

12,000 Sensors under the sea

Explore the Ocean. Know the Planet. Ocean Networks Canada (ONC) operates a unique and extensive array of ocean observing systems at all three of Canada's coasts and from the Arctic to Antarctica. ONC's observatories generate big data in the form of high resolution sensor measurements, video, and underwater sound recordings—used by more than 72,000 researchers, communities, and decisionmakers around the world. Data are collected on ocean physics, chemistry, biology, and geology, supporting research on complex Earth processes in ways not previously possible. This presentation provides a window into the world of science and technology associated with advanced research ocean observatory systems.

Dr. Daniela Loock contributed to the chemical characterization, environmental assessment and monitoring of field sites in truly remote locations – from the Canadian Arctic, to Iceland and the deep Pacific ocean. As Director Engagement & Knowledge Mobilization she ensures that knowledge generated through ONC's observatories is made accessible to researchers and to the public. Her division ensures dissemination, user engagement, co-production, and commercialization of ONC's data and knowledge. Until December 2019, Daniela was the Associate Director of the Environmental Sciences Group at the Royal Military College in Kingston, Ontario, where her work contributed to government policies in Canada and abroad and helped set a standard for the environmental assessment and remediation of contaminated public lands. Daniela holds a PhD in Chemistry from the University of Victoria and an undergraduate degree in Engineering Chemistry from the Technical University Darmstadt in Germany. She is a chartered chemist in the Province of Ontario and a Fellow of the Chemical Institute of Canada.