

**Arctic Mining: Environmental issues,
mitigation and pollution control for
marine and coastal mining-
Workshop March 21, 22, 23, 2023**



Title: Modern mining impacts & mitigation: An overview of principles and criteria for environmental protection in Arctic mining with a focus on the marine environment.

Speaker: CJ Jørgensen, Aarhus University

Biography: *Senior Researcher, PhD, Christian Juncher Jørgensen has an educational background in biogeochemistry and has worked both in academia and in the private sector as environmental consultant. Christian's work has included both studies of pollutants in soil, sediment and groundwater systems as well as emissions of gasses and particles in industrial and natural environments both inside and outside the Arctic.*

Abstract:

Modern mining relies on responsible stewardship of environmental resources, balancing the needs of global society, local community and conservation interests. Failure to effectively manage the potential adverse impacts of mining on these shared resources can result in the deterioration of environmental resources and have adverse consequences for human health.

Mining in the Arctic will inevitably lead to some impacts on ecosystem functions in the physical environment where mining activities occur. Public acceptance of where, when and for how long a given impact may be tolerated is not an exact science and is often a matter for discussion before an agreement can be made between communities, authorities and mining companies. Mitigation of mining related impacts on local environments often require special consideration on the overall footprint of the mining operations with a focus on both spatial, temporal, ecological and project-specific aspects and dimensions following a combined set of best environmental practices.

The talk will present an overview of most recent principles for the protection of the environment following mineral extraction operations with direct contact marine ecosystems. The talk will include discussion of recent international guidelines and standards on environmental protection illustrated with examples from sensitive Arctic ecosystems.