## Conference Call

# Interactions of Soil Minerals with Organic Components and Microorganisms

#### by P. Ming Huang

The 5th International Symposium on Interactions of Soil Minerals with Organic Components and Microorganisms (ISMOM) was held in Pucon, Chile, 24-28 November 2008. This symposium was the 2nd Inter-Congress Conference of Commission 2.5 Soil Physical/Chemical/Biological Interfacial Reactions of the International Union of Soil Sciences. The theme of this symposium was on soil-root-microbe interactions and the impact on the transformations and fate of nutrients and pollutants in the ecosystem. This symposium successfully brought together environmental chemists, mineralogists, microbiologists, ecologists, toxicologists, and soil scientists to share information, identify gaps in knowledge, and stimulate research on the physicochemical and biological interfacial interactions in soil and related environments, with special focus on the soil-root interface (rhizosphere).

Four plenary lectures, 11 keynote addresses, 47 oral papers, and 157 posters were presented over five days during the following sessions:

- Ecological Significance of Interactions among Clay Minerals, Organic Matter, and Biota
- Soil-Root Microbe Interactions and their Effects on the Transformation and Bioavailability of Nutrients
- Soil-Root-Microbe Interactions and their Effects on the Biophysico-Chemical Transformation, Fate, and Toxicity of Metals and Metalloids
- Dynamics and Transformations of Natural Organics and Xenobiotic Compounds
- Environmental Biotechnology: Biochemical and Molecular Mechanisms of Microbe-Plant-Root Interactions and their Genomic and Proteomic Advances Pertaining to Restoration of Contaminated Sites

The symposium was attended by over 200 participants from 36 countries in five continents. It was a major step forward in establishing effective avenues of communication among relevant scientists in developing and developed countries about how to protect and sustain the global environment.

Full details of the conference program, including a list of speakers and lecture titles are available at <www.ismom2008ufro.cl>.

The chair of ISMOM 2008 was Maria de la Luz Mora. This symposium was sponsored and financially supported by IUPAC, the Organization for the Prohibition of Chemical Weapons, the National Council of Science and Technology of the Chilean Ministry of Education, and La Frontera University, Temuco, Chile.

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### Biotechnology for the Sustainability of Human Society

#### by Fengwu Bai

Our society is facing unprecedented challenges such as a shortage of resources, threat of infectious diseases, loss of biodiversity, deterioration of the environment, and an imbalance of economic and social development. The 13th International Biotechnology Symposium & Exhibition (IBS-2008), held 12-17 October 2008 in Dalian, China was more timely than ever: Its theme was Biotechnology for the Sustainability of Human Society.

The 2001 Nobel Laureate Barry K. Sharpless, from the Scripps Research Institute, USA, opened the plenary session with a lecture on the "Secret Lives of Enzymes," in which he explained "Click Chemistry." Click chemistry is the use of chemical building blocks



Werner Arber (left), Nobel Laureate from the University of Basel, Switzerland, with Zhu Chen, Minister of Health in China