**DR. SHIVANI RAI PALIWAL**

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| --- | --- |
| POSITION | ASSISTANT PROFESSOR  |
|  UALIFICATION | MPharm, PhD, Post Doc (Germany) |
| SPECIALIZATION | Pharmaceutics |
| DEPARTMENT | Department of Pharmacy, GGV, Bilaspur, CG, India |
| CONTACT | *email* – srai2k@gmail.com; Mobile: +91- 9407591647 |

**PROFILE SUMMARY**

|  |  |
| --- | --- |
| h index | 29\*  |
| i-10 index | 42\*  |
| Total citations | 3329\* |
| *Cumulative Impact Factor* | ***184.884*** |
| *Average Impact Factor per publication* | ***4.1135*** |

**(AS ON 12.03.2025, Source:** [**GOOGLE SCHOLAR**](https://scholar.google.co.in/citations?user=laJVptgAAAAJ)**)**

**EDUCATIONAL QUALIFICATIONS**

* Post Doc (SERB INTERNATIONAL RESEARCH-Fellowship) at Institute of Lung Biology & Diseases, Munich, Germany 2023.
* PhD (Pharmaceutical Sciences), **Dr. H. S. Gour Central University, Sagar, MP, India** - 2012.
* M. Pharm (Pharmaceutics), **Dr. H. S. Gour Central University, Sagar, MP, India** - 2007.
* B. Pharm, **Dr. H. S. Gour Central University, Sagar, MP, India** - 2004.

**ACADEMIC ACHIEVEMENTS & AWARDS**

* **SIRE FELLOWSHIP** by SERB, India to visit Institute of Lung Biology and Diseases, **Germany** for 6 months.
* **TRAVEL AWARD** by SERB-DST, India for attending International Conference at **USA** in 2014.
* **BRG Travel Award**, Amboise, **France**,2011
* **Fast Track Young Scientist Award, DST, New Delhi,** 2013
* **Best Poster Award,** 2013
* **M.P. Young Scientist Award** in Bioscience-2010
* International **Student Travel Award by ICBN, 2010** at Biopolis, **Singapore**
* **TRAVEL AWARD** by DBT, India and INSA for attending ICBN at **Singapore** in 2010.
* **M.P. Women Young Scientist Award, MPCST,** 2010
* **Rudolf Cimdins Award** from European Society of Biomaterials at Laussane, **Switzerland**, 2009
* **TRAVEL AWARD** by DST, India for attending 22nd ESB at Lausanne, **Switzerland**, 2009
* University Grant Commission (SRF)-Engineering and Technology fellowship for PhD work
* 2005 **Junior Research Fellowship (JRF)** from University Grant Commission for M. Pharm. Research Project, India
* Qualified in GATE-2004 (Percentile **98.07** withAIR-159)

**RESEARCH AREA:** Nanomedicine,Targeted Drug Delivery to Breast Cancer, Nanochemoprevention

**RESEARCH PROJECTS (02**): **Total worth: 40.40 Lakhs [**Funded by SERB-DST (Completed) and ICMR New Delhi (Sanctioned)]

**RESEARCH OUTCOMES**

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| --- | --- | --- | --- |
| Publications  | 46 | Conference Publications/Abstracts  | 54 |
| Book Chapters  | **34** | **Invited Talks**  | **03** |
| Postgraduate Research Supervision  | **07** | **Patents/Invention Disclosure (Published)**  | **01** |
| PhD Supervision | **01+02\* (ongoing)** | **Research Projects** | **02** |

**SCIENTIFIC ROLES/RESPONSIBILITIES**

* Section Editor, **Current Indian Science** (Bentham Science Publisher), Since 2021
* Editorial Board Member, **E-Newsletter, Department of Pharmacy, GGV, Bilaspur.**
* Guest-Editor, Special Issue of **Current Drug Therapy** on **“**Role of Molecular Bioports in Oral Delivery of Biomacromolecules” 2014
* Guest-Editor, Special Issue of **Mini-Review in Medicinal Chemistry** “Nanotherapeutics for Cancer Therapy and Imaging” 2017
* Reviewer of more than 20 well reputed International Journals

**BOOKS (**03**)**

* Advances in Nanochemoprevention: Controlled Delivery of Phytochemical Bioactives, **Springer Nature**, Singapore, ISBN 978-981-15-9692-6, 2021.
* Targeted nanomedicine for breast cancer therapy, 9780128244760**, Elsevier**, 2022.
* Nanomedicine, Nanotheranostics and Nanobiotechnology: Fundamentals and Applications, **CRC Press**, (In Press).

**BEST FIVE PUBLICATIONS**

* Paliwal, Rishi, et al. "Recent advances in search of oral heparin therapeutics." *Medicinal research reviews* 32.2 (2012): 388-409.***(IF: 12.944)***
* Paliwal, Rishi, and Srinath Palakurthi. "Zein in controlled drug delivery and tissue engineering." *Journal of Controlled Release* 189 (2014): 108-122.***(IF: 9.776)***
* Paliwal, Rishi, et al**.** "Solid lipid nanoparticles: A review on recent perspectives and patents." *Expert opinion on therapeutic patents* 30.3 (2020): 179-194. ***(IF: 6.681)***
* Paliwal, Rishi, et al. "Effect of lipid core material on characteristics of solid lipid nanoparticles designed for oral lymphatic delivery." *Nanomedicine: Nanotechnology, Biology and Medicine* 5.2 (2009): 184-191.***(IF: 6.458)***
* Paliwal, Rishi, et al. "Chitosan nanoconstructs for improved oral delivery of low molecular weight heparin: in vitro and in vivo evaluation." *International journal of pharmaceutics* 422.1-2 (2012): 179-184. ***(IF: 5.875)***

**LIST OF PUBLICATIONS**

1. 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. International Journal of Biological Macromolecules. 2025 Apr 17:143300.
2. Vikal A, Maurya R, Patel P, Paliwal SR, Narang RK, Gupta GD, Kurmi BD. Exploring metal-organic frameworks (MOFs) in drug delivery: A concise overview of synthesis approaches, versatile applications, and current challenges. Applied Materials Today. 2024, 41; 102443.
3. 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. Nanomedicine. 2024 Jun 7: 1-22
4. Malaiya A, Kenwat R, Mamgain A, Paliwal SR, Sulakhiya K, Maiti S, Paliwal R. QbD-based optimization and evaluation of chitosan-adorned nanostructured lipid carriers for nose-to-brain delivery of 17β-Estradiol in rat model of Alzheimer's disease. Journal of Drug Delivery Science and Technology. 2024 Jun 1; 96: 105716.
5. Kurmi BD, Preeti Patel, Rishi Paliwal, Paliwal SR. Multifunctional Nanotherapeutics for Intracellular Trafficking of Doxorubicin Against Breast Cancer, Nanomedicine, 2023, vol 18(19), 1261-1279.
6. Kurmi BD, Paliwal SR. Development and optimization of TPGS-based stealth liposome of doxorubicin using Box–Behnken design: characterization, hemocompatibility, and cytotoxicity evaluation in breast cancer cells. Journal of liposome research. 2022 Apr 3;32(2):129-**45.**
7. Paliwal R, Kumar P, Chaurasiya A, Kenwat R, Katke S, Paliwal SR. Development of nanomedicines and nano-similars: Recent advances in regulatory landscape. Current Pharmaceutical Design. 2022 Jan 1;28(2):165-77.
8. SR Paliwal, R Kenwat, S Maiti, R Paliwal. [Nanotheranostics for Cancer Therapy and Detection: State of the Art](https://scholar.google.com.tw/citations?view_op=view_citation&hl=en&user=2SX-S3MAAAAJ&sortby=pubdate&citation_for_view=2SX-S3MAAAAJ:4OULZ7Gr8RgC), Current Pharmaceutical Design 26 (42), 5503-5517, 2020.
9. R Paliwal, SR Paliwal, R Kenwat, BD Kurmi, MK Sahu. Solid lipid nanoparticles: a review on recent perspectives and patents. Expert Opinion on Therapeutic Patents 30 (3), 179-194, 2020.
10. P Tekchandani, BD Kurmi, R Paliwal, SR Paliwal. Galactosylated TPGS Micelles for Docetaxel Targeting to Hepatic Carcinoma: Development, Characterization, and Biodistribution Study. AAPS PharmSciTech. 2020 Jul;21(5):1-1.
11. BD Kurmi, P Patel, R Paliwal, SR Paliwal. Molecular approaches for targeted drug delivery towards cancer: A concise review with respect to nanotechnology. Journal of Drug Delivery Science and Technology. 2020.
12. BD Kurmi, R Paliwal, SR Paliwal. Dual cancer targeting using estrogen functionalized chitosan nanoparticles loaded with doxorubicin-estrone conjugate: A quality by design approach. International Journal of Biological Macromolecules. 2020, 57, 101682.

## Balak Das Kurmi Pawan Techchandani, Rishi Paliwal, [Shivani Rai Paliwal](http://benthamscience.com/journal/render-search-results.php?cx=partner-pub-2685163628273835%3A7983360493&cof=FORID%3A10&ie=UTF-8&q=%20Shivani+Rai+Paliwal).**Transdermal Drug Delivery: Opportunities and Challenges for Controlled Delivery of Therapeutic Agents Using Nanocarriers. Current Drug Metabolism. 2017, 18,5,**481-495.

## Pawan Techchandani, Balak Das Kurmi, Shivani Rai Paliwal. Nanomedicine to Deal with Cancer Cell Biology In Multi-Drug Resistance. Mini Reviews in Medicinal Chemistry. 2017, 17,18, 1793-1810.

## R Paliwal, Shivani Rai Paliwal, SP Vyas, Nanotherapeutics for cancer therapy and imaging, 2016, Mini Reviews in Medicinal Chemistry

1. Shivani Rai Paliwal, Rishi Paliwal, G.P. Agrawal, S.P. Vyas. Hyaluronic acid modified pH-sensitive liposomes for targeted intracellular delivery of doxorubicin. J Liposome Res, 2016,26(4), 276-87.
2. Balak Das Kurmi, Pawan Tekchandani, Rishi Paliwal and Shivani Rai Paliwal. Nanocarriers In Improved Heparin Delivery: Recent Updates. **CurrentPharmaceutical Design,** Volume [**21**](http://benthamscience.com/journals/current-pharmaceutical-design/volume/21/), Issue 42, 2015.
3. R Paliwal, Shivani Rai Paliwal, SP Vyas, Role of Molecular Bioports in Oral Delivery of Biomacromolecules, Current Drug Therapy, 2014, 1-1.
4. Shivani Rai Paliwal, Rishi Paliwal and S.P. Vyas. pH-sensitive liposomes: an update review. Drug Delivery. 2015, 22,3, 231-42.
5. Shivani Rai Paliwal, Rishi Paliwal, G. P. Agrawal, S. P. Vyas, Targeted Breast Cancer Nanotherapeutics: Options And Opportunities With Estrogens Receptors, [Critical Reviews™ in Therapeutic Drug Carrier Systems](http://www.google.co.in/url?sa=t&rct=j&q=critical%20reviews%20in%20therapeutic%20drug%20carrier%20systems&source=web&cd=1&sqi=2&ved=0CCMQFjAA&url=http%3A%2F%2Fwww.begellhouse.com%2Fjournals%2F3667c4ae6e8fd136&ei=471iT_v1MYjzrQflp9S9Bw&usg=AFQjCNErmvGPS3gmWZjotRrfSHKeBPrfEg), 2012, 29(5), 421-446.
6. Shivani R Paliwal, Rishi Paliwal, Harish C Pal, Ajit K Saxena, Praduman R Sharma, 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.
7. Rishi Paliwal, 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.
8. Rishi Paliwal, 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.
9. Rishi Paliwal, 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.
10. Shivani Rai, Rishi Paliwal, S.P. Vyas, “Doxorubicin encapsulated nanocarriers for targeted delivery to estrogen responsive breast cancer” Journal of Biomedical Nanotechnology, 2011, 7(1):121-122.
11. Shivani Rai Paliwal, Rishi Paliwal, G. P. Agrawal, S. P. Vyas, “Liposomal Nanomedicine in Breast Cancer Therapy” Nanomedicine (UK), 2011, 6(6):1085-100.
12. Rishi Paliwal, 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.
13. Rishi Paliwal, 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.
14. Sheetu Wadhwa, Rishi Paliwal, 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.
15. Shivani Rai Paliwal, Rishi Paliwal, 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.
16. Bhuvaneshwar Vaidya, Amit K. Goyal, Kapil Khatri, Neeraj Mishra, Rishi Paliwal,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.
17. Neeraj Mishra, Amit Kumar Goyal, Shailja Tiwari, Rishi Paliwal, Shivani Rai Paliwal, Bhuvneshwar Vaidya, Sharad Mangal, Madhu Gupta, Devyani Dube, Abhinav Mehta, Suresh P. Vyas. Recent advances in mucosal delivery of vaccine: Role of mucoadhesive/ biodegradable polymeric carriers. Expert Opinion on Therapeutic Patents. 2010, 20, 5, 661-679.
18. Madhu Gupta; Amit K. Goyal; Shivani Rai Paliwal; Rishi Paliwal; 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.
19. Daisy Arora, Amit K. Goyal, Shivani R. Paliwal, Bharat Khurana, Suresh P. Vyas, Oral Mucosal Immunization: Recent Advancement and Future Prospects, 2010, 6, 3, 234-259.
20. Rishi Paliwal, Shivani Rai, Bhuvaneshwar Vaidya, Kapil Khatri, Amit K. Goyal, Neeraj Mishra, Abhinav Mehta, Suresh P. Vyas, Effect of lipid core material on characteristics of solid lipid nanoparticles designed for oral lymphatic delivery. Nanomedicine: Nanotechnology, Biology, and Medicine, 2009, 5, 2, 184-191.
21. Rishi Paliwal, Shivani R Paliwal, Neeraj Mishra, Abhinav Mehta, S.P. Vyas “Engineered Chylomicron Mimicking Carrier Emulsome for Lymph Targeted Oral Delivery of Methotrexate”, International Journal of Pharmaceutics. 2009, 380, 1-2, 181-188.
22. Sheetu Wadhwa, Rishi Paliwal, Shivani R Paliwal, S. P. Vyas “Nanocarriers in Ocular Drug Delivery: An Update Review”, Current Pharmaceutical Design. 2009, 15, [23,](http://www.informaworld.com/smpp/title~content%3Dg794752774~db%3Dall) 2724-2750.
23. Sheetu Wadhwa, Rishi Paliwal, Shivani Rai Paliwal, S. P. Vyas, Chitosan and its role in ocular therapeutics, Mini Reviews in Medicinal Chemistry, 2009, 9, 14, 1639-1647.
24. Bhuvaneshwar Vaidya, Rishi Paliwal, Shivani Rai, Kapil Khatri, Amit K. Goyal, Neeraj Mishra, Suresh P Vyas, Cell-selective mitochondrial targeting: A new approach for cancer therapy, Cancer Therapy, 2009, 7, 141-148.
25. Amit K. Goyal, Kapil Khatri, Neeraj Mishra, Abhinav Mehta, Bhuvaneshwar Vaidya, Shailja Tiwari, Rishi Paliwal, Shivani Paliwal, Suresh P. Vyas, Development of Self-assembled Nanoceramic Carrier Construct(s) for Vaccine Delivery, Journal of Biomaterials Applications, 2009, 24, [1,](http://www.informaworld.com/smpp/title~content%3Dg794752774~db%3Dall) 65-84.
26. Shivani Rai, Rishi Paliwal, 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.
27. Shivani Rai, Rishi Paliwal, Bhuvaneshwar Vaidya, Kapil Khatri, Amit Goyal, Prem N. Gupta, S. P. Vyas, Targeted delivery of doxorubicin via estrone appended liposome, Journal Drug Targeting, 2008, 16, [6,](http://www.informaworld.com/smpp/title~content%3Dg794752774~db%3Dall) 455- 463.
28. Neeraj Mishra, Amit K. Goyal, Kapil Khatri, Bhuvaneshwar Vaidya, Rishi Paliwal, Shivani Rai, Abhinav Mehta, Shailja Tiwari, Shiva Vyas, Suresh P. Vyas, “Biodegradable Polymer Based Particulate Carrier(s) for the Delivery of Proteins and Peptides” Anti-Inflammatory & Anti-Allergy Agents in Medicinal Chemistry, 2008, 7, 240-251.
29. Rishi Paliwal, Shivani Rai, Bhuvaneshwar Vaidya, Sunil Mahor, Prem N. Gupta, Amit Rawat, S.P. Vyas, Cell-selective Mitochondrial Targeting: Progress in Mitochondrial Medicine, Current Drug Delivery, 2007, 4, 3, 211-214.
30. Shivani Rai, Rishi Paliwal, Bhuvaneshwar Vaidya, Prem N. Gupta, Sunil Mahor, Kapil Khatri, Amit K. Goyal, Amit Rawat, S.P. Vyas, Estrogen(s) and Analogs as a Non Immunogenic Endogenous Ligand in Targeted Drug/DNA Delivery, Current Medicinal Chemistry, 2007, 14, 2095-2105.
31. Amit Rawat, Bhuvaneshwar Vaidya, Kapil Khatri, Amit K. Goyal, Prem N. Gupta, Rishi Paliwal, Shivani Rai, S.P. Vyas, Targeted intracellular delivery of therapeutics: An overview, Die Pharmazie, 2007, 62, 9, 643-58.

**BOOK CHAPTERS**

1. Paliwal R, Paliwal SR, Kesharwani D, Kenwat R, Malaiya A, Parker A, Gouthami C, Pathak P. Theragnostic approaches for the management of tuberculosis. In Emerging Paradigms in Delivery Systems for Antitubercular Therapy 2025 (pp.). Academic Press.
2. 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.
3. Paliwal R, Paliwal SR, Shukla S, Nayak P. Nanomedicine: History, Progress, and Advances. In Nanomedicine, Nanotheranostics and Nanobiotechnology 2025. (pp. 1-9) CRC Press.
4. Kesharwani D, Baldi A, Paliwal SR, Paliwal R. Ethical and Regulatory Aspects of Nanomedicine. In Nanomedicine, Nanotheranostics and Nanobiotechnology 2025. (pp. 153-162) CRC Press.
5. Pandey S, Nayak P, Malaiya A, Paliwal R, Alam MD.I, Kashid S, Yadav AK, Paliwal SR. Colloidal Drug Delivery System: An Overview. In Novel Carrier Systems for Targeted and Controlled Drug Delivery 2024 December 24 (pp. 339-390). Springer Nature Singapore.
6. Malaiya A, Kewat R, Paliwal SR, Paliwal R. Targeted Brain Delivery of Therapeutics. In Novel Carrier Systems for Targeted and Controlled Drug Delivery 2024 December 24 (pp. 287-308). Springer Nature Singapore.
7. Kenwat R, Mamgain A, Singh N, Paliwal SR, Paliwal R. Nanoparticles in nanomedicines: concept, development, and therapeutic applications. InProgress and Prospect of Nanocarriers 2024 Jan 1 (pp. 131-156). Academic Press.
8. Paliwal SR, Sulakhiya K, Kumar P, Maiti S, Paliwal R. Hormonal delivery systems. In Molecular Pharmaceutics and Nano Drug Delivery 2024 Jan 1 (pp. 103-134). Academic Press.
9. Tiwari A, Joshi M, Kenwat R, Paliwal SR, Sulakhiya K, Paliwal R. Nanophytomedicine: nanotechnology for herbal product development and value addition. InPhytopharmaceuticals and Herbal Drugs 2023 Jan 1 (pp. 197-212). Academic Press.
10. Kenwat R, Singh V, Paliwal SR, Paliwal R. Photoresponsive nanocarriers for the delivery of bioactives. InSmart Polymeric Nano-Constructs in Drug Delivery 2023 Jan 1 (pp. 109-128). Academic Press.
11. Naman S, Naryal S, Palliwal R, Paliwal SR, Baldi A. Combating atherosclerosis with nanodrug delivery approaches: from bench side to commercialization. InDrug Delivery Systems for Metabolic Disorders 2022 Jan 1 (pp. 97-136). Academic Press.
12. Malaiya A, Singhai M, Paliwal SR, Paliwal R. Basics of targeted nanodrug delivery of chemotherapeutics for breast cancer therapy. InTargeted Nanomedicine for Breast Cancer Therapy 2022 Jan 1 (pp. 27-44). Academic Press.
13. Kurmi BD, Paliwal R, Paliwal SR. Cell-selective breast cancer targeting through estrogen receptors. InTargeted Nanomedicine for Breast Cancer Therapy 2022 Jan 1 (pp. 131-151). Academic Press.
14. Kenwat R, Paliwal SR, Paliwal R. Targeted breast cancer nanotheranostics. InTargeted Nanomedicine for Breast Cancer Therapy 2022 Jan 1 (pp. 441-464). Academic Press.
15. Gajbe B, Kurmi BD, Kenwat R, Paliwal R, Paliwal SR. Breast cancer: introduction. InTargeted Nanomedicine for Breast Cancer Therapy 2022 Jan 1 (pp. 3-26). Academic Press.
16. Paliwal SR, Paliwal R, Rai S, Bhatt R, Patra A, Jaiswal M, Back NR, Sulakhiya K. Nanocarriers for pulmonary drug delivery overcoming anatomical barriers and prospective solutions. In Recent Advances in Pharmaceutical Sciences 2022 (pp. 256-267). Veer Bahadur Publications.
17. Paliwal SR, Paliwal R, Pandey S, Parveen N, Sharma A, Rai S, Joshi AN, Shrivastava A, Design, classification, synthesis and applications of nanogels as drug delivery carrier. In Recent Advances in Pharmaceutical Sciences 2022 (pp. 301-310). Veer Bahadur Publications.
18. Paliwal R, Chaurasiya A, Panchal K, Nayak P, Parveen N, Paliwal SR. Engineering and functionalization of nanomaterials for theranostic applications in infectious diseases. In Nanotheranostics for Treatment and Diagnosis of Infectious Diseases 2022 Jan 1 (pp. 45-71). Academic Press.
19. Paliwal R, Sulakhiya K, Paliwal SR, Singh V, Kenwat R, Paramanik D. Role of nanoparticles in neurotoxicity. InNanomedical Drug Delivery for Neurodegenerative Diseases 2022 Jan 1 (pp. 165-182). Academic Press.
20. R Paliwal, A Mamgain, R Kenwat, SR Paliwal. [Reverse Engineering in Pharmaceutical](https://scholar.google.com.tw/citations?view_op=view_citation&hl=en&user=2SX-S3MAAAAJ&sortby=pubdate&citation_for_view=2SX-S3MAAAAJ:CHSYGLWDkRkC). Micro-and Nanotechnologies-Based Product Development, 235, 2021.
21. R Paliwal, P Kumar, SR Paliwal, R Kenwat, O Schmid. [Utility of Nanomaterials](https://scholar.google.com.tw/citations?view_op=view_citation&hl=en&user=2SX-S3MAAAAJ&sortby=pubdate&citation_for_view=2SX-S3MAAAAJ:xtRiw3GOFMkC). Nanomaterials in Bionanotechnology: Fundamentals and Applications, 333, 2021.
22. R Paliwal, SR Paliwal, R Kenwat. [Nanomedicine-based multidrug resistance reversal strategies in cancer therapy](https://scholar.google.com.tw/citations?view_op=view_citation&hl=en&user=2SX-S3MAAAAJ&sortby=pubdate&citation_for_view=2SX-S3MAAAAJ:fPk4N6BV_jEC). Nano Drug Delivery Strategies for the Treatment of Cancers, 319-339, 2021.
23. Rishi Paliwal Shivani R Paliwal, Rameshuru, Balak D. Kurmi, Chitosan-based nanocarriers for ophthalmic applications. Polysaccharide Carriers for Drug Delivery,**Editors:** Sabyasachi Maiti SougataJana.Elsevier. 79-104. 2019
24. Shivani R Paliwal, Pawan Tekchandani, Balak D. Kurmi, Rishi Paliwal. Designing Nanocargos for Multi Drug Resistant Cancerous Cells: Strategies and Applications, 4 VolumeNanoBioMedicine book series. (In Press)
25. Shivani R Paliwal, Rishi Paliwal, Suresh P Vyas “Ligand appended liposomes for breast cancer therapy” Encyclopedia Of Biomedical Polymers And Polymeric Biomaterials, Taylor & Francis Group, LLC, New York, New York 10017 U.S.A. (In press)
26. Shivani R Paliwal, Rishi Paliwal, Suresh P Vyas “*pH sensitive liposomes in drug delivery*” In: Smart Materials for Drug Delivery, Royal Soceity of Chemistry, UK (In press).
27. Rishi Paliwal, Shivani R Paliwal, Suresh P Vyas “*Novel Carrier(s) Based Vaccine Design against Hepatitis B: Recent Updates*” In: Hepatitis B: New Research, Nova Science Publishers, (In press).
28. Suresh P Vyas, Rishi Paliwal, Shivani R Paliwal, “*Chitosan-based Systems for Ocular Biopharmaceuticals Delivery*” In: Chitosan-Based Systems for Biopharmaceuticals: Delivery, Targeting and Polymer Therapeutics Ed. Sarmento B and Neves JD, John Wiley & Sons, Ltd. 2012, pp. 243-254.
29. Suresh P Vyas, Rishi Paliwal, Shivani R Paliwal “*Ocular Delivery of Proteins and Peptides*” In: Protein and Peptide Delivery, Ed. Chris Walle, Elsevier. 2011, pp. 87-103
30. Suresh P Vyas, Rishi Paliwal, Shivani R Paliwal “*Chitosan/Chitosan Derivatives as Carriers and Immunoadjuvants in Vaccine Delivery*” In: Chitin, Chitosan, Oligosaccharides and Their Derivatives: Biological Activities and Applications, Ed. SN Kim CRC press. 2010, pp. 335-349.
31. Suresh P Vyas, Shivani R Paliwal, Rishi Paliwal “*Targeted Drug Delivery*” In: Lachman’s Industrial Pharmacy, Ed. Vyas SP and Khar RK, CBS Publishers, New Delhi, India.
32. Rishi Paliwal, Shivani R Paliwal, Suresh P Vyas, “*Ocular Nanomedicine*” In Nanocolloidal carriers in site specific and controlled drug delivery, CBS Publishers, New Delhi, India, 2010, 154-171.
33. Shivani R Paliwal, Rishi Paliwal, Suresh P Vyas, “*Nanocarriers in Breast Cancer Therapy*” In: Nanocolloidal carriers in site specific and controlled drug delivery, CBS Publishers, New Delhi, India, 2010, 554-577.
34. Rishi Paliwal, Shivani R Paliwal, Suresh P Vyas, “*Nanocarriers: Toxicological Aspects*” In Nanocolloidal carriers in site specific and controlled drug delivery, CBS Publishers, New Delhi, India, 661-674.

