LETTER OF SUPPORT

TO CLAIM FUNDING FOR ATTENDING SEDIBUD MEETINGS

Amplified climate change and ecological sensitivity of polar and cold regions has been highlighted as a key global environmental issue. Projected climate change in cold regions is expected to alter melt season duration and intensity, along with total precipitation, frequency of extreme rainfall events and the balance between snowfall and rainfall. Similarly, changes to the thermal balance are expected to reduce the extent of permafrost and ground frost and increase active layer depth. These effects will undoubtedly change surface water environments in cold regions and alter the flux of sediment, nutrients and solutes, but the absence of data and analysis to understand the sensitivity of the surface water environment are acute in cold regions.

A working group of the *International Association of Geomorphologists (I.A.G./A.I.G.)* has been formed to address this key knowledge gap through the *SEDIBUD (Sediment Budgets in Cold Regions) program*. The central research question of this working group is to *Assess the contemporary sediment fluxes in cold climates, with emphasis on both particulate and dissolved components*. Initially formed as European Science Foundation (ESF) project SEDIFLUX (2004-2006), SEDIBUD has expanded to a global group of researchers with field research sites located in polar and alpine regions in the northern and southern hemisphere. Research carried out at each site varies by program, logistics and available resources, but typically represent interdisciplinary collaborations of geomorphologists, hydrologists, ecologists, and permafrost scientists and glaciologists with different levels of detail. SEDIBUD has developed a key set of primary research data requirements intended incorporate results from these varied projects and allow analysis across the network. Sites will report annual climate conditions as well as total discharge and particulate and dissolved fluxes. To support these efforts, the SEDIFLUX Manual (http://www.ngu.no/FileArchive/237/2007_053.pdf) has been produced to establish common methods and data standards. Ongoing revision will continue to improve the manual to facilitate inter-comparison of research results.

SEDIBUD currently has identified 38 Sites with a goal to extend the network to at least 40-45 sites that cover the widest range of cold environments possible. Additionally, it is expected that collaboration within the group will act as a catalyst to develop new sites in underrepresented regions. Close coordination and collaboration with a number of International Polar Year (IPY) research programs including: International Tundra Experiment (ITEX), Circumpolar Active Layer Monitoring (CALM), BIPOMAC and Arctic Coastal Dynamics (ACD/ACCO Net) provides further opportunities for collaborative research to address broader polar environmental research issues.

Detailed information on the SEDIBUD program can be found at http://www.geomorph.org/wg/wgsb.html or contact Achim A. Beylich (Chair, Trondheim, Norway; achim.beylich@NGU.NO) or Scott F. Lamoureux (Vice-Chair, Kingston, Canada; scott.lamoureux@queensu.ca).

By this letter we want to support proposals for travel funds, which are related to SEDIBUD workshops, sessions and meetings.

Sincerely yours,

Achim A. Beylich
Chair of SEDIBUD

Scott F. Lamoureux
Vice-Chair of SEDIBUD