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7.1. Publications from the research work

1. **Priya, V.,** Vikas, Mehata, A.K., Jain, D., Singh, S.K. and Muthu, M.S., (2022). Efficient delivery of abciximab using mesoporous silica nanoparticles: in-vitro assessment for targeted and improved antithrombotic activity. Colloids and Surfaces B: Biointerfaces 218, 112697. **(Impact factor: 5.999)**
2. **Priya, V.,** Singh, S.K., Revand, R., Kumar, S., Mehata, A.K., Sushmitha, P., Mahto, S.K. and Muthu, M.S., (2022). GPIIb/IIIa Receptor targeted rutin loaded liposomes for site-specific antithrombotic effect. Molecular Pharmaceutics (ACS) 20(1), 663-679. **(Impact factor: 5.364)**

7.2. Other Publications

1. Suseela, M. N. L., Viswanadh, M. K., Mehata, A. K., **Priya, V**., Setia, V. A., Malik, A. K., Gokul, P., Selvin, J. & Muthu, M. S. (2023). Advances in solid-phase extraction techniques: role of nanosorbents for the enrichment of antibiotics for analytical quantification. Journal of Chromatography A, 463937. **(Impact Factor: 4.601)**
2. Vikas, Sahu, H. K., Mehata, A. K., Viswanadh, M. K., **Priya, V**., & Muthu, M. S. (2022), Dual-receptor-targeted nanomedicines: emerging trends and advances in lung cancer therapeutics. Nanomedicine (Lond). 17(19), 1375-1395. **(Impact Factor: 6.096)**.
3. Singh, C., Mehata, A.K., **Priya, V.,** Malik, A.K., Setia, A., Suseela, M.N.L., Gokul, P., Singh, S.K. and Muthu, M.S., (2022). Bimetallic Au–Ag Nanoparticles: Advanced Nanotechnology for Tackling Antimicrobial Resistance. Molecules, 27(20), 7059. **(Impact factor: 4.927)**
4. Rout, S.K., **Priya, V.,** Mehata, A.K. and Muthu, M.S., (2022). Abciximab coated albumin nanoparticles of rutin for improved and targeted antithrombotic effect. Journal of Drug Delivery Science and Technology, 76, 103785. **(Impact factor: 4.950)**
5. Rout, S.K., **Priya, V.,** Setia, A., Mehata, A.K., Mohan, S., Albratty, M., Najmi, A., Meraya, A.M., Makeen, H.A., Tambuwala, M.M. and Muthu, M.S., (2022). Mitochondrial targeting theranostic nanomedicine and molecular biomarkers for efficient cancer diagnosis and therapy. Biomedicine & Pharmacotherapy, 153, 113451. **(Impact factor: 7.419)**
6. Manners, N., **Priya, V**., Mehata, A.K., Rawat, M., Mohan, S., Makeen, H.A., Albratty, M., Albarrati, A., Meraya, A.M. and Muthu, M.S., 2022. Theranostic nanomedicines for the treatment of cardiovascular and related diseases: current strategies and future perspectives. Pharmaceuticals, 15(4), 441. **(Impact factor: 5.215)**
7. **Priya, V.,** Viswanadh, M.K., Mehata, A.K., Jain, D., Singh, S.K. and Muthu, M.S., (2021). Targeted nanotherapeutics in the prophylaxis and treatment of thrombosis. Nanomedicine, 16(13), 1153-1176. **(Impact factor: 6.096)**
8. Dehari, D., Mehata, A.K., **Priya, V.,** Parbat, D., Kumar, D., Srivastava, A.K., Singh, S. and Agrawal, A.K., (2022). Luliconazole nail lacquer for the treatment of onychomycosis: formulation, characterization and in vitro and ex vivo evaluation. AAPS PharmSciTech, 23(6), 1-17. **(Impact factor: 4.026)**

9. Viswanadh, M.K., Mehata, A.K., Sharma, **V., Priya**, V., Varshney, N., Mahto, S.K. and Muthu, M.S., (2021). Bioadhesive chitosan nanoparticles: Dual targeting and pharmacokinetic aspects for advanced lung cancer treatment. Carbohydrate Polymers, 274, 118617. **(Impact factor: 10.72)**
10. Mehata, A.K., Viswanadh, M.K., **Priya, V.,** Vikas and Muthu, M.S., (2021). Harnessing immunological targets for COVID-19 immunotherapy. Future Virology, 16(9), 619-640. **(Impact factor: 3.015)**
11. Viswanadh, M.K., Vikas, Jha, A., Reddy Adena, S.K., Mehata, A.K., **Priya, V.,** Neogi, K., Poddar, S., Mahto, S.K. and Muthu, M.S., (2020). Formulation and in vivo efficacy study of cetuximab decorated targeted bioadhesive nanomedicine for non-small-cell lung cancer therapy. Nanomedicine, 15(24), 2345-2367. **(Impact factor: 6.096)**
12. Mehata, A.K., Viswanadh, M.K., **Priya, V.,** Vikas and Muthu, M.S., (2020). Dendritic cell-targeted theranostic nanomedicine: advanced cancer nanotechnology for diagnosis and therapy. Nanomedicine, 15(10), 947-949. **(Impact factor: 6.096)**
13. Narendra, Mehata, A.K., Viswanadh, M.K., Sonkar, R., Pawde, D.M., **Priya, V.,** Singh, M., Koch, B. and S Muthu, M., (2020). Formulation and in vitro evaluation of upconversion nanoparticle-loaded liposomes for brain cancer. Therapeutic Delivery, 11(9), 557-571.
14. Vikas, Viswanadh, M.K., **Priya, V.,** Mehata, A.K. and Muthu, M.S., 2020. What are the unexplored facts about nanomicelles formed from docetaxel clinical injection?. Therapeutic Delivery, 11(1), 801-803.
15. Mehata, A.K., Dubey, T., Bhanukiran, K., Dehari, D., **Priya, V.** and Muthu, M.S., (2017). Receptor targeted nanomedicine as emerging platform for brain cancer therapy. World Journal of Pharmaceutical Research 6(3), 487-497.

7.3. BOOK CHAPTERS

1. Mehata, A.K., Dehari, D., Vikas, Priya, V., (2023) Drug releasing textile materials: current developments and future" S. Navneet, B. Bhupendra. "Fibre and textile engineering in drug delivery systems", Elsevier. Woodhead Publishing, 1-38.

VISHNU PRIYA

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I have eighteen papers to my name and three of them as the first author (two research article and one review article). 4 more articles are in pipeline as co-author. I have six years of research experience in the area of drug delivery systems, particularly development of targeted nanoformulations for antithrombotic therapy. The title of my doctoral research work is **TARGETED NANOMEDICINE FOR THE PREVENTION AND TREATMENT OF THROMBOSIS**. Since, GPIIb/IIIa receptors are substantially expressed on the activated platelets at the time of thrombotic event, they can be used to design the receptor targeted nanomedicine. The abciximab is a USFDA approved first chimeric antibody used clinically for antithrombotic therapy, which can be employed as targeting ligands for GPIIb/IIIa receptors The abciximab coated mesoporous silica nanoparticles was prepared for efficient delivery of abciximab and the targeting affinity of the same was explored further by the fabrication of rutin loaded targeted liposomes. The targeting efficiency of abciximab as a targeting ligand was compared with conventionally used ligand i.e., RGD peptide. All the nano formulations were analyzed through physicochemical parameters such as particle size, surface charge, SEM, TEM and SAED. Moreover, the *in-vitro* drug release, XRD analysis TGA, and surface chemistry of these nanoformulations were examined. The *in-vitro* imaging study was performed to investigate platelet binding affinity. The *in-vivo* tail bleeding assay blood clotting time assay and $FeCl_3$ induced thrombosis model was performed to evalute the therapeutic activity of prepared nanoformulations. The biosafety assesment was carried out to ensure the safety of the nanoformulations. Both works are published in peer reviewed journals such as **Colloids and Surfaces B: Biointerfaces (Elsevier, 5.999 impact factor)** and **Molecular Pharmaceutics (ACS, 5.364 impact factor)**.

EDUCATION

S. No.	Description	Board/University	Year	Percentage/Grade
1	B. Pharm.	Jaipur National University, Jaipur	2014	81.71%
2	M. Pharm.	Indian Institute of Technology (BHU)	2017	9.23 CGPA
3	PhD **(Full time)**	Indian Institute of Technology (BHU)	24 July 2018 to 17 May 2023	**Targeted nanomedicine for the prevention and treatment of thrombosis** **(9.40 CGPA)**

PUBLICATIONS

1. **Priya, V.,** Vikas, Mehata, A.K., Jain, D., Singh, S.K. and Muthu, M.S., (2022). Efficient delivery of abciximab using mesoporous silica nanoparticles: in-vitro assessment for targeted and improved antithrombotic activity. Colloids and Surfaces B: Biointerfaces 218, 112697. **(Impact factor: 5.999)**
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Mitochondrial targeting theranostic nanomedicine and molecular biomarkers for efficient cancer diagnosis and therapy. Biomedicine & Pharmacotherapy, 153, 113451. **(Impact factor: 7.419)**

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16. Vikas, Viswanadh, M.K., **Priya, V.,** Mehata, A.K. and Muthu, M.S., 2020. What are the unexplored facts about nanomicelles formed from docetaxel clinical injection?. Therapeutic Delivery, 11(1), 801-803.
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18. Mehata, A.K., Dehari, D., Vikas, **Priya, V., (**2023) Drug releasing textile materials: current developments and future" S. Navneet, B. Bhupendra. "Fibre and textile engineering in drug delivery systems", Elsevier. Woodhead Publishing, 1-38.

ACHIEVEMENTS

- DL-101 General Course on Intellectual Property, DL101E16S1
- Qualified three times GPAT, Secured AIR-170 Rank in GPAT 2015
- Secured first position twice in the live presentation at college.
- Attended 5 national seminars.
- Poster Presentation on "Combating EGFR Mutation: An insilico study" in Central University of Rajasthan
- Poster Presentation on "A review on nanotechnology based drug delivery system" at Jamia Hamdard University, Delhi.
- Awarded as Excellor in quiz contest "Pharma talent hunt 2011-2014" organized by Leaders Academy and.
- Successfully participated in "Paper Presentation" organized by Jaipur National University, Jaipur.
- Successfully participated in "SPIRIT 2016" organized by Department of Pharmaceutics, IIT BHU, Varanasi.
- Presented a poster on "Development and characterization of curcumin loaded nanogel for topical use in psoriasis treatment" at NIPER Mohali in 2016.
- M. Pharm project done on topic **"Development and characterization of luliconazole ethogel for topical use in the treatment of athlete foot infection",** successfully presented at IPC 2018, at Amity University.

INSTRUMENTS HANDLED

- Particle size analyzer DLS (Malvern Nano S90)
- Freeze Dryer (Labocon)
- Cell Culture Facility (Biosafety cabinet, CO2 Incubator, Digital Inverted Microscope)
- High-speed Homogenizer (IKA)
- UV Visible Spectrophotometer (Agilent).
- HPLC (LC-20AR, with PDA detector, Shimadzu, Japan)
- 6 Jar Dissolution Apparatus (ELECTROLABS)
- Tablet Punching Machine (Single and Rotary, Karnavati)
- 5 Plate Multi mode Plate Reader (Spincotech Pvt. Ltd.)
- Ultra-centrifuge 18k (REMI)
- Rotary evaporator (IKA)
-

PROJECT INFORMATION

- **Ph.D. Research work: "**Targeted nanomedicine for the prevention and treatment of thrombosis**"**

Supervisor: Dr. M. S. Muthu
Associate Professor
Dept. Pharm. Engineering & Tech,
Indian Institute of Technology (BHU), Varanasi - 221005

- **M Pharm Research work:** "Development and characterization of luliconazole ethogel for topical use in the treatment of athlete foot infection"

Supervisor: Ex-Professor A.K. Srivastava
Dept. Pharm. Engineering & Tech,
Indian Institute of Technology (BHU), Varanasi - 221005

PERSONAL INFORMATION

- **Name** **:** Vishnu Priya
- **Father Name** **:** Mahendra Prasad
- **Gender** **:** Female
- **Marital status** **:** Unmarried
- **Languages Known** **:** English, Hindi
- **Present address** **:** Department of Pharmaceutical Engineering & Technology, IIT (BHU)
- **Permanant address :** H. No. 207ch, near M.B.B.L. College, gandhibihar colony, damodarpur, muzaffarpur (BIHAR), 843113**.**

REFERENCES:

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2) **Dr. Shreyans K Jain**
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3) **Dr. Ashish Kumar Agrawal**
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DECLARATION

I hereby declare that the above mentioned data are true, complete and correct to the best of my knowledge and belief.

Date: 17-05-2023

Place: Varanasi

VISHNU PRIYA