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LIST OF PUBLICATIONS DURING Ph. D.

Book chapters:

1. Verma, D. K., Mohapatra, B., Kumar, C., **Bajwa, N.,** Kumari, K., G., K., Baldi, A., Patel, A., Singhal, B., Alaa, K. N., & Srivastav, P. P. (2019). Molecular techniques for detection of foodborne pathogens: *Salmonella and Bacillus cereus*. In D. Kumar, A.R. Patel, P.P. Srivastav, B. Mohapatra, A.K. Niamah (Eds.), Microbiology for Food and Health: Technological Developments and Advances (1st ed., pp. 129-146). Apple Academic Press. ISBN: 9781771888134.

2. **Bajwa, N.,** Singh, P., Sodhi, R. K., Baldi, A., Jyoti, K., Chandra, R., & Madan, J. (2019). Chronicle of nano micelles in drug delivery: From bench to bedside. In S. Nimesh, N. Gupta, & R. Chandra (Eds.), Nanomaterials: Evolution and Advancement towards Therapeutic Drug Delivery (pp. 161-210). Bentham Science. ISBN: 9781681087825.

3. **Bajwa, N.,** Singh, P., Baldi, A., Jyoti, K., Chandra, R., & Madan, J. (2021). Scale-up, the preclinical and clinical status of poly (lactide-co-glycolide) and its copolymers-based drug delivery systems. In S. Nimesh, N. Gupta, & R. Chandra (Eds.), Nanomaterials: Evolution and Advancement towards Therapeutic Drug Delivery (pp. 246-292). Bentham Science. ISBN: 9781681088242.

4. **Bajwa, N.,** Mahal, S., Singh, P. A., Jyoti, K., Madan, J., & Baldi, A. (in press). Polymer drug conjugates in clinical trials: Challenges, opportunities, and prospects. In J. Madan, A. Baldi, M. Chaudhary, N.Chopra (Eds.) Polymer-Drug Conjugates: Linker Chemistry, Protocols and Applications. Elsevier.

5. **Jyoti, K.,** Bajwa, N., Singh, P. A., Madan, J., Baldi, A., & Singh, K. K. (in press). Chemistry of conjugation in drug delivery: The prospects of biodegradable and non-biodegradable bonds. In J. Madan, A. Baldi, M. Chaudhary, N.Chopra (Eds.) Polymer-Drug Conjugates: Linker Chemistry, Protocols and Applications. Elsevier.

Research and review papers related to present research work:

1. Bajwa, N., Naryal, S., Mahal, S., Singh, P. A., & Baldi, A. (2022). Quality-by-design strategy for the development of arteether-loaded solid self-micro emulsifying drug delivery systems. Journal of Drug Delivery Science and Technology, 67, 103707. (**Impact factor 5.1)**

2. Bajwa, N., Mahal, S., Naryal, S., Singh, P. A., & Baldi, A. (2022). Development of novel solid nanostructured lipid carriers for bioavailability enhancement using a quality by design approach. AAPS PharmSciTech, 23(4), 130. **(impact factor 4.01)**

3. Bajwa, N., Mahal, S., Madan, J., & Baldi, A. (2023). Implementation of the QbD approach to the development and validation of an analytical method for alpha-beta arteether. Letters in Drug Design & Discovery **(Impact factor 1.099)**.

4. Bajwa, N., Singh, M., Mahal, S., Mehta, S., & Baldi, A. (2021). Formulation development and assessment of solid dispersion and hydrotropy for BCS class II drug solubility enhancement. Letters in Drug Design and Discovery. **(Impact factor 1.099).**

5. Bajwa, N., Mahal, S., & Baldi, A. (2022). Implementation of QbD approach to the development and validation of analytical method for alpha- beta arteether. Letters in Drug Design and Discovery 19(9). **(Impact factor 1.099)**

6. Bajwa N., Saroch P., Baldi A. (2023). Implementation analytical quality by design methodology to develop a UV spectrometric technique for arteether quantification. Indian Journal of Pharmaceutical Education and Research 57(3):1-7**. (Impact factor 0.9)**

7. Bajwa, N., Singh, P. A., Naryal, S., Sharma, T., Sijwal, P. S., & Baldi, A. (2022). Execution of quality by design approach for preparation and optimization of inclusion complexes: *In-vivo* and *ex-vivo* assessment. Analytical Chemistry Letters, 12(6), 715-729.(**Impact factor-2.3)**

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9. Bajwa, N., Mehra, N. K., Jain, K., & Jain, N. K. (2016). Targeted anticancer drug delivery through anthracycline antibiotic-bearing functionalized quantum dots. Artificial Cells, Nanomedicine, and Biotechnology, 44(7), 1774-1782. **(Impact Factor-5.602)**

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12. Kevadiya, B. D., Machhi, J., Herskovitz, J., Oleynikov, M. D., Blomberg, W. R., Bajwa, N., Soni, D., Das, S., Hasan, M., Patel, M., Senan, A. M., Gorantla, S., McMillan, J., Edagwa, B., Eisenberg, R., Gurumurthy, C. B., Reid, S. P. M., Punyadeera, C., Chang, L., & Gendelman, H. E. (2021). Diagnostics for SARS-CoV-2 infections. Nature Materials, 20(5), 593–605. **(Impact Factor 48.3)**

13. Machhi, J., Shahjin, F., Das, S., Patel, M., Abdelmoaty, M. M., Cohen, J. D., Singh, P. A., Baldi, A., Bajwa, N., Kevadiya, B., et al. (2021). A Role for Extracellular Vesicles in SARS-CoV-2 Therapeutics and Prevention. Journal of Neuroimmune Pharmacology, 16(2), 270–288. **(Impact Factor 7.6)**

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15. Kevadiya, B.D., Machhi, J., Herskovitz, J., Bajwa, N., & Gendelman, H.E. (2021). Pharmacotherapeutics of SARS-CoV-2 Infections. J Neuroimmune Pharmacol, 16(1), 12–37. **(Impact Factor 7.6)**

16. Dharwal, S., Bajwa, N., Madan, J., Mandal, U.K., Singh, K., & Baldi, A. (2022). Self-double emulsified drug delivery system of pyridostigmine bromide augmented

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24. Naman, S., Madhavi, N., Singh, M., Singh, P. A., Bajwa, N., & Baldi, A. (2019). Formulation design and pharmaceutical considerations for paediatric patients: Current status and future dimensions. Journal of Drug Delivery and Therapeutics, 9(4), 601-606. (UGC J No.- 45744).

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Papers presented in Conferences during Ph.D.

International

- Neha Bajwa, Ashish Baldi "Arteether loaded novel formulation development and optimization by formulation by design concept for intensified oral bioavailability" in RSTMH Annual Meeting 2021: Drug-Resistant Infections: Causes, Consequences And Considerations held at London on 11-12 Oct 2021.
- Neha Bajwa, Ashsih Baldi "Development and optimization of arteether loaded novel drug delivery system using formulation by design concept for intensified oral bioavailability" in International Pharmaceutical Federation (FIP) PSWC 2020 Conference held at Montreal, Canada on 4-6 Oct.2019.
- Neha Bajwa, Nupur Madhavi, Ashish Baldi "Arteether loaded novel formulation development and optimization by formulation by design concept for intensified oral bioavailability "in International Nanoscience Student Conference (INASCON 2020) held at Lund University on 11-13 August 2019.
- Neha Bajwa and Ashish Baldi "Novel oral formulation development and optimization for treatment of malaria" at 6th Edition of Global conference on pharmaceutics and novel Drug delivery systems held at University of Picardie Jules Verne, France on June 13-14, 2022.
- Neha Bajwa, Rohit, Ashish Baldi "Atenolol Loaded Self Double Emulsifying Drug Delivery System for Improved Bioavailability" at SPER, Nepal International conference held at Kathmandu University, Nepal on 7-8 June 2019.

National

- Neha Bajwa, Ashsih Baldi "Development and characterization of arteether loaded nano lipid carrier systems with augmented solubility and bioavailability" in International Conference of Pharmacy-2019 held at Lovely Professional University, Punjab. **(Won best research award)**
- Neha Bajwa, Nupur Madhavi, Ashish Baldi "Formulation by design based optimization of arteether loaded solid lipid nanoparticles for intensified oral bioavailability "in National Conference on Regulatory Affairs and Intellectual Property Rights in Indian Pharmaceutical Industries held at Chandigarh Group of Colleges, Landra, Punjab **(Won best research award)**

- Nupur Madhavi, Neha Bajwa, Ashish Baldi "Development and characterization of arteether loaded nanostructured lipid carrier for treatment of malaria" in 23rd Annual National Convention of Pharmaceutical Teachers of India (APTICON -2018), held at APTI Rajasthan State Branch and Swami Keshvan and Institute of Pharmacy, Jaipur, Rajasthan, Oct 2018.
- Neha Bajwa, Shiwani, Jitender Madan, Uttam Mandal, Ashish Baldi, "Self-Double Emulsified Drug Delivery System of pyrostigmine bromide augmented aermeation across Caco-2 Cells". 6th World Congress on Nanomedical Sciences-ISNSCON-2018, Chemistry-Biology Interface 2019, and Conference on Science and Technology for Future of Mankind held at Vigyan Bhawan, New Delhi on 7-10 Jan 2019 **(Won Best Poster Award).**
- Neha Bajwa N., Ashish Baldi, N.K. Jain "Targeted anticancer drug delivery through anthracycline antibiotic bearing functionalized quantum dots". 23rd Annual National Convention of Association of Pharmaceutical Teachers of India (APTICON-2018) held at Jaipur on 5 -6 Oct 2018.
- Neha Bajwa, Ashish Baldi "Novel herbal fizzy formulation using quality by design methodologies as an effective alternate to amla juice" International Conference on Herbal Medicines: Research and Commerce-Global Perspectives at L.M. College of Pharmacy Ahmedabad held on 27– 29 Dec 2018.

Technical Events attended during Ph.D.

- Attended one day workshop on "IPR-AWAKE" Awareness Workshop on Intellectual Property Rights held at MRSPTU, Bathinda on 19 March, 2018.
- Attended Elsevier Author Workshop on Scholarly Writing & Intellectual Ethics on 24 Aug. 2018.
- Participated in AWSAR (Augmenting Writing Skills for Articulating Research) workshop on popular science writing organized by DST, New-Delhi and Vigyan Prasar in collaboration with Punjab State Council for Science & Technology (PSCST) and IISER, Mohali on 24 Sept, 2018.
- Participated in ICMR sponsored workshop on "Nanomedical Sciences and its impact on healthcare: Challenges, Opportunities and Future Directions" organized by Jamia

Hamdard and the University of Delhi at Vigyan Bhawan, New Delhi, India in Jan 2019.

- Participated in Faculty workshop: Basic Research Methodology organized by Multi-Disciplinary Research Unit at Pt. B.D.Sharma Postgraduate Institute of Medical Sciences, Rohtak.
- Attended DST-AWSAR webinar on augmented skill writing by DST-New Delhi.
- Attended Web Training Course on "Attaining Quality Excellence in Drug Delivery Development & Research: Emerging Trends, Tools & Techniques in Pharmaceutics & Biopharmaceutics" from 29 Nov to 04 Dec 2021.
- Attended a one-day national seminar on "Importance of Intellectual Property Rights" sponsored by the Department of Science & Technology, Haryana held at Pt.B.D. Sharma University of Health Sciences, Rohtak, Haryana on 21 Nov 2018.
- Participated as LOC member in Continuing Education Program on "Recent Industrial Approaches in Pharmaceutical Arena: From Theory to Practice" sponsored by Pharmacy Council of India (PCI), New-Delhi, held at MRSPTU, Bathinda on 27 -29 Sept, 2018.