

**US EPA/PWB Webinar Program: US EPA: Water Toxicity Challenge: Phase One Winners
October 11th, 2022**

Webcast Summary:

Overview:

Monitoring the increasing number of pollutants in source waters is an ongoing concern for water treatment systems and water resource managers. Current methods for detecting and identifying many of these contaminants are expensive, time-consuming, and require the use of specialized laboratories. In addition, the numbers of sensors, instruments, tests, labs, personnel, and other costs can become an economic burden for water resource managers.

To help meet the need for better ways to monitor toxicity in water, EPA along with several partners launched the Water Toxicity Sensor Challenge. This ideation challenge called on innovators to propose a sensor design that would allow for the detection of chemical pollutants and/or natural toxins in water, based on the sensor's ability to detect the activation of one or more cellular toxicity pathways. Winners of this challenge will outline their unique and novel approaches to addressing this need.

Presenter Biography Information

Cristian Căpitănescu

Cristian is a biochemist at the S.C. Ecodet Activ S.R.L company in Bucharest, Romania. He also serves as a Counselor for the National Environmental Protection Agency in Romania. Areas of expertise include the creation and validation of procedures to analyze biological products, foods, drugs and environmental factors.

Elisa Michelini

Elisa is an associate professor in analytical chemistry at the University of Bologna. She has over 20 years of experience in the development of bioanalytical methods and optical biosensors for water, environmental, and agro-food sectors. She's coordinated a NATO-SPS project and has been deeply involved in projects funded by European Commission

Natalie Cookson

Natalie is the Founder and CEO of Quantitative BioSciences, Inc. She has expertise in physics and synthetic biology, as well as in the financial and technical management of projects ranging from biosensor development to waste treatment and renewable energy generation.

Valentina Mayorca González

Valentina is a student of Chemical Engineering at the Universidad Nacional de Colombia. She developed her proposal with several team members who are part of the Chemical and Biochemical Processes research group of the Universidad Nacional de Colombia in the InnovaCodingUN research hotbed.