


## Brief Biodata

**Name: Dr. Sudhir Kumar Sharma**

<b>Designation:</b>	Principal Scientist	
<b>DP No. and Name:</b>	3.1, Atmospheric Science	
<b>DU No. and Name:</b>	3.0, ES&BMD	
<b>Email:</b>	sudhir@nplindia.org	
<b>Date of Joining CSIR-NPL:</b>	7 <sup>th</sup> June 1999	
<b>Phone (office)</b>	011-4560 9448	

### Research Area/ Interest

- Study on atmospheric trace gases (NH<sub>3</sub>, NO, NO<sub>2</sub>, CO, SO<sub>2</sub>, O<sub>3</sub> and NMHCs etc.) and their interaction over Indian region.
- Characteristics of particulate matter (PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>10</sub> and TSP) and their source apportionment using various receptor models
- Estimate of pollutants emitted from biomass burning in rural sector of India
- Environmental Impact Assessment and simulation modelling

### Educational Qualifications

*(Please write latest qualification first)*

Degree	Subject	University/ Institute	Year
Ph.D.	Environ Science	CCSU/IARI	1999
M.Sc.	Physics	LNMU	1994
B.Sc.(H)	Physics	LNMU	1992

### Academic / Research Experience

Grade / Post	Institute	Duration		Research Field
		From	To	
Principal Scientist	CSIR-NPL	3.12.2017	To date	Atmospheric Science
Senior Scientist	CSIR-NPL	3.12.2014	2.12.2017	Atmospheric Science
Scientist	CSIR-NPL	3.12.2010	2.12.2014	Atmospheric Science
Scientist-B	CSIR-NPL	3.12.2007	2.12.2010	Atmospheric Science
Gr-III (2)	CSIR-NPL	7.06.2004	2.12.2007	Electrical Standard
Gr-III (1)	CSIR-NPL	7.06.1999	6.06.2004	Electrical Standard

## No. of Publications

No. of Publications in SCI Journals	No. of Publications in non-SCI Journals	No. of Publications in Conference Proceedings	Books	Total
125	10	40	5	180

## Selected Publications

- Joshi, P., Dey, S., Ghosh, S., Jain, S., and Sharma, S.K., (2022). Association between acute exposure to PM<sub>2.5</sub> chemical species and mortality in megacity Delhi, India. *Environmental Science & Technology*, Vol. 56 (June), 7275-7287.
- Sharma, S.K., Mukherjee, S., Choudhary, N., Rai, A., Ghosh, A., Chatterjee, A., Vijayan, N., and Mandal, T.K., (2021). Seasonal variation and sources of carbonaceous species and elements of PM<sub>2.5</sub> and PM<sub>10</sub> over the eastern Himalaya. *Environmental Sciences and Pollution Research*, Vol. 28 (October), 51642-51656.
- Jain, S., Sharma, S.K., Srivastava, M.K., Chatterjee, A., Vijayan, N., Tripathy, S.S., Kumari, K.M., Mandal, T.K., and Sharma, C., (2021). Chemical characterization, source apportionment and transport pathways of PM<sub>2.5</sub> and PM<sub>10</sub> over Indo Gangetic Plain of India. *Urban Climate* Vol. 36, 100805.
- Jain, S., Sharma, S.K., Vijayan, N., and Mandal, T.K., (2020). Seasonal characteristics of aerosols (PM<sub>2.5</sub> and PM<sub>10</sub>) and their source apportionment using PMF: A four-year study over Delhi, India. *Environmental Pollution*, Vol. 262, 114337.
- Sharma, S.K., Mandal, T.K., Jain, S., Saraswati, Sharma, A., and Saxena, M., (2016). Source apportionment of PM<sub>2.5</sub> in Delhi, India using PMF model. *Bulletin of Environmental Contamination and Toxicology*. Vol. 97(2), 286-293.

## Patents

Nil

## Current Activities

(Not more than 100 words)

- Study on atmospheric trace gases (NH<sub>3</sub>, NO, NO<sub>2</sub>, CO, SO<sub>2</sub>, O<sub>3</sub> and NMHCs etc.) and their interaction over Delhi-NCR, IGP and other part of India.
- Physico-chemical characteristics of aerosols (PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>10</sub> and TSP) and identifications of their sources & source regions using various receptor models.
- Estimate of pollutants (gaseous and particulates) emitted from residential fuels biomass burning over rural sector of India.

## Honour(s)/Award(s)/ Fellowship(s)

- R&D team award by CSIR-2003
- SRF by IARI, New Delhi
- Guest Associate Editor, Frontiers in Atmospheric Science
- Guest Editor, Mapan
- Among 2% of Scientist (in Environmental Science )

### **Contributions to AcSIR**

- Ph.D. completed: 6
- Ph.D. continuing: 4

### **Membership of Professional Societies/ Institutions**

- Metrology Society of India
- Indian Society of Analytical Scientists
- Society for Environmental Awareness and Protection

### **Any other Information**

*(Not more than 100 words)*

--