



Minerals and Metals Sector Update

Canadian Explosives Research Laboratory (CERL) to Develop Research Program With Japan

Three representatives from the Research Center for Explosion Safety (RCES) of the Japanese National Institute of Advanced Industrial Science and Technology (AIST) visited CERL in the fall of 2005 (www.nrcan.gc.ca/mms/cerl/). The purpose of their visit was to develop closer cooperation between the laboratories and to establish joint research initiatives on explosion safety. The RCES scientists are particularly interested in CERL's extensive expertise in the hazardous properties of commercial blasting explosives. The aim of the joint research program is to develop improved United Nations (UN) Transportation of Dangerous Goods (TDG) tests for ammonium nitrate emulsion explosives, which are extensively used around the world, but for which existing UN TDG tests are inadequate.

Contact: Phil Lightfoot, 613-947-7534, plightfo@nrcan.gc.ca

Video Helps Aboriginal Peoples to Better Understand Mining

A new educational tool has been developed to better inform Aboriginal peoples about the mineral industry. Natural Resources Canada (NRCan), in collaboration with the Ontario Ministry of Northern Development and Mines (MNDM), has produced a video to explain geological mapping, mineral exploration, and the mining sequence. Exploration and mining can provide Aboriginals in rural and remote communities with economic development opportunities. This video will help them make informed decisions about their participation in mineral development activities.

The video, entitled *Our Community . . . Our Future: Mining and Aboriginal Communities*, describes the mining sequence from government geological surveying and mapping, through exploration, construction of the mine and the mining process, to the eventual closing of the mine and rehabilitation of the mine site. Filmed in Northern Ontario, the video was produced by NRCan and MNDM with support from a number of First Nations communities and exploration and mining companies that are active in the province. The video is available in both official languages, as well as in Cree,

Oji-Cree and Ojibwa. This approach may be applicable in other countries using local languages and mining interests.

To obtain a copy of the video, please visit www.nrcan.gc.ca/mms/video/dvd/video-abg_e.htm or www.mndm.gov.on.ca/mndm/mines.

Contact: MMS Public Inquiries, 613-947-6580, info-MMS@nrcan.gc.ca

MMS Recognized For Excellence

In 2005, a number of individuals with the Minerals and Metals Sector (MMS) were recognized by various organizations for their excellent work. We are pleased to acknowledge the following achievements:

1. Mr. J. Thomson, Dr. Y. Fasoyinu, Dr. K. Sadayappan and Dr. M. Sahoo from the CANMET Materials Technology Laboratory (CANMET-MTL) received the Best Paper Award from the Magnesium Division of the American Foundry Society. The award was received for a paper entitled *Casting Characteristics of Permanent-Mold Cast Magnesium Alloy AZ91E*.
2. S. Xu, J. Li, V. Gertsman, J. Thomson and M. Sahoo, researchers from CANMET-MTL, earned the Best Paper Award from the Light Metals Section of the Metallurgical Society. The paper describes work on the microstructure and mechanical properties of a technically important magnesium alloy (AM50). A new phenomenon on creep deformation asymmetry was reported, which is of significance to an engineering property (bolt-load retention of magnesium alloys for automotive applications).
3. Dr. John Dutrizac of the CANMET Mining and Mineral Sciences Laboratories (CANMET-MMSL), as part of his CIM distinguished lecture award, lectured on the topic of *Recent Developments in the Hydrometallurgical Processing of Base-Metal Ores and Concentrates*.
4. Rob Dunn earned an award for providing leadership to the International Statistical Working Group of the Kimberley Process Certification Scheme for the International Trade in Rough Diamonds. As chair of the Group, he demonstrated both the vision and actions required to streamline the statistical reporting of all 45 countries involved using common methodologies and practices.

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Minerals and Metals Sector
Natural Resources Canada
580 Booth Street
Ottawa, Ontario K1A 0E4
Canada

E-mail: CoordinationMMS@nrcan.gc.ca
Fax: 613-952-7501

www.nrcan.gc.ca/mms