Exponent®
Engineering & Scientific Consulting

Samuel Hanke
Analyst | Polymers & Chemistry
Menlo Park
+1-650-688-7141 | shanke@exponent.com

Professional Profile

Mr. Sam Hanke is an analytical chemist with many years of experience in the extraction and analysis of numerous semi-volatile organic compounds (SVOC), such as pesticides (organochlorine and organophosphorus), polychlorinated biphenyls (PCBs), phthalates, and the like. In his wet lab project work, Mr. Hanke often utilizes a variety of extraction techniques including microwave extractions, liquid-liquid extractions, ultrasonication, and solid-phase extractions (SPE). Mr. Hanke is also well versed in the separation sciences and routinely assist clients in isolating, identifying, and characterizing molecules of various sizes and chemical structures using gas chromatography (GC), gas chromatography - mass spectrometry (GC-MS), liquid chromatography-mass spectrometry (LC-MS), gas chromatography - electron capture device (GC-ECD), and gas chromatography - flame ionization detector (GC-FID). He is familiar with Environmental Protection Agency (EPA) regulations, consumer protective policies and organizations such as Proposition 65 or the Consumer Products Safety Commission (CPSC), and ISO/IEC 17025 regulations. Prior to joining Exponent, Mr. Hanke held a series of analytical chemist roles throughout northern California testing for trace elements, trace ions, and semi-volatile organic chemicals.

Academic Credentials & Professional Honors

B.S., Chemical Physics, University of California, Davis, 2013

Prior Experience

Staff Chemist, K Prime, Inc. 2021-2023

Quality Control Analyst, United Foods International, Inc. 2021-2021

Analyst, Enthalpy Analytical, 2018-2020

Graduate Assistant, University of Vermont, 2015-2017

QC Chemist, Agriculture and Priority Pollutants Laboratories, Inc. 2013-2015

Publications

Gottlieb, S. M., Kim, P. W., Chang, C.-W., Hanke, S. J., Hayer, R. J., Rockwell, N. C., Martin, S. S., Lagarias, J. C., & Larsen, D. S. (2015). Conservation and diversity in the primary forward photodynamics of red/green cyanobacteriochromes. Biochemistry, 54(4), 1028–1042. https://doi.org/10.1021/bi5012755

Gottlieb, S. M., Kim, P. W., Corley, S. C., Madsen, D., Hanke, S. J., Chang, C.-W., Rockwell, N. C., Martin, S. S., Lagarias, J. C., & Larsen, D. S. (2014). Primary and secondary photodynamics of the

Violet/orange dual-cysteine NPF2164G3 cyanobacteriochrome domain from nostoc punctiforme. Biochemistry, 53(6), 1029–1040. https://doi.org/10.1021/bi4015538