Quincy Teng, Research Chemist, in EPA's National Exposure Research Laboratory

Exposure Methods and Measurements Division
[Mailing Address](#)

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Area of Expertise: My research has focused on the applications of nuclear magnetic resonance (NMR) spectroscopy and mass spectrometry (MS) to environmental and life sciences. We have developed and applied NMR/MS methodologies for assessing exposure of fresh-water small fish models to chemicals of environmental concern by means of metabolomics. More recently, we have developed a novel methodology of cell-based metabolomics for assessing chemical exposure using human and fish cell lines. Current projects: applications of NMR and MS to metabolomics, and assessing chemical exposure and toxicity by cell culture-based metabolomics.

Select Publications:

Quincy Teng. 2013. "Structural Biology: Practical NMR Applications", 2nd Edition, Springer (New York), 427 pages, ISBN 978-1461439639.

Scanlan,LD, AV Loguinov, Q Teng, P Antczak, KP Dailey, DT Nowinski, J Kornbluh, XX Lin, E Lachenauer, A Arai, NK Douglas, F Falciani, HM Stapleton, and CD Vulpe. 2015. "Gene, Expression, Metabolite and Lipid Profiling in Eco-Indicator Daphnia magna Indicate Diverse Mechanisms of Toxicity by Legacy and Emerging Flame-Retardants" *Environ. Sci. Technol.* DOI: 10.1021/acs.est.5b00977.

Skelton DM, Ekman DR, Martinović-Weigelt D, Ankley GT, Villeneuve DL, Teng Q, Collette TW. 2014. "Metabolomics for in situ environmental monitoring of surface waters impacted by contaminants from both point and nonpoint sources" *Environ. Sci. Technol.* 48, 2395-403.

Davis JM, Collette TW, Villeneuve DL, Cavallin JE, Teng Q, Jensen KM, Kahl MD, Mayasich JM, Ankley GT, Ekman DR. 2013. "Field-based approach for assessing the impact of treated pulp and paper mill effluent on endogenous metabolites of fathead minnows (Pimephales promelas)" *Environ. Sci. Technol.* 47, 10628-36.

Teng Q, Ekman DR, Huang W, and Collette TW. 2013. "Impacts of 17α-Ethynylestradiol Exposure on Metabolite Profiles of Zebrafish (*Danio rerio*) Liver Cells", *Aquatic Toxicology*, 130–131, 184–191.

Teng Q, Ekman DR, Huang W, and Collette TW. 2012. "Push-through Direct Injection NMR: an optimized automation method applied to metabolomics" *Analyst* 137, 2226–2232.

View more research publications by [Quincy Teng.](#)

Education:

- Ph.D. Biophysical Chemistry, Florida State University, 1990
- M.S. Physical Chemistry, Jilin University, China, 1982
- B.S. Chemistry, Jilin University, China, 1979

Professional Experience:

- Research Chemist, USEPA, ORD, NERL-ERD, Athens, GA. 2006–present
- Director, Chemical Sciences Magnetic Resonance Facility, University of Georgia, Athens GA 1994–2006
- Adjunct Professor, Department of Chemistry, Jilin University, China. 1999–present
- Postdoctoral Research Associate, University of California, Davis 1992–1994
- NMR Lab Manager/Research Associate, University of Arizona, 1991–1992
- Postdoctoral Research Associate, Cornell University Medical College, New York, 1990 – 1991

Honors and Awards:

- USEPA STAAs: Level II ('08), Level III ('09, '10,'12,'13,'15), Hon. Mention ('14, '15)
- USEPA ORD Award for Teamwork Achievement ('11)
- ACS Distinguished Service Award, Northeast Georgia Section ('15)