

Curriculum vitae

Dr. PRAMOD KUMAR



Personal Details

Address: Assistant Professor, Department of Chemistry & Chemical Science,
School of Physical & Material Sciences, Central University of
Himachal Pradesh (CUHP), Shahpur campus, Kangra, H.P, India,
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Google Scholar: [Qqd9F4oAAAAJ](https://scholar.google.com/citations?user=Qqd9F4oAAAAJ)

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Vidwan Infilbnet: <https://vidwan.infilbnet.ac.in/myprofile>

Research ID: [ACU-9392-2022](https://orcid.org/0000-0003-0859-8740)

Professional Qualifications

M.Sc., Ph.D., GATE, NET

2015 Ph.D. Thesis entitled ***“Synthesis of core and core-shell inorganic nanoparticles for application in drug delivery”*** Department of Chemistry, University of Delhi, Delhi (India)-110007.

Specialization/Research interest

His current research topic includes Nanomedicine specializing in the use of inorganic-based and gold nanoparticles for applications in targeted drug delivery, non-viral gene delivery, photodynamic therapy (PDT), photothermal therapy (PTT), and in-vitro diagnostics, and multimodal diagnostic imaging. Current research interests are hybrid nanoparticles, Hydrogel nanoparticles, and Quantum dots for triggered drugs, bioimaging/biosensors, and gene delivery for the treatment of cancer, respiratory and neurological diseases. Along with this new fields like waste water treatment and tea extraction has been explored.

Employment History

Dr. Pramod Kumar is currently working as **Assistant Professor**, at the Department of Chemistry and Chemical Sciences, School of Physical & Material Sciences, Central University of Himachal Pradesh, Dharamshala (H.P) from **15.01.2020**

Worked as **Assistant Professor**, Department of Chemistry, **Ramjas College** (University of Delhi) from date **15.10.2014 to 14.01.2020**

Personal Distinctions

Graduate aptitude test for engineers (**GATE**) in Chemistry

National eligibility examination (**NET**) in Chemical Sciences

Professional Contributions

Scientific Recognitions:

Life Time membership of Himalayan Life Sciences Society, CUHP, 2021

Reviewer of reputed Journals:

1. International Journal of Pharmacy and Pharmaceutical Sciences.
2. International Journal of Nanomedicine.
3. European Journal of Pharmaceutics and Biopharmaceutics.
4. Journal Polymer and Environment.
5. Fibres and Polymers.
6. Materials Technology: Advanced Performance Materials

Teaching

1. Nano Materials and Composites.
2. Quantum Mechanics, Atomic structure and Spectroscopy.
3. Chemical Kinetics and Reaction Dynamics-1& 2.
4. Group Theory, Photochemistry, Electrochemistry.
5. Principles Instrumentation of NMR/ESR/ Mössbauer and Nuclear Quadrupole Resonance Spectroscopy.

Doctoral Thesis Supervision

Four (04) Ph.D. Students currently working

1. Ms. Purnima Justa, "***Preparation and characterization of core and core shell inorganic nanomaterials and their biological applications***".

2. Ms. Nancy Jaswal “**Synthesis of Hybrid nanomaterials for environmental and biomedical applications**”
3. Mr. Sumit Thakur
4. Ms. Priyanka

M.Sc. Research Projects/ Dissertation Supervised (Total 36 Nos),

Supervision of M.Sc. dissertations (5/6 months) (2018-2020, 2019-2021, 2020-2022, 2021-2023, 2022-2024, 2023-2025 batch) at Central University of Himachal Pradesh

University Administration

1. **M.Sc. Chemistry** Projects Coordinator (CUHP)
2. Department **IQAC coordinator** (NAAC CUHP)
3. **Member: (BMPC)** Building Maintenance and Purchase Committee (2019-2020), Ramjas College, University of Delhi.
4. **Member: (ECA)** Extra Curriculum Activity Committee (2019-2020), Ramjas College, University of Delhi.

Research Projects and Income

Year	Source of funds	Project title	Amount
2020-2022	DST-SERB	Microemulsion Mediated Multifunction Iron-Oxide/Ormosil Nanoparticles for Bioimaging and Drug Delivery	21.15520 Lakhs

Publications

1. Multifunctional RE-MOFs in water decontamination: From detection to degradation. Priyanka, Ambika Kumar, Vijay Bahadur, **Pramod Kumar***, Inorganic Chemistry Communications, **2025**, 115280.
2. Fabrication and *In vitro* Evaluation of Dox@FeSe Nanorods for Independent Photothermal and Chemotherapeutic Effects Toward Theranostic Cancer Treatment. Purnima Justa, Nancy Jaswal, Devendra Kumar Gangwar, Dimple Kumari, **Pramod Kumar***, Next Research, **2025**, 100695.
3. Synthesis, characterization of pine chir based biochar nanocomposites and their application in heavy metal ion detection. Manisha Shukla, Nitin Srivastava,* Abhishek Srivastava, Shivi Singh, Hemant Kumar, **Pramod Kumar***, Next Materials, **2025**,

1008052.

4. Valorizing Saccharum officinarum and plastic waste biochar with Zn-Al LDH for Congo Red dye removal: kinetics and isotherms insights. Nancy Jaswal, Amit Kumar Sharma, Vijay Bahadur, **Pramod Kumar*** Inorganic Chemistry Communications, **2025**, 114654.
5. Functionalising Pinus roxburghii Biochar with Mg-Fe-LDH for Effective Organic Pollutant Mitigation in Wastewater. Nancy Jaswal, Nipjyoti Sarma, Purnima Justa, Amit Kumar Sharma, Pragati Kumar, **Pramod Kumar*** Catalysis Letters, **2025**, 155 (1), 20
6. Integration of cadmium sulfide quantum dots with calcium alginate microbeads for dual-functional mercury (II) ion sensing and removal. Ambika Kumar, Nancy Jaswal, RK Dutta, **Pramod Kumar***, Journal of Environmental Chemical Engineering, **2024**, 12 (6), 114458
7. Harnessing biomass derived carbon material with heteroatoms for sensitive and selective detection of mercury (II) ions in waste water. Nancy Jaswal, Vishal Bharti Jaryal, Raghubir Singh, **Pramod Kumar**, Neeraj Gupta, Microchemical Journal, **2024**, 207, 111767
8. Iron Sulfide Nanoparticles: Synthesis, Characterization, and Molecular Docking Studies of Its Interaction with Bovine Serum Albumin and Human Serum Albumin. Purnima Justa, Nancy Jaswal, Amit Kumar Sharma, Adesh Kumar, Hemant Kumar, Balaram Pani, Pragati Kumar, Ambika Kumar, **Pramod Kumar***, BioNanoScience, **2024**, 14, 1362-1369.
9. Peroxidase Like Activity of Prussian Blue Nanoparticles and Visible Light Mediated Catalytic Degradation of Methylene Blue Dye. Jitender Kumar, Purnima Justa, Nancy Jaswal, Hemant Kumar, Balaram Pani, **Pramod Kumar**, ChemicalPhysicsImpact, **2024**,8,100575.
10. In-vitro and Bioimaging Studies of Mesoporous Silica Nanocomposites Encapsulated Iron-Oxide and Loaded Doxorubicin Drug (DOX/IO@Silica) as Magnetically Guided Drug Delivery System. Hemant Kumar, Jitender; Balaram Pani, **Pramod Kumar***, **Current Pharmaceutical Biotechnology, Bentham Science**, **2023**, 24(15), 2046-2069.
11. Structural, Optical and Magnetic properties of PMMA-Magnetite (Fe₃O₄) Composites: Role of magneto-conducting filler particles. Uma Shankar, Amit Kumar, Sujeet Kumar Chaurasia, **Pramod Kumar**, F. A. Latif, M.Z.A. Yahya, **Journal of Electronic Materials**, **2023**.
12. Impact of ionic liquid incorporation on ionic transport and dielectric properties of PEO-lithium salt-based quasi-solid-state electrolytes: role of ion-pairing. Sujeet Kumar

Chaurasia, Manish Pratap Singh, Manoj K. Singh, **Pramod Kumar**, and A. L. Saroj. **Journal of Materials Science: Materials in Electronics**, 2022, 33, 1641–1656.

13. Multifunction Folic acid-coated Mesoporous Silica and Doxorubicin Encapsulated Nanocomposites (FA/DOX@Silica) for Superior Active Targeting Cancer Therapeutics, Bioimaging, and in vitro Studies. Hemant Kumar, Jitender Kumar, and Balaram Pani and **Pramod Kumar*** **ChemistrySelect**, 2022, 7 (44), e202203113.
14. Microemulsion mediated multifunction of Doxorubicin Encapsulated Core-Shell Iron Oxide/Ormosil Nanoparticles as efficient Magnetically-guided Delivery, bioimaging, and *In-vitro* studies. Hemant Kumar, Shrish Agnihotri, Indrajit Roy, Balaram Pani, **Pramod Kumar***. **Advanced Science, Engineering and Medicine**. 2020,12(5), 2164-6627.
15. Mono dispersible water-soluble iron sulfide nanoclusters: Synthesis, Characterization, and Catalytic Application for highly efficient synthesis of Xanthene derivatives. Kumar Karitkey Yadav, Hemant Kumar, Balaram Pani, Indrajit Roy, **Pramod Kumar***, **Advanced Science, Engineering and Medicine**, 2020, 2164-6627.
16. Preparation and Characterization of Superparamagnetic Iron-Oxide Nanoparticles for Magnetically Guided Drug Delivery. **Pramod Kumar**, Shrish Agnihotri, and Indrajit Roy*, **International Journal of Nanomedicine**, 2017, 1178-2013.
17. Synthesis of Visible light responsive Nickel Phthalocyanine encapsulated Ormosil nanoparticles for efficient Photodynamic and Photothermal therapy. Shrish Agnihotri, Kumar Kartikey Yadav, Indrajit Roy and **Pramod Kumar***, **Advanced Science, Engineering and Medicine** 2018, 2164-6627.
18. Preparation and Characterization of Photosensitizer conjugated Superparamagnetic Iron-Oxide Nanoparticles for their potential application in light-activated therapy. **Pramod Kumar***, Shrish Agnihotri, and Indrajit Roy. **Journal of Nanomedicine and Nanotechnology** 2016, 2157-7439.
19. Preparation and Characterization of Gold Nanospheres and Nanorods, with Potential Application in Catalysis. **Pramod Kumar*** and Indrajit Roy. **Advanced Science, Engineering and Medicine**, 2016, 2164-6627.
20. Synthesis of Dox drug conjugation and citric acid stabilized superparamagnetic iron oxide nanoparticles for drug delivery. **Pramod Kumar***, Shrish Agnihotri, and Indrajit Roy. **Biochemistry & Physiology**, 2016, 2168-9652.
21. Optically and magnetically doped ormosil nanoparticles for bioimaging: synthesis, characterization, and in vitro studies. **Pramod Kumar**, Anuradha, Indrajit Roy*. **RSC Advances** 2014, -2069.

22. Ormosil nanoparticles as a sustained-release drug delivery vehicle. Indrajit Roy*, **Pramod Kumar**, Rajiv Kumar, Tymish Y. Ohulchanskyy, Ken-Ty Yong, and Paras N Prasad. **RSC Advances** **2014**, 2046-2069.

Books:

1. **Editors:** **Arbind Prasad and Pramod Kumar** **Book Titled** "Nanomanufacturing Techniques in Sustainable Healthcare Applications. CRC Press Taylor & Francis Group. **2024**.
2. **Editors:** **Pragati Kumar, Nupur Saxena, Pramod Kumar, and Sundar Singh** **Book Titled** "New Generation Advanced Materials for Regenerative Development. CRC Press Taylor & Francis Group. **2025**.
3. **Editors:** **Arbind Prasad and Pramod Kumar** **Book Titled** "Industrial Wastewater Management: Sustainability, Eco-Innovations and Green Technologies" CRC Press Taylor & Francis Group. **2025**.

Book Chapters:

1. Ridhima Juneja, Anuradha, **Pramod Kumar**, Indrajit Roy*. "Translational Research in New Drug Development Book, Nanomedicine: New Frontiers in diagnosis and therapy of diseases". 19 Chapters, **2012**, 341-366.
2. Purnima Justa Hemant Kumar Sujeet Kumar Chaurasia, Adesh Kumar, Balaram Pani **Pramod Kumar***. "Biodegradable Composites for packaging applications" Topic: "Bio-based materials for food packaging applications" CRC Press Taylor & Francis Group. **2022**.
3. Nancy Jaswal, Purnima Justa, Hemant Kumar, Deepshikha, Deepshikha, Krishna Devi, Balaram Pani and **Pramod Kumar***. "Iron Ores and Iron Oxide" Topic "Biomedical Applications of Superparamagnetic Iron Oxide Nanoparticles (SPIONS) As a Theranostic Agent" Intech Open -**2023**.
4. Hemant Kumar, Purnima Justa, Nancy Jaswal, Balaram Pani and **Pramod Kumar*** "Advanced Materials and Manufacturing Techniques for Biomedical Applications" **Topic** "Biomimetic and Bioinspired Composite Processing for Biomedical Applications" Wiley **2023**
5. Siddharth Mohan Bhasney, Shubhranshu, Ranjan Das, Arbind Prasad, **Pramod Kumar**, and Bidyanand Mahto "Nanomanufacturing Techniques in Sustainable Healthcare Applications" **Topic** "Introduction to Bio-based Polymers and Their Advancements" CRC Press Taylor & Francis Group. **2024**.

6. Purnima Justa, Nancy Jaswal, Vijay Bahadur, Manoj K. Singh, Devendra Kumar Gangwar, Mohan Bhushan Kalhans, and **Pramod Kumar** "Nanomanufacturing Techniques in Sustainable Healthcare Applications" **Topic** "Bio-based Nanocomposites for Imaging, Tissue Repairing, and Drug Delivery Applications" CRC Press Taylor & Francis Group. **2024.**
7. Jitender Kumar, Hemant Kumar, Rajesh Kumar and **Pramod Kumar** "Nanomanufacturing Techniques in Sustainable Healthcare Applications" **Topic** "Nanocomposites in Cytotoxicity and Targeted Drug Delivery Applications" CRC Press Taylor & Francis Group. **2024.**
8. Nancy Jaswal, Vijay Bahadur, Ali Raza, Arbind Prasad and **Pramod Kumar** "Nanomanufacturing Techniques in Sustainable Healthcare Applications" **Topic** "Future Trends of Nanocomposites in 3D Bioimplants and Fluorescent Bioimaging" CRC Press Taylor & Francis Group. **2024.**
9. Nancy Jaswal, Purnima Justa, Hemant Kumar, Sujeet Kumar Chaurasia, Adesh Kumar, Balamani Pani, and **Pramod Kumar*** "Bioabsorbable Polymers for Drug Carriers and Fixation Devices" **Topic** "Bioactivity and Biocompatibility of Chitosan-Based Biocomposites" Apple Academic Press Taylor & Francis Group. **2025.**
10. Hemant Kumar, Purnima Justa, Nancy Jaswal, Reenu Gangwar, Sundar Singh, Balamani Pani, and **Pramod Kumar*** "Bioabsorbable Polymers for Drug Carriers and Fixation Devices" **Topic** "Biocomposites in Craniofacial Fixations and Applications in Maxillofacial Fixations" Apple Academic Press Taylor & Francis Group. **2025.**

Other Refereed Contributions: letters, reviews, editorials, notes, and commentaries

1. ORMOSIL: advanced catalytic application in organic synthesis, Nancy Jaswal, Aman, Vijay Bahadur, **Pramod Kumar***., Journal of the Iranian Chemical Society, 2025, 22, 931-953.
2. Exploring regional influences on bioactive components in tea leaves and their effect on sensory quality. Sumit Thakur, **Pramod Kumar***., Neeraj Gupta, **Journal of Food Composition and Analysis**, 2025, 144, 107683.
3. Properties and Applications of Ormosil for Biosensing. Purnima Justa, Nancy Jaswal, Deeksha Rana, Hemant Kumar, Neha Yadav, Vijay Bahadur, **Pramod Kumar***.. **Silicon**, 2025, 17(5), 1-27.
4. Perylene Bisimides–Advanced Synthesis and Photoelectric Applications. Vijay Bahadur, Neha Yadav, Murthy Chavali, **Pramod Kumar**, Brajendra Kumar Sing. **Dyes and Pigments**, 2024, 12, 112389.
5. Synthesis and surface modification of biocompatible mesoporous silica nanoparticles (MSNs) and its biomedical applications: a review. Hemant Kumar,

Shwetank Pandey, Balaram Pani* and **Pramod Kumar***. **Research Journal of Chemistry and Environment**, 2023, 27(2), 0250–4707

6. Contributed as Members of Editorial Board of Journal in the **Journal of Nanomedicine, Nanotechnology and Nanomaterials**, 2023
7. Synthesis and Characterization of Biogenic Iron Sulfide Nanoparticles in Cancer and Other Biomedical Applications: A Review. Hemant Kumar, Tarun Mohan, Balaram Pani, and **Pramod Kumar***. **Acta Scientific CANCER BIOLOGY**, 2022.
8. *Strategic Developments towards Improved Photovoltaic Performance in Quantum Dots Sensitized Solar Cells: A Review*. Sundar Singh; Zishan H. Khan; **Pramod Kumar**, Pragati Kumar. **Bulletin of Materials Science, Springer**, 2022, 0250–4707.
9. *Recent Designed Simple Synthesis Approaches, Surface Modification Superparamagnetic Iron Oxide Nanoparticles and Biologically Inspired Biocompatible Nanoparticles for Biomedical Applications: A Review* Hemant Kumar, Jitender Kumar, Balaram Pani and **Pramod Kumar***. **Research Journal of Chemistry and Environment**, 2022, 26(9), 0250–4707.
10. *Applications of gold nanoparticles in clinical medicine*. **Pramod Kumar*** and Indrajit Roy, **International Journal of Pharmacy and Pharmaceutical Sciences**, 2016, 0975–1491.

Refereed Conference and Proceedings Publications

1. Co-surfactant modulates nanoparticle dimensions synthesized in normal micro-emulsion. Purnima Justa, Nancy Jaswal, Hemant Kumar, Sujeet Kumar Chaurasia, Balaram Pani, **Pramod Kumar*** (Springer Nature, **Recent Advances in Nanotechnology: Proceedings of ICNOC 2022**)
2. Structural, Optical and Magnetic properties of PMMA-Magnetite (Fe₃O₄) Composites: Role of magneto-conducting filler particles **Uma Shankar, Amit Kumar, Sujeet Kumar Chaurasia, Pramod Kumar, Famiza Abdul Latif, M.Z.A. Yahya, *Journal of Electronic Materials* (2022 ICOE)**
3. Advances in Functional Materials proceedings” Topic: **Investigation on Raman spectroscopic and ionic conductivity of ionic liquid immobilized PEO based quasi-solid electrolyte membranes**. Sujeet Chaurasia, **Pramod Kumar**, Abhishek Gupta, Sarvesh Kumar Gupta. Springer Nature, 2022.
4. **Ormosil–Iron oxide nanocomposites for magnetically targeted drug delivery**. Indo-Portuguese Workshop on Emerging Trends of Nanotechnology in Chemistry

and Biology (INCB-2016), Tarun Mohan, **Pramod Kumar**, Indrajit Roy*. (J. Mat. NanoSci. **2016**, 3(1)), S1-S23 S3,2394–0867.

5. **Preparation and characterization of gold nanostructures with potential application in catalysis** Indo-Portuguese Workshop on Emerging Trends of Nanotechnology in Chemistry and Biology (INCB-2016), Tarun Mohan, **Pramod Kumar**, Indrajit Roy*. (J. Mat. NanoSci. **2016**, 3 (1), S1-S23 S9 2394–0867



Cited by:

	All	Since 2020
<u>Citations</u>	342	266
<u>h-index</u>	9	9
<u>i10-index</u>	9	8

Refresher/Orientation & Faculty Development Programme

1. Certificate of Participated, **“Refresher Course on Chemistry”** (on **“Centre for Professional Development in Higher Education (CPDHE)”**, UGC-Human Resource Development Centre, University of Delhi” 27 Oct-10 Nov. 2020, [Organized by: Centre for Professional Development in Higher Education (CPDHE), UGC-Human Resource Development Centre, University of Delhi]
2. Certificate of Participation in two-week online **refresher course** on **“The Quintessential Educator-Challenges and Opportunities in the Changing World”**, from 23 Aug to 06 Sept 2021, at University of Delhi [Organized by: Atma Ram Sanatan Dharma College in collaboration with Teaching Learning Centre, Ramanujan College, University of Delhi]
3. Certificate of Participation, **Faculty Development Programme 2017** on **“From Chemistry of Life to Chemistry of Diseases: Understanding Clinical Biochemistry”** 15-22 June 2017, [Organized by: Department of Chemistry, Daulat Ram College, University of Delhi]
4. Certificate of Participated, Faculty Development Programme on, National Webinar on **“ICT Enabled Higher Education in India: Challenges and Opportunities”**

Sponsored by the Ministry of Human Development, Government of India” 17 April-2020, [Organized by: Guru Angad Dev Teaching Learning Center SGTB Khalsa College (DU), Under PMMMNMTT]

5. Certificate of Participated, Faculty Development Programme on Topic “**Quantum and Energy Materials: Potential & Applications**” Sponsored by ministry of Human Development, Government of India” 20 April-24 April 2020, [Organized by: Applied Science Department, NITTTR, Chandigarh]
6. Certificate of Participated, Faculty Development Programme on Topic “**Spectroscopic and analytical techniques: Application**” Sponsored by ministry of Human Development, Government of India” 25-29 May- 2020, [Organized by: Guru Angad Dev Teaching Learning Center SGTB Khalsa College (DU), Under PMMMNMTT of MHRD and Department of Chemistry, J.C BOSE University of Science & Technology, YMCA, Faridabad.
7. Certificate of Participated, Faculty Development Programme on Topic “**Nanomaterials and Devices**” Sponsored by ministry of Human Development, Government of India” 27 May-01 June 2020, [Organized by: Applied Science Department, NITTTR, Chandigarh]
8. Certificate of Participated, **Faculty Induction/Orientation Programme (FIP-01)** “Sponsored by the ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on **Teacher and Teaching Learning Center**” 04 June-01 July 2020, [Organized by: Teaching Learning Center Ramanujan College, University of Delhi]
9. Certificate of Participation, Faculty Development Programme on “**Chemistry and Biology Interface for Scientific Transformations**”, on 25th July - 30th July 2022 [Organized by: SGT University, Gurugram in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi]

Invited Lectures /Resource Person/Poster Presentation/Oral Presentation

1. Online Lecture delivered on National Webinar “**Environmental issues and their Solution**” Topic: **Toxicity of Nanoparticles on Environment and Future Needs**, 28th Dec 2020 [Organized by Department of Botany through IQAC, Govt. Degree College Jaisinghnagar, Shahdol (M.P.)]
2. Presented an Invited lecture on “**Conservation of Bio-diversity**” on Dec./2021 Department of Botany & Geography, Govt. S.K. College Mauganj, Rewa (M.P) [Organised by: Govt. S.K. College Mauganj, Rewa (M.P)]

3. Online Lecture delivered on National Webinar on ***“Environmental issues and their Solution”** Topic: **Dynamics of Biodiversity and Its Conservation in India: Challenges and Prospects**, 24-25th Dec 2022 [Organized by Department of Botany & Geography, Govt. S.K. College Mauganj, Rewa (M.P.)]
4. Online Lecture delivered on National Webinar on * **Bio-diversity and its conservation** **Topic:** Bio-diversity and its conservation, 28th August 2023 [Organized by Department of Zoology through IQAC, Govt. P.G. College, Amarpatan, Satna (M.P.)]
5. Online lecture on **“Conservation of Bio-diversity”** on 28/Aug/2023 Department of Geography, Govt. PG College Amarpatan Satna (M.P.) [Organised by: Govt. PG College Amarpatan Satna (M.P.)]
6. Lecture delivered on National seminar on **“Sustainable Chemistry-A Step Towards Steady Environment and Technical Terminology”** Topic is *Reducing Chemical Waste: Techniques and Technologies for a Green Future*, “22th - 23th November 2024 [Organized by Department of Chemistry through IQAC, Ramjas College, University of Delhi (D.U)]
7. Participated as a Resource Person, National Workshop on **“Workshop on Recent Advances in Chemistry”**, 12 March 2015, Department of Chemistry, Ramjas College, University of Delhi. [Organized by: Chemistry Society, Ramjas College, University of Delhi].
8. Participated as a Resource Person, National Workshop on **“Chemistry in Everyday Life”**, 29 Jan 2016, Department of Chemistry, Ramjas College, University of Delhi. [Organized by: Chemistry Society, Ramjas College, University of Delhi].
9. Certificate of Participated as a Resource Person in the **“Virtual Workshop on Collating Chemistry Resources for Teachers in Higher Education”** June 18-19, 2020 [Organized by: National Resource Centre for Education of this Institute during at NIEPA, New Delhi].
10. Presented poster in National Symposium on **“DAE-BRNS 4th Interdisciplinary Symposium on Material Chemistry”** December 2012, Chemistry Division, Bhabha Atomic Research Center, Mumbai and Society for Materials Chemistry, Mumbai, India. [Organized by: Chemistry Division, Bhabha Atomic Research Center, Mumbai and Society for Materials Chemistry, Mumbai].
11. Presented poster in International Conference on **“Nanoscience and Technology”**, (ICONSAT- 2014), 2-5 March, 2014, Institute of Nanoscience and Technology” Mohali, India. [Organized by: Institute of Nanoscience and Technology].

12. Presented poster in International Conference on **“International Conference On Translational Nanomedicine” (T-NANO- 2014)**, 15-17 December 2014, Institute of Life Sciences, Ahmadabad University, Ahmadabad, India. [Organized by: Institute of Life Sciences, Ahmadabad University].
13. Presented poster National Conference on **“New Frontiers in Chemistry-From Fundamentals to Applications”**, (NFCFA-2015), 18-19 December 2015, Department of Chemistry BITS Pilani K.K. Birla, Goa Campus, India [Organized by: Department of Chemistry BITS Pilani K.K. Birla, Goa Campus].
14. Certificate of participation and presented Poster on paper entitled **Drug encapsulated optically and magnetically active amine functionalized silica shell and magnetite nanocomposite & its application in magnetically targeted drug delivery** in the international conference on **Renewable Energy and Sustainable Technology (ICREST-2024) on July 4 to 6, 2024** [Organized by Department of Applied Sciences & Humanities, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi, India.

Conferences & Symposium:

1. Celebration of the International Year of Chemistry, Research Scholar as member of the organizing committee, on 31 March 2011, department of chemistry, the University of Delhi [Organized by: Department of Chemistry, University of Delhi].
2. Certificate of Participated, National Webinar on **“Challenges and Opportunities of Digital Higher Education in Post Corona Scenario”** 4th May 2020 [Organized by: SWAMI SHUKDEVANAND COLLEGE SHAHJAHANPUR (U.P.) & DR. JANAK SINGH SOCIOCULTURAL EDUCATIONAL SOCIETY BAREILLY (U.P)].
3. Certificate of Participated, National Webinar on **“Genome-Wide Changes Under Microgravity”** 15 May 2020 [Organized by: School of Life Sciences, Central University of Himachal Pradesh]
4. Certificate of Participated, National Webinar on **“Occupied Territories of Ladakh”** 18 May 2020 [Organized by: Shaheed Bhagat Singh Evening College, University of Delhi]

5. Certificate of Participated as an Advisory Committee in the **National Webinar on “Role of Science for Sustainable Rural Development of Uttarakhand-2021”** February 28, 2021 [Organized by: Department of Higher Education, Uttarakhand]
6. Certificate of Participated Proudly Present on, International Webinar on **“Production of Radionuclides and their Application in Medical Imaging & Therapy”** June 10, 2021 [Organized by: Department of Chemistry, Chaudhary Bansi Lal University, Bhiwani, Haryana, India]
7. Participated in National Seminar on **“Role of Analytical Sciences in Sustainable Development”**, 04-05 March 2016, Hansraj College, University of Delhi. [Organized by: Hansraj college, Indian Society of Analytical Scientists Delhi Chapter and Petrotech Society of India].
8. Certificate of Participation as Session Chair during the Multidisciplinary International Seminar on **Ecosystem Restoration: Challenges and Opportunities in Indian Perspective (ERCOIP-2025)**, from 7 March 2025 to 8 March 2025 at B. N. College, Bhagalpur [organized by Faculty of Science B. N. College, Bhagalpur.]
9. Participated in International Workshop on, 7th Indo-Italian Workshop on **“Chemistry and Biology of Antioxidants”** on 16th November 2010, at Department of Chemistry, University of Delhi, India. [Organized by: Department of Chemistry, University of Delhi]
10. Participated in International Seminar on, 4th Indo-Italian Workshop on **“Green Chemistry and Natural Product”** on 17th November 2010, at Department of Chemistry, University of Delhi, India. [Organized by: Department of Chemistry, University of Delhi].
11. Participated in National Workshop on **“Renewable Energy and Environment”**, 28-29 January 2011, Department of Chemistry, Ramjas College, University of Delhi. [Organized by: Ramjas College, University of Delhi].
12. Participated in International Indo-German Workshop on **“Supramolecular Chemistry”**, 30 March 2015, Department of Chemistry, University of Delhi. [Organized by: Department of Chemistry, University of Delhi].
13. Certificate of Participated, National Workshop on **“Emerging Green Technology and Technical Terminology”** 13-14 February 2019, Department of Chemistry, Ramjas College, University of Delhi. [Organized by: Department of Chemistry, Ramjas College, University of Delhi]
14. Certificate of Participated, National Workshop on **“Importance and Role of Sanskrit language in science”** 09 March 2019, Central Institute of Education

(CIE), University of Delhi. [Organized by: Central Institute of Education (CIE), University of Delhi]

15. Certificate of Participated, Virtual International Workshop on “**Current Trajectory of India’s Foreign Policy**” 17-20 June 2020 [Organized by: Shaheed Bhagat Singh Evening College, University of Delhi]
16. Certificate of Participation in ten days National Workshop on **Vedic Mathematics**, on 31 Aug to 09 Sept. 2021, at department of Chemistry, Chaudhary Bansi Lal University, India [Organized by: Department of Chemistry, Chaudhary Bansi Lal University, Bhiwani, Haryana, India].
17. Participated in International Symposium on, 2th Indo-Italian Workshop on “**ELECTROCHEMISTRY FOR FUTURE ENERGY SOLUTION**” 30th Dec to 3rd Nov 2011, Department of Chemistry, University of Delhi, India. [Organized by: Department of Chemistry, University of Delhi].
18. Participated in National Symposium on, **3th national Agrochemical Conference 2013**, July 30-31, 2013, at Federation House, New Delhi, India. [Organized by: Department of Agriculture and Cooperation Government of India, Department of Chemicals and Petrochemicals Government of India, and Department of Fertilizer Government of India].
19. Participated in International Conference on “**International Conference on Materials Science and Technology**”, 01 - 04 March 2016, Conference Center, University of Delhi. [Organized by: Department of Chemistry, University of Delhi]
20. Participated in International Conference on “**International Conference on Materials Science and Technology**”, 01 - 04 March 2016, Conference Center, University of Delhi. [Organized by: Department of Chemistry, University of Delhi].
21. Certificate of Organizer **NCFCS-2022** on 04-05 Nov. 2022 at department of Chemistry & chemical Sciences, Himachal Pradesh, India [Organized by: Central University of Himachal Pradesh, Shahpur, Kangra.]
22. Certificate of Participation as a Member of National advisory committee of International-e-conference on **Recent advances & innovations in Applied Sciences (RAIAS-2023)** on August 12/2023 [Organised by IITyam India Academy Delhi in collaboration with Department of Chemistry HNB Govt PG College Khatima UK and Department of Zoology, Govt PG College Bazpur UK , Dept. of Higher Education, Govt. Of Uttrakhand, India.
23. Certificate of participation in **4th International Sustainability Conference on HEALTH, SAFETY, FIRE, AND ENVIRONMENTAL ADVANCES (HSFEA 2023)** presented paper on **Iron sulfide nanoparticles: Synthesis, characterization, and molecular & Docking studies of its interaction with bovine serum albumin and**

human serum albumin. on 30-31 October, 2023 [organized by the Sustainability Cluster, UPES, Dehradun, India].

24. Certificate of participation in **4th International Sustainability Conference on HEALTH, SAFETY, FIRE, AND ENVIRONMENTAL ADVANCES (HSFEA 2023)** presented paper on **Photocatalytic degradation of Methylene Blue dye using Mg-Fe-LDH@Biochar nanocomposite for waste water treatment** on 30-31 October, 2023 [organized by the Sustainability Cluster, UPES, Dehradun, India, on October].
25. Certificate of participation in **2nd International Conference on Energy Material and Devices (2nd ICEMD-2024)** entitled **Microemulsion Mediated Organically Modified Silica-Based Sensors for Electrocatalysis** on 19-21 March, 2024 [Organized by Department of Physics, Banaras Hindu University, Varanasi, India.]
26. Participated in National Symposium on **“Translational Research in New Drug, Development”**, 12-13 January 2011, Vallabhbhai Patel Chest Institute, University of Delhi, India. [Organized by: Vallabhbhai Patel Chest Institute, University of Delhi].
27. Participated in National Symposium on, **“CME Programme of Evaluation of Drug Safety”** 05 April 2013, Vallabhbhai Patel Chest Institute, University of Delhi, India. [Organized by: Vallabhbhai Patel Chest Institute, University of Delhi]
28. Participated in National Symposium on **“National Symposium on Nanobiotechnology”**, 31 March- 1 April 2016, Department of Biotechnology, Teri University, New Delhi. [Organized by: Teri University Biotechnology Society at Teri University, New Delhi].
29. Attending the **International Chemistry Symposium 2023** on 25 October 2023 at University of Delhi [Organized by Thieme Group and Department of Chemistry, University of Delhi]
30. Certificate of Participation in **Vedic Mathematics**, Department of Mathematics, 31 Aug. to 09 Sept. 2021 [Organized by: Chaudhary Bansi Lal University, Bhiwani in collaboration with Shiksha Sanskriti Utthan Nyas, New Delhi].
31. Certificate of Participation on **“Relevance of Vedic Mathematics in today’s scenario”**. 03 Sept 2021 [Organized by: Central University of Himachal Pradesh, Shahpur, Kangra.]
32. Certificate of Participation in **“Principles of Vedic Mathematics”** 08 Nov. to 12 Nov 2021. [Organized by: Central University of Himachal Pradesh, Shahpur, Kangra.]
33. Certificate of Participation in **IP Awareness/Training, Intellectual Property Office**, India. Dr. Pramod Kumar, 09 Feb 2022. [Organized by: Central University of Himachal Pradesh, Shahpur, Kangra]

34. Certificate of Participation in a Constitutional Accession week from 26-31 October 2023 at Central university of Himachal Pradesh [Organized by Centre of Kashmiri Studies, Centre University of Himachal Pradesh]
35. Participated as **Extended Executive Committee Member (National Conference) in NEP: Implementation, Challenges, Opportunities and Probable Outcomes** on 14 May, 2022 [Organized by: Deshbandhu College, University of Delhi]