

Playing a Big Role

Cooperating in Chinese Acid Rain Monitoring



Cooperating in a Japan-China joint project, Shimadzu Corporation has presented Guiyang — a Japan-China Environmental Development Model City — with an ambient air monitoring system to assist Chinese environmental protection work.



The mobile air monitoring station has become operational, with Shimadzu's monitoring system (for ambient air and meteorological parameters) and the vehicle procured and remodeled by Guiyang city.

Part of an Important National Project

As China's economy takes quantum leaps forward, so too do the environmental pollution problems confronting the Chinese people. So great is the problem that the Chinese government has earmarked the environmental protection policy as an important national pro-

ject in the tenth Five Year Plan starting from 2001. The policy plan not only involves the use of national budget funds, but also funds from many other parts of the world. As part of the growing economic cooperation between Japan and China, three cities with critical environmental pollution problems - Chongqing,

Dalian and Guiyang - were designated as model cities in 1999, under the "Environmental Development Model City" plan. These three cities will concentrate on restoring their environmental quality, and are expected to become environmental recovery models for other cities. Shimadzu Corporation has presented Guiyang, a city in need of an air pollution monitoring network, with an ambient air monitoring system, as part of this "Environmental Model City" project.

Highly Accurate Continuous Monitoring of SO₂, NO_x and CO

Guiyang, located in the southwest of China, is the provincial capital of Guizhou. The population exceeds one million, consisting not only of large residential numbers of the Han people but also ethnic minorities such as the Miao. As one of China's long-established industrial cities, Guiyang has many heavy industries, including metalworking and machinery, and is known as the leading manufacturer of aluminum in China. This alone caus-



The Environmental Protection Bureau of Guiyang City directs environmental protection management and control to improve the environment of Guizhou province.

es critical environmental pollution, most striking of which is the ambient air pollution. Environmental management of Guiyang is entrusted to the Environmental Monitoring Central Station, which is affiliated with the Environment Protection Bureau of Guiyang and monitors ambient air, water and soil. However, up until now, the tendency has been to chemically analyze the pollutants without any continuous monitoring system for ambient air. Shimadzu Corporation donated the ambient air monitoring system to enable highly accurate continuous monitoring.

This ambient air monitoring system continuously measures pollutants such as SO₂, NO_x, CO and suspended particles to effectively keep track of the substances that cause acid rain. Ambient air pollution used to be monitored in Japan using the conventional wet method, but as the dry method became the global standard in the 90s, Japan adopted it as well. Shimadzu Corporation took this opportunity to develop and market an ambient air analyzer



Full-automatic Ambient Air Monitoring System (NO_x, SO₂, SPM, CO and meteorological data are gathered and processed.)

employing the dry system, which resulted in multiple sales in Japan. And the donated analyzer represents the first Shimadzu device of its kind to have crossed the sea to China.

System Installed in Environmental Monitoring Vehicle and Data Collection Commenced

In June of 1999 Mr. Xianwen Meng, then the General Director of the Environment Protection Bureau of Guizhou Province, met with Mr. Takayoshi Koya, then the Shimadzu General Representative, to agree on the donation of the ambient air monitoring system. Mr. Meng proposed that the system be installed in an environmental monitoring vehicle and Shimadzu Corporation concurred. Now, the environmental monitoring vehicle, prepared by Guiyang City and equipped with the Shimadzu system, has commenced collecting data by monitoring areas in Guizhou Province.

Examples of direct contribution to the Chinese environmental protection policy by an individual private enterprise are extremely rare; Shimadzu's donation has been highlighted as a major step in the increasing cooperation between Japan and China. In fact, executive members of the State Environmental Protection Administration have been invited to attend the soon-to-be-held environmental monitoring vehicle handover ceremony. This is a defining moment that will hopefully lead to the introduction of more advanced Japanese environmental monitoring technology to China in the near future, which in turn will promote Chinese environmental protection.

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