

Kristin C. Pangallo*

13 Mount Vernon St.
Salem, MA 01970

(508) 864-0292
krismi@mac.com

EDUCATION

Ph.D. Chemical Oceanography, MIT-WHOI Joint Program in Oceanography and Ocean Engineering, July 2009 – (GPA 4.9/5.0)

Dissertation: Bioaccumulating natural products: halogenated 1'-methyl-1,2'-bipyrroles in the North Atlantic

Advisor: Dr. Christopher Reddy (WHOI)

B.S. Chemistry, Bates College, 2002
Summa Cum Laude (GPA 3.84/4.00)

EMPLOYMENT

6/2004-7/2009: Graduate Research, MIT-WHOI Joint Program

- Investigation into the biomagnification of halogenated natural products, specifically halogenated bipyrroles accumulating in marine mammal blubber
- Investigation into marine and terrestrial carbon inputs to Saanich Inlet, British Columbia, by lamina-scale carbon isotope analyses (^{13}C and ^{14}C)

9/2006-12/2006: Teaching Assistant for Marine Chemistry, MIT-WHOI Joint Program

- Facilitated a weekly recitation for students to answer questions, clarify material and introduce background information; also wrote answer keys and graded problem sets

7/2002-6/2004: Research Assistant II, Woods Hole Oceanographic Institution

- Operated and maintained graphite production vacuum line at the National Ocean Sciences Accelerator Mass Spectrometer Facility
- Investigated intact phospholipids from deep-sea sediments, analyzed out-gassing of deep-sea sediments.

6/2001-4/2002: Research (Undergraduate Thesis), Bates College

- Synthesis and analysis of amino acid substituted calix[4]arene compounds for use as chiral NMR shift reagents

9/2000-5/2002: Teaching Assistant for Bates College Chemistry Department

- General Chemistry (I and II), Organic Chemistry (I and II): assisted in laboratory explanations and oversight, graded lab writing assignments

AWARDS AND HONORS

- 2007 Ocean Ventures Fund Award
- 9/2004-9/2007 National Science Foundation Graduate Research Fellowship
- 2002 Phi Beta Kappa
- 2002 Sigma Xi
- 2002 I. M. Kolthoff Award, American Chemical Society
- 2001 Bates College Undergraduate Award in Analytical Chemistry
- 2001 Pfizer Undergraduate Research Fellowship in Chemistry

* Name change in 2007 from Kristin J. Smith.

PUBLICATIONS

- Hoh, E.; Lehotay, S.J.; Mastovska, K.; Ngo, H.L.; Vetter, W.; **Pangallo, K.C.**; Reddy, C.M. Capabilities of Direct Sample Introduction – Comprehensive Two-Dimensional Gas Chromatography – Time-of-Flight Mass Spectrometry to Analyze Organic Chemicals of Interest in Fish Oils. *Environ. Sci. Technol.* **ASAP** DOI: 10.1021/es803486x
- Hoh, E.; Lehotay, S.J.; **Pangallo, K.C.**; Mastovska, K.; Ngo, H.L.; Reddy, C.M.; Vetter, W. Simultaneous quantitation of multiple classes of organohalogen compounds in fish oils with direct sample introduction comprehensive two-dimensional gas chromatography and time-of-flight mass spectrometry. *J. Agric. Food Chem.*, **2009**, 57(7), 2653-2660.
- **Pangallo, K.C.**; Reddy, C.M. Distribution patterns suggest biomagnification of halogenated 1'-methyl-1,2'-bipyrroles. *Environ. Sci. Technol.* **2009**, 43(1), 122-127.
- **Pangallo, K.**; Nelson, R.K.; Teuten, E.L.; Pedler, B.E.; Reddy C.M. Expanding the range of halogenated 1'-methyl-1,2'-bipyrroles (MBPs) using GC/ECNI-MS and GC×GC-TOF/MS. *Chemosphere.* **2008**, 71, 1557-1565.
- Sturt, H.F.; Summons, R.E.; **Smith, K.**; Elvert, M.; Hinrichs K.-U. Intact polar membrane lipids in prokaryotes and sediments deciphered by high-performance liquid chromatography/electrospray ionization multistage mass spectrometry – new biomarkers for biogeochemistry and microbial ecology. *Rapid. Commun. Mass Spectrom.* **2004**, 18, 617-628.
- **Smith, K.J.**; Wilcox, J.D.; Mirick, G.E.; Wacker, L.S.; Ryan, N.S.; Vensel, D.A.; Reading, R.; Domush, H.L.; Amonoo, E.P.; Shariff, S.S.; Wenzel, T.J. Calix[4]arene, calix[4]resorcarene, and cyclodextrin derivatives and their lanthanide complexes as chiral NMR shift reagents. *Chirality.* **2003**, 15, S150-S158.

PRESENTATIONS

- **Pangallo, K.C.**; Reddy, C.M. “Bioaccumulating Halogenated Organic Compounds: Natural vs. Anthropogenic” Oral Presentation at the Northeast Regional Meeting of the American Chemical Society, Burlington, VT, June 29-July 2, 2008
- **Pangallo, K.C.**; Reddy, C.M. “Not so conservative? Chlorine and bromine in chemical oceanography” Oral Presentation at the Ocean Sciences Meeting of the American Society of Limnology and Oceanography, Orlando, FL, March 2-7, 2008

PUBLICATIONS (NOT PEER REVIEWED)

- **Pangallo, K.C.** (2008) How does nature deal with persistent pollutants? *Oceanus* **27**(1), 26-27.

TEACHING EXPERIENCE

- Chemistry Module Leader, Woods Hole Partnership Education Program: partnering with other module leaders in the creation and implementation of a 1 month intensive course in climate change (11/2008-6/2009)
- Member of a 5 person graduate student team that developed and taught a month-long course on human impacts on marine ecosystems to undergraduate students visiting WHOI (10/2008-1/2009)
- Invited guest lecturer in the Environmental Science course at North Shore Community College (10/2008)
- One week intensive with Prof. Rachel Austin (Bates College), developed and taught 3 general chemistry lectures, an additional in-class problem set, and a brief quiz (2/2007)

- Chemistry tutor for Bates College students (2000-2002), high school students (1999-2002)

PROFESSIONAL SERVICE AND MEMBERSHIPS

- Reviewer for *Environment International* and *Journal of Chromatography A*
- Student Representative WHOI's Gender Equity Program Advisory Committee (2008-2009)
- Chemical Oceanography student representative to the MIT/WHOI Joint Program Educational Assembly (2006-2007)
- American Association for the Advancement of Science (AAAS) through the Excellence in Science Program (2008-2009)
- Society of Environmental Toxicology and Chemistry (2008-present)
- American Society for Limnology and Oceanography (2007-2009)
- American Chemical Society, Environmental Science Division (2004-present)
- Up with People (1997-1998)