*Curriculum Vitae*

# PROF. (DR.) PRASHANT KUMAR SHARMA


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**Date of Birth:** 17/06/1984; **Language Proficiency:** English, Hindi, German (learning stage)

## 1. Research Interest

Nanomaterials: Synthesis and Characterization, Nanoparticles for sensing, security & harmful chemical detection, Electro-catalysis (Energy generation-HER-OER and storage), Opto-electronic devices (LEDs & Solar Cells), Microscopic Techniques, Magnetic properties of nanostructures, Nanoparticles for Bio-medical Applications.

## 2. Academic Details

| *Degree* | *University/Board* | *Year* | *Subjects* | *Remarks* |
|---|---|---|---|---|
| D.Phil.* | UNIVERSITY OF ALLAHABAD | 2012 | NANOSCIENCE | |
| M.Sc. | UNIVERSITY OF ALLAHABAD | 2006 | PHYSICS | Gold Medalist: Topper of M. Sc. Physics (X-Rays) |
| B.Sc. | UNIVERSITY OF ALLAHABAD | 2004 | PHY, CHEM, MAT, | |
| 12th Std. | U. P. BOARD | 2001 | PHY, CHEM, MAT, | Ranked among top 5% of students |
| 10th Std. | U. P. BOARD | 1999 | MAT, SCI, BIO, ENG, HIN, SO.SCI. | Ranked among top 5% of students |

* **Thesis Title:** ***"Study of Nanophosphors for Opto-electronic and DMS based Applications".***
**Thesis supervisor:** **Prof. Avinash C. Pandey**, presently **Director, IUAC, New Delhi**, (Former Vice-Chancellor, Bundelkhand University, Jhansi; Professor, Nanotechnology Application Centre, University of Allahabad, Prayagraj).

## 3. Details of Employment

a. **Faculty: July 2012 - Till Date (Ongoing)**
Department of Physics, Indian Institute of Technology (ISM), Dhanbad.

b. **Post Doctoral Research Scientist: August 2011 - June 2012**
Nanotechnology Application Centre, University of Allahabad, Prayagraj in DST Nano-mission project for the development of novel magnetic nanoparticles for biomedical applications (mainly for Bio-imaging, targeted drug delivery, contrast agents for magnetic resonance imaging and hyperthermia).

c. **Research Scientist: April 2010 - July 2011**
Nanotechnology Application Centre, University of Allahabad, Prayagraj in DST Nano-mission project for the development of novel magnetic nanoparticles for biomedical applications.

d. **Junior Research Fellow: July 2006 - March 2010**
Worked in CSIR-NMITLI funded project at Nanotechnology Application Centre, University of Allahabad, Prayagraj 211002, India.

**4. Patents:** Intellectual property, technological innovations, new products etc. : **09**

**5. Books/Book Chapters/Monographs** published : **21**

**6. Publications in International Journals/Proceedings** : **113**

## 7. Details of Professional Training and Research Experience, Specifying Period

| S. No. | Research Experience | Period |
|---|---|---|
| 1. | **Assistant Professor:** Indian Institute of Technology (ISM), Dhanbad | July 2012 - Till Date |
| 1. | **Post Doctoral Research Scientist:** DST Nano-Mission Project | Aug 2011 - June 2012 |
| 2. | **Research Scientist:** DST Nano-Mission Project | April 2010 - July 2011 |
| 3. | **Junior Research Fellow (JRF):** CSIR funded NMITLI Project | July 2006 - March 2010 |
| 4. | Synthesized several nanomaterials using various methods such as Sol-Gel, Reverse Miscelles, Precipitation, Hydrothermal, Solvothermal, Ultrasonication, Combustion, Solid state etc. | July 2006 - Till Date |
| 5. | Developed expertise in preparing demonstrator Opto-electronic devices (LEDs & Solar Cells) | July 2006 - Till Date |
| 6 | Hands on experience of handling high end sophisticated material characterization techniques. | July 2006 - Till Date |

| | Professional Training | Period |
|---|---|---|
| 7. | X-Ray Diffraction (XRD) and Small Angle X-Ray Scattering (SAXS) technique. | July 2006 - Aug 2006 |
| 8. | Photoluminescence (PL/PLE) and UV-Vis spectrophotometer. | April 2007 |
| 9. | Micro Raman Spectrometer. | May 2007 – JUNE 2007 |
| 10. | Complete Probe Microscopy techniques including Atomic/ Magnetic / Electric Force Microscope (AFM/MFM/EFM). | May 2007 – JUNE 2007 & again in OCT 2009 |
| 11. | McPherson VUV spectrophotometer (The only system in India). | Nov 2007 |
| 12. | Nano-indentation / nano-hardness tester. | March 2008 |
| 13. | Profession Training on Electron Microscopy Techniques [HRTEM /SEM/ESEM / EDX & related sample preparation tools] | Aug 2007 – Oct 2007 & again in March 2008 |
| 14. | Magnetic Characterization techniques such as VSM @ IIT Delhi. | August 2008 |
| 15. | NSOM with Confocal AFM and Raman Mapping @ IIT Delhi. | December 2010 |

I have also studied following topics during pre-Ph.D. training course modules of Semester-I at Inter University Accelerator Centre (IUAC), New Delhi (**One Semester Course during Aug - Nov 2010**)

1. Energy Loss in Solids
2. Programming Techniques
3. Fundamental Lattice Defects in Solids
4. Numerical Analysis
5. Ion Beams in Materials Science
6. Instrumentation and Control
7. Ion Beams in Semiconductors
8. Special Lecture Series on Nanomagnetism for Spintronics, DMS and Biomedical Applications.

Besides this I have also attended following Schools and Training Programmes from time to time,

1. "X-ray techniques in Material Science" at IUAC, New Delhi, India, (2006).
2. "Science and Application of Luminescent Materials" at NPL, New Delhi, India, (2008).
3. "Winter School on Nanoscience: Research Training and Exposure" under the aegis of IIT-Kanpur and Nanotechnology Application Centre, University of Allahabad, Allahabad, (2010).
4. "Characterization Techniques in Nanotechnology" at National Academy of Sciences, India (2011).
5. "2nd Continuing Education and Quality Improvement Programme (CE & QIP) on Magnetic Resonance Imaging" at Indian Institute of Technology Bombay, Mumbai, India, (2011).

## 8. Technical Skills and Experience

- Synthesized several nanomaterials using various methods such as Reverse Miscelles, Precipitation, Hydrothermal, Solvothermal, Sol-Gel, Ultrasonication, Combustion, Solid state reaction and Biomimetic etc.
- Expertise in preparing demonstrator opto-electronic devices (LEDs and solar Cells).
- Good experience of characterization with
  - ❖ High Resolution Transmission Electron Microscopy (HRTEM)/EDX.
  - ❖ Scanning Electron Microscope (SEM)/EDX technique.
  - ❖ Micro Raman Spectrometer.
  - ❖ Atomic/Magnetic/Electric Force Microscope (AFM/MFM/EFM).
  - ❖ Scanning Tunneling Microscopy (STM).
  - ❖ Nanoindentor-nanohardness tester.
  - ❖ NSOM with Confocal System.
  - ❖ Magnetic Characterization techniques such as VSM and SQUID.
- Having expertise of Characterization Using McPherson VUV spectrophotometer (VUV-PL) (The one and only system in India).
- Having expertise of Characterization Using X-Ray Diffractometer (XRD) and Small Angle X-Ray Scattering (SAXS) technique.
- Have good knowledge of characterization using Photoluminescence spectrometer (PL), absorption (UV-Vis) and IR spectrometer.
- Exposed to
  - ❖ Scanning Tunneling Microscope (STM).
  - ❖ TGA/DTA/DSC etc.
  - ❖ Different sample preparation systems related to HRTEM/SEM.
    - Grid coating unit, Ultrasonic disk cutter, Ion mill, grinder cum polisher, Dimple grinder, Twin jet electropolisher.
    - Biological sample preparation.
  - ❖ Keithley make equipments for transport properties measurements.
  - ❖ X-ray Photoelectron Spectroscopy (XPS) and Valance Band Spectroscopy (VBS) techniques.
- Also worked on L.B. Film deposition unit and Spin coater system (Participated in four day training program at IACS, Kolkata, during 20$^{th}$ Nov to 24$^{rd}$ Nov 2006).

## Computer Skill:

- **Atomic Scale/Nanoscale Simulation/Analysis and Visualization Software:**
  Origin, Chem Draw, Chem-Bio Draw, Coral Draw
  Image J, Gatan Digital Micrograph, Gatan 3-D view
- **Software:**
  Nanosolver (software for determining shape, size and distribution of nanoparticles), Nano-Hive: Nanospace Simulator (A Simulation Software on Nano technology).

## 9. Laboratory Development

***a. Functional Nanomaterials Research Lab (FNRL):***

This lab is developed with the help of funding from DST, DAE_BRNS and IIT (ISM) Dhanbad in the year 2013 for the "Synthesis and Characterizations of Efficient Functional Nanomaterials for the Sensing, Security & Harmful Chemical Detection, Electro-catalysis (Energy generation-HER-OER and Storage), Opto-electronic devices (LEDs & Solar Cells), magnetic nanomaterials for Bio-medical Applications."

***FNRL** houses:*

- Various equipment required for chemical synthesis of nanomaterials including:
  - Verities of Magnetic Stirrer
  - Micro-Balance
  - Hot-Air Oven
  - Vacuum Oven
  - Box Furnaces with/without gas purging facility
  - Micro-centrifuges and Vortex Mixers
  - pH-Meters
  - Autoclaves (Teflon Lined as well as pressurized chambers)
  - Orbital Shakers
  - Bath Sonicators
  - Water/Oil Baths
  - Double Distillation water plants
  - Microwave Oven
- Electrochemical Workstation (Potentiostat/Galvanostat),
- I-V measurement setup
- Portable Glove Box
- Gas Sensing Setup: in-house developed customized Gas Sensing Chamber
- Mass Flow Controller
- Fume Hood
- Laminar Air Flow Cabinet
- *in-house* Fuel cell set-up.

***Since its inception in 2013, FNRL has made significant advances in high quality research by developing:***

- ✓ Selective and Sensitive Non-Enzymatic Glucose Sensor.
- ✓ Vitamin C Sensor at lab-scale using PEGlyted Nanoparticles.
- ✓ Highly efficient multifunctional electrocatalyts for the promotion of overall water splitting in various medium for Hydrogen/Oxygen production.
- ✓ A fully functional water/various solvent based electolysers based set-up for Hydrogen/Oxygen production. These facilities can be used for water splitting as well as $CO_2$ reduction, which will able to solve not only the problem of energy crisis but able to reduce the $CO_2$ content from the environment in healthy and safe way.
- ✓ We have also developed a good facility for sensing of various kind of biologically/medically relevant compounds using handheld potentiostat/galvanostat.
- ✓ Electrochemical sensor for cyanometalic compound using $TiO_2$/PVA nanocomposite.
- ✓ A selective and convenient method for the detection of anticancer drug Flutamide (FLT) is developed using Ag/N doped reduced graphene oxide (Ag/N-rGO).
- ✓ Acetaminophen and acetone electrochemical sensor.
- ✓ Developed a Multi-tasking visual sensor for on-site monitoring of various biologically/medically relevant compounds.

- ✓ We have also designed a Stainless-steel Gas/humidity sensing chamber as per requirement of my Research Lab.
- ✓ We have also developed a good facility for detection and removal of toxic dyes/pigments/chemical compounds from waste water/soil.

## FNRL's Contribution in combating COVID-19

Coronavirus Disease 2019 (COVID -19) is an acute respiratory disease caused by a novel Coronavirus (SARS-CoV-2), transmitted in most instances through respiratory droplets, direct contact with cases and also through contaminated surfaces/objects. The provision of safe water, sanitation and waste management and hygienic conditions is essential for preventing and for protecting human health during all infectious disease outbreaks, including of coronavirus disease 2019 (COVID-19).

Though the coronavirus survives on environmental surfaces for varied period of time, it gets easily inactivated by chemical disinfectants. The spread of infectious disease, including of coronavirus disease 2019 (COVID-19) can be controlled using alcohol based disinfectants, popularly known as sanitizers or hand rubs. In 2020 because of shortages of hand sanitizer in the wake of the COVID-19 pandemic, hundreds of liquor, perfume manufactures along with pharmaceutical industries switched their manufacturing facilities from their normal product to hand sanitizer. In order to keep up with the demand, local distilleries also started using their alcohol to make hand sanitizer. Due to the high demand, despite the Government's capping and control, these commercial products are mostly very costly and are out of reach to the common people or in some cases not feasible to be used in large amount in offices, labs or Institution. Even some of these commercial products are reported to be dangerous, either due to poor oversight and process control, or fraudulent motive. They are of poor quality or are very hard/rough to the hands of user.

To overcome these problem, FNRL has modified the World Health Organization (WHO) guide for manufacturing the alcohol based hand sanitizer/hand rubs. The FNRL hand sanitizer is having an alcohol base enriched with goodness of Essential oil, Aleovera, Vitamin E, Rose extracts, Glycerine. The FNRL developed hand sanitizer is soft to the hand (cares for your hand) and is hard to the virus/bacteria and germs. It can be developed at large scale in a small lab or even in our home and can be used in home, offices, labs or Institution.

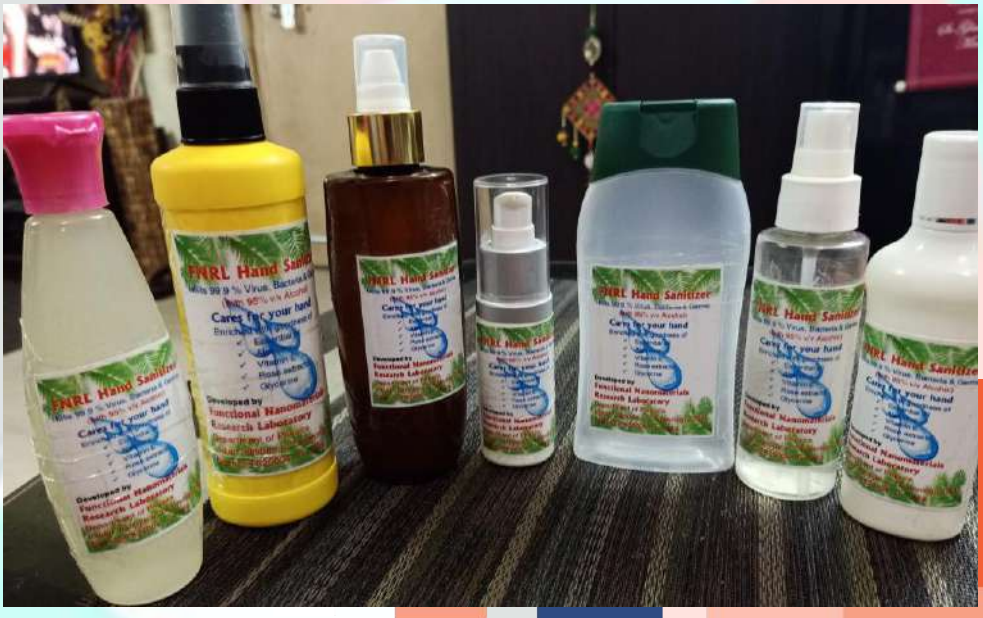



**Image of the FNRL developed hand sanitizer in verities of bottles.**

### b. B.Tech. and MSc Physics Laboratory:

Designed and successfully implemented few experiments, as mentioned below, for B.Tech. and MSc Physics Laboratory.

**Exp 1:** Determination of crystal structure of materials by indexing the given X-ray diffraction pattern. Determination of lattice constants and lattice planes.

**Exp 2:** Identification of crystal structure from a given electron diffraction pattern and Indexing the given selected area electron diffraction pattern and determination of lattice parameters.

## 10. Membership of Academic/Scientific/Professional bodies

| S. N. | Membership Type | Society |
|---|---|---|
| 1. | Life Member | Luminescence Society of India (LSI) |
| 2. | Life Member | Electron Microscopy Society of India (EMSI). |
| 3. | Life Member | Chemical Research Society of India (CRSI). |
| 4. | Life Member | Luminescence Society of Karnataka, India (LSKI). |
| 5. | Life Member | International Association for Advanced Materials (IAAM), Sweden |
| 6. | Life Member | Society of Physics, IIT (ISM) Dhanbad |

## 11. Teaching Experience at UG and PG Level (10 Years; including 2 years as Scientist at NAC, UoA)

| S. N. | Papers Taught in Last 5 years | Level |
|---|---|---|
| **Theory** | | |
| 1. | Physics (Modern Physics) | 1st Year B.Tech.(Common) |
| 2. | Nanotechnology | VIIIth B.Tech. Engg Phys. (Honors) |
| 3. | Advanced Characterization Techniques | M.Sc. |
| 4. | Materials Characterizations | Ph.D. Course Work |
| 5. | Physics of Nanomaterials | M.Sc./Integrated M.Sc./M.Phil./Pre-PhD Course work |
| 6. | Nuclear and Particle Physics | BTech (Engg. Phys.)/MSc Physics students |

## 12. Thesis/Dissertation/Project Supervision

### a. Summary

| Degree | Awarded/Completed |
|---|---|
| **Ph.D.** | 02† |
| **M.Sc.** | 17 |
| **Int. M.Sc./M.Sc. Tech.** | 03 |
| **B.Tech.** | 02 |

† Four Students are transferred to other faculty members in March 2019.

### b. Details of Ph.D. Supervision

| S. N. | Student Name | Level | Registration Date | Status |
|---|---|---|---|---|
| **1.** | **Ms. Shrabani Mondal** | **Ph.D.** | **Feb, 2013** | **Awarded** |
| **2.** | **Mr. Trupti Ranjan Das** | **Ph.D.** | **July, 2015** | **Awarded** |
| **3.** | Ms. Manisha Kumari | Ph.D. | July, 2014 | Transferred to Other Faculty in March 2019 |
| **4.** | Ms. Suryakanti Debata | Ph.D. | March, 2016 | |
| **5.** | Ms. Sanchari Banerjee | Ph.D. | August, 2016 | |
| **6.** | Mr. Minarul Islam Sarkar | Ph.D. | September, 2017 | |

### c. Details of M.Sc. Project Supervision

| S. N. | Student Name | Level | Registration Date | Status |
|---|---|---|---|---|
| **1.** | Mr. Subharthi Samanta | M.Sc. | September 2018 | Completed |
| **2.** | Mr. Mikon Das | M.Sc. | September 2018 | Completed |
| **3.** | Mr. Swarndeep Bakshi | M.Sc. | September 2017 | Completed |
| **4.** | Ms. Rita Majumdar | M.Sc. | September 2017 | Completed |
| **5.** | Ms. Sanchari Chakraborty | M.Sc. | May 2017 | Completed |
| **6.** | Mr. Suchit Kumar Jena | M.Sc. | September 2016 | Completed |
| **7.** | Ms. Jayashree Pati | M.Sc. | September 2016 | Completed |
| **8.** | Mr. Sreedeep Das | M.Sc. | August 2015 | Completed |
| **9.** | Ms. Sanchari Banerjee | M.Sc. | August 2015 | Completed |
| **10.** | Ms. Sathi Chatterjee | M.Sc. | August 2015 | Completed |
| **11.** | Ms. Sanjana Mukherjee | M.Sc. | August 2015 | Completed |

| S. N. | Student Name | Level | Registration Date | Status |
|---|---|---|---|---|
| **12.** | Ms. Lakshmi Mukhopadhaya | M.Sc. | July, 2014 | Completed |
| **13.** | Ms. Bela Purty | M.Sc. | July, 2014 | Completed |
| **14.** | Ms. Manisha Kumari | M.Sc. | July, 2013 | Completed |
| **15.** | Mr. Arun Kumar Singh | M.Sc. | July, 2013 | Completed |
| **16.** | Ms. Priya Dwivedi | M.Sc. | Oct. 2012 | Completed |
| **17.** | Ms. Sneha Bharti Linda | M.Sc. | Oct. 2012 | Completed |

## d. Details of B.Tech. Project Supervision

| S. N. | Student Name | Level | Registration Date | Status |
|---|---|---|---|---|
| **1.** | Mr. Nalin Shiva | B.Tech. (Engg Phys) | August 2015 | Completed |
| **2.** | Mr. Ramendra Ranjan | B.Tech. (Engg Phys) | August 2015 | Completed |

## e. Details of Int. MSc/MSc Tech Project Supervision

| S. N. | Student Name | Level | Registration Date | Status |
|---|---|---|---|---|
| **1.** | Mr. Jitendra Chaturvedi | Int. M.Sc. | July, 2014 | Completed |
| **2.** | Mr. S K Paswan | Int. M.Sc. Tech. | August, 2012 | Completed |
| **3.** | Mr. Parva Mehta | Int. M.Sc. Tech. | August, 2012 | Completed |

## 13. Research Projects

| S. N. | Title of Project | Funding Agency and Role | Amount (in Lakhs Rupees) | Sanction Year and Duration |
|---|---|---|---|---|
| **1.** | Development of a Point-of-Care Assay System for Qualitative and Quantitative Analysis of Food Allergens using Artificial Antibodies | Science and Engineering Research Board (SERB)-DST **(Co-Principal Investigator)** **PI: Dr. R. Madhuri** | ~46 | 2016 3-Years (Ongoing) |
| **2.** | Faculty Development Centre Under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching | Ministry of Human Resource and Development **(Deputy Coordinator 1)** | 756 | 2015 3-Years (Ongoing) |
| **3.** | Synthesis and Assembly of Hybrid Nanostructured Materials for detection of explosives and narcotic drugs | DAE-BRNS **(Principal Investigator)** **Co-PI: Dr. R. Madhuri** | ~25 | 2014 3-Years |
| **4.** | Development of Hybrid Polymer – Nanoparticle Based White Light Emitting Diodes (WLEDs) | Department of Science and Technology **(Principal Investigator)** | ~20 | 2014 3-Years |
| **5.** | Hybrid Nano-composites Optoelectronic and Photovoltaics Applications | Indian School of Mines, Dhanbad **(Principal Investigator)** | 10 | 2013 3 Years |
| **6.** | Origin and Role of valence-band states on room temperature ferromagnetism in oxide nanocrystals: An X-Ray Magnetic Circular Dichroism (XMCD) Investigations. | Photon Factory, Institute of Material Structure Science, High Energy Accelerator Research Organization (KEK-PF), Japan. **(PI - 2)** | Experimental facility and Travel Support etc. (Twice a year) | 2012 Two Years |

## 14. Administrative Responsibilities/Involvement in Institutional Work

| S.No. | Responsibility | Duration |
|---|---|---|
| 1. | **Co-ordinator**, 1st Year B.Tech. (Common) Physics Theory course | July 2018 - Continuing |
| 2. | **Co-ordinator**, 1st Year B.Tech. (Common) Physics Lab | July 2020 - Continuing |
| 3. | **Faculty-in-Charge**, Training and Placement, Department of Physics, IIT (ISM) Dhanbad | July 2019 - Continuing |
| 4. | **Co-Ordinator**, Examination (Mid Semester and End Semester Examination), Department of Physics, IIT (ISM) Dhanbad. | Jan 2013 - Continuing |
| 5. | **Co-Ordinator**, 2 Years M.Sc. Physics Programme, Department of Physics, IIT (ISM) Dhanbad. | Jan 2013 - Continuing |
| 6. | **Deputy Co-Ordinator(1)** for Establishment of **Faculty Development Centre (FDC)** under the scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), funded by Department of Higher Education, Ministry of Human Recourse and Development, Government of India **worth Rs. 7.56 Crores**. | Sep 2015 - Continuing |
| 7. | **Liaising Officer, OBC Cell,** IIT (ISM) Dhanbad for enforcement of orders of reservation in posts and services as per the directives of Central Government at IIT (ISM) Dhanbad. Monitored the recruitment process for various posts at IIT (ISM) Dhanbad | July 2015 – Aug 2019 |
| 8. | **Faculty Member, Founder Core Team**, Centre for Innovation, Incubation and Entrepreneurship (CIIE). | Dec 2013 - June 2019 |
| 9. | **Member**, Special **Task Force** for handling emergency problems in IIT (ISM) Hostels, particularly mess services. | Nov 2013- June 2018 |
| 10. | **Scrutinizer JAM**. Verification and scrutiny of application (online as well as Physical) for admission in MSc Physics programme, | 2018, 2019, 2020 |
| 11. | **Institute Faculty Co-Cordinator**, CONCETTO, Annual Techno-Management Festival, IIT (ISM) Dhanbad | 2018 (January 12 -14, 2018) |
| 12. | **Departmental Faculty Co-Ordinator, CONCETTO,** Annual Techno-Management Festival, IIT (ISM) Dhanbad | 2013-2017 and 2019 |
| 13. | **Secretary, "Digital Learning Monitoring Cell, IIT (ISM) Dhanbad"**, for recommend and implement the action plan to use the digital resources and future improvement steps as per directives of MHRD, GOI vide letter F.No.8-6/2017-TEL dated 31/08/2017 | 2017-2018 |
| 14. | **Secretary, "Innovation Group, IIT (ISM) Dhanbad"**, for suggesting the Ideas and procedures for the growth and | 2016-18 |

| | | |
|---|---|---|
| | expansion of IIT (ISM) at par with other IITs. | |
| **15.** | **Secretary and Co-coordinator, Design Innovation Centre**, IIT (ISM) Dhanbad. Collaborating with different Institutes and suggesting the Ideas as per Government of India directives. | 2016-18 |
| **16.** | **Member, Ranking Committee**, NIRF (MHRD, GOI), QS (World, BRICKS, Asia etc,), India Today, Times etc | 2017-18 |
| **17.** | Member, Advertisement Committee, IIT (ISM) Dhanbad | 2017-18 |
| **18.** | **Member**, Organizing Committee, **90th Foundation Day**, IIT (ISM), Dhanbad. | 2015 |
| **19.** | **Member**, IIT (ISM) Extension Centre at New Delhi | |
| **20.** | **Mentor**, 1st Year BTech new entrants in IIT (ISM) Dhanbad | 2017- Continuing |
| **21.** | **Observer**, Conducted and Observed the ISM entrance examination as observer at Delhi (2015), Lucknow (2013, 2014) | 2013 - 2015 |
| **22.** | Performed **stock verification for Departmental R & D Labs** | 2013- Continuing |
| **23.** | Worked as **Tabulator.** | 2013-14, 2014-15 |
| **24.** | Made the **presentation** of departmental activities & facilities for placing before the committee visited the Institute/ Department in Jan 2014 **for conversion of ISM to IIT**. | 2014 |
| **25.** | **Compiled total projects outlays and publications** of the department and prepared it in the form of bound volume for placing before the committee, chaired by Prof. Mishra, visited the Institute/ Department in Jan 2014 **for conversion of ISM to IIT**. | 2014 |
| **26.** | Made the **presentation** for departmental activities and facilities and presented **before the DRDO team** visited the Institute/Department in 2013. | 2013 |
| **27.** | **Member, Sub-Committee**, constituted for the data collection, preparation and finalizing **DST-FIST project proposal** and presentation. | 2012 |
| **28.** | Designed and made the Departmental Profile and Training and Placement Brochure. | |
| **29.** | **Member**, Board of Course Studies (**BOCS**), Department of Applied Physics, ISM Dhanbad. | |
| **30.** | Member Anti Ragging Squad, IIT (ISM). | |
| **31.** | Participated as well as worked as judge for various annual sports activities of IIT (ISM). | |
| **32.** | Represented Institute in Knowledge Expo, 2017 organized by Rastrapati Bhavan, New Delhi (at Pragati Maidan, New Delhi) | 2017 |

## 15. Short Term Courses/Training Programmes/Workshops/Conferences Organized

1. **Co-ordinator, 3 week** "Induction Training/ Orientation Programme" organized during Nov 15 – Dec 12, 2019 under the agis of Faculty Development Centre, IIT(ISM) Dhanbad.
2. **Organizer, 3 week** "Refresher Programme in Chemistry" organized during June 08 – June 28, 2018 under the agis of Faculty Development Centre, IIT(ISM) Dhanbad.
3. **Organizer, 3 week** "Refresher Programme in Physics with special focus on Bio-Photonics" organized during May 29 – June 18, 2018 under the agis of Faculty Development Centre, IIT(ISM) Dhanbad.
4. **Organizer, 1 week National Training Programme** on "Advanced Material Characterization Techniques" organized during March 18 – 24, 2018 under the agis of Faculty Development Centre, IIT(ISM) Dhanbad.
5. **Organizer, 3 week** "Induction Training/ Orientation Programme" organized during Dec. 28, 2017 – Jan. 25, 2018 under the agis of Faculty Development Centre, IIT(ISM) Dhanbad.
6. **Organizer, 1 week National Training Programme** on "Research Methodology" organized during December 18 – 23, 2017 under the agis of Faculty Development Centre, IIT(ISM) Dhanbad.
7. **Organizer, 1 week National Training Programme** on "Wireless Sensor Networks" organized during December 18 – 22, 2017 under the agis of Faculty Development Centre, IIT(ISM) Dhanbad.
8. **Co-Ordinator**, **3 week Refresher Programme in Physics with special focus on 'Nano-Biotechnology'** organized under the agis of Faculty Development Centre, IIT(ISM) Dhanbad during 25$^{th}$ May 2017 – 14$^{th}$ June 2017 for the University/Institute/ College Teachers.
9. **Organizer, 1 week National Training Programme** on **"Mineral Processing with special focus on Mineral Processing-Principles, Processes & Practice"** during June 26- July 1, 2017 organized under the agis of Faculty Development Centre, IIT(ISM) Dhanbad.
10. **Organizer, 3 week Refresher Programme** on the topic "Mathematical Sciences"organized under the agis of Faculty Development Centre, IIT(ISM) Dhanbad during 16$^{th}$ May 2017 – 05 June 2017 for the University/Institute/ College Teachers.
11. **Organizer, 3 week Refresher Programme** on the topic "Chemistry with special focus on Materials Chemistry" organized under the agis of Faculty Development Centre, IIT(ISM) Dhanbad during 01$^{st}$ June 2017 – 21$^{st}$ June 2017 for the University/Institute/ College Teachers.
12. **Organizer, 3 week Refresher Programme** on the topic "Recent Trends on Microwave Devices and Anteenas"organized under the agis of Faculty Development Centre, IIT(ISM) Dhanbad during 26$^{th}$ Dec 2016 – 15 Jan 2017 for the University/Institute/ College Teachers.
13. **Co-Ordinator**, **3 week Orientation Programme** organized during 09$^{th}$ -29$^{th}$ Feb 2016 for the University/Institute/ College Teachers under the agis of Faculty Development Centre, IIT(ISM) Dhanbad.
14. **Co-Convener**, **National Conference on Recent Advances in Science and Engineering (RASE 2016)**, 28$^{th}$ -30$^{th}$ March 2016, IIT (ISM), Dhanbad.
15. **Organizer, 23$^{rd}$ National Conference on Liquid Crystals (NCLS 2016)** Nov 07$^{th}$ -09$^{th}$, 2016, IIT (ISM) Dhanbad.

16. **Organizer, "International Topical Conference on Charged Particle Collisions and Electronic processes in Atoms, Molecules and Materials, q-PaCE 2016**", Organized by Department of Applied Physics, Indian School of Mines, Dhanbad during 9-11 January, 2016.
17. **Co-Convener**, **International Conference on Structural and Physical Properties of Solids (SPPS 2013)**, 18th -20th November 2013, IIT (ISM), Dhanbad.
18. Member of Organizing Committee in *"National Conference on Advances in Lasers and Spectroscopy-ALS",* during Nov 1-3, 2012, Indian School of Mines (ISM), Dhanbad.
19. Member of Organizing Committee in "International Conference on Nanostructuring by Ion Beams" during 17-19 Oct 2011 jointly organized by Inter University Accelerator Centre (IUAC) and Nanotechnology Application Centre, University of Allahabad, Allahabad.
20. Member of Organizing Committee in organizing two day policy support brainstorming on 'Study of Observed and Model Simulated Extreme Weather Events Over India in a Changing Climate', June 6-7, 2011 jointly organized by KBCAOS and MNSCOSS, University of Allahabad, Allahabad 211002.
21. Member of Organizing Committee, also worked as resource person and delivered 3 lectures in two day workshop on "Characterization Techniques in Nanotechnology" during Feb 12-13 2011, organized by National Academy of Sciences, India, Allahabad Chapter. http://nasi.nic.in/Regular%20Activities.htm
22. Member of Organizing Committee in *"4th International Conference INDIAS 2010"*, during Sep 19th -21st 2010 at Nanotechnology Application Centre, University of Allahabad, Allahabad.
23. Also worked as Associate Editor for the "Abstract Book, Proceedings and Special Issues" published in an international journal "Adv Mat Letts" for the *"4th International Conference INDIAS 2010"*, organized during Sep 19th -21st 2010.
24. Member of Organizing Committee in three day "Winter School on Nanoscience (Research Training and Exposure)" during 24-26 Jan 2010, organized by Nanotechnology Application Centre, University of Allahabad, Allahabad 211002.
25. Member of Organizing Committee in International workshop *"Synergy of Nanomaterials for Newcomer Technology"* organized by Nanotechnology Application Centre, University of Allahabad, Allahabad on 24th Dec 2009.
26. Member of Organizing Committee in International workshop *"Meghnad Saha Memorial Symposium on Emerging Trends in Laser Spectroscopy and Applications, MMSETLSA 2009"* organized by University of Allahabad, Allahabad India during 23-25 March 2009.
27. Member of Organizing Committee in *"International Workshop on Surface and Interface Modifications by Energetic Ion Beams"* jointly organized by Nanotechnology Application Centre University of Allahabad, Allahabad and Inter University Accelerator Centre, New Delhi, India on March 18th 2009.
28. Member of Organizing Committee in *"International Conference on Transport and Optical Properties of Nanomaterials, ICTOPON 09"*, jointly organized by Department of Physics, University of Allahabad, Allahabad, India and University of Western Ontario, Canada during 5-8 JAN 2009.

## 16. Patents Applied / Under Consideration

| S.N. | BibID / Ref. / Title / Authors / (Year wise sorted)/ Special note, if any |
|---|---|
| 1. | **RSREP2016\| Patent Application No.: 20163110351117**<br>Triple signaling mode carbon dots-based biodegradable molecularly imprinted polymer as multi-tasking visual sensor for rapid and "on-site" monitoring of silver ion<br>Rashmi Madhuri, Santanu Patra, Raksha Choudhary, Ekta Roy, **Prashant K. Sharma** |
| 2. | **PA2010\| Patent Number: 608/DEL/2010**<br>Developement of Zinc Oxy-Sulphide Ternary Nanocrystal: A new hope for tunable white light LED nanophosphors<br>**Prashant K Sharma** and Avinash C Pandey, |
| 3. | **PA2010\|Patent Number: 607/DEL/2010**<br>Performance Enhancement of Large Area Solar Cells by Incorporating Nanocrystals<br>**Prashant K Sharma** and Avinash C Pandey, |
| 4. | **PRA2010\|Patent Number: 610/DEL/2010**<br>A Novel Up-scalable Solution Combustion Synthesis of Bright Blue Luminescent BAM:$Eu^{2+}$ Nanophosphors for PDP Applications<br>**Prashant K Sharma**, Ranu K Dutta and Avinash C Pandey. |
| 5. | **PRA2010\|Patent Number: /DEL/2010**<br>Combustion Synthesis and Fluorescent Properties of $Eu^{3+}$ and $Tb^{3+}$ Doped $YBO_3$ Nanorods under VUV excitations<br>**Prashant K Sharma**, Ranu K Dutta and Avinash C Pandey, |
| 6. | **PRA2010\|Patent Number: 609/DEL/2010**<br>Reverse Micelles Synthesis of Quantum Confined Rare-Earth Ortho-botare Nanocrystals for High-Definition Display Devices<br>**Prashant K Sharma**, Ranu K Dutta and Avinash C Pandey, |
| 7. | **PRA2010\|Patent Number: /DEL/2010**<br>Enhanced Luminescence Characteristics of $YBO_3$:$Eu^{3+}$ Nanophosphors co-doped with $Gd^{3+}$ under VUV and UV excitation<br>**Prashant K Sharma**, Ranu K Dutta and Avinash C Pandey, |
| 8. | **PRA2010\|Patent Number: 1077/DEL/2010**<br>Vitamin Encapsulated Magnetofluores as Target Specific MRI Contrast Agents<br>Ranu K Dutta, **Prashant K Sharma** and Avinash C Pandey, |
| 9. | **RPA2009\| Patent Number: 1072/DEL/2009**<br>Luminescent Magnetic Quantum Dots (LMQDTs): Synthesis Method and corresponding functional properties<br>Ranu K Dutta, **Prashant K Sharma** and Avinash C Pandey. |

## 17. Full List of Publications

### A. Books

| S.N. | BibID / Ref. / Title / Authors / (Year wise sorted)/ Special note, if any |
|---|---|
| 1. | "Study of Nanomaterials for Opto-electronics and DMS Based Applications" **Prashant K. Sharma** and Avinash C. Pandey, ***LAP Lambert Academic Publishing***, 244 Pages, **2012**. **ISBN 978-3-8473-7963-8** |

### B. Book Chapters

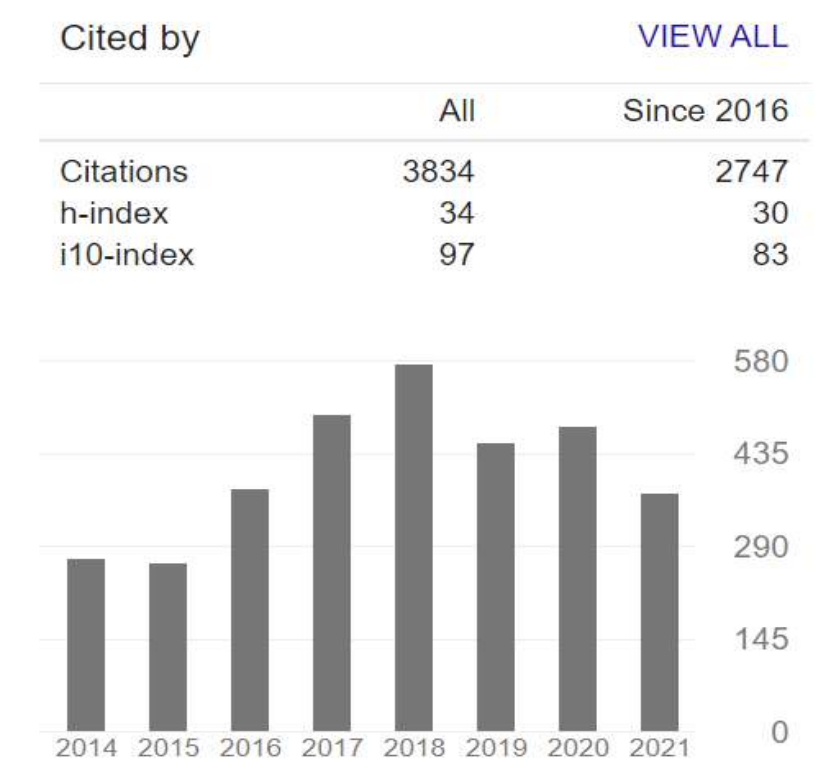
| S.N. | BibID / Ref. / Title / Authors / (Year wise sorted)/ Special note, if any |
|---|---|
| 2. | "Quality control of beverages for health safety: Starting from laboratory to the point-of-care detection techniques", Santanu Patra, Raksha Choudhary, Rashmi Madhuri, **Prashant K. Sharma**, Book: Quality Control in the Beverage Industry (Volume 17: The Science of Beverages), **2019**, Chapter 2, page no. 1-45, ***Publisher: Elsevier***. |
| 3. | "Stimuli-responsive polymers for treatment of Diabetes Mellitus, Book: Stimuli Responsive Polymeric Nanocarriers for Drug Delivery Applications" Santanu Patra, Rashmi Madhuri and **Prashant K. Sharma**, **2019**, Chapter 18, page no 491-518, ***Publisher: Elsevier***. |
| 4. | "Materials Characterization using Scanning Tunneling Microscopy: From Fundamentals to Advanced Applications" Suryakanti Debata, Trupti R. Das, Rashmi Madhuri, **Prashant K. Sharma** Handbook of Materials Characterization, **2018**, pp 217-261, DOI: 10.1007/978-3-319-92955-2_6. ***Publisher: Springer*** |
| 5. | "Graphene-Based Multifunctional Magnetic Nanocomposites and Their Multimode Biomedical Applications" in the book titled Complex Magnetic Nanostructures, Editor: Surender K. Sharma, TR Das, S Debata, R Madhuri, **Prashant K. Sharma**, Chapter No. 10, Page numbers: 359-392, Publication date: **2018**, ***Publisher: Springer***, **ISBN 978-3-319-52086-5 (eBook)** |
| 6. | "Graphene-Based Portable, Flexible, and Wearable Sensing Platforms: An Emerging Trend for Health Care and Biomedical Surveillance", Santanu Patra, Raksha Choudhary, Rashmi Madhuri, **Prashant K. Sharma**, Chapter 13: Book: Graphene Bioelectronics, **2018**, Pages 307-338. DOI:10.1016/B978-0-12-813349-1.00013-5, ***Publisher: Elsevier***. |
| 7. | "Functionalization of Carbon Nanostructures, Book: Reference Module in Materials Science and Materials Engineering" Paramita Karfa, Shrabani De, Kartick C. Majhi, Rashmi Madhuri, **Prashant K. Sharma** **2018**, DOI: 10.1016/B978-0-12-803581-8.11225-1. ***Publisher: Elsevier***. |
| 8. | "Role of Nanomaterials as an Emerging Trend Towards the Detection of Winged |

| | |
|---|---|
| | Contaminants" in the book entitled, "Nanotechnology in Oil and Gas Industries"<br>S Patra, R Madhuri, **Prashant K. Sharma**<br>Chapter No. 9, 245-289, ***2018* Publisher: *Springer***,<br>**https://doi.org/10.1007/978-3-319-60630-9_9**<br>**Print ISBN978-3-319-60629-3; Online ISBN978-3-319-60630-9** |
| **9.** | "Role of Magnetic Nanoparticles in Providing Safe and Clean Water to Each Individual" in the book titled: Complex Magnetic Nanostructures, Editor: Surender K. Sharma,<br>E Roy, S Patra, P Karfa, R Madhuri, **Prashant K. Sharma**,<br>Chapter No. 8, Page numbers: 281-316, Publication date: **2017**, ***Publisher: Springer***,,<br>**ISBN 978-3-319-52087-2 (eBook).** |
| **10.** | "A genuine combination of solvent-free sample preparation technique and molecularly imprinted nanomaterials", in the book titled: Advanced Molecular Imprinting Materials, Editors: Ashutosh Tiwari, Lokman Uzun,<br>Santanu Patra, Ekta Roy, Rashmi Madhuri**, Prashant K. Sharma**,<br>Chapter number: 02, Page numbers: 29-88, Publication date: **2016**,<br>Publisher: ***WILEY-Scrivener Publishing, USA***,<br>**ISBN: 978-1-119-33629-7**. |
| **11.** | "Imprinted carbonaceous nanomaterials: A tiny looking big thing in the field of selective and specific analysis", in the book titled: Advanced Molecular Imprinting Materials, Editors: Ashutosh Tiwari, Lokman Uzun,<br>Ekta Roy, Santanu Patra, Rashmi Madhuri, **Prashant K. Sharma**,<br>Chapter number: 05, Page numbers: 165-216, Publication date: **2016**<br>Publisher: ***WILEY-Scrivener Publishing, USA,***<br>**ISBN: 978-1-119-33629-7** |
| **12.** | "A technique comes to life for security of life: The food contaminant sensors", in the book titled: NanoBioSensors, Editor: Alexandru Mihai Grumezescu,<br>Santanu Patra, Ekta Roy, Rashmi Madhuri, **Prashant K. Sharma**,<br>Chapter number: 17, Volume: 08, Page numbers: 773-772, Book Publication date: **2016**,<br>Publisher: ***Elsevier***,<br>**ISBN: 978-0-12-804301-1** |
| **13.** | "Combination of Molecular Imprinting and Nanotechnology: Beginning of a New Horizon" in "Advanced Materials" book series.<br>Rashmi Madhuri, Ekta Roy, Kritika Gupta and **Prashant K. Sharma**<br>***WILEY-Scrivener Publisher***, **2013/14** |
| **14.** | "Functionalized Biocompatible Nanoparticles for Site Specific Imaging and Therapeutics" in book entitled "Advances in Polymer Science: Polymers in Nanomedicine"<br>Ranu K Dutta, **Prashant K Sharma**, Hisatoshi Kobayashi and Avinash C Pandey,<br>***Springer-Verlag Berlin Heidelberg*** 1-43, DOI: 10.1007/12(2011)155, **2012**,<br>**ISBN 978-3-642-27855-6** |

| | |
|---|---|
| **15.** | "High Resolution Transmission Electron Microscopic Investigations of Nanocrystals Growth and Defect Formation",<br>in book entitled 'Current microscopy contributions to advances in science and technology (Microscopy Book Series, number #5)',<br>**Prashant K. Sharma** and Avinash C Pandey,<br>***Formatex Publications***, Spain **2012**. |
| **16.** | "Multifunctional core-shell luminescent magnetic nanocrystals for targeted imaging and therapy",<br>in book entitled "Nanobiomaterials for Intelligent Medical Devices",<br>**Prashant K. Sharma** and Avinash C Pandey,<br>***WILEY-Scrivener Publishing LLC***, USA, Chapter 16, (**2012**). |
| **17.** | "Advancement in Semiconducting Nanomaterials Based Solar Cell Applications",<br>In book entitled 'Nanomaterials and Nanotechnology"<br>**Prashant K. Sharma** and Avinash C Pandey,<br>***VBRI Press***, India, **2012**. **ISBN 978-81-920068-33** |
| **18.** | "II-VI Semiconductor Nanocrystals for Energy Securing 'Green' Technology and Solid State Lighting",<br>in book entitled "Intelligent Nanomaterials",<br>**Prashant K. Sharma** and Avinash C. Pandey,<br>***Scrivener Publishing LLC***, USA, Chapter 7, (**2011**). |
| **19.** | "Rare-Earth Based Insulating Nanocrystals: Improved Luminescent Nanophosphors for Plasma Display Panels",<br>in book entitled "Intelligent Nanomaterials",<br>**Prashant K. Sharma** and Avinash C. Pandey,<br>***Scrivener Publishing LLC***, USA, Chapter 3, (**2011**), |
| **20.** | "Potential Advancement of the Nanomedicines in Cancer Theragnosis",<br>in book entitled "Recent Advances in Nanomedicine",<br>**Prashant K Sharma**, Ranu K Dutta and Avinash C Pandey,<br>***VBRI Press***, India, Chapter 8, (**2011**). **ISBN 978-81-920068-03** |
| **21.** | "Recent Advances in Biomedical Applications of Multifunctional Nanocomposites"<br>In book entitled "Recent Developments in Bio-Nanocomposites for Biomedical Applications",<br>Avinash C. Pandey, **Prashant K. Sharma**, Ranu K. Dutta,<br>***Nova Science Publishers***, Inc, Chapter 20, pp.409-432, **2010**. **ISBN 978-1-61761-008-0** |

## C. Peer Reviewed Research Articles

### Citation till August 2021 (Google Scholar)




### Publications in International Journals/Proceedings : 113

**Q1 Journals: 55, Q2 Journals: 15, Q3 Journals:09, Q4 Journals/others: 14/20**
**No. of Q1 publications as First Author: 14**
**No. of Q2 publications as First Author: 01**
**No. of Q1 publications as Corresponding Author: 23**
**No. of Q2 publications as Corresponding Author: 07**

| S.N. | Title / Authors / Citation (Year wise sorted) / Impact Factor / Special Note, if any |
|---|---|
| **113.** | Hydrothermal-assisted green synthesis of Ni/Ag@rGO nanocomposite using Punica granatum juice and electrochemical detection of ascorbic acid<br>Trupti R. Das, **Prashant K. Sharma**<br>***Microchemical Journal***, 156, 104850, **2020**, (**Impact Factor: 4.82**) **Q Rank: 2** |
| **112.** | Bimetal oxide decorated graphene oxide (Gd2O3/Bi2O3@GO) nanocomposite as an excellent adsorbent in the removal of methyl orange dye<br>Trupti R. Das, **Prashant K. Sharma**<br>***Materials Science in Semiconductor Processing***, 105,104721, **2020.** (**Impact Factor: 3.97**) **Q Rank: 2** |
| **111.** | Template assisted hydrothermal synthesis of $CoSnO_3$ hollow microspheres for electrocatalytic oxygen evolution reaction<br>Suryakanti Debata, Sanchari Banerjee, Sanchari Chakraborty, **Prashant K. Sharma**<br>***International Journal of Hydrogen Energy***, 44(39), 21623-21636, **2019**. (**Impact Factor: 5.81**) **Q Rank: 1** |

**110.** Sensitive and selective electrochemical detection of Cd2+ by using bimetal oxide decorated Graphene oxide (Bi2O3/Fe2O3@GO) electrode
Trupti R. Das and **Prashant K. Sharma**
***Microchemical Journal***, 147, 1203-1214, **2019**. (**Impact Factor: 4.82**) **Q Rank: 2**

**109.** Marigold shaped N-rGO-MoS2-Ni(OH)2 nanocomposite as a bifunctional electrocatalyst for the promotion of overall water splitting in alkaline medium,
Suryakanti Debata, Sanchari Banerjee, **Prashant K. Sharma**,
***Electrochimica Acta***, 303, 257-267, **2019**, (**Impact Factor: 6.9**) **Q Rank: 1**

**108.** Synthesis, characterization and electrochemical monitoring of drug release properties of dual stimuli responsive mesoporous GdPO4:Eu3+ nanoparticles,
Manisha Kumari, Shrabani Mondal, **Prashant K. Sharma**,
***Journal of Alloys and Compounds***, 776,5,654-665, **2019** (**Impact Factor: 5.31**). **Q Rank: 1**

**107.** Controlled Hydrothermal Synthesis of Graphene Supported NiCo2O4 Coral-Like Nanostructures: An Efficient Electrocatalyst for Overall Water Splitting
Suryakanti Debata, Santanu Patra, Sanchari Banerjee, Rashmi Madhuri and **Prashant K. Sharma**
***Applied Surface Science***, 449, 203-212, **2018**. (**Impact Factor: 6.7**) **Q Rank: 1**

**106.** Polymeric Iron Oxide-Graphene Nanocomposite as a Trace Level Sensor of Vitamin C
Trupti R. Das, Suchit Kumar Jena, Rashmi Madhuri and **Prashant K. Sharma**
***Applied Surface Science***, 449, 304-313, **2018**. (**Impact Factor: 6.18**) **Q Rank: 1**

**105.** Electrocatalytic behavior of transition metal (Ni, Fe, Cr) doped metal oxide nanocomposites for oxygen evolution reaction
Sanchari Banerjee, Suryakanti Debata, Rashmi Madhuri and **Prashant K. Sharma**
***Applied Surface Science***, 449, 660-668, **2018**. (**Impact Factor: 6.18**) **Q Rank: 1**

**104.** Designing of fluorescent and magnetic imprinted polymer for rapid, selective and sensitive detection of imidacloprid via Activators regenerated by the electron transfer-atom transfer radical polymerization (ARGET-ATRP) technique
Sunil Kumar, Rashmi Madhuri and **Prashant K. Sharma**
***Journal of Physics and Chemistry of Solids***, 116, 222-233, **2018**. (**Impact Factor: 3.44**) **Q Rank: 2**

**103.** Bismuth Oxide Decorated Graphene Oxide Nanocomposites synthesized via Sonochemical Assisted Hydrothermal Method for Adsorption of Cationic Organic Dyes,
TR Das, S Patra, R Madhuri, **Prashant K. Sharma**,
***Journal of Colloid and Interface Science*** 509C, 82-93,**2018.** (**Impact Factor: 7.5) Q Rank: 1**

**102.** Acetaminophen and acetone sensing capabilities of nickel ferrite nanostructures,
S Mondal, M Kumari, R Madhuri, **Prashant K. Sharma**,
***Applied Physics A: Materials Science and Processing*** 123, 494, **2017**. **(Impact Factor: 1.81) Q Rank: 2**

**101.** Probing the Shape-Specific Electrochemical Properties of Cobalt Oxide Nanostructures for its Application as Selective and Sensitive Non-Enzymatic Glucose Sensor,
S Mondal, R Madhuri, **Prashant K. Sharma**,
***Journal of Materials Chemistry C***, 5, 6497-6505, **2017**. **(Impact Factor: 7.1) Q Rank: 1**

**100.** Synthesis of single phase Fe x Sn 1− x O 2 nanoparticles with enhanced structural, optical and magnetic properties
M Kumari, S Mondal, R Madhuri, **Prashant K. Sharma**
***Journal of Alloys and Compounds***, 717, 260–270, **2017**, **(Impact Factor: 4.65)**. **Q Rank: 1**

**99.** Introduction of selectivity and specificity to graphene using an inimitable combination of molecular imprinting and nanotechnology
E Roy, S Patra, A Tiwari, R Madhuri, and **Prashant K. Sharma**
***Biosensors and Bioelectronics***, 89(1), 234-248, **2017, (Impact Factor: 10.25)**. **Q Rank: 1**

**98.** 2-Dimensional graphene as a route for emergence of additional dimension nanomaterials
S Patra, E Roy, A Tiwari, R Madhuri, and **Prashant K. Sharma**
***Biosensors and Bioelectronics***, 89 (1), 8-27, **2017, (Impact Factor: 10.25)**. **Q Rank: 1**

**97.** Shape effect on the fabrication of imprinted nanoparticles: Comparison between spherical-, rod-, hexagonal-, and flower-shaped nanoparticles
E Roy, S Patra, S Saha, D Kumar, R Madhuri, **Prashant K. Sharma**
***Chemical Engineering Journal*** 321, 195-206, **2017**. **(Impact Factor: 10.65)**. **Q Rank: 1**

**96.** Electrochemical sensing of cyanometalic compound using TiO2/PVA nanocomposite-modified electrode
Shrabani Mondal, Rashmi Madhuri and **Prashant K. Sharma**
***Journal of Applied Electrochemistry***, 47, 75–83, **2017**. **(Impact Factor: 3.0)**. **Q Rank: 2**

**95.** Heteroatom-doped graphene 'Idli': A green and foody approach towards development of metal free bifunctional catalyst for rechargeable zinc-air battery,
Santanu Patra, Raksha Choudhary, Ekta Roy, Rashmi Madhuri, **Prashant K. Sharma**,
***Nano Energy*** 30, 118–129, **2016 (Impact Factor: 16.6)**. **Q Rank: 1**

**94.** A single solution for arsenite and arsenate removal from drinking water using cysteine@ ZnS: $TiO_2$ nanoparticle modified molecularly imprinted biofouling-resistant filtration membrane
E Roy, S Patra, Rashmi Madhuri and **Prashant K. Sharma**
***Chemical Engineering Journal***, 304, 259-270, **2016, (Impact Factor: 10.65)**. **Q Rank: 1**

**93.** Europium doped magnetic graphene oxide-MWCNT nanohybrid for estimation and removal of arsenate and arsenite from real water samples
E Roy, S Patra, Rashmi Madhuri and **Prashant K. Sharma**
***Chemical Engineering Journal***, 299, 244-254, **2016, (Impact Factor: 10.65)**. **Q Rank: 1**

**92.** Molecularly imprinted star polymer modified superparamagnetic iron oxide nanoparticle for the trace level sensing and separation of mancozeb
Sunil Kumar, Paramita Karfa, Santanu Patra, Rashmi Madhuri and **Prashant K. Sharma**
***RSC Adv.***, **6**, 36751-36760, **2016, (Impact Factor: 3.84)**. **Q Rank: 1**

**91.** Nanocomposite of bimetallic nanodendrite and reduced graphene oxide as a novel platform for molecular imprinting technology
Santanu Patra, Ekta Roy, Rashmi Madhuri, **Prashant K. Sharma**
***Analytica Chimica Acta,*** 918, 77–88, **2016, (Impact Factor: 6.0)**. **Q Rank: 1**

**90.** Stimuli-responsive poly (N-isopropyl acrylamide)-co-tyrosine@ gadolinium: Iron oxide nanoparticle-based nanotheranostic for cancer diagnosis and treatment
E Roy, S Patra, R Madhuri, **Prashant K. Sharma**
***Colloids and Surfaces B: Biointerfaces*** 142, 248-258, **2016, (Impact Factor: 4.38)**. **Q Rank: 1**

**89.** Agar Based Bimetallic Nanoparticles as High-Performance Renewable Adsorbent for Removal and Degradation of Cationic Organic Dyes,
Santanu Patra, Ekta Roy, Rashmi Madhuri, **Prashant K. Sharma**
***Journal of Industrial & Engineering Chemistry***, 33, 226-238, **2016**, **(Impact Factor: 5.27)**. **Q Rank: 1**

**88.** PVA Assisted Low Temperature Anatase to Rutile Phase Transformation (ART) and Properties of Titania Nanoparticles
Shrabani Mondal, Rashmi Madhuri, **Prashant K. Sharma**
***Journal of Alloys and Compounds***, 646, 565-572, **2015**, **(Impact Factor: 4.65)**. **Q Rank: 1**

**87.** Fast and selective pre-concentration of europium from wastewater and coal soil by graphene oxide/silane@Fe3O4 dendritic nanostructure,
Santanu Patra, Ekta Roy, Rashmi Madhuri, and **Prashant K. Sharma**,
***ACS Environ. Sci. Technol.***, 49 (10), 6117–6126, **2015**. **(Impact Factor: 7.86)**. **Q Rank: 1**

**86.** Developing electrochemical sensor for point-of-care diagnostics of oxidative stress marker

| | |
|---|---|
| | using imprinted bimetallic Fe/Pd nanoparticle<br>Ekta Roy, Santanu Patra, Rashmi Madhuri, **Prashant K. Sharma**<br>***Talanta***, 132, 406-415, **2015**, **(Impact Factor: 5.33)** **Q Rank: 1** |
| **85.** | Nano-iniferter based imprinted sensor for ultra trace level detection of prostate-specific antigen in both men and women<br>Santanu Patra, Ekta Roy, Rashmi Madhuri, **Prashant K. Sharma**<br>***Biosensors & Bioelectronics***, 66, 1-10, **2015**, **(Impact Factor: 10.25)** **Q Rank: 1** |
| **84.** | Development of an imprinted polymeric sensor with dual sensing property for trace level estimation of zinc and arginine<br>Ekta Roy, Santanu Patra, Rashmi Madhuri, **Prashant K. Sharma**<br>***Material Science and Engineering: C***, 49, 25-33, **2015**, **(Impact Factor: 5.88)** **Q Rank: 1** |
| **83.** | A metronidazole-probe sensor based on imprinted biocompatible nanofilm for rapid and sensitive detection of anaerobic protozoan<br>Ekta Roy, Soham Maity, Santanu Patra, Rashmi Madhuri, **Prashant K. Sharma**<br>***RSC Advances***, 4, 32881- 32893, **2014** **(Impact Factor: 3.8)** **Q Rank: 1** |
| **82.** | Simultaneous determination of heavy metals in biological samples by a multiple-template imprinting technique: an electrochemical study.<br>Ekta Roy, Santanu Patra, Rashmi Madhuri, **Prashant K. Sharma**<br>***RSC Advances***, 4, 56690–56700, **2014**, **(Impact Factor: 3.8)** **Q Rank: 1** |
| **81.** | Engineering of Gadofluoroprobes: Broad-spectrum applications from cancer diagnosis to therapy<br>Ranu Dutta, **Prashant K. Sharma**, Vandana Tiwari, Vivek Tiwari, Anant B. Patel, Ravindra Pandey and Avinash C. Pandey,<br>***App. Phys. Lett.*** *104, 023703*, **2014**. **(Impact Factor: 3.7)** **Q Rank: 1** |
| **80.** | Gold nanoparticle mediated designing of non-hydrolytic sol-gel cross-linked metformin imprinted polymer network: A theoretical and experimental study<br>Ekta Roy, Santanu Patra, Rashmi Madhuri, **Prashant K. Sharma**<br>***Talanta***, 120, 198-207, **2014**. **(Impact Factor: 5.33)** **Q Rank: 1** |
| **79.** | Switching in structural, optical, and magnetic properties of self-assembled Co-doped ZnO: effect of Co-concentration<br>Richa Bhargava, **Prashant K. Sharma**, Sushant Singh, Avinash C. Pandey and Naresh Kumar<br>***Journal of Mat. Sci.: Materials in Electronics*****,** 25:552–559, **2014**. **(Impact Factor: 2.22)** **Q Rank: 2** |
| **78.** | Nanosphere in Ferroelectric Liquid Crystal Matrix: The Effect of Aggregation and Defects on the Dielectric and Electro-Optical Properties<br>D P Singh, S K Gupta, **Prashant K. Sharma**, R Manohar<br>***Advances in Condensed Matter Physics***, http://dx.doi.org/10.1155/2013/250301, **2013**. **(Impact Factor: 1.03)** **Q Rank: 3** |
| **77.** | Concentration Dependent Physical Parameters of Ferroelectric Liquid Crystal and ZnOS Nano material Composite System,<br>D P Singh, Rajiv Manohara, **Prashant K. Sharma** and Avinash C. Pandey,<br>***Soft Materials,*** 11, 305–314, **2013**. **(Impact Factor: 2.0),** **Q Rank: 3** |
| **76.** | Guest-Host interaction in ferroelectric liquid crystal-nanoparticle composite system,<br>Dharmendra P. Singh, Swadesh K. Gupta, Satya P. Yadav, **Prashant K. Sharma**, Avinash C Pandey and Rajiv Manohar,<br>***Bulletin of Materials Science***, 0973-7669, **2013**. **(Impact Factor: 1.40)** **Q Rank: 2** |
| **75.** | A Novel Up-Scalable Solution Combustion Synthesis of Bright Blue Luminescent BAM: $Eu^{2+}$ Nanophosphors for PDP Applications<br>**Prashant K. Sharma**, Ranu K Dutta and Avinash C Pandey<br>***J. Applied. Physics***, 112, 054321, **2013**. **(Impact Factor: 2.3)** **Q Rank: 1** |

**74.** Engineering of superparamagnetic eurogadofluoroprobes (EGFP) and their biocompatibilty evaluation through platelet aggregation studies
Ranu K Dutta, **Prashant K. Sharma** and Avinash C Pandey,
***J. Materials Science***, **2013**. **(Impact Factor: 3.55) Q Rank: 1**

**73.** Changes in Material Parameters for Dye-Doped Ferroelectric Liquid Crystal
Abhishek Kumar Misra, Pankaj Kumar Tripathi, **Prashant K. Sharma** & Rajiv Manohar
***Phase Transitions***, 86 (10), 977-986, **2013**. **(Impact Factor: 1.02) Q Rank: 3**

**72.** Performance of RGB (YAG:$Eu^{3+}$, YAG:$Tb^{3+}$ and BAM:$Eu^{2+}$) plasma display nanophosphors
**Prashant K. Sharma**, Ranu K Dutta and Avinash C Pandey,
***J. Nanopart. Res.***, 14: 731, **2012**. **(Impact Factor: 3.25) Q Rank: 1**

**71.** Self-Assembled Nanofiber-Bundles of Single-Crystalline $V_2O_5$ for High-Performance Lithium-Ion Batteries
Khemchand Dewangan, Nupur Nikkan Sinha, **Prashant K. Sharma**, Avinash C. Pandey, N. Munichandraiah, N. S. Gajbhiye,
***Nanoscale***, 4, 645-651, **2012**. **(Impact Factor: 7.76) Q Rank: 1**

**70.** Size-Dependent Emission Efficiency and Luminescence Characteristics of $YBO_3$:$Tb^{3+}$ Nanocrystals under Vacuum Ultraviolet Excitations
**Prashant K. Sharma,** Ranu K Dutta and Avinash C Pandey,
***J. Appl. Phys.*** 112, 054321, **2012**. **(Impact Factor: 2.3) Q Rank: 1**

**69.** Green luminescent ZnO:$Cu^{2+}$ nanoparticles for their applications in white-light generation from UV LEDs
**Prashant K. Sharma,** Manvendra Kumar and Avinash C Pandey.
***J. Nanopart. Res.,*** 13:1629–1637, **2011**. **(Impact Factor: 3.25) Q Rank: 1**

**68.** Highly stabilized monodispersed citric acid capped ZnO:$Cu^{2+}$ nanoparticles: Synthesis and characterization
**Prashant K. Sharma,** Ranu K Dutta, Manvendra Kumar, Prashant K Singh, Avinash C Pandey and V N Singh,
***IEEE Trans Nanotech,*** 10 (1), 163-169, **2011**. **(Impact Factor: 2.2) Q Rank: 2**

**67.** Synthesis and characterization of single-crystalline $\alpha$-$MoO_3$ nanofibers for enhanced Li-ion intercalation applications
Khemchand Dewangan, Nupur Nikkan Sinha, **Prashant K. Sharma**, Avinash C. Pandey, N. Munichandraiah and N. S. Gajbhiye,
***Cryst. Eng. Comm.*** 13, 927-933, **2011**. **(Impact Factor: 4.1) Q Rank: 1**

**66.** Raman investigations of $Zn_{1-x}Co_xO$ nanocrystals: Role of starting precursors on vibrational properties
Richa Bhargava, **Prashant K. Sharma**, Sanjeev Kumar, Avinash C. Pandey and Naresh Kumar,
***Journal of Raman Spectroscopy***, 42 (9), 1802, **2011**. **(Impact Factor: 3.2) Q Rank: 1**

**65.** An ultra sensitive saccharides detection assay using carboxyl functionalized chitosan containing $Gd_2O_3$ : $Eu^{3+}$ nanoparticles probe
Ashutosh Tiwari, Dohiko Terada, **Prashant K. Sharma**, Vyom Parashar, Chiaki Yoshikawa, Avinash C. Pandey and Hisatoshi Kobayashi,
***Anal. Methods***, 3, 217-226, **2011**. **(Impact Factor: 2.59) Q Rank: 1**

**64.** Variation in structural, optical and magnetic properties of $Zn_{1-x}Cr_xO$ (x = 0.0, 0.10, 0.15, and 0.20) nanoparticles: role of dopant concentration on non-saturation of magnetization
Richa Bhargava, **Prashant K. Sharma**, Amit Chawla, Ramesh Chandra, Sanjeev Kumar, Avinash C. Pandey, Naresh Kumar,
***Mater. Chem. Phys***. 125 (3), 664-671, **2011**. **(Impact Factor: 3.4) Q Rank: 2**

**63.** Advances in Multifunctional Magnetic Nanoparticles
**Prashant K. Sharma**, Ranu K. Dutta and Avinash C Pandey,

| | |
|---|---|
| | ***Adv Mat Letts***, 2(4), 246-263, **2011**. **(Impact Factor: 1.95) Q Rank:3** |
| **62.** | VUV excited photoluminescence of $Eu^{3+}$ doped yttria nanoparticles<br>**Prashant K. Sharma**, Ranu K Dutta and Avinash C Pandey,<br>***Adv Mat Letts***, 2(4), 285-289, **2011**. **(Impact Factor: 1.95) Q Rank: 3** |
| **61.** | Synthesis of CdS nanoparticles with enhanced optical properties<br>Vineet Singh, **Prashant K. Sharma**, Pratima Chauhan,<br>***Materials Characterization***, 62 (1), 43-52, **2011**. **(Impact Factor: 3.56) Q Rank: 1** |
| **60.** | Biological approach of zinc oxide nanoparticles formation and its characterization<br>Ravindra P. Singh, Vineet K. Shukla, Raghvendra S. Yadav, **Prashant K. Sharma**, Prashant K. Singh, Avinash C. Pandey,<br>***Adv Mat Letts***, 2(4), 313-317, **2011**. **(Impact Factor: 1.95) Q Rank: 3** |
| **59.** | Assessing the conformational and cellular changes of ZnO nanoparticles impregnated Escherichia coli cells through molecular fingerprinting<br>Ranu K Dutta, **Prashant K. Sharma** and Avinash C Pandey,<br>***Adv Mat Letts***, 2(4), 268-275, **2011**. **(Impact Factor: 1.95) Q Rank: 3** |
| **58.** | Editorial: Special Issue of Advanced Materials Letters for INDIAS 2010,<br>**Prashant K. Sharma** and Avinash C. Pandey<br>**Adv. Mat. Lett.**, 2(4), 245, **2011**. **(Impact Factor: 1.95) Q Rank: 3** |
| **57.** | Size dependence of Eu–O charge transfer process on luminescence characteristics of $YBO_3:Eu^{3+}$ nanocrystals<br>**Prashant K. Sharma**, Ranu K Dutta and Avinash C Pandey,<br>***Optics Letters*** 35, 2331-2333, **2010**. **(Impact Factor: 3.86) Q Rank: 1**<br>**(Also Selected for Publication in Virtual Journal of Nanoscale Science and Technology)** |
| **56.** | DNA base (cytosine) modified/capped ultrasmall $Gd_2S_3:Eu^{3+}$ gadofluoroprobes for platelet isolation<br>Ranu K Dutta, **Prashant K. Sharma** and Avinash C Pandey<br>***App. Phys. Lett.*** 97, 253702, **2010**. **(Impact Factor: 3.7) Q Rank: 1**<br>**(Also Selected for Publication in Virtual Journal of Biological Physics Research)** |
| **55.** | Differential susceptibility of *Escherichia coli* cells towards TM doped and matrix embedded ZnO nanoparticles<br>Ranu K Dutta, **Prashant K. Sharma**, Richa Bhargava, Naresh Kumar and Avinash C Pandey,<br>***J. Phys. Chem. B***, 114 (16), 5594–5599, **2010**. **(Impact Factor: 3.8) Q Rank: 1** |
| **54.** | Design and surface modification of potential luminomagnetic nanocarriers for biomedical applications<br>Ranu K Dutta, **Prashant K. Sharma** and Avinash C Pandey,<br>***J. Nanopart. Res***. 12 (4), 1211-1219, **2010**. **(Impact Factor: 3.25) Q Rank: 1** |
| **53.** | Alteration of Magnetic and Optical Properties of Ultrafine Dilute Magnetic Semiconductor $ZnO:Co^{2+}$ Nanoparticles<br>**Prashant K. Sharma**, Ranu K Dutta and Avinash C Pandey,<br>***J. Colloid Interface Sci.*** 345 (2), 149-153, **2010**. **(Impact Factor: 7.5) Q Rank: 1** |
| **52.** | Surfactant Mediated Optical Properties of Cytosine Capped CdSe Quantum Dots<br>**Prashant K. Sharma**, Ranu K Dutta, Avinash C Pandey, Chun hui Liu and Ravindra Pandey,<br>***Materials Letters,*** 64 (10), 1183-1186, **2010**. **(Impact Factor: 3.2) Q Rank: 1** |
| **51.** | Engineering of Highly Susceptible Paramagnetic Nanostructures of $Gd_2S_3:Eu^{3+}$: Potentially an Efficient Material for Room Temperature Gas Sensing Applications,<br>Ranu K Dutta, **Prashant K. Sharma** and Avinash C Pandey.<br>***Sensors & Transducers***, 122 (11), 36-45, **2010**. **(Impact Factor: 215) Q Rank: N.A.** |
| **50.** | Tunable visible emission of Ag doped CdZnS alloy quantum dots<br>Ruchi Sethi, Lokendra Kumar, **Prashant K. Sharma** and A. C. Pandey,<br>***Nanoscale Res Lett.,*** 5: 96–102, **2010**. **(Impact Factor: 3.4) Q Rank: 2** |

**49.** Influence of Co-doping on the thermal, structural, and optical properties of sol–gel derived ZnO nanoparticles
Richa Bhargava, **Prashant K. Sharma**, Ranu K. Dutta, Sanjeev Kumar, Avinash C. Pandey, Naresh Kumar,
***Mater. Chem. Phys.***, 120 (2-3), 393-398, **2010**. **(Impact Factor: 3.4) Q Rank: 2**

**48.** Glycolic acid assisted one-step synthesis of Cu–Ni–Fe metal oxide nanocomposites by sol–gel-combustion method: Structural, spectroscopic and magnetic studies
Manish Srivastava, Animesh K. Ojha, S. Chaubey, **Prashant K. Sharma**, Avinash C. Pandey,
***Mater. Chem. Phys.***, 120 (2-3), 493-500, **2010**. **(Impact Factor: 3.4) Q Rank: 2**

**47.** Surfactant mediated phase transformation of CdS nanoparticles
Vineet Singh, **Prashant K. Sharma,** Pratima Chauhan,
***Mater. Chem. Phys.***, 121 (1-2), 202-207, **2010**. **(Impact Factor: 3.4) Q Rank: 2**

**46.** Influence of calcinations temperature on physical properties of the nanocomposites containing spinel and CuO phases
Manish Srivastava, Animesh K. Ojha, S. Chaubey, **Prashant K. Sharma**, Avinash C. Pandey,
***J. Alloys Compd.,*** 494 (1-2), 275-284, **2010**. **(Impact Factor: 4.65) Q Rank: 1**

**45.** Raman studies on Ag-ion doped CdZnS luminescent alloy quantum dots
R. Sethi, **Prashant K. Sharma,** L. Kumar and A. C. Pandey,
***Chem. Phys. Lett.***, 495 (1-3) 63-68, **2010**. **(Impact Factor: 2.0) Q Rank: 1**

**44.** Consequence of doping mediated strain and the activation energy on the structural and optical properties of ZnO:Cr nanoparticles
Richa Bhargava, **Prashant K. Sharma**, Sanjeev Kumar, Avinash C. Pandey, Naresh Kumar,
***Journal of Solid State Chemistry***, 183 (6), 1400-1408, **2010**. **(Impact Factor: 2.8) Q Rank: 2**

**43.** Investigation on magnetic properties of α-$Fe_2O_3$ nanoparticles synthesized under surfactant-free condition by hydrothermal process
Manish Srivastava, A. K. Ojha, S. Chaubey, **Prashant K. Sharma**, Avinash C. Pandey,
***Journal of Alloys and Compounds***, 500 (2), 206-210, **2010**. **(Impact Factor: 4.65) Q Rank:1**

**42.** Influence of pH on structural morphology and magnetic properties of ordered phase cobalt doped lithium ferrites nanoparticles synthesized by sol–gel method
Manish Srivastava, Animesh K. Ojha, S. Chaubey, **Prashant K. Sharma**, Avinash C. Pandey,
***Materials Science and Engineering: B***, 175 (1), 14-21, **2010** **(Impact Factor: 4.8) Q Rank: 1**

**41.** Properties of Sol-gel derived YAG:$Eu^{3+}$ hierarchical nanostructures with their time evolution studies
**Prashant K. Sharma,** M Kumar, Prashant K Singh, Avinash C Pandey and V N Singh
***J. Appl. Phys***. 105, 034309, **2009**. **(Impact Factor: 2.3) Q Rank: 1**
**(Also Selected for Publication in Virtual Journal of Nanoscale Science and Technology)**

**40.** Luminescence studies and formation mechanism of symmetrically dispersed ZnO quantum dots embedded in $SiO_2$ matrix
**Prashant K. Sharma,** Ranu K. Dutta, Manvendra Kumar, Prashant K Singh and Avinash C Pandey
***J. Lumin.,*** 129, 605, **2009**. **(Impact Factor: 3.2) Q Rank: 1**
**(Most Downloaded article of the year 2009)**

**39.** Effect of Iron doping concentration on magnetic properties of ZnO nanoparticles
**Prashant K. Sharma,** Ranu K Dutta, Avinash C Pandey, Samar Layek and H C Verma,
***J. Magn. Magn. Mater.*** 321, 17, 2587, **2009**. **(Impact Factor: 2.7) Q Rank: 1**
**(Most Downloaded article of the year 2009)**

**38.** Effect of nickel doping concentration on structural and magnetic properties of ultrafine diluted magnetic semiconductor ZnO nanoparticles
**Prashant K. Sharma,** Ranu K Dutta and Avinash C Pandey,
***J. Magn. Magn. Mater,*** 321, 20, 3457, **2009**. **(Impact Factor: 2.7) Q Rank: 1**

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|---|---|
| **37.** | Surface enhanced Raman spectra of *Escherichia coli* cells using ZnO nanoparticles<br>Ranu K Dutta, **Prashant K. Sharma** and Avinash C Pandey,<br>***Digest J. Nanomat. and Biostructures***, 4, (1), 83-87, **2009**. **(Impact Factor: 2.5)** **Q Rank: 3** |
| **36.** | Doping dependent room-temperature ferromagnetism and structural properties of dilute magnetic semiconductor ZnO:$Cu^{2+}$ nanorods<br>**Prashant K. Sharma**, Ranu K Dutta and Avinash C Pandey,<br>***J. Magn. Magn. Mater,*** 321, 4001, **2009**. **(Impact Factor: 2.7)** **Q Rank: 1**<br>**(5th Most Downloaded article of the year 2009)** |
| **35.** | Relationship between Oxygen Defects and the Photoluminescence Property of ZnO Quantum Dots: A Spectroscopic View<br>**Prashant K. Sharma**, Avinash C Pandey, Grzegorz Zolnierkiewicz, Nikos Guskos and Czeslaw Rudowicz,<br>***J. Appl. Phys.,*** 106, 094314, **2009**. **(Impact Factor: 2.3)** **Q Rank: 1** |
| **34.** | Zinc Oxide (1% Cu) Nanoparticle in Nematic Liquid Crystal: Dielectric and Electro-Optical Studies<br>K K Pandey, **Prashant K. Sharma**, Rajiv Manohar and Avinash C Pandey,<br>***Japanese Journal of Applied Physics***, 48 101501, **2009**. **(Impact Factor: 1.8)** **Q Rank: 1**<br>**(Also Selected for Publication in Virtual Journal of Nanoscale Science and Technology)** |

## D. Peer Reviewed Conference Proceedings having ISBN/ISSN Numbers

| S.N. | BibID / Title / Authors / Citation (Year wise sorted)/ Special note, if any |
|---|---|
| **33.** | Design of CdV2O4-V6O13 micro flowers for non-enzymatic electrochemical detection of urea<br>Suryakanti Debata and **Prashant K. Sharma**<br>***AIP Conf Proc.***, 2115, 030058, **2019**.<br>https://doi.org/10.1063/1.5112897 |
| **32.** | Hydrothermally synthesized reduced graphene oxide/nickel hydroxide (rGO/Ni(OH)2) nanocomposite: A promising material in dye removal<br>Suryakanti Debata, Trupti R. Das, Rashmi Madhuri, and **Prashant K. Sharma**<br>***AIP Conf Proc.***, 1832, 050059, **2017**.<br>http://doi.org/10.1063/1.4980292 |
| **31.** | Electrochemical performance of Ag nanoparticle decorated reduced graphene oxide in determination of anticancer drug flutamide<br>Sanchari Banerjee, Shrabani Mondal, Rashmi Madhuri, and **Prashant K. Sharma**<br>***AIP Conf Proc.***, 1832, 050067 , **2017**.<br>http://doi.org/10.1063/1.4980300 |
| **30.** | Electrocatalytic activity of silver nanoparticles decorated reduced graphene oxide (AgNP@rGO) nanocomposites<br>Trupti R. Das, Rashmi Madhuri, and **Prashant K. Sharma**<br>***AIP Conf Proc.***, 1832, 050015 , **2017**.<br>http://doi.org/10.1063/1.4980248 |
| **29.** | CuO nanostructure modified pencil graphite electrode for non-enzymatic detection of glucose<br>Shrabani Mondal, Rashmi Madhuri, and **Prashant K. Sharma**<br>***AIP Conf Proc.***, 1832, 050011 , **2017**.<br>http://doi.org/10.1063/1.4980244 |
| **28.** | Study of structural, optical and electrical properties of hydrothermally synthesised Cu-doped ZnO nanorods<br>Lakshmi Kumari, Rashmi Madhuri, and **Prashant K. Sharma**<br>***AIP Conf Proc.***, 1832, 050075 , **2017**.<br>http://doi.org/10.1063/1.4980308 |

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| **27.** | Imprinted magnetic graphene oxide for the mini-solid phase extraction of Eu (III) from coal mine area<br>Santanu Patra, Ekta Roy, Rashmi Madhuri, and **Prashant K. Sharma**<br>***AIP Conf Proc.***, 1832, 050009 , **2017**.<br>http://doi.org/10.1063/1.4980242 |
| **26.** | Development of carbon dots modified fluorescent molecular imprinted Polymer@Ag/AgCl nanoparticle for hepatocellular carcinoma marker<br>Paramita Karfa, Rashmi Madhuri, and **Prashant K. Sharma**<br>***AIP Conf Proc.***, 1832, 050008 , **2017**.<br>http://doi.org/10.1063/1.4980241 |
| **25.** | Super paramagnetic iron oxide nanoparticle modified mancozeb imprinted polymer<br>Sunil Kumar, Rashmi Madhuri, and **Prashant K. Sharma**<br>***AIP Conf Proc.***, 1832, 050014 , **2017**.<br>http://doi.org/10.1063/1.4980247 |
| **24.** | Detection of Hg2+ ion using fluorescent carbon dots derived from elephant foot yum via green-chemistry<br>Raksha Choudhary, Rashmi Madhuri, and **Prashant K. Sharma**<br>***AIP Conf Proc.***, 1832, 050010 , **2017**.<br>http://doi.org/10.1063/1.4980243 |
| **23.** | Dual doped graphene oxide for electrochemical sensing of europium ion<br>Sunil Kumar, Santanu Patra, Rashmi Madhuri, and **Prashant K. Sharma**<br>***AIP Conf Proc.***, 1832, 050068 , **2017**.<br>http://doi.org/10.1063/1.4980301 |
| **22.** | Synthesis and characterization of $Eu^{3+}$: $Gd_2O_3$ hollow spheres for biomedical applications,<br>Manisha Kumari and **Prashant K. Sharma**,<br>***AIP Conf Proc.***, 1728, 020215, **2016**.<br>http://dx.doi.org/10.1063/1.4946266 |
| **21.** | Designing of Target-Specific Sites on Nanostructures for the Early Diagnosis of Cancer Biomarker,<br>Rashmi Madhuri and **Prashant K. Sharma**,<br>Proceedings of International Conference on Chemistry: Frontiers & Challenges (ICCFC-13), **2013**, **ISBN 88-9235- 401-9**. |
| **20.** | Cutting Edge Advanced Theragnostics: The Epoch of Nano-biotechnology,<br>**Prashant K. Sharma**,<br>Proceedings of National Conference on "Nanotechnology and Life", **2012**,<br>**ISBN 978-88-8526-901-1**. |
| **19.** | A Review of Nanocomposite Semiconducting Sensing Material<br>Abhijit Kakati and **Prashant K. Sharma**,<br>Proceedings of National Conference on Advances in Lasers and Spectroscopy-ALS, Page No-248-252, **2012**, **ISBN 978-81-8424-806-7.** |
| **18.** | Zinc Oxy-Sulphide Ternary Nanocrystals: An efficient Nanophosphor for Performance Enhancement of Large Area Solar Cells and WLEDs<br>**Prashant K. Sharma** and Avinash C. Pandey,<br>Proceedings of '*4th International conference on Luminescence and Its Applications-ICLA 2012'*,<br>***ISBN 81-6717-806-5***. **2012** |
| **17.** | Superparamagnetic Eurogadofluoroprobes (EGFP) for Medical Imaging and Cancer Theragnostics<br>Ranu K. Dutta, **Prashant K. Sharma** and Avinash C. Pandey,<br>Proceedings of '*4th International conference on Luminescence and Its Applications-ICLA 2012'*,<br>***ISBN 81-6717-806-5***. **2012** |

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| **16.** | Fine encapsulated ZnO nanophosphors and their potential antibacterial evaluation on the gram negative bacillus *Escherichia coli*<br>Ranu K Dutta, **Prashant K. Sharma** and Avinash C Pandey,<br>***AIP Conf Proc.***, 1147, 528, **2009.** doi: 10.1063/1.3183485. |
| **15.** | Effect of Sol-Gel Derived ZnO Nanoparticles on the growth of Escherichia coli Bacteria<br>R. Bhargava, R. K Dutta, **Prashant K. Sharma**, N K Singh, A. C Pandey and Naresh Kumar, Excel India Publishers, ***ISBN 93-80043-61-9***, published in the Proceeding of 2nd National Conference on Nanomaterials and Nanotechnology. **2009** |
| **14.** | Luminescence Studies of PDP Nanophosphors under Vacuum-Ultraviolet Excitation<br>**Prashant K. Sharma** and Avinash C Pandey,<br>Proceedings of National Seminar on Display Phosphors and its Applications. **2009** |
| **13.** | Futuristic Nanoparticles: From Solid State Lightning to MRI Contrast Agents<br>**Prashant K. Sharma** and Avinash C Pandey<br>Proceedings of "2nd National Conference on Nanomaterials & Nanotechnology", published by Excel India Publishers, ***ISBN 93-80043-61-9. 2009*** |
| **12.** | Highly stabilized monodisperse citric acid capped ZnO:$Cu^{2+}$ nanoparticles: Synthesis and characterization<br>**Prashant K. Sharma**, Ranu K. Dutta, M. Kumar, Prashant K. Singh and Avinash C. Pandey<br>Proceedings of the 3th International conference on Luminescence and Its Applications-ICLA **2008**, Macmillan Advanced Research Series *Page Number 135,*<br>ISBN 0230-63468-0, |
| **11.** | Synthesis and characterization of $Cd_{1-x}Zn_xS$ ternary nanocrystals<br>R. Sethi, **Prashant K. Sharma,** L. Kumar and A. C. Pandey,<br>Proceedings of the 14th International Workshop on the Physics of Semiconductor Devices, IWPSD, art. no. 4472553 , pp. 472-474 © **2007** IEEE, 978-1-4244-1728-5/07/$25.00. |

## Articles Under Review / Considerations/Preparation

| | |
|---|---|
| **10.** | Size Dependent Emission Color Tunability in ZnO Quantum Dots<br>**Prashant K. Sharma et.al.,** |
| **9.** | Dopant Concentration Mediated Defects: A Case Study for Activator Dependent Structural and Spectroscopic Properties<br>**Prashant K. Sharma et.al.,** |
| **8.** | Co-relation between doping induced defects and magnetic properties of ZnO:Mn Nanoparticles<br>**Prashant K. Sharma et.al.,** |
| **7.** | Band Gap tunable optical properties of $ZnO_{1-x}S_x$ nanocrystals<br>**Prashant K. Sharma et.al.,** |
| **6.** | Structural Properties and Electron Paramagnetic Resonance Studies of $Cu^{2+}$ Doped ZnO Nanorods<br>**Prashant K. Sharma et.al.,** |
| **5.** | Nanomechanical Imprints in Cancer Diagnostics<br>**Prashant K. Sharma et.al.,** |
| **4.** | Fluorescent properties of $Eu^{3+}$ and $Tb^{3+}$ doped yttrium ortho-borate under VUV excitations<br>**Prashant K. Sharma et.al.,** |
| **3.** | Enhanced luminescent properties of $YBO_3:Eu^{3+}$ nanophosphors co-doped with $Gd^{3+}$ under VUV/UV excitation<br>**Prashant K. Sharma et.al.,** |
| **2.** | Effect of doping concentration and synthesis process on vacuum ultraviolet excited luminescence of blue BAM:$Eu^{2+}$ nanophosphors<br>**Prashant K. Sharma et.al.,** |
| **1.** | Effect of organic surface passivating agents on doped ZnO Nanostructure<br>**Prashant K. Sharma et.al.,** |

## 18. Conferences/Workshops/Seminars contributions in relevant field

1. Attended *ASID 2006* (*9th Asian Symposium on Information Display*, organized by SID & IIT Kanpur) and presented a paper which get published in the proceedings of ASID 2006.
2. Presented a paper at *ICLAN - 2006* (International Conference on Lasers and Nanomaterials, 150 years celebration of Calcutta University) which get published in the proceedings of ICLAN 2006.
3. Participated in One Day International Seminar on *"Liquid Crystals: Synthesis and Characterization"*, 13th December 2006, Department of Physics, University of Allahabad, Allahabad.
4. Participated in Indo-Polish Workshop on *"Liquid Crystals: Synthesis, Characterization and molecular Engineering"*, 12th December 2007, Physics Department, University of Allahabad, Allahabad.
5. Contributed in *"International Workshop on Physics of Semiconducting Devices, IWPSD-2007"*, organized by IIT Mumbai and got published in the proceedings of IEEE.
6. Presented a paper at *ICLA-2008* (*International Conference on Luminescence and Its Application*), jointly organized by National Physical Laboratory (NPL), New Delhi and Luminescence Society of India (LSI) which get published in the proceedings of ICLA- 2008.
7. Presented a paper at *ICONSAT-2008* (*International Conference on Nanoscience and Technology*), organized by IIT- Chennai, Chennai.
8. Presented two papers in an International Conference *"2nd Bangalore Nano 2008"* at the Lalit Ashoka, Bangalore in Nov 2008 organized by JNCASR and IISc Bangalore.
9. Presented two papers in an International Conference *"Cochin Nano 2009"* at the Department of Physics, Cochin University, Cochin in JAN 2009.
10. Presented six papers in the *"International Conference on Transport and Optical Properties of Nanomaterials, ICTOPON 09"*, jointly organized by Department of Physics, University of Allahabad, Allahabad, India and University of Western Ontario, Canada during 5-8 JAN 2009.
11. Contributed to one day *"International Workshop on Surface and Interface Modifications by Energetic Ion Beams"* jointly organized by Nanotechnology Application Centre University of Allahabad, Allahabad and Inter University Accelerator Centre, New Delhi, India on March 18th 2009.
12. Presented paper in *"Meghnad Saha Memorial Symposium on Emerging Trends in Laser Spectroscopy and Applications, MMSETLSA 2009"* organized by University of Allahabad, Allahabad India during 23-25 March 2009.
13. Contributed two papers in *"14th International Conference on X-ray Absorption Fine Structure"* during July 26-31, 2009 at Camerino, Italy.

**14.** Contributed one paper in *"Joint Conferences on Advanced Materials, 6th Workshop on Functional and Nanostructured Materials and 10th Conference on Intermolecular and Magnetic Interactions in Matter"* during 27-30 Sep 2009 at Sulmona-L'Aquila Italy.

**15.** Contributed one paper to *"National Seminar on Display phosphors and its Applications, NSDPA 2009"* during October 22-23 2009 at Bangaluru, India.

**16.** Presented two papers in *"International Conference on Frontiers in Prevention, Diagnosis and Therapy of Cancer"*, during 21-22 Nov 2009 at Motilal Nehru Medical Collage Allahabad India.

**17.** Presented two papers in *"2nd National Conference on Nanomaterials & Nanotechnology"*, during Dec 21-23, 2009 at Physics Department, University of Lucknow, India.

**18.** Contributed to one day International Seminar on *"Synergy of Nanomaterials for Newcomer Technology"* organized by Nanotechnology Application Centre, University of Allahabad, Allahabad on 24th Dec 2009.

**19.** Presented three papers in *"CONIAPS XI 11th Conference of the International Academy of Physical Sciences"*, having focal theme: Convergence in Science and Technology during February 20 – 22, 2010 at University of Allahabad, Allahabad, India.

**20.** Participated in two day national seminar on *"Physics Education Research and Development of e-Learning Modules"*, during Feb 24-26, 2010, University of Allahabad, Allahabad.

**21.** Presented/contributed 5 papers (1Oral) and (4 Posters) in *"4th International Conference INDIAS 2010",* during Sep 19th -21st 2010 at Nanotechnology Application Centre, University of Allahabad, Allahabad.

**22.** Contributed to *"International Conference on Radiation Environment and Health"* during 20-21 Nov 2010 organized by Nehru Gram Bharti University, Allahabad.

**23.** Presented/contributed 3 papers in *"3rd Bangalore Nano 2010: Conference, Partnering & Exhibition"* during 8th-09th Dec 2010 at the Lalit Ashoka, Bangalore organized by JNCASR and IISc Bangalore.

**24.** Presented/contributed 4 papers (1Oral) and (3 Posters) in *"National Symposium on Nanomaterials in Engineering and Technology"*, during Feb 19th -20th 2011 at HMFA Memorial Institute of Engineering & Technology, Handia, Allahabad.

**25.** Contributed to *"International Conference on Nanostructuring by Ion Beams"* during 17-19 Oct 2011 jointly organized by Inter University Accelerator Centre (IUAC) and Nanotechnology Application Centre, University of Allahabad, Allahabad.

**26.** Presented two papers in *"2nd International Conference on Frontiers in Prevention, Diagnosis and Therapy of Cancer"*, during 4th- 7th Jan 2012 at Motilal Nehru Medical Collage Allahabad India.

**27.** Presented 1 oral talk and two posters in *"4th International conference on Luminescence and Its Applications-ICLA 2012",* during 7-10 Feb 2012, Hyderabad India.

**28.** Given one Invited Talk in *"National Conference on "Nanotechnology and Life",* during Sep 12-14, 2012, University of Allahabad, Allahabad.

**29.** Contributed to *"National Conference on Advances in Lasers and Spectroscopy-ALS",* during Nov 1-3, 2012, Indian School of Mines (ISM), Dhanbad.

**30.** Presented one talk in *"International Conference on Chemistry: Frontiers & Challenges (ICCFC-13)"* during March 2-3, 2013, Aligarh Muslim University, Aligarh.

**31.** Given an Invited talk in *"International Workshop on Materials Modeling and Simulation"*, during June 24-27, 2013, at Department of Applied Physics, Faculty of Engineering & Technology, Shri Shankaracharya Group of Institutions, Bhilai, India

**32.** Presented three papers in *"International Conference on Structural and Physical Properties of Solids"* having focal theme 'Smart Materials at Nano and Micro Scale' during November 18-20, 2013 at Indian School of Mines, Dhanbad 826004, India.

**33.** Presented Two Papers/talk in *"3rd International Conference on Advanced Nanomaterials and Nanotechnology"* at IIT Guwahati, 2014.

**34.** Presented one papers/talk in *"Current Trends in Advanced Materials (CTMat-2014)"* 19th - 21th Nov, 2014 VECC, Kolkata

**35.** Presented Two papers/talk in *"XXXIII Annual conference of Indian Council of Chemists (ICC)"*, 2014 at ISM, Dhanbad

**36.** Presented Two Papers/talk *in "International Conference on Multifunctional Materials, Structures and Applications (ICMMSA 2014)"*, 22-24 December 2014 MNNIT, Allahabad

**37.** Presented Two Papers/talk in *"2nd International conference on nanostructured materials and nanocomposites (ICNM 2014)"* Mahatma Gandhi University, Kottayam, Kerala.

**38.** Contributed three papers in *"Condensed Matter Days- 2015"*, August 27-29, 2015, Visva-Bharati, Santiniketan, Bolpur, W.B.

**39.** Contributed three papers in *"International conference on nanomaterials and nanotechnology, NANO-15"*, December 7- 10, 2015, K. S. Rangasamy College of Technology, Tiruchengode, Tamilnadu.

**40.** Contributed three papers in *"Second International on Advanced Materials for Power Engineering, ICAMPE-15"*, December 11-13, 2015, Mahatma Gandhi University, Kottayam, Kerala.

**41.** Contributed One Paper in *"International Conference on Condensed Matter and Applied Physics, ICC-15"*, 30th – 31st Oct. 2015, Govt. Engineering College, Bikaner, (Rajasthan).

**42.** Contributed Five papers in *"International conference on multifunctional materials for future applications (ICMFA-2015)"*, 27-29 October, 2015, Indian Institute of Technology – Banaras Hindu University, Varanasi.

**43.** 3rd International E-Workshop/Conference on "*Computational Condensed Matter Physics and Materials Science*" IWCCMP-2015, ABV-IIITM, Gwalior, 18-22 Oct. 2015

**44.** Chaired a session and given invited talk at a Workshop on *Recent Trends in Biomaterials, Biodiagnostics, Tissue Engineering, Drug Delivery and Regenerative Medicines*. Organized by Department of Biomedical Engineering, IIT Delhi, 14-17 April, 2016, IIT Delhi

**45.** Contributed 6 papers in *61st DAE Solid State Physics Symposium-2016*. KITT University BBSR, 26-30 December, 2016, Bhubaneswar, Orissa.

**46.** Chaired a Session in *23rd National Conference on Liquid Crystals*, 07-09 December, 2016, IIT(ISM) Dhanbad

**47.** Contributed 2 papers in *6th Interdisciplinary symposium on material chemistry* at Bhaba Atomic Research Centre Mumbai, 06-10 December, 2016, BARC Mumbai.

**48.** AICTE Sponsored Short Term Course On *"Geometrical & Mathematical Crystallography with Applications to Structural studies"* School of Materials Science & Technology, Indian Institute of Technology (BHU), Varanasi, India during February 14 - 19, 2017

**49.** Invited talk at *International Conference on Nanomaterials and Nanotechnology* held during 1-3 March 2017 at University of Allahabad, Allahabad, India.

**50.** *1st annual workshop on catalysis* at IIT(ISM) Dhanbad organized by Department of Applied chemistry, 06-09 March, 2017, IIT(ISM) Dhanbad.

**51.** 4th *International Symposium on Semiconductor Materials and Devices*. Jadavpur University, 08-10 March, 2017, Jadavpur, Kolkata.

**52.** Contributed 4 papers in *4th International Conference on Nanoscience and Nanotechnology (ICONN 2017)*, SRM University, Chennai during 9-11 Aug 2017.

**53.** Contributed 2 papers in *I2CAM School on Clean and Renewable Energy Technologies via Chemical Route*, JNCASR, Bangalore during 22/11/2017-2/12/2017.

**54.** Contributed 5 papers in *National Conference on Advances in Spectroscopic Techniques and Materials (ASTM-2018)*, IIT(ISM) Dhanbad during 14-16 March 2018.

**55.** Contributed 2 papers in *4th India International Science Festival* during 5-8 Oct 2018 at Lucknow.

**56.** Contributed a paper in *63rd DAE Solid State Physics Symposium*, December 18-22, 2018 at Guru Jambheshwar University of Science and Technology, Hisar, Haryana

**57.** Contributed 4 papers in *5th International Conference on Nanoscience and Nanotechnology (ICONN 2019)*, SRM Institute of Science and Technology, Chennai during 28-30 Jan 2019.

## 19. School/Workshops Attended in Relevant Field

1. Participated in School on "X-ray techniques in Material Science" at IUAC, New Delhi, India, (2006).
2. Participated in School on "Science and Application of Luminescent Materials SALM – 2008", jointly organized by National Physical Laboratory (NPL), New Delhi and Luminescence Society of India (LSI).
3. Worked as resource person in three day "Winter School on Nanoscience (Research Training and Exposure)" during 24-26 Jan 2010, organized by Nanotechnology Application Centre, University of Allahabad, Allahabad 211002.
4. Worked as resource person and delivered 3 lectures in two day workshop on "Characterization Techniques in Nanotechnology" during Feb 12-13 2011, organized by National Academy of Sciences, India, Allahabad Chapter.
5. "2nd Continuing Education and Quality Improvement Programme (CE & QIP) on Magnetic Resonance Imaging" at Indian Institute of Technology Bombay, Mumbai, India, (2011).
6. Participated and delivered an Invited Talk in *"International Workshop on Materials Modeling and Simulation"*, during June 24-27, 2013, at Department of Applied Physics, Faculty of Engineering & Technology, Shri Shankaracharya Group of Institutions, Bhilai, India.
7. Participated in *"International Workshop on Introduction to Gaussian: Theory and Practice"*, during Jan 6-10, 2014, at New Delhi, India.
8. 3rd International E-Workshop/Conference on "*Computational Condensed Matter Physics and Materials Science*" IWCCMP-2015, ABV-IIITM, Gwalior, 18-22 Oct. 2015
9. *1st annual workshop on catalysis* at IIT(ISM) Dhanbad organized by Department of Applied chemistry, 06-09 March, 2017, IIT(ISM) Dhanbad.
10. *4th International Symposium on Semiconductor Materials and Devices*. Jadavpur University, 08-10 March, 2017, Jadavpur, Kolkata.
11. *I2CAM School on Clean and Renewable Energy Technologies via Chemical Route*, JNCASR, Bangalore during 22/11/2017-2/12/2017.

## 20. Reviewer

Worked as reviewer of various peer reviewed international journals viz.

- Nature: Nature Nanomaterials, Scientific Reports.
- *Wiley:* Advanced Functional Materials, Journal of Raman Spectroscopy,
- *ACS:* Langmuir, Applied Materials and Interfaces, Journal of Physical Chemistry A/B/C,
- *Springer:* Journal of Nanoparticle Research, Nanoscale Research Letters,
- *AIP:* Applied Physics Letters, Journal of Applied Physics,
- *Science Direct:* Journal of Colloid and Interface Science,
- *Science Direct:* Journal of Chemical Engineering and Materials Science,
- *Science Direct:* Materials Letter, Materials Science and Engineering B,
- *Science Direct:* Journal of Alloys and Compounds, Journal of Magnetism and Magnetic Materials,
- *Science Direct:* Materials Chemistry and Physics,
- *RSC:* Nanoscale, Crystal Engineering and Communications, Journal of Materials Chemistry, etc.

## 21. Visits of National Laboratory

- Visited IACS, CGCRI and Thin Film and Nanoscience Lab, Jadhavpur University, Kolkata.
- Thin film Laboratory IIT Delhi several times.
- HRTEM and SEM lab at IIT Delhi several times.
- Nanoscience and technology Lab IIT BHU.
- SQUID and VSM facilities at IIT Delhi.
- Luminescent Material Division, National Physical Laboratory, New Delhi.
- PDP Production Division, SAMTEL color Lab, Gaziabad.
- HRTEM Lab at National Physical Laboratory, New Delhi.
- VSM and Mossbauer LAB at IIT Kanpur.
- XPS and PLD facilities at UGC-DAE Consortium of Scientific Research, Indore India.
- Worked at beam-line for photoelectron spectroscopy on Indus-1 at Raja Ramanna Centre for Advanced Technology, Indore.

## 22. Executive Editor and Editorial Board Member

a. Associate Editor for Nanotechnology and Nanoscience, Publisher: Bioinfo Publications, ISSN : 0976-7630 (Print), E-ISSN: 0976-7649 (Online), Impact Factor: 4.61 http://bioinfopublication.org/journal.php?opt=azjou&jouid=BPJ0000289&detail=editorial,
b. International Journal of Metals, Hindawi Publishing Corporation (http://www.hindawi.com/journals/ijmet/editors/).
c. Journal of Nanotechnology in Diagnosis and Treatment, (http://savvysciencepublisher.com/editorial-board-member-jndt/).
d. International Journal of Nanotechnology and Application (IJNA); ISSN (Print): 2277-4777; ISSN (Online): 2278-9391; Impact Factor (JCC): 1.7629), http://tjprc.org/journals.php?year=2013&jtype=2&id=6&details=editors IF 1.78
e. Worked as Guest Managing Editor for an international journal “Adv Mat Letts”. (http://amlett.com/index.php?vol=2&iss=4&issDate=October)
f. Associate Editor, International Journal of NanoScience and Nanotechnology (IJNN) http://www.ripublication.com/irph/editorial_board_of_ijnn.htm
g. Executive Editor: http://jml2012.indexcopernicus.com/Nanotechnology+and+Nanoscience,p1043,3.html

## 23. Details of Professional Recognitions, Awards, and Fellowships Received

i. **DST-Fast Track Young Scientist (PHYSICAL SCIENCE),** Department of Science and Technology, Government of India on the topic, "Development of Hybrid Polymer - Nanoparticle Based White Light Emitting Diodes (WLEDs)", 2013.

ii. **Best Poster** Prize in SPPS 2013 (won by Ph.D. student Ms. Shrabani Mondal).

iii. **Best Poster** Prize in FPDTC 2012.

iv. **YOUNG SCIENTIST AWARD (PHYSICS)** for my presentation at CONIAPS-XI during February 20-22, 2010 organized by International Academy of Physical Sciences, INDIA.

v. **Best Poster** Prize in ICTOPON 2009.

vi. **Best Poster** Prize in FPDTC 2009.Frontiers in Prev

vii. **Best Poster** Prize in ICLAN 2006.

viii. **GB Deodhar Gold Medal** for securing highest marks in **M.Sc. Physics (X-Rays)** Examinations, 2006, Department of Physics, University of Allahabad, Prayagraj 211002, India.

ix. Awarded '***National Scholarship***' in the Year 1999.

x. Enlisted in ***Who's Who in Science and Engineering***, 12th Edition (2012-2013), world's premier data source of notable individuals from every significant field of science and engineering.

**References:**

- **Prof. Avinash Chandra Pandey (Ph.D. Supervisor)**,
  ***Director, Inter University Accelerator Centre, New Delhi, India***
  ***(Former Vice Chancellor, Bundelkhand University, Jhansi, India.)***
  Coordinator & Head, Principal Investigator,
  Nanotechnology Application Centre, University of Allahabad,
  Allahabad 211002, India.
- **Prof. Ravindra Pandey,** Professor and Chair, Department of Physics, Michigan Technological University, Houghton, MI 49931, USA.
- **Prof. Rajiv Prakash**, Professor & Dean (R&D),
  School of Materials Science and Technology,
  Indian Institute of Technology (BHU) Varanasi, India.
- **Prof. Parameswar K. Iyer,** Dean and Professor,
  Centre for Nanotechnology, Indian Institute of Technology Guwahati, Guwahati-781039, Assam, India.

**Declaration:** I hereby declare that the above information's are correct to the best of my knowledge.

**(Dr. Prashant Kumar Sharma)**