EDUCATION AND RESEARCH CENTERS INDUSTRIAL HYGIENE WEBINAR SERIES

BIOMONITORING AND RISK ASSESSMENT: ESSENTIAL CONCEPTS & EMERGING TECHNOLOGY

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Register: coeh.berkeley.edu/20ihw1110

About the Webinar:

Biological monitoring is a method for capturing information on cumulative exposures and health related effects of chemical and nonchemical stressors. This presentation will examine the rapidly evolving state of biomarker research and its application in risk assessment using polycyclic aromatic hydrocarbons (PAHs) exposure as an illustration. Dr. Reichard will also describe the adverse outcome pathway (AOP) framework, and emerging technologies that hold promise for non-invasive human monitoring and high-throughput chemical screening to reduce the need for animal testing.

Objectives:

At the completion of this activity, the learner will be able to:

- Describe biomarkers and their use for cumulative and aggregate exposures / risks
- Describe the adverse outcome pathway (AOP) concept and its use in risk assessment
- Discuss examples of new biomonitoring technologies
- Contextualize biomonitoring in a risk assessment framework using polycyclic aromatic hydrocarbons (PAHs) exposure as an example

Speaker Biography:

Dr. Reichard is Assistant Professor of Toxicology and Risk Assessment in the Department of Environmental and Public Health Sciences (DEPHS) at the University of Cincinnati, and Director of the Biological Monitoring Component of the DEPHS Education and Research Center.

