Other Initiatives

relating to the International Conferences on Contaminants in Freezing Ground

Russian Information Transfer Project: Scott Polar Research Institute, University of Cambridge

The permafrost in Russia and other countries of the Eurasian land mass underlies a far greater area than that in North America. The region has provided home to indigenous peoples and migrant populations much larger than those of Northern Canada and Alaska and much more extensive industrial development has occurred. It is not surprising that the history of studies of soil freezing and permafrost is a far longer one in Russia and its neighbouring countries than elsewhere. Geocryology (or 'permafrost studies' as the subject was called until two or three decades ago) has been a university specialisation in Russia for many years and hundreds of people have graduated as specialists in the field. The wealth of detailed research and the technology for the cold regions developed in Russia is often poorly understood in English-speaking countries.

In part, this results from the difficult conditions for exchanges of scientific information, especially that relating to Siberia and to the gas or oil-producing regions, during the cold war years. Subsequently, with a freeing-up of communications, it has become evident that the extensive advantages of a free flow of scientific and other information, are all too often restricted by problems of translation.

Drawing on its extensive collections, and multilingual staff, Scott Polar Research Institute has developed a programme for making available up-to-date, technically accurate and easily understandable translations relating to various key questions in cold regions science and management. The translations include maps, books, and notably, the English version of the Russian 'permafrost' journal (published by the Academy of Sciences) - which is to appear shortly. Materials provided under the project, include basic and applied science for cold regions, applicable to such areas of engineering activity as construction and design for pipelines and other infrastructure, environmental remediation, cartography, gas hydrates, geographic information systems, remote sensing, climate change, microbiology and other topics. A broad range of related materials concerning political, social, anthropological, economic and other studies is also available. These materials include much information which is important to those engaged in transfer of expertise between companies, governments and others, especially where circumpolar industrial and scientific ventures are underway. Further details are found at the website: *www.spri.cam.ac.uk/ritp/home.htm*

Cold Regions Bioremediation Project

(Contributed by Dennis Filler, *DMF@shanwil.com*)

Petroleum contamination of the arctic environment is a consequence of military history and oil and natural gas exploration in the northern hemisphere. This year alone, 234 releases at exploration infrastructure have been reported on Alaska's North Slope, four of which directly impacted tundra. Greater than 85 percent of these incidents were petroleum related. In the Antarctic, hydrocarbon contamination is predominately associated with activity at scientific research stations. Typically, 10 and 20 spills are reported each year, and there is a well documented history of large spills that have not yet been remediated. The existing legacy of on-land spills and the potential for future spills are recognized as posing some of the most pressing environmental threats to cold region environments. The challenges that extreme climate and frozen ground present requires innovative remediation, and sometimes enhancement of environmental conditions.

The Cold Regions Bioremediation Project (CRBP) was launched in Spring 2001. A professional consortium representing countries in both hemispheres is working to produce a monograph for cold regions hydrocarbon bioremediation. The guide will compile research generated from both pilot tests and bench-scale remediation projects. Look for the publication in 2003-2004.

We at the CRBP take a proactive stance toward preserving the world's cold regions environments for future generations. The demand for resource development in cold regions is growing. Our vision is that development and preservation are mutually inclusive toward that inevitability.