

# Curriculum Vitae



**RISHI PALIWAL**

**M. Pharm. PhD, Post. Doc. (USA), CSIR-NET (LS)**

**Associate Professor**

**Department of Pharmacy, IGNTU, MP, India**

**Pharmaceutics (Drug Delivery and Nanomedicine)**

**Email: [rishipaliwal@gmail.com](mailto:rishipaliwal@gmail.com)**

**[paliwal@igntu.ac.in](mailto:paliwal@igntu.ac.in)**

| <b>RESEARCH EXPERIENCE</b> |  |
|----------------------------|--|
| August 2017- Till date     | Teaching and Guiding students at Department of Pharmacy, Indira Gandhi National Tribal University, Amarkantak, MP  |
| April 2017- August 2017    | Research Supervision and Teaching and Guiding students at Siddhi Vinayaka Institute of Technology and Sciences, Bilaspur   |
| Jan 2015- April 2017       | Research Supervision of Post Graduate Students, Coordinating and Guiding students as In-charge Head of the Department, Pharmaceutics, Columbia Institute of Pharmacy, Raipur |
| Dec 2013 –Dec 2014         | Post-Doctoral Research Associate, Texas A&M Health Science Center, TAMU-Kingsville, TX, USA conducting research on biomaterials based non-invasive vaccine delivery          |
| July 2012-Dec 2013         | Research Supervision of Post Graduate Students, Coordinating and Guiding students as In-charge Head of the Department, Pharmaceutics, Columbia Institute of Pharmacy, Raipur |
| July 2009-April 2012       | Senior Research Fellow, Council of Scientific and Industrial Research,   |

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|                      | New Delhi, India   |
| April 2008-June 2009 | Research at Nanomedicine Research Centre, ISF College of Pharmacy, Moga, India |
| July 2004-June 2007  | Junior Research Fellow, University Grant Commission, New Delhi                 |

### QUALIFICATIONS AND TRAININGS

|           |   |
|-----------|---|
| 2013-2014 | Post-Doctoral Fellowship, Texas A&M Health Science Center, TAMU-Kingsville, TX, USA   |
| 2008-2012 | Doctor of Philosophy, Pharmaceutical Sciences, Department of Pharmaceutical Sciences, Dr. H. S. Gour University, Sagar, MP, India (Thesis submitted April 2012, Awarded on November 2012) |
| 2004-2007 | Master of Pharmacy, Pharmaceutics, Department of Pharmaceutical Sciences, Dr. H. S. Gour University, Sagar, MP, India (June 2007)   |
| 2000-2004 | Bachelor of Pharmacy, Pharmaceutical Science, Department of Pharmaceutical Sciences, Dr. H. S. Gour University, Sagar, MP, India (June 2004)  |
| 1997-2000 | Bachelor of Science, Bundelkhand University, Jhansi, India (June 2000)  |

### NATIONAL TEST QUALIFICATIONS

|      |  |
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| 2004 | GATE with 98.51 percentile (AIR-122)         |
| 2006 | GATE   |
| 2007 | GATE   |
| 2016 | CSIR-UGC-NET for Lectureship in Life Science |

**TEACHING/SUPERVISORY EXPERIENCE**

|                                |  |
|--------------------------------|--|
| 16 January 2023-Till date      | Associate Professor Teaching and Guiding MPharm & PhD students at the Department of Pharmacy, Indira Gandhi National Tribal University, Amarkantak, MP       |
| 21 August 2017-15 January 2023 | Assistant Professor Teaching and Guiding MPharm & PhD students at the Department of Pharmacy, Indira Gandhi National Tribal University, Amarkantak, MP       |
| 24 April 2017- 19 August 2017  | Associate Professor - teaching and supervising B. Pharm and M. Pharm. students, Siddhi Vinayaka Institute of Technology and Sciences, Bilaspur, CG           |
| July 2016- 22 April 2017       | Associate Professor - teaching and supervising B. Pharm and M. Pharm. students, Columbia Institute of Pharmacy, Raipur                                       |
| Jan 2015- June 2016            | Senior Assistant Professor - teaching and supervising B. Pharm and M. Pharm. students, Columbia Institute of Pharmacy, Raipur                                |
| Jan 2014-May 2014              | Volunteer Teaching Assistance for PharmD in Laboratory Practices at Irma Lerma Rangel College of Pharmacy, USA   |
| July 2012-August 2013          | Assistant Professor - Teaching and Supervising B. Pharm and M. Pharm. Students, Columbia Institute of Pharmacy, Raipur                                       |
| July 2009-June 2012            | Assisting M. Pharm. students in their research projects of Prof. Vyas research group   |
| April 2008-June 2009           | Senior Lecturer- Teaching and supervision of B. Pharm and M. Pharm student supervision at Nanomedicine Research Centre, ISF College of Pharmacy, Moga, India |
| June 2007- March 2008          | Lecturer- Undergraduate student supervised for their minor projects at Globus College of Pharmacy, Bhopal, India   |

| <b>HONORS/AWARDS/RECOGNITION</b> |   |
|----------------------------------|---|
| 2024                             | <b>Best Herbal Oral Presentation Award in International Conference cum Herbal Expo-2024 by GGU, Bilaspur, CG</b>                          |
| 2023                             | <b>Listed in Top 2% Scientist of the world for the Year 2023 (published report by Stanford University)</b>                                |
| 2023                             | <b>Listed in Top 2% Scientist of the world for the Year 2022 (published report by Stanford University)</b>                                |
| 2022                             | <b>Listed in Top 2% Scientist of the world for the Year 2021 (published report by Stanford University)</b>                                |
| 2022                             | <b>Prof. M. L. Schroff “Pharma Recognition Award” by PharmLok on Teacher’s Day</b>  |
| 2021                             | <b>Listed in Top 2% Scientist of the world for the Year 2020 (published report by Stanford University)</b>                                |
| 2021                             | <b>Outstanding Assistant Professor of Pharmaceutics by IPA-MP Branch, Indore</b>  |
| 2019                             | <b>Outstanding Assistant Professor of Pharmaceutics by APTI-MP Branch, Bhopal</b>   |
| 2013                             | <b>Career Award for Young Teachers by AICTE, New Delhi</b>  |
| 2011                             | <b>Bioencapsulation Research Grant (BRG) to attend and talk at XIX International Conference on Bioencapsulation, Amboise, France</b>      |
| 2010                             | <b>Travel Grant by the Department of Biotechnology, India, and Indian National Science Academy for attending ICBN 2010 at Singapore</b>   |
| 2009                             | <b>Rudolf Cimdins Award 2009 by European Society of Biomaterials in 22nd European Conference on Biomaterials, Lausanne, Switzerland</b>   |
| 2009                             | <b>Travel Grant by the Department of Science and Technology, India for attending 22<sup>nd</sup> ESB at Lausanne, Switzerland in 2009</b> |
| 2009                             | <b>Senior Research Fellowship (SRF) from Council of Scientific and Industrial Research (CSIR), for PhD Project, India</b>                 |
| 2007                             | <b>M. P. Young Scientist Award, 2007 by MP Council of Science and Technology, Bhopal, India</b>   |

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| 2005 | <b>Junior Research Fellowship (JRF)</b> from the University Grant Commission for M. Pharm. Research Project, India |
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## FUNDING

| S. No | Title of the project   | Funding Agency                          | Amount Rs. (in Lacs) | Current Status | Duration            | Principal Investigator |
|-------|--|---|----------------------|----------------|---------------------|------------------------|
| 1     | Development and Optimization of Functionalized Nanomedicine Using Quality by Design for Controlled Delivery of Therapeutics for Ophthalmic Applications                                      | Department of Biotechnology, New Delhi  | 62.46 Lakh           | Completed      | 3 Years (2018-2021) | Yes                    |
| 2     | Development and characterization of mixed nanomicellar formulations using QbD approach for the delivery of Bioactive(s) for the management of Rheumatoid Arthritis                           | University Grants Commission, New Delhi | 10 Lakh              | Completed      | 2 Years (2018-2020) | Yes                    |
| 3     | To develop on-site identification mechanism and study importance of some medicinal plants of Chhattisgarh used by local healers for human health management in tribal region using Foldscope | Department of Biotechnology, New Delhi  | 8 Lakh               | Completed      | 1 Year (2018-2019)  | Yes                    |

## **EDITORIAL BOARD MEMBER**

- Current Drug Therapy (Bentham Science Publisher since 2017)
- Mekal Meemansha (IGNTU, Since 2021-2025)
- Current Indian Science (Since 2022)

## **GUEST EDITOR**

- 1 Special Issue of **Current Drug Therapy** on “Role of Molecular Bioports in Oral Delivery of Biomacromolecules” (Published), 2014.
- 2 Special Issue of **Mini-Review in Medicinal Chemistry** “Nanotherapeutics for Cancer Therapy and Imaging” (Published), 2017.
- 3 Special Issue of **Gels** on “Synthesis and Applications of Hydrogels in Biomedical Field” MDPI, ongoing 2023.
- 4 Special Issue of **Current Indian Science on** “Nanotechnological Approaches for the Controlled Delivery of Neurotherapeutics” ongoing 2023

## REVIEWER OF INTERNATIONAL JOURNAL

|  |                                |
|--|--------------------------------|
| AAPS SciTech                                       | Springer                       |
| Colloid and Biointerface B                         | Elsevier                       |
| Molecular Nanoscience                              | Springer                       |
| Biotechnology Advances                             | Elsevier                       |
| International Journal of Pharmaceutics             | Elsevier                       |
| Drug Discovery Today                               | Elsevier                       |
| Journal of Drug Delivery Science and Technology    | Elsevier                       |
| International Journal of Biological Macromolecules | Elsevier                       |
| Expert Opinion on Drug Delivery                    | Informa Health Care            |
| Expert Opinion on Therapeutic Patents              | Informa Health Care            |
| Drug Delivery                                      | Informa Health Care            |
| International Journal of Nanomedicine              | Dove Press                     |
| Drug Delivery Letters                              | Bentham Science                |
| Current Pharmaceutical Biotechnology               | Bentham Science                |
| Current Pharmaceutical Design                      | Bentham Science                |
| Current Drug Therapy                               | Bentham Science                |
| Journal of Nanopharmaceutics and Drug Delivery     | American Scientific Publishers |
| Science of Advanced Materials                      | American Scientific Publishers |
| Molecular Neurobiology                             | Springer                       |
| Frontier in Pharmacology                           | Frontier                       |
| Bioanalysis  | Informa Health Care            |

## **PROFESSIONAL MEMBERSHIP**

- Association of Pharmacy Teachers of India (APTI) – Life Member
- The India Pharmaceutical Association (IPA) – Life member
- Anticancer Drug Society
- UP State Pharmacy Council

### **E-content Developed**

#### **UGC-CEC content writer and presenter**

1. Micro-encapsulation -I, II and III, 12 modules, BPharm VIIIth semester
2. Two compartment open model with first order elimination kinetics-I, 07 modules, BPharm VIIIth semester
3. Two compartment open model with first order elimination kinetics-II, 05modules, BPharm VIIIth semester

| <b>PROFILE SUMMARY</b>                               |                             |
|--|-----------------------------|
| Peer-reviewed International Publications             | <b>62</b>                   |
| Book Chapters  | <b>39</b>                   |
| Book ( <b>Springer Nature, Elsevier, CRC Press</b> ) | <b>03</b>                   |
| Patents  | <b>08 (filed/published)</b> |
| h index  | <b>32*</b>                  |
| i-10 index   | <b>50*</b>                  |
| Total citations                                      | <b>4671*</b>                |
| PG guided  | <b>19</b>                   |
| PhD guided   | <b>04</b>                   |
| Invited lectures                                     | <b>52</b>                   |
| Conference seminar/workshops organized               | <b>10</b>                   |
| Conference paper presented/attended                  | <b>34</b>                   |
| *As on 05.08.2025 Google scholar                     |                             |

## **PATENTS (08)**

1. Patent No.: 202221044981

Patent Title: A NOVEL POLYHERBAL FORMULATION FOR WOUND HEALING AND METHOD OF PREPARING THEREOF

Inventor: **Dr. Rishi Paliwal**, Mr. Rameshroo Kenwat, Mr. Chiranjeev Singh

2. Patent No.: 202221045056

Patent Title: A NOVEL POLYHERBAL GEL FOR RHEUMATOID ARTHRITIS MANAGEMENT

Inventor: **Dr. Rishi Paliwal**, Mr. Rameshroo Kenwat, Mr. Chiranjeev Singh

3. Patent No.: 202221045973

Patent Title: A NOVEL CAPSAICIN NANOFORMULATION GEL FOR THE TREATMENT OF RHEUMATOID ARTHRITIS AND THE METHOD OF PREPARING THEREOF

Inventor: **Dr. Rishi Paliwal**, Mr. Rameshroo Kenwat

4. Patent No.: 202221046239

Patent Title: ESTRONE BASED TARGETED LIPOSOMES AS NOVEL FORMULATION FOR BREAST CANCER THERAPY AND METHOD PREPARING

Inventor: Dr. Balak Das Kurmi, Dr. Shivani Rai Paliwal, Dr. Preeti Patel, **Dr. Rishi Paliwal**

5. Patent No.: PCT/US2023/018069

Patent Title: NOVEL DRUG DELIVERY SYSTEMS AND METHODS OF MAKING AND USING SAME

Inventor: Dr. Srinath Palakurthi, **Dr. Rishi Paliwal**

6. Patent No.: 202321036850

Patent Title: MORINGA OLEIFERA EXTRACT LOADED NANOFORMULATION FOR WOUND HEALING AND METHOD OF PREPARING THEREOF

Inventor: **Dr. Rishi Paliwal** and Mr. Aanjaneya Mamgain

7. Patent No.: 202321086106

Patent Title: A NOVEL COMBINATION OF MORINGA OLEIFERA EXTRACT LOADED GOLD NANOPARTICLES FOR ARTHRITIS AND METHOD OF PREPARING THEREOF

Inventor: **Dr. Rishi Paliwal** and Mr. Aanjaneya Mamgain

8. Patent No.: 202421034121

Patent Title: HEDYCHUM CORONARIUM FLOWER EXTRACT LOADED NOVEL NANOEMULSION FORMULATION FOR OCULAR DISORDERS AND THE METHOD OF PREPARING THEREOF

Inventor: **Dr. Rishi Paliwal** and Mr. Rameshroo Kenwat,

**PUBLICATIONS (62)**

|           |             |  |
|-----------|-------------|--|
| <b>1.</b> | <b>2025</b> | Malaiya A, Kenwat R, Mamgain A, Nayak P, Parker A, Paliwal SR, Paliwal R. Intranasal resveratrol delivery to the brain with chitosan-decorated bovine serum albumin nanoparticles: Advancing Alzheimer's management in old female rats through QbD-based optimization, in vitro evaluation, and in vivo exploration. <i>International Journal of Biological Macromolecules</i> . 2025 Apr 17;143300. |
| <b>2.</b> | <b>2025</b> | Rameshroo Kenwat, Aanjaneya Mamgain, Akanksha Malaiya, Umesh Kumar Patil, Awadhesh Kumar Shukla, and Rishi Paliwal*, Exploring Bioactive Profiling and Anticataract Effect of Hedychium coronarium J. Koenig Flower Extract on Glucose-induced Diabetic Cataract Ex vivo Model, Volume 14, Issue 1, 2025, 13 March, 2025, 29 – 51.   |
| <b>3.</b> | <b>2024</b> | Kisku A, Nishad A, Agrawal S, Paliwal R, Datusalia AK, Gupta G, Singh SK, Dua K, Sulakhiya K. Recent developments in intranasal drug delivery of nanomedicines for the treatment of neuropsychiatric disorders. <i>Frontiers in Medicine</i> . 2024 Sep 19;11:1463976.   |
| <b>4.</b> | <b>2024</b> | Mamgain A, Kenwat R, Paliwal R. Phytochemical Profiling and Molecular Investigation of Moringa Oleifera Lam. Leaves for Anti-Arthritic Potential: Assessment and Identification of Phytopharmaceuticals through GC-MS Analysis, In Silico Study, ADMET Analysis, and In Vitro Evaluation. <i>Current Biotechnology</i> . 2024 Sep;13(3):140-58.  |
| <b>5.</b> | <b>2023</b> | Kumar A, Paliwal R, Gulbake A. Lentinan: An unexplored novel biomaterial in drug and gene delivery applications. <i>Journal of Controlled Release</i> . 2023 Apr 1;356:316-36.   |
| <b>6.</b> | <b>2024</b> | Kumar A, Vaiphei KK, Singh N, Datta Chigurupati SP, Paliwal SR, Paliwal R, Gulbake A. Nanomedicine for colon-targeted drug delivery: strategies focusing on inflammatory bowel disease and colon cancer. <i>Nanomedicine</i> . 2024 Jun 7:1-22.  |
| <b>7.</b> | <b>2024</b> | Patra P, Katke S, Singh S, Panchal K, Johari A, Pawar AV, Paliwal R, Chaurasiya A. Development and Evaluation of Stable Long Circulating Decitabine-loaded Copolymeric Nanoparticles: Harnessing QbD Approach and Lyophilization Technique. <i>Journal of Pharmaceutical Innovation</i> . 2024 Jun;19(3):38.   |
| <b>8.</b> | <b>2024</b> | Vishwakarma A, Yadav H, Lakra P, Sulakhiya K, Paliwal R, Maiti S. Madhuca indica oil-entrapped buoyant galactomannan hydrogel microspheres for controlling epileptic seizures. <i>International Journal of Biological Macromolecules</i> . 2024 May 31:132739.   |

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| 9.  | 2024 | Malaiya A, Kenwat R, Mamgain A, Paliwal SR, Sulakhiya K, Maiti S, <b>Paliwal R</b> . QbD-based Optimization and Evaluation of Chitosan-Adorned Nanostructured Lipid Carriers for Nose-to-Brain Delivery of 17 $\beta$ -Estradiol in Rat Model of Alzheimer's Disease. <i>Journal of Drug Delivery Science and Technology</i> . 2024 Apr 25:105716. |
| 10. | 2024 | Panchal K, Reddy A, <b>Paliwal R</b> , Chaurasiya A. Dynamic intervention to enhance the stability of PEGylated Ibrutinib loaded lipidic nano-vesicular systems: transitioning from colloidal dispersion to lyophilized product. <i>Drug Delivery and Translational Research</i> . 2024 Mar 8:1-22.  |
| 11. | 2024 | Mamgain A, Kenwat R, <b>Paliwal R</b> . Biopolymer zein nanoparticles loaded with Moringa Oleifera extract for improved wound healing activity: Development, Qbd based optimization and in vivo study. <i>International Journal of Biological Macromolecules</i> . 2024 Feb 20:130314.   |
| 12. | 2024 | Shinde A, Panchal K, Patra P, Singh S, Enakolla S, <b>Paliwal R</b> , Chaurasiya A. QbD Enabled Development and Evaluation of Pazopanib Loaded Nanoliposomes for PDAC Treatment. <i>AAPS PharmSciTech</i> . 2024 May 6;25(5):97.   |
| 13. | 2023 | Panday A, Yadav H, Patel J, Paliwal R, Maiti S. Calcium silicate-reinforced pH-sensitive alginate-gellan gum composite hydrogels for prolonged drug delivery. <i>Journal of Applied Polymer Science</i> . 2023 Oct 5;140(37):e54392.   |
| 14. | 2023 | Kurmi BD, Patel P, <b>Paliwal R</b> , Kumar P, Paliwal SR. Multifunctional nanotherapeutics for intracellular trafficking of doxorubicin against breast cancer. <i>Nanomedicine</i> . 2023 Aug(0).   |
| 15. | 2023 | Shukla S, Sharma P, Gupta P, Pandey S, Agrawal R, Rathour D, Singh R, <b>Paliwal R</b> , Sulakhiya K. Current Scenario and Future Prospects of Adverse Drug Reactions (ADRs) Monitoring and Reporting Mechanisms in the Rural Areas of India. <i>Current Drug Safety</i> . 2023 Apr 28.  |
| 16. | 2023 | Kesharwani D, Paul SD, Paliwal R, Satapathy T. Development, QbD based optimization and in vitro characterization of Diacerein loaded nanostructured lipid carriers for topical applications. <i>Journal of Radiation Research and Applied Sciences</i> . 2023 Jun 1;16(2):100565.  |
| 17. | 2023 | Kesharwani D, Paul SD, Paliwal R, Satapathy T. Exploring potential of diacerein nanogel for topical application in arthritis: Formulation development, QbD based optimization  |

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|            |             | and pre-clinical evaluation. <i>Colloids and Surfaces B: Biointerfaces</i> . 2023 Mar 1;223:113160.  |
| <b>18.</b> | <b>2022</b> | Prajapati SK, Malaiya A, Mishra G, Jain D, Kesharwani P, Mody N, Ahmadi A, Paliwal R, Jain A. An exhaustive comprehension of the role of herbal medicines in Pre-and Post-COVID manifestations. <i>Journal of ethnopharmacology</i> . 2022 Oct 5;296:115420.   |
| <b>19.</b> | <b>2022</b> | Chandraker SK, Lal M, Ghosh MK, Ram T, Paliwal R, Shukla R. Biofabrication of spherical silver nanoparticles using leaf extract of <i>Plectranthus barbatus</i> Andrews: characterization, free radical scavenging, and optical properties. <i>Inorganic Chemistry Communications</i> . 2022 Aug 1;142:109669. |
| <b>20.</b> | <b>2022</b> | Shinde A, Panchal K, Katke S, Paliwal R, Chaurasiya A. Tyrosine kinase inhibitors as next generation oncological therapeutics: Current strategies, limitations and future perspectives. <i>Therapies</i> . 2022 Jul 1;77(4):425-43.  |
| <b>21.</b> | <b>2022</b> | Paliwal R, Kumar P, Chaurasiya A, Kenwat R, Katke S, Paliwal SR. Development of nanomedicines and nano-similars: recent advances in regulatory landscape. <i>Current Pharmaceutical Design</i> . 2022 Jan 1;28(2):165-77.  |
| <b>22.</b> | <b>2020</b> | Paliwal SR, Kenwat R, Maiti S, <b>Paliwal R</b> . Nanotheranostics for Cancer Therapy and Detection: State of the Art. <i>Current Pharmaceutical Design</i> . 2020 Nov 1;26(42):5503-17.   |
| <b>23.</b> | <b>2020</b> | Kurmi BD, <b>Paliwal R</b> , Paliwal SR. Dual cancer targeting using estrogen functionalized chitosan nanoparticles loaded with doxorubicin-estrone conjugate: A quality by design approach. <i>International Journal of Biological Macromolecules</i> . 2020 Dec 1;164:2881-94.                               |
| <b>24.</b> | <b>2020</b> | Tekchandani P, Kurmi BD, <b>Paliwal R</b> , Paliwal SR. Galactosylated TPGS Micelles for Docetaxel Targeting to Hepatic Carcinoma: Development, Characterization, and Biodistribution Study. <i>AAPS PharmSciTech</i> . 2020 Jul;21(5):1-1.  |
| <b>25.</b> | <b>2020</b> | Kurmi BD, Patel P, <b>Paliwal R</b> , Paliwal SR. Molecular approaches for targeted drug delivery towards cancer: A concise review with respect to nanotechnology. <i>Journal of Drug Delivery Science and Technology</i> . 2020 Mar 24:101682.  |
| <b>26.</b> | <b>2020</b> | <b>Paliwal R</b> , Paliwal SR, Kenwat R, Kurmi BD, Sahu MK. Solid lipid nanoparticles: a review on recent perspectives and patents. <i>Expert Opinion on Therapeutic Patents</i> . 2020 Mar 3;30(3):179-94.  |

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| 27. | 2020 | <b>Paliwal SR and Paliwal R</b> , Exploring Over Expressed Estrogen Receptors for Targeted Nanomedicine in Breast Cancer Therapy, ISSRF Newsletter 26 (September, 2020), 92.   |
| 28. | 2019 | Kesharwani D, <b>Paliwal R</b> , Satapathy T, Paul SD. Rheumatoid Arthritis: An Updated Overview of Latest Therapy and Drug Delivery. Journal of Pharmacopuncture. 2019 Dec;22(4):210.   |
| 29. | 2019 | Kesharwani D, Mishra S, Paul SD, <b>Paliwal R</b> , Satapathy T. Solubility Augmentation of Simvastatin by using the Marvelous Carrier Hydroxy Propyl $\beta$ -cyclodextrin: Compatibility Study, Statistical and Spectral Analysis. INDIAN JOURNAL OF PHARMACEUTICAL EDUCATION AND RESEARCH. 2019 Jul 1;53(3):S231-8. |
| 30. | 2019 | D Kesharwani, S Mishra, SD Paul, <b>R Paliwal</b> , T Satapathy, The Functional Nanogel: An Exalted Carrier System, Journal of Drug Delivery and Therapeutics, 2019 9 (2-s), 570-582   |
| 31. | 2017 | Kurmi BD, Tekchandani P, <b>Paliwal R</b> , Paliwal SR. Transdermal Drug Delivery: Opportunities and Challenges for Controlled Delivery of Therapeutic Agents Using Nanocarriers.Curr Drug Metab. 2017   |
| 32. | 2016 | Paliwal SR, <b>Paliwal R</b> , Agrawal GP, Vyas SP. Hyaluronic acid modified pH-sensitive liposomes for targeted intracellular delivery of doxorubicin. J Liposome Res. 2016 Jan 19:1-12.  |
| 33. | 2015 | Kurmi BD, Tekchandani P, Paliwal R, Paliwal SR Nanocarriers in Improved Heparin Delivery: Recent Updates. Curr Pharm Des. 2015;21(30):4509-18  |
| 34. | 2014 | <b>Rishi Paliwal</b> , S Palakurthi. Zein in controlled drug delivery and tissue engineering. J Control Release. 2014, 189, 108-122.   |
| 35. | 2014 | <b>Paliwal R</b> , Babu RJ, Palakurthi S. Nanomedicine scale-up technologies: feasibilities and challenges. Aaps Pharmscitech. 2014 Dec;15(6):1527-34.   |
| 36. | 2014 | Paliwal SR, <b>Paliwal R</b> , Vyas SP. A review of mechanistic insight and application of pH-sensitive liposomes in drug delivery. Drug delivery. 2015 Apr 3;22(3):231-42.  |
| 37. | 2012 | Shivani Rai Paliwal, <b>Rishi Paliwal</b> , G. P. Agrawal, S. P. Vyas, Targeted Breast Cancer Nanotherapeutics: Options And Opportunities With Estrogens Receptors, <i>Critical Reviews™ in Therapeutic Drug Carrier Systems</i> , 2012;29(5):421-46   |
| 38. | 2012 | Shivani R Paliwal, <b>Rishi Paliwal</b> , Harish C Pal, Ajit K Saxena, Praduman R Sharma,  |

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|-----|------|---|
|     |      | Prem N Gupta, Govind P Agrawal, Suresh P Vyas. Estrogen-Anchored pH-Sensitive Liposomes as Nanomodule Designed for Site-Specific Delivery of Doxorubicin in Breast Cancer Therapy, Mol Pharm. 2012 Jan 1;9(1):176-86.   |
| 39. | 2012 | <b>Rishi Paliwal</b> , Shivani Rai Paliwal, G. P. Agrawal, S.P. Vyas, "Chitosan nanoconstructs for improved oral delivery of low molecular weight heparin: In vitro and in vivo evaluation" International Journal of Pharmaceutics, 2012 Jan 17;422(1-2):179-84.                          |
| 40. | 2012 | <b>Rishi Paliwal</b> , Shivani Rai Paliwal, Govind Prasad Agrawal, S.P. Vyas. Recent advances in search of oral heparin therapeutics. Medicinal Research Reviews. 2012 32(2):388-409.   |
| 41. | 2011 | <b>Rishi Paliwal</b> , Shivani Rai Paliwal, G. P. Agrawal, S.P. Vyas, "Biomimetic Solid Lipid Nanoparticles for Oral Bioavailability Enhancement of Low Molecular Weight Heparin and Its Lipid Conjugates: In vitro and in vivo evaluation", Molecular Pharmaceutics, 2011, 8(4):1314-21. |
| 42. | 2011 | <b>Rishi Paliwal</b> , Shivani Rai, S.P. Vyas, "Lipid drug conjugate (LDC) nanoparticles as autolymphotrophs for oral delivery of methotrexate", Journal of Biomedical Nanotechnology, 2011, 7(1):130-131.  |
| 43. | 2011 | Shivani Rai, <b>Rishi Paliwal</b> , S. P. Vyas, "Doxorubicin encapsulated nanocarriers for targeted delivery to estrogen responsive breast cancer" Journal of Biomedical Nanotechnology, 2011, 7(1):121-122.  |
| 44. | 2011 | Shivani Rai Paliwal, <b>Rishi Paliwal</b> , G. P. Agrawal, S. P. Vyas, "Liposomal Nanomedicine in Breast Cancer Therapy" Nanomedicine (UK), 2011, 6(6):1085-100.  |
| 45. | 2010 | <b>Rishi Paliwal</b> , Shivani Rai Paliwal, S. P. Vyas. Advances in effective vaccine development against hepatitis B: focus on mucosal immunization strategies. Therapeutic Delivery, 2010, Vol. 1, No. 3, Pages 397-410.  |
| 46. | 2010 | Sheetu Wadhwa, <b>Rishi Paliwal</b> , Shivani Rai Paliwal, S. P. Vyas, Hyaluronic Acid modified Chitosan Nanoparticles for Effective Management of Glaucoma: Development, characterization and evaluation, Journal of Drug Targeting, 2010, 18, 4, 292-302.                               |
| 47. | 2010 | Shivani Rai Paliwal, <b>Rishi Paliwal</b> , Neeraj Mishra, Abhinav Mehta, Suresh P. Vyas. A novel cancer targeting approach based on estrone anchored stealth liposome for site-specific breast cancer therapy. Current Cancer Drug Target, 2010, 10, 3, 343-353.                         |

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| 48. | 2010 | Bhuvaneshwar Vaidya, Amit K. Goyal, Kapil Khatri, Neeraj Mishra, <b>Rishi Paliwal</b> , Shivani Rai, Shailja Tiwari, S.P. Vyas, Bolaamphiphiles based novel liposomes: a possible approach for drug delivery, Int. J. Biomedical Nanoscience and Nanotechnology, 2010, 1, 2/3/4, 95-108.  |
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| 50. | 2010 | Madhu Gupta; Amit K. Goyal; Shivani Rai Paliwal; <b>Rishi Paliwal</b> ; Neeraj Mishra; Bhuvneshwar Vaidya; Devyani Dubey; S.K. Jain; S.P. Vyas. Development and characterization of effective topical liposomal system for localized treatment of cutaneous candidiasis. Journal of Liposome Research. 2010, 20, 4, 341-50.                                   |
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| 53. | 2009 | Sheetu Wadhwa, <b>Rishi Paliwal</b> , Shivani R Paliwal, S. P. Vyas “Nanocarriers in Ocular Drug Delivery: An Update Review”, Current Pharmaceutical Design. 2009, 15, 23, 2724-2750.   |
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| 56. | 2009 | Amit K. Goyal, Kapil Khatri, Neeraj Mishra, Abhinav Mehta, Bhuvaneshwar Vaidya,   |

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| <b>57.</b> | <b>2008</b> | Shivani Rai, <b>Rishi Paliwal</b> , Bhuvaneshwar Vaidya, Prem N. Gupta, Kapil Khatri, Amit Goyal, S. P. Vyas, Solid lipid nanoparticles (SLNs) as a rising tool in drug delivery science: one step up in nanotechnology, Current Nanoscience, 4,1, 2008, 30-44.  |
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| <b>62.</b> | <b>2007</b> | Amit Rawat, Bhuvaneshwar Vaidya, Kapil Khatri, Amit K. Goyal, Prem N. Gupta, <b>Rishi Paliwal</b> , Shivani Rai, S.P. Vyas, Targeted intracellular delivery of therapeutics: An overview, Die Pharmazie, 2007, 62, 9, 643-58.  |

**BOOKS (03)**

| <b>S No.</b> | <b>Year</b> | <b>Title</b>  | <b>ISBN</b>   | <b>Publisher</b>   | <b>Remark</b> |
|--------------|-------------|---|---------------|--------------------|---------------|
| 1            | 2021        | Advances in Nanochemoprevention: Controlled Delivery of Phytochemical Bioactives by <b>Rishi Paliwal</b> and Shivani Rai Paliwal    | 9789811596940 | Springer<br>Nature | Authored      |
| 2            | 2022        | Targeted Nanomedicine for Breast Cancer Therapy by Shivani Rai Paliwal <b>and Rishi Paliwal</b>                                     | 9780128244760 | Elsevier           | Edited        |
| 3            | 2024        | Nanomedicine, Nanotheranostics and Nanobiotechnology: Fundamentals and Applications by <b>Rishi Paliwal</b> and Shivani Rai Paliwal | 9780367655495 | CRC Press          | Edited        |

**BOOK CHAPTERS (39\*)**

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| <b>2.</b>  | <b>2025</b> | Mamgain A, Parveen N, Kenwat R, Shukla R, Paliwal SR, Paliwal R. Green Synthesis of Nanoparticles: From Protocols to Applications. In Nanomedicine, Nanotheranostics and Nanobiotechnology 2025 (pp. 352-365). CRC Press.  |
| <b>3.</b>  | <b>2025</b> | Paliwal R, Paliwal SR, Shukla S, Nayak P. Nanomedicine: History, Progress, and Advances. In Nanomedicine, Nanotheranostics and Nanobiotechnology 2025 (pp. 1-9). CRC Press.  |
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| <b>5.</b>  | <b>2025</b> | Sulakhiya K, Singh R, Paliwal R. Regulatory Toxicological Assessment of Nanomedicines. In Nanomedicine, Nanotheranostics and Nanobiotechnology 2025 (pp. 163-176). CRC Press.  |
| <b>6.</b>  | <b>2025</b> | Lodhi R, Gurnany E, Bhargava S, Paliwal R, Ram C, Saraogi G, Shilpi S. Gold Nanoparticles: Multifunctional Nanocarriers for Drug Delivery and Biomedical Application. In Nanomedicine, Nanotheranostics and Nanobiotechnology (pp. 255-266). CRC Press.            |
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| <b>8.</b>  | <b>2024</b> | Malaiya A, Kewat R, Paliwal SR, Paliwal R. Targeted Brain Delivery of Therapeutics. In Novel Carrier Systems for Targeted and Controlled Drug Delivery 2024 Dec 24 (pp. 287-308). Singapore: Springer Nature Singapore.  |
| <b>9.</b>  | <b>2024</b> | Pandey S, Nayak P, Malaiya A, Paliwal R, Alam MI, Kashid S, Yadav AK, Paliwal SR. Colloidal Drug Delivery System: An Overview. Novel Carrier Systems for Targeted and Controlled Drug Delivery. 2024 Dec 24:339-90.  |
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| 35. | 2011 | Suresh P Vyas, <b>Rishi Paliwal</b> , Shivani R Paliwal “ <i>Ocular Delivery of Proteins and Peptides</i> ” In: Protein and Peptide Delivery, Ed. Chris Walle, Elsevier. 2011, pp. 87-103  |
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| <b>38.</b> | <b>2010</b> | Shivani R Paliwal, <b>Rishi Paliwal</b> , Suresh P Vyas, “ <i>Nanocarriers in Breast Cancer Therapy</i> ” In: Nanocolloidal carriers in site specific and controlled drug delivery, CBS Publishers, New Delhi, India, 2010, 554-577. |
| <b>39.</b> | <b>2010</b> | <b>Rishi Paliwal</b> , Shivani R Paliwal, Suresh P Vyas, “ <i>Nanocarriers: Toxicological Aspects</i> ” In Nanocolloidal carriers in site specific and controlled drug delivery, CBS Publishers, New Delhi, India, 2010, 661-674     |

### List of PG Students guided (19)

1. Sheetu Wadhwa (Development and characterization of nanoparticles loaded with Timolol and Dorzolamide for treatment of Glaucoma)-2009
2. Hukendra Sahu (Registration and Post approval changes procedures of human medicine for European Market)-2013
3. Vipin Masih (Formulation development and evaluation of transdermal patch of Aceclofenac)-2013
4. Ishtiyak Ahmad (Process Validation of Ritonavir, soft gelatin capsule 100 mg)-2013
5. Mukesh Sahu (Development and Characterization of a novel topical gel for rheumatoid arthritis)-2016
6. Seem Devi Sahu (Development and characterization of liposomal gel of bioactive(s) for rheumatoid arthritis)-2016
7. Mukesh Katakwar, Development and Characterization of Lipid NanoCarrier For Topical Delivery of Anti-Rheumatic Agents-2017
8. Naveen Singh- Development and characterization of surface Decorated lipid nanocarriers for oral delivery of Diacerein using quality by design approach-2021
9. Pooja Nayak (Development and characterization of a novel formulation for oral delivery of diacerein)-2022
10. Nilosha Parveen (Development and characterization of a novel cocktail formulation for rheumatoid arthritis management)-2022
11. Rupali Halwai (Zein-Chitosan Complexed System for Controlled Delivery of Indomethacin)-2023
12. Kratika Halwai (Development and Characterization of Nanoemulsion for Oral Delivery of Estradiol for Alzheimer Management)-2023
13. Saurabh Tiwari (Silver nanoparticle and plant extract co-loaded chitosan hydrogel for Diabetic wound management)-2023
14. Ayush Parker (Development, Optimization, and Characterization of Eudragit Coated Beta-Cyclodextrin-Chitosan Based Nanoparticles For Indomethacin Delivery)-2024
15. Chakka Gouthmi (Development and Characterization of  $\beta$ -Cyclodextrin Based Nanoparticles for Improving Solubility and Control Release of Resveratrol)-2024

16. Pragya Pathak (Development and Characterization of Novel  $\beta$ -Cyclodextrin Zein Based Diclofenac Nanoformulation for Oral Drug Delivery)- 2024
17. Arvind Maurya (Development and characterization of *Madhuca longifolia* var. *latifolia* leaf extract-loaded chitosan hydrogels for anti-inflammatory activity) -2025
18. Anurag Barik (Preparation and characterization of Nigella Sativa Extract loaded Sodium alginate-chitosan microspheres for anti-diabetic activity)-2025
19. Manjeet Mahto (Development, optimization and characterization of zein microspheres loaded solidum alginate films for oromucosal delivery of benzocaine)-2025

### List of PhD Students Guided/Guiding (04)

1. Disha Kesharwani (completed, CSVTU, Bhilai)  
Title: Development and Characterization of nanocarrier system of Diacerein for topical application  
Reg No. 3186, 24-12-2018 onwards  
Date of award: Aug 3, 2024
2. Aanjaneya Mamgain (completed, IGNTU, Amarkantak)  
Title: Development and Characterization of Functional Nanocarrier(s) for Controlled Delivery of Bioactive(s)  
1801378001, 25/09/2018  
Date of award: Aug 1, 2024
3. Rameshroo Kenwat (ongoing, IGNTU, Amarkantak)  
Title: Development and evaluation of Hedychium coronarium flower extract loaded ophthalmic formulation(s) for ocular disorder(s)  
2001378008, 13.02.2021  
Date of award: Aug 04, 2025
4. Aakansha Malaiya (completed, IGNTU, Amarkantak)  
Title: Development and optimization of novel surface engineered nanoformulation(s) for nose to brain delivery of selected drug(s)  
2001378001, 14.02.2021  
Date of award: Aug 9, 2024

### **Orientation/Refresher/Staff Development Programme Attended**

- Staff Development Programme on Recent Development in Herbal drug Research, March, 17-31, 2008 sponsored by AICTE, New Delhi organized by ISF College of Pharmacy, Moga, Punjab
- Staff Development Programme on Globalizing Indian Herbal Formulations: Bottlenecks and Solutions, February, 08-19<sup>th</sup> 2013 sponsored by AICTE, New Delhi, organized by Columbia Institute of Pharmacy, Raipur, CG
- Attended and completed Orientation Programme conducted by Academic Staff College, GGU, Bilaspur from 03.06.2013 to 29.06.2013(04 weeks) sponsored by UGC, New Delhi
- Attended and completed Refresher Course conducted by Human Resource Development Centre, GGU, Bilaspur From 18.11.2015 to 09.12.2015 (03 weeks) sponsored by UGC, New Delhi [Methodology in Social Science & Pure and applied Science (Interdisciplinary)]
- Attended and completed 25<sup>th</sup> Orientation Programme scheduled from 08/07/2019 to 27/07/2019 by HRDC, GGU, Bilaspur, CG
- Attended and Completed Online Refresher Course in Pharmacy for Higher Education through Swayam Portal Online mode from January 2020 to May 2020
- Attended and Completed Online Refresher Course on Teacher and Teaching in Higher Education through Swayam Portal Online mode from October 2020 to March 2021
- Attended and Completed Online Refresher Course on Pedagogical Innovations and Research Methodology (Interdisciplinary) through Swayam Portal Online mode from October 2020 to March 2021

## **Workshop attended**

UGC-SPONSORED WORKSHOP (ONLINE), Workshop On NEP 2020: Academic Bank Of Credit (ABC), 27/06/2022, organized by HRDC, GGV, Bilaspur

UGC-SPONSORED WORKSHOP (ONLINE), Workshop Workshop On NEP 2020: Multidisciplinary, 28/06/2022, organized by HRDC, GGV, Bilaspur

UGC-SPONSORED WORKSHOP (ONLINE), Workshop on NEP 2020: Good Academic Research Practices /Academic Research Integrity, 30/06/2022, organized by HRDC, GGV, Bilaspur

UGC-SPONSORED WORKSHOP (ONLINE), Workshop on NEP 2020: Internationalization of Higher Education, 30/06/2022, organized by HRDC, GGV, Bilaspur

### Seminar/Conference/Workshop/Webinar Organized

| S.No | Title  | Sponsored By   | Year | Capacity                |
|------|--|----------------|------|-------------------------|
| 1.   | Advances in Molecular Pharmaceutics, Nanomedicine, Nanobiotechnology, and Drug Research                                | DBT, New Delhi | 2013 | Convenor                |
| 2.   | Emerging Trends and Innovation in Drug Delivery and Pharmaceutical Sciences  | AICTE          | 2013 | Convenor                |
| 3.   | Emerging Trends in Drug Discovery, Pharmaceutical Science and Biomedical Research                                      | IGNTU          | 2018 | Organizing Secretary    |
| 4.   | Industry-Academia Interaction on Patenting and Drug Regulatory Affairs: Progress in Translational Research Perspective | IGNTU          | 2021 | Convenor                |
| 5.   | Importance of Profession Ready Training in Clinical Research & Pharmacovigilance                                       | CliniIndia     | 2021 | Coordinator             |
| 6.   | Pharmaceutical Product Development: A context of Indian Pharmaceutical Industry and Research                           | IGNTU          | 2022 | Organizing Secretary    |
| 7.   | First International Conference (Hybrid Mode) on Nanopharmaceuticals and Neurological Disorders                         | IGNTU          | 2023 | Co-organizing secretary |
| 8.   | Importance of Profession-Ready Training in Clinical Research & Pharmacovigilance                                       | CliniIndia     | 2023 | Coordinator             |
| 9.   | Advances in Nanotechnology in Pharmaceutical and Biological Sciences, 05 Feb, 2025                                     | IGNTU          | 2025 | Organizing Secretary    |
| 10.  | Advances in Ayurveda and Vaccines, 08 Feb, 2025.   | IGNTU          | 2025 | Organizing Secretary    |

**Seminar/Conference/Workshop/Webinar Attended (Paper presented)/Participated/Session chaired/co-chaired (34)**

| S. No. | Title of the Invited Lecture delivered/Paper presented                         | Details Conference   | Organized by                                 | Date of Presentation              | Level         | Role      |
|--------|--|--|--|-----------------------------------|---------------|-----------|
| 1.     | Development and characterization of lipid nanoparticles for oral drug delivery | Indo-US symposium  | NIPER,SAS Nagar,Punjab                       | 04-06 October 2006                | International | Presented |
| 2.     | Lymphatic delivery of anticancer drug  | Advances in technology business potential of new drug delivery systems | Controlled release society – Indian chapter  | 13-14 <sup>th</sup> Feb 2007      | International | Presented |
| 3.     | Chylomicron mimics for oral lymphatic delivery                                 | Controlled & Targeted drug delivery: Nanotechnology                    | Dr. HS Gour University, Sagar                | 17-18 <sup>th</sup> March 2007    | National      | Presented |
| 4.     | Biomimicking drug delivery systems for oral delivery of bioactive(s)           | Silver jubilee all india young scientist conference                    | MP Council of science and technology, Bhopal | 23-25 <sup>th</sup> November 2007 | National      | Presented |
| 5.     | Lipid based carrier system oral bioavailability enhancement                    | Centre for Pharmaceutical Nanotechnology                               | NIPER, SAS Nagar, Punjab                     | 24-28 Feb 2009                    | National      | Presented |

|     |   |   |   |                                |                               |               |
|-----|---|---|---|--------------------------------|-------------------------------|---------------|
| 6.  | Engineered chymomimetics for oral lymphatic delivery of bioactives                    | 22 <sup>nd</sup> European Conference on Biomaterials                                  | Lausanne Switzerland                                      | 7-11 <sup>th</sup> Sept 2009   | International (Abroad)        | Presented     |
| 7.  | Chymomimetics for oral drug delivery and bioavailability enhancement                  | Ranbaxy Science Awards  | Ranbaxy science foundation Gurgaon, Haryana               | 17 Sept 2009                   | National                      | Presented     |
| 8.  | Participation   | MP Mahila Vigyan Sammelan   | Mata Gujri Mahavidyalaya, Jabalpur, MP                    | 18-19 <sup>th</sup> Dec 2010   | National                      | Participation |
| 9.  | Lipid based carrier for oral delivery of biomacromolecules                            | The 5 <sup>th</sup> SBE international conference on bioengineering and nanotechnology | ICBN, Biopolis, Singapore                                 | 1-4 <sup>th</sup> August 2010  | International (Abroad)        | Presented     |
| 10. | Development and characterization of autolymphotropic carrier system for oral delivery | Bioencapsulation research group   | Amboise, France   | 5-8 <sup>th</sup> October 2011 | International (Abroad)        | Presented     |
| 11. | Lipid drug conjugate nanoparticles for oral delivery of methotexate                   | The safe use of nanomaterials   | Indian Institute of Toxicological Research, Luknow, India | 1-3 <sup>rd</sup> Feb 2011     | International (within India)/ | Presented     |
| 12. | Biomimetic systems for oral drug delivery   | Standardization of herbal formulations: A holistic goal                               | SLT Institute of Pharmaceutical Sciences, GGU, Bilaspur   | 26-27 <sup>th</sup> Feb 2012   | National                      | Presented     |

|     |  |   |   |                                    |                  |                   |
|-----|--|---|---|------------------------------------|------------------|-------------------|
| 13. | Solid lipid nanoparticles for non-invasive drug delivery                         | Recent trends in chemical research: Challenges aheads                   | Department of chemistry,GGU, Bilaspur                                   | 30-31th March 2012                 | National         | Presented         |
| 14. | Surface modified lipid carrier for oral delivery of low molecular weight heparin | Bioasia2012:The global bio businessforum                                | Hyderabad, India  | 9-11 <sup>th</sup> Feb 2012        | International    | Presented         |
| 15. | Resource Person  | Inspire science Camp  | Columbia College of Pharmacy, Raipur                                    | 28 <sup>th</sup> April 2013        | National         | Resource Person   |
| 16. | Partiticipation  | VIMARSH   | Chuoksey Engineering College, Bilaspur CG                               | 12-13 <sup>th</sup> September 2013 | National         | Presented         |
| 17. | Herbal nanomedicine and their future applications                                | Current development for modernization of indigenous herbal formulations | Columbia Institute of Pharmacy, Raipur CG                               | 16-17 <sup>th</sup> March 2013     | National seminar | Resource Person   |
| 18. | Nanocosmetics  | The chemistry of cosmetics and its impact on human health               | Department of chemistry<br>S.S. Girls college<br>Gondia,<br>Maharashtra | 26 <sup>th</sup> October 2013      | National seminar | Presented         |
| 19. | Resource person  | Analytical Techniques for phytochemicals                                | Columbia institute of Pharmacy, Raipur CG                               | 9 <sup>th</sup> April 2015         | National         | Resource person   |
| 20. | Participation  | Ethonomediicne and New Drug Discovery : Opportunities and challenges    | SLT Institute of Pharmaceutical Sciences,GGU,Bilaspur                   | 10-11 April 2015                   | National         | Participatio<br>n |

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| 21. | Participation   | Preparation of NBA   | Auropath Agency  | 30-31 August 2019              | National                      | Participation   |
| 22. | Participation   | Herbal Drug Research: Current status with reference to institute-industry interaction opportunities and challenges in Chhattisgarh | Siddhi Vinayaka Institute of Technology and Sciences, Bilaspur, CG               | 16 February 2016               | National                      | Participation   |
| 23. | Participation   | Academia-industry Interaction: Global Pharma Prospects   | Department of Pharmaceutical Sciences, Dr. H.S. Gour Vishwavidyalaya, Sagar M.P. | 6-7 Feb 2016                   | International (within India)/ | Resource Person |
| 24. | Resource Person | Prospects and Avenues for in vivo studies on animal models and human volunteers for treatment of oral cancer                       | Shri Rawatpura Sarkar Institute of Pharmacy, Durg                                | 5-6th April 2017               | National                      | Resource Person |
| 25. | Chaired person  | Treat to target approaches for dental disorders : Newer perspective and challenges   | IOP, Raipur, CG  | 24-26 <sup>th</sup> March 2017 | National                      | Chaired session |
| 26. | Participation   | Importance of intellectual property rights in innovation management  | IGNTU and PhD chamber of commerce and industry                                   | 26 July 2018                   | National                      | Participation   |
| 27. | Departmental    | Inspire-Camp   | IGNTU,   | 6-10 <sup>th</sup> July        | University                    |                 |

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|     | Coordinator   |  | Amarkantak   | 2018                              |                               | Departmental Coordinator |
| 28. | Participation   | UGC Quality mandates in HEI  | Central University of Rajasthan                                    | 9-10 <sup>th</sup> September 2018 | National                      | Participation            |
| 29. | Participation   | Animal Handling and In silico Techniques for Research activities: Current scenario                           | Siddhi Vinayaka Institute of Technology and Sciences, Bilaspur, CG | 14 <sup>th</sup> April 2018       | National                      | Participation            |
| 30. | Participation   | Ethnomedicines- A Source of Complementary and Alternative Medicine for Navigating the Future in Therapeutics | School of Pharmacy Chouksey Engineering College, Bilaspur (C.G.).  | 23 Feb 2018                       | National                      | Participation            |
| 31. | Exploring Foldscope for identification and characterization of medicinal plants | International Conference on emerging research in bioscience.   | Department of Zoology, Guru Ghasidas Vishwavidyalaya, Bilaspur     | 28-30 <sup>th</sup> October 2018  | International (within India)/ | Presented                |
| 32. | Co-chaired Session  | Indian Tribal Medicinal Plant Research: Challenges and Prospects   | IGNTU, Amarkantak  | 28-29 <sup>th</sup> April 2018    | University                    | Co-chaired Session       |
| 33. | Participation   | FDP on Climate change  | Department of Environment, Govt of Madhya Pradesh                  | 30-31 <sup>st</sup> August 2019   | National                      |                          |
| 34. | Oral Presentation on  | International Conference Medicinal   | Department of Botany, GGV,   | 21-23 February                    |                               |                          |

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|  | “DEVELOPMENT AND EVALUATION OF A NOVEL POLYHERBAL GEL FOR ARTHRITIS MANAGEMENT” | Plants Research & Tribal Health Medicine (Oral presentation) | Bilaspur | 2024 |  |  |
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### INVITED LECTURES (52)

| Sr. No. | Title of presentation  | Organized by  | Year                                  |
|---------|--|---|---------------------------------------|
| 1.      | Functional Nanomaterials in new Era of medicine: Nanomedicine                            | Department of Physics,<br>Govt Autonomous College<br>, Chhindwara<br><br>MP | 4-6 <sup>th</sup> March 2013          |
| 2.      | Emerging trends in developing herbal nanomedicine  | Institute of Pharmacy, RPt<br>Ravishankar Shukla<br>University, Raipur, CG  | 14-16 <sup>th</sup> March<br>2013     |
| 3.      | Surface modified lipid nanoparticles for oral delivery of biomacromolecules              | Hilton San Antonio airport<br>San Antonio USA                               | 24-26 <sup>th</sup> March 2014        |
| 4.      | Educating pharmacy professionals   | Institute of Pharmacy, RPt<br>Ravishankar Shukla<br>University, Raipur, CG  | 19-21 November<br>2015                |
| 5.      | Nanomedicine: History progress and challenges  | Ravi Shankar College of<br>Pharmacy, Bhopal                                 | 21-22 March 2015                      |
| 6.      | Entrepreneurship Awareness camp  | Columbia College of<br>Pharmacy, Raipur                                     | 1-3 March 2016                        |
| 7.      | Entrepreneurship Awareness camp  | Columbia College of<br>Pharmacy, Raipur                                     | 24-26 Nov 2016                        |
| 8.      | Development of analytical Techniques for indigenous drugs of CG                          | Columbia Institute of<br>Pharmacy, Raipur                                   | 26-27 <sup>th</sup> Feb 2016          |
| 9.      | In vitro cell line studies   | Columbia Institute of<br>Pharmacy, Raipur                                   | 8-9 <sup>th</sup> September<br>2017   |
| 10.     | Treat to target approaches for dental disorders: newer perspective and challenges        | Institute of Pharmacy, RPt<br>Ravishankar Shukla<br>University, Raipur, CG  | 24-26 <sup>th</sup> March 2017        |
| 11.     | Current trends in medicinal and aromatic plants with special emphasis on India Scene     | RKDF University, Bhopal   | 25-26 November<br>2018                |
| 12.     | Nanomedicine and Nanotechnology based drug delivery Approaches: prospects and challenges | Ravishankar College of<br>Pharmacy, Bhopal                                  | 29 September 2018                     |
| 13.     | Indian Tribal Medicinal Plant Research: Challenges and Prospects                         | IGNTU, Amarkantak   | 28-30 April 2018                      |
| 14.     | Contemporary technological solutions towards fulfilment of social needs                  | RKDF University, Bhopal   | 28-29 <sup>th</sup> September<br>2019 |

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| 15. | Impact on Climate change   | Department of Environment,<br>Govt of Madhya Pradesh                                 | 30-31 August 2019  |
| 16. | Popular lecture on Biotechnology: New Horizon  | RKDF College, Bhopal   | 16 Feb 2019        |
| 17. | Recent Developments in Pharmaceutical Sciences-Industry Interaction Initiative                                   | Department of<br>Pharmaceutical Sciences,<br>Dr. H. S. Gour University,<br>Sagar, MP | 06-07 March 2020   |
| 18. | Implementation of green chemistry and analytical techniques to reconcile obligation of drug discovery and design | Adina Institute of<br>Pharmaceutical Sciences  | 03-07 March 2020   |
| 19. | The Covid-19 Pandemic  | Shri Krishna University,<br>Chhatarpur   | 11-14 May 2020     |
| 20. | Importance of artificial Intelligence and Social Intelligence for Covid19 management                             | Sagar Institute of<br>Pharmaceutical Sciences,<br>Sagar                              | 21 May 2020        |
| 21. | Pharmacist-Frontline Health Professionals  | Columbia College of<br>Pharmacy, Raipur  | 24 Nov 2020        |
| 22. | Importance and an application of pharma-education with motivational ideas  | Truba College of Pharmacy,<br>Bhopal   | 15 Dec 2020        |
| 23. | Future trends in research methodology for drug discovery & development   | Columbia Institute of<br>Pharmacy Raipur   | 07-12 June 2021    |
| 24. | Nanomedicine and Nanobiotechnology: History, Progress and Challenges   | Parul University, Gujrat   | 12-March-2021      |
| 25. | Particle Size Analyzer and its applications  | Government Shyam Sundar<br>Agrawal PG College,<br>Sihora, Jabalpur (M.P.)            | 08-13 Feb 2021     |
| 26. | Biophysical to Molecular Techniques: An interface in Neurobiology Research                                       | IBRO-APRC, Department<br>of Zoology, IGNTU   | 23-27 August 2021  |
| 27. | Indigenous knowledge based quality academic research in india : a paradigm shift with nep 2020                   | Dr. H. S. Gour University<br>Sagar, MP   | 10 November 2021   |
| 28. | Quality Academic Research in India: A Paradigm Shift   | Kalinga University, Raipur   | 20 June 2022       |
| 29. | Importance of innovation and research in the field of pharmacy for nation building                               | Columbia College of<br>Pharmacy, Raipur  | 15 April 2022      |
| 30. | Role of Women in Pharmaceutical Technology without Bias and Barrier  | Sanjivani Institute of<br>Pharmacy, Bilaspur   | 08-March-2022      |
| 31. | Formulation Development Aspects of Nanotechnology-Based Drug Delivery Systems                                    | STUTI, DST, India  | 18-24 August 2022  |
| 32. | National Science Day: Indian Indigenous Herbal Medicine Scientific Knowledge                                     | Shri Rawatpura Sarkar<br>College of Pharmacy, Sagar                                  | 28 Feb 2022        |
| 33. | SERB sponsored Accelerate Vigyan Workshop titled: "AI-APMED:   | NIT Rourkela   | 05-12 January 2022 |

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|     | Artificial Intelligence (AI) Aided Personalized Medicine and Drug Delivery<br>Nanomedicine Based Drug Delivery Approach A Step Towards Personalized Medicine Development |  |                                   |
| 34. | Advances in Drug Design and Development - Current and Future Prospective   | Gayatri College of Pharmacy, Sambhalpur  | 28 January 2023                   |
| 35. | Biomedical Research Tools and Techniques in DST STUTI Sponsored Training Program   | Department of Zoology, IGNTU, Amarkantak   | Feb 6-12, 2023                    |
| 36. | Nanopharmaceuticals and Neurological Disorders   | Department of Pharmacy, IGNTU  | 02-04 Feb 2023                    |
| 37. | Particle Size Analyzer   | Department of Pharmacy, Central University of Rajasthan, DST-STUTI Hands-on Training Program on "Formulation and Characterization Techniques in Drug Delivery" | August 1 <sup>st</sup> 2023       |
| 38. | Indigenous Knowledge System-Based Quality Research Practices in India: A Context to NEP 2020   | MMTC, IGNTU  | 01.03.2024                        |
| 39. | Western Blotting Technique in Biomedical and Diagnostic Applications   | Department of Pharmaceutical Sciences, BBAU, Lucknow   | 08.03.2024                        |
| 40. | Invited talk during a refresher course on "Inspirations and Challenges for Quality Multidisciplinary Research and Innovations"   | MMTC, IGNTU, Amarkantak, MP  | 27 March 2024                     |
| 41. | Indigenous Knowledge System-Based Quality Research Practices in India: A Context to NEP 2020   | MMTC, University of Lucknow  | 23 April 2024                     |
| 42. | Indigenous Knowledge System-Based Quality Research Practices in India: A Context to NEP 2020   | MMTC, University of Lucknow  | 29 March 2024                     |
| 43. | Pharmacy Courses: Education, Endurance and Economics   | Induction Program, Columbia Institute of Pharmacy, Raipur  | 30 <sup>th</sup> , September 2024 |
| 44. | Nanotechnology and medicinal plants for next-generation therapeutics development   | Shri Rawatpura Sarkar University, Raipur   | 24 November 2024                  |
| 45. | Nanomedicine and   | DBT sponsored  | 16 December                       |

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|     | Nanobiotechnology<br>History, Concept, and Advances   | Popular Lecture Series by<br>Millennium College of<br>Pharmacy, Bhopal MP. | 2024          |
| 46. | Integrating indigenous knowledge<br>systems (IKS) with modern technology<br>for Quality Research Practices  | MMTTC, GGV, Bilaspur   | 22 Jan 2025,  |
| 47. | Nanomedicine - History, Progress and<br>Advances  | Haldia Institute of<br>Pharmacy, Haldia                                    | 24 Jan 2025   |
| 48. | Recent Trends in Nanopharmaceuticals<br>and Nanomedicines   | KLEF University, Guntur,<br>AP   | 19 March 2025 |
| 49. | Indian Knowledge System & Research<br>and Development   | MMTTC, North-Eastern<br>Hill University, Shillong                          | 27 May 2025   |
| 50. | Indian Knowledge System   | MMTTC, Mizoram<br>University   | 19 June 2025  |
| 51. | Research and Development  | MMTTC, Mizoram<br>University   | 20 June 2025  |
| 52. | NEP2020 for Research and<br>Development in IKS & Integration of<br>IKS with quality academic research<br>practices in higher education institutions | MMTTC, Central University<br>of Kerala                                     | 21 June 2025  |

## **ADMINISTRATIVE EXPERIENCE**

- Head, Department of Pharmacy, Indira Gandhi National Tribal University (IGNTU), Amarkantak, MP, 2025
- Head, Department of Pharmaceutics, Columbia Institute of Pharmacy, Raipur, 2012-2017
- Hostel Warden, Indira Gandhi National Tribal University (IGNTU), Amarkantak, MP