Position: Postdoctoral fellow in sea ice algae ecotoxicology

We are seeking a motivated Postdoctoral Fellow (PDF) to support a project called Toxicology and Ecology of sea ice Algae (TEA). The overarching goal of this project is to improve ice algal ecological understanding while developing and validating new standard toxicity tests for oil-spill related contaminants associated with an opening Arctic Ocean. The focus will be on controlled experiments using isolated cultures of *Nitzschia frigida* in a laboratory setting. A combination of toxicological and algal ecological expertise will be an asset for this project. The PDF is funded for a 2-year duration starting April 1 or as soon as possible after. Supervision will include ice algal (Dr. C.J. Mundy, U Manitoba; Dr. M. Gosselin, ISMER-UQAR) and aquatic toxicological expertise (Dr. B. de Jourdan, Hunstman; Dr. M. Hanson, U Manitoba). The PDF will be housed within the Centre for Earth Observation Science (umanitoba.ca/ceos), Department of Environment & Geography at the University of Manitoba, Winnipeg, Canada; but will involve at least 3-month stays a year at Huntsman Marine Science Centre to undertake the laboratory experiments. The successful candidate will also become a member of the Arctic Science Partnership (asp-net.org) and ArcticNet (http://www.arcticnet.ulaval.ca) providing national and international networking opportunities. Furthermore, the successful candidate will have obtained (or submitted) their PhD in a related field within 4 years of accepting the position.

Ice algae are an ephemeral part of the Arctic marine ecosystem; however, their production provides a critical pulse of high energy to the food web in spring. This pulse demonstrates the uniqueness of the sea ice-influenced ecosystem and without this contribution, cascading effects in the food web could rapidly transform the Arctic ecosystem. However, ice algal growth dynamics are often inaccurately represented through growth models, highlighting a need for an improved ecological understanding of ice algae. Climate change and the opening Arctic Ocean are leading to an increase in anthropogenic pressures on the Arctic marine ecosystem, including an increase in shipping traffic in the Arctic, which increases the potential for oil-spills in the ice-covered marine environment. As a result, there is a pressing need to understand the risk of emerging contaminants and their impact on Arctic ecosystems; however, most standard toxicity tests are designed for temperate species, contributing to uncertainty in Arctic marine risk assessments. The TEA project seeks to build on earlier work by Huntsman and U Manitoba to meet these needs through its overarching goal to improve ice algal ecological understanding, while developing and validating new standard toxicity tests for oil-spill related contaminants associated with an opening Arctic Ocean.

Applications should be sent directly to Drs. Mundy (cj.mundy@umanitoba.ca) and de Jourdan (Benjamin.deJourdan@huntsmanmarine.ca) and include: a cover letter briefly describing your previous research and experience in relation to the TEA project goal, a detailed *Curriculum vitae*, and the names of two academic or industry references.