Maribel Colón, Research Chemist, in EPA's National Exposure Research Laboratory

Exposure Methods and Measurements Division Mailing Address

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Area of Expertise: Maribel's experience at EPA covers different aspects of the research atmosphere: methods development for TO-14 and TO-17 and comparing the advantages and disadvantages of both sampling methods for atmospheric air monitoring. She has worked with the newest development in technology for gas chromatography and the variety of detectors to find the best conditions for analysis and data managing. During this time she worked with different international agencies (São Paulo, Brazil; Mexico City, Mexico; Ostrava, Czech Republic and others) giving them technical advice in the use of new VOCs analytical technologies and their application. She has also worked on exhaled breath sampling and analysis for biomarkers of exposure on MTBE and jet fuel.

Maribel worked with Brominated Flame Retardants (BFRs) on methods development to improve the performance and analysis of Polybrominated Diphenyl Ethers (PBDEs) by GC/MS/NCI. She was a team member that developed methods for sample cleanup, extraction and analysis of PBDEs in PUF, surface and window wipes, dust and others routes for human exposure for the SUPERB study.

Maribel worked on VOCs. She worked with canisters and sorbent tubes on new ways to analyze TO-14, TO-15 and TO-17 compounds with the newest technology developed for ambient samples. She supported work done in the Regions in oil and gas exploration with sorbent tubes. Additionally, she provided technical support for CETESB, São Paulo, Brazil.

She has supported EPA's Region 2 in a RARE project in Puerto Rico and been part of an EPA/NASA team in support of the KORUS study in Seoul, South Korea.

Select Publications:

- Polybrominated diphenyl ether serum concentrations in a Californian population of children, their parents, and older adults: an exposure assessment study. X. (May) Wu · D.H.
 Bennett · R.E. Moran · A. Sjödin · R.S. Jones · D.J. Tancredi · N.S. Tulve · M.S. Clifton · M. Colón · W. Weathers · I. Hertz-Picciotto Environmental Health. (Dec 2015)
- Use of Fluorinated polybrominated diphenyl ethers and simplified cleanup for the analysis of polybrominated diphenyl ethers in house dust. W. Weathers; M. Colón; A. Hines; E.M. Ulrich Journal of Chromatography A (Aug 2014)
- Flame retardant exposures in California early childhood education environments. A. Bradman;
 R. Castorina; F. Gaspar; M. Nishioka; M. Colón; W. Weathers; P. Egeghy; R.
 Maddalena; J. Williams; P.L. Jenkins; T.E. McKone. Chemosphere (May 2014)

- Polybrominated diphenyl ether (PBDE) Concentrations and Resulting Exposures in Homes in California: Relationshipsamong Passive Air, Surface Wipe and Dust Concentrations, and Temporal Variability. D.H. Bennett; R. E. Moran; X. (May) Wu; N.S. Tulve; M.S. Clifton; M. Colón; W. Weathers; A. Sjödin; R. Jones; I. Hertz-Picciotto. Indoor Air (May 2014)
- Analysis of polybrominated diphenyl ethers (PBDEs) in house dust and results from California homes participating in the SUPERB study Weathers, W.S., M. Colón, A. Hines, A. King, N.S. Tulve, D.H. Bennett, R. E. Moran, I. Hertz-Picciotto Science of the total environment (Feb 2013)
- Quantitative analysis of organophosphate and pyrethroid insecticides, pyrethroid transformation products, polybrominated diphenyl ethers and bisphenol A in residential surface wipe samples. Clifton, M. S., J.P. Wargo, W.S. Weathers, M. Colón, D. H. Bennett, N.S. Tulve. J. Chromatography A, 1273 (2012) 1-11.

View more research publications by Maribel Colon.

Education:

• B.S., Chemistry, University of Puerto Rico, Cayey, 1987

Professional Experience:

- Research Chemist, USEPA, ORD, NERL, RTP, NC 2004-present
- Chemist, USEPA, OAQPS, RTP, NC 2003-2004
- Research Chemist, USEPA, ORD, NERL, RTP, NC 1991-2003
- Agricultural Chemist, Technician II, North Carolina Department of Agriculture, NC 1989-1991
- Parallel Technician, Roche Biomedical Laboratories, Burlington, NC 1989
- Pathology Data Analyst, Experimental Pathology Laboratories, Durham, NC 1987-1989