Keynote Speech

Speaker Photo	Human Exposure to Environmental Chemicals using Biomonitoring: Examples from the National Health and Nutrition Examination Survey (NHANES)
	Dr. Antonia M. Calafat Centers for Disease Control and Prevention, Atlanta, GA, USA

Speaker Biographies : Dr. Antonia Calafat is the Chief of the Organic Analytical Toxicology Branch, Division of Laboratory Sciences, National Center for Environmental Health, U.S. Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia. She leads CDC's biomonitoring programs for assessing human exposure to chemicals added to consumer and personal-care products such as phthalates and phenols; flame retardants; pesticides; polycyclic aromatic hydrocarbons; and persistent organic pollutants including polybrominated diphenyl ethers; polychlorinated dibenzo-p-dioxins, furans, and biphenyls; and per- and polyfluoroalkyl substances (PFAS).

She has developed and maintained extensive collaborative research with leading scientists in the fields of exposure science, epidemiology, toxicology and health assessment, and has published over 590 peer-reviewed articles. Her research has made important contributions to biomonitoring science, including CDC's National Reports on Human Exposure to Environmental Chemicals.

Throughout her career, Dr. Calafat has served on numerous advisory committees and scientific panels. In 2019, she received the Excellence in Exposure Science Award given by the International Society of Exposure Science. Since 2017, she is the co-Editor-in-Chief of the International Journal of Hygiene and Environmental Health.

Dr. Calafat earned her PhD in Chemistry in 1989 from the University of the Balearic Islands, Spain. She was a Fulbright Scholar at the Department of Chemistry of Emory University where she completed her postdoctoral training. She joined CDC in 1996.

Keynote Speech

Abstract：

Biomonitoring programs provide relevant information for investigating human exposure to environmental chemicals. One of such programs, embedded within the National Health and Nutrition Examination Survey (NHANES), periodically provides the most comprehensive assessment of the U.S. general population's exposure to select chemicals. These biomonitoring data can inform scientists, health professionals, and public health officials to help prevent chemical exposures, to set intervention and research priorities, to evaluate effectiveness of public health measures, and to monitor exposure trends. Of interest, NHANES data suggest that reformulation of products in response to bans and regulations in the past decades can influence exposures to certain chemicals and their replacements. We will illustrate uses of biomonitoring data to improve people's health using examples from NHANES.