

Recent Scientific Findings on Air Pollution and Implications on Policy Making

Intensive measurement campaigns conducted over the last few years in urban centers, such as the Mexico City Metropolitan Area, Monterrey, Guadalajara, and Salamanca, have produced a wealth of data on atmospheric pollution, particularly related to the transport and dispersion of pollutants, and the characterization of fine suspended particles, toxic compounds and volatile organic compounds (VOCs).

In an effort to disseminate the new scientific findings among decision-makers at local, state, and federal levels to support the development and implementation of environmental programs and public policy, a science-policy workshop was held in 2007 by the Center for Environmental Research and Training (DGCENICA) from the National Institute of Ecology and the Molina Center. The overall goal of the workshop was to stimulate dialogue and promote collaboration among the academic and government sectors. Furthermore, it aimed to encourage the discussion of the development and implementation of public policies based on the presentation of new scientific findings by members of the scientific community and of the problems and challenges faced by Mexican cities today by government officials. In addition, the organizers agreed that the workshop should be held in other cities as part of outreach activities to promote participations from these cities.

The first workshop was held at Leon, Guanajuato on November 16-17, 2007, which brought together renowned Mexican and international researchers in air pollution atmospheric sciences and officials from all three levels of government involved in air pollution prevention, control and management to discuss the policy implications of the recent scientific findings (See MCE2 Newsletter, Fall 2007/Winter 2008 issue).

This workshop was made possible thanks to the participation and close collaboration of DGCENICA, the Molina Center, the Government of the State of Guanajuato through the General Directorate of Guanajuato's Institute of Ecology, the Mexico-U.S. Foundation for Science, and the North American Commission for Environmental Cooperation (CEC).

The workshop was attended by about 60 participants. One full day was dedicated to presentations by two groups: the first group offered presentations relating to key scientific findings on meteorology, emissions, VOC, and PM, as well as the impacts of air pollution on the health of the population and ecosystem. The second group involved oral presentations and included a panel with high-level state and federal officials responsible for air quality management to discuss environmental achievements and challenges. The second day was divided into two working sessions. Both scientists and government officials acted as moderators for the discussion groups, which included the participation of scientists from different disciplines and institutions.

The goals set for the workshop were successfully accomplished. The participants agreed that these types of workshops are a valuable tool to help bridge the gap between the academic and governmental sectors and to work together to bring a solution to the air pollution problem. A proposal was presented to organize a workshop in 2008 to further discuss and evaluate key topics through similar forums. The participants also interacted socially at a reception hosted by the Molina Center and the Guanajuato Institute of Ecology. It was overall a very productive and rewarding workshop for the organizers and the participants.

Following the successful completion of the workshop, a second workshop was again jointly organized by CENICA and the Molina Center and hosted by the Government of Jalisco in Guadalajara. The format was similar to the first workshop, with plenary and breakout sessions. One of the highlights was the presentation and discussion of the Comprehensive Assessment of North American Air Emissions Inventories and Ambient Air Monitoring Networks, which summarizes the extent to which current inventories and networks in Canada, US, and Mexico are addressing key air quality issues facing each country and North America as a whole. The Assessment addresses the air quality issues facing North America, including impacts on human health and welfare in highly populated areas, visibility degradation and ecosystem damages in rural and remote regions; contamination of water bodies, effects on wildlife and fish from deposition of harmful toxics; and ongoing alteration of the climate. The Assessment provided the themes for the working groups: investigation and management of industrial sources, mobile sources, toxic substances and their impacts on human health and ecosystems, air quality monitoring network and modeling. As in the previous workshop, a social event was organized by the host whereby the participants were invited to tour the city of Guadalajara, followed by a reception.

The third workshop was hosted by the Government of Nuevo León through the Agency of Protection of the Environment and Natural Resources (APMARN) of the City of Monterrey on August 20-21, 2009. The theme of the Third Workshop was “Recent Scientific Findings on Air Toxics and the Implications on Policy Making.”

The workshop was attended by approximately 90 participants over the two-day event. In addition to representatives from different Mexican government agencies and academic institutions, the organizers also invited representatives from industries and non-government environmental organizations in Mexico as well as scientific experts from US, Canada and Europe. The format was slightly different from the past two events: the first day was devoted to presentations from the scientific experts; while there were two panel discussions on the second day, including experts from US and Canada sharing their perspectives on air toxic research, monitoring and evaluation. As part of the social event, a dinner and folk dancing was sponsored by local industry.

As in the past two workshops, the participants feel that this type of forum should continue as it is a very productive and useful way to promote interaction among different sectors of governments and society. There were suggestions to invite authorities of the Secretary of Economy, the energy sector and non government organizations in future panel discussions. The workshop information is available on the INE and the MCE2 websites.