ZOFIA ALEKSANDRA BAUMANN
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KEY RESEARCH INTERESTS

Chemical Ecology; Bioaccumulation; Chemical Cycling; Trophic-Transfer of Contaminants; Marine Pollution; Pollutants as Ecological Indicators; Environmental Radioactivity; Gamma-Emitting Radioisotopes; Gamma Spectroscopy; Chemical Distribution in the Marine Environment; Coastal Restoration

EDUCATION

Ph.D. − May 2011 − School of Marine and Atmospheric Sciences at Stony Brook University, Stony Brook, NY, USA; Advisor: Nicholas S. Fisher; Dissertation title: "Bioavailability of arsenic, cadmium and chromium for the deposit-feeding polychaete *Nereis succinea*"

Magister (equivalent of M.S.) − May 2004 − Department of Food Science and Inland Fisheries at Agricultural University of Szczecin, Poland; Advisor: Ewa Sobecka; Dissertation title: "Comparison of endoparasites in Baltic cod (*Gadus morhua calarias*) and populations (North Sea and Norwegian Sea) of Atlantic cod (*Gadus morhua*)"

Inzynier (equivalent of B.S.) − January 2004 − Department of Food Science and Inland Fisheries at Agricultural University of Szczecin, Poland

APPOINTMENTS

University of Connecticut, Department of Marine Sciences, Groton, CT | Assistant Research Professor: August 2014 – present

University of Connecticut, Graduate School, Storrs, CT | Graduate Faculty: May 2014 – present

University of Connecticut, Center for Environmental Sciences and Engineering, Storrs, CT | Affiliated Faculty Member: June 2018 – present

Billion Oyster Project, Governors Island, NY, Staff Scientist: April 2020 – February 2021

Stony Brook University, School of Marine and Atmospheric Sciences, Stony Brook, NY

Postdoctoral Research Associate: August 2011 – May 2014
PI: Nicholas S. Fisher; *Project I*: "Bioaccumulation of radionuclides released by Earthquake-

damaged Fukushima nuclear power plant in marine organisms"; *Project II*: Development of a new tracer, i.e. Fukushima-derived radiocesium, to study the highly migratory predators in the Pacific Ocean such as the Pacific bluefin tuna *Thunnus orientalis*".

Research Assistant: January 2006 – June 2010; January – May 2011; PI: Nicholas S. Fisher; *Project*: "The study of sediment-associated Cs, Cr and As bioavailability for deposit-feeding polychaetes".

Graduate Assistant: June - December 2005 PI: Lawrence Swanson; *Project*: "COASTAL 2000" (A survey of marine habitats around Long Island, New York).

ADVISING

PhD students

- Wesley Huffman, Ph.D. candidate at the Marine Science Department, University of Connecticut, Groton, USA; Primary advisor [expected graduation – spring 2022]
- Gunnar Hansen, Ph.D. candidate at the Marine Science Department, University of Connecticut, Groton, USA; Primary advisor [expected graduation – summer 2021]
- Patricia Myer, Ph.D. candidate at the Marine Science Department, University of Connecticut, Groton, USA; Associate Advisor
- Yipeng He, Ph.D. candidate at the Marine Science Department, University of Connecticut, Groton, USA; Associate Advisor
- Maodian Liu, Received his Ph.D. degree in summer of 2019 from the Peking University in China; I acted as an co-advised during a year-long fellowship at the Marine Science Department, University of Connecticut, Groton, USA
- Kayla Anatone, Received her Ph.D. degree in December 2020 from the Wesleyan University, Middletown, Connecticut, USA; I acted as an informal advisor since 2017

Postdoctoral scholars

- Brian DiMento (July – December 2018; Currently Brian is at the Bigelow Lab pursuing postdoctoral research in photochemical controls on organic pollutant cycling in aquatic ecosystems)

TEACHING AND MENTORING

University of Connecticut

Courses Taught

- Environmental Chemistry – Atmosphere (CHEM4370 Lecture; 3 credits): Fall 2019. This course targets senior students majoring in chemistry. Students are learning about atmospheric chemistry by integrating basic concepts from physical, inorganic and organic chemistry. This course discusses sources, transport, effects, fate, analytical chemistry, monitoring and

management of chemical species; chemical principles, equilibria and reactions. Example topics covered in this course are evolution of Earth's atmosphere over time, chemical composition of atmosphere's layers, atmospheric pollution, chemistry of wet deposition, greenhouse gasses and ozone.

- Independent Study – Mercury Bioaccumulation in Marine Fish (MARN3899 Lab-based project; 2 credits): Fall 2019. An undergraduate student - Christian Pyle, conducts research project on mercury (Hg) in Tautog (*Tautoga onitis*) from Fishers Island Sound. Through lab-based research project and assigned readings the student learns about fish anatomy, and sources and cycling of Hg in the marine realm. Student develops an understanding of methods and tools required for contaminant bioaccumulation studies and general understanding of how contaminants accumulate in animal tissues.
- Foundations of Biology (BIO1102 Lecture and Lab; 4 credits): Spring 2019. In this course that has been designed for non-science majors I introduce the principles that are employed across sciences, while focusing on biology. In this course students are exposed to the diversity and complexity of life, acquire skills of critical assessment via formulation and testing of hypotheses. Students gain appreciation of science, which continuously evolves.
- Independent Study - Mercury cycling and bioaccumulation (MARN 4898; 2 credits): Spring and Fall 2016. Literature review- based course (co-taught with prof. R. Mason in the Fall); The goal of this course was to provide the foundation of knowledge in the area of mercury cycling and bioaccumulation in marine ecosystems to a graduate student audience (Spring – Emily Seelen; Fall – Gunnar Hansen). Expected student work outside the class involved reviewing some seminal articles on specific topics and composing summarizing paragraphs. Classes were discussion based. Spring edition included research project and term paper.
- Independent Study - "Hg cycling and bioaccumulation in the marine environment" (MARN3899): Fall 2015. Undergraduate student, Wesley Huffman, studied the principles of contaminant cycling and bioaccumulation, with a focus on mercury, via reading and discussion of assigned articles. He conducted literature review on Hg concentrations in marine zooplankton and delivered term paper on this subject.

Guided Undergraduate and High School Research

- "Growth and MeHg bioaccumulation in juvenile Atlantic silversides" (Summer Research - high school student): Summer 2018. There were two goals of this program. The first goal was to provide a research experience for a female high school student at a laboratory located at Marine Sciences Department of UConn, while the second goal was to introduce the student to methodology used for determining THg in fish tissues, data analysis and result interpretation.
- Research mentorship of graduate (since September 2014) and undergraduate (Summer of 2015) students from the University of Connecticut, Wesleyan University and Peking University.

Stony Brook University

Guided Undergraduate and High School Research

- Research mentor for graduate students in the Radioecology Laboratory of Nicholas S. Fisher:

2011-2014

- Research mentor for undergraduate and high-school students in the Radioecology Laboratory of Nicholas S. Fisher: 2006-2014
- Guest lecturer for "Fish Ecology" and "Undergraduate Honors Mini-course": 2012-2013
- Science Teacher for NY STEM summer program "Energy" for middle school underprivileged students from New York City: Summer 2010
- Women in Science and Engineering (WISE) for high school females: Fall 2008 and Spring 2009
- Teaching practicum: Prepared and taught three lectures for the 100-level course "Long Island Sound Study" Spring 2007
- Teaching assistantship (Introductory course in general chemistry): Fall 2004 and Spring 2005

PAST AND CURRENT FUNDING

- "The development of a shell recycling program in Groton-Mystic, Connecticut"; Long Island Sound Futures Fund; $155,900 (2022-2023); Lead-PI: **Zofia Baumann**
- "Resilience through Restoration: Developing a Sustainable Shellfish Bed Management Strategy to Support Connecticut's Shellfish Sector"; NOAA; $196,990 (2021-2022); Tessa L. Getchis (Lead-PI), PIs: David Carey, Sylvain De Guise, Gary Wikfors, Kristin DeRosia-Banick; Other investigators and partners: Dan Meiser, **Zofia Baumann**, Tyeisha Cole, Jimmy Bloom, John Short, Cary Chadwick, Michael Zuber, Rick Seiden, Kristin Russo, Cyrena Thibodeau.
- "Support for a travel to Krakow, Poland for an undergraduate student (Mackenzie Blanusa) to take part in the International Conference on Mercury as a Global Pollutant (Sep. 13th -13th, 2019)"; Connecticut Sea Grant; $1,000, Lead PI: **Zofia Baumann**, Co-PIs: R.P. Mason and C. Koerting
- "Mercury bioaccumulation in Southeastern Bering Sea" North Pacific Research Board; $205,746 for 1 year (2018-2019) Lead PI: **Zofia Baumann**, co-PIs Mary Beth Decker and Hans G. Dam
- "Methylmercury and total mercury in Antarctic seawater, snow and penguin tissues" Citizen's Institute for Environmental Studies (Korea); $19,994 (2018) subcontract awarded to **Zofia Baumann**
- "Methylmercury in spiny dogfish from offshore Cape Cod" Cape Cod Fisherman Alliance; $5,580 (2018-2019) Subcontract awarded to **Zofia Baumann**
- "Patterns and controls of methylmercury bioaccumulation in zooplankton from Long Island Sound" Connecticut Sea Grant; $149,083 for 2 years (2018-2020) Lead PI: **Zofia Baumann** and co-PI Hans G. Dam
- "Evaluating the impacts of human and climate disturbance on mercury dynamics and bioaccumulation in benthic and pelagic organisms in the Hackensack sub-estuarine system" Hudson River Foundation; $197,507 for 2 years (2017-2019) Lead PI: Robert P. Mason and co-PI **Zofia Baumann**
- "Influence of nitrogen on methylmercury accumulation in shellfish and planktivorous fish

along the Long Island Sound shoreline of Connecticut" Connecticut Sea Grant; $149,992 for 2 years (2016-2018) Lead PI: Robert P. Mason and co-PI **Zofia Baumann**

- "A novel methylation pathway for mercury in the oxic waters of Long Island Sound" Connecticut Sea Grant: $5,000 (2016) PI: **Zofia Baumann**
- "Funding request by Z. Baumann to study mercury exposure in New Haven subsistence fisherman consuming locally caught fish and crabs" Woman's Seamen's Friend Society of Connecticut, Inc.: $2,500 (2016-2017) PI: **Zofia Baumann**
- Greater New Haven Green Fund: Mercury Level Assessment of Local Fish and Crabs; $1,000; (2016-2017) PI: **Zofia Baumann**
- "Radiocesium, a migration tracer for the Pacific bluefin tuna"; The Moore Foundation: $400,000 for 2 years (2012-2013) PI: Nicholas S. Fisher; co-authored by **Zofia Baumann** and D.J. Madigan
- "FORWARD" STAR program of the European Commission: €100k for 15 months (start March of 2014) PI: Nicholas S. Fisher; co-authored by **Zofia Baumann** and D.J. Madigan
- Scholarship for undergraduate academic achievements at the Agricultural University of Szczecin, Poland (spring 2000 - spring 2004)

SERVICE

- Member of the Communications Committee at the Department of Marine Sciences (UConn)
- Outreach at a local daycare (Cherished Children) and elementary school (Catherine Kolnaski Magnet School) in Groton, CT - reading marine themed books to preschoolers and K and 2nd grade students. Since September of 2018
- Organizer of "The William Fitzgerald Symposium: 50 years of Mercury Cycling from Watershed to the Open Ocean" October 13, 2017
- Member of the local organizing committee for the 13th International Conference on Mercury as a Global Pollutant: Integrating Research and Policy in a Changing World, Providence 2017
- Event Coordinator: SoMAS club (graduate student club at SoMAS Stony Brook; 2008-2009)
- Member of the organizing committee for the research assistant union Stony Brook University (2008-2011)
- Graduate Student member of the Education Task Force (SoMAS Stony Brook University, 2007-2008)
- Senator for the Graduate Student Organization (GSO) at Stony Brook University (2008-2009)
- Chair of the graduate student Housing Committee of GSO (2008-2009)
- Volunteer at the "Bay Scallop Bowl" (Marine Science annual high school competition; 2006-2009)
- Journal and grant peer-reviewer: Scientific Reports; Environmental Contamination; Toxicology Marine Environmental Research; Science of the Total Environment; Water, Air

& Soil Pollution; Biogeosciences; Washington State Sea Grant

- Member of Association for the Sciences of Limnology and Oceanography (ASLO) and Society of Environmental Toxicology and Chemistry (SETAC)

JOURNAL ARTICLES & BOOK CHAPTER CONTRIBUTIONS

(PUBLISHED, IN REVISION OR IN PRESS)

UNDERLINED NAMES INDICATE GRADUATE STUDENTS

33. Poulin B.A., Janssen J.E., Rosera T.J., Krabbenhoft D.P., Eagles-Smith C.A., Ackerman J.T., Stewart A.R., Kim E., **Baumann Z.,** Kim J.H., Manceau A. (2021) Isotope fractionation from *in vivo* methylmercury detoxification in waterbirds. *ACS Earth and Space Chemistry* 5 (5), 990-997

32. Roth, S., Poulin B., Krabbenhoft D., **Baumann Z.,** Shaefer J.E., Aiken, G., Hines, M., Barkay, T. (2021) Impacts on groundwater inputs on mercury methylation and soil microbial communities in subarctic fen. *Frontiers in Microbiology* 12: 2939

31. **Baumann Z.,** Hansen G., Bonnett L., Mason R.P., Decker, M.B., (In revision; Environmental Chemistry) Fish size and species determine methylmercury exposure to frequent human consumers – A case study in New Haven, Connecticut, USA.

30. Thorne, L.H., Fuirst, M., Veit, R., **Baumann** Z. (2020) Mercury concentrations provide an indicator of marine foraging in coastal birds. *Ecological Indicators. 121: 106922*

29. Anatone, K.A., **Baumann Z.,** Mason R.P., Hansen G., B. Chernow (2020) "Century-old mercury pollution: Evaluating the impacts on local fish from the eastern United States". *Chemosphere*. 259: 127484

28. Liu M., He Y., **Baumann Z.,** Mason R.P., Jing X., Zhang Q., Xie H., Chen L., Zhang W., Mason R.P., Wang X., Zhang Q., (2020) Long-term perturbation of large dam on contaminant fate in riverine - oceanic continuums. *Water Research.* 185: 116295

27. Huffman W., Dam H.G., Mason R.P., **Baumann Z.** (2020) Formalin-preserved zooplankton are not reliable for historic reconstructions of methylmercury bioaccumulation. *Science of the Total Environment.* 738: 139803

26. Liu M., He Y., **Baumann Z.,** Yu, He, Y., Mason R.P., Wang X. (2019). Reply to Comment on" Traditional Tibetan Medicine Induced High Methylmercury Exposure Level and Environmental Mercury Burden in Tibet, China". *Environmental Science and Technology*

25. Maynard G. A., **Baumann Z.** (2020) Methylmercury levels in commercially harvested spiny dogfish (*Squalus acanthias*) from off the coast of Massachusetts. *Transactions of the American Fisheries Society*. 149(4): 486-497

24. **Baumann Z.,** S. Jonsson, R.P. Mason (2019) Geochemistry of Mercury in the Marine Environment. Chapter in the Encyclopedia of Ocean Sciences, Third Edition. Editors: J. Kirk Cochran, Henry J. Bokuniewicz, Patricia L. Yager, ISBN 978-0-12-813082-7.

23. Mason R.P., **Z. Baumann,** Hansen G.**,** K.M. Yao, M. Coulibaly, S. Coulibaly (2019) An assessment of the impact of artisanal and commercial gold mining on mercury and methylmercury levels in the environment and local fish consumed within Cote d'Ivoire. *Science of the Total Environment.* 665: 1158-1167

22. **Baumann Z.,** Madigan D.J., Fisher N.S. (2019) Radioactive cesium from the Fukushima Nuclear Power Plant in migratory marine animals. Chapter 5: Ocean Transport of Radioactive Materials. Section 10: "Radioactive caesium in marine migratory animals". *Environmental Contamination from the Fukushima Nuclear Disaster: Dispersion, Monitoring, Mitigation and Lessons Learned*. Editors: T. Nakajima, T. Ohara, M. Uematsu, and Y. Onda. *Cambridge University Press*. doi: 10.1017/9781108574273.007.
21. Liu M., He Y., **Baumann Z.,** Yu, Chenghao G., Shidong S., Xuejun Cheng M., Shen H., Mason R.P., Chen L., Zhang Q., Wang X. (2018). Traditional Tibetan Medicine Induced High Methylmercury Exposure Level and Environmental Mercury Burden in Tibet, China. *Environmental Science and Technology* 52 (15): 8838-8847.
20. Liu M., Chen L., He Y., **Baumann Z**., Mason R.P., Shen H., Yu C., Zhang W., Zhang Q., Wang X. (2018) Impacts of farmed fish consumption and food trade on methylmercury exposure in China. *Environment International* 120: 333-344.
19. Madigan D.J., Li M., Runsheng Y., Baumann H., Snodgrass O.E., Dewar H., Krabbenhoft D.P., **Baumann Z.,** Fisher N.S., Balcom P., Sunderland E.M. (2018) Mercury stable isotopes reveal influence of foraging depth on mercury concentrations and growth in Pacific bluefin tuna. *Environmental Science and Technology* 52 (11): 6256-6264.
18. Madigan D.J., **Baumann Z**., Carlisle A.B., Snodgrass, O.E., Dewar, H., Fisher, N.S. (2018) Isotopic insights into migration patterns of Pacific bluefin tuna in the eastern Pacific Ocean. *Canadian Journal of Fisheries and Aquatic Sciences* 75 (2): 260-270.
17. Madigan D. J., **Baumann Z**., Snodgrass, O.E., Dewar, H., Berman-Kowalewski M., Weng K.W., Nishikawa J., Dutton P.H., Fisher N.S. (2017) Assessing Fukushima-derived radiocesium in migratory Pacific predators. *Environmental Science and Technology*. *51* (16): 8962-8971.
16. **Baumann, Z.;** Mason R.P., Conover D.O., Balcom, P.H., Chen C.Y., Buckman K. L., Fisher, N.S., Baumann H. (2017) Mercury bioaccumulation increases with latitude in a coastal marine fish (Atlantic silverside *Menidia menidia*). *Canadian Journal of Fisheries and Aquatic Sciences* 74(7): 1009-1015.
15. Wang, C., **Baumann, Z.** Madigan, D. J. Fisher, N. S., (2016) Contaminated marine sediments as a source of cesium radioisotopes for benthic fauna near Fukushima. *Environmental Science and Technology* 50: 10448-10455.
14. **Baumann Z.** Fisher N.S., Gobler C.J., Buesseler K.O., George J.A., Pike S.M., Breier C.F., Nishikawa J. (2015) Fukushima ^{137}Cs in planktonic food webs off Japan. *Deep Sea Research Part I: Oceanographic Research Papers* 106: 9-16.
13. Baumann, H., Wells, R.J.D., Rooker, J.R., Zhang, S., **Baumann, Z.**, Madigan, D.J., Dewar, H., Snodgrass, O.E., Fisher, N.S., (2015) Combining otolith microstructure and trace elemental analyses to infer the arrival of juvenile Pacific bluefin tuna in the California current ecosystem. *ICES Journal of Marine Science: Journal du Conseil* 72: 2128-2138.
12. Madigan D.J., **Baumann Z**., Carlisle A.B., Hoen D.K, Popp B.N., Dewar H., Snodgrass O.E., Block B.A., and Fisher N.S. (2014) Reconstructing transoceanic migration patterns of Pacific bluefin tuna using a chemical tracer toolbox. *Ecology* 95: 1674-1683.
11. Nalluri D., **Baumann Z**., Abercrombie D. L., Chapman D.C., Hammerschmidt C.R., Fisher N.S. (2014) Methylmercury in dried shark fins and shark fin soup from American restaurants. *Science of the Total Environment* 496: 644-648.

10. Madigan, D.J., **Baumann Z**., Snodgrass, O.E., Ergül, H.E., Dewar, H., and Fisher, N.S. (2013) Radiocesium in Pacific bluefin tuna *Thunnus orientalis* in 2012 validates new tracer technique. *Environmental Science and Technology* 47: 2287-2294.
9. Fisher N.S., Beaugelin-Seiller K., Hinton T.G., **Baumann Z**., Madigan D.J., Garnier-Laplace J. (2013) An evaluation of radiation doses and associated risk from the Fukushima nuclear accident to marine biota and human consumers of seafood. *Proceedings of the National Academy of Sciences of the United States of America* 110: 10670-10675; *Press coverage: CNN, ABC, Science Daily*
8. **Baumann, Z**., Casacuberta, N., Baumann, H., Masque, P., and Fisher N.S. (2013) Natural and Fukushima-derived radioactivity in macroalgae and mussels along the Japanese shoreline. *Biogeosciences*. 10: 3809-3815.
7. Fisher N.S., and **Baumann Z.** (2013) Application of radiotracer methodology for understanding the influence of geochemical fractionation on metal bioavailability in estuarine sediments. In: Proc. *IAEA International Symposium on Isotopes in Hydrology, Marine Ecosystems, and Climate Change Studies.*
6. Fisher N.S., D.J. Madigan and **Baumann Z.** (2013) Radioactive cesium from Fukushima Japan detected in Bluefin tuna off California: Implications for public health and for tracking migration. doi: 10.1051/e3sconf/20130132001.
5. Buesseler, K.O., Jayne, S.R., Fisher, N.S., Rypina, I.I., Baumann, H., **Baumann, Z.,** Breier, C.F., Douglass, E.M., George, J., Macdonald, A.M., Miyamoto, H., Nishikawa, J., Pike, S.M., Yoshida, S., (2012) Fukushima-derived radionuclides in the ocean and biota off Japan. *Proceedings of the National Academy of Sciences of the United States of America* 109, 5984-5988. *Press coverage*: *CNN.*
4. **Baumann Z.**, Koller. A., Fisher N.S. (2012) Factors influencing the assimilation of arsenic in a deposit-feeding polychaete. *Comparative Biochemistry and Physiology Part C: Toxicology and Pharmacology* 156: 42-50.
3. Madigan, D.J., **Baumann Z**., Fisher N.S. (2012) Pacific bluefin tuna (*Thunnus orientalis*) transport Fukushima-derived radionuclides from Japan to California. *Proceedings of the National Academy of Sciences of the United States of America* 109: 9483-9486; *Press coverage*: *Nature, Scientific American, Wall Street Journal, Forbes, LA Times, Washington Post, Associated Press, CNN*
2. **Baumann Z.** and Fisher N.S. (2011) Relating the sediment phase speciation of As, Cd and Cr with their bioavailability for the deposit-feeding polychaete *Nereis succinea. Environmental Toxicology and Chemistry* 30: 747-756.
1. **Baumann Z.** and Fisher N.S. (2011) Modeling metal bioaccumulation in a deposit-feeding polychaete from labile sediment fractions and from pore water. *Science of the Total Environment* 409: 2607-2615.

MANUSCRIPTS SUBMITTED & IN PREPARATION

[Drafts written]

Anatone, K.A., **Baumann Z.,** Mason R.P., Hansen G., R. McKinney, Chernow B. (submitted to ET&C) Trophic position, mercury in prey and bioaccumulation effects on metal concentrations in

Rhinichthys atratulus, Eastern Blacknose Dace, inhabiting a fluvial ecosystem in northeastern USA

Hansen G., Cerrato R., Mason R.P., Shumway S., **Baumann Z.** (In preparation) Bioaccumulation and allocation of inorganic mercury and methylmercury in the Northern quahog (*Mercenaria mercenaria*) from a temperature North American estuary.

Ndu, U., Janssen, S., Hailemariam, A., Schartup, A.T., **Baumann, Z.,** Abo, T., Thuo, M., Lelago, A., Krabbenhoft, D.P., Mason, R.P. (draft in hand – to be submitted to Environmental Research Letters) Mercury cycling in three East African Rift Valley Lakes (Abaya, Chamo and Awasa).

Baumann Z., Madigan, D.J., Nishikawa, J., Snodgrass O., Gilhooly W., Brown K.S., Fisher N.S. (In preparation) Benthic and pelagic sources of radioactive cesium to coastal fish off the Japanese coast.

Baumann Z., Rubin, E., Seelen, Pierce M., Ward. J.E., Buck M., Bravo A., Schaefer J.E., Roth, S., Mason R.P., Bertilsson, S. (In preparation) The role of marine aggregates in Hg transformations in oxygenated seawater.

INVITED SEMINARS & LECTURES

- Baumann Z. Cycling of mercury in the environment: global and point sources, chemical transformations and bioaccumulation in aquatic food webs, Massachusetts College of Liberal Arts, North Adams, MA – March 5th, 2020
- Baumann Z. Mercury cycling in Long Island Sound, Wesleyan University, Middletown, CT – November 14th, 2019
- Baumann Z. Lessons learned from the Fukushima Disaster, Connecticut College Chemistry Department, New London, CT, November 6th, 2018
- Baumann Z. Mercury in the ocean: Where does it come from and why should we care? Museum of the Aleutians, Dutch Harbor, AK August 31st, 2018
- Baumann Z. Public Lecture Series: Radioactivity in the ocean and lessons learned from the Fukushima Disaster, Block Island Maritime Institute, Block Island, August 22nd, 2018
- Baumann Z. Fate of toxic metals and metalloids in marine environment, Department of Marine Sciences, University of Connecticut, December 1st, 2017
- Baumann Z. New Haven Green Drinks: How does mercury into our fish? Which and how much fish is safe to eat? Waucoma Yacht Club, New Haven CT, October 18th, 2017
- Baumann Z. Influence of environmental gradients on bioaccumulation of methylmercury in marine organisms" March 27th, 2017
- Baumann Z. From scientific fundaments to interdisciplinary research in marine science – lecture at the workshop for marine science high school teachers from

Connecticut, March 22nd, 2017

- Baumann Z. "Hot" science - one consequence of the Fukushima disaster, Brown Bag Seminar Series, Marine Sciences, University of Connecticut, September 29th, 2014

SELECT CONFERENCE PRESENTATIONS

(As presenter only)

Baumann Z., S. Janssen, N. Van Meter, J.-W. Jung, J.-H. Kim, E. Kim. Penguins detoxify MeHg in liver as evidenced by Δ^{202}Hg and %MeHg. 14th ICMGP, September 8-13th, 2019. Krakow, Poland (poster).

Baumann Z., G. Maynard. Simulated human exposure to methylmercury in potential consumers of spiny dogfish *Squalus acanthias* harvested in southern New England waters. 14th ICMGP, September 8-13th, 2019. Krakow, Poland (poster).

Baumann Z., Pavia, F. Lund, D., Mason, R.P., Anderson, R. Periodicity of hydrothermal activity and mercury fluxes into nearby sediments. 14th ICMGP, September 8-13th, 2019. Krakow, Poland (oral).

Baumann Z., Huffman W., Decker M.B., DiMento B., Myer P., Mason R.P., Dam H.G. Mercury concentrations and speciation in seawater and zooplankton of the southeastern Bering Sea. Alaska Marine Science Symposium, January 28-31, 2019. Anchorage, AK, USA (poster).

Baumann Z., Rubin, E., Seelen, Pierce M., Buck M., Bravo A., Mason R.P., Bertilsson, S. Methylation of inorganic Hg can occur in oxic portion of ocean's water column in coincidence with presence of anaerobic bacteria. 13th ICMGP, July 16-21, 2017. Providence, RI, USA (oral).

Baumann Z., Madigan D. J., Nishikawa J., Snodgrass, O.E., Gilhooly W., Fisher N.S., Sources of radioactive cesium to marine biota off Fukushima. 7th SETAC World Congress/ SETAC North America 37th Annual Meeting, November 7-11, 2016. Orlando, USA (invited talk).

Baumann Z., Mazrui N., Shi X., Huffman W., Hansen G., Mason R.P., Nutrients and Hg cycling in Long Island Sound embayments. 7th SETAC World Congress/ SETAC North America 37th Annual Meeting, November 7-11, 2016. Orlando, USA (poster).

Baumann Z., Baumann H., Balcom P.H., Buckman K.L., Chen C. Y., Fisher N.S., Mason R.P. Latitudinal patterns of condition factors and mercury in coastal fish species *Menidia menidia*. 12th International Conference on Mercury as a Global Pollutant, June 14-19, 2015. Jeju Korea (poster).

Baumann Z., Fisher N.S., Baumann H., Nishikawa J., George J., Miyamoto H., Buesseler K.O. Bioaccumulation of Fukushima-derived radionuclides by local marine biota SETAC, 2012, Berlin (invited talk).

Baumann Z., Fisher N.S., Baumann H., Nishikawa J., George J., Miyamoto H., Buesseler K.O. Bioaccumulation by zooplankton and micronektonic fish of Fukushima released cesium and silver

radioisotopes in Japanese waters. ASLO, 2012, Salt Lake City (talk).

Baumann Z., Fisher N.S. Geochemical and biological factors allow better understanding of sedimentary As, Cd and Cr uptake in a deposit-feeding polychaete *Nereis succinea*, SETAC North America 32nd meeting, Boston, MA November 2011 (poster).

Baumann Z. Fisher N.S. Relating sedimentary metal phase speciation to its bioavailability, Aquatic Sciences Meeting, ASLO, 2011, San Juan, Porto Rico (talk).

Turek Z. Fisher N.S., Cutter G.A. Geochemical and biological factors influencing metal accumulation in benthic animals. Partners in Environmental Technology Technical Symposium & Workshop, Washington D.C.; December 2009 (poster).

Turek Z. Fisher N.S., Cutter G.A. Metal(loid) partitioning in three different natural sediments in time and its influence on bioavailability in *Nereis succinea*. New York Marine Science Consortium, 1st annual meeting, Stony Brook University; June 2008 (poster).

Turek Z., Fisher N.S., Cutter G.A. Geochemical and physiological influences on metal accumulation in deposit-feeding polychaetes SETAC Europe 18th meeting, May 2008. Warsaw, Poland (talk).

Turek Z., Fisher N.S., Cutter G.A., Explaining the bioaccumulation of sediment-bound metals to benthic deposit-feeding animals, SETAC North America 28th meeting, Milwaukee, WI November 2007 (talk).