

Development of passive sampling techniques for monitoring air quality in cities; possible transboundary effects

Web Address: <http://www.airmacsl.org/>

Implementing agencies:

Department Of Chemistry, University Of Peradeniya,
Peradeniya, Sri Lanka

Main contact person:

Prof. Oliver A. Ileperuma
Senior Professor and Head of Department
University of Peradeniya
+94 81 2389129
+94 81 2389129
oliveri@pdn.ac.lk

Major Objectives/Outputs

This project is concerned with developing economical methods for air quality of monitoring of three key pollutants; sulphur dioxide, ozone and nitrogen dioxide. Passive sampling methods have been developed for these criteria pollutants. Studies were carried out in two cities; Kandy and Anuradhapura. The latter site is located in the north-central province and is expected to have a high degree of transboundary pollution during the north-east monsoon. Continuous monitoring from December 2001 to December 2004 was carried out.

Project output: There is significant air pollution in the city of Kandy which is situated in a valley between two mountain ranges. Levels exceeded the Sri Lanka standards on many occasions. Air quality monitoring at Anuradhapura indicated significant transboundary effects during the period from October - December. Ozone levels exceeded the standards on many occasions specially during dry weather.

Project Parameters

Total budget:	\$1800
Funding sources:	1. National Science Foundation, Sri Lanka (partial support)
Funding type:	TA
Status of the project:	Completed 2004
Regions:	South Asia
Countries:	Sri Lanka
Provinces/Cities:	Kandy(Central Province) Anuradhapura(North-Central Province)
Project components:	Data Gathering and Analysis.Awareness Raising.Capacity Building. Equipment Support.

Areas of focus	
Air quality monitoring:	Ambient.Source Apportionment.
Mobile sources:	Inspection and Maintenance.
Climate change and co-benefits:	Energy.
Other areas of focus:	Monitoring Transboundary Air Pollution. Policies for Transboundary air pollution.

Contact persons in each country or city (if applicable)

Not Specified