

## Customs stall '*Milagro*'

By Iván Sosa / Saturday March 4, 2006



The scientific monitoring equipment is put through extensive testing. Final touches applied to the international campaign to study pollution in the Valley of Mexico.

Set back two days, the campaign to measure pollutants in the Valley of Mexico has been unable to initiate due to the comprehensive examination of the scientific monitoring equipment by the American and Mexican custom agencies.

“They have limited personnel for the amount of equipment being brought through. I believe we didn’t foresee this problem to prevent it in time, but hopefully in two days we will be ready to begin with the campaign’s activities”, mentioned Luisa Molina, coordinator of the **MILAGRO** project.

While attending the opening ceremony at the Universum Museum of Ciudad Universitaria (UNAM) of what has to be the biggest scientific research project in Mexico’s history, Adrián Fernández, president of the National Institute of Ecology (INE) expressed his appreciation to the Ministry of Foreign Affairs for helping to expedite the immigration procedures.

“Without their help it would have taken two or three more months”, stated Fernández.

During an interview, Luisa Molina announced that she expects all of the scientific equipment to be available shortly in order to fully begin with the activities.

The Megacity Initiative: Local and Global Research Observations (**Milagro**) campaign includes the participation of six airplanes, nine satellites, aerial sondes and ground monitoring supersites, as well as 400 scientists from 17 different countries.

Luisa Molina, research scientist of the Massachusetts Institute of Technology, explained that the next decade will produce 21 megacities with dimensions similar to the Valley of Mexico.

“We want to find out how the phenomenon of atmospheric pollution occurs, its reactions; the regional effects outside the city as well as other areas, on other continents, and how this affects the health of the population” stated Molina.

Mexico was chosen as a study case for several reasons: its location is set at a tropical latitude similar to other expanding megacities; it offers a competitive level of scientific collaboration as well as data bases with emissions inventories since 1985; it has excellent logistical facilities and is close to United States territory.



“In 1950 the only megacity in existence was New York; in a few years, that number will increase to 21. With the knowledge we acquire today on the air pollution phenomenon in the Valley of Mexico, other countries will be able to take precautions to control it”, cited Molina.

Divided into four coordinated studies the **MILAGRO** Project is being sponsored by the United States Department of Energy and the Space Agency (NASA) and has specialists from 160 research centers around the world.

Of the six airplanes that are specially equipped to conduct measurements, five will fly out next Monday out of Veracruz airport and one, from NASA, out of Houston.

## The cities of the future

The **MILAGRO** Project will be valuable in the prevention of pollution in megacities.

### Population

City	1975*	2003*
Tokyo	26.6	35
Mexico	10.7	18.7
New York	15	18.3
Sao Paulo	9.6	17.9
Bombay, India	7.3	17.4
Delhi, India	4.4	14.1
Calcutta, India	7.9	13.8
Buenos Aires	9.1	13
Shanghai, China	11.4	12.8

\*Millions of inhabitants

Source: **MILAGRO Project/ Saturday March 4, 2006**

## **Milagro** begins

By Lorena Morales / **March 4, 2006**

Government. Research study is launched on pollutants in the Valley of Mexico.

On Thursday the ceremony initiating the **Milagro** Project took place, which aims to study the behavior and composition of pollution in the Valley of Mexico as well as the regional impact of pollutants generated in the Tula industrial strip.

Gustavo Sosa, researcher for the *Instituto Mexicano del Petróleo* (IMP) and member of the scientific research team, explained that the object is to study the behavior of the emissions. "We will deploy meteorological balloons three times a day in order to study the behavior of airflows", he stated.

Some of the elements to be analyzed are suspended particles, volatile organic compounds, ozone, sulfur dioxide, and carbon dioxide, among others.

The investigation will help specify where the more than 10 million tons of hazardous residue generated by the Tula-Vito-Asasco industrial strip travel to.

Among the studies to be realized at Tula is also the implementation of bio-monitoring which considers gathering information about the pollution of the area through lichens, a specie of mushroom.

The cutting of the inaugurating ribbon was performed at the Universum signifying the start of activities to be carried out during the month of March.

Some of the attendees to the event were: the Rector of the UAM, José Lema, the Director of the Center for Atmospheric Sciences of the UNAM, Carlos Gay, Anne Marie Schmoltner from the National Science Foundation, and the President of the National Institute of Ecology, Adrián Fernández, among others.

### Radiography

The studies will classify emissions that are hazardous to the city

- 31 days to gather data and information
- 400 scientists and researchers will participate in the project