

THOMAS M. CAHILL

School of Mathematical and Natural Sciences
Arizona State University at the West Campus
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CURRENT POSITION:

Associate Professor in the Division of Mathematical and Natural Science at Arizona State University, West Campus.

EDUCATION:

- 2000 Ph.D. in Environmental Sciences and Health; University of Nevada, Reno (GPA - 4.0)
Advisor: Dr. James Seiber
Dissertation title: "Determination of Trifluoroacetic Acid in Environmental Samples and an Evaluation of its Distribution and Possible Impacts on Sensitive Ecosystems"
- 1997 Master of Science in Ecology (emphasis in Ecotoxicology) at the University of California, Davis (GPA 3.87) Thesis title: "X-ray Analyses of Elemental Concentrations in Feathers"
- 1994 Bachelor of Science, Wildlife and Fisheries Biology, University of California at Davis, Graduated with Honors, Upper division GPA- 3.92; Cumulative GPA- 3.52

AREAS OF SPECIALIZATION:

Development of analytical methods for new chemicals of concern
Field sample collection techniques to assess biological impacts of chemicals
Modeling of environmental and biological fate of chemicals

RESEARCH EXPERIENCE:

Postdoctoral Research at University of California, Davis

Developed analytical methods for the detection of acrolein at low ppt levels
Developed tandem mass spectrometry methods for the detection of hydroxylated PAHs
Quantified gaseous and particulate concentrations of biogenic secondary organic aerosols
Engaged in source identification of tracer compounds for diesel and gasoline vehicles

Postdoctoral Research at Trent University, Peterborough, Canada

Developed and programmed pharmacokinetic models to predict chemical fate in humans
Predicted human tissue concentration of two phthalate esters from exposure assessments
Developed environmental fate model predicting the fate of multiple chemical species
Investigated the environmental fate of perfluorooctane sulfonate (PFOS) for 3M

Dissertation Research at the University of Nevada, Reno

Developed headspace gas chromatographic methods to determine trifluoroacetate (TFA)
Determined the potential impacts of TFA of sensitive wetlands, namely vernal pools
Investigated the spatial distribution of TFA downwind of source regions

Master's Research at the University of California, Davis

Refined and applied X-ray fluorescence techniques to determine elements in feathers
Assessed the impacts of mercury contamination on the Clear Lake bird community

TEACHING EXPERIENCE:

Instructor for *Fundamentals of Toxicology* Arizona State University, West Campus, Spring 2016, 2017, 2018, 2019

Created the upper division toxicology course required for the Pharmacology and Toxicology BS program and the Pharmacology and Toxicology concentration within the Biology BS program.

Instructor for *Instrumental Analysis of Chemicals*, Arizona State University, West Campus, Spring 2009, 2010 and 2011, Fall 2014 to 2018

Upper division analytical chemistry course required for the Chemistry minor within the Life Sciences majors.

Included laboratory experiment creation and application.

Instructor for *General Chemistry*, Arizona State University, West Campus, Fall 2006, 2007, 2008, 2010, 2011 & Spring 2007, 2008, 2012 and 2013, 2015

Introductory chemistry course for biological sciences majors.

Included laboratory experiment creation and application.

Lead instructor for *Analysis of Toxicants* course for two years, Fall 2004 and Fall 2005

Graduate level course in the Dept. of Environmental Toxicology, UC Davis,

The course details analytical procedures for common toxic compounds

Teaching evaluations available upon request.

Created a new graduate course *Introduction to Environmental Multimedia Fugacity Models*

Graduate level course in the Dept. of Environmental Toxicology, UC Davis, Winter 2003

The course describes the processes to create multimedia environmental fate models.

Teaching evaluations available upon request.

PROFESSIONAL EXPERIENCE:

Principal investigator of Health Effects Institute and California Air Resources Board grants

Currently managing a trace analysis chemical laboratory in Environmental Chemistry

Managing grant budgets

Preparing progress and final reports for contract agencies

Supervising graduate students in the laboratory

GRANTS and CONTRACTS:

2018

STOPS: Stop Transmission of OrthoPoxviruses at the Source
(one of approximately 20 investigators)

FP# 15144 submitted to DARPA

Total budget: \$9,023,649

“Engine Particle Ingestion Classifier for Gas Turbine Engines” A Small Business Technology Transfer (STTR) Program with Creare LLC submitted to the US Department of the Navy.
Funded: \$71,000 (ASU portion)
Duration: June 2018 to June 2019

2017

“Isolation and characterization of botanical-based anti-zika virus compounds”
Proposed to NIH but not funded

2016

“Cure As A Research Experience For All: Preparing The Future Stem Workforce”
Funded by NSF

“Isolation and Characterization of A Broad Antiviral That Inhibits Viral Attachment”
Proposed to NIH but not funded

“Isolation And Characterization Of A Novel Cdk Inhibitor With Broad Antiviral Activity”
Proposed to NIH but not funded

“Curing Limited Undergraduate Research Opportunities With I-Cures: Interdisciplinary Course-Based Undergraduate Research Experiences”
Proposed to NSF but not funded.

2014

“RUI/RIG: Student-friendly elemental analysis at ASU West.”
Proposed to NSF but not funded

“Assessment of Natural Background and Sources of Acrolein”
Proposed to NSF but not funded

2013:

Analysis of Biological Markers of Metal Pollution in Arizona
SLAC facility, SSRL proposal 4022
Proposal for beam time on beamline 2.2 only (project duration is 2 years).

2011:

Rare earths and heavy metals in aerosol and geological samples
SLAC facility, SSRL proposal 3626
Proposal for beam time on beamline 2.2 only (project duration is 2 years).

2010:

Analysis of Winter Time Aerosols at Del Paso Manor for Organic Chemicals
Funded by Breathe California of Sacramento-Emigrant Trails
Project cost: \$10,000

2007:

Alternative Fuels Emissions and Their Environmental Health Effects: Biodiesel

Funded by California Air Resources Board

Project cost: \$30,015

Determination of Toxic Aerosols on a Heavily Traveled Secondary Road.

Funded by Sacramento Metropolitan Air Quality Management District

Project cost: \$49,400

2006:

Determination of Diurnal Cycles of Acrolein and Other Small Carbonyls in Regions Impacted by Vehicle Emissions

Funded by California Air Resources Board

Project cost: \$87,179

PATENTS:

2017 (provisional) Pharmaceutical composition comprising caffeic acid chelates. 62/503,276

JOURNAL PUBLICATIONS: (Corresponding author denoted by *)

Langland, J.; Bertram Jacobs, B.; Wagner, C.E.; Ruiz, G.; **Cahill, T.M.*** (2018) Antiviral activity of metal chelates of caffeic acid and similar compounds towards herpes simplex, VSV-Ebola pseudotyped and vaccinia viruses. *Antiviral Research* 160 (2018) 143–150.

Ehrlich, J. and **Cahill, T.M.*** (2018) Identification of broadleaf and coniferous trees as a primary source of acrolein. *Atmospheric Environment* 191 (2018) 414–419

Polidoro, B.A.*; Comerros-Raynal M.T.; **Cahill, T.**; Clement, C. (2017) Land-based sources of marine pollution: Pesticides, PAHs and phthalates in coastal stream water, and heavy metals in coastal stream sediments in American Samoa. *Marine Pollution Bulletin* 116:501-507

Sweat, K.G.; Broatch, J.; Borrer, C.; Hagan, K.; **Cahill, T.M.*** (2016) Variability in Capsaicinoid Content and Scoville Heat Ratings of Commercially Grown Jalapeño, Habanero and Bhut Jolokia Peppers. *Food Chemistry* 210: 606–612

Cahill, T.M.* (2014) Ambient Acrolein Concentrations in Coastal, Remote, and Urban Regions in California. *Environmental Science and Technology*, 48, 8507–8513

Barberie, S.R.; Iceman, C.R.; Cahill, C.F.; **Cahill, T.M.*** (2014) Evaluation of Different Synchrotron Beamline Configurations for X-ray Fluorescence Analysis of Environmental Samples. *Analytical Chemistry*, 86, 8253–8260

Cahill, T.M.* and Cahill, T.A. (2014) Seasonal Variability of Particle-associated Organic Compounds Near of a Heavily Traveled Secondary Road. *Aerosol Science and Technology*, 48: 53-60.

Barberie, S.R.; Cahill, T.A.; Cahill, C.F.; **Cahill, T.M.**; Iceman, C.R.; Barnes, D.E. (2013) UC Davis XIPLINE (“zipline”) end-station at the Stanford Synchrotron Radiation Lightsource: Development and experimental results. *Nuclear Instruments and Methods in Physics Research A* 729: 930–933

Cahill, T.M.* (2013) Annual Cycle of Size-resolved Organic Aerosol Characterization in an Urbanized Desert Environment *Atmospheric Environment*, 71: 226-233.

Wagner, C.*; Marshall, P.; **Cahill, T.**; Mohamed, Z. (2013) Following the Hydrogenation of Curcumin Visually and by NMR. *Journal of Chemical Education* 90: 930-933.

Cahill, T.M.*; Okamoto, R.A. (2012) Emissions of Acrolein and Other Aldehydes from Biodiesel-Fueled Heavy-Duty Vehicles. *Environmental Science and Technology* 46: 8382-8388.

Wagner C.E.*; **Cahill, T.M.** Marshall P.A.; (2011) Extraction, Purification and Spectroscopic Characterization of a Mixture of Capsaicinoids. *Journal of Chemical Education* 88: 1574-1579

Vasquez, M.E.; **Cahill, T.M.**; Tjeerdema, R.S.* (2011) Soil and Glass Surface Photodegradation of Etofenprox under Simulated California Rice Growing Conditions. *Journal of Agricultural and Food Chemistry* 59: 7874-7881.

Cahill, T.A.*; Barnes, D.E.; Spada, N.J.; Lawton, J.A.; **Cahill, T.M.** (2011) Very Fine and Ultra-Fine Metals and Ischemic Heart Disease in the California Central Valley 1: 2003 – 2007. *Aerosol Science and Technology* 45:1123-1134.

Cahill, T.A.*; **Cahill, T.M.**; Barnes, D.E.; Spada, N.J.; Miller, R. (2011) Inorganic and organic aerosols downwind of the California’s Roseville Rail Yard. *Aerosol Science and Technology* 45:1049-1059.

Wagner C.E.*; Marshall P.A.; **Cahill, T.M.** (2010) “Determination of the Molar Mass of an Unknown Gas with a 2-L Soda Bottle,” *Chem. Educator* 2010, 15, 277-280. DOI 10.1333/s00897102299a

Cahill, T.M. (2010) Size-Resolved Organic Speciation of Wintertime Aerosols in California’s Central Valley. *Environmental Science and Technology* 44: 2315-2321.

Seaman, V.Y.; Bennett, D. H.; **Cahill, T.M.*** (2009) Indoor Acrolein Emission and Decay rates Resulting from Domestic Cooking Events. *Atmospheric Environment*, 43: 6199-6204.

Vasquez, M.E.; Gunasekara, A.S.; **Cahill, T.M.**; Tjeerdema, R.S.* (2009) Partitioning of etofenprox under simulated California rice-growing conditions. *Pest Management Science*. Published online in Wiley Interscience: DOI 10.1002/ps.1826

Spada, N.; Fujii, E. **Cahill, T.M.*** (2008) Diurnal Cycles of Acrolein and Other Small Aldehydes in Regions Impacted by Vehicle Emissions. *Environmental Science and Technology*, 42:7084-7090.

Bouvier-Brown, N.C.; Goldstein, A.H.*; Worton, D.R.; Matross, D.M.; Gilman, J.B.; Kuster, W.C.; Welsh-Bon, D.; Warneke, C.; de Gouw, J.A.; **Cahill, T.M.**; Holzinger, R. Methyl chavicol: characterization of its biogenic emission rate, abundance, and oxidation products in the atmosphere. *Atmospheric Chemistry and Physics Discussions*, 8, 19707–19741, 2008

Riddle, S.G.; Jakober, C.A.; Robert, M.A.; **Cahill, T.M.**; Charles, M.J.; Kleeman, M.J.* (2007) Large PAHs Detected In Fine Particulate Matter Emitted From Light-Duty Gasoline Vehicles. *Atmospheric Environment* 41:8658-8668.

Kobayashi, R.; **Cahill, T.M.**, Okamoto, R.A.; Maddalena, R.L.; Kado, N.Y.* (2007) Exposure Chamber Study of Uptake and Clearance of Airborne Polycyclic Aromatic Hydrocarbons (PAHs) by Wheat Grain. *Environmental Science and Technology* 41:7934-7940

Seaman, V.Y.; Bennett, D. H.; **Cahill, T.M.*** (2007) Origin, Occurrence and Source Emission Rate of Acrolein in Residential Indoor Air. *Environmental Science and Technology*, 41:6940-6946.

Cahill, T.M.*; Groskova, D.; Charles, M.J.; Sanborn, J.R; Denison, M.S.; Baker, L.; (2007) Atmospheric Concentrations of Polybrominated Diphenyl Ethers at Near-Source Sites. *Environmental Science and Technology*, 41:6370-6377

Cahill, T.M.*; Seaman, V.Y.; Charles, M.J.; Holzinger R.; Goldstein, A.H. (2006) Secondary Organic Aerosols Formed from Oxidation of Biogenic VOCs in the Sierra Nevada Mountains of California. *Journal of Geophysical Research, Atmospheres*, 111, D16312.

Lau, F.K.; Charles, M.J.; **Cahill, T.M.*** (2006) Evaluation of gas stripping methods for the determination of Henry's Law Constants for polybrominated diphenyl ethers and polychlorinated biphenyls. *Journal of Chemical & Engineering Data*. 51: 871-878

Seaman, V.Y.; Charles, M.J.; **Cahill, T.M.*** (2006) A Sensitive Method for Quantification of Acrolein and Other volatile Carbonyls in Ambient Air Samples. *Analytical Chemistry*. 78: 2405-2412.

Fraser, A.J.; **Cahill, T.M.**; Lasenby, D.C.; Mackay, D.*; Milford, L. (2005) The Role of Cannibalism and Contaminant Source on Bioaccumulation in Aquatic Food Webs. *Environmental Toxicology and Chemistry* 24(4): 909-915.

Mackay, D.*; Webster, E.; Woodfine, D.; **Cahill, T.**; Doyle, P.; Couillard, Y.; Gutzman, D. (2003) Towards Consistent Evaluation of the Persistence of Organic, Inorganic and Metallic Substances. *Human and Ecological Risk Assessment* 9: 1445-1474.

Cahill, T.M.; Mackay, D.* (2003) Application of a High-Resolution Multi-species (HR-MS) Model for Estimating the Environmental Fate of Chemicals. *Chemosphere* 53: 571-581.

Cahill, T.M.; Mackay, D.* (2003) Complexity in Multimedia Mass Balance Models: When are Simple Models Adequate and When are more Complex Models Necessary? *Environmental Toxicology and Chemistry* 22: 1404-1412.

Cahill, T.M.; Cousins, I.; Mackay, D.* (2003) General Fugacity-Based Model to Predict the Environmental Fate of Multiple Chemical Species. *Environmental Toxicology and Chemistry* 22: 483-493.

Cahill, T.M.; Cousins, I.; Mackay, D.* (2003) Development and Application of a Generalized Physiologically-Based Pharmacokinetic (PBPK) Model for Multiple Environmental Contaminants. *Environmental Toxicology and Chemistry* 22: 26-34.

Herzog, S.K.*; Kessler, M.; **Cahill, T.M.** (2002) Estimating Species Richness of Tropical Bird Communities From Rapid Assessment Data. *Auk* 119: 749-769.

Benesch, J.A.; Gustin, M.S.*; Cramer, G.R.; **Cahill, T.M.** (2002) Investigation of Effects of Trifluoroacetate on Vernal Pool Ecosystems. *Environmental Toxicology and Chemistry* 21: 640-647.

Cahill, T.M.*; Thomas, C.M.; Schwarzbach, S.E.; Seiber, J.N. (2001) Accumulation of Trifluoroacetate in Seasonal Wetlands. *Environmental Science and Technology* 35: 820-825.

Cahill, T.M.*; Seiber, J.N. (2000) Regional Distribution of Trifluoroacetate in Surface Waters Downwind of Urban Areas in Northern California, USA. *Environmental Science and Technology* 34: 2909-2912.

LeNoir, J.S.; McConnell, L.L.; Fellers, G.M.; **Cahill, T.M.;** Seiber, J.N.* (1999) Summertime Transport of Current-Use Pesticides from California's Central Valley to the Sierra Nevada Mountain Range, USA. *Environmental Toxicology and Chemistry* 18: 2715-2722.

Cahill, T.M.; Benesch, J.A.; Gustin, M.S.; Zimmerman, E.J.; Seiber, J.N.* (1999) Simplified Method for Trace Analysis of Trifluoroacetic Acid in Plant, Soil and Water Samples using Headspace Gas Chromatography. *Analytical Chemistry* 71:4465-4471.

Wujcik, C.E.; **Cahill, T.M.;** Seiber, J.N.* (1999) Determination of Trifluoroacetic Acid in 1996-1997 Precipitation and Surface Waters in California and Nevada. *Environmental Science and Technology* 33:1747-1751.

Wujcik, C.E.*; **Cahill, T.M.;** Seiber, J.N. (1998) Extraction and Analysis of Trifluoroacetic Acid in Environmental Waters. *Analytical Chemistry* 70:4074-4080.

Cahill, T.M.; Anderson, D.W.*; Elbert, R.A.; Perley, B.P.; Johnson, D.R. (1998) Elemental Profiles in Feather Samples from a Mercury Contaminated Lake in Central California. *Archives of Environmental Contamination Toxicology* 35:75-81.

Cahill, T.M.*; Perley, B.P.; Anderson, D.W. (1997) X-ray Analyses of Elemental Concentrations in Feathers: Comparison of XRF and PIXE. *International Journal of PIXE* 7:53-69.

OTHER PUBLICATIONS:

Sandrin, Susannah; Cahill, Thomas (2017). Chapter 5 Chemical Reactions: Something New from Something Old. In: Rillero, P. & Eddis, S. (editors). *Mastering the Science Content of the NES General Science Exam*. Anthem, AZ: Independent Variable

Cahill, T.M.; Cahill, T.A.; Spada, N.J.; Barnes, D.E.; Cliff, S.S.; Perry, K.D.; Fujii, E. (2007) Mass, Organic, and Elemental Aerosols by size, time, and composition for the Roseville Railyard Aerosol Monitoring Project (RRAMP). Final report prepared for Placer County Air Quality Management District and EPA Region IX. June 1, 2007.

Cahill, T.M.; Charles, M.J.; Seaman, V.Y. Development and Application of a Sensitive Analytical Method for Acrolein Determination in Ambient Air. Final Report Prepared for the Health Effects Institute (HEI) for project 03-1. March 2007.

Charles, M.J.; Groskova, D.; Cahill, T.M. (2005) "Near-Source Ambient Air Monitoring of Polybrominated Diphenyl Ethers" Report prepared for the California Air resources Board, project #01-407. October 2005.

Jakober, C.A.; Riddle, S.G.; Robert, M.A.; Cahill, T.M.; Kleeman, M.J.; Charles, M.J. (2005) "Oxygenated Organics in Gas and Fine Particulate Diesel Emissions for Source Apportionment." Report prepared for the California Air resources Board, project #00-318. March 2005.

Cahill, T.M.; Mackay, D. "Agricultural Applications of Fugacity Modeling" *In: Handbook of Agrichemicals*. Roberts, T. (eds). John Wiley & Sons, Inc. New York, (in press).

Ellis, D.A.; Cahill, T.M.; Mabury, S.A.; Cousins, I; Mackay, D. (2003) "Partitioning of Organofluorine Compounds in the Environment" *In: The Handbook of Environmental Chemistry*, vol 3, part N, Neilson, A.H. (eds), Springer-Verlag, Berlin. pp 63- 83.

Mackay, D.; Sharpe, S.; Cahill, T.; Webster, E.; Gouin, T.; Cousins, I.; Toose, L. (2001) "Assessing the Environmental Persistence of a Variety of Chemical Substances Including Metals." Report prepared for Environment Canada, Contract K2221-0-0178. August 2001.

Mackay, D.; Cousins, I.; Cahill, T. "Multimedia Environmental and Pharmacokinetic Modeling of Phthalate Esters." Final report to NSERC for grant # CRDPJ 228071-99. March 31, 2001.

Macaky, D.; Webster, E.; Cousins, I.; Cahill, T.; Foster, K.; Gouin, T.; Beyer, A.; Matthies, W. "An Introduction to Multimedia Models: Final Report Prepared as a Background paper for OECD Workshop in Ottawa, October 2001." CEMC Report No. 200102.

Cahill, T.M.; Anderson, D.W.; Perley, B.P.; Suchanek, T.H. (1997) "Concentrations of Mercury and Other Elements in Five Species of Birds at Clear Lake" *In*: Suchanek, T.H.; Richerson, P.J.; Mullen, L.H.; Brister, L.L.; Becker, J.C.; Maxson, A.E.; Slotton, D.G. (1997) Interim Final Report. The role of the Sulphur Bank Mercury Mine Site in the dynamics of mercury transport and bioaccumulation within the Clear Lake aquatic ecosystem. Report Prepared for EPA Region IX Superfund Program.

PROFESSIONAL PRESENTATIONS:

- 2015 (invited platform presentation) Thomas M Cahill. Remote and Urban Concentrations of Acrolein: Implications for Natural Sources 2015 CRC Mobile Source Air Toxics Workshop, Sacramento, CA, February 17 to 19, 2015.
- 2012 (Poster) Thomas M. Cahill, Catherine F. Cahill, Christopher Iceman, David E. Barnes, Sean Barberie, Thomas A. Cahill. Use of continuous ("white"), energy-filtered continuous, and 38 keV monochromatic beams for analysis of atmospheric aerosols, rare earth ores, toxic wastes, and the Sutter's Mill meteorite. Stanford Synchrotron Radiation Lightsource (SSRL) user group meeting, Stanford Linear Accelerator Center (SLAC), Oct 2012
- 2010 (invited platform presentation) Thomas M Cahill and Vincent Y. Seaman. Using Ambient Acrolein Measurements to Assess Relative Importance of Different Acrolein Sources. 2010 CRC Mobile Source Air Toxics Workshop, Sacramento, CA, November 30 - December 2, 2010,
- 2010 (Poster) Thomas M. Cahill, Nicholas J. Spada and Thomas A. Cahill. Size-resolved Organic Speciation of Wintertime Aerosols in California's Central Valley. American Association for Aerosol Research (AAAR) specialty conference: Air Pollution and Health: Bridging the Gap. San Diego, California, USA. March 22 to 26, 2010.
- 2009 (poster) Thomas M. Cahill, Nicholas J. Spada and Thomas A. Cahill*. Size and compositionally speciated organic aerosols near a heavily traveled secondary road. American Association for Aerosol Research (AAAR) 28th Annual Conference, Minneapolis, Minnesota, USA. Oct 26 -30, 2009.
- 2006 (platform presentation) Cahill, Thomas M. (2006) Determination of diurnal cycles of acrolein and other volatile aldehydes at a vehicle-impacted site during the summer of 2006. Platform presentation at: Coordinating Research Council's Mobile Source Air Toxics Workshop. October 25, 2006. Phoenix AZ.
- 2006 (poster) Seaman, V.Y. and Cahill, T.M. "A Highly Sensitive and Robust Method for the Determination of Acrolein and other Toxic Carbonyls in Air", Society of Toxicology and Chemistry, The Hague, The Netherlands, April 9 2006.

- 2006 (poster) Cahill, T.M. and Seaman, V.Y. “Determination of Acrolein and Other Toxic Carbonyls in Air for Exposure Assessment”, Health Effects Institute Annual Conference, San Francisco, April 2006.
- 2006 (poster) Seaman, V.Y.; Charles, M.J.; Cahill, T.M. “A Highly Sensitive and Robust Method for the Determination of Acrolein and other Toxic Carbonyls in Air” 45th Annual Meeting of the Society of Toxicology, March 5-9, 2006 San Diego, California, 2006.
- 2005 (platform presentation) Lau, F.K.Y.; Cahill, T.M.; Seiber, J.N.; and Charles, M.J. “Measured Henry’s Law Constants of polybrominated diphenyl ethers and polychlorinated biphenyl”, 15th Annual Northern California Society of Environmental Toxicology and Chemistry, Berkeley, California, 2005.
- 2005 (poster) Cahill, T.M. and Seaman, V.Y. “A Novel Analytical Procedure for the Determination of Acrolein and Other Toxic Carbonyls in Air”, Health Effects Institute Annual Conference, Baltimore, Maryland, April 2005.
- 2004 (platform presentation) Cahill, T.M.; Wang, G.; Jakober, C.; Kelly, P.B., Charles, M.J. “Challenges Quantifying Hydroxylated Polyaromatic Hydrocarbons in Aerosols”, An International State of the Science Workshop on Organic Speciation in Atmospheric Aerosols Research. Las Vegas, Nevada, April 2004.
- 2002 (poster) Cahill, T.M. and Mackay, D. “Development of a Multiple Chemical Species Environmental Fate Model and Its Application to Pentachlorophenol and Perfluorooctane Sulfonate”, American Chemical Society, Environmental Division, National Meeting in Boston, August 2002.
- 2001 (poster) Cahill, T.M. and Mackay, D. “Generalized Human Physiologically-Based Pharmacokinetic (PBPK) Model for Multiple Chemical Species Based on Fugacity”, American Chemical Society, Environmental Division, National Meeting in San Diego, April 2001.
- 2000 (poster) Cahill, T.M. and Seiber, J.N. “Regional Distribution of Trifluoroacetate in Surface Waters Downwind of Urban Areas in Northern California, USA” American Chemical Society, Environmental Division, National Meeting in San Francisco, March 2000.
- 1999 (posterboard) Cahill, T.M.; Seiber, J.N.; Benesch, J.A.; Gustin, M.S. and Zimmerman, E.J. “Simplified Method for Trace Analysis of Trifluoroacetic Acid in Plant, Soil and Water Samples Using Headspace Gas Chromatography” American Chemical Society, Environmental Division, National Meeting in New Orleans, August 1999.

Numerous meetings with corporate sponsors (3M, American Chemistry Council, California Air Resources Board, Health Effects Institute, etc.)

PROFESSIONAL AFFILIATIONS:

American Chemical Society – member for 17 years
Society for Environmental Toxicology – member for 12 years
International Carnivorous Plant Society – member for 11 year (as a hobby)

REFERENCES:

Professor Todd Sandrin, Todd.Sandrin@asu.edu (602) 543-6934
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