

**Sanjay Tiwari, Ph.D.**  
Associate Professor of Pharmaceutics  
NIPER-Raebareli  
Bijnor-Sisendi Road, Sarojini Nagar,  
Near CRPF Base Camp, Lucknow (UP)- 226002  
**E-mail: tiwarisanju@gmail.com, sanjay1.tiwari@niperraebareli.edu.in**  
Phone # +91-7567503983 (Cell)

---

**EDUCATION:**

Postdoctoral Research	Institute of Drug Research, The Hebrew University of Jerusalem, Israel	2015 - 2017 2008 - 2011
Ph.D.	Indian Institute of Technology (Banaras Hindu University), INDIA	
M. Pharm.	Indian Institute of Technology (Banaras Hindu University), INDIA	2005 - 2007
B. Pharm.	U.P. Technical University, INDIA	2001 - 2005

**Grants and extramural projects**

1. Research Grant of Rupees 14.4 Lakh from UGC-DAE CSR, Mumbai
2. Research Grant of Rupees 31.8 Lacs from DST-SERB under Early Career Research Scheme
3. Grant of Rupees 200 Lakh by Govt. of Gujarat under Student Startup and Innovation Policy (SSIP)
4. Research Grant of Rupees 7.8 Lacs from GUJCOST, Gandhinagar
5. Seminar Grant of Rupees 1.3 Lacs from GUJCOST, Gandhinagar

**Academic Credentials, Awards and Honors:**

1. Postdoctoral Fellowship of Hebrew University of Jerusalem, Israel
2. Gandhian Young Technological Innovation Award - 2014 (Technological-Edge Category)
3. '2011 IT-BHU Publication Award' by Global IT-BHU Alumni Association
4. Best Poster Award in a DST-sponsored National Seminar held at Sikkim (India)
5. Research Fellowship of UGC, ICMR and CSIR during Ph.D. research
6. Fellowship of University Grants Commission during M. Pharm.
7. Passed M. Pharm. with honors
8. Qualified GATE 2005 in Pharmaceutical Sciences with a percentile of 99.56 (AIR – 49)

**Research/ Review Articles in Refereed Journals**

1. Sarolia J, Shukla R, Ray D, Aswal VK, Choudhury SD, Bahadur P, **Tiwari S**. Mobility of doxorubicin in TPGS micelles in response to sodium taurodeoxycholate incorporation: Analyses based on scattering and fluorescence studies. *Colloids and Surfaces A* 622 (2021) 126693.
2. Handa M, **Tiwari S**, Yadav AK, Almalki WH, Alghamdi S, Alharbi KS, Shukla R, Beg S. Therapeutic potential of nanoemulsions as feasible wagons for targeting Alzheimer's disease. *Drug Discovery Today*. 2021 (Accepted). [10.1016/j.drudis.2021.07.020](https://doi.org/10.1016/j.drudis.2021.07.020)
3. Rathod S, Arya S, Shukla R, Ray D, Aswal VK, Bahadur P, **Tiwari S**. Investigations on the role of edge activator upon structural transitions in Span vesicles. *Colloids and Surfaces A* 627 (2021) 127246.
4. **Tiwari S**, Ma J, Rathod S, Bahadur P. Solubilization of quercetin in P123 micelles: Scattering and NMR studies. *Colloids and Surfaces A* 621 (2021) 126555.
5. Singh A, Mallika TN, Gorain B, Yadav AK, **Tiwari S**, Flora SJS, Shukla R, Kesharwani P.

- Quantum dot: Heralding a brighter future in neurodegenerative disorders. *Journal of Drug Delivery Science and Technology*. 65 (2021) 102700.
6. Kumar AVP, Dubey SK, **Tiwari S**, Puri A, Hejmady S, Gorain B, Kesharwani P. Recent advances in nanoparticles mediated photothermal therapy induced tumor regression. *International Journal of Pharmaceutics* 606 (2021) 120848.
  7. Patil R, Ray D, Aswal VK, Bussy C, Bahadur P, **Tiwari S**. Adsorption of P103 nanoaggregates on graphene oxide nanosheets: Role of electrostatic forces in improving nanosheet dispersion. *Langmuir*. 37 (2021) 867-873.
  8. Gandhi SM, Khan AK, Rathod S, Jain R, Dubey SK, Ray D, Aswal VK, Joshi A, Bahadur P, **Tiwari S**. Water driven transformation of a nonionic microemulsion into liquid crystalline phase: Structural characterizations and drug release behavior. *Journal of Molecular Liquids*. 326 (2021) 115239. (ISSN - 0167-7322; Impact factor – 5.0)
  9. Rathod S, Joshi A, Ray D, Aswal VK, Verma G, Bahadur P, **Tiwari S**. Changes in aggregation properties of TPGS micelles in the presence of sodium cholate. *Colloids and Surface A*. 2021, 610, 125938.
  10. Patil R, Patel H, Pillai SB, Jha PK, Bahadur P, **Tiwari S**. Influence of surface oxygen clusters upon molecular stacking of paclitaxel over graphene oxide sheets. *Materials Science and Engineering: C*. (2020) 111232.
  11. Rathod S, Bahadur P, **Tiwari S**. Nanocarriers based on vitamin E-TPGS: Design principle and molecular insights into improving the efficacy of anticancer drugs. *International Journal of Pharmaceutics*. (2020) 120045.
  12. Patel D, Rathod S, **Tiwari S**, Kuperkar K, Ray D, Aswal VK, Bahadur P. Self-Association in EO–BO–EO Triblock Copolymers as a nanocarrier template for sustainable release of anticancer drugs. *Journal of Physical Chemistry B*. 124, (2020) 11750–11761.
  13. **Tiwari S**, Sarolia J, Kansara V, Chudasama NA, Prasad K, Ray D, Aswal VK, Bahadur P. Synthesis, Colloidal Characterization and Targetability of Phenylboronic Acid Functionalized  $\alpha$ -Tocopheryl Polyethylene Glycol Succinate in Cancer Cells. *Polymers*. 12 (2020) 2258.
  14. Hejmady S, Pradhan R, Alexander A, Agrawal M, Singhvi G, Gorain B, **Tiwari S**, Kesharwani P, Dubey SK. Recent advances in targeted nanomedicine as promising antitumor therapeutics. *Drug Discovery Today*, 25 (2020) 2227-2244.
  15. **Tiwari S**, Kansara V, Bahadur P. Targeting Anticancer Drugs with Pluronic Aggregates: Recent Updates. *International Journal of Pharmaceutics*. (2020) 119544.
  16. Patil R, Marathe D, Roy SP, Husain GM, Bahadur P, **Tiwari S**. Biosafety assessment of P103 stabilized graphene oxide nanosheets. *Materials Today Communications*. (2020) 101319.
  17. Dubey SK, Salunkhe S, Agrawal M, Kali M, Singhvi G, **Tiwari S**, Saraf S, Saraf S, Alexander A. Understanding the Pharmaceutical Aspects of Dendrimers for the Delivery of Anticancer Drugs. *Current Drug Targets*. 21 (2020) 528-40.
  18. **Tiwari S**, Patil R, Dubey SK, Bahadur P. Graphene nanosheets as reinforcement and cell-instructive material in soft tissue scaffolds. *Advances in Colloid and Interface Science*. 281 (2020) 102167.
  19. Patil R, Marathe D, Roy SP, Ray D, Aswal VK, Jha PK, Bahadur P, **Tiwari S**. Colloidal stability of graphene oxide nanosheets in association with triblock copolymers: A neutron scattering analysis. *Materials Science & Engineering C*. 109 (2020) 110559.
  20. Patel A, **Tiwari S**, Jha PK. Molecular interaction between bi-antennary phenylboronic acid and sialic acid using density functional theory and multi-time scale trajectories. *Journal of Biomolecular Structure & Dynamics*. 38 (2020) 1242-47.

21. Golwala P, Rathod S, Patil R, Joshi A, Ray D, Aswal VK, Bahadur P, **Tiwari S**. Effect of cosurfactant addition on phase behavior and microstructure of a water dilutable microemulsion. *Colloids and Surface B: Biointerfaces*. 186 (2020) 110736.
22. Patil R, Bahadur P, Tiwari S. Dispersed graphene materials of biomedical interest and their toxicological consequences. *Advances in Colloid and Interface Science*. 275 (2020) 102051.
23. Patil R, Kansara V, Ray D, Aswal VK, Jha PK, Bahadur P, Tiwari S. Slow degrading hyaluronic acid hydrogel reinforced with cationized graphene nanosheets. *International Journal of Biological Macromolecules*. 141 (2019) 232–239.
24. Vyas B, Pillai SA, **Tiwari S**, Bahadur P. Effects of head group and counter-ion variation in cationic surfactants on the microstructures of EO-PO block copolymer micelles. *Colloid and Interface Science Communications*. 33 (2019) 100216.
25. Pathan H, Patil R, Ray D, Aswal VK, Bahadur P, **Tiwari S**. Structural changes in non-ionic surfactant micelles induced by ionic liquids and application thereof for improved solubilization of quercetin. *Journal of Molecular Liquids*. 290 (2019) 111235.
26. Jain S, Pandey S, Sola P, Pathan H, Patil R, Ray D, Aswal VK, Bahadur P, **Tiwari S**. Solubilization of carbamazepine in TPGS micelles: effect of temperature and electrolyte addition. *AAPS PharmSciTech*. 20 (2019) 203.
27. **Tiwari S**, Patil R, Dubey SK, Bahadur P. Derivatization approaches and applications of pullulan. *Advances in Colloid and Interface Science*. 269 (2019) 296-308.
28. Patel A, **Tiwari S**, Jha PK. Theoretical investigations and density functional theory-based probe of the affinity interaction of saccharide ligands with extra-cellular sialic acid residues. *Journal of Biomolecular Structure & Dynamics*. 37 (2019) 1545-54.
29. Rathod V, Tripathi R, Joshi P, Jha PK, Bahadur P, **Tiwari S**. Paclitaxel encapsulation into dual-functionalized multi-walled carbon nanotubes. *AAPS PharmSciTech*. 20 (2019) 51.
30. **Tiwari S**, Patil R, Bahadur P. Polysaccharide based scaffolds for soft tissue engineering applications. *Polymers*. 11 (2019) 1.
31. **Tiwari S**, Bahadur P. Modified hyaluronic acid-based materials for biomedical applications. *International Journal of Biological Macromolecules*. 121 (2019) 556-571.
32. Kansara V, Patil R, Tripathi R, Jha PK, Bahadur P, **Tiwari S**. Functionalized graphene nanosheets with improved dispersion stability and superior paclitaxel loading capacity. *Colloids and Surfaces B: Biointerfaces*. 173 (2019) 421-8.
33. Sheth U, **Tiwari S**, Bahadur A. Preparation and characterization of anti-tubercular drugs encapsulated in polymer micelles. *Journal of Drug Delivery Science and Technology*. 48 (2018) 422-8.
34. Patidar P, Bahadur A, Prasad K, **Tiwari S**, Aswal VK, Bahadur P. Synthesis, self-assembly and micellization characteristics of choline alkanoate ionic liquids in association with a star block copolymer. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*. 555 (2018) 691-8.
35. Rathod S, Tripathi R, Verma G, Aswal VK, Bahadur P, **Tiwari S**. Bioadhesive polymeric film-based integrative platform for the unidirectional carbamazepine release from a volatile microemulsion. *Colloids and Surfaces B: Biointerfaces*. 170 (2018) 683-91.
36. **Tiwari S**. Mannosylated constructs as a platform for cell-specific delivery of bioactive agents. *Critical Reviews™ in Therapeutic Drug Carrier Systems*. 35 (2018) 157-194.
37. **Tiwari S**, Tirosh B, Rubinstein A. Increasing the affinity of cationized polyacrylamide-paclitaxel nanoparticles towards colon cancer cells by a surface recognition peptide. *International Journal of Pharmaceutics*. 531(2017) 281-91.
38. Patel H, Patel K, **Tiwari S**, Pandey S, Shah S, Gohel M. Quality by Design (QbD) Approach

for Development of Co-Processed Excipient Pellets (MOMLETS) By Extrusion-Spheronization Technique. Recent patents on drug delivery & formulation. 10 (2016) 192-206.

39. Patel H, Patel H, Gohel M, **Tiwari S**. Dissolution rate improvement of telmisartan through modified MCC pellets using  $3^2$  full factorial design. Saudi Pharmaceutical Journal. 24 (2016) 579-87.
40. Navadiya K, **Tiwari S**. Pharmacology, efficacy and safety of felodipine with a focus on hypertension and angina pectoris. Current Drug Safety 10 (2015) 194.
41. Patel SK, Shah DR, **Tiwari S**. Bioadhesive films containing fluconazole for mucocutaneous candidiasis. Indian Journal of Pharmaceutical Sciences. 77 (2015) 55.
42. **Tiwari S**, Mistry P, Patel V. SLNs based on co-processed lipids for topical delivery of terbinafine hydrochloride. Journal of Pharmaceutics & Drug Development. 2 (2014) 1-8.
43. **Tiwari S**, Chaturvedi AP, Tripathi YB, Mishra B. Microspheres based on mannosylated lysine-co-sodium alginate for macrophage-specific delivery of isoniazid. Carbohydrate Polymers. 87 (2012) 1575-82.
44. **Tiwari S**, Chaturvedi AP, Tripathi YB, Mishra B. Macrophage-specific targeting of isoniazid through mannosylated gelatin microspheres. AAPS PharmSciTech. 12 (2011) 900.
45. Jha RK, **Tiwari S**, Mishra B. Bioadhesive microspheres for bioavailability enhancement of raloxifene hydrochloride: formulation and pharmacokinetic evaluation. AAPS PharmSciTech. 12 (2011) 650-7.
46. **Tiwari S**, Mishra B. Multilayered membrane-controlled microcapsules for controlled delivery of isoniazid. DARU Journal of Pharmaceutical Sciences, 19 (2011) 41.
47. Mishra BB, Patel BB, **Tiwari S**. Colloidal nanocarriers: a review on formulation technology, types and applications toward targeted drug delivery. Nanomedicine: Nanotechnology, Biology and Medicine. 6 (2010) 9-24.
48. Mishra B, Arya N, **Tiwari S**. Investigation of formulation variables affecting the properties of lamotrigine nanosuspension using fractional factorial design. DARU Journal of Pharmaceutical Sciences. 18 (2010) 1.
49. **Tiwari S**, Singh S, Rawat M, Tilak R, Mishra B.  $L_9$  orthogonal design assisted formulation and evaluation of chitosanbased buccoadhesive films of miconazole nitrate. Current Drug Delivery. 6 (2009) 305-16.
50. Singh S, Jain S, Muthu MS, **Tiwari S**, Tilak R. Preparation and evaluation of buccal bioadhesive films containing clotrimazole. AAPS PharmSciTech. 9 (2008) 660-7.

#### **MEMBERSHIPS: Scientific Societies**

- Academic Member, Athens Institute for Education and Research, Greece
- Life time member, Association of Pharmaceutical Teachers in India (APTI)