


Brief Biodata

Name: Dr. Radhakrishnan S R

Designation:	Principal Scientist	
DP No. and Name:	3.01, Atmospheric Science & Metrology	
DU No. and Name:	3.0, Environmental Sciences & Biomedical Metrology Division	
Email:	rkrishnan@nplindia.org	
Date of Joining CSIR-NPL:	28-05-2012	
Phone (office)	01145608289	

Research Area/ Interest

- Lidar remote sensing
- Surface Ozone measurement and calibration

Educational Qualifications

(Please write latest qualification first)

Degree	Subject	University/ Institute	Year
Ph.D.	Optoelectronics	University of Kerala	2011
M. Phil	Photonics	University of Kerala	2006
M.Sc.	Physics	University of Kerala	2003

Academic / Research Experience

Grade / Post	Institute	Duration		Research Field
		From	To	
Scientist	CSIR-NPL	28-05-2012	27-05-2016	Laser remote sensing, primary ozone standard etc.
Senior Scientist	CSIR-NPL	28-05-2016	27-05-2020	Laser remote sensing, primary ozone standard etc.
Principal Scientist	CSIR-NPL	28-05-2020	Till date	Laser remote sensing, primary ozone standard etc.

No. of Publications

No. of Publications in SCI Journals	No. of Publications in non-SCI Journals	No. of Publications in Conference Proceedings	Books	Total
22	10	30	1	

Selected Publications

1. **Radhakrishnan S.R.**, Satyanarayana, M, Krishnakumar V, V P Mahadevan Pillai S, K Raghunath, and Venkata Ratnam M, Optical properties of cirrus clouds at a tropical Indian station Gadanki (13.50 N, 79.20 E), Tirupati”, *J. Appl. Remote Sens.*, 4, 043559 (2010).
2. Satyanarayana, M, **Radhakrishnan S.R.**, V P Mahadevan Pillai S Veerabhuthiran, K Raghunath, Presennakumar B, and V.S Murthy, “Laser radar characterization of atmospheric aerosols in the troposphere and stratosphere using range dependent lidar ratio, *J. Appl. Remote Sens.* Vol. 4, 043503 (Jan. 13, 2010).
3. **Radhakrishnan S.R.**, Satyanarayana, M Presennakumar B, V.P Mahadevan Pillai & V.S Murthy “Measurement of water vapor in the lower atmosphere at a coastal station, Trivandrum (8⁰N, 77⁰E) using a high resolution Raman lidar”, “*Indian J. of Radio & Space Phys.*”, Vol.37, 353-359, 2008.
4. Krishnakumar V, Satyanarayana, M, **Radhakrishnan S.R.**, V P Mahadevan Pillai S, K Raghunath, and Venkat Ratnam M, et al., “Investigations on the Physical and Optical Properties and their role in the nucleation of Cirrus Clouds using Lidar at Gadanki (13.5⁰N, 79.2⁰E)”, *J. Appl. Remote Sens.*, 5, 053567 (2011).
5. Krishnakumar V, Satyanarayana, M, **Radhakrishnan S.R.**, V P Mahadevan Pillai S, K Raghunath, and Venkat Ratnam M, et al., “Lidar Investigations on the Optical and Dynamical Properties of cirrus clouds in the UTLS at tropical station Gadanki (13.5⁰N, 79.2⁰E)”, *J. Appl. Remote Sens.*, 083659-1 (2014).
6. **Radhakrishnan S.R.**, B.C.Arya, C.Sharma, S.K.Mishra, Arun Kumar and D.K.Shukla, “Studies on low altitude clouds over New Delhi, India”, *MAPAN* 31 (2016).
7. Sumit K Mishra, **Radhakrishnan S R**, et al, SEM-EDS and FTIR Characterization of aerosols during Diwali and post Diwali festival over Delhi: implications to human health, *J. Environ. Nanotech.*, 5, 16-30, 2016.
8. **Radhakrishnan S R**, B.C.Arya, C.Sharma, Arun Kumar and D.K.Shukla Studies on lower tropospheric aerosols over New Delhi, India using lidar, *MAPAN (Springer)*, 32 (3), 183-191, 2017.
9. Joele Viallon, Faraz Idrees, Philippe Moussay, Robert Wielgosz, Chhemendra Sharma, **Radhakrishnan Soman Radha** and Devesh Kumar Shukla, Final report, Ongoing Key Comparison BIPM.QM-K1, Ozone at ambient level, comparison with NPLI, 55 (1A), 2018
10. Vikas Goel, Sumit Kumar Mishra, Ajit Ahlawat, Chhemendra Sharma¹, N. Vijayan, **S. R. Radhakrishnan**, A. P. Dimri and R. K. Kotnala, Effect of Reduced Traffic Density on PM Characteristics over Delhi: A Case Study, *Current Science*, 115 (2), 315-319, 2019
11. Ajit Ahlavat, Sumit K Mishra, MVS N Prasad, C Sharma, **Radhakrishnan S.R.**, and B.Gupta, Vertical Profiling of Radio Refractivity and Associated Parameters Using Tethered Balloon Over New Delhi, *MAPAN (Springer)*, 34, 479-485, 2019
12. R. Masiwal, C. Sharma, D. K. Shukla, D. Sethi, **S. R. Radhakrishnan**, R. K. Kotnala & B. C. Arya Photochemistry of ozone over urban area: a case study for Delhi City, *Ind. J.Phys.*, 93 (4), 415-425, 2019
13. Jaswant, **Radhakrishnan S.R.**, Shishir Kr Singh, Chhemendra Sharma, and Devesh Kumar Shukla, Initial assessment of lidar signal and the first result of a Raman lidar installed at a high altitude station in India, *Remote Sensing Applications: Society and Environment*, 18, 1-12(100309), 2020

Patents

- Two patent applications submitted

Current Activities

(Not more than 100 words)

- Taking care of the Primary Ozone Standard facility at CSIR-NPL for providing apex level calibration to the surface ozone measurements in the country
- Working on the development of calibration and testing facility for CEMS and CAAQMS on a MoEF&CC sponsored project as Co-PI
- Currently working on the development of Secondary ozone standard for the performance evaluation of ozone analyzers
- Working on the vertical profiling of aerosols and clouds using lidar remote sensing technique
- Developed 3 D scanning lidar for atmospheric studies

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

- CBKT visiting scientist fellowship from NPL-UK
- Best poster award in national conference NCOL held at Trivandrum in 2007

Contributions to AcSIR

- Associate professor in AcSIR in the faculty of Physical Science
- Faculty of the Ph.D. course titled “Environmental Chemistry and Metrology”
- Supervising Ph.D. students
- Produced two Ph.Ds
- One of the co-ordinators of AcSIR societal programme (CSIR 800) at CSIR-NPL

Membership of Professional Societies/ Institutions

- Metrology Society of India- Life Member
- Indian Aerosol Science and Technology Association (IASTA)-Life Member

Any other Information

(Not more than 100 words)