


## Brief Biodata

**Name:** V. K. Jaiswal

<b>Designation:</b>	Principal Scientist	
<b>Sub. Div. No. and Name:</b>	1.04, Optical Radiation Metrology	
<b>Division No. and Name:</b>	1, Physico-Mechanical Metrology	
<b>Email:</b>	<a href="mailto:jaiswalvk@nplindia.org">jaiswalvk@nplindia.org</a>	
<b>Date of Joining CSIR-NPL:</b>	February 01, 2008	
<b>Phone (office)</b>	45608228	
<b>Mobile (optional)</b>	-	

### Research Area/ Interest:

Optical Radiation Metrology: Photometry and Radiometry, Applied and Fundamental Optics

### Educational Qualifications:

*(Please write latest qualification first)*

Degree	Subject	University/ Institute	Year
M. Tech	Applied Optics	Indian Institute of Technology, Delhi	2002
M. Sc.	Physics	University of Allahabad	2000
B. Sc.	Physics, Statistics, Mathematics	University of Allahabad	1997

### Academic / Research Experience:

Grade / Post	Institute	Duration		Research Field
		From	To	
Principal Scientist	CSIR-National Physical Laboratory, New Delhi	2016	Till Date	Photometry and Radiometry, Applied and Fundamental Optics
Senior Scientist	CSIR-National Physical Laboratory, New Delhi	2013	2016	-do-
Scientist C	CSIR-National Physical Laboratory, New Delhi	2008	2013	-do-
Scientist SC	Physical Research Laboratory, Ahmedabad (Dept. of Space, GoI)	2002	2008	Fundamental Optics: Laser Physics and Quantum Optics

**No. of Publications:** 19 publications in SCI Journals

No. of Publications in SCI Journals	No. of Publications in non-SCI Journals	No. of Publications in Conference Proceedings	Contributions to Books	Total
19	Nil	69	12	100

**Selected Publications:**

- (i) Rajeev Dwivedi, et al, "Elliptically squeezed axicon phase for detecting topological charge of vortex beam", *Opt. Commun.*, **485**, 126710 (2021)
- (ii) S. Saha, et al, "Evolution of SI Base Unit Candela: Quantifying the Light Perception of Human Eye", *MĀPAN – J. of Met. Soc. of India*, **35(4)**, 563-573 (2020)
- (iii) V. K. Jaiswal, et al, "Producing optical vortices through forked holographic grating: study of polarization", *J. of Mod. Opt.*, **57**, 2031-2038 (2010)

**Patents:**

- (i) UVC Disinfection Casket (Under process)
- (ii) UVC based air microbial disinfection unit (Under process)

**Current Activities:**

(Not more than 100 words)

Working in metrology of optical radiation, Applied and Fundamental Optics.

Apart from fundamental optics, photonics and Photometry and Radiometry, as a group head, Optical Radiation Metrology, the current emphasis of our group is in creating apex level testing and calibration facilities to render apex measurement traceability and pave the way in LED metrology as well, supporting Indian Industries for their endeavours in producing export quality products.

**Honour(s)/Award(s)/ Fellowship(s):**

GATE-2000 Fellowship  
JEST-2000 Fellowship

**Contributions to AcSIR:**

- (1) Teaching the following AcSIR courses:
  - (i) Quantum Optics and Advanced Solid State Optical devices (Pre-PhD students of the Laboratory)
  - (ii) Optical Radiation Metrology to Students of PGD-PMQC (Precision Metrology and Quality Control)
- (2) Member of several academic evaluation and advisory committees

**Membership of Professional Societies/ Institutions:**

- (1) Sectional Committee, ETD 23 of Bureau of Indian Standards (BIS) on 'Lamps and Related Equipment'
- (2) Sectional Committee, ETD 49 of Bureau of Indian Standards (BIS) on 'Illumination Engineering and Luminaires'
- (3) Sectional Committee of Ophthalmic Instruments and Appliances (MHD 05) of Bureau of Indian Standards (BIS), New Delhi
- (4) Metrology Society of India (MSI), New Delhi

**Any other Information:**

*(Not more than 100 words)*