

## **Bioaccumulation of mercury and perfluoroalkyl substances in fish after forest clearcutting**

As a consequence of increasing anthropogenic activities, concentrations of hazardous substances are increasing in the environment. Mercury (Hg) and perfluoroalkyl substances (PFASs) are two renowned contaminants of these kinds under great concerns. Both Hg and PFASs bioaccumulate in animals via the food chain and pose a risk to human and wildlife. The land use activities such as clearcutting can result in water and soil losses from terrestrial ecosystems and are likely to exacerbate the release of hazardous substances into the aquatic environment. However, little is known about the accumulation of these contaminants in fish in forest lake ecosystems after clearcutting. The master student will investigate the levels of Hg and PFASs in biological samples (mainly fish muscle) collected from several lakes in Sweden in recent 5 years, before and after deforestation events and investigate differences between PFASs and Hg bioaccumulation patterns. The experiments and chemical analysis will be performed by the student. The student should have laboratory experience and be interested in analytical chemistry.

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