

Preface

Science-based decision-making to reduce risks from Persistent Organic Pollutants (POPs) [☆]

The technical papers included in this issue of Chemosphere were presented at the workshop “Strengthening Science-Based Decision-Making to Reduce Risks from Persistent Organic Pollutants (POPs)”, which was held June 7–10 in Beijing, the People’s Republic of China (PRC). The workshop was a collaboration of the US National Academies, the Chinese Academy of Sciences (CAS), the State Environmental Protection Administration of China (SEPA), the Scientific Committee of Problems of the Environment (SCOPE), and the China Association for Science and Technology (CAST). The meeting was co-chaired by the Secretary General of SCOPE-China, Professor Yonglong Lu, and Distinguished Professor of Zoology at Michigan State University, John P. Giesy. The co-chairs emphasized the potential for enhancing environmental stewardship by building on China’s strong scientific capability and by fostering systems of decision-making and environmental management that are based on strong science and communication. Because China is currently working on a national implementation plan for the implementation of the Stockholm Convention on Persistent Organic Pollutants, which happened to be ratified by China’s legislature while the workshop was taking place, the workshop presented an important and timely opportunity to address science-based decision-making for POPs reduction.

The workshop was attended by 95 delegates from government agencies, businesses and industries, academia, and non-governmental organizations (NGOs). Participants came from several regions in China, including Beijing, Nanjing, Hong Kong, and Wuhan; the United States; and New Zealand. This diverse group was brought together to share strategies and lessons learned from their various perspectives regarding the following topics:

- (1) what kinds of scientific information are needed to make decisions about achieving POPs risk reduction;
- (2) development of science-based policy and implementation plans for POPs control;
- (3) plans to develop monitoring systems and predicting fates of chemicals in the environment;
- (4) risk assessment and risk communication;
- (5) what decision-makers dealing with POPs need from the scientific community including next steps to make such science available and ensure its use on a continuing basis;
- (6) what constitutes good scientific advice, and where such information can be obtained; and
- (7) methods of communication between and among policy-makers, scientists, and the public.

The above issues were addressed in plenary presentations and in a series of breakout discussion sessions. Delegates were divided into working groups and, drawing from their expertise and experience with POPs management, discussed at length questions such as: where do decision-makers get scientific advice? In what form do policy-makers receive scientific advice? How can the decision-making process be facilitated through scientific input? Are there existing “bridging or boundary” organizations that can help create effective interface between scientists and decision-makers ...providing “reliable and timely translations of information and views between the two communities”? What are some elements of good science advice? What can be done to improve communications, build trust? What do decision makers need from the science community? And, what does the science community need to understand about decision-makers?

Select technical papers from the meeting are being published in this issue of Chemosphere. Statements made in these papers are those of the individuals and

[☆] Based on Papers Presented at an International Workshop in Beijing, the People’s Republic of China.

do not necessarily reflect the positions of the sponsoring organizations. A workshop summary of the US National Academies and the Chinese Academy of Sciences will highlight the less technically-oriented cross-cutting issues related to strengthening science-based decision-making, as previously described. The workshop summary, which will be available in 2005, will be accessible, free of cost, through the National Academies Press web site: <http://www.nap.edu>.

The workshop was the second in the series “Strengthening Science-Based Decision-Making in Developing Countries” that was established as a “Type II Partnership” (see <http://www.sdp.gov/sdp/initiative/>) at the World Summit on Sustainable Development (WSSD). The series aims to: increase professional connection between scientists and decision-makers; improve communication between the scientific community and decision-makers; identify the gaps between the needs of decision-makers and scientific research priorities; and enhance decision-makers’ use of science in the decision-making process and consideration of decision-makers’ needs in the development of research priorities.

The workshop series is sponsored by the US Environmental Protection Agency (EPA) and the American Chemistry Council (ACC) and is overseen by a steering committee that reviews all workshop proposals and provides general direction for the initiative. Steering committee members include: Michael Clegg (Chair), University of California, Riverside; Thomas Lovejoy, H. John Heinz III Center for Science, Economics and the Environment; Whitney MacMillan, Cargill, Inc.; Perry McCarty, Stanford University; Roger McClellan, Chemical Industry Institute of Toxicology; F. Sherwood Rowland, University of California, Irvine.

The partnership includes the following organizations:

- US National Academies
- InterAcademy Panel
- US Environmental Protection Agency
- American Chemistry Council
- Mexican Academy of Sciences
- State Environmental Protection Administration of China
- Chinese Academy of Sciences

- Scientific Committee on Problems of the Environment
- National Council for Science and the Environment
- National Oceanic and Atmospheric Administration
- H. John Heinz Center for Science, Economics, and the Environment

“Strengthening Science-Based Decision-Making in Developing Countries” project information is available at: <http://www.nationalacademies.org/sustainability/type2>.

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