

Brief Biodata

Name: Dr Parag Sharma

Designation:	Principal Scientist	
DP No. and Name:	1.04, Optical Radiation Metrology	
DU No. and Name:	1.0, Physico-Mechanical Metrology	
Email:	sharmap2@nplindia.org	
Date of Joining CSIR-NPL:	February 14, 2007	
Phone (office)	+91-11-45608228	
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Research Area/ Interest

LED Photometry, Spectroradiometry, Nonlinear Optics, Photonics, Quantum Optics

Educational Qualifications

(Please write latest qualification first)

Degree	Subject	University/ Institute	Year
PhD	Physics	Dayalbagh Educational Institute, Agra	2006
MSc	Physics	Dayalbagh Educational Institute, Agra	2002
BSc	Phys, Chem	MJP Rohilkhand University, Bareilly	2000

Academic / Research Experience

Grade / Post	Institute	Duration		Research Field
		From	To	
Principal Scientist	CSIR-National Physical Laboratory, New Delhi	14.02.17	Cont.	Photometry Radiometry
Senior Scientist	CSIR-National Physical Laboratory, New Delhi	14.02.14	13.02.17	Optics Photonics
Scientist	CSIR-National Physical Laboratory, New Delhi	14.02.10	13.02.14	
Scientist B	CSIR-National Physical Laboratory, New Delhi	14.02.07	13.02.10	
CSIR-SRF (NET)	Dayalbagh Educational Institute, Agra	01.10.04	13.02.07	Photonics Nonlinear Optics
CSIR-JRF (NET)	Dayalbagh Educational Institute, Agra	23.09.02	30.09.04	

No. of Publications

No. of Publications in SCI Journals	No. of Publications in non-SCI Journals	No. of Publications in Conference Proceedings	Books Chapters	Total
30	1	20	3	54

Selected Publications

- R Dwivedi, **P Sharma***, VK Jaiswal and R Mehrotra, Elliptically squeezed axicon phase for detecting topological charge of vortex beam, *Optics Communications* 485, 0126710 (2021).
- K Gambhir, **P Sharma***, C Sharma, M Kumar and R Mehrotra, Morphology induced plasmonic-excitonic interaction revealed by pump-probe spectroscopy, *Optics and Laser Technology* 119, 105674 (2019).
- K Gambhir, **P Sharma***, A Sharma, S Husale and R Mehrotra, Plasmon augmented two photon absorption in a strongly coupled nano-molecular hybrid, *Dyes and Pigments* 155, 313-322 (2018).
- R Dwivedi, **P Sharma***, VK Jaiswal and R Mehrotra, Axicon aberration leading to short-range nondiverging optical array and elliptical dark hollow beam, *Optical Engineering (SPIE)* 57(5), 055106 (2018).
- K Gambhir, B Ray, R Mehrotra, **P Sharma***, Morphology dependent two photon absorption in plasmonic structures and plasmonic-organic hybrids, *Optics and Laser Technology* 90, 201-210 (2017).

Patents

- N Singh, Rajesh, VK Jaiswal, **P Sharma**, G Sumana, A Krishna, SR Krishnan, A Purohit, S Rathore and DK Aswal, UVC Disinfection Casket, (Applied, NF 202011021206, India), May 20, 2020.
- N Singh, Rajesh, VK Jaiswal, **P Sharma**, SR Radhakrishnan, G Sumana, DK Shukla, SG Aggarwal, K Singh, SK Jaiswal and DK Aswal, UVC based air microbial disinfection unit, (Submitted 46NF2021, India, Mar. 3, 2021)

Current Activities

(Not more than 100 words)

Creation of apex level testing and calibration facilities for LED and LED based lighting as per international/national standards. Study of visual and nonvisual effects including photobiological/circadian effects of artificial lighting systems. R&D in the area of optical vortex beam, optical phase singularities and quantum radiometry.

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

- Dr OPS Sengar Memorial **Young Scientist Award**, by Nano and Molecular Society, December, 2015.
- '**Best Thesis Award**' at *Eighth International Conference on Optoelectronics, Fiber Optics and Photonics*, Photonics 2006, Hyderabad, India, Dec. 13–16, 2006.
- '**DST Award**' for participation in the Meeting of Nobel Laureates and Students in Physics in Lindau (Germany), June 27-July 2, 2004
- Indian Science Congress Association-**Young Scientist Award** in Physical Sciences at the 91st Indian Science Congress, 2004.

Contributions to AcSIR

- **Associate Professor** in the Faculty of Physical Science
- **Course coordinator:** Advanced Measurement Techniques & Metrology
- **Faculty** in the Courses: Quantum Optics & Advanced Solid State Optical devices; Basic Metrology; Optical radiation Metrology.
- PhD Guided: 02
- PhD Guiding: 04

Membership of Professional Societies/ Institutions

- Life Member (LM-898), Metrology Society of India (MSI)
- Life Member (L-11614), Indian Science Congress Association (ISCA)
- Life Member & Fellow (L-492), The Optical Society of India (OSI)
- Life Member (LM-722), Indian Laser Association (ILA)
- Life Member, Nano and Molecular Society of India (NMS)

Any other Information

(Not more than 100 words)

- Member, Bureau of Indian Standards (BIS), Lamp and Related Equipment Sectional Committee, ETD 23, and Illumination Engineering and Luminaires Sectional Committee, ETD 49
- Member, Review Committee, BIS, National Lighting Code Drafting
- Member, Panel for formulation of a BIS safety standard on UV-C products being used as disinfectant to kill bacteria/viruses
- Technical Accessor (Optics), National Accreditation Board for Testing and Calibration Laboratories, India