

Alison Gauthier, M.S.P.H., CIH, CPPS

Managing Scientist | Health Sciences
Pasadena
510-268-5041 | agauthier@exponent.com

Professional Profile

Ms. Gauthier is a board-certified industrial hygienist who specializes in evaluating human health exposure and risk from products throughout their life cycle, from raw materials sourcing through end-of-life. She is a recognized and accredited expert in product stewardship and has experience measuring, modeling, and evaluating the health effects of chemical hazards in the workplace, in the environment, and from consumer products. She provides scientific consultation on exposure to and potential human health effects of various chemicals such as asbestos, phthalates, bisphenol A (BPA), metals, pesticides, volatile organic compounds (VOCs), and acrylamide as well as biological hazards such as mold, *Legionella*, and *E. coli*. In addition, she regularly manages complex and multidimensional projects related to consumer product testing and risk evaluation. Ms. Gauthier is a leading expert in developing studies and analyzing dermal sensitizers based on extensive experience with wearable electronic devices. Throughout her nine years of consulting experience, she has routinely interfaced with stakeholders at all stages of the supply chain and has applied her knowledge and expertise in green chemistry and product stewardship to compliance and proactive chemical exposure and risk evaluations for products and product components.

Ms. Gauthier regularly synthesizes complex regulatory and scientific information related to large consumer product lines in support of regulatory compliance and development of product stewardship programs. In particular, she coordinates with stakeholders throughout the consumer product supply chain to develop wearable electronic device products that minimize risk of dermal sensitization and maximize biocompatibility. She also supports clients in prioritizing and evaluating products through the application of consumer-specific exposure models such as ConsExpo, Crystal Ball, ECETOC Targeted Risk Assessment and has developed ad hoc models for evaluating consumer exposure and prioritizing product risk. With respect to industrial hygiene, Ms. Gauthier specializes in the design and implementation of qualitative exposure assessments and has experience identifying and prioritizing high risk groups in aerospace and automotive manufacturing settings. She is also experienced in quantitative industrial hygiene evaluations of residential and industrial mold and moisture, vehicle HVAC system odor investigations, as well as the design and implementation of vapor intrusion, indoor air quality, and hospital disinfection system sampling. Ms. Gauthier earned an M.S.P.H. in occupational and environmental hygiene from the Johns Hopkins School of Public Health. She received her B.S. from the University of California, Berkeley, in molecular environmental biology in 2010 and has also completed U.C. Berkeley Extension's Green Chemistry Certificate Program and Johns Hopkins's Risk Sciences and Public Policy Certificate Program.

Academic Credentials & Professional Honors

M.P.H., Public Health, Johns Hopkins University, 2016

B.S., Molecular Environmental Biology, University of California, Berkeley, 2010

AIHA Volunteer Groups Outstanding Project Team - Stewardship & Sustainability Whiteboard Team, 2020

Delta Omega Public Health Honor Society

National Institute for Occupational Safety and Health Traineeship - Industrial Hygiene, 2014-2016

American Industrial Hygiene Conference and Exposition Student Sponsorship, May 2015

AIHA Stewardship & Sustainability Committee Best Professional Poster at AIHce, May 21, 2013

Prior Experience

Industrial Hygiene Intern, Northrop Grumman Corporation, 2015

Senior Associate Health Scientist, Cardno ChemRisk, 2010-2014

Research Intern, Center for Occupational and Environmental Health, University of California, Berkeley, 2010

Professional Affiliations

American Industrial Hygiene Association

Stewardship and Sustainability Committee, AIHA (Vice Chair)

Product Exposure Testing Committee, AIHA (active member)

Product Stewardship Society (active member)

- Product Stewardship Credential Exam Committee (Item Writing and Review)
Society of Environmental Toxicology and Chemistry

Integrated Environmental Assessment and Management Journal peer-reviewer

Publications

Hill D, Gauthier A, "Chapter 10: Product Design Principles." Professional Practices of Product Stewardship. First Edition. Product Stewardship Society. Gauthier A, Posson M, Kalmes R. (2018). Considerations of 3D Printing Outside the Manufacturing Environment, in POWDERMET 2018 Conference Proceedings, Metal Powder Industries Federation, submitted manuscript.

Lewis RC, Meeker JD, Basu N, Gauthier AM, Cantoral A, Mercado-García A, Watkins DJ. (2018). Urinary metal concentrations among mothers and children in a Mexico City birth cohort study. International journal of hygiene and environmental health.

Perez AL, Gauthier AM, Ferracini T, Cowan DM, Kingsbury T and Panko J. (2016). The Challenge of Predicting Problematic Chemicals Using a Decision Analysis Tool: Triclosan as a Case Study. Integrated Environmental Assessment and Management doi:10.1002/ieam.1778.

Gauthier AM, Fung M, Panko J, Kingsbury T, Perez AL, Hitchcock K, Ferracini T, Sahmel J, Banducci A, Jacobsen M, Abelman A, Shay E. Chemical assessment state of the science: Evaluation of 32 decision-support tools used to screen and prioritize chemicals. Integrated Environmental Assessment and Management 2014 Nov. doi:10.1002/ieam.1605.

Lam NL, Smith KR, Gauthier A, Bates MN. Kerosene: A review of household uses and their hazards in

low- and middle-income countries. *Journal of Toxicology and Environmental Health, Part B* 2012; 15 (6):396-432.

Presentations & Technical Posters

Gauthier A, Dopart P, Freeman E. Strategies for Risk Prioritization of Large Product Lines. Conference Technical Presentation at Product Stewardship 2020 Virtual Conference (PSX). September 15-17, 2020.

Morris-Schaffer K, Gauthier A, Bogen K. Evaluating Allergic Contact Dermatitis Elicitation Risk for Organic Residuals Detected in Consumer Products. Poster presentation. Virtual Society of Toxicology Meeting. March 15-19, 2020.

Gauthier A. Qualitative Industrial Hygiene Exposure Assessment at an Auto Manufacturing Facility. Invited podium presentation at the Transplant Automotive Safety Forum. San Francisco, California. September 10-12, 2019.

Gauthier A. Health and Safety of 3D Printing. Invited presentation at DRI Toxic Tort and Environmental Law Seminar. New Orleans, Louisiana. March 14-15, 2019.

Gauthier A. Considerations of 3D Printing Outside the Manufacturing Environment. POWDERMET 2018 Conference technical presentation. San Antonio, Texas. July 18, 2018.

Sheehan P, Kalmes R, Posson M, Singhal A, Lewis R, Gauthier A. Challenges in Assessing Health Risks from Exposure to Bisphenol-A (BPA) in Consumer Products. Society of Toxicology Meeting. San Antonio, TX. March 11-15, 2018.

Gauthier A, Lewis R, Winegar E, Posson M, Singhal A, Sheehan P. Challenging Exposure Assessment Assumptions: A Volatile Cleaning Product Case Study. Podium presentation at the Product Stewardship 2017 Conference in Tampa, FL, November 2-4, 2017.

Winegar E, Gauthier A. Real-Time Air Monitoring to Assess Community Exposures. Invited podium presentation at the International Society of Exposure Science California Chapter Meeting in Oakland, CA, October 27, 2017.

Lewis R, Winegar E, Posson M, Gauthier A, Singhal A, Sheehan P. Conventional and Non-Conventional Exposure Monitoring Methods: A Case Study Involving Simulated Occupational Exposures to an Ethanol-Based Cleaning Product. Podium presentation. American Industrial Hygiene Conference and Exposition (AIHce), June 3-5, 2017 in Seattle, WA.

Gauthier A, Lewis R, Bogen K, Singhal A, Sheehan P. Wearable Technology Biocompatibility: A Unique Opportunity in Green Chemistry and Engineering. Poster presentation at the Industry Roundtable, Green Chemistry & Engineering Conference in Reston, VA, June 13-15, 2017.

Singhal A, Bogen KT, Lewis RC, Gauthier A, Winegar E, Sheehan P. A Novel Approach to Estimating Dermal Contact with Hand-Applied Cleaning Solutions: A Simulation Study Involving Denatured Alcohol. Poster presentation. Society of Toxicology Meeting, Baltimore, MD, March 12-16, 2017.

Lewis R, Singhal A, Gauthier A, Kalmes R, Sheehan P. Proposed methods for characterizing dermal exposure to BPA for purposes of Proposition 65. Poster presentation at the Society for Risk Analysis Conference, December 11-15, 2016 in San Diego, CA.

Gauthier A, Lewis R, Kalmes R. Hand-to-mouth Contact Frequency Among Adults: Review of The Literature and Recommendations for Future Studies. Poster presentation at the Society of Environmental Toxicology and Chemistry North America 37th Annual Meeting in Orlando, FL. 2016.

Singhal A, Posson M, Jones A, Lewis R, Gauthier A, Schenk J, Kalmes R, Sheehan P. Assessing Risk for

Consumer Products Under California's Proposition 65 Regulations. Poster presentation at The SETAC North America 37th Annual Meeting, November 6-10, 2016 in Orlando, FL.

Gauthier A, Koehler K, McNamara J. Industrial Hygiene at Work: Developing and Implementing a Comprehensive Exposure Assessment Strategy. Poster presentation at The American Industrial Hygiene Conference & Exposition (AIHce) in Baltimore, MD. 2016.

Gauthier AM, Kingsbury T, Ferracini TV, Panko JM. Beyond the standards: Comparing sustainability reports of consumer products companies. Session: Stewardship & Sustainability. Poster presentation at The American Industrial Hygiene Conference & Exposition (AIHce) in Montreal, Quebec, Canada, 2013.

Kingsbury T, Gauthier A, Ferracini T, Panko J, Perez A. Predicting chemistries targeted for deselection: Triclosan as a case study. Poster presentation at The American Industrial Hygiene Conference & Exposition (AIHce) in Montreal, Quebec, Canada, May 21, 2013.