### **CURRICULUM VITAE**

## DR. AWESH KUMAR YADAV

National Institute of Pharmaceutical Education and Research (NIPER), Raebareli Bijnor-Sisendi Road, Sarojini Nagar, Near CRPF Base Camp, Lucknow (UP)- 226002

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#### ACAMEDIAN and R&D PROFESSIONAL

Aspiring challenging assignments for a career encompassing personal & professional enhancement

#### **PROFILE**

- ✓ Experience of more than 15 years in diverse areas encompassing Product Development & Management, Quality Audits, Quality Systems Implementation, Reporting & Documentation, and Teaching; presently associated as Assistant Professor in National Institute of Pharmaceutical Education and Research, Raebareli (NIPER-R, Lucknow Campus).
- ✓ Well versed with FDA related documentation, Reactions, Processes, and Technology coupled with extensive experience of Fluid Bed Processor (GPCG 1.1), Extruder and Spheronizer, Autocoater, Tablet Compression Machine, Rapid Mixer Granulator (RMG), HPLC, Brookfield Viscometer, Particle Size Analyzer, Zeta Sizer, Rotatory flash evaporator with cryogenic bath, Sonicator, Lyophilizer, Ultracentrifuge, Hydrogenator, Gamma counter.
- ✓ Hold merit of successfully developing three extended-release products (pellets) for US market (ANDA) and five products for Semi Regulatory market. Scale-up experience of pelletization product for ANDA filling and different documentation for the regulatory market.
- ✓ Hands-on experience in formulation of solid oral product right form API procurement, vendor selection, internal quality audits, scale-up activity, document for scale-up (i.e. MMD, TAD, and PDR)
- ✓ A keen researcher, teacher, trainer, and motivator with strong analytical and troubleshooting skills. Able to effectively interact with diverse populations of students at a variety of academic levels with abilities in recognizing, respecting & nurturing the potential of each student.

#### **Selected Accomplishments**

- √ 102 Publications including books and Patents.
- ✓ Three Indian patents filed.
- ✓ Guided 31 M. Pharma/M.S. (Completed) and 2 Ph.D.
- ✓ Review Editor in pharmaceutical Medicine and Outcomes Research (Frontiers| Pharmacology Editorial Office www.frontiersin.orgtwitter.com/FrontiersIn EPFL Innovation Square, building Lausanne, Switzerland.
- ✓ **Guest Editor** of the Special Issues of Journal of Pharmaceutics <a href="http://www.hindawi.com/journals/jph/">http://www.hindawi.com/journals/jph/</a>
- ✓ Reviewer for the manuscripts of the international Journals like Journal of Microencapsulation, Nanomedicine, AAPS Pharma SciTech, Journal of Drug Targeting, and Journal of Inclusion Phenomena and Macrocyclic Chemistry, Drug Delivery, Current Drug Therapy, Artificial Cells, Nanomedicine and Biotechnology, Current Pharmaceutical Design, etc.
- ✓ Nominee of CPCSEA New Delhi.

# **Research Project and Seminar Grants**

- 1. **Major Research project** on "Self-Degradable DNA Nanoclew Based Site-specific Anticancer Drug Delivery (EMR/2016/002028)' Approved by SERB India of **28 lacs rupees (Completed)**.
- 2. **Major Research project** on "Hyaluronic acid anchored nanoparticles for multifunctional delivery of anticancer siRNA [BT/PR9236/MED/30/1206/2013]" Approved by DBT India of **23.68 lacs rupees** (Completed).
- 3. **Minor Research project** on "Glycosoaminoglycan Anchored Nanoparticles for Tumor Targeting" by Madhya Pradesh Council of Science and Technology, Bhopal (MP) India of **1.64 lacs rupees** (Completed).

- 4. **Seminar Grant** from Madhya Pradesh Council of Science and Technology, Bhopal (MP) India of **50,000**/rupees on the "Novel Drug Delivery Strategies A Changing and Challenging Global Scenario" at Guru Ramdas Khalsa Institute of Science and Technology- Jabalpur (MP).
- **5. Popular Lecture Series** sponsored DBT, New Delhi (**Grant amount 29000 rupees**) on Application and Challenges in Polymeric Drug Delivery Systems" at Bhagyoday Tirth Pharmacy College, Sagar (MP) 15th Feb 2018.

#### PROFESSIONAL EXPERIENCE

# National Institute of Pharmaceutical Education and Research, Raebareli (NIPER R) March 9, 2020 to till date.

#### **Assistant Professor**

- ✓ Teaching and Research as per institute research mandate.
- ✓ Responsible for competitive functioning of academic curriculum.

#### Bhagyoday Tirth Pharmacy College, Sagar MP.

#### Feb 9, 2016 to March 8, 2020

#### **Principal**

- ✓ Competitive, effective, and smooth functioning of the academic program of study.
- ✓ Planning, evaluating, and revision of course curriculum, content, materials, and methods of instruction.
- ✓ Preparation of course materials such as syllabi, homework assignments, and handouts.
- ✓ Preserved regularly scheduled office for the counseling of students.
- ✓ Guided students for academic and vocational curricula and for best career options.
- ✓ Collaboration with fellow lecturers on lesson plans and performed administrative tasks viz. recording attendance, managing student portfolios, and providing individual assistance to the students.
- ✓ Stress on improving the learning environment of the classrooms and acting as a facilitator to promote student leadership by developing positive thoughts.

# GURU RAMDAS KHALSA INSTITUTE OF SCIENCE AND TECHNOLOGY (PHARMACY) JABALPUR MP Jul 12, 2012 to Feb 8, 2016

## **Associate Professor**

- ✓ Fulfilling the responsibility to teach PG & UG students, Dean (Academic), Head of various institutional committees ie. PCI, Purchase, and verification of equipment.
- ✓ Plan, evaluate, and revise curriculum, course content, and course materials and methods of instruction. Prepare course materials such as syllabi, homework assignments, and handouts.
- ✓ Maintain regularly scheduled office hours to advise and assist students. Advise students on academic and vocational curricula and on career issues. Select and obtain materials and supplies such as textbooks and laboratory equipment.
- ✓ Collaborated with fellow lecturers on lesson plans and performed administrative tasks viz. recording attendance, managing student portfolios, and providing individual assistance to the students.
- ✓ Improvement of learning environment in the classrooms and acted as a facilitator to promote student leadership in initiating and creating positive learning opportunities.

#### IPCA LABS LIMITED, MUMBAI

#### Oct 01, 2008 - Jul 12, 2012

#### **Assistant Manager in Formulation Development**

- ✓ Organized efforts for patent analysis, "Formulation Development", scale-up, Literature search, and preparation and evaluation documents pertaining to all these activities related to the projects assigned.
- ✓ Received "Appreciation Letter for the process improvement" by IPCA Lab. Limited.

#### **Completed projects**

✓ Developed "Multi-unit particulate systems, and Extended-Release" Tablets for anti-hypertensive Drug (ANDA).

- ✓ Developed Extended Release (pellets) Capsules of An Antihypertensive Drug (ANDA).
- ✓ Developed Extended Release (pellets) Capsules of An Anti-inflammatory Drug (ANDA),
- ✓ Developed Extended Release (pellets) Capsules for the Treatment of Ulcerative Colitis (ANDA filing).
- ✓ Developed Controlled-Release Tablets for UTI for Domestic Market.
- ✓ Developed Immediate Release Tablets/Capsules for antibacterial drugs for the domestic market.
- ✓ Developed Bilayer Tablets for anti-hypertensive drugs for the domestic market.

#### FORMULATION DEVELOPMENT, HIMALAYA DRUG COMPANY, BANGALORE (KA)

#### Feb 11, 2008 -Sep 27, 2008

#### **Research Scientist**

✓ Entrusted with the responsibility of handling Development of An Microparticulate Formulation of a Sunscreening Agent

# SUN PHARMA ADVANCED RESEARCH CENTER (SPARC), VARODARA (GJ)

## Apr'04 - Aug'04

#### **Research Assistant in Formulation Development**

✓ Development of Injectable Formulations of an anticancer drug.

#### **EDUCATIONAL CREDENTIALS**

#### Ph. D. in Pharmaceutical Sciences, 2008

Dr. H. S. Gour University Sagar (MP).

Thesis: Development and Characterization of Nanoparticulates carriers for delivery of anticancer drugs.

#### M. Pharm. in Pharmaceutics, 2003

Dr. H. S. Gour University Sagar (MP).

Thesis: "Polypropyleneimine Glycodendrimer for delivery of primaquine phospahate"

#### B. Pharm. 2000

Dr. H. S. Gour University Sagar (MP).

#### Higher Secondary Certificate Examination, 1995

M.P. Board of Secondary Education Bhopal, M.P.

# High School Certificate Examination 1993

M.P. Board of Secondary Education Bhopal, M.P.

## **Computer Proficiency**

Microsoft Office, Windows, and Internet Applications

#### **Associations**

- ✓ Life member of Association of Pharmaceutical Teachers of India (MP/LM-368).
- ✓ Member of Society of Pharmaceutical Education and Research (SPER/LM/MP/022)
- ✓ Member of Society of Ethnopharmacology, Bhopal Chapter

## **Academic Accolades**

- ✓ **Outstanding Professor in Pharmaceutics Award** by APTI MP State Brach in the year 2018.
- ✓ **Best Cited Paper** award by International Journal of Pharmaceutics in the year 2005
- ✓ **UGC-JRF** for P.G. Studies (M. Pharm.)
- ✓ **ICMR-SRF** for Ph.D.
- ✓ Qualified **GATE** conducted by IIT Kanpur.

# **Extra-Curricular Activities**

- ✓ Actively participated, managed, and hosted the various events during Pharmacy Quality Improvement Programmes conducted by All India Council for Technical Education (AICTE), New Delhi, and Deptt. Of Pharmaceuticals Sciences Dr. H.S. Gour University Sagar during the academic Years 2005-06.
- ✓ NCC Certificate "A" In 1993
- ✓ Cricket: University Level

**Languages Known:** Hindi and English **References:** Available on request

#### **ANNEXURE**

#### **Publications**

- (I) List of Research, Review articles (Citations: 1716, h-Index-19, i10 Index-28)
- 1. Swapnali Vasant Birajdar, Farhan Mazahir, **Awesh K. Yadav\*** Transferrin Functionalized Poloxamer-Chitosan Nanoparticles of Metformin: Physicochemical Characterization, In-vitro, and Ex-vivo Studies. **Drug Development and Industrial Pharmacy (Accepted). (Impact Factor: 3.4)**
- 2. Mahazir F., Sharma R. **Yadav A.K.** Bioinspired theranostic quantum dots: paving the road to a new paradigm for cancer diagnosis and therapeutics. **Drug Discovery Today 2023 (In-press). (Impact Factor: 7.4)**
- 3. Birajdar S., Mahazir F., Alam Md. I., Kumar A.K. Yadav A.K. Repurposing and clinical attributes of antidiabetic drugs for the treatment of neurodegenerative disorders. European Journal of Pharmacology 30 October 2023, 176117. (Impact Factor: 5)
- 4. Shah H, Paul G, Yadav AK. Surface-Tailored Nanoplatform for the Diagnosis and Management of Stroke: Current Strategies and Future Outlook. Molecular Neurobiology, (2023) 1-21. (Impact Factor: 5.1)
- 5. Suthar T., Patel, P., Singh P., Datusalia, A.K. Yadav, A. K. Jain K. Hesperidin microemulsion: Formulation optimization, characterization, and in vitro evaluation. Journal of Drug Delivery Science and Technology 2023: 80, 104166 (Impact Factor: 5.1)
- 6. Mazahir F., Sahoo R. K, Gupta U., Yadav A.K. Chondroitin Sulfate Anchored Biodegradable Nanoparticles: Design, Synthesis, and In-vitro anti-Tubercular Efficacy. Material Today Communications 2023: 34, 105364 (Impact Factor: 3.6)
- 7. Jain D. Yadav A.K. Development of Hyaluronic Acid Anchored Polycaprolactone Nanoparticles for Efficient Delivery of PLK1 siRNA to Breast Cancer. Drug Delivery and Translational Research 2023 (Accepted) https://doi.org/10.1007/s13346-022-01288-2 (Impact Factor: 5.67)
- 8. Bhosale A., Paul G.B., Mazahir F., **Yadav A.K.** Theoretical and Applied Concepts of Nanocarriers for the Treatment of Parkinson's Diseases. **Open Nano** 2023, 100111
- 9. Patel P., Kumar K., Jain V. K., Popli, H., **Yadav A. K.,** Jain K. "Nanotheranostic for Diagnosis and Treatment of Breast Cancer". **Current Pharmaceutical Design** 2022 (Accepted)
- 10. Bhosale D., Mazahir F., Yadav A. K. "Recent Synergy of Nanodiamonds: Role in Brain Targeted Drug Delivery for The Management of Neurological Disorders" Molecular Neurobiology 2022; 59(8): 4806 4824 (Impact Factor: 5.59).
- 11. Saini V., Singh A., Shukla R., Jain K., Yadav A.K. Silymarin Encapsulated Xanthan Gum Stabilized Selenium Nanocarriers for Enhanced Activity against Amyloid Fibrils Cytotoxicity. AAPS PharmSciTech 2022; Apr 26;23(5):125 (Impact Factor: 3.2).
- 12. Mazahir F., and Yadav A. K., Recent Trend of Nanoparticulate Carriers for the Diagnosis and Treatment of Alzheimer's disease. CNS & Neurological Disorders Drug Targets (2023); 22(4): 477-499 (Impact Factor: 4.388).
- 13. Prabakaran A, Agrawal Mukta, Dethea MR, Ahmeda H, Yadav A, Gupta U and Alexander A. Nose-to-brain drug delivery for anti-Alzheimer drugs: current challenges and recent advances. Expert Opinion on Drug Delivery, 2022; 1-16. (Impact Factor: 4.8).
- 14. Ujjwal R. R., Yadav A.K.\*, Tripathi S., and Krishna Sai S.T.V., Polymer-Based Nanotherapeutics for Burn Wounds, Current Pharmaceutical Biotechnology, 2021; 10.2174/1389201022666210927103755 (in-press), (Impact Factor: 2.8).
- 15. Tripathi S., Gupta U, Ujjwal R.R., Yadav A. K., Nano-Lipidic Formulation and Therapeutic Strategies for Alzheimer's disease via Intranasal Route, Journal of Microencapsulation, 2021; 38 (7-8): 572-593 (Impact Factor: 3.1)
- 16. Handa M., Tiwari S., **Yadav A. K.,** Almalki W. H., Alghamdi S., Alharbid KS., Shukla R., Beg S, Therapeutic potential of nanoemulsions as feasible wagons for targeting Alzheimer's disease, **Drug Discovery Today**, **2021**; 26(12): 2881-2888 (**Impact Factor**: **7.8**)
- 17. Singh A., Naga Mallika T., Gorain B., Yadav A.K., Tiwari S., Flora S.J.S., Shukla R., Kesharwani P., Quantum dot: Heralding a brighter future in neurodegenerative disorders, Journal of Drug Delivery Science and Technology, 2021; 65: 102700 (Impact Factor: 3.98)
- 18. **Yadav A.K.**, Shukla R., Flora SJS. Nanodiamonds: A Versatile Drug-Delivery System in the Recent Therapeutics Scenario **Critical Reviews™ in Therapeutic Drug Carrier Systems, 2021;** 38(4): 39-78 (**Impact factor**: 4.889)

- 19. Jain K., Shukla R., Yadav A., Ujjwal R.R., Flora SJS. 3D printing in development of nanomedicines Nanomaterials, 2021; 11(2): 420. (Impact factor: 4.034)
- 20. Garg S., Garg A., Sahu N.K., Yadav A. K., Synthesis and Characterization of Nanodiamond-Anticancer Drug Conjugates for Tumor Targeting. **Diamond & Related Materials**, 2019; 94 (Impact factor: 2.65)
- 21. Singh A., Gothwal A., Rani S., Rana M., Sharma A., **Yadav A.**, Gupta U. Dendrimer Donepezil Conjugates for Improved Brain Delivery and Better in vivo Pharmacokinetics **ACS Omega**, 2019; 4(3): 4519–4529. (Impact factor: 3.5)
- 22. Garg S. Garg A, Enaganti S, **Yadav AK.**, Chondroitin sulphate decorated polymeric nanoparticles: an effective carrier for enhancement of lung cancer targeting capabilities of anticancer drug. **Current Nanomedicine**, 2019; 9(3): 243 261.
- 23. Garg A., Garg S., Sahu N.K., Rani S., Gupta U., **Yadav A.K.**, Heparin Appended ADH-Anionic Polysaccharide Nanoparticles for Site-Specific Delivery of Usnic Acid **International Journal of Pharmaceutics, 2019**; 557: 238-253. **(Impact factor; 4.8).**
- 24. Malaiya A., Yadav A.K. Hyaluronic acid anchored nanoparticulate carrier for delivery of methotrexate **Asian Journal of Pharmacy and Pharmacology,** 2018; 4(6): 899-907.
- 25. Pandey P., Sharma A., Rani S., Mishra G., Kandasamy G., Patra A., Rana M., Sharma A., **Yadav A.K.,** Gupta, U. MCM-41 Nanoparticles for Brain Delivery: Better Choline-Esterase and Amyloid Formation Inhibition with Improved Kinetics, **ACS Biomaterials Science & Engineering**, 2018; 4(8):2860-2869 (**Impact factor: 4.4**).
- 26. Garg A., Sahu N.K., **Yadav A.K.,** Usnic acid-loaded bioinspired heparin modified-cellulose acetate phthalate nanoparticle(s) as an efficient carrier for site-specific delivery in lung cancer cells. **International Journal of Pharmaceutical Investigation,** 2018; 8(2):53.
- 27. Yadav V., Jain A.P., Sharma R., Yadav A.K., Nanocarriers(s) based approaches in cancer therapeutics **Current Nanomedicine**, 2020; 10(2): 130 148.
- 28. Kaur I, Sharma A, Yadav A.K., Mishra N., Recent Advances on Biodegradable Polymeric Carrier Based Mucosal Immunization: An Overview Artificial Cells, Nanomedicine and Biotechnology, 2017; 452-464 (Impact factor: 5.67)
- 29. Pawar RS, Sudeesh MS, **Yadav A.K.**, Phyto-phospholipid complex of Eclipta alba extract containing coumestans for the management of hepatotoxicity, **Current Nanomedicine**, 2017; 7(3), 212-222.
- 30. Thakur D, Yadav A.K., Formulation and Evaluation of Herbal Tablets Containing Pterocarpus Marsupium Extract for Effective Management of Diabetes, Asian Journal of Biomaterial Research
- 31. Jain D, Yadav A.K., Development and Characterization of Transdermal Film of Losartan Potassium Asian Journal of Biomaterial Research
- 32. Garg A, Patel V, Sharma R, Pandey V, **Yadav AK.,** Heparin Tailored Biopolymeric Nanocarriers in Site-Specific Delivery: A Systematic Review, **Critical Reviews in Therapeutic Drug Carrier Systems,** 2017; 34(1): 1-33 (Impact factor: 4.8)
- 33. Garg A, Patel V, Sharma R, Jain A, **Yadav AK.,** Heparin Appended Polycaprolactone Core/Corona Nanoparticles for Site Specific Delivery Of 5-Fluorouracil, **Artificial Cells Nanomedicine and Biotechnology,** 2017; 45(6): 1-10 (**Impact factor: 5.67**)
- 34. Soni R, Garg A, Patel V, **Yadav AK.**, Nanoparticles: A regnant approach for Drug delivery and Cancer management, **Asian Journal of Biomaterial Research**
- 35. Gour V, Garg A, Shukla A, **Yadav AK.** Development and Evaluation of Metronidazole Injection by Mixed Solvency Approach. **Asian Journal of Biomaterial Research**
- 36. Jain AP, Lodhi S. **Yadav A.K.** Rai G., Evaluation of Parmotrema reticulatum Taylor for Antibacterial and Antiinflammatory Activities, **Indian Journal of Pharmaceutical Sciences**, 2016, 78(1): 94–102. (**Impact factor:** 0.72)
- 37. Sharma N, Bhandari S, Deshmukh R, **Yadav A.K.,** Mishra N. "Development and Characterization of Embelin Loaded Nanolipid Carriers for Brain Targeting" **Artificial Cells, Nanomedicine and Biotechnology,** 2017; 45(3): 409-413 (Impact factor: 5.67)
- 38. Sen DK, Yadav A.K., Shukla A. An incredible diagnostic tool Quantum Dots: A review Asian Journal of Biomaterial Research, 2015; 1(2): 46-50
- 39. Patel V, Garg A, Yadav A.K., Rai G. Development, and characterization of Tretinoin loaded gelatin microspheres for Transdermal Delivery of Tretinoin. Asian Journal of Biomaterial Research
- 40. Garg A, Rai G, Lodhi SR, Jain AP, **Yadav A.K.,** Hyaluronic Acid Embedded Cellulose Acetate Phthalate Core/Shell Nanoparticulate Carrier of 5-Fluorouracil, **International Journal of Biological Macromolecules,** 2016; 87: 449-59. (**Impact factor: 6.953**)
- 41. Lodhi S, Jain AP, Rai G, **Yadav A.K.**, Preliminary investigation for wound healing and anti-inflammatory effects of Bambusa vulgaris leaves in rats, **Journal of Ayurveda and Integrative Medicine**, 2016; 7(1): 14–22.

- 42. Rai G., Yadav A.K., Jain N.K., and Agrawal G.P., Enteric Coated Epicholrohydrin Crosslinked Dextran Microspheres for Site-Specific Delivery to Colon, **Drug Development and Industrial Pharmacy**, 2015; 41(12): 2018-28 (Impact factor: 2.295).
- 43. Jhariya S., Rai G., **Yadav A.K.,** Jain A.P., Lodhi S., Protective Effects of Tridax procumbens Linn. Leaves on Experimentally Induced Gastric Ulcers in Rats, **Journal of Herbs, Spices & Medicinal Plants,** 2015; 21(3), 308-320
- 44. Garg A., Rai G., Lodhi S.R., Jain A.P., **Yadav A.K.**, In-vitro and In-vivo Assessment of Dextran-Appended Cellulose Acetate Phthalate Nanoparticles for Transdermal Delivery of 5-Fluorouracil, **Drug Delivery**, 2016;23(5):1525-35 (Impact factor: 6.419).
- 45. Rai G., Yadav A.K., Jain N.K. and Agrawal G.P., Eudragit Coated Dextran Microspheres of 5-Fluorouracil for Site-Specific Delivery to Colon Drug Delivery, Drug Delivery, 2016; 23(1):328-37 (Impact factor: 6.419).
- 46. **Yadav A.K.,** Agarwal A., Jain S., Mishra A.K., Bid H., Rai G., Agrawal H., Agrawal G.P., Chondroitin Sulphate Decorated Nanoparticulate Carriers of 5-Fluorouracil: Development and In-Vitro Characterization, **Journal of Biomedical Nanotechnology**, 2006; 58(9): 1177-81 (Impact factor: 4.521)
- 47. **Yadav A.K.**, Agarwal A., Rai G., Mishra P., Jain S., Mishra A.K., Agrawal H., Agrawal G.P., Development and characterization of hyaluronic acid decorated PLGA nanoparticles for delivery of 5-fluorouracil, **Drug Delivery**, 2010; 17(8): 561-72 (**Impact factor: 6.419**)
- 48. **Yadav A.K.,** Mishra P., Agrawal G.P., An insight of hyaluronic acid in drug delivery and drug targeting **Journal of Drug Targeting**, 2008; 16(2): 91-107. (**Impact factor: 5.121**)
- 49. **Yadav A.K.,** Mishra P., Jain S., Mishra P., Mishra A.K., Agrawal G.P. Preparation and characterization of HA-PEG-PCL intelligent core-corona nanoparticles for delivery of doxorubicin, **Journal of Drug Targeting**, 2008; 16(6): 464-478. (Impact factor: 3.408)
- 50. Yadav A.K., Mishra P., Mishra P., Jain S., Agrawal G.P., Development and Characterization of Hyaluronic acid anchored PLGA nanoparticulate carrier of Doxorubicin, Nanomedicine: Nanotechnology, Biology and Medicine, 2007; 3(4): 246-257. (Impact factor: 6.458).
- 51. Paharia A., **Yadav A.K.**, Rai G., Jain S.K., Pancholi S.S., Agrawal G.P., Eudragit Coated Pectin Microspheres of 5-Fluorouracil for Colon Targeting, **AAPS PharmaSciTech**, 2007; 8(1): 12. (Impact factor: 2.451)
- 52. Gogna D., Jain S.K., **Yadav A.K.**, Agrawal G.P. Microsphere Based Improved Sunscreen Formulation of Ethylhexyl Methoxycinnate, **Current Drug Delivery**, 2007; 4(2): 153-159. (**Impact factor: 2.565**)
- 53. Jain A.K., Jain S.K., Yadav A.K., Agrawal G.P. Controlled Release Calcium Silicate based Floating Granular Delivery System of Ranitidine Hydrochloride, Current Drug Delivery, 2006; 3(4): 367-372. (Impact factor: 2.565)
- 54. Patel M, Jain SK, Yadav AK, Agrawal GP, Preparation and characterization of oxybenzone loaded gelatin microspheres for Enhancement of Sunscreening Efficacy, **Drug Delivery**, 2006; 13(5): 323-330 (Impact factor: 6.419)
- 55. Bhadra D., Yadav A.K., Bhadra S., Jain N.K., Glycodendrimeric nanoparticulate carriers of primaquine phosphate for liver targeting, International Journal of Pharmaceutics, 2005; 295(1-2):221-233 (Impact factor: 4.8)
- 56. Saraogi S.K., Agrawal P., **Yadav A.K.** Bhadra D. Jain N.K. Glycodendrimers based Novel Targeted Drug Delivery Systems, **The Pharma Review** 2004, 37-53.

### (II) Patent: Three Indian Patent

## (III) Books

- 1. Book entitled "Multifunctional Nanocomposites for Targeted Drug Delivery in Cancer Therapy" with Elsevier publication.
- 2. Book entitled "Nanomedical Drug Delivery for Neurodegenerative Disease" with Elsevier publication.
- 3. Published book entitled "Nano Drug Delivery Strategies for the Treatment of Cancer" with Elsevier Publication.
- 4. Published book entitled "MODULATED ORAL & NANO DRUG DELIVERY SYSTEMS" with Nirali Prakashan Pune.
- 5. Published book entitled "A Text of Pharmacology II" with Everest Publication House Pune.
- 6. Published book entitled "Practical Manual for M. Pharm. Students" with Nirali Prakashan Pune.
- 7. Book entitled "Pharmaceutical Product Development" Springer Nature Publication (On Going)
- 8. Book entitled "Recent Advances in Novel Carrier Systems for Targeted and Controlled Drug Delivery Springer" Nature Publication (On Going)

9. Book entitled "Emerging paradigms in delivery of therapeutic agents for the treatment of Glioblastoma" with Elsevier publication (On Going).

#### (IV) Book Chapters

## (Published)

- 1. Jain S., Yadav V., Jain A.K., Yadav\* A.K. "Nutraceuticals A Revolutionary Approach for Nano Drug Delivery" in, NanoBioMedicine Series USA, CRC Press, Editor by Prof. Bhupinder Singh Bhoop.1st edition (2018) 1-22.
- 2. Malaiya A., Jain D., **Yadav\* A.K.,** book chapter entitled "Nanoparticles and pancreas cancer" In Book entitled "Nano Drug Delivery Strategies for the Treatment of Cancers" **Elsevier publication**, edited by Dr. Awesh K. Yadav, Dr. Umesh Gupta and Dr. Rajeev Sharma 1<sup>st</sup> edition (2020) 145-164.
- 3. Gupta S., and Yadav\* A.K. in Book entitled "Polysaccharide Nanoparticles: Preparation and Biomedical Applications" Chapter 6: Chondroitin sulfate-based Nanoparticles: Preparation and Applications edited by Prof. Se-Kwon Kim, Prof. Sukumaran Anil, Dr. J Venkatesan, Prof. Rekha P.D, Elsevier publication, 1st edition, Jan. (2022), 65-90.
- 4. Shilpi S., Jain A., Dixit S., Saraogi G., **Yadav A.K.**, Jain S.K. Chapter entitled "Lipid nanocarrier-based drug delivery for the treatment of brain-related disorders" in Book entitled "Nanomedical Drug Delivery for Neurodegenerative Diseases" edited By Yadav AK, Shukla R, Flora SJS, 1<sup>st</sup> edition, (2022) 55-65 in **Elsevier Publication**.
- 5. Mazahir F., Tripathi S., & **Yadav**, **AK\***. (2022). Hyaluronic receptors for the development of breast cancer nanomedicine. Book entitled "Targeted Nanomedicine for Breast Cancer Therapy". Edited by Dr. Shivani Paliwal and Rishi Paliwal **Elsevier Publication**. 1<sup>st</sup>:171-191.
- 6. Mazahir F, Birajdar S, Bhogale D, Bhosale A, and **Yadav AK**. 3D (2022) Nanoprinting in the Biomedical/Health Care Applications in Book entitled Smart 3D Nanoprinting: Fundamentals, Materials, and Applications by Ajit Behera, Tuan Anh Nguyen and Ram K. Gupta In **CRC Press** (2022) 73-86.
- 7. Birajdar S.V., Mulchandani M., Mazahir F., **Yadav AK.**\* Dementia and Neurodegenerative Disorder: An Introduction Book Entitled "Nanomedicine Based Approaches for Treatment of Dementia" Edited by Dr. Umesh Gupta and Dr. Prashant Kesharwani **Elsevier Publication** (2023) 1-36.
- 8. Mulchandani M., Palai A. K., Bhosale A., Mazahir F. and **Yadav AK.** Chapter-4 entitled Targeting the Viral Entry Pathways through Repurposed Drugs in Sars-Cov-2 Infection in Book entitled "Drug Repurposing against SARS-CoV2" Edited By Dr. Tabish Qidawai Bentham Publication, 2022, 71-98 **Bentham Science Publishers.**
- Mazahir F., Pathak, A., Gupta, U., & Yadav, AK\*. (2021). Nanotechnology for cancer treatment: An Introduction. In Dr. N. Mishra, Dr. N. Upmanyu, & Dr. A. Garg (Eds.), Therapeutic Nanocarriers in Cancer Treatment: Challenges and Future Perspective. Bentham Science Publishers Ltd 1<sup>st</sup> edition, (2023) 31-54.
- 10. Mazahir F, Bhogale D, Palai AK, **Yadav AK.\*** Nanomedicine: Principle, Properties, and Regulatory Issues Book Entitled "Smart Polymeric Nano-Constructs in Drug Delivery: Concept, Design and Therapeutic Applications" Edited Prof S.P. Vyas and Rajeev Sharma (editor) in **Elsevier Publication** (2022) 1 st edition, 523-565.
- 11. Jain SK, Rajpoot K, Kesavan K, **Yadav AK**, Gupta U, Gupta PN. Book Chapter Targeting of Nanocarriers for Efficient Treatment of H. Pylori Infection in BOOK ENTITLED Nanoparticle and Nanocarrier Based Pharmaceutical Formulations edited by Jain AK and Mishra K. **in Bentham Publication**, (2022), 1st edition, 158-175.
- 12. Kumar J, Verma S, Mazahir F **Yadav AK.** Book chapter entitled "Synbiotics for management of Cancer In edited by Dr. Neeraj Mishra, Dr. Keshav Raj Paudal, Philip M. Hansbro and Dr. Kamal Dua, Springer-Nature 1st edition: 269-287.
- 13. Handa M, Saini V, Tripathi S, **Yadav AK.** & Shukla R. Chapter entitled "Hybrid Nanomaterials as Novel Therapeutic and Imaging Modalities" in book entitled Nanomaterial-Based Drug Delivery Systems (2023) 1<sup>st</sup> Edition: pp 147–173.
- 14. Paul G, Gupta U, Shah H, Mazahir F, **Yadav\* AK.** Inorganic and Metal-Based Nanoparticles Book Entitled "Molecular Pharmaceutics and Nano Drug Delivery Fundamentals and Challenges

Edited by Dr. Umesh Gupta and Dr. Amit K. Goyal (In-press) in Elsevier Publication 2024, Pages 203-235.

#### **In-Press**

- 15. Hinal Shah, Jitendra Kumar, Gajanan Paul, **A.K. Yadav\*** (2022) Drug delivery strategies in Traumatic Brain Injury book entitled "Drug delivery strategies in neurological disorders: Challenges and Opportunities," edited Awanish Mishra and Hitesh Gulhari in **Springer Nature** (In-Press).
- 16. Ujjwal Gupta, Ajay Suryawanshi, Farhan Mazahir, Awesh Kumar Yadav\* Use of Nano formulations in the treatment of Neurodegenerative disorders Selective Treatment Strategies for Neurodegenerative Disorders using Nanomedicine, (Neurodisorder-AAP 2022)" Apple Academic Press, Taylor and Francis edited by Dr. Rishabha Malviya, Dr. Kamla Pathak and Dr. Swati Verma.
- 17. Mahesh Gaikwad, Shilpa Verma, Gajanan Paul, **Awesh Kumar Yadav** Overview of Blood-Brain Barrier (BBB) Transport Mechanisms Use of Nano formulations in the treatment of Neurodegenerative disorders Selective Treatment Strategies for Neurodegenerative Disorders using Nanomedicine, (Neurodisorder-AAP 2022)" **Apple Academic Press, Taylor and Francis** edited by Dr. Rishabha Malviya, Dr. Kamla Pathak, and Dr. Swati Verma.
- 18. Amit Kumar and **Awesh Kumar Yadav** Alzheimer's Disease and Drug Targets book entitled "Natural product-based synthetic drug molecules in Alzheimer's Disease Therapeutic & Theranostic agents" Edited by Dr. Abha Sharma, and Dr. Gyan Prakash Modi, book **springer publication** (2023) (In-press).
- 19. Sachin Logde, Paul Gajanan Balaji, Amit Kumar, **Awesh Kumar Yadav** "Inflammatory Bowel Disease and Gut-microbiota: Current Strategies and Future Prospects of Nanomedicine" **Apple Academic Press, CRC Press, Taylor & Francis Group, Inc., USA**
- 20. Kumar A, **Yadav AK.** Chapter entitled Biodegradable Elastomer: Synthesis, Properties, Applications In book entitled ELASTOMERS IN ENGINEERING APPLICATIONS to be published by **springer publication** (2023) (In-press).
- 21. Kashid Saurabh Machhindra#, Mane Ramdas Pandurang#, Amit Kumar, **Awesh K. Yadav\*** "Autophagy-targeted Nanoparticles for the Treatment of Cancer" in Book Entitled "Role of Autophagy and Reactive Oxygen Species in Cancer Treatment: Principles and Current Strategies", edited by Mishra N. and Kaundal **Springer publication** (2023) (In-press).
- 22. Farhan Mazahir and **Awesh K. Yadav** Book Chapter entitled "Novel targets and drugs for the treatment of Tuberculosis" in book entitled "Emerging Paradigms IN Delivery Systems for Antitubercular Therapy" in Elsevier Publication (2023).
- 23. Ramdas mane Saurabh Kashid, Farhan Mazahir, **Awesh K. Yadav\*** Microbiota gut-brain axis and CNS disorders in book entitled Future prospective of microbiome gut-brain axis for treatment of CNS disorders Elesevier Publication (2023).
- 24. Nagphase NJ, Md Imtiyaz Alam, **Awesh K. Yadav\*** Chapter entitled Safety, Stability Concerns and Regulatory Aspects of Nanocarriers for Brain Delivery in book entitled Application of Nanocarriers in Brain Delivery of Therapeutics Springer Publication (2023)
- 25. Amit Kumar, **Awesh K. Yadav\*** Biodegradable elastomer: synthesis, properties and applications. In Book entitled Elastomer in engineering application in springer publication.
- 26. Prakash Kumar Sirvi, Vishal Jadhav, Gajanan Balaji, **Awesh K. Yadav\*** chapter entitled "Therapeutic hallmark of cancer and immunology book entitled Nanotechnology-based Strategies for cancer immunotherapy: Concepts, Design, and Therapeutic Applications Springer-Nature edited by Dr. Neeraj Mishra, Dr. Rajeev Sharma, Dr. Vikas Panday. (In-press)
- 27. Londhe Sachin Bhimrao, Paul Gajanan Balaji, Amit Kumar, Rupshee Jain, **Awesh K. Yadav\*** "Inflammatory Bowel Disease and Gut-microbiota: Current strategies and Future prospects of Nanomedicine" in book entitled "Future prospects and patents of nanomedicines to treat Inflammatory Bowel Disease" 2023 (In-press).
- 28. Rohit Garg, Farhan Mazahir, **Awesh K. Yadav\*** Polymeric Materials in Controlled Drug Delivery in Book entitled "Novel Carrier System for Targeted and Controlled Drug Delivery" to published in Springer Nature edited by Dr. Awesh K. Yadav and Dr. Keerti Jain (In-Press).

- 29. Nagphase Nakshatra Jitendra, Rohit Garg, Md Imtiyaz Alam, **Awesh K. Yadav\*** Advances in tablet production and tablet coating. In Book entitled "Advances in Pharmaceutical Product Development" Dr. Awesh K. Yadav and Dr. Keerti Jain (In-Press).
- 30. Md Imtiyaz Alam, **Awesh K. Yadav\*** Parenteral Drug Delivery in Book entitled "Novel Carrier System for Targeted and Controlled Drug Delivery" to published in Springer Nature edited by Dr. Awesh K. Yadav and Dr. Keerti Jain (In-Press).
- 31. Amit Kumar, **Awesh K. Yadav\*** Transdermal/skin drug delivery Book entitled "Novel Carrier System for Targeted and Controlled Drug Delivery" to published in Springer Nature edited by Dr. Awesh K. Yadav and Dr. Keerti Jain (In-Press).
- 32. Farhan Mazahir, Prakash Kumar Sirvi, Londhe Sachin Bhimrao, Ramdas Mane, **Awesh K. Yadav\*** Novel Targets and Drugs for the Treatment of Tuberculosis in Book entitled "Emerging Paradigms in Delivery Systems for Antitubercular Therapy (In-Press).
- 33. Amit Kumar, Londhe Sachin Bhimrao, **Awesh K. Yadav\*** Polymer for oral drug delivery technologies in Book entitled Polymers in orally disintegrating tablets and orally dissolving films"

# (V) E-CONTENT DEVELOPMENT for Educational Multimedia Research Center (EMRC), Dr. Hari Singh Gour University, Sagar (UGC Programme)

- 1. Full academic script on Anticoagulants, haemostatic agents, and oxytocic agents.
- 2. Full academic script on Oral Hypoglycemic Drugs.
- 3. Full academic script on Thyroid hormones and antithyroid drugs

#### (VI) Conferences/Seminars Attended

- 1. Delivery a lecture on the topic entitled "Nanodiamonds: An Emerging Drug Delivery System for the Treatment of Cancer and Neurogenerative Disorders" at ISF College of Pharmacy Moga Panjob on 2<sup>nd</sup> June 2023.
- 2. Delivery a lecture on the topic entitled "Nanodiamonds is a Versatile Targeted Drug Delivery system" at Dr. Rammanohar Lohiya Awad University, Ayodhya on 4<sup>th</sup> Feb 2022
- 3. Invited as **Resource Person** in National Seminar "Emerging Frontiers and Challenges in Nanotechnology and Drug Design" during 1 March 2015 at Department of Pharmaceutical Sciences, Dr Hari Singh Gour University Sagar.
- 4. **Poster presentation** in International Conference on "Advances in Pharmaceutical Nanotechnology and Nanomedicine' to be held during 6-8 February 2015 at I.S.F. College of Pharmacy, Moga, Punjab (India).
- 5. Invited as **Resource Person** in National Seminar 2015" at Laxmi Narain College of Technology, Bhopal during 14 March 2015.
- 6. Invited as **Resource Person** ICMR, DBT, DAE & MPCST Sponsored One Day National Symposia ON "National Symposia on vector based siRNA Delivery: An Emerging Tool in Nanobiotechnology Research on 28th February 2015 at ADINA Institute of Pharmaceutical Sciences, Sagar (M.P.).
- 7. Invited as **Resource Person** in DST and MPCST sponsored International Seminar "Adicon 2014" at Adina Institute of Pharmaceutical Science, Sagar on "Progress and Advances in Human Health Management and Healthcare Reforms" during 11-12 October 2014.
- 8. Deliver **oral presentation** in DST, ICMR and UPCOST sponsored 2nd **International Symposium on Dendrimer in Nano Drug Delivery-ISDNDD-2014** at Central Drug Research Laboratory (CDRI), Lucknow on "Evalution of Chondrotin Sulphate Anchored Nanoparticulate Carrier of Chloroquine Phosphate" during 14th June 2014 to 15th June. 2014.
- 9. Invited as **resource person** and deliver oral presentation in AICTE sponsored Faculty Development Programme at Laxmi Narain College of Technology, Bhopal on "Current Scenario of Nanoparticulate Drug Delivery Carriers in Pharm. Industry" during 04th Dec 2013 to 17th Dec. 2013.
- 10. Invited as **resource person** and deliver oral presentation in AICTE sponsored Faculty Development Programme at Vedica College of B. Pharmacy, Bhopal on "Current Scenario of Nanoparticulate Drug Delivery Carriers in Pharm. Industry" during 11th Nov 2013 to 24th Nov 2013.
- 11. Invited as **resource person** and deliver oral presentation in APP sponsored Faculty Development Programme at Global College of Pharmacy, Bhopal on "Current Scenario of Nanoparticulate Drug Delivery Carriers in Pharm. Industry" during 25th Nov 2012 to 8th Dec 2012.

- 12. Received certificate of appreciation by Ipca Lab Mumbai by presenting improvement project on Propranolol ER Pellets.
- 13. **AK Yadav** P. Mishra Agrawal GP "Development and Characterization of chondroitin sulphate anchored PLGA nanoparticulate carrier of Doxorubicin" Abstract published in 16th International Symposium on Microencapsulation Lexington, Kentucsky, USA.
- 14. **AK Yadav,** NK Jain, GP Agrawal "Polypropylene imine glycodendrimer for delivery of primaquine phosphate" National Science Day on 28 February 2005 organized Dr. Hari Singh Gour Vishwavidyalaya, Sagar (MP).
- 15. Organized National Seminar On "Nanobiotechnology: An Emerging Future Technology for Nanomedicine" as **Organizing Secretary** during 13th to 14 April 2013 at Guru Ramdas Khalsa Institute of Science and Technology (Pharmacy) Jabalpur.
- 16. Attended DST sponsored Faculty Development Programme on "Enterpreneourship" at Kalaniketan Polytechnique Collage, Jabalpur during 5 Feb to 15 Feb 2013.
- 17. **AK Yadav,** 54th IPC on 13-15 Dec 2002 at Pune.
- 18. AK Yadav, MP PHARMA MEET- 2007 on 24th March 2007 at Indore.
- 19. AK Yadav, First HR Submit-2012 on 13-14th Oct 2012 at Nagpur.
- 20. Member of organizing committee of One day workshop on "Campus to Company" on 22 Oct 2012 at Guru Ramdas Khalsa Institute of Science and Technology- Jabalpur.