



## FACULTY PROFILE

**Name:** Dr. Prashant Kumar

**Designation:** Associate Professor

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### **Professional Qualification:**

- Ph. D Pharmaceutical sciences
- M. Pharm (Pharmaceutics)

### **Publications (Journals & Conferences):** Total 48

- Unlocking the role of herbal cosmeceutical in anti-ageing and skin ageing associated diseases, Cutaneous and Ocular Toxicology. 2024 ;43(3), 211–22  
<https://doi.org/10.1080/15569527.2024.2380326>
- Unlocking the Role of Virus-like Particles (VLPs) for Cancer Treatment. Current Cancer Therapy Reviews. April 2024. 10.2174/0115733947308351240514182503
- Unlocking the Secrets of Probiotics – A Therapeutic Breakthrough for Major Depressive Disorders, Journal of Biological Regulators And Homeostatic Agents. May 2024.
- Targeting the Interplay of Proteins through PROTACs for Management Cancer and Associated Disorders, Current Cancer Therapy Reviews, April 2024.
- A Review on Pharmacological Potential of Various Synthetic and Phytoconstituents in Managing Recurrent Aphthous Stomatitis, International Journal of Pharmaceutical Investigation, April 2024.
- Microballoons: A promising approach for gastroretentive drug delivery system and their advantages, limitations, recent advancement in drug delivery system, patents and future aspects, Indian Drugs, 61(03):7-20 DOI:10.53879/id.61.03.13237.
- Emulgel: A Cutting Edge Approach for Topical Drug Delivery System. Current Drug Research Reviews. 2024 Jan 31. doi: 10.2174/0125899775278612240129055753.

- Multi drug resistance in Colorectal Cancer approaches to overcome advancements and future success, *Advances in Cancer Biology – Metastasis*, 10,2024.
- Carbon Nanotubes: A Targeted Drug Delivery against Cancer Cell, *Current Nanoscience*. Volume 20, Issue 6, 2024, [769 - 800].
- Nanodelivery systems An efficient and target- specific approach for drug-resistant cancers, *Cancer Medicine*, 2023 Sep;12(18):18797-18825. doi: 10.1002/cam4.6502.
- Current Landscape of Therapeutics for the Management of Hypertension – A Review, *Current Drug Delivery*. 2024;21(5):662-682. doi: 10.2174/1567201820666230623121433.
- Pharmaceutical contaminants in aquatic systems, conventional and green strategies, recent updates, challenges and policies, and potential outcomes, *Journal of Molecular Liquids*, Volume 389, 2023,122905,ISSN 0167-7322, <https://doi.org/10.1016/j.molliq.2023.122905>.
- Therapeutic approaches of nutraceuticals in the prevention of neurological disorders, *Eur Chem Bull*. 2023,12(5) 1575-1596.
- Application of Box-Behnken Experimental design in process parameter optimization for production of Berberine HCl loaded Chitosan coated Sodium Alginate Nanoparticles. *Research Journal of Pharmacy and Technology*. 2023, Vol: 16, Issue:3.
- Effect of antineoplastic patch on DMBA induced breast cancer” *International journal of Pharmaceutical Science and Research*. 2023, 14(3): 1528-1533.
- Development and characterization of novel co-processed excipients to enhance compressibility profile for formulation of tablet dosage form, *Research Journal of Pharmacy and Technology*. 2022, Vol : 15, Issue : 6.
- A comprehensive Review on recent trends and Future Prospects of Nanogels. *International journal of Pharmaceutical Science and Research*. 2022, Vol.13 (11) : 1000-13.
- Chronopharmaceutical Drug Delivery Systems: A Comprehensive Review. *Int. J. Pharm. Sci. Rev. Res.*, 2021:69(2), 75-82.
- PEG Based Suppositories Bearing Anti- Tubercular Drugs: Effect of Drug

Loading on Release and Physical Properties. Latin American Journal of Pharmacy. 2021. 40 (12):2841-2848.

- Review Article on Phytochemical Investigation and Pharmacological Activity of Various Parts of Dalbergia Sissoo. Int. J. Pharm. Sci. Rev. Res., 2021:69(1): 77-83.
- Medicinal Plants Used in Herbal Cosmetics with Special Reference to Anti-Dandruff. International Journal of Pharmaceutical Research. 2020; 12 (4): 188-197.
- Medicated Tattoos: A Recent Drug Delivery Approach In Medical Science. International Journal of Pharmaceutical Science and research. 2020; Vol.11(9): 4174-4179.
- Investigation on protective effect of Terminalia bellirica (Roxb.) against drugs induced cardiotoxicity in wistar albino rats. Journal of Ethnopharmacology 261 (2020) 113080.
- High performance thin layer chromatography analysis for simultaneous quantification of phenolic biomarkers in Oxalis corniculata L. methanolic fraction. Journal of Planar chromatography. 2018; 31(4) Suppl: 327-331.
- Formulation and evaluation of pH sensitive Sustained release hydrogel of Methotrexate", Clinical CancerDrugs, 2018; 5,105-112.
- Formulation, Characterization and Evaluation of Temperature Sensitive Controlled Release Hydrogels of Methotrexate, Research Journal of Pharmaceutical, Biological and Chemical Sciences, 2018; 9 (5): 2094-2104.
- Pharmacognostic Evaluation and Determination of Secondary Plant Metabolites by HPTLC and its Antioxidant Activity in Myrica esculenta Pharmacogn J. 2017; 9(6) Suppl: s103-s106.
- Assessment of Anti-aging Potential of Nanostructured lipidcarriers (NLCs) gel of Myrica esculenta & Coenzyme Q10 using UVA induced photo- toxicity model. Res J Pharm Biol Chem Sci. 2018;9(4): 1449-1458.
- **Nanostructured Lipid Carriers (NLCs): A Prominent Topical Delivery System**

for Coenzyme Q10 & Myrica Esculenta Leaves Extract for Anti- Aging Potential. International journal of pharm and pharm. 2018; 10 (8):106-112

- Adaptogenic activity of *Plumbago zeylanica* Linn. and *Plumbago rosea*: An experimental study using swiss albino mice by swimming endurance test Journal of Pharmacognosy and Phytochemistry 2016; 5(1): 182-185
- Validation of a Statistically Optimized Stability Indicating Method for the Estimation of Febuxostat in a Solid Dosage Form, EC Pharmaceutical Science 1.3 (2015): 133-147.
- Development, Statistical Optimization and Characterization of Promethazine Teoclate Loaded Solid Lipid Nanoparticles, using Central Composite Design, Asian journal of pharmaceutics, Year 2014, Volume 8, Issue 4 [p. 279-286].
- Nephroprotective potential of *curcuma caesia roxb.* in animal model. International Journal of Bioassays, 2014; 3 (10): 3336-3341.
- Pharmacological Role of *Alstonia scholaris* Leaves for its Anticonvulsant and Sedative Action, published in American Journal of Phytomedicine and Clinical Therapeutics, Vol 1, No 6 (2013)
- Huntington Disease An Overview Published in pharmainfo.net. 2008
- OTC Medication a pivotal role in medication: A review, Indian pharmacist, Volume 9. 2008.
- A book chapter on Interplay Between Gut-microbiota and Neurodegeneration, in book titled, Advances in Diagnostics and Immunotherapeutics for Neurodegenerative Diseases, Bentham sciences. Eissn:978-981-5238-75-4, 2024. 104-145 (42). [10.2174/9789815238754124010009](https://doi.org/10.2174/9789815238754124010009).
- Book chapter on Role of Synbiotics in Inflammatory Lung Diseases, in book titled Synbiotics in “Human Health: Biology to Drug Delivery” Springer Nature Singapore, ISBN 978-981-99- 5574- 9 ISBN978-981-99-5575-6(eBook) <https://doi.org/10.1007/978-981-99-5575-6>, April 2024.
- Correlation Between Exosomes and Neuro- inflammation in Various Brain Disorders, in book titled “Exosomes Based Drug Delivery Strategies for Brain Disorders. Springer Nature Singapore ISBN 978-981-99-8372-8

[https://doi.org/10.1007/978-981-99-8373-5\\_1](https://doi.org/10.1007/978-981-99-8373-5_1), April 2024.

- Role of Exosomes in Parkinson's and Alzheimer's Diseases. in book titled "Exosomes Based Drug Delivery Strategies for Brain Disorders. Springer Nature Singapore ISBN 978-981-99-8372-8 [https://doi.org/10.1007/978-981-99-8373-5\\_1](https://doi.org/10.1007/978-981-99-8373-5_1), April 2024.147-182
- Quercetin in the Management of Cardiovascular Disorders, Natural Products: An Answer to Cardiovascular Complications, Nova Science Publishers, USA, Nov 2023.
- Use of Polysaccharides: Novel Delivery System for Genetic Material, in book titled "Integration of Biomaterials for Gene Therapy" Wiley Scrivener Publishing LLC,USA, Oct. 2023.
- Book chapter on Dyes from Natural Products: characterization, Chemical, chemical, and Biochemical analysis, and their Importance, 2023, CRC press under Taylor and Francis. USA.
- Elsevier's book chapter on "Coenzyme Q10: An endogenous Antioxidant. The Bright and the Dark side. 2022, pages 91-104.
- Deep learning framework for cancer diagnosis and treatment. Scrivener Publisher LLC, WileyMassachusetts, USA. 2022, PP:229-246.
- Elsevier's book chapter on Bacopa monniera (Brahmi): "A Potential Naturally Occurring Chemical against Alzheimer's disease". Prashant Kumar, Abhishek Gupta, Anita Singh, Aadesh Kumar Published Nov. 2020.
- Book chapter on "COVID-19: Paediatric Management" Prashant Kumar, Shiv Bahadur, Lexicon International Publisher. ISBN no. 9788194914709.
- A book on "HerbalCosmeceuticals-An Emerging Anti-Aging Potential" in, LAP LAMBERT Academic Publishing is a trademark of OmniScriptum GmbH & Co. KG Heinrich-Böcking-Str. 6-8,66121, Saarbrücken, Germany. 2016.
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### **Awards and Achievements**

- Qualified CSIR-UGC, NET-LS in Chemical Science. AIR- 48
- Qualified GATE 2009, conducted by IIT, Roorkee with 93 percentile
- Qualified G-PAT 2011, Conducted By MS Baroda University. AIR-780.
- Qualified G-PAT 2014, Conducted By the AICTE, India. AIR-729.

### **Workshops/Seminars/FDPs : More Than 20**

- Research Methodology and Statistical Analysis, 2021 under MOOCs platform SWAYAM, an initiative of Ministry of Human Resource and development, Government of India.
- Completed Annual Refresher Programme in Teaching - 2020 under MOOCs platform SWAYAM, an initiative of Ministry of Human Resource and development, Government of India.

- AICTE Sponsored ATAL FDP on Emerging trends in drug discovery and formulation development Conducted by KLE College of Pharmacy Belagavi, held on 22/11/2021 to 26/11/2021.
- AICTE Sponsored ATAL FDP on Applications of Biotechnological and Analytical Tools in Pharmaceutical Research, Conducted by Meerut institute of engineering and technology, held on 14/09/2021 to 18/09/2021.
- AICTE Sponsored Two Weeks Online Faculty Development Program (FDP) on “Exploration of Nascent Pedagogical Tools for Updating Teachers of Pharmacy Education” conducted by,
- Lloyd Institute of Management & Technology (Pharm), Greater Noida, held from 08th-20th March, 2021
- FDP on Rational utilization of AYUSH drugs during Covid-19, conducted by, College of Pharmacy, Theerthanker Mahaveer University, Moradabad Up, Held on 21-26 July 2021.
- FDP, on "Advancement and strategies on Nano Drug Delivery Systems" Conducted by Meerut institute of engineering and technology , held on 25-27 July, 2020.
- Conference on “Challenges and opportunities in Materiovigilance and digital healthcare system” held at ITS college of Pharmacy, Ghaziabad, on 30 Sept.2023
- Development and characterization of nanoemulsion for the treatment of psoriasis” International Conference on Innovation & Advances in Drug Development and Clinical Research(IADDCR 2023) by Chitkara College of Pharmacy, Chitkara University, Punjab, India, Held on 24th & 25th April 2023.
- “ Emulgel formulation: An effective approach for the treatment of skin diseases” International conference on Latest trends & Innovations in Pharmaceutical and Biosciences organized by Career Point University, Rajasthan, India, Held on 18th March 2023.
- “Effect of antineoplastic patch on DMBA induced breast cancer” National conference on “ Scope and Research opportunities for Pharmacy Professionals in Pharmacovigilance and Materiovigilance organized by School of Pharmacy, Sharda University, Greater Noida, Uttarpradesh, India, held on 17th and 18th March 2023.
- “Herbal cosmeceuticals: Recent trend” National conference on “ Traditional and Modern Research in science and technology” in organized by, Quantum University, Roorkee, Uttarakhand, India, held on 8th October 2022.
- “Development and Characterization of Berberine HCl loaded chitosan coated Sodium Alginate Nanoparticles” International conference on current trends in Engineering, Sciences and Management organized by CT University, Ludhiana, Punjab, India, held on 20th May 2022.
- “Use of UVA induced photo-toxicity model for assessment of Anti-aging Potential of Herbal NLC gel containing Coenzyme Q10 & Myrica esculenta leaves extract” International seminar on Herbal pharmacovigilance: current scenario and future strategies, Held at ITS college of pharmacy Ghaziabad, sponsored by AKTU, Lucknow, held on 31st August 2018.
- ‘Use of 23 factorial design for Statistical Optimization of Nanostructured Lipid Carriers of Coenzyme Q10 & Myrica Esculenta Leaves Extract” ICMR sponsored national conference on, interdisciplinary trends in pharmaceutical research. APTI conference, held at RBU Punjab, APTICON, on 13-14 April 2017.
- National “Phytochemical Evaluation of Myrica esculenta by HPTLC and estimation of its invitro Antioxidant potential” National seminar on Altering Paradigm of Biomaterials in Drug Development, Department of Pharmacy, held at United College of pharmacy, Allahabad, on 07 Oct. 2017.
- Attended workshop on “Novel techniques in solubility enhancement of poorly soluble drugs” held on 11 March 2016 at RKGIT Ghaziabad U.P
- “Novel trends and strategies in the treatment of skin aging” IPGA sponsored conference on 5th March 2016, held at SGIT Ghaziabad.

- Design expert as a statistical tool for optimization of promethazine teoclate loaded solid lipid nanoparticles, using central composite design, in 1st International Conference On New Horizons in Pharmaceutical And Biomedical Sciences (NHPBMS-2013), published in IJPSR, held at, Dehradun
- Comparative study for conventional hot stirring, reflux process and novel microwave assisted synthesis of substituted-2-aminobenzothiazole derivatives and their Pharmacological Screening, in 1st International Conference On New Horizons in Pharmaceutical And Biomedical Sciences (NHPBMS-2013), published in IJPSR, held at, Dehradun.
- Design Expert” As A Statistical Tool for Optimization of Bilayered Buccoadhesive Film of A Highly Water Soluble Drug’ ICMR and CSIR Sponsored National seminar on Biostatistics and Research Methodologies with an overview on Clinical Research, Department of Pharmacy, Pranveer singh Institute of Technology, Kanpur, Feb 2011.
- Development and Statistical Optimization of Promethazine Teoclate Loaded Solid Lipid Nanoparticles, using Central Composite Design’ IPGA 2009, held at ISF college of pharmacy, Moga, Punjab
- One Day Seminar on “PHARM D: A NEW DEFINATION OF PHARMACIST” held at Meerut institute of Engineering and Technology in 2008.

**Work Experience: 13 Years**

**Professional Memberships:**

Member of IPGA (Indian Pharmacist Graduate Association)

Member of Uttarpradesh State Pharmacy Council.