



University of Bonn

Transdisciplinary Research Area Innovation and Technology for Sustainable Futures

# INNOVATION PATHWAYS TO SUSTAINABILITY

Distinguished Lecturers Series

Prof. NOELLE E. SELIN

"UNDERSTANDING SUSTAINABILITY THROUGH MERCURY STORIES: LESSONS FOR DECISION-MAKING FROM A VOLATILE ELEMENT"

September 3, 2020, 14 h CEST, Zoom

## **Abstract**

Informing and evaluating sustainability transitions requires better knowledge about how people interact with their environments as well as with technologies and institutions. Human interactions with mercury pollution provide a millennial-scale history of empirical material through which to examine complex systems relevant to sustainability. Mercury is a global-scale environmental pollutant, and the subject of a new global environmental treaty, the Minamata Convention on Mercury, which entered into force in 2017. This element travels through the atmosphere regionally and globally to pose risks both nearby and far away from its emission sources, which include coal burning and artisanal and small-scale gold mining. Noelle E. Selin will present new interdisciplinary approaches to trace pathways by which different policies influence mercury emissions, atmospheric transport, and human exposure and health impacts. The presentation will also discuss ways in which Selin has incorporated interactions with stakeholders and policy-makers in her work, including ongoing efforts to evaluate the effectiveness of the Minamata Convention, and address how research can both be more robust and impactful through such engagement. The presentation draws upon a forthcoming book about human interactions with mercury and their lessons for sustainability (MIT Press, October 2020).

## About the speaker

Noelle Eckley Selin is Associate Professor in the Institute for Data, Systems and Society and the Department of Earth, Atmospheric and Planetary Sciences and Director of MIT's Technology and Policy Program. Her research uses modeling and analysis to inform sustainability decision-making, focusing on issues involving air pollution, climate change and hazardous substances such as mercury. She received her PhD and M.A. (Earth and Planetary Sciences) and B.A. (Environmental Science and Public Policy) from Harvard University. Her work has focused on atmospheric chemistry, air pollution, as well as interactions between science and policy in international environmental negotiations. Her articles were selected as the best environmental policy papers in 2015 and 2016 by the journal Environmental Science & Technology. She is the recipient of a U.S. National Science Foundation CAREER award (2011), a Leopold Leadership fellow (2013-2014), Kavli fellow (2015), a member of the Global Young Academy (2014-2018), an American Association for the Advancement of Science Leshner Leadership Institute Fellow (2016-2017), and a Hans Fischer Senior Fellow at the Technical University of Munich Institute for Advanced Study (2018-2021).

#### **Registration for the event:**

https://www.uni-bonn.de/forschung/forschungsprofil/innovation-und-technologie-fuereine-nachhaltige-zukunft/registration

The lecture is held via Zoom and will be recorded and published afterwards.

The Zoom access data will be sent to those registered a few days prior to the lecture.

### About the Lecture Series

The lecture series on Innovation Pathways to Sustainability is a forum for high profile and internationally visible scientists who are active in academia or at the science-policy interface. The lectures address an interdisciplinary audience of experts from natural, social, and engineering sciences as well as representatives from international and implementation-oriented organizations.

#### Save the date for the next lectures:

- 17.08.2020, 14 h CEST, Prof. Jessica Fanzo (Johns Hopkins Berman Institute for Bioethics)
- 23.09.2020, 14 h CEST, Prof. Matin Qaim (University of Göttingen)

#### Contact:

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