Dr Bhasha Sharma

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Google Scholar: https://scholar.google.co.in/citations?user=71owaMcAAAAJ&hl=en&oi=ao

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OBJECTIVE

Highly productive, focused professional with strong passion in science and research, particularly in biology, chemistry and physics in the field of nanotechnology; complemented with comprehensive knowledge of advanced laboratory techniques. Self-motivated and dynamic individual with excellent communication, administrative, leadership and operational skills.

PROFESSIONAL CAREER HIGHLIGHTS

- **Assistant Professor (Ad-hoc)** in Shivaji College, University of Delhi, India — Duration: (05/01/2022) to (10/02/2024)
  Role: To teach Chemistry to BSc students
- **Language Editor** in TNQ technologies, Chennai, India. — Duration: (08/09/2021) to (31/12/2021)
  Role:- Content Editing of Manuscripts
- **Guest Faculty** in Netaji Subhas University of Technology, Delhi, India. — Duration: (7/12/2020) to (31/08/2021)
  Role:- To teach Environmental Science and Green Chemistry to students 4 hours (theory).
- **Guest Faculty** in Netaji Subhas University of Technology, Delhi, India. — Duration: (5/08/2019) to (10/05/2020)
  Role:- To teach Environmental Science and Green Chemistry to students 4 hours (theory).
- **Guest Lecturer** in Guru Nanak Dev Institute of Technology, Delhi, India. — Duration: (19/08/2019) to (09/11/2019)
  Role:- To teach Polymer Chemistry to students 4 hours (theory).
- **Teaching Research Fellow** (Chemistry) in NSIT, University of Delhi, India. — Duration: (18/12/2014) to (17/12/2018)
  Role:- To teach Polymer Material & Properties to students 4 hours (theory).
- **TCS Executive (Technical Customer Service)** in Henkel Teroson Ltd, Gurgaon, India. — Duration: (15/09/2011) to (04/03/12)
  Role:- Processing and testing of Mastic (rubber-based products), sealants, and adhesives used in (Maruti Suzuki, Mitsubishi, Tata Motors, and Toyota, etc) automotive industry.

INDUSTRIAL INTERNSHIP

- **Organization: - METTLER TOLEDO India Private Ltd**, Mumbai, India. — Duration: 16-18 April 2018
  Project: - Thermal Analysis Basic Course TABS01
- **Organization**: **Henkel Teroson Ltd, Gurgaon, India.** — Duration: Sept –March 2012
  Project: - Processing and Rheological behavior of PVC and Fillers.
- **Organization: CSIR – National Physical Laboratory New Delhi, India.** — Duration: June –July 2014
  Project: - Synthesis and Characterization of Zinc Oxide Nanoparticles.
- **Organization: Premier Polyfilm Ltd** (Sahibabad), India. — Duration: 1st-30th June 2011
  Project: - Processing of PVC films, flooring, and artificial leather cloth and testing of materials.

AREAS OF INTEREST & TECHNICAL SKILLS

Performing cutting-edge imaging techniques on various research microscope platforms as well as spectroscopic techniques for biological applications and drug delivery system.

Equipment Handled: Differential Scanning Calorimetry, Rheometer, Dynamic Mechanical Analysis, Polarizing Optical Microscope, Injection

Molding Machine, Single-screw Extruder, Universal Testing Machine, Compression Molding Machine, Double Planetary Mixer, Sigma Mixer, Spin Coating Unit, Electro-conductometer, and Two-roll mill.

Research Interests: Biopolymer nanocomposites, Plastic waste technology, Energy recovery, Nanostructured materials, Rheology, Sustainable polymers development, Electrical properties of nanocomposites, Graphene Oxide nanoparticles, Conducting polymers, Green synthesis of nanoparticles.

KEY RESEARCH PROJECTS

- Working in collaboration with **Newcastle University in Singapore, United Kingdom** on the project titled "Plastic Waste Management with life cycle assessment for production of energy for application in nanotribogenerator".
- Working in collaboration with **Netaji Subhas University of Technology** on the project titled "Development of NPK nanofertilizers using hydroponics system.
- Associated with **Bhaskaracharya College of Applied Sciences, University of Delhi** on the project titled" Valorization of plastic waste following its conversion into value added product to attain maximum efficiency".

EDUCATION AND ACADEMIC POSITIONS

- **PhD**
  (University of Delhi, New Delhi, India) **2015-2019**
  Thesis Titled: "Studies on Preparation and Characterization of Polymer Nanocomposites Functionalized with Graphene.
- **M. Sc: Applied** Chemistry **2012-2014**
  Amity University Haryana, India
  Dissertation Titled: Synthesis and Characterization of Zinc Oxide Nanoparticles.
- **B. Sc:** Polymer Science **2008-2011**
  Bhaskaracharya College of Applied Sciences, University of Delhi

PAPER PUBLICATIONS

1. "An investigation of fatigue, creep and dynamic mechanical behavior of bio fibers reinforced PLA and their hybrid bio composites".**Biomass Conversion and Biorefinery** (2024): IF: 4.05
2. Ankit Manral,……..**Bhasha Sharma**, Pallav Gupta, Vijay Chaudhary, "Effect of water ageing on mechanical performance of Kenaf/PLA bio-composites". **Biomass Conversion and Biorefinery** (2024): IF: 4.05
3. Sidharth Radhakrishnan, Shashi Prakash Dwivedi, **Bhasha Sharma**, ……..Vijay Chaudhary, "Deciphering the pathways for deployment of different architecture of chemically treated and untreated fibers in polymeric materials for performance enhancement". Proceedings of the Institution of Mechanical Engineers, **Part C: Journal of Mechanical Engineering Science** (2024): IF: 2.0
4. Shashank Shekhar, Vijay Chaudhary, **Bhasha Sharma**……Mahendra Kumar Meena, "Bioinspired molecular modeling and antibacterial efficacy of silver/graphene oxide grafted chitosan nanocomposite for food packaging applications". **Biomass Conversion and Biorefinery** (2023): IF: 4.05
5. Sidharth Radhakrishnan, Anas Khan,…….. **Bhasha Sharma**, Sumit Gupta, Pallav Gupta, "Studies on mechanical, thermal and water immersion of plant and animal wastage nanofiller based bio fiber reinforced composites". **Biomass Conversion and Biorefinery** (2023): IF: 4.05.
6. **Bhasha Sharma**, Shubhanshu Nigam[2], Anishka Verma[2] et al, A biogenic approach to develop guava derived edible copper and zinc oxide nanocoating to extend shelf life and efficiency for food preservation". **Journal of Polymers and the Environment** (2023). IF: 4.93
7. A Manral, AP Agarwal, F Ahmad, PP Das, **B Sharma**, V Chaudhary, "Experimental investigation of tribology, interfacial temperature, surface roughness, and morphological analysis of bio-composites". **Biomass Conversion and Biorefinery** (2023): IF: 4.05.
8. Sidhartha Radhakrishnan, Partha Pratim Das, **Bhasha Sharma** et al, "Deterioration of polymer composites after water ageing of chemically treated and untreated biomass". **Biomass Conversion and Biorefinery** (2023): IF: 4.05.
9. Shashank Shekhar, Santosh Singh……**Bhasha Sharma**, Green chemistry based benign approach for the synthesis of titanium oxide nanoparticles using extracts of *Azadirachta Indica".* **Cleaner Engineering and Technology** (2023).
10. Shashank Shekhar, Md Enamul Hoque……**Bhasha Sharma**· "Chemical upcycling of plastics as a solution to the plastic trash problem for an ideal, circular polymer economy and energy recovery". **Environment, Development and Sustainability** (2022). IF: 4.08.
11. Shashank Shekhar, Reetu Sharma……..Krishan Dutt Chauhan, **Bhasha Sharma**. "An Investigation of Chemical Oxidative

Polymerization and Life Cycle Assessment of Graphene Oxide grafted Polyaniline Nanocomposite for Improved Electrocatalytic Performance". **Polymer Bulletin** (2023). IF: 2.84

12. Shashank Shekhar, Vijay Chaudhary, **Bhasha Sharma**, Amit Kumar et al. "Sustainable Polysaccharide Hydrogels Based on Dynamic Schiff Base Linkages as Versatile Building Blocks for Fabricating Advanced Functional Materials". **Journal of Polymers and the Environment** 31, 1257 (2022). IF: 5.3
13. **Bhasha Sharma**, Shantanu Pandey, Nidhi Bijalwan, Neema Kushwaha, et al. "Tuning mechanical properties of poly (vinyl alcohol) and its influence on different concentrations of epoxidized vegetable oils". **International Journal of Polymer Analysis and Characterization** (2022). IF: 2.58
14. Partha Pratim Das, Ankit Manral, Furkan Ahmad, **Bhasha Sharma** et al. "Environmentally sustainable chemical treatment of plant fibers for improved performance of polymeric composites". **Polymer Composites** (2022). IF: 3.17
15. Wei Liang Lai, Shreya Sharma, Sunanda Roy, Pradip Kumar Maji, **Bhasha Sharma** et al." Roadmap to sustainable plastic waste management: a focused study on recycling PET for triboelectric nanogenerator production in Singapore and India." **Environmental Science and Pollution Research** (2022). IF: 4.3
16. Shashank Shekhar,Shreya Sharma,Jude A. Okolie,Amit Kumar,**Bhasha Sharma** et al." Synthesis, structural elucidation, biological screening, and density functional theory calculations of Cu(II), Ni(II), Mn(II), and Co(II) complexes of 20 *Z*-*N*-((*Z*)-2-(6-nitrobenzo[*d*]thiazol-2-ylimino)-1,2-diphenylethylidene)-5-nitrobenzo[*d*]thiazol-2-amine Schiff base ligand." **Applied Organometallic Chemistry** (2022). IF: 4.10
17. Shreya Sharma, **Bhasha Sharma** et al. "Microplastic profusion in food and drinking water: Are microplastics becoming a macroproblem?." **Environmental Science: Processes & Impacts** (2022). IF : 4.20
18. Sahajpal, Kartik, Shashank Shekhar, Amit Kumar…**Bhasha Sharma.** "Dynamic Protein and Polypeptide Hydrogels Based on Schiff Base Co-assembly for Biomedicine." **Journal of Materials Chemistry B** (2022). IF: 6.3
19. Shashank Shekhar, Sanjeev Gautam, **Bhasha Sharma**, Shreya Sharma, Partha Pratim Das, Vijay Chaudhary, "Deciphering the pathways for evaluation of nanotoxicity: Stumbling block in nanotechnology in **Cleaner Engineering and Technology** 5, 100311 (2021).
20. Shashank Shekhar, Shreya Sharma, Amit Kumar, Anjali Taneja, **Bhasha Sharma**, "The framework of nanopesticides: a paradigm in biodiversity" in **RSC Material Advances** 2 (20), 6569-6588 (2021).
21. **Bhasha Sharma**, Shashank Shekhar, Shreya Sharma, Purnima Jain, "The paradigm in conversion of plastic waste into value added materials", in **Cleaner Engineering and Technology** 4, 100254 (2021).
22. Shreya Sharma, Shashank Shekhar, Sanjeev Gautam, KD Chauhan, **Bhasha Sharma**, "Invigoration of Polymer Bioinks for Additive Manufacturing of Human Tissues and Organs" in **Emergent Materials** 1-10 (2021). IF: 0.41
23. Shashank Shekhar, Amarendra Mohan Khan, Shreya Sharma, **Bhasha Sharma**, Anjana Sarkar, "Schiff Base Metallodrugs in Antimicrobial and Anticancer Chemotherapy Applications: A Comprehensive Review" in **Emergent Materials** 1-15 (2021). IF: 0.41
24. **Bhasha Sharma**, Yagyadatta Goswami, Shreya Sharma, Shashank Shekhar, "Inherent Roadmap of Conversion of Plastic Waste into Energy and its Life Cycle Assessment: A Frontrunner Compendium" in **Renewable and Sustainable Energy Reviews** 146, 111070 (2021). IF: 14.98
25. Sanjeev Gautam, **Bhasha Sharma**, Purnima Jain, "To investigate interfacial interaction between Soy Protein Isolate Biocomposite thin films reinforced with Poly (vinyl alcohol) Matrix" Accepted in **Polymer Composites** 42, 3114-3124 (2021). IF: 2.26
26. Sanjeev Gautam, Shreya Sharma, **Bhasha Sharma**, Purnima Jain, "Antibacterial efficacy of poly (vinyl alcohol) nanocomposites reinforced with graphene oxide and silver nanoparticles for packaging applications" in **Polymer Composites** 42, 2829,2837 (2021). IF: 2.26
27. Sanjeev Gautam, **Bhasha Sharma**, Purnima Jain, "Dynamic Shear Rheological Study of Soy Protein Isolate/Poly (vinyl alcohol) nanocomposites reinforced with Montmorillonite (MMT) nanoparticles" in **Polymer Composites** 42, 2349-2359 (2021). IF: 2.26
28. **Bhasha Sharma**, Avinash Sandilya, Urvee Patel et al, "A bio-inspired exploration of eco-friendly bael gum and guar gum based bioadhesive as tackifiers for packaging applications" in **International Journal of Adhesion and Adhesives** (2020). IF: 3.27
29. **Bhasha Sharma**, Avinash Sandilya, Sachin Sharma et al, "Thermo-mechanical investigation of PEG-PVA biohybrid active film grafted with copper nanoparticles for packaging applications" in **Bulletin of Materials Science** 44 (2021). IF: 1.61.
30. **Bhasha Sharma**, Shreya Sharma, Purnima Jain, "Leveraging advances in chemistry to design biodegradable polymeric implants using chitosan and other biomaterials" in **International Journal of Biological Macromolecules** 169, 414-427 (2020). IF: 8.2.
31. Shreya Sharma, Shashank Shekhar, **Bhasha Sharma**, Purnima Jain, "Decoding the Glycans: Deciphering the sugary secrets to be coherent on the implications" in **RSC Advances** 10, 34099- 34113 (2020). IF:3.24
32. **Bhasha Sharma**, "Viscoelastic investigation of graphene oxide grafted PVA biohybrid using Ostwald modeling for packaging applications" in **Polymer Testing** 91, 106791 (2020). IF: 4.28
33. **Bhasha Sharma**, Purnima Jain, "Deciphering the advances in biodegradation of polymers" in **Journal of Cleaner Production** 275, 123241, (2020). IF: 11.07
34. Sanjeev Gautam, **Bhasha Sharma,** Purnima Jain. "Green Natural Protein Isolate based composites and nanocomposites: A review"

in **Polymer Testing** 99, 106626 (2020). IF: 4.28

35. Shashank Shekhar, Reetu Sharma, Shreya Sharma, **Bhasha Sharma**, Anjana Sarkar, and Purnima Jain. "An Exploration of Electrocatalytic Analysis and Antibacterial Efficacy of Electrically Conductive Poly (D-Glucosamine)/Graphene Oxide Bionanohybrid." in **Carbohydrate Polymers** 240, 116242 (2020). IF: 11.2.
36. Shekhar, Shashank, Anjana Sarkar, **Bhasha Sharma**, and Purnima Jain. "Electrochemical evaluation of functionalized graphene oxide filled PVA-chitosan biohybrid for supercapacitor applications." in **Journal of Applied Polymer Science** 137, 48160 (2019) (Wiley). IF: 3.12.
37. **Sharma Bhasha**, Sanjeev Gautam, Shashank Shekhar, Rukmani Sharma, Deepak Singh Rajawat, and Purnima Jain, "Facile synthesis of poly(vinyl alcohol) bionanocomposite & its potential application to enhance electrochemical performance" in **Polymer Testing** 74, 119-126 (2019). IF: 4.28
38. **Bhasha Sharma**, Shashank Shekhar, Vijay Chaudhary, Purnima Jain, "Synergistic Reinforcement of Graphene Oxide-Poly (vinyl alcohol) Bionanocomposite to Enhance Mechanical Performance", in **Research & Reviews: Journal of Physics** 8 (3), 20-26 (2019). IF: NIL
39. **Sharma Bhasha**, Shashank Shekhar, Sanjeev Gautam, Anjana Sarkar, and Purnima Jain, "Nanomechanical analysis of chemically reduced graphene oxide reinforced PVA nanocomposite thin films" in **Polymer Testing** 70, 458-466 (2018). IF: 4.28
40. **Sharma Bhasha**, Shashank Shekhar, Sanjeev Gautam, and Purnima Jain, "Dynamic shear rheology behavior and long term stability kinetics of reduced graphene oxide filled poly (vinyl alcohol) biofilm" in **Polymer Testing** 69, 583-592 (2018). IF*:* 4.28
41. **Sharma Bhasha**, Shashank Shekhar, Parul Malik, and Purnima Jain, "Study of the mechanism involved in the synthesis of graphene oxide and reduced graphene oxide from graphene nanoplatelets" in **Materials Research Express** 5, 6, 1-11 (2018). IF: 1.92
42. **Bhasha Sharma**, Parul Malik, Purnima Jain, "To Study the Effect of Processing Conditions on Structural & Mechanical Characterization of Graphite & Graphene Oxide Reinforced PVA Nanocomposite" in **Polymer Bulletin** 76, 3841- 3855 (2018). IF: 2.01.
43. **Sharma Bhasha**, Parul Malik, Sanjeev Gautam, and Purnima Jain, "Biopolymer Reinforced Nanocomposites: A Comprehensive Review" in **Materials Today Communications** 16, 353-363 (2018). IF: 3.38.
44. **Bhasha**, Purnima Jain, "Effects of Nanofiller on the Properties of PVA Nanocomposite Thin Films" in Proceedings of NCGE 6-11 (2017), ISBN: 978-1-63535-362-4. IF: NIL
45. **Bhasha Sharma**, Santosh Singh, Purnima Jain, and Parul Malik, "Synthesis and Characterization of Nanocrystalline Zinc Oxide Thin Films via Green Chemistry" in **Journal of Nanoanalysis** 2,10-16 (2015) IF: 3.21
46. **Bhasha Sharma,** Parul Malik, Purnima Jain, Abhijit Baruah, **"**Rheological Study of Fillers used in PVC Plastisol for Industrial Applications**"** in **International Journal Of Scientific & Engineering Research** 6, 1-7 (2015). IF: 4.20
47. **Bhasha Sharma**, Parul Malik, Purnima Jain & Santosh Singh, "Synthesis and Characterization of Sol-gel Derived Nanocrystalline Iridium oxide Thin Films" in **International Journal of Advanced Scientific and Technical Research** 3, 174-180 (2015). IF: 3.94
48. **Bhasha Sharma**, S., P. Malik, S. Santosh, and J. Purnima "Synthesis and Characterization of Nanocrystalline Zinc Oxide Thin Films for Ethanol Vapor Sensor" in **Journal of Nanomedicine & Nanotechnology** 6, 1-4 (2015). IF: 3.57.

BOOK PUBLICATIONS

1. **Title:** Biobased Sustainable Packaging
   Editors: Balaram Pani, Bhasha Sharma
   Imprint: CRC Press
   Publication Date: 2025
   ISBN: Yet to receive

2. **Title:** Biodegradability of Conventional Plastics
   Editors: Anjana Sarkar, Bhasha Sharma, Shashank Shekhar
   Imprint: Elsevier
   Publication Date: 2022
   ISBN: 9780323886116

3. **Title:** Polysaccharides: Advanced Polymeric Materials

Editors: Bhasha Sharma, M. Enamul Hoque
Imprint: CRC Press
Publication Date: 2023
ISBN: 9781003265054

4. **Title:** Advances in Bionanocomposites
Editors: Bhasha Sharma, Sabu Thomas, Kajal Ghosal, PK Bajpai, Shashank Shekhar
Imprint: Elsevier
Publication Date: 2023
ISBN: 9780323983495

5. **Title:** Sustainable Hydrogels
Editors: Bhasha Sharma, Shashank Shekhar, Purnima Jain, Sabu Thomas
Imprint: Elsevier
Publication Date: 2023
ISBN: 9780323986182

6. **Title:** Nanofillers Volume 1
Editors: Vijay Chaudhary Bhasha Sharma, Shashank Shekhar, Partha Pratim Das
Imprint: CRC Taylor Francis
Publication Date: 2023
ISBN: 9781032245935

7. **Title:** Nanofillers Volume 2
Editors: Bhasha Sharma, Vijay Chaudhary, Shashank Shekhar, Partha Pratim Das
Imprint: CRC Taylor Francis
Publication Date: 2023
ISBN: 9781032245935

8. **Title:** Graphene-based Biopolymer Nanocomposites
Editors: Bhasha Sharma and Purnima Jain
Imprint: Springer Nature
Publication Date: Dec 2020
ISBN: 978-981-15-9179-2

BOOK CHAPTER PUBLICATIONS

1. Shashank Shekhar, **Bhasha Sharma** and Amit Kumar, Graphene-based magnetic nanoparticles in Magnetic Nanoparticles and Polymer Nanocomposites, Pp 37-48 Elsevier (2024)
2. Shradha S Tiwari, Surendra G Gattani, **Bhasha Sharma**, Md Enamul Hoque, Carbohydrate-Based Therapeutics: Evolution from Wellness Pursuit to Medical Treatment in Polysaccharides, Pp 109-123 CRC Press (2024).
3. Enock Siankwilimba, **Bhasha Sharma**, Md Enamul Hoque, Polysaccharides for Agricultural Applications: A Growing Presence on the Farms in Polysaccharides, Pp 263-286 CRC Press (2024).
4. Garv Gupta, **Bhasha Sharma**, Circular economy and upcoming horizons in the field of bionanocomposites in Advances in Bionanocomposites, Pp 365-384 Elsevier (2023).
5. **Bhasha Sharma**, Shashank Shekhar, Amit Kumar, Shreya Sharma, Biomimetic nanosystems in theranostics. Advanced Nanoformulations. Pp 637-660 Elsevier (2023).
6. Shreya Sharma, Shashank Shekhar, **Bhasha Sharma**, Anjana Sarkar, Purnima Jain, Starch-based nanosystems for theranostic applications. Polymeric Nanosystems, pp 483-495 Elsevier (2023)
7. Reetu Sharma, Amit Kumar Sharma, **Bhasha Sharma**, Anjana Sarkar, Biodegradability of synthetic plastics: effective degradation Mechanisms. Biodegradability of Conventional Plastics. 2022
8. Shashank Shekhar, **Bhasha Sharma**, Anjana Sarkar, Shreya Sharma and Amit Kumar, Bioplastics overview: are bioplastics the panacea for our environmental woes? Biodegradability of Conventional Plastics. 2022
9. Sanjeev Gautam, **Bhasha Sharma**, Harjeet Singh, Future prospects for the biodegradability of conventional plastics. Biodegradability of

Conventional Plastics. 2022.

10. **Bhasha Sharma**, Meenakshi Garg, Rajni Chopra, and Susmita Dey Sadhu. "Edible Packaging of Liquid Foods." In Edible Food Packaging, pp. 461-480. Springer, Singapore, 2022.
11. **Bhasha Sharma**, Susmitadey Sadhu, Rajni Chopra, Meenakshi Garg, ''Role of Packaging in Food Processing'' in Food Chemistry: The Role of Additives, Preservatives and Adulteration, pp 73-95, John Wiley & Sons, Inc (2021).
12. Sharma, Shreya, **Bhasha Sharma**, Shashank Shekhar and Purnima Jain. "Natural Polymer Based Composite Wound Dressings" in Polymeric and Natural Composites'', pp. 401-423. Springer (2021).
13. **Bhasha Sharma**, Shashank Shekhar, Purnima Jain, Reetu Sharma, and K. K. D. Chauhan. "Graphene Grafted Chitosan Nanocomposites and Their Applications" in Graphene Based Biopolymer Nanocomposites, pp. 135-147. Springer, (2020).
14. Sharma, Shreya, **Bhasha Sharma**, and Purnima Jain. "Graphene Based Biopolymer Nanocomposites in Sensors" in Graphene Based Biopolymer Nanocomposites, pp. 273-286. Springer, Singapore (2020).
15. Gautam, Sanjeev, **Bhasha Sharma,** and Purnima Jain. "Structural Applications of Graphene Based Biopolymer Nanocomposites" in Graphene Based Biopolymer Nanocomposites, pp. 61-81. Springer, (2020).
16. Singh, Rahul, Sanjeev Gautam, **Bhasha Sharma**, Purnima Jain, and Krishna Dutt Chauhan. "Biopolymers and their classifications" in Biopolymers and their Industrial Applications, pp. 21-44. Elsevier (2020).
17. Sharma, Shreya, **Bhasha Sharma**, Ankit Manral, Parmendra Kumar Bajpai, and Purnima Jain. "Biopolymers in the automotive and adhesive industries" in Biopolymers and their Industrial Applications, pp. 261-280. Elsevier (2020).
18. Shreya Sharma, Shashank Shekhar, Sanjeev Gautam, **Bhasha Sharma**, Amit Kumar, Purnima Jain, "Carbon-based nanomaterials as novel nanosensor" in Nanofabrication And Smart Nanosensor Applications, pp 323-347. Elsevier (2020).
19. Ankit Manral, Furkan Ahmad, **Bhasha Sharma**, "Advances in Curing Methods of Reinforced Polymer Composites" in Reinforced Polymer Composites: Processing, Characterization and Post Life Cycle Assessment, John Wiley & Sons (2019).
20. **Bhasha Sharma**, Shashank Shekhar, Purnima Jain, "Thin Films Prepared Using Sol-Gel Dip Coating Method" in Metal Chalcogenide Nanostructures: Characteristics and Synthesis (OMICS International). DOI: 10.4172/978-1-63278-029-4-030.
21. **Bhasha Sharma**, Sanjeev Gautam, Parul Malik, Purnima Jain, "Ceramic Composites for Aerospace Applications" in Thermo-Mechanical Properties of Polymer Composites (Diffusion Foundation), Scientific. Net, Publisher in material Science and Engineering, (2019).

SELECTED CONFERENCE PRESENTATIONS

1. Presented a paper on **"Nanotechnology derived sustainable packaging for food"** at First International Online Conference on Blends, Composites, Bio-Composites and Nanocomposites (ICNC–2020) 9th - 11th October 2020 Kottayam, Kerala, India
2. Presented a poster on "**A Bioinspired Approach to Fabricate Reduced Graphene Oxide Filled Poly (vinyl alcohol) Bionanocomposite for Electrical Applications**" at 9th Virtual NANOPOSTER Conference on 20-26th April 2020.
3. Presented a poster on "**Rheological optimization of Graphene Oxide filled PVA Nanocomposite using Power-law Model**" at ISNSCON 2018 organized by Jamia Hamdard & University of Delhi from 7th-9th Jan 2018.
4. Presented a paper on **"Ultrasonic Assisted Fabrication of Covalently Functionalized Graphene Oxide Grafted PVA-Chitosan Bionanocomposite and Its Electrochemical Analysis"** at ICEES organized by Netaji Subhas Institute of Technology from 19th-21st Feb 2018.
5. Presented a paper on **"Synergistic Reinforcement of Graphene Oxide – Poly (vinyl alcohol) Bionanocomposite to Enhance Mechanical Performance"** at REPSI 2018 organized by Bhartiya Vidyapeeth College of Engineering from 8th-9th Feb.
6. Presented a paper on **"Fabrication & Characterization of Graphene Oxide Filled Poly (vinyl alcohol) Nanocomposite"** at ISCA Haridwar Chapter 13-15th Oct 2017.
7. Presented a paper on **"Fabrication & Characterization of Graphene Oxide/ Poly (vinyl alcohol) Nanocomposite"** in AFM2017 (Advances in Functional Materials) held at University of California, Los Angeles, the USA from 14th to 17th August 2017.
8. Presented a poster on **"Facile synthesis of Chemically Reduced Graphene Oxide Reinforced Poly (vinyl alcohol) Nanocomposite Thin Films to enhance its electrical conductivity"** in ICME held at IIT Kanpur 2-4th June 2017.
9. Presented a poster on **"Effects of Nanofiller on the Properties of PVA Nanocomposite Thin Films"** in "Clean & Green Energy: The Chemical & Environmental Aspects" (NCGE-2017).
10. Presented a poster **"Thermal & Mechanical Analysis of Biocompatible PVA Nanocomposite**" at 104th Indian Science Congress, Tirupati, 2017 from 3-7th Jan.
11. Presented a poster on **"Synthesis and Characterization of Nanocrystalline Zinc Oxide Thin Films for Ethanol Vapor Sensor"** at 1st Indo-UK Seminar on Recent Advances on Chemical Sensors at Gargi College in 2014.
12. Presented a paper on **"Role of Analytical Techniques in Biological & Environmental Sciences"** at Kirori Mal College in 2011.

ACCOLADES

- Received **Commendable Research Award** with a cash price of 50,000 INR from **Netaji Subhas University of Technology**, Delhi, India in 2023.

WORKSHOP PRESENTATIONS

1. Attended one-week Faculty Development Program on **"Environmental Sciences and Public Health"** organized by KMC, University of Delhi, India from 1st to 5th Feb 2022.

2. Attended a one-week Faculty Development Program on **"Research Methodology"** organized by Kamala Nehru Mahavidyalaya, Nagpur, India from 26th April -1st May 2021.
3. Attended seminar on **"Sustainable Technologies for Environmental Management"** organized by Delhi technological University" from 27th-28th Mar 2018.
4. Attended workshop on **"Research Methodology and Scientific Writing"** held at NSIT, Delhi from 14th to 17th March 2017.
5. Attended workshop on **"Rheology & DMTA Analysis of Polymers"** on 26th-27th Sept 2016 organized by Anton Paar, Gurgaon, INDIA
6. Attended workshop on **"Biohazard Management"** organized by NSIT, Delhi on 25th-26th June 2016.
7. Attended twin workshop on **"Advance Polymeric Materials"** organized by Centre for Polymer Science and Engineering IIT, Delhi on 29th Feb-3rd March 2016.
8. Attended workshop on **"Numerical Methods and Analysis"** 29th - 11th July 2015 organized by NSIT.
9. Attended Symposium on **"Polymer Processing Academy Fourth Foundation Day"** organized by IIT Delhi in March 2015.
10. Attended First National Conference on **"Recent Advances in Polymer Nanocomposites"** in Zakir Husain College, University of Delhi, India in 2011 (14-15 Jan).
11. Attended **"PU Tech Exhibition''** at India Expo Centre in Greater Noida, UP in 2011 (9-11 March).
12. Participated in the National Seminar on **"Recent Development in Polymers"** at the University of Delhi, India in 2011 (29th Oct).

REVIEWER OF INTERNATIONAL JOURNALS

- **RSC:** RSC Advances
- **Elsevier:** Energy Storage and Materials, Biotechnology Advances, Carbohydrate Polymers
- **ACS:** Applied Polymer Materials
- **Sage:** Journal of Reinforced Plastics and Composites
- **Wiley:** Polymer Composites