

CHRISTINE WIEDINMYER

National Center for Atmospheric Research
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EDUCATION

The University of Texas at Austin

Ph.D., Chemical Engineering, December, 1999

Advisor: Dr. David T. Allen

Dissertation Title: Biogenic Hydrocarbons in Texas: Source Characterization and Chemistry

The University of Texas at Austin

M.S. Chemical Engineering, May 1998

Tulane University, New Orleans, LA

B.S.E. Chemical Engineering, *Cum Laude*, May 1994

WORK EXPERIENCE

Scientist II

July 2008 - present

National Center for Atmospheric Research, Boulder, CO

Atmospheric Chemistry Division, The Institute for Integrative and Multidisciplinary Earth Studies

Scientist I

November 2005- July 2008

National Center for Atmospheric Research, Boulder, CO

Atmospheric Chemistry Division, The Institute for Integrative and Multidisciplinary Earth Studies

Project Scientist I

Oct. 2001- Nov. 2005

National Center for Atmospheric Research, Boulder, CO

Atmospheric Chemistry Division

Research Associate

May - October, 2001

University of Colorado, CIRES, Boulder, CO

(at the National Oceanic and Atmospheric Administration, Aeronomy Lab)

Post-Doctoral Research Scientist

April, 2000–April, 2001

University of Denver, Denver, CO

Department of Engineering

Graduate Research Assistant

1995-1999

University of Texas at Austin, Austin, Texas

Department of Chemical Engineering

Consultant

August-December, 1998 & Summer 1999

ENVIRON Technology, Inc., Novato, California

Consultant

May-August, 1998

Pollution Solutions, Austin, TX

Undergraduate Research Assistant

1993-1994

Tulane University, New Orleans, LA

Department of Chemical Engineering

HONORS

- Invited Speaker: International Young Scientist Global Change Conference, Trieste, Italy, November, 2003
- Invitee: Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS VI), Brookhaven National Laboratory. Brookhaven, NY, June 14 - 17, 2001
- University Continuing Fellowship recipient, 1998
- Tau Beta Pi (Engineering Honor Society), 1994
- Omega Chi Epsilon (Chemical Eng. Honor Society), 1993

INVITED TALKS

- “Estimating Emissions from Fires”, Environmental Engineering Department, University of Colorado at Boulder, Boulder, CO, February 1, 2008.
- “Estimating Emissions from Vegetation for Air Quality Modeling: Methods and Challenges”, University of Texas at Austin, Austin, TX, August 22, 2007.
- “Aerosols and the Terrestrial Biosphere: Emissions, Processes, and Feedbacks”, University of North Carolina at Chapel Hill, Chapel Hill, NC, March 22, 2007.
- "Aerosols and the Terrestrial Biosphere: Emissions, Processes, and Feedbacks", ACD/TIIMES Seminar, NCAR, Boulder, CO, January 22, 2007.
- “Understanding and Quantifying Biosphere-Atmosphere Interactions,” NCAR, Boulder, CO, October 10, 2005.
- “Working with spatial data to model and evaluate biosphere-atmosphere interactions”, NCAR GIS Initiative Seminar, Boulder, CO, March 22, 2005.
- “Estimating Emissions from Fires in North America for Air Quality Modelers,” Monitoring Science & Technology Symposium, Denver, CO, September 2004
- “Changes in biogenic isoprene emissions: How do they affect regional and global atmospheric chemistry?” International Young Scientist Global Change Conference, Trieste, Italy, November, 2003
- “Regional Air Quality in Texas and the Influence of Biogenic Isoprene,” Gordon Research Conference: Biogenic Hydrocarbons and the Atmosphere, Ventura, CA, February, 2000
- Department of Chemical Engineering, Widener University, Chester, PA, May 1999
- Department of Environmental Engineering, Drexel University, Philadelphia, PA, May 1999

PROFESSIONAL ORGANIZATIONS

American Geophysical Union member, 1998-present
American Association for Aerosol Research member, 2004–2006
Air & Waste Management Association member, 1997-1999
AIChE student member, 1992-1994

TEACHING EXPERIENCE

- Guest Lecturer: University of Denver
 - Sustainable Development and Environment, Oct. 10, 2007 (Sandy Johnson, Instructor).
- Guest Lecturer: University of Colorado at Boulder
 - Organics in the Atmosphere, CHEM 6111, April 22, 2008 (Veronica Vaida, Instructor)
 - Air Pollution Control, MCEN4131/5131, April 2007 (Jana Milford, Instructor)
 - Environmental Modeling, MCEN 4228/5228, April 2006 (Jana Milford, Instructor)

- Energy and the Environment Seminar: Biomass, MCEN 5228-001, March 30, 2005 (Mike Hannigan and Shelly Miller, Instructor)
- Energy and the Environment Seminar: Aerosols, MCEN 5228-005, November 2004 (Mike Hannigan, Instructor)
- Environmental Science and Policy, Spring 2004 (Professor Linnea Avelone)
- Fluid Mechanics, Fall 2002 (Michael Hannigan, instructor)
- Design Project Mentor: University of Colorado at Boulder, (Spring, 2003)
 - Air Pollution Control (MCEN4131/5131) (Michael Hannigan & Elisabeth Andrews, Instructors)
- Teacher: University of Denver, (Fall 2000, Winter 2001)
Mechanical Engineering Laboratory I and II
- Teaching Assistant: University of Texas at Austin, (Spring Semesters 1997, 1998, 1999)
ChE 317- Introduction to Chemical Engineering (Pam Tucker, Professor)

STUDENTS

Co-Advisor: Tanarit Sakulyanontvittaya, Dept. of Mechanical Engineering, University of Colorado at Boulder. Ph.D. received December 2007.

Thesis Committee: Michael Feldman, Dept. of Chemical Engineering, Univ. of Texas at Austin (expected Ph.D. 2009).

NCAR supervisor: Xiaoyan Jiang, Jackson School of Geosciences, Univ. of Texas at Austin

NCAR supervisor: Barron Henderson, School of Engineering and Public Health, University of North Carolina at Chapel Hill.

PROFESSIONAL SERVICE

- Leadership board member, Earth Science Women's Network (ESWN), 2002-present (<http://www.sage.wisc.edu/ESWN>).
- Associate Editor, *Journal of Geophysical Research- Atmospheres*, January 2007-present.
- Reviewer: *Journal of Geophysical Research- Atmospheres; Atmospheric Chemistry and Physics, Atmospheric Environment, Geophysical Research Letters, Environmental Science & Technology*, UK National Environment Research Council, U.S. EPA, U.S. Department of Defense, National Science Foundation.
- Nominated co-Chair for 2012 Gordon Research Conference: Biogenic Hydrocarbons and the Atmosphere (nominated March 2007).
- Co-Organizer, Biogenic Secondary Organic Aerosol Workshop series for early career US and Nordic Scientists, Jan. 2007 - present.
- Discussion leader/Panelist, NCAR GIS in Weather, Climate and Impacts Workshop 2005, Boulder, Colorado July 6-8, 2005.
- Co-Chair/Organizer, 2003 UCAR/NCAR Junior Faculty Forum on Future Scientific Directions: *Interactions between land ecosystems and the atmospheric hydrologic cycle*. NCAR, Boulder, CO, June, 2003.
- Organizer/Leader, BVOC Emissions Workshop, Lancaster University, Lancaster, U.K., September 2002.

COMMUNITY OUTREACH

- Air Quality Expert, NCAR Broadcast Meteorologist Meeting, June 27, 2008.
- Speaker, Geoscience Research at Storm Peak (GRASP), June 23, 2008.
- Speaker, NCAR Undergraduate Leadership Workshop, June 18, 2008.
- NCAR SOARS Science Mentor, Summer 2008.
- Speaker, "Climate Impacts of the Great Outdoors," National Wildlife Federation National Meeting, Keystone, CO, May 16, 2008.

- Speaker, “Energy, Air Quality, and Water Systems in Colorado,” Trout Unlimited Conservation Day, Boulder, CO, Oct. 6, 2007.
- Speaker, NCAR Undergraduate Leadership Workshop, June 21, 2007.
- Workshop activity presenter (the Nitrogen Cycle Game), the Girls Exploring Science, Engineering and Technology (GESET) Symposium, Denver, CO, April 10, 2007.
- Speaker, Western Regional Retired FBI Agents luncheon, Golden, CO, Feb. 21, 2007.
- Speaker, NCAR Undergraduate Leadership Workshop, June 21, 2006.
- Speaker, NCAR Undergraduate Leadership Workshop, June 22, 2005.
- NCAR SOARS writing mentor, Summer 2005.
- Science Fair Judge, Regional Secondary Science Fair, Boulder Valley Public Schools, Boulder, CO, March 3, 2005.
- Lecturer, NCAR Climate and Global Change Geoscience Workshop, July 2002 & 2004.
- Science Fair Judge, Weber Elementary School, Arvada, CO, February, 2003.
- Lecturer, Environmental Science Workshop for School Teachers, Center for Energy and Environmental Resources, University of Texas at Austin, June 1997, June 1998, June 1999.
- Student lecturer for environmental program at Pecan Springs Middle School, Austin, TX, 1997.
- Student lecturer for environmental program at Lago Vista Middle School, Austin, TX, 1997.
- UT Graduate Student Engineering Council, 1995- 1999.

WORKSHOPS

- 2007-2008 NSF Biogenic secondary organic aerosol workshop series for early career US and Nordic scientists, July 2007 (Finland); August 2008 (Sweden).
- 2006 UCAR/NCAR Junior Faculty Forum: *Air Quality Management*, NCAR, Boulder, CO, August 1-3, 2006.
- 2005 NCAR GIS in Weather, Climate and Impacts Workshop 2005 Boulder, Colorado July, 2005.
- 2004 UCAR/NCAR Junior Faculty Forum on Future Scientific Directions: *The role of coastal zones in global biogeochemical cycles*. NCAR, Boulder, CO, June, 2004.
- 2003 UCAR/NCAR Junior Faculty Forum on Future Scientific Directions: *Interactions between land ecosystems and the atmospheric hydrologic cycle*. (co-Chair) NCAR, Boulder, CO, June, 2003.
- Megacities Impacts on Regional and Global Environments (MIRAGE), Mexico City case study workshop. Hosted by NCAR, November 13-14, 2003.
- BVOC Emissions Workshop, Lancaster University, Lancaster, U.K., September 2002
- NCAR GIS Initiative Workshop: GIS in Weather, Climate and Impacts, NCAR, Boulder, CO, August 2002.
- 3rd WRF User’s Workshop, NCAR, Boulder, CO, July 2002.
- Houston Emissions Inventory Roundtable, NOAA Aeronomy Laboratory, Boulder, CO, September 2001.
- TexAQS2000 Science Workshop, J.J. Pickle Research Center, Austin, TX, August 2001.
- SOLVE/THESEO Science Meeting. Sponsored by NASA. Palermo, Italy, September 24-29, 2000.
- Biogenic Emissions - Biosphere Atmosphere Exchange - Net Effects Symposium. California Air Resources Board. Sacramento, CA, December 9-10, 1999.
- Workshop on Biogenic Hydrocarbons in the Atmospheric Boundary Layer. Sponsored by the American Meteorology Society. University of Virginia, Charlottesville, VA, August 24-27, 1997.

PEER-REVIEWED PUBLICATIONS (**Papers of advised graduate student)

In preparation

Wiedinmyer, C., M. Tewari, F. Chen. Impact of forest mortality due to pine beetle infestation on local and regional meteorology. To be submitted to *Geophysical Research Letters*.

Carlton, A.M., **C. Wiedinmyer**, J. Kroll. Secondary organic aerosol from isoprene: A review. To be submitted to *Atmos. Chem. Phys. Discuss.*

Yokelson, R., J. Crounse, P. DeCarlo, T. Karl, S. Urbanski, E. Atlas, T. Campos, A. Weinheimer, J. Holloway, P. Weibring, F. Flocke, D. Toohey, P. Wennberg, **C. Wiedinmyer**, L. Mauldin, A. Fried, J. Jiminez, C. Cantrell, R. Weber, Ernesto Alvarado, K. Adachi, and P.R. Buseck. Biomass burning in the Yucatan. To be submitted to *Atmos. Chem. Phys. Discuss.*

Wiedinmyer, C. and S. Chung. Direct aerosol and cloud impacts on biogenic emissions in the eastern U.S. To be submitted to *Geophysical Research Letters*.

Karl, T., E. Apel, A. Hodzic, L. Emmons, D.D. Riemer, D.R. Blake, F. Flocke, **C. Wiedinmyer**, and W. Shaw. Emissions of Volatile Organic Compound Inferred from Airborne Flux Measurements over a Megacity. To be submitted to *Atmos. Chem. Phys. Discuss.*

Submitted

Pfister, G., L. Emmons, **C. Wiedinmyer**. Impacts of the Fall 2007 California Wildfires on Surface Ozone: Integrating Local Observations with Global Model Simulations. Submitted to *Geophysical Research Letters*, June 2008.

Chen, J., J. Avise, B. Lamb, E. Salathé, C. Mass, A. Guenther, **C. Wiedinmyer**, J.-F. Lamarque, S. O'Neill, D. McKenzie, N. Larkin. The Effects of Global Changes upon Regional Ozone Pollution in the United States. Submitted to *Atmos. Chem. Phys. Discuss.*, June 2008.

Avise, J., J. Chen, B. Lamb, **C. Wiedinmyer**, A. Guenther, E. Salathé, C. Mass. Attribution of projected changes in U.S. ozone and PM_{2.5} concentrations to global changes. Submitted to *Atmos. Chem. Phys. Discuss.*, June 2008.

**Tanarit Sakulyanontvittaya, A. Guenther, D. Helmig, J. Milford, C. Wiedinmyer. Secondary Organic Aerosol from Sesquiterpene and Monoterpene Emissions in the United States. Submitted *Environmental Science & Technology*, March 2008.

Published

Warneke C., J.A. de Gouw, L. Del Negro, J. Brioude, S. McKeen, H. Stark, W.C. Kuster, P.D. Goldan, M. Trainer, F.C. Fehsenfeld, **C. Wiedinmyer**, A.B. Guenther, A. Hansel, A. Wisthaler, E. Atlas. Determination of Biogenic Emissions in the Eastern United States and Texas and Comparison with Biogenic Emission Inventories. *Journal of Geophysical Research*, In press, August 2008.

Jiang., X., **C. Wiedinmyer**, Z.-L. Yang, F. Chen, and J. Chun-Fung Lo. Predicted Impacts of Climate and Land-Use Change on Surface Ozone in the Houston Area. *Journal of Geophysical Research-Atmospheres*, in press, August 2008.

Al-Saadi, J., A. Soja, R.B. Pierce, J. Szykman, **C. Wiedinmyer**, L. Emmons, S. Kondragunta, X. Zhang, C. Kittaka, T. Schaack, K. Bowman. (2008) Evaluation of Near-Real-Time Biomass Burning Emissions

Estimates Constrained by Satellite Active Fire Detections. *Journal of Applied Remote Sensing*, v2, [DOI: 10.1117/1.2948785].

T. Sakulyanontvittaya, T. Duhl, **C. Wiedinmyer, D. Helmig, S. Matsunaga, M. Potosnak, J. Milford, A. Guenther (2008) Monoterpene and Sesquiterpene Emission Estimates for the United States. *Environmental Science & Technology*, 42 (5), 1623–1629.

Wiedinmyer, C. and J. Neff. CO₂ emissions from fires in the U.S.: Implications for policy. *Carbon Balance and Management*, 2 :10 (1 November 2007) .

Wiedinmyer, C. and H. Friedli. (2007) Mercury Emission Estimates from Fires: An Initial Inventory for the United States, *Env. Sci. & Tech.*, 41(23); 8092-8098.

Hodzic, A., S. Madronich, B. Bohn, S. Massie, L. Menut, **C. Wiedinmyer** (2007) Wildfire particulate matter in Europe during summer 2003: meso-scale modeling of smoke emissions, transport and radiative effects. *Atmos. Chem. Phys.*, 7, 4043-4064.

J. D. Fast, B. de Foy, F. Acevedo Rosas, E. Caetano, G. Carmichael, L. Emmons, D. McKenna, M. Mena, W. Skamarock, X. Tie, R. L. Coulter, J. C. Barnard, **C. Wiedinmyer**, S. Madronich (2007) A meteorological overview of the MILAGRO field campaigns, *Atmos. Chem. Phys.*, 7, 2233-2257.

Helmig, D., Ortega, J., Duhl, T., Tanner, D., Guenther, A., Harley, P., **Wiedinmyer, C.**, Milford, J., Sakulyanontvittaya, T. (2007) Sesquiterpene emissions from Pine Trees- Identifications, Emission Rates and Flux Estimates for the Contiguous United States. *Environmental Science & Technology*, 41, 1545-1553.

Matsunaga, S.N., A.B. Guenther, Y. Izawa, **C. Wiedinmyer**, J.P. Greenberg, and K. Kawamura (2007) Importance of wet precipitation as a removal and transport process for atmospheric water soluble carbonyls, *Atmospheric Environment*, 41, 790-796.

Guenther, A., T. Karl, P. Harley, **C. Wiedinmyer**, P. I. Palmer, C. Geron (2006) Estimates of global terrestrial isoprene emissions using MEGAN (Model of Emissions of Gases and Aerosols from Nature), *Atmospheric Chemistry and Physics*, 6, 3181-3210.

Palmer, P.I., Abbot, D.S., Fu, T.-M., Jacob, D.J., Chance, K., Kurosu, T.P., Guenther, A., **Wiedinmyer, C.**, Stanton, J.C., Pilling, M.J., Pressley, S.N., Lamb, B., Sumner, A.L. (2006) Quantifying the seasonal and interannual variability of North American isoprene emissions using satellite observations of the formaldehyde column. *J. Geophys. Res.*, 111(D12), D12315, 10.1029/2005JD006689.

Wiedinmyer, C., B. Quayle, C. Geron, A. Belote, D. McKenzie, X. Zhang, S. O'Neill, and K.K. Wynne (2006) Estimating emissions from fires in North America for Air Quality Modeling. *Atmospheric Environment*, 40, 3419-3432.

Wiedinmyer, C., X. Tie, A. Guenther, R. Neilson, C. Granier. Future changes in biogenic isoprene emissions: how might they affect regional and global atmospheric chemistry? (2006) *Earth Interactions*, v10, paper 3.

Barth, M., J. McFadden, J. Sun, **C. Wiedinmyer**, P. Chuang, D. Collins, R. Griffin, M. Hannigan, T. Karl, S-W Kim, S. Lasher-Trapp, S. Levis, M. Litvak, N. Mahowald, K. Moore, S. Nandi, E. Nemitz, A. Nenes, M. Potosnak, T. Raymond, J. Smith, C. Still, C. Stroud (2005) Coupling between land ecosystems and the atmospheric hydrologic cycle through biogenic aerosol pathways, *Bull. Amer. Meteor. Soc.*, 86(12), 1738-1742.

Wiedinmyer, C., J. Greenberg, A. Guenther, B. Hopkins, K. Baker, C. Geron, P.I. Palmer, B. Long, J. Turner, G. Petron, T. Pierce, B. Lamb, H. Westberg, W. Baugh, P. Harley, M. Koerber, M. Janssen. (2005), Ozarks Isoprene Experiment (OZIE): Measurements and modeling of the “isoprene volcano,” *J. Geophys. Res.*, 110, D18307, doi:10.1029/2005JD005800.

Pfister, G., P.G. Hess, L.K. Emmons, J.-F. Lamarque, **C. Wiedinmyer**, D.P. Edwards, G. Pétron, J.C. Gille, G. W. Sachse (2005) Constraints on Emissions for the Alaskan Wildfires 2004 using Data Assimilation and Inverse Modeling of MOPITT CO. *Geophysical Research Letters* v32, L11809, doi:10.1029/2005GL022995.

Neuman, J. A., D. D. Parrish, T. B. Ryerson, C. A. Brock, **C. Wiedinmyer**, G. J. Frost, J. S. Holloway, and F. C. Fehsenfeld (2004), Nitric acid loss rates measured in power plant plumes, *J. Geophys. Res.*, 109, D23304, doi:10.1029/2004JD005092.

Greenberg, J.P., A.B. Guenther, G. Petron., **C. Wiedinmyer**, O. Vega, L. Gatti, J. Tota, G. Fisch. (2004) Biogenic VOC emissions from forested and cleared Amazonian landscapes. *Global Change Biology*, 10(5), pp. 651-662.

Wiedinmyer, C., Guenther, A., Harley, P., Hewitt, C.N., Geron, C., Artaxo, P., Steinbrecher, R., Rasmussen. (2004) Global organic emissions from vegetation. Chapter in Emissions of Atmospheric Trace Compounds, Edited by Claire Granier, Paulo Artaxo, and Claire E. Reeves. Kluwer Academic Publishers, Dordrecht, The Netherlands, pp. 115 -170.

Hawes, AK; Solomon, S; Portmann, RW; Daniel, JS; Langford, AO; Miller, HL; Eubank, CS; Goldan, P; **Wiedinmyer, C**; Atlas, E; Hansel, A; Wisthaler, A. (2003) Airborne observations of vegetation and implications for biogenic emission characterization. *Journal of Environmental Monitoring*, (6), pp. 977-983.

Levis, S., **C. Wiedinmyer**, G. B. Bonan, and A. Guenther, (2003) Simulating biogenic volatile organic compound emissions in the Community Climate System Model, *Journal of Geophysical Research-Atmospheres*, 108(D21), 4659, doi:10.1029/2002JD003203.

Roberts, J.M., Jobson, B.T., Kuster, W., Goldan, P., Murphy, P., Williams, E., Frost, G., Reimer, D., Apel, E., Atlas, E., Stroud, **C.**, **Wiedinmyer, C.**, Fehsenfeld, F. (2003) An examination of PANs and related VOC chemistry during TexAQS2000 using ground-based measurements. *Journal of Geophysical Research-Atmospheres*, 108(D16), 4495, doi:10.1029/2003JD003383.

Otter, L., A. Guenther, **C. Wiedinmyer**, G. Fleming, P. Harley, and J. Greenberg (2003) Spatial and temporal variations in biogenic volatile organic compound emissions for Africa south of the equator, *J. Geophys. Res.*, 108(D13), 8505, doi:10.1029/2002JD002609.

Ryerson, T.B., Trainer, M., Nicks, D.K., Neuman, A.J., Holloway, J.S., Brock, C.A., Jakoubek, R.O., Parrish, D.D., Seuper, D.T., Frost, G.J., Kuster, W.C., Goldan, P.D., Dissly, R.W., Hubler, G., Angevine, W.M., Fehsenfeld, F.C., Donnelly, S.G., Schauffler, S., Atlas, E.L., Weinheimer, A.J., Flocke, F., Wert, B.P., Potter, W.T., Fried, A., **Wiedinmyer, C.**, Senff, C.J., Banta, R.M., Darby, L.S., Alvarez, R.J. (2003) Effect of petrochemical industrial emissions of reactive alkenes and NO_x on tropospheric ozone formation in Houston, TX. *Journal of Geophysical Research-Atmospheres*, 108(D8), 10.1029/2002JD003070.

Schmid, O., J. M. Reeves, J. C. Wilson, **C. Wiedinmyer**, C.A. Brock, D.W. Toohey, L. M. Avallone, A. M. Gates, M.N. Ross. (2003) Size-Resolved Particle Emission Indices in the Stratospheric Plume of an Athena II Rocket. *Journal of Geophysical Research-Atmospheres*, 108(D8), 10.1029/2002JD002486.

Brock, C.A., M. Trainer, T.B. Ryerson, J.A. Neuman, D.D. Parrish, J.S. Holloway, D.K. Nicks, Jr., G.J. Frost, G. Hubler, F.C. Fehsenfeld, J.C. Wilson, J.M. Reeves, B.G. Lafleur, H. Hilbert, E.L. Atlas, S. G. Donnelly, S.M. Schauffler, V.R. Stroud, **C. Wiedinmyer**. (2003) Particle Growth in Urban and Industrial Plumes in Texas. *Journal of Geophysical Research-Atmospheres*, 108(D3), 4111, doi:10.1029/2002JD002746.

Wert, B.P., Trainer, M., Fried, A., Ryerson, T.B., Henry, B., Potter, W., Angevine, W.M., Atlas, E., Donnelly, S.G., Fehsenfeld, F., Frost, G.J., Goldan, P.D., Hansel, A., Holloway, J.S., Hubler, G., Kuster, W.C., Nicks, D.K. Jr., Neuman, J.A., Parrish, D.D., Schauffler, S., Stutz, J., Sueper, D.T., **Wiedinmyer, C.**, Wisthaler, A. (2003) Signatures of alkene oxidation in airborne formaldehyde measurements during TexAQS2000. *Journal of Geophysical Research-Atmospheres*, 108(D3), 4104, doi:10.1029/2002JD002502.

Wiedinmyer, C., Guenther A., Strange, W., Yarwood, G., Allen, D. (2001) A land use database and examples of biogenic isoprene emission estimates for the state of Texas, USA. *Atmospheric Environment*. 35(36), pp. 6465-6477.

McDonald-Buller, E., **Wiedinmyer, C.**, Kimura, Y., Allen, D. (2001) Effects of Land Use Data on Dry Deposition in a Regional Photochemical Model for Eastern Texas. *J. Air & Waste Management Assoc.* 51 (8), pp.1211-1218.

Wiedinmyer, C., Friedfeld, S., Baugh, W., Greenberg, J., Guenther, A., Fraser, M., Allen, D. (2001) Measurement and analysis of atmospheric concentrations of isoprene and its reaction products in central Texas. *Atmospheric Environment*, 35(6), pp. 1001-1013.

Wiedinmyer, C., Strange, W., Estes, M., Yarwood, G., Allen, D. (2000) Biogenic hydrocarbon emissions estimates in North Central Texas. *Atmospheric Environment*, 34(20), pp. 3419-3435.

SELECTED PRESENTATIONS AND PAPERS

Wiedinmyer, Christine, Jerome Fast, Alex Guenther, Serena Chung. "The Influence of Aerosols on Biogenic Emissions: Case Studies for... (1) Mexico and (2) Eastern U.S.", presented at the AGU Fall Meeting, San Francisco, CA, December 10-15, 2006.

Wiedinmyer, Christine, Chris Geron, Angie Belote, Brad Quayle, Don McKenzie, Xiaoyang Zhang, Susan O'Neill, Kristina Klos Wynne, and Alex Guenther. "Fire emissions from North America: A simple modeling approach", presented at the U.S. EPA Emission Inventory Conference, New Orleans, LA, May 18, 2006.

Wiedinmyer, Christine, Angie Belote, Kristina Klos, Alex Guenther, Brad Quayle, Chris Geron, Carol Shay, Tanarit Sakulyanontvittaya, and Jana Milford. "Estimating fire emissions and the impacts for air quality in the eastern United States", presented at the EastFIRE Conference, Fairfax, VA., May 11-13, 2005

Wiedinmyer, C., K. Klos, A. Belote, C. Geron, B. Quayle, A. Guenther, and C. Shay. "Daily fire emissions in North America for air quality modelers". Monitoring Science & Technology Symposium, Denver, CO, September 22, 2004.

Wiedinmyer, C., Ross, M.N. Reeves, J.M., Wilson, J.C., Brock, C.B. "Measurement of the aerosol size distributions in the stratospheric wakes of three rockets." Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS). Brookhaven National Laboratory, Long Island, NY, June, 2001.

Wiedinmyer, C. "Regional Air Quality in Texas and the Influence of Biogenic Isoprene." Gordon Research Conference: Biogenic Hydrocarbons and the Atmosphere. Ventura, CA. February 27 – March 3, 2000.

Geron, C., Guenther, A., Greenberg, J., Wiedinmyer, C. "Scaling Isoprene Emissions in the Western and Central United States." American Geophysical Union Fall Conference. San Francisco, Ca. December 1999.

Wiedinmyer, C. and D. Allen. (Paper 99-236) "Isoprene Emissions and Concentrations in Central Texas." Proceedings of the Air and Waste Management Association's 92nd Annual Meeting. St. Louis, MO. June 20-24, 1999.

Wiedinmyer, C., Strange, W., Allen, D. (Paper 99-233) "Vegetation Coverage for Central Texas." Proceedings of the Air and Waste Management Association's 92nd Annual Meeting. St. Louis, MO. June 20-24, 1999.

Estes, M., Smith, J., Wiedinmyer, C. "Hierarchical Emissions Inventory Development for Nested Photochemical Modeling Part 3: Biogenic Sources." Proceeding of the Air and Waste Management Association Emission Inventory Conference. New Orleans, LA. Dec. 8-10, 1998.

SELECTED POSTER PRESENTATIONS

Wiedinmyer, C., S. Chung, J. Fast, and A. Guenther. "Impacts of aerosols on meteorology and biogenic emissions", Presented at the Biogenic Hydrocarbons and the Atmosphere Gordon Research Conference, Ventura, CA, Feb. 25- March 2, 2007.

Wiedinmyer, Christine, Tanarit Sakulyanontvittaya, Jana Milford, Alex Guenther, Detlev Helmig, Chao-Jung Chien, John Ortega, Tiffany Duhl, David Tanner, Angie Belote, Chris Geron, Brad Quayle. "Estimating the impact of biogenic sesquiterpene and fire emissions to organic aerosol concentrations", presented at the 24th Annual AAAR Annual Conference, Austin, TX, Oct. 17-21, 2005.

Wiedinmyer, C., Angie Belote, Brad Quayle, Chris Geron, Tanarit Sakulyanontvittaya, Kristina Klos Wynne, Jana Milford, Alex Guenther, and Carol Shay. "Estimating and Understanding the Impacts of Fire on Regional Particulate Matter Concentrations", Presented at the 2005 AAAR PM Supersites Program and Related Studies International Specialty Conference, Atlanta, GA, February 7-11, 2005.

Wiedinmyer, C., A. Guenther, A. Belote, K. Klos. "Emissions From the Terrestrial Biosphere." Presented at the 2004 Fall AGU Meeting, San Francisco, CA, December 12-17, 2004.

Matsunaga, S., C. Wiedinmyer, S. Kato, A. Yoshino, Y. Miyakawa, J. Greenberg, Y. Kajii, A. Guenther. "Sources of Biogenic and Anthropogenic Semi Volatile Organic Carbonyls and Their Effects on the Air Quality in Suburban and Remote Areas." Presented at the 2004 Fall AGU Meeting, San Francisco, CA, December 12-17, 2004.

Nandi, S., U. Vanchindorj, C. Wiedinmyer, A. Guenther, E. Prins, A. Setzer, P. Artaxo, C. Elvidge. "Uncertainties in Satellite Based Fire Emission Inventories in the Amazon." Presented at the 2004 Fall AGU Meeting, San Francisco, CA, December 12-17, 2004.

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