

Eawag Seminar Invitation

Mercury Science and Policy: Modeling Environmental Transport and Analyzing Case Studies of Regulation

Speaker **Prof. Noelle Eckley Selin,**
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When **September 21, 11.00 – 12.00 a.m.**

Where **Forum Chriesbach, room C20, Eawag Dübendorf**

Abstract Mercury pollution poses risks to human health and the environment at local to global scales. A variety of policy initiatives aim to address mercury, including the global Minamata Convention, which entered into force in 2017. In this talk, I summarize research tracing the pathway by which human activities and decisions influence mercury in the environment, linking emissions, transport, exposure, and health impacts. Using coupled modeling, I examine how existing policies to control mercury emissions, from coal-fired power plants and other sources, can influence mercury concentrations, deposition, human exposure, and related health impacts in different global regions. I then summarize policy challenges, comparing the implementation of regulatory approaches with the timescales of mercury transport and cycling in the environment. I conclude by proposing concrete frameworks, metrics, and analyses to inform decision-making on mercury and related long-term sustainability issues.