

Initiative for an International Panel on Chemical Pollution (IPCP)

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Overview

- ◆ Motivation: why an IPCP?
- ◆ Organization of the IPCP
- ◆ Current status and way forward

Is Chemical Pollution Serious on a Global Scale?

- ◆ Need to set priorities among different environmental problems:
 - ➔ Climate change
 - ➔ Biodiversity loss
 - ➔ Chemical pollution
 - ➔ ...
- ◆ On a global and long-term scale, chemical pollution may affect the intellectual and hormonal/sexual development of a large number of humans.

What are the Problems to be Addressed?

- ◆ Many chemical property data and findings on exposure and effects **not harmonized**.
- ◆ **High uncertainties** limit a science-based treatment of transboundary chemical pollution.
- ◆ **Support and funding** for measuring chemical properties, compiling emission inventories, conducting monitoring programs, performing modeling studies still **too low**.
- ◆ **Existing organizations limited** in their resources or their geographical or thematic scope.

Examples ...

- ◆ Emission inventories
- ◆ Pesticide stockpiles



Source: UN News
Pesticide cans in a
dump in Mali



Source: T. Kukharchyk, Belarus



- ◆ Risk-benefit assessment
of DDT usage



Source: WHO
DDT indoor residual spraying

Tasks of an IPCP (I): Provide Scientific Support for Politics

- ◆ **Compile** and **evaluate existing results** of research into large-scale chemical pollution
- ◆ Harmonize and **share data**
- ◆ Provide **evaluated results** for decision makers: reports on priority topics
- ◆ Support development of **political consensus** as a prerequisite for taking actions

Tasks of an IPCP (II): Encourage Political Support for Science

- ◆ **Create awareness** among policy makers; support funding
- ◆ **Coordinate scientific research** in priority areas
- ◆ Put **emphasis** on fields not part of the scientific mainstream, e.g. chemical property measurements

What Makes IPCP Different from SETAC, ACS, etc?

- ◆ Scientific societies in general:
 - ➔ primary aim is to foster exchange among scientists (conferences, journals, books)
 - ➔ A «forum for scientists to disagree»
- ◆ IPCP:
 - ➔ Focus on science-politics interface
 - ➔ Intergovernmental Panel on Climate Change as a model?
 - ➔ A «forum for scientists to build consensus»
- ◆ SETAC in particular:
 - ➔ Consensus building activities; review of the state-of-the-science
 - ➔ Good opportunity for collaboration

Overview

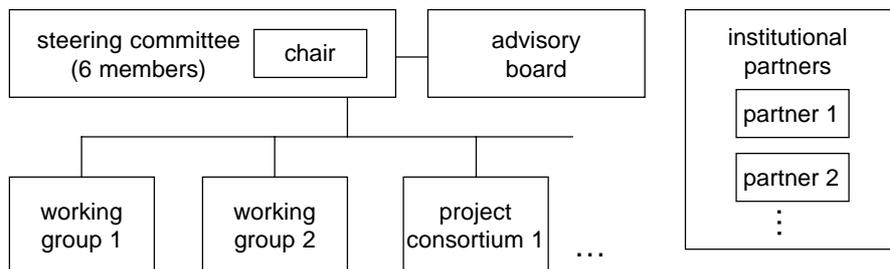
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Organization of the IPCP (I)

- ◆ **Global network** of scientists from
 - ➔ chemistry
 - ➔ toxicology and ecotoxicology
 - ➔ engineering
 - ➔ epidemiology
 - ➔ medicine
 - ➔ ...
- ◆ Focus of IPCP work is on **scientific** evaluation of pollution problems and fostering research
- ◆ Focus is not on discussion between academia, government, and industry.

Organization of the IPCP (II)

- ◆ Bodies:
 - ▶ Steering committee and chair
 - ▶ Working groups and project consortia
 - ▶ Advisory board
 - ▶ Institutional partners



Organization of the IPCP (III)

- ◆ Steering committee and chair
 - ▶ Responsible for general direction of IPCP work, approve results from working groups and project consortia
- ◆ Working groups and project consortia
 - ▶ Can be organized in a flexible way, work on priority topics, prepare reports, carry out research
- ◆ Advisory board
 - ▶ Gives scientific advice, approves results from working groups and project consortia
- ◆ Institutional partners
 - ▶ Nominate members of advisory board, disseminate results of IPCP work, provide additional support

Organization of the IPCP (IV)

- ◆ **Partners** for collaboration and information exchange:
 - ➔ Society of Environmental Toxicology and Chemistry (SETAC)
 - ➔ Strategic Approach to International Chemicals Management (SAICM)
 - ➔ International Conventions
 - ➔ Governments: IPCP newsletter
 - ➔ ...

Deliverables from the IPCP

- ◆ IPCP working groups will prepare **reports** or **guidance documents** on priority topics
 - ➔ To be endorsed by Steering Committee and Advisory Board
 - ➔ Delivered to governments and all interested parties, available to the public from IPCP web site
- ◆ Results from IPCP projects will be made available to the public, including
 - ➔ Data (chemical properties, emission inventories, field measurements, etc.)
 - ➔ Methods and tools, e.g. in the form of model software
 - ➔ Summaries of findings
 - ➔ ...

IPCP Documents

- ◆ **Declaration** about IPCP initiative, open for signature, see www.sust-chem.ethz.ch/news/IPCP.html

Initiative to establish an International Panel on Chemical Pollution, IPCP

The production of chemicals is an important source of economic welfare and chemical products provide a multitude of benefits for modern societies. However, many chemicals also enter the environment and chemical pollution will remain a major environmental issue in the 21st century in many regions of the world. To reduce levels of pollution and ensure safe production, use and disposal of chemicals, large scientific, technical and political efforts will be required. To address this need, we propose to establish an *International Panel on Chemical Pollution*, IPCP. The main task of this panel will be to provide scientific support for decision makers dealing with pollution problems and the assessment and management of chemicals, both at the national and international level and based on the state-of-the-science. (...)

IPCP Documents

- ◆ Declaration about IPCP initiative, open for signature, see www.sust-chem.ethz.ch/news/IPCP.html
- ◆ Description of objectives and context

International Panel on Chemical Pollution

Science and Policy

Science and Policy

Initiative for an International Panel on Chemical Pollution (IPCP)

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At the 2006 Dioxin Conference in Oslo, an *Open Meeting* was held on Managing risks of global POPs contamina-

public and policy makers, that research in priority areas such as measurements of chemical properties and monitoring pro-

Environ Sci
Pollut Res
13 432-434
(2006)

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Identifying Priority Topics (I)

- ◆ Assessment schemes and priority setting
 - ➔ Prioritization of chemicals of concern in different regions of the world (planned collaboration with SAICM)
 - ➔ ...
- ◆ Monitoring of environmental status
 - ➔ Availability and suitability of analytical methods for the global monitoring of POPs
 - ➔ ...

Identifying Priority Topics (II)

- ◆ Region-specific issues of concern
 - ➔ Implications of DDT usage in malaria control
 - ➔ Dealing with chemicals from electronic waste
 - ➔ ...
- ◆ Identification of emerging issues
 - ➔ Sources, pathways, exposure of perfluorinated chemicals
 - ➔ Reviewing polybrominated chemicals
 - ➔ Reviewing long-range transport of heavy metals
 - ➔ ...

Expanding IPCP

- ◆ Invite scientists from all regions of the world to participate
- ◆ Discuss topics of IPCP work at the Dioxin 2007 Conference in Tokyo, September 2007
- ◆ Establish first working groups
- ◆ Funding and budget

Summary and Contact

- ◆ Problem:
 - ➔ Scientific results inconsistent, not harmonized, difficult to use
 - ➔ Political and financial support insufficient
- ◆ Mission:
 - ➔ Scientific support of politics
 - ➔ Political support of science
- ◆ Next Steps:
 - ➔ Make IPCC more visible
 - ➔ Establish collaborations with existing institutions
 - ➔ Identify priority topics, establish working groups
- ◆ Contact: ipcp@chem.ethz.ch