Contaminants of Emerging Concern, perspectives from Stony Brook University.

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Overview/Abstract

This workshop aims to bring together members of the Stony Brook University (SBU) community who are interested or already working on understanding the effect that Contaminants of Emerging Concern (CECs) pose on the environment and human health. CECs include a wide range of chemicals that are difficult to break down and can build up in the environment and organisms. CECs are ubiquitous and have been found in water, soil, air, and food, as well as in household materials and workplaces. In this workshop, we will address abundance, distribution, and potential sources of CECs, in addition to exploring examples of mitigation efforts to try to reduce the impacts of these contaminants on the environment, organisms and human health. We will focus on per- and polyfluoroalkyl substances (PFAS), pharmaceuticals, and microplastics as a new form of CECs.

Stony Brook University has the resources to address this problem from different perspectives while working together to develop interdisciplinary research and professional and educational programs. The workshop will engage students, postdocs, faculty, staff, and stakeholders in getting involved, understanding, and creating awareness and solutions to this issue. Moreover, this event will work as a platform to connect the SBU community and build new research collaborations in an effort to generate competitive and interdisciplinary research and proposals. This should be possible under the guidance of the Collaborative of the Earth using the expertise of the School of Marine and Atmospheric Sciences (SoMAS), the Center for Clean Water Technology, the School of Journalism, the School of Business, Engineering, Chemistry, SB Medicine, etc.

The workshop will feature researchers from SBU working on several topics related to CECs. Among potential speakers are Dr Benjamin Hsiao from Chemistry, Dr Elizabeth Hewitt from Technology and Society, Dr Lokesh Padhye from The New York State Center for Clean Water Technology, Dr Luis E Medina Faull from the School of Marine and Atmospheric Sciences (SoMAS), Dr. Jayme Meliker from the Program of Public Health at SBU and Dr. Julia Hathaway from the Environmental Protection Agency (EPA). In addition, we are planning to host two external speakers who are experts in the main topics of the workshop (Forever Chemicals and Plastics). Dr. Jenna Jambeck a Distinguished Professor in Environmental Engineering at the University of Georgia, expert on solid waste and plastic pollution and Dr Kurunthachalam Kannan form University at Albany, State University of New York, a well renowned environmental health researcher, with a focus on understanding human exposure to environmental and dietary chemicals.

We are expecting approximately 50.