



*Non-Ferrous Metals  
Consultative Forum on  
Sustainable Development*

## **SCIENCE, RESEARCH AND DEVELOPMENT WORKING GROUP**

### **Report on the Non-Ferrous Metals Consultative Forum on Sustainable Development's Science Research Network**

#### **Co-Chairs**

**David Chambers (Center for Science in Public Participation)  
Murray Cook (International Zinc Association)  
Gilles Tremblay (natural Resources Canada)**



International Copper  
Study Group



International Nickel  
Study Group



International Lead and  
Zinc Study Group



## **The Non-Ferrous Metals Consultative Forum on Sustainable Development's Science Research Network**

### **Identifying the Need for a Network**

Early during its first meeting in April 2001, the Science and Research Working Group identified the need to:

- Take stock of existing science-related sustainable development initiatives being pursued by other inter-governmental organisations and industry associations
- Construct an information resource base accessible via the Internet that would allow networking between scientists and institutions known to be working in the field of science and the sustainable development of non-ferrous metals

At an early stage it was decided that provision should be made for the Network to grow organically. The Working Group also decided that limiting the Network's scope to essential contact details rather than detailed entries relating to areas of research specialisation could make the best use of resources.

### **Building the Network**

Work proceeded on two parallel tracks. Initially, the ILZSG Secretariat compiled a stock-take of intergovernmental organisations and industry associations that were known to be active in the field of sustainable development, science and non-ferrous metals. At the same time members of the Working Group submitted the names of individuals specialising in science and sustainable development of non-ferrous metals. The names of relevant academic research institutes were also submitted.

The International Copper Association then assembled the information contained in these two work strands into a database format. This framework was then passed to the web masters at Natural Resources Canada who worked on developing basic search facilities within the database and inserting the finished product into the NFMSD's web site.

### **Using the Network**

The Network can be accessed via the home page of [www.nfmsd.org](http://www.nfmsd.org) where a navigation button called "Science Network" takes the user directly to the Network's opening page. Once this page has been reached users are met by a welcome prompt which asks whether they would like to be added to the Network if they were involved actively in any field of research into non-ferrous metals and sustainability. Users register their interest via an electronic form that is generated when they opt to join the Network. Completed forms are

forwarded automatically to the ILZSG Secretariat where they are screened before the details are inserted finally into the Network.

The form prompts for details of the affiliation of the user, name, country, area of research as well as details of any collaborators. The user then enters full contact details including address, telephone and fax numbers, email and web site addresses as well as any additional remarks.

By October 2002 the Network had grown to over 100 entries drawn from nineteen countries, four intergovernmental organisations and one international association. It had been visited just under 4,000 times since its launch in mid 2001. Usage of the Network has increased markedly since the World Summit on Sustainable Development in Johannesburg in September 2002. In the month following the Summit the Science Research Network was visited over 1,000 times. The NFMSD web site as a whole has had over 31,000 visits since it was set up in September 2000.

### **What types of Research Interests are identified?**

There have been many individual entries relating to areas of research specialisation made to the Science Research Network. Broadly speaking, the research interests identified can be grouped along the following lines:

- Life Cycle Inventories (LCI) and the application of Life Cycle Assessment (LCA) for non-ferrous metals and materials flow analysis
- Hazard waste engineering, waste reduction and resource recovery
- Biological systems for extracting metals
- Mine closure, reclamation and remediation
- Cleaner production, industrial water management and soil quality management
- Environmental pollution prevention
- Risk assessment (ecological and environmental effects)
- Non-ferrous metals and human health
- Bio-availability of non-ferrous metals

While it cannot be claimed that the research interests listed are fully comprehensive, they do help in understanding some of the major areas of focus for researchers across the world. We may gain a better insight into research activity as the Science Research Network continues to grow organically over time. In the meantime it is proving a useful tool in focusing the approach of the NFMSD's Science, Research and Development Working Group.

### **Next Steps**

Its prominence in Internet search engines should ensure that the Science Research Network continues to attract new entries so that it grows organically. However, steps may be taken to extend the reach of the network further beyond [www.nfmsd.org](http://www.nfmsd.org). These may include:

- Constructing links to the Science Research Network from the web sites of all the non-ferrous industry associations
- Improving the profile of the Science Research Network within the UN's World Summit on Sustainable Development process by registering it as a "Type 2" partnership initiative
- Building formal links to the web sites of the research institutes that appear on the Science Research Network
- Building new links from the Science Research Network to the web sites of government members of the three Non-Ferrous Metals Study Groups and their ministries responsible for science, research, industry and the environment