

# CURRICULUM VITAE



## DR. SANJEEV KUMAR

Assistant Professor (A L-11)

**Date of Joining 18.08.2010**

### DEPARTMENT OF PHYSICS

✉ R. K. (PG) College, Shamli,  
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**Research Gate Profile:** <https://www.researchgate.net/profile/Sanjeev-Kumar-221>

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[https://scholar.google.com/citations?view\\_op=list\\_works&hl=en&user=HMkGficzEggC](https://scholar.google.com/citations?view_op=list_works&hl=en&user=HMkGficzEggC)

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## OBJECTIVE

**To establish myself as a distinguished and renown personality in the field of teaching and research & development. To take challenging opportunity that offers the responsibility and development.**

## EDUCATIONAL QUALIFICATIONS

Examinations/Degree	Board/University
M.Sc. Physics	C. C. S. University, Campus Meerut
M.Phil. Physics	C. C. S. University, Campus Meerut
Ph. D. Physics	C. C. S. University, Meerut

## ACADEMIC/EDUCATIONAL RECORD

- Alumnus of C.C.S. University Campus Meerut, UP
- Alumnus of CSIR-NPL, New Delhi
- Alumnus of JNU, New Delhi
- Good Academic Record

## EXPERIENCE: TEACHING/RESEARCH/ADMINISTRATION

- 15 Years Teaching Experience for UG in University of Delhi, GDC, UP and R. K. (PG) College, Shamli, UP

- Approx 12 Years Experience for PG Level at R. K. (PG) College, Shamli, UP
- Academic Administration at R. K. (PG) College, Shamli, UP
- NSS Programme Officer at R. K. (PG) College, Shamli, UP from 15.12.2014 to 19.07.2019
- Research and Development experience in CSIR-NPL , NewDelhi

### **TEACHING/RESEARCH AT**

- Worked as Permanent Lecturer in the Department of Physics, Mahamaya Govt. Degree College, Kaushambi, UP selected by Public Service Commission (PCS) of Uttar Pradesh from 11.03.2010 to 17.08.2010
- Worked as Ad-hoc Lecturer in the Department of Electronics, Maharaja Agrasen College, University of Delhi., 2010
- Worked as Ad-hoc Lecturer in the Department of Physics, Miranda House, North Campus, University of Delhi., 2009
- Worked as Ad-hoc Lecturer in the Department of Physics, Ramjas College, North Campus, University of Delhi., 2009
- Worked as Guest Lecturer in the Department of Physics, Dayal Singh College, University of Delhi., 2008
- Worked as Guest Lecturer in the Department of Physics, Kalindi College, University of Delhi., 2009
- Worked as Ad-hoc Lecturer in the Department of Physics & Electronics, Rajdhani College, University of Delhi., 2007
- Worked as Research Intern in Advanced Carbon Products and Metrology Section, Advanced Materials and Devices Metrology Division, CSIR-National Physical Laboratory, New Delhi., 2007
- Worked as Research Scholar in Advanced Carbon Products, CSIR-NPL, New Delhi from 12.05.2005 to 15 .04. 2007

### **HONORS /AWARDS/PROFESSIONAL RECOGNITIONS**

- CSIR-NPL, Diamond Jubilee Research Intern (DJRI) Award , 2007
- Excellent Reviewer Award for outstanding contribution by “Asian Journal of Physical and Chemical Sciences”, 2021

### **UTTAR PRADESH STATE ADMINISTRATION**

- Worked as Magistrate - FST in Legislative Assembly Election, 2022
- Worked as Sector Magistrate in Tristariya Panchayat General Election, 2021
- Worked as Sector Magistrate in Panchayat General Election, 2015

### **MEMBERS/ POSITIONS HELD IN PROFESSIONAL SOCIETIES**

- Indian Carbon Society (ICS), CSIR-NPL, Life Membership No-455, New Delhi, INDIA
- American Chemical Society (ACS), Membership No. 3230016, USA

### **MEMBERHIP IN NATIONAL/INTERNATIONAL JOURNALS**

- Member of Editorial Board of National Journal of Environment and Scientific Research ( NJESR)

## **CONFERENCES/SEMINARS/WEBINARS/SHORT TERM COURSES ORGANIZED:**

**02**

- Seminar on “Role of Mahatma Jyotiba Phule in the Field of Social Reform” organized as Organising Secretary at R. K. (PG) College, Shamli-247776, UP on April 11, 2022.
- National Webinar on National Education Policy (NEP) 2020: Planning for UG and PG Programmes organized as Convener at R. K. (PG) College, Shamli-247776, UP in association with NEEV – a social education initiative of IIT alumni on August 30, 2020.

## **EDUCATIONAL VISIT CONDUCTED: 01**

- Conducted Educational Visit of M.Sc. Physics Students at CSIR-NPL, New Delhi on 18.01.2011

## **OP/RC/STC/FDP/ TRAINING PROGRAMME**

- Attended Workshop in Science Leadership from Central University of Punjab , Bhatinda, India from 22.06.2020 to 28.06.2020.
- Attended Faculty Development Programme (FDP) on Technical Skill Development: Need of the Hour from SMP Govt. Girls (P.G.) College, Meerut, U.P., India from 23.05.2020 to 27.05.2020.
- Attended Refresher Course (RC) on Physical Sciences and Nano Sciences from UGC-HRDC, Jawaharlal Nehru University (JNU), New Delhi from 18.11.2019 to 30.11.2019.
- Attended Refresher Course (RC) on IT from UGC-HRDC, Kurukshetra University (KU), Kurukshetra from 04.11.2019 to 16.11.2019.
- Attended Refresher Course (RC) on ICT from UGC-HRDC, Himachal Pradesh University (HPU), Shimla from 07.07.2014 to 26.07.2014.
- Attended Orientation Programme (OP) from UGC-HRDC, Punjab University (PU), Chandigarh from 15.02.2014 to 14.03.2014.

## **AREA OF SPECIALIZATION**

- Master of Science (M.Sc.): “**ELECTRONICS**”
- Master of Philosophy (M.Phil.): “**COLLISION OF ELECTRONS WITH Ne-ATOMS**” (Quantum Mechanics)
- Doctor of Philosophy (Ph.D.): “**PREPARATION AND CHARACTERIZATION OF SOME POLYMERIC PHOTOLUMINESCENT NANOFIBERS**” (Physics of Nanomaterials)

## **FIELD OF RESEARCH INTEREST**

- Photoluminescence Nanofibers (PLNs),
- Electrospinning
- Scale up of process of PLNs by Electrospinning Technique
- Electrospun (Espun) Nanofibers Fabrication
- Advanced Nanomaterials Synthesis
- Carbon Nanotubes (CNTs) Synthesis
- Advanced Carbon Products
- Photoluminescence (PL)
- Polymers
- Simulation and Modelling

## PUBLICATIONS IN INTERNATIONAL AND NATIONAL REFEREED JOURNALS

1. **Sanjeev Kumar**, Garima Jain, Kuldeep Kumar, Ashish Gupta, B.P. Singh, S. R. Dhakate, J S Tawle and P D Sahare, “Stress Induced Structural Phase Transition in Polystyrene/ NaYF<sub>4</sub>: Eu<sup>3+</sup> Photoluminescent Electrospun Nanofibers” published in *Journal of Nanomaterials*, Vol. 2022, Article ID 2173629, p.p.1-10, 2022. <https://doi.org/10.1155/2022/2173629>
2. **Sanjeev Kumar**, Garima Jain, Kuldeep Kumar, Ashish Gupta, B.P. Singh and S. R. Dhakate, “A facile fabrication of poly(methyl methacrylate)/ $\alpha$ -NaYF<sub>4</sub>:Eu<sup>3+</sup> tunable electrospun photoluminescent nanofibers” published in *Applied Nanoscience*, 2020, 10, 3857-3864. <https://doi.org/10.1007/s13204-020-01499-4>
3. **Sanjeev Kumar**, Garima Jain, Kuldeep Kumar, Ashish Gupta, B.P. Singh and S. R. Dhakate, “A novel fabrication of electrospun polyacrylonitrile/NaYF<sub>4</sub>: Eu<sup>3+</sup> light emitting nanofibers” published in *RSC Advances*, 2020, 10, 24855-24861. DOI: 10.1039/d0ra03984e
4. **Sanjeev Kumar**, Garima Jain, B.P. Singh and S. R. Dhakate, “Tunable Photoluminescence of Polyvinyl Alcohol Electrospun Nanofibers by Doping of NaYF<sub>4</sub>: Eu<sup>3+</sup> Nanophosphor” published in *Journal of Nanomaterials*, Vol. 2020, Article ID 1023589, p.p.1-8, 2020. <https://doi.org/10.1155/2020/1023589>
5. **Sanjeev Kumar** and Garima Jain “Advanced Carbon Materials and their Applications” published in *Journal of Applied Physics*, Vol. 8 No. 2, 2017, p.p. 63-70. ISSN: 0976-903X
6. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh “Synthesis of Multi-walled Carbon Nanotubes (MWCNTs) from Turpentine oil” published by VBRI Press in *International Conference on Material science and Technology* proceeding 2016, p.p. 35 ISBN: 978-91-8825-01-2
7. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh and Garima Jain “Synthesis of Multi-walled Carbon Nanotubes (MWCNTs) by Chemical Vapour Deposition (CVD) Technique” published in *Journal of Applied Chemistry*, Vol. 5 No. 2, 2014, p.p. 76-78. ISSN: 0976-7355
8. **Sanjeev Kumar**, Chhotey Lal and Bhanu Pratap Singh “Estimation of Mechanical Properties of CNTs Using Molecular Mechanics based Finite Element Method: A Review” *Rev. Adv. Mater. Sci.*14, 2007, 14-34.
9. **Sanjeev Kumar**, Garima Jain, Kuldeep Kumar, B.P. Singh and S. R. Dhakate, “A Review on Polymeric Photoluminescent Nanofibers: Electrospinning, Process Parameters and Solid- State Lighting Application” is communicated.
10. **Sanjeev Kumar**, Kuldeep Kumar, B.P. Singh and S. R. Dhakate, “Luminescence Properties of ZnO:Eu<sup>3+</sup> nanophosphor embedded poly Vinyl Alcohol Electrospun Nanofibers” is communicated.

## PRESENTATION IN INTERNATIONAL/ NATIONAL CONFERENCE/WORKSHOP

1. **Sanjeev Kumar** participated in “*Indian Patent (IP) Awareness Training/Program*” under National Intellectual Properties Awareness Mission on February 19, 2022 organized by Intellectual Property Office, India.
2. **Sanjeev Kumar** participated in “*International Special Public Webinar on Testing the massive Black Hole Paradigm in the Center of Our Galaxy*” A 40- Year Journey Professor Reinhard Genzel, Nobel Laureate Physics 2020, Max Plank Institute for Extraterrestrial Physics, Garching on January 12, 2022 jointly

organized by The National Academy of Sciences India-Delhi Chapter and Deen Dayal Upadhyaya College (University of Delhi) under the aegis of DBT Star College Program, Delhi, India.

3. **Sanjeev Kumar** participated in “*International Symposium on History and Future of Transistor*” on December 23-30th, 2021 jointly organized by The National Academy of Sciences India-Delhi Chapter, Deen Dayal Upadhyaya College (University of Delhi) under the aegis of DBT Star College Program IEEE Electron Device Society (EDS) Delhi Chapter, India.
4. **Sanjeev Kumar** participated in “*International Workshop on Strategic Cooperation in Higher Education in Pandemic Context: Experiences, Challenges, and Perspectives*” on December 9th, 2021 organized by Romania Ovidius University of Constanta, Romania.
5. **Sanjeev Kumar** participated in “*National e-Workshop on Carbon Materials for Energy Applications*” on December 13th, 2021 organized by Indian Carbon Society (ICS) in collaboration with CSIR-National Physical Laboratory, New Delhi, India.
6. **Sanjeev Kumar**, Garima Jain, B. P. Singh and S. R. Dhakate “Brilliant Red Light Emission from Polystyrene/ NaYF<sub>4</sub>: Eu<sup>+3</sup> Electrospun Beaded Nanofibers” presented in “*International Webinar (e-Conference) on Prospective of Interdisciplinary Research in Science and Technology in the Present Scenario*” from May 15-16th, 2020 at Department of Physics, C.C.S. University, Meerut, U. P., India.
7. **Sanjeev Kumar**, Garima Jain and S. R. Dhakate “Fabrication of some polymeric photoluminescent nanofibers by Electrospinning” presented in “*National Conference on Carbon Materials-2019 (CCM2019)*” from November 20-22nd, 2019 at India Habitat Centre, Silver Oak, New Delhi, India.
8. **Sanjeev Kumar**, Garima Jain and S. R. Dhakate “Preparation of polymeric photoluminescent nanofibers by doping of NaYF<sub>4</sub>: Eu nanophosphor with polystyrene (PS) via Electrospinning” presented in *Young Scientist Award Category in 24th International Conference of International Academy of Physical Sciences (CONIAPS-XXIV)* on August 9-11th, 2019 at C.C.S. University, Meerut, UP, India.
9. **Sanjeev Kumar**, Garima Jain and S. R. Dhakate “Fabrication of photoluminescence polymeric nanofibers by doping of NaYF<sub>4</sub>: Eu nanophosphor with poly vinyl alcohol (PVA) via Electrospinning” presented in “*2nd International Conference on Energy, Functional Materials and Nanotechnology & Sustainable Environment Management (ICEFNSEM)*” on May 24-26th, 2019 at, Kumaun University, Nainital, Uttarakhand, India.
10. **Sanjeev Kumar**, Garima Jain and S. R. Dhakate “Synthesis of tunable photoluminescence electrospun polymeric nanofibers mat” presented in “*International Conference on Materials for Energy Applications (ICME)* on December 6-8th, 2018 at S S Jain Subodh PG (Autonomus) College, Jaipur, Rajasthan India.
11. **Sanjeev Kumar**, Garima Jain, S. R. Dhakate and P D Sahare “Synthesis of photoluminescent polymeric nanofibers via electrospinning technique” presented in “*Indo-Japan Workshop 2018 on Highly Conductive CFRP Using Conductive Polymers and Nanomaterials for Structural Application*” on November 26-28th, 2018 at CSIR-National Physical Laboratory, Dr. K. S. Krishnan Marg, New Delhi-12, India.
12. **Sanjeev Kumar**, Garima Jain and S. R. Dhakate “Preparation of photoluminescent polymeric nanofibers by using electrospinning technique” presented in “*National Conference on Innovation and Technology for Rural India (ITRI-2018)*” on November 15-16th, 2018 at OSIR, Bah, Agra, Uttar Pradesh, India.

13. **Sanjeev Kumar** participated in “*National Workshop on Materials Metrology for Sustainable Society-2018 (NWMMS 2018)*” at National Physical Laboratory, New Delhi on November 1-2nd, 2018 organized by CSIR-National Physical Laboratory and Metrology Society of India (MSI), Dr. K. S. Krishnan Marg, New Delhi-12, India.
14. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh and Garima Jain “Photoluminescent nanofibers (PLNs) of polyvinyl alcohol (PVA) by electrospinning technique” presented in “*National Conference on Recent Developments in Science & Technology in Modern Era (RDSTME-2017)*” on December 15th, 2017 at Arya (PG) College Panipat, Hariyana, India. ISBN : 978-93-838617-5-0
15. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh and Garima Jain “A review on futuristic applications of Carbon Materials” presented in “*National Workshop on Advanced Carbon Materials for Strategic Application*” on April 28th, 2017 at National Physical Laboratory New Delhi, India.
16. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh and Garima Jain “Carbon nanotubes (CNTs) prepared from different precursor materials by Chemical Vapor Deposition Technique (CVD)” presented in “*5th National Conference on Nanoscience and Instrumentation Technology*” from March 5-6th, 2017 at National Institute of Technology (NIT) Kurukshtra, Hariyana, India.
17. **Sanjeev Kumar** “Applications of carbon products: A review” presented in “*National Conference on Emerging Trends in Science & Technology (ETST-2017)*” on February 18th, 2017 at Arya (PG) College Panipat, Hariyana India.
18. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh and Garima Jain “Synthesis of multiwalled carbon nanotubes (MWCNTs) from coconut oil” presented in “*National Seminar on Recent Innovative Changes in Science and Technology*” on 29th March, 2016 at DAV PG College Muzaffarnagar, UP, India.
19. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh “Synthesis of Multi-walled Carbon Nanotubes (MWCNTs) from Turpentine oil” presented in “*International Conference on Materials Science Technology (ICMTech)*” from March 1- 4th, 2016, at the Conference Centre, University of Delhi, Delhi, India.
20. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh and Garima Jain “A Review on Electrospun Photoluminescent Nanofibers (PLNs)” in “*National Conference on Recent Advancements in Science & Technology (RAST)*” from February 27- 28th, 2016 at Arya (PG) College Panipat, Hariyana, India.
21. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh and Garima Jain “Electrospun Photoluminescent Nanofibers (PLNS) for Solid State Lighting: A Review” presented in “*National Conference on Carbon Materials (NCCM)*” from November 26- 28th 2015 at India International Centre, Multipurpose Hall, Maxmullar Marg, New Delhi, India.
22. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh “Synthesis of Multi-walled Carbon Nanotubes (MWCNTs) from Jatropha oil (Biodiesel)” presented in “*National Conference on Carbon Materials for Energy Application*” from October 15-16th, 2015 at National Physical Laboratory New Delhi, India.
23. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh and Garima Jain “Synthesis of Single-walled Carbon Nanotubes (SWNTs) by Arc-discharge Technique” presented in “*3rd National Conference on Nanoscience and Instrumentation Technology (NCNIT)*” from June 6-7th, 2015 at National Institute of Technology (NIT) Kurukshtra, Hariyana, India.
24. **Sanjeev Kumar**, S. R. Dhakate, B.P. Singh and Garima Jain “Synthesis of Multi-walled Carbon Nanotubes (MWCNTs) by Chemical Vapour Deposition (CVD) Technique”

- presented in “*National Conference on Future Perspectives of Science & Technology in Society and Governance (FPSTSG)*” from November 29-30th, 2014 organised by SSV College, Hapur, UP, India.
25. Sanjeev Kumar, S. R. Dhakate, B.P. Singh, Garima Jain and M C Jain “Synthesis of Carbon Nanotubes (CNTs) by Chemical Vapour Deposition (CVD) and Arc Discharge technique” presented in “*National Seminar on Recent Advances in Condensed Matter Physics*” from March 19-20th, 2013 at DAV College, Muzaffarnagar, UP, India.
  26. Sanjeev Kumar participated in “*National Seminar on Role of Ion in Materials Science and Acquaintance programme on Ion Beam Facilities*” on September 20th, 2013, jointly organized by IUAC New Delhi and Department of Physics, C. C. S University Meerut, UP, India.
  27. Sanjeev Kumar participated in “*International Conference on Nanomaterials and Nanotechnology (ICNANO)*” from December 18-21st, 2011 at University of Delhi, Delhi, India.
  28. Sanjeev Kumar participated in “*National Seminar on “Brosil Man Singh Survismeter an Advance Instrument to Measure the Physical Properties of Solution*” on December 11th, 2011 at DAV College Muzaffarnagar, UP, India.
  29. Sanjeev Kumar participated in “*National Symposium on Indian Physics and Mega Projects: Research on the Frontiers*” on February 2-3th, 2009 organized by DS Kothari Center for Research and Innovation in Science Education Miranda House, University of Delhi, India.
  30. Chhotey Lal, Sanjeev Kumar, Anil Kumar and Tejendra Kumar Gupta, “Studies on Carbon Nanotubes-Polyaniline based composites” presented in “*XXIX Annual Meeting of Electron Microscope Society of India (EMSI)*” from November 26-28th, 2007 at University of Delhi, Delhi, India.
  31. Sanjeev Kumar, Chhotey Lal and Bhanu Pratap Singh, “Finite Element Modeling of Carbon Nanotubes A Review” presented in “*18th Annual General Meeting (AGM), Material Research Society of India (MRSI)*” from February 12-14th, 2007 at National Physical Laboratory, New Delhi, India.
  32. Chhotey Lal, Sanjeev Kumar and Bhanu Pratap Singh, “Modeling Approach for Single Walled carbon Nanotubes (SWNTs) Studies” presented in “*National Conference on Indo Carbon*” from November 9-10th, 2006 at HEG, Bhopal, India.

Date: 20. 04.2022

Place: Shamli

Signature: 