, Advisory Council on Clean Air Compliance Analysis, a Council of the Science Advisory Board, 2002-2008
Texas Council on Environmental Technology (Chair, appointed by Governor Perry, 2001-2005)
Texas Energy Coordination Council (appointed by Governor Bush), 1999- 2001
National Research Council Board on Environmental Studies and Toxicology, 1998-2004
State of Texas Waste Reduction Advisory Committee, 1997-2000
Life Cycle Assessment Advisory Group, Society of Environmental Toxicology and Chemistry, 1992-1998
Advisory Council, South Coast Air Quality Management District, 1991-1995
American Institute of Pollution Prevention (USEPA), 1989-1994
Advisory Committee, National Pollution Prevention Center, University of Michigan, 1994-1998
National Advisory Committee on Environmental Policy and Technology (U.S. EPA), 1990-1993

Editorial Service

Co-Editor, *Journal of Industrial Ecology* (published by MIT Press), 1996-2001
Associate Editor, *Industrial and Engineering Chemistry Research* (published by the American Chemical Society), 1998-2012
Founding Editor-in-Chief, *ACS Sustainable Chemistry and Engineering* (published by the American Chemical Society) 2012-present.

Honors and Awards

- 2022 Hocott Award Engineering Research Award (University of Texas Cockrell School of Engineering annual award for research)
- 2022 ExxonMobil Visiting Professor of Chemical Engineering, National University of Singapore
- 2022 Distinguished Lecturer, IIT Wanger Institute for Sustainable Energy Research
- 2022 Johansen-Crosby Lecturer, Michigan State University
- ENI Energy Transition Award 2020
- National Academy of Engineering, Peer Committee (Section 3, Chemical Engineering, 2019-2022)
- Guest Professor, Wuhan University
- Guest Professor, Sichuan University 2017-2020
- Master Lecturer, Chinese University of Hong Kong – Shenzhen (2017)
- National Academy of Engineering (elected a member in 2017)
- 2016 Air and Waste Management Association, Critical Review Keynote Lecturer
- 2016 Julian C. Smith Lecturer in Chemical Engineering, Cornell University
- 2015 Annual Lecturer, Sustainable Gas Institute, Imperial College, London
- Class of 1979 Distinguished Alumnus (Cornell University)

- 2014 Zarrow Family K-16 Teaching Innovation Award (given once every 3 years at the University of Texas)
- 2013 Indian Institute of Chemical Engineers Distinguished Speaker Award (Hetero Drugs, Professor Laddha Distinguished Speaker)
- 2013 Elected Fellow, American Chemical Society
- 2013 Walter J. Weber Jr. Distinguished Lecture for Environmental and Energy Sustainability, University of Michigan
- 2013 Roy F. Weston Distinguished Lecture, University of Wisconsin at Madison
- 2012 Elected Fellow, American Institute of Chemical Engineers
- 2011 Warren K. Lewis Award for Chemical Engineering Education, American Institute of Chemical Engineers
- 2010 ConocoPhillips Lecturer, Oklahoma State University
- 2009 Research Excellence Award, Sustainable Engineering Forum, American Institute of Chemical Engineers
- University of Dayton, von Ohain Fuels and Combustion Center, Distinguished Lecturer, December, 2009.
- Air and Waste Management Association Best Paper Award (First Place), 2009 Annual Meeting (presented to a doctoral student and research advisor for best contribution by a doctoral student)
- Joe J. King Professional Engineering Achievement Award, 2007 (highest honor given by the College of Engineering at the University of Texas, to one faculty member each year, in recognition of professional achievement and service)
- Distinguished Lecturer, Association of Environmental Engineering and Science Professors, 2007
- University of Texas Excellence in Teaching Award 2007 (one award presented annually, campus wide, by Division of Instructional Innovation and Assessment)
- Yale University/Journal of Industrial Ecology: Award for contributions to Industrial Ecology and service to the Journal of Industrial Ecology (2006)
- National Associate of the U.S. National Academies of Science and Engineering (in recognition of service to the National Research Council, lifetime appointment awarded in 2004)
- 2002 Governor's Environmental Excellence Award
- 2000 Lawrence Cecil Award, American Institute of Chemical Engineers (presented annually for contributions to environmental engineering)
- 1999 Joe King Faculty Leadership Award in Chemical Engineering (awarded annually by the chemical engineering students at the University of Texas)
- AT&T Faculty Fellow in Industrial Ecology (1993)
- Presidential Young Investigator Award (1987)
- 1986 TRW Teaching Award (presented annually to a faculty member in the School of Engineering at UCLA for excellence and innovation in teaching)
- DOE Faculty Research Participation Fellowship (1985)
- UCLA Faculty Career Development Award (1983)

Professional and Honorary Societies

American Institute of Chemical Engineers (Dr. Allen has been elected Fellow and served as Chair of the Institute for Sustainability, Director of the Environmental Division and President of the Division), American Chemical Society (elected Fellow), American

Society for Engineering Education, American Geophysical Union, Registered Professional Engineer in the States of Texas and California

Personal Data

Born in 1958, U.S. citizen, excellent health, married, two adult children

Invited Seminars

Air Products and Chemicals
American Air Liquide
Amoco Research
Arizona State University
AT&T Bell Laboratories
British Petroleum
California Institute of Technology
Carnegie Mellon University
Chevron Research Company
Chinese Univ. Hong Kong-Shenzhen
Clemson University
Cornell University
Department of Energy Pittsburgh
Energy Technology Center
Dow Chemical Company
Duke University
Eidgenossische Technische
Hochschule (ETH) Zurich
Exxon Research & Engineering Co.
Hamad Bin Khalifa Univ. (Qatar)
Hanwha Chemical Corporation
Harbin Institute of Technology
Harvard University
Illinois Institute of Technology
Johns Hopkins University
Korean Advanced Institute of
Science and Technology
Lehigh University
Michigan State University
Michigan Technological University
Mobil Research & Development Co.
National University of Singapore
New Jersey Institute of Technology
Northwestern University
PPG Industries
Ohio State University
Oklahoma State University
Pennsylvania State University
Princeton University
Purdue University
Rice University
Seoul National University
Shanghai University

Sichuan University

South Dakota School of Mines
Stanford University
Sun Oil Company
Texas A&M University
Texas A&M University, Qatar
Texas Tech University
Tec de Monterrey
UOP/Allied Signal
Universidad Autonoma de N.L.
University of Alberta
University of Arizona
University of California, Berkeley
University of California, Davis
University of California, San Diego
University of Cal., Santa Barbara
University of Cincinnati
University of Connecticut
University of Dayton
University of Delaware
University of Houston
University of Illinois Champ.-Urb.
University of Iowa
University of Kansas
University of Maryland, Balt. Cnty.
University of Michigan
University of New Mexico
University of Oklahoma
University of Pittsburgh
University of Southern California
University of Texas at Austin
University of Toledo
University of Toronto
University of Tulsa
University of Washington
University of Wisconsin
Virginia Tech
Washington University
Washington State University
Wayne State University
W. R. Grace and Company
Wuhan University
Yale University

PUBLICATIONS

Books

1. “NMR for Liquid Fossil Fuels” with L. Petrakis, *Elsevier*, 242 pp. (1986).
2. “Pollution Prevention: Homework and Design Problems for Engineering Curricula,” with N. Bakshani and K. S. Rosselot, *American Institute of Chemical Engineers*, 155 pp. (1992).
3. “Guidelines for Life Cycle Assessment: A Code of Practice,” F. Consoli, D. T. Allen, I. Boustead, J. Fava, W. Franklin, A. A. Jensen, N. deOude, R. Parrish, R. Perriman, D. Postlethwaite, B. Quay, J. Seguin and B. Vigon, SETAC, Pensacola, FL, 81 pp. (1993).
4. “Pollution Prevention for Chemical Processes,” with K. S. Rosselot, Wiley, New York, 434 pp. (1997).
5. “Public Policy Applications of Life Cycle Assessment,” D. T. Allen, F.J. Consoli, G. A. Davis, J.A. Fava, and J.L. Warren, SETAC, Pensacola, FL, 127 pp. (1997).
6. “Green Engineering: Environmentally Conscious Design of Chemical Processes,” D. T. Allen and D. Shonnard, Prentice Hall, Englewood Cliffs, 539 pp. (2001).
7. “Sustainable Engineering”, D.T. Allen and D.R. Shonnard, Prentice Hall, Upper Saddle River NJ, 223 pp. (2012).

Edited Books

1. “Intermedia Pollutant Transport: Modeling and Field Measurements,” D. T. Allen, Y. Cohen and I. R. Kaplan, eds., Plenum, (1989).

National Academies Reports

1. National Research Council, "Evaluating Vehicle Inspection and Maintenance Programs" (Report of committee chaired by R. J. Cicerone and D. T. Allen) National Academy Press (2001)
2. National Research Council, “Materials Count: The Case for Material Flows Analysis” (Report of committee of which D. T. Allen was a member) National Academy Press (2004)
3. National Research Council, “State and Federal Standards for Mobile Source Emissions” (Report of committee chaired by D. T. Allen), National Academy Press (2006)
4. National Research Council, “Energy Futures and Urban Air Pollution, Challenges for China and the United States” (Report of committee of which D. T. Allen was a member) National Academy Press (2008)

5. National Research Council, “Sustainability Concepts in Decision-Making: Tools and Approaches for the U.S. Environmental Protection Agency” (Report of committee of which D. T. Allen was a member) National Academy Press (2014)
6. National Academies of Science, Engineering and Medicine (NASEM), “Improving Characterization of Anthropogenic Methane Emissions in the United States,” (Report of committee of which D. T. Allen was a member), National Academy Press, Washington, DC, 2018.
7. National Academies of Science, Engineering and Medicine (NASEM), “Gaseous Carbon Waste Streams Utilization: Status and Research Needs,” (Report of committee of which D. T. Allen was the chair), National Academy Press, Washington, DC, 2018
8. National Academies of Science, Engineering and Medicine (NASEM), “Effectiveness and Impacts of Dust Control Measures for Owens Lake” (Report of committee of which D. T. Allen was the chair), National Academy Press, Washington, DC, 2020.
9. National Academies of Science, Engineering and Medicine (NASEM), “Chemistry of Urban Wildfires” (Report of committee of which D. T. Allen was the chair), National Academy Press, Washington, DC, 2022.

Reports of The Academy of Medicine, Engineering and Science of Texas (TAMEST)

1. The Academy of Medicine, Science and Engineering of Texas, “Environmental and Community Impacts of Shale Development in Texas (Report of task force of which D. T. Allen was a member) (2017).

U.S. Environmental Protection Agency, Science Advisory Board Reports to the Administrator (<http://yosemite.epa.gov/sab/sabproduct.nsf/WebBOARD/advisoryreports?OpenDocument>)

1. *Particulate Matter Research Centers Program Advisory Report*: An SAB Advisory Report (Report of a panel chaired by D.T. Allen), January 12, 2009. Review of EPA’s *Draft Oil Spill Research Strategy*: An SAB Advisory Report (Report of a panel chaired by D.T. Allen), September 29, 2011.
2. Review of EPA’s Draft Assessment entitled *Toxicological Review of Libby Amphibole Asbestos*: An SAB Advisory Report (Report of a panel completed while D.T. Allen was chair of SAB), January 30, 2013.
3. Review of EPA’s Draft Assessment entitled *Retrospective Cost Study of the Costs of EPA Regulations: An Interim Report of Five Case Studies*: An SAB Advisory Report (Report of a panel completed while D.T. Allen was chair of SAB), April 11, 2013.
4. Review of *Emissions-Estimating Methodologies for Broiler Animal Feeding Operations and for Lagoons and Basins at Swine and Dairy Animal Feeding Operations*: An SAB Advisory Report (Report of a panel chaired by D.T. Allen and completed while D.T. Allen was chair of SAB), April 19, 2013.

5. Review of EPA's Draft Assessment entitled *Approaches to Derive a Maximum Contaminant Level Goal for Perchlorate*: An SAB Advisory Report (Report of a panel completed while D.T. Allen was chair of SAB), May 29, 2013.
6. Report on Discussions about EPA Planned Actions in the Fall 2012 Unified (Regulatory) Agenda and their Supporting Science: An SAB letter report to the Administrator from D.T. Allen as Chair, July 26, 2013.
7. SAB Recommendations for EPA's FY2013 Scientific and Technological Achievement Awards: An SAB letter report to the Administrator from D.T. Allen as Chair, January 13, 2014.
8. Science Advisory Board (SAB) Consideration of EPA Planned Actions in the Spring 2013 Unified (Regulatory) Agenda and their Supporting Science: An SAB letter report to the Administrator from D.T. Allen as Chair, January 29, 2014.
9. Concern about the Future of the Science to Achieve Results (STAR) Fellowship Program: An SAB letter report to the Administrator from D.T. Allen as Chair, January 30, 2014.
10. Science Advice and EPA Priority Topics: An SAB letter report to the Administrator from D.T. Allen as Chair, March 7, 2014.
11. SAB Advice on *Advancing the Application of CompTox Research for EPA Chemical Assessments*: An SAB Advisory Report (Report of a panel completed while D.T. Allen was chair of SAB), May 22, 2014.
12. Science Advisory Board (SAB) Consideration of the Adequacy of the Scientific and Technical Basis of the EPA's Proposed Rule titled "Definition of Waters of the United States under the Clean Water Act", An SAB letter report to the Administrator from D.T. Allen as Chair, September 30, 2014.
13. SAB Review of the Draft EPA Report *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence*, An SAB Advisory Report (Report of a panel completed while D.T. Allen was chair of SAB), October 17, 2014.
14. Science Advisory Board (SAB) Consideration of EPA Planned Actions in the Fall 2013 Unified (Regulatory) Agenda and their Supporting Science: An SAB letter report to the Administrator from D.T. Allen as Chair, January 26, 2015.
15. Science Advisory Board (SAB) Consideration of EPA Planned Actions in the Spring 2014 Unified (Regulatory) Agenda and their Supporting Science: An SAB letter report to the Administrator from D.T. Allen as Chair, January 26, 2015.
16. SAB Review of the Draft EPA Report on Strategic Research Planning for 2016-2019: A Joint Report of the Science Advisory Board and Board of Scientific Counselors. An SAB letter report to the Administrator from D.T. Allen as Chair, January 27, 2015.

Editorials in ACS Sustainable Chemistry & Engineering (as Editor-in-Chief)

1. Allen, D. T. Welcome to ACS Sustainable Chemistry & Engineering (Editorial in inaugural issue) *ACS Sustainable Chemistry & Engineering*, 1, 1 (2013).
2. Allen, D.T., Hwang, B.-J., Licence, P., Pradeep, T., and Subramaniam, B. The Impact of ACS Sustainable Chemistry & Engineering, *ACS Sustainable Chemistry & Engineering*, 3, 1262, doi: 10.1021/acssuschemeng.5b00549 (2015).
3. Allen, D.T., Hwang, B.-J., Licence, P., Pradeep, T., and Subramaniam, B. Advancing the Use of Sustainability Metrics, *ACS Sustainable Chemistry & Engineering*, 3, 2359-2360 doi: 10.1021/acssuschemeng.5b01026 (2015).
4. Allen, D.T., Hwang, B.-J., Licence, P., Pradeep, T., Sels, B. and Subramaniam, B., and Tam, M.K.C., Introducing the Inaugural ACS Sustainable Chemistry & Engineering Lectureship Awards, *ACS Sustainable Chemistry & Engineering*, 4, 2898 doi: 10.1021/acssuschemeng.6b01118 (2016)
5. Allen, D.T., Hwang, B.-J., Licence, P., Pradeep, T., Sels, B. Subramaniam, B., Tam, M.K.C., and Williams, R.M. ACS Sustainable Chemistry & Engineering's Impact Factor Rises. *ACS Sustainable Chemistry & Engineering*, 4, 3597 doi: 10.1021/acssuschemeng.6b01380 (2016)
6. Allen, D.T. Beckham, Gong, Sneddon: First Winners of the ACS Sustainable Chemistry & Engineering Lectureship Award, *ACS Sustainable Chemistry & Engineering*, 4, 4490, doi: 10.1021/acssuschemeng.6b01992 (2016).
7. Anastas, P.T. and Allen, D.T. Twenty-Five Years of Green Chemistry and Green Engineering: The End of the Beginning, *ACS Sustainable Chemistry & Engineering*, 4, 5820, doi: 10.1021/acssuschemeng.6b02484 (2016).
8. Allen, D.T., Carrier, D.J., Hwang, B.-J., Licence, P., Moores, A., Pradeep, T., Sels, B. Subramaniam, B., Tam, M.K.C., and Williams, R.M. Four Years of ACS Sustainable Chemistry & Engineering: Reflections and New Developments, *ACS Sustainable Chemistry & Engineering*, 5, 1-2, doi: 10.1021/acssuschemeng.6b03062 (2017)
9. Allen, D.T., The Global Reach of ACS Sustainable Chemistry & Engineering and Welcoming Lina Zhang, *ACS Sustainable Chemistry & Engineering*, 5, 2034, doi: 10.1021/acssuschemeng.7b00479 (2017).
10. Allen, D.T., Carrier, D.J., Hwang, B.-J., Licence, P., Moores, A., Pradeep, T., Sels, B., Subramaniam, B., Tam, M.K.C., Zhang, L., and Williams, R. ACS Sustainable Chemistry & Engineering's Impact Factor Continues to Rise, *ACS Sustainable Chemistry & Engineering*, 5, 5617, doi: 10.1021/acssuschemeng.7b01938 (2017).
11. Allen, D.T. Luque, Yan, You: 2018 Winners of the ACS Sustainable Chemistry & Engineering Lectureship Awards, *ACS Sustainable Chemistry & Engineering*, 5, 7450, doi: 10.1021/acssuschemeng.7b02826 (2017).
12. Allen, D.T., Carrier, D.J., Gong, J., Hwang, B.-J., Licence, P., Moores, A., Pradeep, T., Sels, B., Subramaniam, B., Tam, M.K.C., Zhang, L., and Williams, R. Advancing the Use of Sustainability Metrics in ACS Sustainable Chemistry & Engineering, *ACS Sustainable Chemistry & Engineering*, 6, 1 (2018)

13. Subramaniam, B. and Allen, D.T., ACS Sustainable Chemistry & Engineering Virtual Special Issue on Promoting the Development and Use of Quantitative Sustainability Metrics, 6, 4422 (2018).
14. Allen, D.T., ACS Sustainable Chemistry & Engineering Appoints New Associate Editors Gathergood, Gong, Meier, and Qiu, *ACS Sustainable Chemistry & Engineering*, 6, 8063 (2018).
15. Allen, D.T., Dauenhauer, Vignolini, and Wu: 2019 Winners of the ACS Sustainable Chemistry & Engineering Lectureship Awards, *ACS Sustainable Chemistry & Engineering*, 6, 11144, doi: 10.1021/acssuschemeng.8b03790 (2018).
16. Allen, D.T., Carrier, D.J., Gong, J., Gathergood, N., Han, H., Hwang, B.-J., Licence, P., Meier, M., Moores, A., Pradeep, T., Qiu, J., Sels, B., Subramaniam, B., Tam, M.K.C., Zhang, L., and Williams, R., Why Wasn't My ACS Sustainable Chemistry & Engineering Manuscript Sent Out for Review?, *ACS Sustainable Chemistry & Engineering*, 7, 1-2 (2019)
17. Allen, D.T., Baltrusaitis, Barta, and Wang: 2020 Winners of the ACS Sustainable Chemistry & Engineering Lectureship Awards, *ACS Sustainable Chemistry & Engineering*, 7, 18197–18197 (2019).
18. Allen, D.T., Carrier, D.J., Chen, J., Gathergood, N., Gong, J., Han, H., Hii, K.K., Hwang, B.-J., Licence, P., Meier, M., Moores, A., Nakamura, R., Pradeep, T., Sels, B., Subramaniam, B., Tam, M.K.C., Zhang, L., Zhuang, L., Williams, R., Anastas, P.T., The Evolution of ACS Sustainable Chemistry & Engineering, *ACS Sustainable Chemistry & Engineering*, 8, 1 (2020).
19. Tam, M.K.C., Meier, M.A.R., Zhang, L. Allen, D.T., Licence, P., Subramaniam, B., Expectations for Papers on Sustainable Materials in ACS Sustainable Chemistry & Engineering, *ACS Sustainable Chemistry & Engineering*, 8, 1703-1704, (2020).
20. Han, H., Gong, J., Hwang, B.-J., Nakamura, R., Zhuang, L., Allen, D.T., Licence, P., Subramaniam, B., Expectations for Papers on Photochemistry, Photoelectrochemistry, and Electrochemistry for Energy Conversion and Storage in ACS Sustainable Chemistry & Engineering, *ACS Sustainable Chemistry & Engineering*, 8, 3038-3039, (2020).
21. Hii, K.K., Moores, A., Pradeep, T., Sels, B., Allen, D.T., Licence, P., Subramaniam, B., Expectations for Manuscripts on Catalysis in ACS Sustainable Chemistry & Engineering, *ACS Sustainable Chemistry & Engineering*, 8, 4995-4996 (2020).
22. Allen, D.T., An Earth Day Message: Earthrise, *ACS Sustainable Chemistry & Engineering*, 8, 5815-5816, (2020).
23. Burrows, C.J., Wang, S., Kim, H.J., Meyer, G.J., Schanze, K., Lee, T.R., Lutkenhaus, J.L., Kaplan, D., Jones, C., Bertozzi, C., Kiessling, L., Mulcahy, M.B., Lindsley, C.W., Finn, M.G., Blum, J.D., Kamat, P., Aldrich, C.C., Rowan, S., Liu, B., Liotta, D., Weiss, P.S., Zhang, D., Ganesh, K.N., Sexton, P., Atwater, H.A., Gooding, J.J., Allen, D.T., Voigt, C.A., Sweedler, J., Schepartz, A., Rotello, V., Lecommandoux, S., Sturla, S.J., Hammes-Schiffer, S., Buriak, J., Steed, J.W., Wu, H., Zimmerman, J., Brooks, B., Savage, P. Tolman, W., Hofmann, T.F., Brennecke, J.F., Holme, T.A., Merz Jr., K.M., Scuseria, G., Jorgensen, W., Georg, G.I., Wang, S., Proteau, P., Yates III, J.R., Stang, P., Walker, G.C., Hillmyer, M., Taylor, L.S., Odom, T.W., Carreira, E., Rossen, K., Chirik, P., Miller, S.J., McCoy, A., Shea, J.-E., Zanni, M., Murphy, C., Scholes, G., Loo, J.A.,

Update to Our Reader, Reviewer, and Author Communities—April 2020, *Journal of the American Chemical Society*, 142, 18, 8059-8060 (2020).

24. Pradeep, T., Allen, D.T., Licence, P., Subramaniam, B., Expectations for Manuscripts with Nanoscience and Nanotechnology Elements in ACS Sustainable Chemistry & Engineering, *ACS Sustainable Chemistry & Engineering*, 8, 7751-7752 (2020).
25. Allen, D.T., Carrier, D.J., Chen, J., Gathergood, N., Gong, J., Han, H., Hii, K.K., Hwang, B.-J., Licence, P., Meier, M., Moores, A., Nakamura, R., Pradeep, T., Sels, B., Subramaniam, B., Tam, M.K.C., Zhang, L., Zhuang, L., Williams, R.M., The Changing Structure of Scientific Communication: Expanding the Nature of Letters Submissions to ACS Sustainable Chemistry & Engineering, *ACS Sustainable Chemistry & Engineering*, 8, 8469-8470, (2020).
26. Burrows, C.J., Huang, J., Wang, S., Kim, H.J., Meyer, G.J., Schanze, K., Lee, T.R., Lutkenhaus, J.L., Kaplan, D., Jones, C., Bertozzi, C., Kiessling, L., Mulcahy, M.B., Lindsley, C.W., Finn, M.G., Blum, J.D., Kamat, P., Choi, W., Snyder, S., Aldrich, C.C., Rowan, S., Liu, B., Liotta, D., Weiss, P.S., Zhang, D., Ganesh, K.N., Atwater, H.A., Gooding, J.J., Allen, D.T., Voigt, C.A., Sweedler, J., Schepartz, A., Rotello, V., Lecommandoux, S., Sturla, S.J., Hammes-Schiffer, S., Buriak, J., Steed, J.W., Wu, H., Zimmerman, J., Brooks, B., Savage, P., Tolman, W., Hofmann, T.F., Brennecke, J.F., Holme, T.A., Merz, K.M. Jr., Scuseria, G., Jorgensen, W., Georg, G.I., Wang, S., Proteau, P., Yates, J.R. III, Stang, P., Walker, G.C., Hillmyer, M., Taylor, L.S., Odom, T.W., Carreira, E., Rossen, K., Chirik, P., Miller, S.J., Shea, J.-E., McCoy, A., Zanni, M., Hartland, G., Scholes, G., Loo, J.A., Milne, J., Tegen, S.B., Kulp, D.T. and Laskin, J., Confronting Racism in Chemistry Journals, *Accounts of Chemical Research*, doi: 10.1021/acs.accounts.0c00383 (2020).
27. Allen, D.T., Chen, J., Licence, P., Subramaniam, B., Expectations for Manuscripts on Industrial Ecology in ACS Sustainable Chemistry & Engineering, *ACS Sustainable Chemistry & Engineering*, 8, 9599-9600, (2020).
28. Carrier, D.J., Allen, D.T., Gathergood, N., Han, H., Licence, P., Meier, M.R., Pradeep, T., Sels, B., Subramaniam, B., Tam, M.K.C., Zhang, L., Expectations for Manuscripts on Biomass Feedstocks and Processing in ACS Sustainable Chemistry & Engineering, *ACS Sustainable Chemistry & Engineering*, 8, 11031-11032, (2020).
29. Allen, D.T., Gathergood, N., Licence, P., Subramaniam, B., Expectations for Manuscripts Contributing to the Field of Solvents in ACS Sustainable Chemistry & Engineering, *ACS Sustainable Chemistry & Engineering*, 8, 14627-14629 (2020).
30. Allen, D.T., Carrier, D.J., Chen, J., Gathergood, N., Gong, J., Han, H., Hii, K.K., Hwang, B.-J., Licence, P., Meier, M., Moores, A., Nakamura, R., Pradeep, T., Sels, B., Subramaniam, B., Tam, M.K.C., L. Zhang, Zhuang, L., Williams, R.M., Expectations for Manuscripts in ACS Sustainable Chemistry & Engineering: Scope Summary and Call for Creativity, *ACS Sustainable Chemistry & Engineering*, 8, 16046-16047 (2020).
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313. Chen, Q., Kimura, Y., and Allen, D.T., Determining times to detection for large methane release events using continuously operating methane sensing systems at simulated oil and gas production sites, submitted to *Environmental Science & Technology Letters*, preprint at ChemRxiv, doi: 10.26434/chemrxiv-2023-p8lfk (2023).
314. Schissel, C., Allen, D. and Dieter, H., Methods for spatial extrapolation of methane measurements in constructing regional estimates from sample populations, ChemRxiv, doi: 10.26434/chemrxiv-2023-zcqnq-v2 (2023).
315. Allen, D.T., Ravikumar, A. and Tullos, E., The Scientific Challenges of Monitoring, Measuring, Reporting and Verifying Greenhouse Gas Emissions from Natural Gas Systems, submitted to *ACS Sustainable Resource Management* (2023).
316. Huang, L., Stokes, S., Chen, Q., Cardoso-Saldaña, F.J., Allen, D.T., High spatial and temporal resolution simulations of methane column loadings due to routine emissions and emission events in oil and gas regions, ChemRxiv, doi: 10.26434/chemrxiv-2023-x9m80 (2023)

PUBLISHED PROCEEDINGS AND SELECTED CONFERENCE PRESENTATIONS

1. Allen, D. T. and G. R. Gavalas, "Model Compound Studies of Thermal Reactions Related to Coal Liquefaction," presented at the AIChE Annual Meeting, Los Angeles, November (1982).
2. Allen, D. T., L. Petrakis, D. W. Grandy and G. R. Gavalas, "Functional Group Analysis of Coal Liquids," ACS Division of Petroleum Chemistry Preprints, 28(5), 1346 (1983).
3. Grandy, D. W., K. M. Jeong, L. Petrakis and D. T. Allen, "Comparative Structural Profiles of Heavy Bitumens by a Novel Functional Group Analysis," International Symposium on the Characterization of Heavy Oils, Lyon, France, June (1984). (Proceedings published by Technip.)
4. Allen, D. T., "Functional Group Based Characterization and Property Estimation Applied to Petroleum Residuals," AIChE Annual Meeting, San Francisco, November (1984).
5. Johnson, C. E. and D. T. Allen, "Flow Fields Downstream of the Starr Edwards Aortic Heart Valve: Theoretical Modeling and Experimental Measurements," AIChE Annual Meeting, San Francisco, November (1984).
6. Allen, D. T., "NMR Characterizations and Property Estimation in Heavy Oils," ACS Division of Petroleum Chemistry Preprints, 30(2), 270 (1985).
7. Allen, D. T., "Property Estimation Using Structural Characterizations: Heat Capacities of Coal Liquids," 40th Annual Calorimetry Conference, Asilomar, California, August (1985).
8. Allen, D. T., Invited Lecture, Fourth International Conference on Fluid Properties and Phase Equilibria for Chemical Process Design, Helsingor, Denmark, May (1986).
9. Burke, S., M. Dangler, S. V. Hering, D. T. Allen, "A Novel FTIR Method for Identifying Functional Groups in Size Segregated Aerosols," Poster presented at the Advances in Air Sampling Symposium, American Conference of Governmental Industrial Hygienists, Inc., Asilomar, February (1987).
10. Parnas, R.S. and D. T. Allen, "Compound Class Modeling of Thermal Hydropyrolysis," Poster at the Engineering Foundation Conference on Chemical Reaction Engineering, Santa Barbara, California, March (1987).
11. Liguras, D. L. and D. T. Allen, "Interfacing Structural Characterizations and Kinetic Models: A Case Study Using FCC," Poster at the Engineering Foundation Conference on Chemical Reaction Engineering, Santa Barbara, California, March (1987).
12. Dangler, M. C., S. R. Burke, S. V. Hering and D. T. Allen, "Direct FTIR Analysis of Size Segregated Atmospheric Aerosols," American Association for Aerosol Research, Seattle, September (1987).
13. Dangler, M. C., S. R. Burke, S. V. Hering, and D. T. Allen, "Direct FTIR Analysis of Size Segregated Aerosols: Results from the Carbonaceous Species Intercomparison Study," Third International Conference on Carbonaceous Particles in the Atmosphere, Berkeley, California, October (1987).

14. Parnas, R. S. and D. T. Allen, "Compound Class Modeling of Hydropyrolysis," presented at the AIChE Annual Meeting, New York, November (1987).
15. Hartounian, H. and D. T. Allen, "NMR Characterization and Prediction of Coal Liquid Properties," Midwest Thermodynamics Symposium, Lake Geneva, WI, May (1988).
16. Liguras, D. K. and D. T. Allen, "A Lumped Kinetic Model for Catalytic Cracking Based on Pure Compound Reactions," CONFAB '88, Silver Creek, CO, August (1988).
17. Hagh, B. and D. T. Allen, "Catalytic Hydroprocessing of Chlorinated Organics," AIChE National Meeting, Denver, CO, August (1988).
18. Liguras, D. K. and D. T. Allen, "A Semicontinuous Kinetic Model of Hydropyrolysis," AIChE Annual Meeting, Washington, D.C., November (1988).
19. Hagh, B. and D. T. Allen, "Catalytic Hydroprocessing of Chlorinated Organics for Source Reduction in Agricultural Chemical Manufacturing," AIChE Annual Meeting, Washington, D.C., November (1988).
20. Hering, S. V., D. T. Allen and E. C. Ellis, "A Direct FTIR Analysis of Size-Segregated Atmospheric Aerosols," at the International Conference on Global and Regional Environmental Atmospheric Chemistry, Beijing, China, May 3-10 (1989).
21. Allen, D. T. and S. V. Hering, "Size Distributions of Aerosol Sulfate, Nitrate, Carbonyl and Aliphatic Carbon During the SCAQS Period," Air Pollution Control Association Meeting, Anaheim, CA, June (1989).
22. Pettit, D. R. and D. T. Allen, "Unit Operations for Gas-Liquid Mass Transfer in Reduced Gravity Environments," Lunar Bases Proceedings, Lunar and Planetary Institute, (1989).
23. Palen, E., T. Pickle and D. T. Allen, "Size Distributions of Organic and Inorganic Functional Groups in Los Angeles Aerosol," American Association for Aerosol Research, Reno, Nevada, October (1989).
24. Hagh, B. F. and D. T. Allen, "Catalytic Hydroprocessing of Multiply Chlorinated Benzenes," AIChE Annual Meeting, San Francisco, CA, November (1989).
25. Cohen, Y. and D. T. Allen, "An Integrated Approach to Pollution Prevention Research," AIChE Conference on Pollution Prevention, Washington, D.C. (1989).
26. Allen, D. T., "Structural Models of Catalytic Cracking Chemistry," Mobil Workshop on Chemical Reactions in Complex Systems, Paulsboro, NJ, March (1990).
27. Allen, D. T., D. T. Mylonas, E. J. Palen and S. E. Pratsinis, "Principal Component Analysis of Organic Functional Groups in Ambient Los Angeles Aerosol," American Association for Aerosol Research Annual Meeting, Philadelphia, PA, June (1990).
28. Palen, E. J., D. T. Allen, R. C. Flagen and J. H. Seinfeld, "Smog Chamber Studies of Biogenic Hydrocarbons: Characterization of Aerosol Products," American Association for Aerosol Research Annual Meeting, Philadelphia, PA, June (1990).
29. Hagh, B. F., S. Chon and D. T. Allen, "Catalytic Hydroprocessing of Chlorinated Benzenes," International Symposium on Chemical Reaction Engineering (ISCRE 11), Toronto, Canada, July (1990).

30. Hagh, B. F., S. Chon and D. T. Allen, "Design of a Commercial Reactor for Catalytic Hydroprocessing of Chlorinated Benzenes," American Institute of Chemical Engineers, Summer National Meeting, San Diego, CA (1990).
31. Behmanesh, N., V. Manousiouthakis and D. T. Allen, "Modeling and Optimizing the Performance of Hazardous Waste Incinerators," Poster, American Institute of Chemical Engineers Annual Meeting, Chicago, November (1990).
32. Allen, D. T., P. E. Rosen, E. C. Harrison and E. Rambod, "In Vitro Backflow Studies of the St. Jude Aortic Valve," American Institute of Chemical Engineers Annual Meeting, Chicago, November (1990).
33. Allen, D. T., "Structural Models of Catalytic Cracking Chemistry," American Chemical Society, Atlanta, GA, April (1991).
34. Allen, D. T., "Waste Reduction," Invited presentation, Materials Research Society, Anaheim, CA, April (1991).
35. Allen, D. T., Panel discussion on Source Reduction, Society for the Advancement of Materials and Process Engineering, San Diego, CA, May (1991).
36. Cohen, Y., and D. T. Allen, "An Integrated Approach to Process Waste Minimization Research," Air and Waste Management Association Meeting Paper 91-43.5, Vancouver, BC, June (1991).
37. Cohen, Y., D. T. Allen, R. E. Clay, K. Rosselot and W. Tsai, "Multimedia Assessment of Emissions from the Amoco Corporation Yorktown Refinery," Air and Waste Management Association Meeting Paper 91-84.6, Vancouver, BC, June (1991).
38. Allen, D. T., "Synthesizing the Databases: Developing a Model of the Waste Processing Industry," American Institute of Chemical Engineers, Summer National Meeting, Pittsburgh, PA, August (1991).
39. Behmanesh, N. and D. T. Allen, "Metals and Halogens in Incinerated Waste Streams: Identifying Targets for Reduction," American Institute of Chemical Engineers, Summer National Meeting, Pittsburgh, PA, August (1991).
40. Rosselot, K., Y. Cohen and D. T. Allen, "Targeting Wastes Based on Exposure: A Multimedia Exposure Assessment of Emissions Reported Through the Toxic Release Inventory," American Institute of Chemical Engineers, Summer National Meeting, Pittsburgh, PA, August (1991).
41. Palen, E. J. and D. T. Allen, "Infrared Spectroscopy of Size Resolved Fine Aerosol: Method Development and Field Calibration," American Association for Aerosol Research, Traverse City, MI, October (1991).
42. Allen, D. T., E. J. Palen, S. Pandis, S. E. Paulson and M. A. Shaw, "Chemical Composition of Aerosol Formed in the Photooxidation of Isoprene and β -Pinene," American Institute of Chemical Engineers, Annual Meeting, Los Angeles, CA, November (1991).
43. Chon, S. and D. T. Allen, "Catalytic Hydroprocessing of Chlorophenols," American Institute of Chemical Engineers, Annual Meeting, Los Angeles, CA, November (1991).
44. Allen, D. T., E. J. Palen, M. I. Haimov, S. V. Hering and J. R. Young, "Fourier Transform Infrared Spectroscopy of Aerosol Collected in a Low Pressure Impactor

- (LPI/FTIR): Method Development and Field Calibration," American Association for Aerosol Research Annual Meeting, San Francisco, CA, October (1992).
45. Eusebi, A., D. T. Allen and D. Grosjean, "LPI-FTIR Signatures of Secondary Aerosol: Smog Chamber and Field Data," American Association for Aerosol Research Annual Meeting, San Francisco, CA, October (1992).
 46. Nuzzolo, J., D. T. Allen, E. J. Palen and R. F. Pueschel, "Infrared Spectroscopy of Stratospheric Aerosol," American Association for Aerosol Research Annual Meeting, San Francisco, CA, October (1992).
 47. Allen, D. T., V. Jalapathy and W. Whiting, "An Equation of State for Atmospheric Organic Aerosol," American Institute of Chemical Engineers Annual Meeting, Miami, FL, November (1992).
 48. Eusebi, A. and D. T. Allen, "Formation Pathways for Secondary Atmospheric Aerosol: Smog Chamber and Field Data," American Institute of Chemical Engineers Annual Meeting, Miami, FL, November (1992).
 49. Allen, D. T. and D. Kim, "Catalytic Hydroprocessing of Chlorinated Benzenes, Chlorinated Phenols and Chlorinated Pyridines," American Institute of Chemical Engineers Annual Meeting, Miami, FL, November (1992).
 50. Allen, D. T., "Pollution Prevention in Engineering Education," Keynote address at Canadian Chemical Engineering Conference, Ottawa, Ontario, October (1993).
 51. Allen, D. T., "Loadings, Size Distributions and Sources of Organic Compound Classes in Los Angeles Aerosol," Colloquium on Particulate Air Pollution and Human Mortality and Morbidity; Beckman Center of the National Academy of Sciences, Irvine, CA, January (1994).
 52. Allen, D. T., "Pollution Prevention at the Macro Scale: Life Cycle Analyses and Industrial Ecology," Invited Plenary Talk at the Annual Gulf Coast Environmental Conference, Lamar University, Beaumont, TX, March (1994).
 53. Allen, D. T., "Pollution Prevention: Homework and Design Problems for Engineering Curricula," AIChE National Meeting Denver, CO, August (1994).
 54. Eusebi, A. A. and D. T. Allen, "Aerosol Phase Products from the Atmospheric Reactions of 1-Octene," Fifth International Conference on Carbonaceous Particles in the Atmosphere, Berkeley, CA, August (1994).
 55. Eusebi, A. A., D. T. Allen and K. A. Prouty, "Aerosol Phase Products from the Atmospheric Reactions of Anthropogenic and Biogenic Hydrocarbons," Fourth International Aerosol Conference, UCLA, September (1994).
 56. Dekermenjian, M., D. T. Allen, R. Atkinson and J. Arey, "FTIR Analysis of Aerosol Formed in the Photooxidation of Naphthalene," Fourth International Aerosol Conference, UCLA, September (1994).
 57. Eusebi, A., D. T. Allen, A.J. Holes, "Composition of Aerosol Generated in the Photooxidation of 1,3,5-Trimethylbenzene," American Association for Aerosol Research, Pittsburgh, Pa., October (1995).

58. Dekermenjian, M., D.T. Allen, R. Atkinson and J. Arey, "FTIR Analysis of Aerosol Formed in the Photo oxidation of a series of Sesquiterpenes," American Association for Aerosol Research, Pittsburgh, PA., October (1995).
59. Allen, D. T., "Wastes as Raw Materials," American Institute of Chemical Engineers Annual Meeting, Miami, November (1995).
60. Kim, D. I. and D. T. Allen, "Thermal and Catalytic Depolymerization of PVC," American Institute of Chemical Engineers Annual Meeting, Miami, November (1995).
61. Allen, D. T., "Catalytic Hydroprocessing of Chlorinated Aromatics, Aliphatics, and Polymeric Materials," World Congress of Chemical Engineering, San Diego, July (1996).
62. Allen, D. T., "Pollution Prevention at the Macro-Scale: Flows of Wastes, Industrial Ecology and Life Cycle Assessment," World Congress of Chemical Engineering, San Diego, July (1996).
63. Allen, D. T., "Pollution Prevention: Engineering Design at Macro-, Meso- and Micro-Scales," Invited Presentation, Korean Society for Clean Technology, Seoul, Korea, September (1996).
64. Allen, D. T., "Pollution Prevention for Chemical Processes," American Institute of Chemical Engineers Annual Meeting, Chicago, November, (1996).
65. Allen, D. T., "Assessing the Life Cycle Environmental Impacts of Materials: A Case Study Comparing Alternative Electric Vehicle Batteries," American Chemical Society Green Chemistry and Engineering Conference, Washington, D.C., June (1997).
66. Allen, D. T., "Case Studies in Industrial Ecology," Lucent Foundation Symposium on Industrial Ecology, Bell Labs, Murray Hill, NJ, June (1997).
67. Allen, D. T., "Industrial Environmental Performance Metrics," National Academy of Engineering Workgroup on Industrial Environmental Performance Metrics, January (1998).
68. Allen, D. T. and S. E. Keckler, "Design Tools for Industrial Symbiosis," American Institute of Chemical Engineers, Spring National Meeting, New Orleans, March (1998).
69. Nobel, C. E., S. E. Keckler and D. T. Allen, "Using Linear Programming and Geographical Information Systems (GIS) to Model Material Reuse," Annual Meeting of Air and Waste Management Association, San Diego, June (1998).
70. Nobel, C. E. and D. T. Allen, "A Model for Industrial Water Reuse: A Geographic Information System Approach to Industrial Ecology," Gordon Conference on Industrial Ecology, Colby Sawyer College, New Hampshire, June (1998).
71. Meyer, R. J., D. I. Kim D. T. Allen and J.H. Jo, Catalytic Hydrodechlorination of 1,3-Dichloropropene, Poster presented at 15th International Symposium on Chemical Reaction Engineering, Newport Beach, CA, September (1998).
72. Wittig, A. E. and D. T. Allen, "Uncertainties in Hydrocarbon Source Allocations Determined using the Chemical Mass Balance Tool: A Case Study Using Houston Data," Air and Waste Management Association Symposium on Measurement of Toxic and Related Air Pollutants, Cary NC, September (1998).
73. Allen, D. T., "Fourier Transform Infrared Microscopy of Size Segregated Aerosol," American Institute of Chemical Engineers, Annual Meeting, Miami, November (1998).

74. Allen, D. T. and R. J. Meyer, "Catalytic Hydroprocessing of Chlorinated Organics," American Institute of Chemical Engineers, Annual Meeting, Miami, November (1998).
75. Russell, M. W. and D. T. Allen, "The Significance of Averaging Period on the Effectiveness of NO_x Control Strategies for Ground Level Ozone in Central Texas," Air and Waste Management Association, Paper 99-604, St. Louis, June (1999).
76. Wiedinmyer, C. and D. T. Allen, "Isoprene Emissions and Concentrations in Central Texas," Air and Waste Management Association, Paper 99-236, St. Louis, June (1999).
77. Wiedinmyer, C. and D. T. Allen, "Development of a Land Cover Database for a Biogenic Emissions Inventory in Central Texas," Air and Waste Management Association, Paper 99-233, St. Louis, June (1999).
78. Tanaka, P. L., S. Oldfield, and D.T. Allen, "Ozone formation in coastal urban atmospheres: The role of anthropogenic sources of chlorine," U.S./German Ozone/Fine Particulate Science and Environmental Chamber Workshop, Riverside, CA, October (1999).
79. Nobel, C. and D. T. Allen, "Optimization of NO_x Emission Trading to Minimize Ozone Production," American Institute of Chemical Engineers, Spring Meeting, Atlanta, March (2000).
80. Allen, D. T, Cecil Award Lecture, "Case Studies in Industrial Ecology: Analysis of Material and Energy Flows," American Institute of Chemical Engineers, Spring Meeting, Atlanta, March (2000).
81. Nobel, C. and D. T. Allen, "Design of NO_x Cap and Trade Programs Incorporating Spatial and Temporal Variability in Ozone Productivity," Air and Waste Management Association Annual Meeting, Session EI-2d, Salt Lake City, Utah, June (2000).
82. Tanaka, P. L., S. Oldfield, J. D. Neece, C. B. Mullins and D. T. Allen, "The Role of Anthropogenic Sources of Chlorine in Promoting Urban Ozone Formation," Air and Waste Management Association Annual Meeting, Session AB-2d, Salt Lake City, Utah, June (2000).
83. McDonald-Buller, E. C. and D. T. Allen, "Ambient Air Quality Studies at the University Level," Society of Women Engineers National Conference, Washington, D.C., June (2000).
84. Russell, M. M., E. C. McDonald-Buller and D. T. Allen, "The Significance of Averaging Period for Ozone Concentrations on the Effectiveness of Ozone Control Strategies," American Institute of Chemical Engineers, Spring National Meeting, Houston, April (2001).
85. McDonald-Buller, E. C., D. T. Allen, Y. Kimura, A. A. Eusebi and M. M. Russell, "The Impact of Regional Transport on Ozone Concentrations in Texas Cities," American Institute of Chemical Engineers, Spring National Meeting, Houston, April (2001).
86. Nobel, C., E. C. McDonald-Buller, Y. Kimura and D. T. Allen, "Accounting for Spatial Variation of Ozone Productivity in NO_x Emission Trading," American Institute of Chemical Engineers, Spring National Meeting, Houston, April (2001).
87. Nowlin, A. C., G. T. Rochelle, D. T. Allen and E. C. McDonald-Buller, "Temporal Control Strategies for Stationary NO_x Sources in Eastern Texas," American Institute of Chemical Engineers, Spring National Meeting, Houston, April (2001).

88. Fraser, M. P. and D. T. Allen, "Characterization of Particulate Matter Emissions from Motor Vehicles," American Institute of Chemical Engineers, Spring National Meeting, Houston, April (2001).
89. Fraser, M. P. and D. T. Allen, "The Gulf Coast Aerosol Research and Characterization Study: An Overview," American Institute of Chemical Engineers, Spring National Meeting, Houston, April (2001).
90. Wiedinmyer, C., S. Friedfeld, M. P. Fraser and D. T. Allen, "Biogenic Emissions in Texas: Comparison of Emission Inventories and Field Measurements," American Institute of Chemical Engineers, Spring National Meeting, Houston, April (2001).
91. Dechapanya, W. and D. T. Allen, "Chemical Mechanisms for Organic Gas to Particle Conversion Processes," American Institute of Chemical Engineers, Spring National Meeting, Houston, April (2001).
92. Tanaka, P. L., D. D. Riemer, C. B. Mullins and D. T. Allen, "The Role of Anthropogenic Chlorine Emissions on Ozone Formation in Southeast Texas," American Institute of Chemical Engineers, Spring National Meeting, Houston, April (2001).
93. Allen, D. T., "The Texas Air Quality Study: State of the Science of Air Quality in Texas and Implications for Air Quality Policy," American Institute of Chemical Engineers, Spring National Meeting, Houston, April (2001).
94. Sarwar, M., R. L. Corsi, Y. Kimura and D. T. Allen, "Hydroxyl Radicals in Indoor Environments," Air and Waste Management Association (AWMA), Annual Meeting, Orlando, Florida June (2001).
95. Allen, D. T., D. S. Shonnard and S. Austin, "Teaching Green Engineering: Curricular Materials and Software," IUPAC CHEMRAWN XIV, Boulder, CO, June (2001).
96. Allen, D. T., "Regional Transport of Ozone in Texas," MIT Symposium on "Exporting and Importing Air Pollution," Endicott, MA, July (2001).
97. Allen, D. T., "Teaching Green Engineering, Keynote address at 2001 Green Engineering Conference, Roanoke, VA, July (2001).
98. Allen, D. T., M. P. Fraser and M. M. Russell, "Fine Particulate Matter Measurements at the Houston PM - Supersite," American Chemical Society National Meeting, Chicago, IL, August (2001).
99. Reimer, D. D., E. C. Apel, J. Orlando, P. L. Tanaka, D. T. Allen, and J. Neece, "Chlorine is an Oxidant in Houston Texas," The 82nd Annual Meeting of the American Meteorological Society (AMS) - Fourth Conference on Atmospheric Chemistry," Orlando, Florida, January (2002).
100. Allen, D. T. and E. McDonald-Buller, "Accounting for Variability in Ozone Productivity in NO_x Emission Trading, 5th Electric Utilities Environmental Conference, Tucson, Arizona, January (2002).
101. Allen, D. T., "Green Engineering: Environmentally Conscious Design of Chemical Processes," invited plenary presentation, International Chemical Engineering Congress, Monterrey, Mexico, February (2002).

102. Allen, D. T. and M. P. Fraser, "The Houston Fine Particulate Matter Supersite," Coordinating Research Council Air Toxics Modeling Workshop, Houston, February (2002).
103. Allen, D. T., "Urban Fine Particulate Matter in Texas: Modeling Physical and Chemical Processes and Resolving Sources," University of Texas, School of Public Health, March (2002).
104. Allen, D. T., "The Texas Air Quality Study: Implications for Air Quality Policy," NARSTO Executive Committee Meeting, White House Conference Center, Washington, D.C., April (2002).
105. Allen, D. T., "The Texas Air Quality Study: State of the Science of Ozone and Particulate Matter Formation in Texas and Implications for Air Quality Policy," invited presentation, American Geophysical Union, 2002 Spring National Meeting, Washington, D.C., May (2002).
106. Allen, D. T. and M. M. Russell, "Fine Particulate Matter Measurements during the Houston Fine Particulate Matter Supersite Program," American Geophysical Union, 2002 Spring National Meeting, Washington, D.C., May (2002).
107. Tanaka, P. L., E. McDonald-Buller, S. Chang, C. B. Mullens, and D. T. Allen, "Enhanced aging of urban air exhibited when chlorine is present," American Geophysical Union, 2002 Spring National Meeting, Washington, D.C., May (2002).
108. Sarwar, M., R. Corsi, D. Allen, and C. Weschler, "Production and Levels of Selected Indoor Radicals: A Modeling Assessment," 9th International Conference on Indoor Air Quality and Climate, Monterey, July (2002).
109. Sarwar, M., R. Corsi, D. Allen, and C. Weschler, "The Significance of Secondary Organic Aerosol Formation and Growth in Buildings: Experimental and Computational Evidence," 9th International Conference on Indoor Air Quality and Climate, Monterey, July (2002).
110. Russell, M. M., G. R. McGaughey, and D. T. Allen, "Fine Particulate Matter Measurements in Texas," American Association for Aerosol Research Annual Meeting, Charlotte, NC, October (2002).
111. Klouda, G. A., C. W. Lewis, D. T. Allen, K. Lemire, and D. C. Stiles, "TexAQS-2000 14C Source Attribution of Ambient PM_{2.5}," American Association for Aerosol Research Annual Meeting, Charlotte, NC, October (2002).
112. Laurent, J-P. and D. T. Allen, "Infrared Spectroscopy of Size Resolved Aerosol Collected During the Houston Supersite Field Program," American Association for Aerosol Research Annual Meeting, Charlotte, NC, October (2002).
113. Vizuete, W., V. Junquera, and D. T. Allen, "Biogenic Secondary Organic Aerosol Formation in Southeast Texas," American Association for Aerosol Research Annual Meeting, Charlotte, NC, October (2002).
114. Tanaka, P. L., D. T. Allen, and C. B. Mullins, "Chlorine-Enhanced Ozone Formation in Houston, TX," American Institute of Chemical Engineers Annual Meeting, Indianapolis, IN, November (2002).

115. Shonnard, D. R., D. T. Allen, and R. P. Hesketh, "Sustainability and Green Engineering in the Chemical Engineering Curriculum," American Institute of Chemical Engineers Annual Meeting, Indianapolis, IN, November (2002).
116. Allen, D. T. and T. A. Al-Bahri, "Micro-Kinetic Modeling of Paraffin Cracking on Zeolite Catalysts," American Institute of Chemical Engineers Annual Meeting, Indianapolis, IN, November (2002).
117. McGaughey, G. R., N. R. Desai, D. T. Allen, R. L. Seila, W. A. Lonneman, M. P. Fraser, R. A. Harley, J. M. Ivy, and J. H. Price, "Analysis of Motor Vehicle Emissions in a Houston Tunnel during the Texas Air Quality Study 2000," American Geophysical Union, Fall Meeting, San Francisco, December (2002).
118. Allen, D. T., "Fine Particulate Matter Composition and Sources during the Texas Air Quality Study," American Geophysical Union, Fall Meeting, San Francisco, December (2002).
119. Allen, D. T., "Air Quality in Texas," Pre-Session Legislative Conference (for Freshman legislators), LBJ School of Public Affairs, University of Texas, December (2002).
120. Allen, D. T., "Emission Inventory Performance Evaluations in Texas: Results from Field Measurements," Workshop on Mexico Emissions Inventory, Mexico City, February, 2003.
121. Allen, D. T., "Air Quality Challenges in Texas," Texas Technology Showcase, Houston, March (2003).
122. Allen, D. T., "Update on the Texas Air Quality Study," NARSTO Executive Assembly, White House Conference Center, March (2003).
123. Fraser, M. P., Z. W. Yue, B. Buzcu, G. McGaughey, D. T. Allen, and R. A. Harley, "Validation of chemical mass balancing using organic markers for emissions of fine particles from mobile sources," European Aerosol Conference, September (2003).
124. Fraser, M. P., B. Buzcu, Z. W. Yue, G. McGaughey, D. T. Allen, R. Seila, W. Lonneman, and R. A. Harley, "Separating the Contribution of Gasoline and Diesel Emissions to Ambient PM: Verification of Receptor Model Calculations," 22nd Annual American Association for Aerosol Research Meeting, October (2003).
125. Allen, D. T., "Policy Outcomes from the Texas Air Quality Study," invited talk at the Symposium on Environmental Monitoring, Evaluation and Protection in New York: Linking Science and Policy," Albany, October (2003).
126. McGaughey, G. R., N. R. Desai, D. T. Allen, R. L. Seila, W. A. Lonneman, M. P. Fraser, R. A. Harley, A. K. Pollack, J. M. Ivy, and J. H. Price, "Analysis of Motor Vehicle Emissions in a Houston Tunnel during the Texas Air Quality Study 2000," NARSTO Emission Inventory Workshop: Innovative Methods for Emission Inventory Development and Evaluation, Austin, Texas, October (2003).
127. Fraser, M. P., B. Buzcu, Z. W. Yue, G. R. McGaughey, N. R. Desai, D. T. Allen R. L. Seila, W. A. Lonneman, and R. A. Harley, "Separating the Contribution of Gasoline and Diesel Vehicles to Ambient Fine Particle Levels: Verification of Results from Receptor Models," NARSTO Emission Inventory Workshop: Innovative Methods for Emission Inventory Development and Evaluation, Austin, Texas, October (2003).

128. Dechapanya, W., M. M. Russell, and D. T. Allen, "Estimates of Anthropogenic Secondary Organic Aerosol Formation in Houston, Texas," NARSTO Emission Inventory Workshop: Innovative Methods for Emission Inventory Development and Evaluation, Austin, Texas, October (2003).
129. Chang, S., E. McDonald-Buller, Y. Kimura, G. Yarwood, J. Neece, M. M. Russell, P. Tanaka, and D. T. Allen, "Sensitivity of Urban Ozone Formation to Chlorine Emission Estimates," NARSTO Emission Inventory Workshop: Innovative Methods for Emission Inventory Development and Evaluation, Austin, Texas, October (2003).
130. Kimura, Y., J. Nam, and D. T. Allen, "Stochastic Modeling of Ambient Ozone Formation with Emission Variability," NARSTO Emission Inventory Workshop: Innovative Methods for Emission Inventory Development and Evaluation, Austin, Texas, October (2003).
131. Vizuete, W., V. Junquera, and D. T. Allen, "Sesquiterpene Emissions and Secondary Organic Aerosol Formation Potentials for Southeast Texas," NARSTO Emission Inventory Workshop: Innovative Methods for Emission Inventory Development and Evaluation, Austin, Texas, October (2003).
132. Katamreddy, A., V. Junquera, and D. T. Allen, "Emissions Associated with Forest, Grassland, and Agricultural Burning during the Texas Air Quality Study," NARSTO Emission Inventory Workshop: Innovative Methods for Emission Inventory Development and Evaluation, Austin, Texas, October (2003).
133. Durrenberger, C., D. T. Allen, and J. Price, "Evaluating the Performance of a Comprehensive Regional Emissions Inventory Using Field Data," NARSTO Emission Inventory Workshop: Innovative Methods for Emission Inventory Development and Evaluation, Austin, Texas, October (2003).
134. Song, J., W. Vizuete, and D. T. Allen, "Comparison of Biogenic Isoprene Emission Estimates with Aircraft Measurements during the Texas Air Quality Study," NARSTO Emission Inventory Workshop: Innovative Methods for Emission Inventory Development and Evaluation, Austin, Texas, October (2003).
135. Allen, D.T. "New challenges in electronics and the environment (keynote presentation)," International Symposium on Electronics and the Environment, Phoenix, AZ, May 2004.
136. Allen, D.T., Yosuke Kimura, William Vizuete, Harvey Jeffries, Mort Webster, and Mike Symons "The Development of a Stochastic Emissions Inventory for Industrial Emissions in Houston/Galveston Texas and Its Use in Photochemical Modeling," International Emission Inventory Conference, Clearwater, Florida, June 2004.
137. Allen, D.T., David R. Shonnard, Nhan Nguyen, Sharon Weil Austin and Robert Hesketh, "Green Engineering Education in the United States," International Conference on Sustainability Engineering and Science, Auckland New Zealand, July, 2004.
138. Allen, D.T., "An Industrial Ecology: Material flows and engineering design (keynote presentation)," International Conference on Sustainability Engineering and Science, Auckland New Zealand, July, 2004.
139. Allen, D. T., "Point Source Emission Variability and its Impact on Ozone Precursor and HAP Concentrations in the Houston-Galveston Area," MIT Symposium on Air Toxics, Boston, MA, August, 2004.

140. Allen, D.T., "Chemical Engineering Applications of Life Cycle Assessment," American Institute of Chemical Engineers, Annual meeting, November, 2004.
141. Allen, D.T., "Engineering Sustainable Technologies: A course on chemical engineering principles for the general university population," American Institute of Chemical Engineers, Annual meeting, November, 2004.
142. Russell, M.M. and D.T. Allen, "Predicting Secondary Organic Aerosol Formation Rates in Southeast Texas," American Institute of Chemical Engineers, Annual meeting, November, 2004.
143. McGaughey, G. R., M. Russell, D. Allen, D. Collins, M. Fraser, "Conceptual Model of Fine Particulate Matter Formation and Accumulation in Southeast Texas," *American Association for Aerosol Research*, Atlanta, February 2005
144. Russell, M. M. and D. T. Allen, "Predicting Secondary Aerosol Formation Rates in Southeast Texas," *American Association for Aerosol Research*, Atlanta, February 2005.
145. Junquera, V., Y. Kimura, W. Vizuite, D. Allen, "Wildfires in Eastern Texas in August and September 2000: Emissions, aircraft measurements and impact on chemical and physical processes," *American Association for Aerosol Research*, Atlanta, February 2005.
146. Allen, D.T., "Application of a Detailed Process Analysis Method to Air Quality Models for the San Francisco Bay Area and southeast Texas," American Institute of Chemical Engineers, Annual meeting, November, 2004.
147. McDonald-Buller, E., C. F. Murphy, Y. Kimura, L. Wang, and D. Allen, "Interpollutant Emission Trading in Ozone Non-attainment Areas," Air and Waste Management Association Annual Meeting, Minneapolis, MN, June, 2005.
148. Allen, D., C. Murphy, Y. Kimura, W. Vizuite, H. Jeffries, B. Kim, M. Webster, and M. Symens, "The Development of a Stochastic Emissions Inventory for Industrial Emissions in Houston/Galveston Texas and Its Use in Photochemical Modeling," Air and Waste Management Association Annual Meeting, Minneapolis, MN, June, 2005.
149. Vizuite, W., J. Song, S. Chang, E. McDonald-Buller, Y. Kimura, and D. Allen, "Application of Process Analysis for Evaluating Biogenic Emission Inventories in Southeast Texas," Air and Waste Management Association Annual Meeting, Minneapolis, MN, June, 2005.
150. Wittig, A., H. Simon, D. Allen "Synthesis of Supersite Program Findings: Uncertainties in Emission Inventories," American Association for Aerosol Research Annual Meeting, Austin, Texas, October 2005.
151. Chang, S., D.T. Allen "Chlorene Chemistry in Urban Atmospheres: Aerosol Formation Associated With Anthropogenic Chlorine Emissions in Southeast Texas," American Association for Aerosol Research Annual Meeting, Austin, Texas, October 2005.
152. Wittig, A., D. Allen "Accounting For Reactivity Using The Chemical Mass Balance Tool: Method Development And Application to Source Resolution of Volatile Organic Compounds in Houston Texas," American Association for Aerosol Research Annual Meeting, Austin, Texas, October 2005.
153. Pavlovic, T., D. Allen, Y. Kimura, U. Nopmongcol "The Impact of Ammonia Emissions on Atmospheric Particular Matter Formation in Texas," American Association for Aerosol Research Annual Meeting, Austin, Texas, October 2005.

154. Buzcu, B., Z. Yue, M.P. Fraser, U. Nopmongcol, D.T. Allen "Influence of Wood Smoke Emissions on Secondary Particle Formation in Houston, Texas," American Association for Aerosol Research Annual Meeting, Austin, Texas, October 2005.
155. Nopmongcol, U., D.T. Allen, B. Buzcu, Z. Yue, M. Fraser "Modeling of Surface Reactions on Carbonaceous Atmospheric Particles During a Wood Smoke Episode in Houston, Texas," American Association for Aerosol Research Annual Meeting, Austin, Texas, October 2005.
156. Wittig, A., J. Turner, D. Allen "Synthesis of Supersite Program Findings: Regional Transport of Fine PM," American Association for Aerosol Research Annual Meeting, Austin, Texas, October 2005.
157. Heo, G., and D.T. Allen "Effects of Changes in Isoprene Emissions on Particulate Sulfate Formation in eastern Texas," American Association for Aerosol Research Annual Meeting, Austin, Texas, October 2005.
158. Allen, D., "Green Engineering: Environmentally Conscious Design of Chemical Processes," Keynote Lecture, Congreso de Ingenieria Quimica, Universidad Autonoma de Nuevo Leon, October, 2005.
159. Allen, D., "Green Engineering: Environmentally Conscious Design of Chemical Processes," Invited presentation, Green Chemistry and Engineering Education Workshop, Chemical Sciences Roundtable, National Research Council, Washington, D.C., November 2005.
160. Song, J., L. Gulden, Z.L. Yang, D. T. Allen, "The Response of Biogenic Emissions to Land-Cover Change and Climate Change", EPA Science Forum, Washington, D.C., May 2006.
161. Heo, G. and D.T. Allen, "Effects of uncertainties in the biogenic emission inventory on gas phase oxidant and particle formation in Texas" Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
162. Song, J., D.T. Allen, and E.C. McDonald-Buller, "Impacts of Urbanization on Biogenic Emissions and Air Pollutant Deposition" Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
163. M. Feldman, T. Howard, G. Mullins, A. Webb, Y. Kimura, D. Allen, and E. McDonald-Buller "Applications of Satellite Remote Sensing Data for Estimating Dry Deposition in Eastern Texas" Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
164. Simon, H.A. and D.T. Allen, "Modeled Effects of Heterogeneous N_2O_5 Hydrolysis on Atmospheric Chemistry in the Houston Area" Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
165. Durrenberger, C, A. Webb, D. Allen, and E. McDonald-Buller, "Barging of Shipping Containers as a Novel Approach to Reducing Emissions Associated with Heavy-Duty Diesel Truck Traffic: A Case Study between the Port of Victoria and the Port of Houston" Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
166. Wang, L., E.C. McDonald-Buller, and D.T. Allen, "Inter-Pollutant Trading of NO_x and VOC Emissions: A Case Study for Houston, Texas and Intercomparison with Results for

- Austin”, Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
167. Thompson, T.M., L. Wang, A. Web, E. McDonald-Buller and D.T. Allen, “Photochemical Modeling of the Air Quality Impacts of an Emissions Trading Program for Highly Reactive Volatile Organic Compounds (HRVOCs) in Texas” Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
 168. Faraji, M., Y. Kimura, E. McDonald-Buller and D.T. Allen, “Comparison of the Carbon Bond and SAPRC photochemical mechanisms under conditions relevant to southeast Texas”, Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
 169. Mullet, I.S., Y. Kimura, D.T. Allen, and S.R. Smith “Development of an Inventory of Air Pollutant Emissions from Fires in Texas Based on Satellite Data” Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
 170. Mullet, I.S., Y. Kimura, D.T. Allen, and S.R. Smith “Use of Satellite Based Measurements of Aerosol Optical Depth to Characterize Aerosol Transport in Texas” Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
 171. Durrenberger, C., A. Webb, D. Allen, and E. McDonald-Buller, “Developing and Applying Surveys to Improve Emissions Estimates for Minor Sources in Victoria, Texas” Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
 172. Durrenberger, C., G. McGaughey, D. Allen, and E. McDonald-Buller, “Airborne Monitoring in Central Texas: Assessment of Regional Transport and Concentration Profiles of Ozone and its Precursors” Air and Waste Management Association Annual Meeting, New Orleans, June, 2006.
 173. Allen, D.T., “Point Source Emission Variability and its Impact on Ozone Formation: a Case Study of the Houston-Galveston Area,” MIT Symposium on Air Quality, Boston, MA, August 2006.
 174. Faraji, M., Y. Kimura, E.C. McDonald-Buller and D. Allen, “The Role of Key Reaction Pathways in Accounting for the Differences in Ozone Predictions by the Carbon Bond and SAPRC Photochemical Mechanisms Under Conditions Relevant to Southeast Texas” International Conference on Atmospheric Chemical Mechanisms, Davis, CA, December 2006.
 175. Kimura, Y., and D. Allen, “Development and Application of a Lagrangian Process Analysis Tool for Tracking Plumes Within a 3-D Eulerian Photochemical Model,” International Conference on Atmospheric Chemical Mechanisms, Davis, CA, December 2006.
 176. Kimura, Y., M. Faraji, E. C. McDonald-Buller, and D. Allen, “Policy Implications of the Difference in Ozone Predictions by the Carbon Bond and SAPRC Photochemical Mechanisms Under Conditions Relevant to southeast Texas,” International Conference on Atmospheric Chemical Mechanisms, Davis, CA, December 2006.
 177. Allen, D. T., “Observational Evidence and Modeling of Heterogeneous Formation of Secondary Organic Aerosol in southeast Texas,” invited presentation, American Geophysical Union, Annual meeting, San Francisco, CA, December 2006.

178. Allen, D. T., "Creating the competent – and sustainable – engineer," American Association for the Advancement of Science, Annual Meeting, San Francisco, CA, February 2007.
179. Allen, D.T., "An Industrial Ecology: Material Flows and Engineering Design" Invited Presentation, First Urban Engineering and Sustainability Meeting, Korea Advanced Institute for Science and Technology (KAIST), Daejeon, Korea, November, 2007.
180. Allen, D.T., The Texas Air Quality Studies: State of the Science of Air Quality in Texas and Implications for Air Quality Policy, Invited Presentation, Annual Meeting of the Academy of Medicine, Engineering and Science of Texas (TAMEST), Houston, January, 2008.
181. McDonald-Buller, E., Song, J., Webb, A., Allen, D and Parmenter, B. Predicting the Relative Impacts of Urbanization on Emissions and Air Quality from Regional Visioning of Austin, Texas, Air and Waste Management Association Annual Meeting, paper 595, Portland, Oregon, June, 2008.
182. Zhu, Y., Pudota, J., DenBleyker, A., Michel, E. , McDonald-Buller, E., Fraser, M., Collins, D., Jia, Y., Clements, A., and Allen, D. Physical Transformation of Ultrafine Particles Near Three Texas Roadways, Air and Waste Management Association Annual Meeting, paper 391, Portland, Oregon, June, 2008.
183. DenBleyker, A., Allen, D., Michel, E. , McDonald-Buller, E., Zhu, Y., Fraser, M., and Collins, D. Near-Roadway Air Pollution in Texas, Air and Waste Management Association Annual Meeting, paper 395, Portland, Oregon, June, 2008.
184. Allen, D.T. Sustainable Engineering: A Model for Engineering Education in the 21st Century? American Institute of Chemical Engineers Annual Meeting, paper 380e, Philadelphia, November, 2008.
185. Allen, D.T., Murphy, C.F., Davidson, C., Allenby, B.R. Sustainable Engineering Education. American Institute of Chemical Engineers Annual Meeting, paper 449a, Philadelphia, November, 2008.
186. Murphy, C.F., Allen, D., Hebner, R., Webber, M. Life Cycle Assessment of Renewable Transportation Fuel Feedstocks. American Institute of Chemical Engineers Annual Meeting, paper 542f, Philadelphia, November, 2008
187. Kimura, Y. and Allen, D.T. Application of mechanism-independent photochemical cycles analysis tool (pyIrr) to evaluate effects of changes in temperature, isoprene concentrations and insolation on regional photochemistry using CB05, SAPRC99 and SAPRC07 mechanisms. International Conference on Atmospheric Chemical Mechanisms, Davis, CA, December, 2008.
188. Heo, G., Kimura, Y., McDonald-Buller, E.C., Allen, D.T., Yarwood, G., and Whitten, G.Z., Evaluation of Toluene Mechanisms for Use in Carbon Bond 05 (CB05) by Environmental Chamber Simulations. International Conference on Atmospheric Chemical Mechanisms, Davis, CA, December, 2008.
189. Simon, H., Kimura, Y., McGaughey, G., Allen, D.T., Brown, S.S., Coffman, D., Dibb, J., Osthoff, H.D., Quinn, P., Roberts, J.M., Yarwood, G., Kemball-Cook, S., Byun, D., and Lee, D., Modeling ClNO₂ Formation, Chlorine Availability, and Chlorine Cycling in the Houston Atmosphere. International Conference on Atmospheric Chemical Mechanisms, Davis, CA, December, 2008.

190. Allen, D.T. Sustainable Engineering: A Model for Engineering Education in the 21st Century?, Keynote presentation, Engineering Sustainability 2009, Pittsburgh, PA, April, 2009.
191. Davidson, C. Hendrickson, C., Matthews, S., Bridges, M., Allen, D., Murphy, C., Allenby, B., Chen, Y., Williams, E., Crittenden, J., Austin, S., The Center for Sustainable Engineering: Workshops and the Electronic Library, American Society for Engineering Education Annual Meeting, Paper AC 2009-524, Austin, Texas, June 2009.
192. Murphy, C., Allen, D., Davidson, C., Matthews, H.S., Hendrickson, C., Allenby, B. Crittenden, J., Center for Sustainable Engineering: Sustainability Education Courses in US Engineering Programs, American Society for Engineering Education Annual Meeting, Paper AC 2009-335, Austin, Texas, June, 2009.
193. Dionisio, M., G. McGaughey, E. McDonald-Buller Regional Transport of the Houston Urban Plume, Air and Waste Management Association Annual Meeting, Paper #80, Detroit, June 2009. (First place, Doctoral student paper award)
194. Pavlovic, R.T., E. McDonald-Buller, D. T. Allen Flare Emission Characterization of Refineries In Houston Texas Air and Waste Management Association Annual Meeting, Paper #485, Detroit, June 2009
195. McDonald-Buller, E., G. McGaughey, D. Sullivan, H. Kim, V. Torres, E. Michel, D. Allen, L. Ma, G. Yarwood, E. Tai, Neighborhood Scale Air Toxics Monitoring and Analysis In Corpus Christi, Texas Air and Waste Management Association Annual Meeting, Paper #478, Detroit, June 2009
196. Heo, G. Y. Kimura, E. McDonald-Buller, D. T. Allen, G. Yarwood, G. Z. Whitten Evaluation of a New Toluene Mechanism For Carbon Bond 05 Using Environmental Chamber Data and Ambient Data, Air and Waste Management Association Annual Meeting, Paper #154, Detroit, June 2009
197. Davidson, C., C. Hendrickson, H.S. Matthews, M. Bridges, D. Allen, C. Murphy, B. Allenby, J. Crittenden, S. Austin, Preparing the Next Generation of Design Engineers: The Emerging Discipline of Sustainable Engineering, Proceedings of the Indo-US Workshop on Designing Sustainable Products, Services and Manufacturing Systems, India Institute of Science, Bangalore, India, August, 2009.
198. Heo, G., McDonald-Buller, E and Allen, D.T. "Impact of isoprene inventories on hydroxyl radical concentrations and sulfate formation chemistry in Texas", International Aerosol Modeling Algorithms Conference, Davis, CA, December, 2009.
199. Allen, D.T, Webber, M., Williams, R., Prinn, R. and Webster, M. "The Interface of Infrastructures, Markets, and Natural Cycles: Innovative Modeling and Control Mechanisms for Managing Electricity, Water and Air Quality in Texas", NSF EFRI Grantees Workshop, Alexandria, VA, December, 2009.
200. Allen, D.T. "Benchmarking Sustainable Engineering Education Practices" Society of Automotive Engineers Green Engineering & Technology Transfer Workshop, Invited Presentation, Detroit, March, 2010.
201. Allen, D.T, Webber, M., Williams, R., Prinn, R. and Webster, M. "Managing Electricity, Water and Air Quality in Texas; Transformative Research in Resilient and Sustainable Infrastructures", NSF EFRI Grantees Workshop, Washington, DC, March, 2010.

202. Heo, G., Kimura, Y., McDonald-Buller, E., Allen, D.T., Carter, W.P.L., Yarwood, G., and Whitten, G.Z. "Detailed Modeling of Alkene Chemistry within Condensed Chemical Mechanisms" Air and Waste Management Association Annual Meeting, Paper #108, Calgary, Alberta, June 2010.
203. Pavlovic, T. McDonald-Buller, E., Allen, D.T., "Impacts of Refinery Flare Operations and Emissions Variability on Ozone Formation in the Houston-Galveston-Brazoria Area" Air and Waste Management Association Annual Meeting, Paper #132, Calgary, Alberta, June 2010.
204. McDonald-Buller, E., McGaughey, G., Kimura, Y., Yarwood, G., Colville, C., Tai, E., Sullivan, D., Kim, H.S. and Allen, D. "Dispersion Modeling of Air Toxics in Corpus Christi, Texas" Air and Waste Management Association Annual Meeting, Paper #130, Calgary, Alberta, June 2010.
205. Dionisio, M.C., McDonald-Buller, E., Allen, D.T., "A Seasonal Analysis of Regional Transport of the Houston Urban Plume" Air and Waste Management Association Annual Meeting, Paper #919, Calgary, Alberta, June 2010.
206. Thompson, T.M., Allen, D.T., and Webber, M. "Air Quality Impacts of Using Electricity Generation to Charge PHEVs for Daytime Use" Air and Waste Management Association Annual Meeting, Paper #693, Calgary, Alberta, June 2010.
207. Allen, D.T. "Smart, sustainable electrical grids: How can we design the daily operation of grids to minimize cost, ozone formation, water use, and carbon emissions", Gordon Research Conference on Industrial Ecology", New London, NH, July, 2010.
208. McDonald-Buller, E.C., McGaughey, G., Kimura, Y., Allen, D., Yarwood, G. Tai, E., Colville, E., Nopmongcol, O., and Nielsen-Gammon, J. "Dispersion Modeling of Air Toxics in Corpus Christi" 19th International Emission Inventory Conference, San Antonio, September 2010.
209. Harrison, M., Hendler, A. and Allen, D. "Preliminary results from fugitive emission measurements of selected components at compressor stations" 19th International Emission Inventory Conference, San Antonio, September 2010.
210. Allen, D.T. "Modules for High School Engineering Courses" American Institute of Chemical Engineers Annual Meeting, Salt Lake City, November, 2010.
211. Allen, D.T., Shonnard, D., Austin, S. and Nguyen, N. "Incorporating the Design of Sustainable Systems Into Engineering Curricula", American Institute of Chemical Engineers Annual Meeting, Salt Lake City, November, 2010.
212. Allen, D.T., Webster, M., and Webber, M. "Integrated Analyses of Carbon Emissions, Water Use and Criteria Air Pollutant Emissions for Electricity Generation in Texas", American Institute of Chemical Engineers Annual Meeting, Salt Lake City, November, 2010.
213. Stillwell, A.S., Clayton, M.E., Webber, M.E., Allen, D.T., and Webster, M. "A river basin based model of advanced power plant cooling technologies for mitigating water management challenges", American Institute of Chemical Engineers Annual Meeting, Salt Lake City, November, 2010.

214. Keith, J.M., Edgar, T.F., Towler, G.P., Fogler, S., Allen, D.T., and Schuster, D. "Energy modules for the ChE Curriculum", American Institute of Chemical Engineers Annual Meeting, Salt Lake City, November, 2010.
215. Allen, D.T. "Sustainability Education: Emerging Practices", Keynote presentation, Second International Congress on Sustainability Science and Engineering, Tucson, January 2011.
216. Allen, D.T., "Incorporating Sustainability into Engineering Research and Teaching", Invited presentation, Board on Chemical Sciences and Technology, National Research Council, Washington D.C., December 2, 2011.
217. Pacsi, A. and Allen, D.T. Role of Aerosol Formation Pathways in Estimating the PM_{2.5} Impacts of Plug-in Hybrid Electric Vehicles in Texas, International Aerosol Modeling Algorithms Conference, Davis California, December 2011.
218. Faxon, C. and Allen, D.T. Impacts of the Parameterization of Heterogeneous N₂O₅ Reactions on Ozone Formation, International Aerosol Modeling Algorithms Conference, Davis California, December 2011.
219. Allen, D.T., "Energy and Sustainability in Chemical Engineering", Invited presentation, Chemical Sciences Roundtable, National Research Council, Washington D.C., January 12, 2012.
220. Rosselot, K.S., Miller, J., Denton, R., Corbett, W., Taylor, P., and Allen, D.T., Parametric Models of Greenhouse Gas Emissions for Coal- and Biomass-to-Liquid Facilities, Carbon Management and Technology Conference, Orlando, Florida, February, 2012.
221. Berland, L.K., Allen, D.T., Crawford, R.H., Farmer, C. and Guerra, L., Learning Sciences Guided High School Engineering Curriculum Development, American Society for Engineering Education, Annual Meeting, San Antonio, June 2012.
222. Allen, D.T., Crawford, R.H., Berland, L.K., High, K.A., Petrosino, A.J., Dobbs, T.A., and Farmer, C. "A Course Sequence in Engineering Design and Problem Solving" American Society for Engineering Education, Annual Meeting, San Antonio, June 2012.
223. Guerra, L., Allen, D.T., Crawford, R.H., and Farmer, C., "A Unique Approach to Characterizing the Engineering Design Process" American Society for Engineering Education, Annual Meeting, San Antonio, June 2012.
224. Farmer, C., Allen, D.T., Berland, L.K., Crawford, R.H., and Guerra, L., Engineer your World: An Innovative Approach to Developing a High School Engineering Design Course" American Society for Engineering Education, Annual Meeting, San Antonio, June 2012.
225. McGaughey, G., Allen, D.T., McDonald-Buller, E.C., Smith, S. and Howard, T. Analysis of Boundary Conditions for Regional Chemical Transport Modeling of Southeastern Texas using Satellite Observations, Air and Waste Association Annual Meeting, Extended Abstract 2012-A-254-AWMA, San Antonio, June, 2012.
226. Al-Fadhli, F.M., Kimura, Y., McDonald-Buller, E.C. and Allen, D.T., Impact of Flare Destruction Efficiency and Products of Incomplete Combustion on Ozone Formation in Houston, Texas. Air and Waste Association Annual Meeting, Extended Abstract 2012-A-284-AWMA, San Antonio, June, 2012.

- 227. Alhajeri, N.S. and Allen, D.T., Impacts of Replacement of Gasoline and Diesel with Biofuels on Ozone Concentrations: A Central Texas Case Study. Air and Waste Association Annual Meeting, Extended Abstract 2012-A-292-AWMA, San Antonio, June, 2012.
- 228. Kimura, Y., McGaughey, G., Feldman, M., Allen, D.T. and McDonald-Buller, E.C., Spatial and Temporal Variability in OMI NO₂ Observations and NO_x Emissions Inventories in Eastern Texas. Air and Waste Association Annual Meeting, Extended Abstract 2012-A-293-AWMA, San Antonio, June, 2012.
- 229. Zavala-Araiza, D., Sullivan, D.W. and Allen, D.T., Analyses of Atmospheric Hydrocarbon Concentrations in a Shale Gas Production Region. Air and Waste Association Annual Meeting, Extended Abstract 2012-A-311-AWMA, San Antonio, June, 2012.
- 230. Torres, V.M., Al-Fadhli, F.M., Allen, D.T., Herndon, S., and Wood, E., NO_x Emissions from Industrial Flaring, Air and Waste Association Annual Meeting, Extended Abstract 2012-A-315-AWMA, San Antonio, June, 2012.
- 231. Alhajeri, N.S., Allen, D.T., Donohoo, P., and Webster, M.D., The Effects of Market-Oriented Price Signals for NO_x and CO₂ on Emissions at Power Generation System in the Texas Grid, Air and Waste Association Annual Meeting, Extended Abstract 2012-A-317-AWMA, San Antonio, June, 2012.
- 232. Faxon, C.B. and Allen, D.T., Impacts of the Heterogeneous Reactions Involving Chlorine on Ozone Formation, Air and Waste Association Annual Meeting, Extended Abstract 2012-A-318-AWMA, San Antonio, June, 2012.
- 233. Pacsi, A.P., Alhajeri, N.S., McDonald-Buller, E.C., Allen, D.T. and Webster, M.D., The Impact of Market-Based Environmental Prices for Power Plant NO_x Emissions on PM Formation in Texas, Air and Waste Association Annual Meeting, Extended Abstract 2012-A-319-AWMA San Antonio, June, 2012.
- 234. Torres, V.M., Allen, D.T., Herndon, S. and Kodesh, Z., Overview of the Texas Commission on Environmental Quality 2010 Flare Study, Air and Waste Association Annual Meeting, Extended Abstract 2012-A-437-AWMA, San Antonio, June, 2012.
- 235. Kimura, Y., Allen, D.T. and McDonald-Buller, E.C., Investigation of the Long-Range Transport of Ozone Precursors using a Lagrangian Process Analysis Tool. Air and Waste Association Annual Meeting, Extended Abstract 2012-A-272-AWMA, San Antonio, June, 2012.
- 236. Jayne, J.T., Fortner, E.C., Onasch, T.O., Worsnop, D.R., Knighton, W.B., Kodesh, Z., Torres, V.M., Allen, D.T., and Herndon, S.C., Particulate and Gas Emissions from Industrial Flares, Air and Waste Association Annual Meeting, Extended Abstract 2012-A-443-AWMA, San Antonio, June, 2012.
- 237. Allen, D.T., Incorporating Sustainability into Engineering Research and Teaching, American Institute of Chemical Engineers, Special Session in Honor of David Allen, Pittsburgh, Pa., October, 2012.
- 238. Allen, D.T., Sustainability and Resilience of Energy Systems: Minimizing emissions and water use and assessing response to drought in the Texas Electrical Grid, American Institute of Chemical Engineers, Pittsburgh, Pa., October, 2012.

239. Allen, D.T. Invited Plenary, Sustainable, Resilient Infrastructures: A case study of electricity, air quality and water, Symposium on Sustainable Cities, Washington University, St. Louis, November, 2012.
240. Allen, D.T., Source Monitoring with Networks and Targeted Field Campaigns, Invited presentation, Air Monitoring Workshop, U.S. Environmental Protection Agency, Raleigh, NC, November, 2012.
241. Allen, D.T., Measurements of methane emissions from natural gas production in the United States, Society of Petroleum Engineers, Workshop on Reducing Environmental Impact of Unconventional Resource Development, Denver, April, 2013.
242. Allen, D.T., Editor's Roundtable, International Symposium on Sustainable Systems and Technology, Cincinnati, OH, May, 2013.
243. Allen, D.T., Incorporating sustainability into engineering research and teaching, Sustainable Chemistry & Engineering in the 21st Century, 17th Annual Green Chemistry & Engineering Conference, Bethesda, MD, June 2013.
244. Allen, D.T., The Interface of infrastructures, markets and natural cycles – Innovative modeling and control mechanisms for managing electricity, water and air quality in Texas, Workshop on Energy, Transportation, and Water Infrastructure: Policy and Social Perspectives, Iowa State University, Ames, IA, July, 2013.
245. Allen, D.T., Measurements of methane emissions from natural gas production in the United States, Intergovernmental Panel on Climate Change Expert Meeting: Fugitive Emissions of Greenhouse Gases from Oil Natural Gas Systems, Washington, DC, August, 2013.
246. Allen, D.T., "Air Quality Impacts of Natural Gas", Keynote Lecture, The 7th National Conference on Environmental Chemistry, Guiyang, China, September, 2013.
247. Allen, D.T. "Methane emissions from Natural Gas Production in the United States", Workshop on Short-Lived Climate Forcers, IPIECA, Rome, October 8-9, 2013.
248. Allen, D.T. "Atmospheric Emissions from Natural Gas Extraction and Implications for Life Cycle Assessments" Coordinating Research Council Workshop on Life Cycle Analysis of Transportation Fuels, Argonne National Laboratory, Argonne, IL, October, 2013.
249. Allen, D.T. "Methane emissions from Natural Gas Production in the United States", Workshop on Air Quality and Oil and Gas Development in the Rocky Mountain Region, University of Colorado, Boulder, October, 2013.
250. Allen, D.T. "Measuring Sustainability: Emerging Metrics." Annual Meeting, Sustainable Nanotechnology Organization, Santa Barbara, CA, November, 2013.
251. Allen, D.T. "Life Cycle Greenhouse Gas Emission Estimates for Alternative Fuels: Responding to Requirements Under Section 526 of the Energy Independence and Security Act", American Institute of Chemical Engineers, Annual Meeting, San Francisco, CA, November, 2013.
252. Allen, D.T. "Air Quality Impacts of Natural Gas Production and Use" Keynote Address, 3rd Annual World Congress in Sustainable Engineering, American Institute of Chemical Engineers, Annual Meeting, San Francisco, CA, November, 2013.

253. Shonnard, D.R., Allen, D.T., Nguyen, N., and Austin, S. "New Developments in Implementing Green Engineering in the Chemical Engineering Curriculum", American Institute of Chemical Engineers, Annual Meeting, San Francisco, CA, November, 2013.
254. Shonnard, D.R., Allen, D.T., Nguyen, N., and Austin, S. "Green Engineering and Sustainability in the Chemical Engineering Curriculum", American Institute of Chemical Engineers, Annual Meeting, San Francisco, CA, November, 2013.
255. Allen, D.T. "Methane Emissions from Natural Gas Production", in Panel session on "Measuring the Gas Boom: A Study of Methane Emissions from Gas Production", Invited Presentation, National Association of Regulatory Utility Commissioners, Orlando, November, 2013.
256. Allen, D.T., Measurements of Methane Emissions at Natural Gas Production Sites in the U.S.", Keynote Address, British Columbia Greenhouse Gas Emissions Data Workshop, Vancouver, British Columbia, November 2013.
257. Workshop on methane emissions from natural gas production, Invited Participant, American Geophysical Union, San Francisco, December, 2013.
258. Allen, D.T. and Pacsi, A.P. Spatial Air Quality Impacts of Increased Natural Gas Development and Use in Texas, Presentation A44A-02, American Geophysical Union, San Francisco, December, 2013.
259. Pacsi, A.P. and Allen, D.T. The Spatial and Temporal Consumptive Water Use Impacts of Rapid Shale Gas Development and Use in Texas. Presentation H14F-06, American Geophysical Union, San Francisco, December, 2013.
260. Allen, D.T. Atmospheric Impacts of Expanded Natural Gas Use, CHEMCON 2013, (meeting of Indian Institute of Chemical Engineers), Invited Award lecture, Mumbai, December, 2013.
261. Allen, D.T., Measurements of Methane Emissions at Natural Gas Production Sites in the U.S.", Workshop on Current Developments and Impacts of Natural Gas in Transportation, Session 192, Invited Presentation, Transportation Research Board, Washington, D.C., January 2014.
262. Allen, D.T. Invited presentation on impacts of Drought on Air Quality, XXXVI MIT Global Change Forum, Miami, January, 2014.
263. Allen, D.T. Atmospheric Impacts of Expanded Natural Gas Use, Invited presentation, "Hydraulic Fracturing: Science, Technology, Myths and Challenges", American Association for the Advancement of Science, Annual Meeting, Chicago, January, 2014.
264. Allen, D.T., Measurements of Methane Emissions at Natural Gas Production Sites in the U.S., U.S. Environmental Protection Agency, Natural Gas STAR Program Annual meeting, San Antonio, May 2014.
265. Allen, D.T., Panel presentation, Climate Change Energy Outlook: Near and Far Solutions, American Geophysical Union Science Policy Conference, Washington, D.C., June, 2014.
266. McGaughey, G., Kimura, Y., Allen, D., McDonald-Buller, E., Craig, M., and Webster, M. Dynamic, Flexible NO_x and SO₂ Abatement from Power Plants. Air & Waste Management Association Annual Conference and Exhibition, Long Beach, California, June, 2014.

267. Allen, D.T. Wastes as Raw Materials: The Role of Separation Science and Technology, Invited Keynote, Separation Science and Technology (SST) as a Convergence Platform for a Sustainable Energy, Water and Materials Nexus, American Chemical Society Fall Annual Meeting, San Francisco, August, 2014.
268. Allen, D.T., “Methane Emissions from the Natural Gas Supply Chain” CH₄ Connections Meeting (sponsored by Houston Advanced Research Center and the Gas Technology Institute, The Woodlands, September, 2014.
269. Allen, D.T., Colorado State University Natural Gas Symposium, Technology Panel, “Evolving Technologies for Characterizing Environmental Footprints of the Natural Gas Supply Chain”, Colorado State University Natural Gas Symposium, Denver, CO, August, 2014.
270. Allen, D.T., Increased Natural Gas Production and Air Quality, Keynote Lecture, North American Oil and Gas Conference, Air and Waste Management Association, Calgary, Alberta, October, 2014.
271. McDonald-Buller, E., Kimura, Y., McGaughey, G., Allen, D.T., Sulprizio, M., Jacob, D., Jung, J., Yarwood, G., Johnson, J., and Emery, C., Predictions of North American Background Ozone in Texas, 13th Annual CMAS Conference, Chapel Hill, NC October 2014.
272. Allen, D.T., Overview of Estimating, Monitoring and Mitigating Anthropogenic Methane Emissions, Invited Talk, National Research Council Planning Meeting on Methane Emissions, Washington, D.C., December 2014.
273. McDonald-Buller, E., Huang, L., McGaughey, G., Kimura, Y., and Allen, D. The Effects of Drought on Predictions of Air Quality in Texas: Vegetation and Biogenic Hydrocarbons, American Geophysical Union, Fall Meeting, San Francisco, December, 2014.
274. Huang, L., Kimura, Y., McDonald-Buller, E., McGaughey, G., and Allen, D. Dry Deposition Estimates in Texas during Drought Years, American Geophysical Union, Fall Meeting, San Francisco, December, 2014.
275. Allen, D.T. Atmospheric Emissions and Air Quality Impacts from Natural Gas Production, Invited Presentation, Mid-Atlantic Regional Air Management Association, Lancaster, PA, February 2015.
276. McDonald-Buller, E., Webster, M., Allen, D., Craig, M., Kimura, Y., McGaughey, G., and Stines, Z. Dynamic Management of NO_x and SO₂ Emissions in Two Electric Power Systems and Implications for Air Quality, ENV•VISION (Environmental Vision - An International Electricity Sector Conference), May, 2015, Crystal City, Virginia.
277. Allen, D.T., Incorporating the Design of Sustainable Systems into Engineering Education, Invited Plenary, International Congress on Sustainability Science & Engineering (ICOSSE), Balatonfüred, Hungary May 2015.
278. Allen, D.T., Methane Emissions and Solutions in Natural Gas, American Gas Association, Pittsburgh, PA, June, 2015.
279. Allen, D.T., Increased Natural Gas Production, Methane Emissions and Climate, Annual Lecture, Sustainable Gas Institute, Imperial College, London, June 2015.

280. Allen, D.T., Incorporating the design of sustainable systems into engineering education, Plenary presentation, AIChE Annual Meeting, Salt Lake City, November, 2015
281. Allen, D.T., AIChE Annual Meeting, The Food, Energy, Water Nexus in Texas: Trade-offs between fuel production, electricity generation and water available for agriculture, Salt Lake City, November, 2015
282. DeRosa, S. and Allen, D.T., The Impact of Natural Gas and Natural Gas Liquids Supplies on the United States Chemical Manufacturing Industry, AIChE Annual Meeting, Salt Lake City, November, 2015
283. Allen, D.T., Emissions from oil and gas operations in the United States and their air Quality Implications, Symposium on Frontiers of Chemical Science and Engineering: Environment and Sustainable Development, Chinese Academy of Engineering, Beijing, February, 2016.
284. DeRosa, S. and Allen, D.T., Impact of new technologies and chemical manufacturing routes on the petrochemical industry in the United States, American Chemical Society Spring National Meeting, San Diego, March, 2016.
285. Allen, D.T., Impact of changes in feedstocks and process technologies on chemical manufacturing systems, National Research Council, Board on Chemical Sciences and Technology, Workshop on Feedstocks for Chemical Production, Washington, D.C., March 2016.
286. Allen, D.T., Natural Gas Production, Methane Emissions, and Climate, Hamad Bin Khalifa University (HBKU), Doha, Qatar, March 2016
287. Allen, D.T., Julian C. Smith Lecture, Emissions for oil and gas operations in the United States and their air quality implications, Cornell University, Ithaca, New York, April, 2016.
288. Allen, D.T., Julian C. Smith Lecture, High School Engineering Courses: Content, Structure, and Implications for University Engineering Curricula, Cornell University, Ithaca, New York, April, 2016.
289. Allen, D.T. Invited Presentation, The Future of Sustainable Chemistry”, GAO Workshop on Sustainable Chemistry, National Research Council, Washington D.C., May, 2016
290. Allen, D.T. Keynote Presentation (Critical Review), Emissions from oil and gas operations in the United States and their air quality implications, Air and Waste Management Association, Annual Meeting, New Orleans, June 2016.
291. Allen, D.T., Keynote Presentation, Transforming to Natural Gas Electricity and Chemical Manufacturing Infrastructures, 2016 International Conference on Sustainable Infrastructure, Chinese Academy of Engineering, Shenzhen, China, October, 2016
292. Allen, D.T. Master Lecture “Emissions from oil and gas operations and their air quality implications, Chinese University of Hong Kong, Shenzhen, April, 2017.
293. Allen, D.T., Latest Innovations in Green Chemistry, InformEx, Philadelphia, PA, May 2017.
294. Allen, D.T., Cardoso-Saldaña, F.J., Kimura, Y. Spatially and temporally resolved emissions of light alkanes from oil and gas sources in shale gas production regions, 2017 International Emissions Inventory Conference, Baltimore, MD, August, 2017.

295. Allen, D.T., Keynote address, “Greenhouse Gas Assessments of Transformed Global Chemical Manufacturing Supply Chains” 2018 International Symposium on Chemicals Risk Prediction and Management, Dalian, China, April 2018
296. Allen, D.T., “Air quality impacts of increased natural gas use in Texas” 2018 International Symposium on Sustainable Chemistry & Engineering” Dalian, China, 2018.
297. Allen, D.T., “Combining innovative science and policy to improve air quality in cities with refining and chemical manufacturing” 2018 International Symposium on Sustainable Chemistry & Engineering” Dalian, China, 2018.
298. Allen, D.T., “Use of Sustainability Metrics in Presenting Research: Drivers, Challenges and Paths Forward” Green Chemistry Gordon Research Conference, Barcelona, Spain, July 2018.
299. Allen, D.T. LuoJia Forum (Distinguished Lecturer) of Wuhan University, “Combining Innovative Science and Policy to Improve Air Quality in Cities with Refining and Chemical Manufacturing”, Wuhan, China, August 2018.
300. Chen, Q., Dunn, J.B., and Allen, D.T. 2nd AIChE Natural Gas Utilization Workshop: Chemistry, Technology, and Deployment of Natural-Gas-based Chemicals, Fuels, and Energy Systems, Texas A&M University, August 12-14, 2018.
301. Allen, D.T. “Improving Characterization of Anthropogenic Methane Emissions in the United States: Summary of a Report from the US National Academies of Science, Engineering and Medicine”, Sustainable Gas Research and Innovation Conference, Sao Paulo, Brazil, September 26, 2018.
302. Chen, Q., Dunn, J.B., and Allen, D.T. “Greenhouse Gas Emissions of Transportation Fuels Manufactured from Natural Gas Liquids Derived from Shale Gas” AIChE Annual Meeting, Pittsburgh, PA, October, 2018.
303. Allen, D.T., “Evolution of Modern Energy Supply Pattern in the United States: Natural Gas Production, Electricity Generation, Methane Emissions and Climate”, 2019 International Forum on Clean Power Technology and Engineering, sponsored by China Energy, Beijing, May 2019.
304. DeRosa, S.E., Kimura, Y., McGaughey, G., McDonald-Buller, E.C., Allen, D.T., Stadtherr, M.A., “Systems Analysis of Light Alkane Resources for Fuels and Petrochemicals Manufacture”, AIChE Natural Gas Conversion Symposium, San Antonio, Texas, June, 2019.
305. Ganesh, H.S., Vernuccio, S., Baldea, M., Edgar, T.F., Broadbelt, L.J., Stadtherr, M.A. and Allen, D.T. “Model-based optimization of an alkene oligomerization process to produce high octane fuels”, AIChE Natural Gas Conversion Symposium, San Antonio, Texas, June, 2019.
306. Allen, D.T., Dunn, J.B., Chen, Q., Life Cycle Environmental Assessment of Liquid Hydrocarbon Fuels from Natural Gas Liquids, American Chemical Society Green Chemistry & Engineering Conference, Reston, Virginia, June, 2019.
307. Allen, D.T., Forum of Young Scholars on Environmental Ecology, “Natural Gas, Methane and Climate”, Harbin, China, June 2019.
308. Allen, D.T., Forum for World STM Journals, Annual Meeting of the China Association for Science and Technology, Harbin, China, June 2019.

309. Allen, D.T., Plenary talk: Increased Natural Gas Production, Electricity Generation, Methane Emissions and Climate, International Conference on Sustainable Chemical Product and Process Engineering, Tianjin, China, July 2019.
310. Giannikopoulos, I., Skouteris, A., Kimura, Y., DeRosa, S.E., McGaughey, G., McDonald-Buller, E.C., Edgar, T.F., Allen, D.T., Baldea, M., Stadtherr, M.A., Systems Analysis of Light Alkane Resources for Chemical Manufacturing, Foundations of Computer-Aided Process Design, Copper Mountain, Colorado, July, 2019.
311. Allen, D.T., Keynote Talk: Opportunities for Carbon Dioxide Utilization in Chemical Manufacturing, National Conference on Environmental Chemistry, Tianjin, China, August 2019.
312. Allen, D.T., Invited presentation: Increased Natural Gas Production, Methane Emissions and Climate: The Scientific Basis, International Workshop on Environmental Management of Unconventional Oil and Gas Development, Chengdu, China, September 2019.
313. Tullos, E.E., Aminfard, S., Cardoso-Saldaña, F.J., Allen, D., Mogstad, I., DeWitt, L., Flowers, B., Herndon, S.C., Scott, A., Elms, S. and Smith, B., Insights from a field trial of methane detection technologies, American Geophysical Union Annual Meeting, San Francisco, December, 2019.
314. Allen, D.T., Increased Natural Gas Production, Methane Emissions and Climate: The Scientific Basis, 2020 China Methane Summit, Beijing, January, 2020.
315. Allen, D.T., Measuring and reducing greenhouse gas impacts of natural gas supply chains, 2020 International Forum on Innovation and Emerging Industries Development (IEID2020), Beijing (virtual participation), September, 2020
316. Allen, D.T., Can circularity increase the resilience of chemical manufacturing systems? Case study of polymer manufacturing, Enterprise and Infrastructure Resilience Workshop, American Institute of Chemical Engineers, (virtual meeting), September, 2020.
317. Allen, D.T., Measuring and reducing greenhouse gas impacts of natural gas supply chains: Project Astra, China Unconventional Oil and Gas Environmental Management Conference, Chongqing (virtual participation), October, 2020.
318. Allen, D.T., Stokes, S., Tullos, E., Smith, B., Herndon, S., Dewitt, L., Flowers, B., Field Trial Of Methane Emission Quantification Technologies, Society of Petroleum Engineers, Annual Technical Conference and Exhibition, (virtual meeting), doi: 10.2118/201537-MS October, 2020.
319. Allen, D.T., How can we compare leak detection technologies and work practices: update on FEAST, MEET (methane emissions evaluation tool), the Pathway to Equivalency projects? CH₄ Connections 2020, virtual conference, November 17-19, 2020.
320. Allen, D.T., Continuous monitoring for measuring and mitigating methane emissions from oil and gas production operations, Invited Keynote, Foundations of Computer Aided Process Operations (FOCAPO), San Antonio, January, 2023.
321. Chen, Q., Schissel, C., Kimura, Y., Ravikumar, A., Allen, D.T., Estimating annual methane emissions inventories at oil and gas sites using continuous emission monitoring systems, 2023 International Emissions Inventory Conference, Seattle, September, 2023

322. Stokes, S., Huang, L., Cardoso-Saldana, F., Ravikumar, A., Allen, D.T., Detecting changes in methane column concentrations due to large emission events in oil and gas regions, 2023 International Emissions Inventory Conference, Seattle, September, 2023
323. Schissel, C., Ravikumar, A., Allen, D.T., Detecting changes in methane column concentrations due to large emission events in oil and gas regions, 2023 International Emissions Inventory Conference, Seattle, September, 2023
324. Torres, V., Chen, Q., Sullivan, D., Ravikumar, A., Allen, D.T., Large scale continuous monitoring networks for detecting and quantifying methane emissions from oil and gas production operations: Project Astra, 2023 International Emissions Inventory Conference, Seattle, September, 2023
325. Rosselot, K., Balcombe, P., Ravikumar, A., Allen, D.T., A time in mode and carrier technology model of emissions of methane and carbon dioxide from LNG shipping, 2023 International Emissions Inventory Conference, Seattle, September, 2023
326. Sharafutdinov, E., Stokes, S., Wang, J., Hammerling, D., Zimmerle, D., Allen, D.T., Ravikumar, A.P., Facility-level Methane Emissions Reconciliation of Bottom-up Inventory with Top-down Measurements: A Case Study in the Marcellus Basin, 2023 International Emissions Inventory Conference, Seattle, September, 2023
327. Xia, H., Strayer, A.R., Allen, D.T., Ravikumar, A.P., Impact of Measurement Strategies on the Uncertainty of Oil and Gas Measurement-Informed Inventory Estimates, 2023 International Emissions Inventory Conference, Seattle, September, 2023
328. Zhu, Y., Richards-Dinger, D., Hammerling, D., Allen, D.T., Ravikumar, A.P., Systematic approaches to incorporate uncertainty in aerial methane measurements into measurement-informed inventory estimates, 2023 International Emissions Inventory Conference, Seattle, September, 2023
329. Yang, S., Li, H.Z., Allen, D.T., Ravikumar, A.P., Updating Midstream Oil and Gas Emissions Inventories in New York State by Reconciling Measurement-based and Activity-based Approaches to Estimating Emissions, 2023 International Emissions Inventory Conference, Seattle, September, 2023
330. Huang, L. Stokes, S.N., Chen, Q., Cardoso, F., and Allen, D., High Spatial and Temporal Resolution Simulations of Methane Column Loadings due to Routine Emissions and Emission Events in Oil and Gas Regions, American Geophysical Union, Fall Meeting, San Francisco, December, 2023.
331. Allen, D.T., Multi-scale analyses of methane emissions from energy systems, International Workshop on Air Quality and Climate Change 2023, organized by Shanghai University (virtual), December, 2023.