Determination of the impact of oxidizing capacity of the troposphere on the abundance of carbon monoxide and methane with special reference to India

Principal Investigator: Dr. Meena Jain, RASD, CSIR-National Physical Laboratory, New Delhi

Co-Investigator: Dr. Sachchidanand Singh, RASD, CSIR-National Physical Laboratory, New Delhi

The long-lived pollutants like methane and carbon monoxide are mainly removed from the atmosphere through their reaction with OH radicals which determine the oxidizing capacity of the atmosphere. An increase in the abundance of the pollutant gases is expected to decrease the abundance of OH radicals and hence oxidizing capacity of the troposphere. Because of biodiversity and economic conditions the emission rates of these pollutants are different over different regions in India. The project proposal aims to determine the impact of abundance of pollutants like methane and carbon monoxide on oxidizing capacity of the atmosphere with special reference to India. The estimated cost of the project is Rs 22.43 lakhs.