

Resume

Dr. Jyoti Chaudhary

Associate Professor & Head, Department of Chemistry
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> Career Highlights

My academic interest and enthusiasm prepared me to work with polymer synthesis and characterization. My interest is to explore efficient strategies towards modifying the structure of existing polymers by internal Plasticization, incorporation of metal salts and by blending, therefore to observe the change in their properties, also working for the designing and development of nano composites of thermosetting/thermoplastic resins and their biological influence. I have initiated research on hydrogels and their applications in various areas like soil, water treatment, and the biomedical field.

Directed placement of a number of students in the industry through collaborative efforts via projects and empirical studies conducted in the industry. 150+ live research projects guided for different industries and 70+ students placed in top industries and presently working at senior positions in R&D sector.

Research consultant to various tyre and polymer industries like BKT Tires, JK Tyres Ltd., Shah Polymers & Aromatics (India) Pvt. Ltd. Only academic executive member from Rajasthan in IRI (Indian Rubber Institute, Rajasthan Branch)

> Professional Experience

- June 2018-Till Date:

Associate Professor, Department of Chemistry, Mohanlal Sukhadia University, Udaipur

- June 2007 – June 2018:

Assistant Professor, Polymer Science, Mohanlal Sukhadia University, Udaipur, Rajasthan

- July 2005 to June 24, 2007

Contractual guest Faculty, Polymer Science, Mohanlal Sukhadia University, Udaipur Rajasthan.

> **Research Supervision:**

Broad Research Interest: **'Polymer Synthesis and Characterization' PhD Guided:**

S.No	Name of Student	Title
1.	Swati Purohit [Degree Awarded]	Synthesis and characterization of microbial resistant, high-performance polymers of maleimide derivatives.
2.	Suman Jinger [Degree Awarded]	Synthesis, characterization and biological evaluation of N-substituted maleimides, acrylates, and vinyls.
3.	Supriya Dadhich [Degree Awarded]	Synthesis and characterization of epoxy and vinyl ester resins.
4.	Giriraj Tailor [Degree Awarded]	Study on nanocomposite of thermosetting formaldehyde resins and their biological significance.
5.	Monika Sharma [Degree Awarded]	Synthesis and characterization of Metal-Incorporated aniline formaldehyde resin nanocomposites
6.	Sudha [Degree Awarded]	Studies on a acrylamide-Guar Gum based hybrid hydrogel derivatives for various sustainable environmental applications
7.	Vipin Khokher	Construction and thermal evolution of metal nanoparticles using thermosetting resin and their biological importance
8.	Suresh Jandu	Green Synthesis of Metal Nanoparticles using Moringa oleifera (Leaves) with Biological Significance
9.	Chetna	Green Fabrication of Metal & Metal Oxide Nanoparticles and their Application
10.	Pooja Badsara	Development of Infection Resistant Sodium Alginate Membranes for Wound Care
11.	Megha Yadav	Biogenic synthesis of metal oxide nanoparticles from <i>ixora coccinea</i> plant for dye degradation Application
12.	Chesta Mehta	Sustainable Synthesis of Polyvinyl Alcohol- Nano Copper Based Membranes for Water Decontamination System

13.	Nirmal Rathore	Synthesis and Characterization of Vinyl Ester Resins and their Applications
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➤ **Research Projects**

1. Principal Investigator in Aromatics (India) Pvt. Ltd., New Delhi funded research project titled “**Design & Development of Nanogel based Drinking Water Decontamination System for Human Healthcare**”, under Corporate Social Responsibility (CSR), **2023**.
2. Mentor in DST-GOI funded research project titled “**Photoredox catalysis: Metal free formation of C-C bond**”, **2023**.
3. Principal Investigator in RUSA, MoE, New Delhi funded research project titled “**Novel natural products from traditional medicinal plants of South Rajasthan region: Structural, synthetic and biological studies**”, **2020**.

➤ **Projects Supervised:**

100+ student’s Project work (as a part of syllabus) supervised for different industries like JK Tyres Ltd, BKT Tires, Apollo Tyres Ltd, Birla Tyres, Pix transmission Ltd, SOMI Conveyor Belting Ltd, Gates India Pvt. Ltd etc.

➤ **Accolades:**

1. **Certificate of merit & award of Gold medal** (1999), MLSukhadia University, Udaipur
2. **Certificate of Merit** (1992), Department of Education, Ministry of Human Resources and Development.

➤ **Books Published (8):**

1. A theory book on Pharmaceutical biochemistry published by Apex publishing house, ISSN- **81-301-0030-4**
2. A combine theory and practical book on Elements of biochemistry published by Apex publishing house, ISSN- **81-301-0037-1**
3. Pharmaceutical biochemistry and clinical pathology book published by Apex publishing house, ISSN- **81-301-0051-7**
4. A practical book on Pharmaceutical biochemistry and clinical pathology published by Apex publishing house, ISSN- **81-301-0060-6**

● **Subject books:**

1. Chemistry-Class 12th (Theory) RBSE, Ajmer [Rajasthan rajya pathya pustak mandal]
2. Chemistry-Class 12th (Practical) RBSE, Ajmer [Rajasthan rajya pathya pustak mandal]

3. Environmental Science-Class 11th (Theory) RBSE, Ajmer [Rajasthan rajya pathya pustak mandal]

4. Sanskrit Shiksha, General Science-Class 11th (Theory) RBSE, Ajmer [Rajasthan rajya pathya pustak mandal]

> **Chapters published in Book:**

1. “**Decontamination and Purification of Wastewater via Metal Nanoparticles: An Overview**”, Advances in Water & Wastewater Treatment, published by - **Apple Academic Press**.
Giriraj Tailor, **Jyoti Chaudhary**, Saurabh Singh, Deepshikha Verma

2. “**Dental Polymers-Applications**”, Encyclopedia of biomedical polymers and polymeric biomaterials, published by - **Taylor & Francis**, pp. – **2501-252**
Narendra P. S. Chauhan, Kiran Meghwal, Priya Juneja, **Jyoti Chaudhary**, Ramchandra Meghwal, Pinki B. Punjabi

3. “**Controlled release: Porous polymer**”, Encyclopedia of biomedical polymers and polymeric biomaterials, published by - **Taylor & Francis**, pp. - **2155-2172**
Narendra P.S. Chauhan, Kiran Meghwal, Pinki Punjabi, **Jyoti Chaudhary**, Paridhi Kataria

> **Membership of Professional Bodies:**

Lifetime membership –

1. Indian Rubber Institute (IRI), Rajasthan Since **2016**
2. Him Science Congress Association Since **2015**
3. Rajasthan Science Congress Association Since **2012**
4. Asian Polymer Association Since **2011**
5. The Indian Science Congress Association Since **2010**

> **Training Courses/Faculty Development Programme:**

1. FDP 2016-17, Promotion of Entrepreneurship among Students **MLS University, Udaipur, September 18 to October 01, 2016.**

2. Refresher course in Chemistry conducted by UGC at **Academic staff college, University of Kerala, Kariavattom, March 04-24, 2014.**

3. Research Methodology and data analysis programme at FMS College, **PAHER University, Udaipur December 21-27, 2014.**

4. Training workshop on science communication through digital media, NCSTC, DST, **Govt. of India, 11-15 May 2011.**

5. Staff Development Programme conducted by AICTE and Department of chemical technology, **North Maharashtra University, Jalgaon, June 15-30, 2011.**
6. RC-242 (Refresher course in chemistry) conducted by UGC Academic staff college, **H.P. University, Shimla, September 12 to October 1, 2011.**
7. 69th orientation Programme for faculty development sponsored by UGC, at **UGC Academic Staff College, JNV University, Jodhpur (Rajasthan), November 16 to December 12, 2009.**

List of Research Publications

1. **Jyoti Chaudhary, Giriraj Tailor, Chesta Mehta, & Megha Yadav. *An overview of biosynthesized metal nanoparticles via medicinal plant extracts of the Moraceae family.* Biocatalysis and Agricultural Biotechnology, 102812, 2023.**
2. **Jyoti Chaudhary, Suresh Jandu, & Giriraj Tailor. *Green synthesis and characterization of iron nanoparticles using Moringa oleifera (Leaves) and their phytochemical screening with biological significance.* Chemical Data Collections, 47, 101065, 2023.**
3. **Jyoti Chaudhary, Giriraj Tailor, Megha Yadav & Chesta Mehta. *Green route synthesis of metallic nanoparticles using various herbal extracts: A review.* Biocatalysis and Agricultural Biotechnology, 102692, 2023.**
4. **Jyoti Chaudhary, Monika Sharma and Giriraj Tailor, Synthesis and characterization of p-Nitro Aniline Formaldehyde resin nanocomposites, Chemical Science Transactions, 2022.**
5. **Zaharaddeen Umara, Usman Rabiou Belloa, Ankita Mathura, Giriraj Tailor, Jyoti Chaudhary, Saurabh Singhd, *Modulation of Biofilm with synthesized silver nanoparticles from Azadirachta indica*, Current Research in Green and Sustainable Chemistry, 2021**
6. **Jyoti Chaudhary, Monika Sharma, *Novel thermal decomposition approach for the fabrication of Mn(II) and Zr(II)doped nanoparticules and studies their physical properties*, Journal of Advanced Scientific Research, 2020**
7. **Jyoti Chaudhary, Monika Sharma, *Synthesis and structural analysis of zirconium nanoparticles using p- amino benzoic acid- formaldehyde resin*, Research Journal of Chemistry and Environment, 2020**
8. **Jyoti Chaudhary, Giriraj Tailor, Deepak Kumar, *Synthesis and Charecterization of Chromium nanoparticles by thermal decomposition method*, Material Today: Proceedings, 2020**

9. **Jyoti Chaudhary**, Giriraj Tailor, B.L. Yadav, Manoj Joshi, Chetana Suvalka, *Green Synthesis of silver nanoparticles using Ocimum canum and their anti bacterial activity*, Biochemistry and Biophysics Reports, 2020
10. **Jyoti Chaudhary**, Sudha Joshi, *Synthesis, characterization and swelling behavior of Guar Gum grafted Acrylamide-co-Hydroxyethyl methacrylate hydrogel.*, Journal of Advanced scientific Research, 2020
11. **Jyoti Chaudhary**, Giriraj Tailor, Deepshikha Verma, Bhupendra Kr. Sarma, *Microscopic study of zinc nanoparticles synthesised using thermosetting polymer*, Applied Microscopy, 2020
12. **Jyoti Chaudhary**, Giriraj Tailor, Deepshikha Verma, Ravi Verma, *Synthesis and characterization of cobalt nanocomposite using aniline-formaldehyde resin*, Composites Communications, 2020
13. **Jyoti Chaudhary**, Giriraj Tailor, Deepak Kumar, Deepshikha Verma, Ajit Joshi, *Synthesis and Characterization of Chromium Nanoparticles by Thermal Method*, Journal of Nanoscience and Technology, 2019
14. **Jyoti Chaudhary**, Giriraj Tailor, B.L. Yadav, Oshon Michael, *Synthesis and biological function of Nickel and Copper nanoparticles*, Heliyon, 2019
15. **Jyoti Chaudhary**, Suman Jinger Giriraj Tailor, *Conventional-Cum-Microwave Synthesis and Characterization Of Polymeric Structures Of N-Substituted Maleimide*, IOSR Journal of Engineering (IOSR-JEN), 2018
16. **Jyoti Chaudhary**, Suman Jinger, Supriya Dadhich, *Preparation of Engineering Material as Substituted Maleimide-Epoxy Resin: Thermal Characteristics and Mechanical / Chemical Reactivity of Cured Glass Composites*, International Journal of Scientific Research and Reviews, 2018
17. **Jyoti Chaudhary**, Suman Jinger, Swati Purohit, Giriraj Tailor, *Studies of thermal properties and effects of microbial strains on maleimide –metal composites with pendent substituted Azo-ligand*, Research Journal of Life Sciences, Bioinformatics, Pharmaceutical and Chemical Sciences, 2018
18. **Jyoti Chaudhary**, Supriya Dadhich, Giriraj Tailor, Swati Purohit, Aruna Solanki, *Synthesis, characterization, thermal and mechanical properties of naphthalene containing alkyl substituted epoxy segments*, Research Journal of Chemistry and Environment, 2018
19. **Jyoti Chaudhary**, Giriraj Tailor, Nalini Tomar, *Synthesis, Characterization and studies of antimicrobial properties of copper nanocomposites*, Material Science: An Indian Journal, 2018

20. **Jyoti Chaudhary**, Suamanjinger, Supriya Dadhich, *Polymer Structures of N-[[4-(N'-Benzenesulphonicacid) Amino-Carbonyl] Phenyl] Maleimide: Synthesis, Thermal and Microbial Studies*, IOSR Journal of Applied Chemistry (IOSR-JAC), 2018
21. **Jyoti Chaudhary**, Giriraj Tailor, Sarvesh Kumar Shailesh, Suhail Afzal, *Synthesis, Structure and Thermal analysis of Silver Nanoparticles using Bakelite Composite* , Asian Journal of Chemistry, 2018.
22. **Jyoti Chaudhary**, Swati Purohit, Suman Jinger, Radha Chaudhary, *Radical Copolymerization of N-Substituted Maleimide and Acrylamide(AM)/ Acrylic Acid/ 2-Hydroxy Ethyl Methacrylate: Determination of Monomer Reactivity Ratios*, Journal of Scientific & Industrial Research, 2017.
23. **Jyoti Chaudhary**, Supriya Dadhich, Suman Jinger, Radha Chaudhary *Synthesis and Characterization of Alkyl Substituted Vinyl Ester Resin*, Asian J. Research Chem , 2017.
24. **Jyoti Chaudhary**, Giriraj Tailor, Ajit Joshi 1 , *A Review: nanotechnology and forensic science*, World Journal of Pharmacy and Pharmaceutical Sciences, 2017.
25. **Jyoti Chaudhary**, Supriya Dadhich, Suman Jinger1, Swati Purohit, Giriraj Tailor, *Studies on Thermal Behaviours of Naphthalene Based Vinyl Ester Resins: Synthesis and Characterization*, International Journal of Chemical and Physical Sciences , 2017.
26. **Jyoti Chaudhary**, Swati Purohit, Suman Jinger1, *Studies on Heat Resistant Metal Composite of N-Substituted maleimide*, Chemical Science Transactions, 2017 .
27. **Jyoti Chaudhary**, Swati Purohit, Supriya Dadhich , Radha Chaudhary *Copolymers of N-Substituted Maleimide with Acrylamide [AM]/ 2-Hydroxy ethylmethacrylate [OHEMA]:- Synthesis, Characterization and Thermal Behaviour*, International Journal of Chemical Engineering Research , 2017.
28. **Jyoti Chaudhary**, Swati Purohit, Radha Chaudhary, *Studies on Reactivity Ratio and Thermal Studies of Copolymers of NSubstituted Maleimide with Vinyl Pyridine [VP]/2-Hydroxyethylmethacrylate [OHEMA]* , Asian J. Research Chem, 2017.
29. **Jyoti Chaudhary**, Giriraj Tailor , Deepa Kumar, Ajit Joshi *Synthesis and Thermal Properties of Copper Nanoparticals*, Asian Journal of chemistry , 2017.
30. **Jyoti Chaudhary**, Supriya Dadhich, Suman Jinger, Giriraj Tailor, *Epoxy Based Vinyl Ester Resins: Synthesis and Characterization* , International Journal of Chemical Engineering Research, 2017.

31. **Jyoti Chaudhary**, Suman Jinger, Swati Purohit ,Chetna Panwar *Bismaleimide-Sulfonamide Homopolymer and Copolymers: Synthesis, Characterization and Microbial Analysis*, Chemical Science Transactions ,2017.
32. **Jyoti Chaudhary**, Suman Jinger, Swati Purohit , Supriya Dadhich, *Synthesis of Emulsion Copolymers of [4-N-Phenylethanamide azo-3-N-(4-nitrophenyl) maleimide, Styrene and Methylacrylate]*, International Journal of Chemical Engineering Research,2017.
33. **Jyoti Chaudhary**, Swati Purohit, Supriya Dadhich¹, Radha Chaudhary, *Synthesis and Characterization of Maleimide-Epoxy Resins and Composites Formation*, Der Pharma Chemica, 2017.
34. **Jyoti Chaudhary**, Supriya Dadhich, Giriraj Tailor, *Preparation, Characterization and Thermal behavior of alkyl substituted epoxy resin*, International Journal of Engineering Science & Research Technology, 2017.
35. **Jyoti Chaudhary**, Giriraj Tailor, Deepak Kumar, Sarvesh Kumar and Shailesh, *Synthesis and structural study of nickel (II) bakelite nanocomposite by x-ray diffraction*, International Journal of Metallurgical & Materials Science and Engineering (IJMMSE), 2016.
36. **Jyoti Chaudhary**, Suman Jinger, Swati Purohit, Harshada Joshi, *Studies on thermal, microbial behavior of Copoly(azo-maleimide-Acrylic acid/Vinyl acetate)and Terpoly(azo-maleimide-acrylic acid-vinyl acetate): synthesis and characterization*, Asian Journal of Chemistry, 2016.
37. **Jyoti Chaudhary**, Suman Jinger, Swati Purohit, *Synthesis and Characterization of Copoly (Azo-Maleimide – Acrylonitrile / Vinyl Acetate) and Terpoly (Azo-Maleimide – Acrylonitrile – Vinyl Acetate): Studies on Influences of Reaction Feed Compositions on Thermal and Microbial Behavior*, American International Journal of Research in Formal, Applied & Natural Sciences (AIJRFANS), 2016.
38. **Jyoti Chaudhary**, Giriraj Tailor, S. K. Shailesh, D. Kumar, *Characterization Techniques used in Nanomaterials -A Review*, J. Environ. Nanotechnol., 2016.
39. **Jyoti Chaudhary**, Suman Jinger,Swati Purohit, *Polymer structures: studies on thermal and microbial reactivity of copolymers and terpolymers of [Azo-N-4-bromo phenyl] substituted maleimide chain with acrylates*, International Journal of Engineering Sciences & Research Technology, 2016.
40. **Jyoti Chaudhary**, Swati Purohit, Suman Jinger, Harshada Joshi, *Thermal and Microbial Studies of Copolymers of Acrylonitrile/ Acrylamide / Vinyl Acetate of N-Substituted Maleimide*, International Journal of Chemical and Physical Sciences, 2016.

41. **Jyoti Chaudhary**, Swati Purohit, Radha Chaudhary, *Copolymers of MA/EA/BA with N-substituted maleimide: synthesis, characterization and effect on the thermal properties*, International Journal of Engineering Science & Research Technology, 2016.
42. **Jyoti Chaudhary**, Giriraj Tailor¹, Deepak Kumar, Mohammad Ashid and Ajit Joshi, *Synthesis and characterization of Zinc (II) Bakelite Nanocomposite*, RNT Journal of Current Discovery in Chemistry, 2016.
43. **Jyoti Chaudhary**, Narendra Pal Singh, Nirmala Jangid, Ritu Tomar, Paridhi Kataria, *Model Free thermal degradation kinetics of biobased phenolic resin derived from vanilline oxime*, Indian Journal of Chemistry-Section A, 2015.
44. **Jyoti Chaudhary**, Swati Purohit, Suman Jinger, *Radical homo and copolymerization of Maleimide with acrylic acid: effect of H-bonding on thermal resistant properties*, American International Journal of Research in Science Technology Engineering & Mathematics, 2015.
45. **Jyoti Chaudhary**, Swati Purohit, Suman Jinger, Rohini Trivedi, *Studies on Thermal and Microbial Resist PolyN-[4-Chloro,2-(phenylcarbonyl) phenyl]maleimide: Synthesis and Characterization*, International Journal of Chemistry and Application, 2015.
46. **Jyoti Chaudhary**, Paridhi Kataria, *The Kinetics and Mechanism study of the oxidation of an amino carboxylic acid by Mn(III)*, International Journal of Chemistry and Application, 2014.
47. **Jyoti Chaudhary**, *Kinetics and mechanism of oxidation of benzhydrol by 4-methyl pyridinium di chromate in acetic acid-water medium*, International Journal of Chemistry and Application, 2013.
48. **Jyoti Chaudhary**, *Synthesis, Characterization and Curing of Vinyl ester resin*, J. Environ. Nanotechnol, 2013.
49. **Jyoti Chaudhary**, Pooja Gupta, Paridhi Chandaliya, *Synthesis, characterization and glass reinforcement of halo-substituted epoxy-vinyl ester resins*, International Journal of New Innovation, 2013.
50. **Jyoti Chaudhary**, *Mechanistic study of oxidation of aromatic aldehydes by Cr (VI) complex in acetic acid-water medium*, ISST Journal of Applied Chemistry, 2013.
51. **Jyoti Chaudhary**, Narendra Pal Singh Chauhan, *Synthesis, thermal and antimicrobial properties of copolymers derived from 2,4 dinitrophenylaminomaleimide and alkyl substituted acrylates*, Malaysian Polymer Journal, 2013.

52. **Jyoti Chaudhary**, Paridhi Chandaliya, Pooja Gupta, B.L.Hiran, *Novel Alkyl Substituted Epoxy Resins Containing Naphthalene Moiety*, American International Journal of Research in Science, Technology, Engineering & Mathematics (IASIR USA Journals), **2013**.
53. Narendra P.S. Chauhan, Paridhi Kataria, **Jyoti Chaudhary**, Suresh C. Ameta, *Synthesis, characterization and thermal studies of terpolymers derived from vanillin, furfural and halo-substituted acetophenone*, International Journal of Polymeric Material, **2012**.
54. **Jyoti Chaudhary**, Paka Ram Chaudhary, B.L. Hiran, *Synthesis and characterization of heat resistant poly (2,4dinitro(phenyl amino) maleimide-co-MMA) prepared by free radical*, Arpan Journal of science and technology, **2012**.
55. **Jyoti Chaudhary**, Narendra P.S. Chauhan, PakaRam Chaudhary, B.L. Hiran, *Thermal and microbial resistant polymers derived from Nitro phenylaminomaleimide and Methylmethacrylate: Synthesis and characterization*, Oxidation communications, **2012**.
56. B. L. Hiran, **Jyoti Chaudhary**, Suresh Meena, and Shiv Narayan Paliw *AIBN initiated free radical homopolymerization of N-(1-naphthyl) maleimide and copolymerization with MMA synthesis and characterization*, Journal of the Indian Chemical Society, **2008**.
57. Hiran B. L., **Jyoti Chaudhary**, Paliwal S. N., Choudhary P. R., *Homo and copolymerization of N-(phenylamino) maleimide: Synthesis and Characterization*, Journal of the Indian Chemical Society, **2007**.
58. B. L. Hiran, **Jyoti Chaudhary**, S. N. Paliwal, Suresh Meena, and P. R. Chaudhary, *Synthesis and Characterization of some new thermal stable polymer-Polymerization of N- [4-N'-(Benzylamino-carbonyl) phenyl] maleimide*, E-Journal of Chemistry, **2007**.
59. B. L. Hiran, S. N. Paliwal, **Jyoti Chaudhary** and P. R. Choudhary, *Synthesis and Characterization and copolymerization of N-(phenylamino) maleimide with MMA*, E-Journal of Chemistry, **2007**.
60. Hiran B. L., Paliwal S. N., **Jyoti Chaudhary**, Meena Suresh, *Preparation, polymerization and characterization of some new maleimides*, Journal of the Indian Chemical Society, **2007**.
61. Hiran B. L., Malkani R. K., **Jyoti Chaudhary**, Amb B .K., Dangarh B. K., *Reduction of 3-Methyl pyridinium Bromochromate by Cs alcohol: A kinetic and mechanistic study*, Asian Journal of Chemistry, **2007**.
62. Jawahar L. Jat, Dinesh Bhambi, **Jyoti Chaudhary**., Talesara G.L., *Synthesis and antimicrobial activity of some new 6-amino 4-phenyl 1-(N-alkoxyphthalimido)3-methyl-1,4-dihydropyrano[2,3-c] pyazole-5-carbonitrile derivatives in aqueous media*, Indian Journal of heterocyclic chemistry, **2006**.

63. B.L.Hiran, Palak Verma, **Jyoti Chaudhary**, Vandana Joshi, *Studies on oxidation of tyrosine by pyridinium bromochromate in the acetic acid-water mixture*, International Journal of Chemical Sciences, 2004.

64. B.L. Hiran, Palak Verma, **Jyoti Chaudhary**, Neetu Sorgar, *Kinetics of Oxidation of 2-Nitro Benzaldehyde by pyridinium Bromochromate in acetic acid-water mixture*, International Journal of Chemical Sciences, 2004.

➤ **Invited Lectures / Chairmanship /Papers Presented in National/ International Conferences/ Seminars :**

1. Biogenic Synthesis of Sulphur Nanoparticles Using Ocimum canum leaves for Antibacterial Application towards Gram positive and Gram negative Pathogens, **International Conference on Polymers for advanced technology** organized by Asian Polymer association, International Centre, **Goa, 2023**
2. Biogenic Synthesis of Iron Nanoparticles using Ficus benjamina leaf extract for validating their in-vitro Antibacterial and Antifungal susceptibility, **International Conference on Polymers for advanced technology** organized by Asian Polymer association, International Centre, **Goa, 2023**
3. Phytochemical screening and Antimicrobial evaluation of Nickel Nanoparticles derived from *Ixora Coccinea* (Leaves) via facile and sustainable synthesis approach, **International Conference on Polymers for advanced technology** organized by Asian Polymer association, International Centre, **Goa, 2023**
4. Synthesis and study of mechanical strength in phenol-naphtholic derived epoxy and vinyl ester resins, **International Conference on Polymers for advanced technology** organized by Asian Polymer association, International Centre, **Goa, 2023**
5. Polyacrylamide based hybrid hydrogel derivatives for their various sustainable environmental applications, **International Conference on Polymers for advanced technology** organized by Asian Polymer association, International Centre, **Goa, 2023**
6. Green Synthesis of Cobalt Nanoparticles using Ficus benjamina Extract and the Evaluation of their Antibacterial Activity, **International Conference on Recent Advances in Chemical Sciences**, Department of Chemistry, Mohanlal Sukhadia University, **Udaipur, 2023.**
7. Phytochemical Screening; Biogenic Synthesis, Characterization and Biological Significance of Cd NPs from using Nyctanthes arbor-tristis (Leaves), **International Conference on Recent Advances in Chemical Sciences**, Department of Chemistry, Mohanlal Sukhadia University, **Udaipur, 2023.**
8. Biogenic Synthesis and characterization of Fe Nanoparticles using Moringa oleifera (Leaves) and Their from Phytochemical Analysis with Biological Importance, **International**

Conference on Recent Advances in Chemical Sciences, Department of Chemistry, Mohanlal Sukhadia University, Udaipur, 2023.

9. Biogenic Synthesis and Characterization of Lead Nanoparticles Ixora Coccinea (Leaves) and Their from Phytochemical Screening with Biological Importance, **International Conference on Recent Advances in Chemical Sciences**, Department of Chemistry, Mohanlal Sukhadia University, Udaipur, 2023.
10. Polyacrylamide based hybrid hydrogel derivatives for their various sustainable environmental applications, **International Conference on Recent Advances in Chemical Sciences**, Department of Chemistry, Mohanlal Sukhadia University, Udaipur, 2023.
11. Phytochemical screening, green synthesis, characterization and biological significance of copper nanoparticles from Ocimum canum, **International Conference on emerging areas in chemical sciences**, Pacific University, Udaipur, 2022.
12. Studies based on thermal and microbial properties of copolymers of N-Substituted maleimide and Vinyl Alcohol, **National Conference** on Industrial advancement and academic research: A Correlation by Department of Pharmaceutical Sciences, ,MLS University ,Udaipur, 2018 .
13. **Invited lecture** on Studies on Microbial Activity of 4-Chlorophenylaminomaleimide – acrylonitrile and acrylamide at **National Conference**, Department of Chemistry, HNB Garhwal University, BGR Campus, Pauri, Uttarakhand, 2018.
14. **Invited lecture** on Chromium impregnated acryamide /Gurar Gum methyl methacrylate based biodegradable hydrogel for waste water treatment at **Kapasan National Conference**, RNT PG College, Kapasan, Rajasthan, 2018.
15. **Invited lecture** on Waste Management: New Challenges, International Conference, FMS, PAHER University, Udaipur, **2017.**
- 16.
17. Microbial activity of terpolymer of N-substituted maleimides, vinyl pyridine, and butyl acrylate, **International Conference on Eco-friendly and socially responsive economy and equity: Issues and challenges of the 21st century for emergent sustainable development amongst SAARC countries** conducted by Department of Zoology, UCS, MLS University, Udaipur, 2017.
18. Synthesis, characterization, thermal and microbial studies of Copolymer of N substituted maleimides, **UGC-Sponsored National Conference**, Department of Chemistry, MLS University, Udaipur, 2016.
19. Synthesis and studies on reactivity ratios of copolymer [N-(4-N Phenylethanamide azo 3-N-(4 nitro phenyl) maleimide-co-acrylic acid], **National Conference** at the department of Mathematics and Statistics, MLS University, Udaipur, 2016.
20. Chemical modification of maleimide polymers with azo functionality: Thermal microbial studies, **National Conference** at Department of Chemistry Mewar University, Chittorgarh, 2016.
21. Studies on microbial activity of terpolymer of N Substituted maleimides, vinyl pyridine and

MMA, National Conference at Department of Botany and Department of Biotechnology, MLS University, Udaipur, 2016.

22. Preparation of terpolymer of N Substituted Maleimide, acrylic acid, and Acrylonitrile: Thermal, antimicrobial studies, **International Conference of Him science congress association, Dharmshala (H.P), 2016.**
23. Green chemistry: Teaching and Technology, **National Conference of Royal Society of Chemistry (London), North India Section, Department of Chemistry, MLS University, Udaipur, 2016.**
24. Synthesis of High-Performance Copolymer of N-Substituted Maleimides With Polymeric Derivatives, **National Conference sponsored by Indian Chemical Society, Kolkata held at PAHER University, Udaipur, 2016.**
25. Synthesis and analytical studies of N substituted maleimide with polymeric basic monomer derivatives **National Conference conducted by Department of Chemistry at MG College, Udaipur, 2016.**
26. High-performance polymer: Synthesis and studies of biological activities, **National Conference of Biodiversity, Conservation and Eco-Tourism, Rajasthan State Medicinal Plants Board, Govt. of Rajasthan, 2016.**
27. Synthesis and Characterization of Multifunctional Carbon Nanotube, **International Conference of Recent Trends in Chemical Sciences, Department of chemistry, SGG Govt. College, Banswara, Rajasthan, 2016.**
28. Studies on thermal and microbial properties of terpolymer of N-substituted maleimides, vinyl pyridine and butyl acrylate **Sponsored by UGC & SCHM College, Ulhasnagar, Maharashtra, 2015.**
29. Rubber and Plastic Waste Management: Recycling, Reuse and Future Demand, **National Conference conducted by faculty of Management studies, Pacific University, Udaipur, 2015.**
30. Radical Homopolymerization of N-[(4-aceto amino) phenyl] Maleimide: Synthesis and Characterization, **International Conference at Patel group of Institutions, Indore (M.P.), 2015.**
31. Chemical, mechanical and electrical properties of Glass fiber reinforced composites of Vinyl Ester Resin, **National Conference at Vallabh Government College, Mandi (HP), 2015.**
32. Synthesis, Characterization, Thermal and Antimicrobial studies of Terpolymer of N Substituted Maleimides, Acrylic Acid and Butyl Acrylate, **National Conference at Department of Chemistry, MNIT, Jaipur, 2015.**
33. Synthesis and Characterization of Metal Complexes of N-Substituted Maleimides, **Asian polymer association** conducted by Department of Chemistry, Saurashtra University, **Rajkot (Gujarat), 2015.**

34. Thermal and Antimicrobial studies of Terpolymer of N-Substituted Maleimides, Acrylic acid and Vinyl acetate, **International Conference conducted by GITS, Udaipur, 2015.**
35. Antimicrobial properties of copolymers derived from N-substituted maleimide and vinyl pyridine, **National Conference at Department of Environment Sciences, MLS University, Udaipur, 2014.**
36. A Comparative Kinetics and Mechanistic studies of the oxidation of aromatic primary and secondary alcohol by Cr (VI), **International Conference of Science Congress Association, Udaipur, 2014.**
37. Industrial application of resins: A study of epoxy resin, **International Conference at PIBS, Udaipur, 2013.**
38. Synthesis and Characterization of copolymer derived from 4-nitro (phenyl amino) maleimide and styrene, **International Conference at Arya post-graduate college, Panipat, Harvana, 2013.**
39. Oxidation of substituted benzaldehyde by 4-methyl pyridinium dichromate: A kinetic and mechanistic study, International Conference at Indian society of chemists & biologists, Lucknow, UP and Department of chemistry, **MLSukhadia University, Udaipur, 2013.**
40. Rubber /Tire waste management: A review of selected techniques, **International Conference at Pacific University, Udaipur, 2013.**
41. New Composites: The Materials for chemical and allied industries, **National Conference of the institution of Engineers, Udaipur, 2013.**
42. Thermo gravimetric analysis of copolymer based on maleimide and acrylates, **National Conference at VBRI, Udaipur, 2013.**
43. Synthesis and Characterization of Thermal resistant polymer derived from dinitro (phenyl amino) maleimide, **National Conference of Pacific College of basic & applied sciences, Pacific University, Udaipur, 2012.**
44. Antimicrobial properties of nitrophenyl aminomaleimide & methyl methacrylate based polymers, **International Conference of Asian polymer association at IIT Delhi, 2012.**
45. Synthesis and characterization of thermal stable (phenyl amino) maleimide, **International Conference of Asian journal of chemistry at Udaipur, 2012.**
46. A comparative study of thermal stable polymers derived from alkyl acrylates & substituted phenyl amino maleimide, **International Conference at Pacific academy of higher education & research university, Udaipur, 2012.**
47. Study of heat resistant poly (2, 4 dinitro (phenyl amino) maleimide-co-MMA) prepared by free radical polymerization, **International Conference at Dr. B R Ambedkar National Institute of Technology, Jalandhar, Punjab, 2012.**
48. A comparative study on kinetics and mechanism of oxidation of benzhydrol by different

complexes of Cr(VI), **International Conference at Dr. B R Ambedkar National Institute of technology, Jalandhar, Punjab, 2012.**

49. Synthesis and free radical homo and copolymerization of nitro derivatives of (phenyl amino) maleimide with MMA, **International Conference of Asian polymer association at Panjab University, Chandigarh, 2010.**

➤ **Academic Contribution:**

- **Executive Committee Member** in Asian Polymer Association (APA), **2023.**
- **Session chair** in the National Conference on Recent Trends in Biotechnology **2023** organized by the Department of Biotechnology, MLSU, Udaipur, Rajasthan.
- **Session chair** in the APA International Conference on Polymers for advanced technology, **2023**, Goa, India
- **Convener**, 1st International Conference on : Recent advances in chemical sciences **2023** (ICRACS 2023)-organized by Department of Chemistry, University college of science, MLS University,Udaipur,(Rajasthan)
- **Convener**, One day seminar on Awareness programme: Gender Equality, Women's safety and Rights-organized by Department of Chemistry, **2022**, University college of science, MLS University,Udaipur,(Rajasthan)
- **Convener**, International virtual Conference on the topic-Frontiers in Chemical Sciences **2021**(IVCFCS-2021)-organized by the Department of Chemistry, University College of science, MLS University,Udaipur,(Rajasthan)
- **Session chair** in Conference on the topic -Current Scenario in science and technology: facing the challenges and creating opportunities, MLS University, Udaipur,**2019.**
- **Convener**, Webinar on the topic-Why Science-organized by the Department of Chemistry, University College of science, MLS University,Udaipur,(Rajasthan).
- **Head**, Department of Chemistry, University college of Science, MLS University,Udaipur,(Rajasthan)
- **Course Director**, M.Sc Industrial Chemistry, Department of Chemistry, University college of Science, MLS University,Udaipur,(Rajasthan)

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