



# EDUCATIONAL ACTIVITIES DURING THE MILAGRO CAMPAIGN

In addition to the scientific activities, the MILAGRO 2006 Campaign has included several educational activities. Their objectives are:

- To foster communication between scientists of the campaign and students, postdoctoral researchers, and the general public.
- To contribute to the education and training of students in the technical and scientific aspects of atmospheric pollution in megacities and their impact on a regional and global scale.
- To promote greater interest in science and scientific careers among junior and high school students by inviting them to participate in scientific research activities.
- To publish and disseminate the objectives, activities, results and impacts of the MILAGRO Campaign, and help raise awareness among the people of Mexico City about air quality problems, their effects and possible solutions.

The following activities have been planned in order to accomplish these goals:



#### **Scientific Research**

The MILAGRO Campaign will provide scientific training for undergraduate and graduate students and postdoctoral researchers from participating institutions in Mexico, US, Europe and other countries. These students will have the opportunity to work on measurement activities and data analysis with MILAGRO scientists during and after the conclusion of the campaign.



Technical workshops during the MCMA 2003 campaign. L. T.

# **Public Lecture Series**

Public lectures will be given at Universum Museum at UNAM on Thursdays and Fridays during the month of March. Thursday lectures will be open to the general public and Friday lectures will be for elementary and junior high school students. Additional lectures are scheduled at several measurement sites and at some local schools.



Guided visits to the monitoring sites during the MCMA 2003 campaign. L. T. Molina

# Workshops

Meteorological workshops for young adults will be conducted at the Universum Museum in UNAM during the month of March.

# **Guided Tours to Measurement Sites**

Five tours to measurement sites (Mexican Petroleum Institute (IMP) and Technological University of Tecámac) are being organized for junior high and undergraduate students. Tours will also be conducted for technicians, officials, scientists, and postgraduate students. In addition to visiting the measurement sites, the tours will include an introductory talk about the MILAGRO Campaign, as well as a description of the goals that this international scientific effort wishes to accomplish. A poster exhibit will be displayed at the sites for the visitors. Middle school students will have the opportunity to participate in workshops to learn more about atmospheric pollution.



# Windows to the Universe (W2U)

The W2U (Windows to the Universe) site is an interactive educational program administrated by UCAR (University Corporation for Atmospheric Research). This site contains scientific material designed for different age groups, as well as research activities and interactive tools. The web portal has reached more than 11 million users during the past twelve months; two thirds of them teachers and elementary students, and 25% of them have accessed the texts in their Spanish version. For this reason, W2U has become an important teaching tool for MILAGRO. Through this website numerous students will gain access to background content on the MILAGRO Campaign, its scientific foundations and social importance, the international efforts implicated, and the role of the different actors and institutions within the campaign. All this information has been enhanced with real-time images, video and data that will help keep the general public constantly updated. Finally, users will also be able to access the vast array of learning resources W2U has to offer.

### Contest: "iHagamos un MILAGRO por el aire!" (Let's Make a Miracle with Air!)

The "iHagamos un MILAGRO por el aire!" contest was organized to enable junior and high school students to become more involved in the subject of atmospheric pollution. The contest will be conducted during the months of February and March and will include the participation of schools from the Federal District and the state of Mexico. This pilot contest will evaluate the feasibility of organizing another contest in the future with more schools. It will also provide an insight on the views and levels of interest young adults have on subjects related to air pollution. The schools invited to participate are representative of the different educational options available in the city. The contest is made up of two categories: poster for junior high students and essay for senior high students.



# **MILAGRO Exhibit**

The goals of the exhibit are to introduce the MILAGRO Campaign to the general public and raise awareness among the Mexico City population about air quality problems, their possible effects and solution or improvement alternatives. The posters will be displayed at several sites: the Universum Museum at UNAM, Mexican Petroleum Institute (IMP) and Technological University of Tecámac. The posters will be displayed also at public places.



