

Dr. Usama Ahmad, Ph.D.

Advanced Drug Delivery Researcher

Current Position: Associate Professor, Faculty of Pharmacy, Integral University,
Lucknow-226026, India

Email: usamaamd@iul.ac.in, usamaahmad.10@outlook.com

Links: [ORCID](#) [LinkedIn](#) [Google Scholar](#) [ResearchGate](#)

PROFESSIONAL PROFILE

Academic researcher with expertise in nanomedicine and advanced drug delivery systems. My research centers on engineering next-generation lipid nanoparticles and biomaterials for targeted and controlled drug delivery that address challenges in cancer, regenerative medicine, neurological disorders, and chronic wound management.

RESEARCH HIGHLIGHTS

Peer reviewed publications: 54+

Edited Books: 05

Book Chapters: 25+

International Patent: 01

Magazine publications: 13

Supervision: Ph.D. Awarded-02, 05 Ongoing | 16+ M.Pharm Supervised

SELECTED REVIEWS

1. Wang, Y., Ahmad, U., Cai, X. and Shubhra, Q.T., 2026. Turning perfusion into repair through ferroptosis blockade. *Trends in Molecular Medicine*. (I.F 18.1)
2. Ahmad, U., Hanaffi, WNW., Islam, A., Salman, A., Khan, MM., Shakeel, F., Cai, Q., Cai, X., Shubhra, Quazi TH., 2025. Cutting edge strategies for diabetic wound care: Nanotechnology, bioengineering, and beyond. *BMEMat*. e70033 (I.F 17.2)
3. Ahmad, U., Musiol, R., Cai, X. and Shubhra, Q.T., 2025. Programmable lipid nanoparticle tropism unlocks precision RNA medicine. *Trends in Molecular Medicine*. (I.F 18.1)

4. Shadab, A., Ahmad, U., Choonara, Y.E. and Faiyazuddin, M., 2026. Rewriting the mRNA Delivery Map: Albumin Hitchhiking Lipid Nanoparticles for Safer and Smarter Nanomedicine. [*ACS Materials Au.*](#) (I.F 9.1)

SELECTED RESEARCH

1. Shakeel, F., Al-Shdefat, R., Ali, M. and Ahmad, U., 2025. Temperature-dependent solubilization and thermodynamic characteristics of ribociclib in varied {PEG 400+ water} combinations. [*BMC chemistry*](#), 19(1), p.79. (I.F 5.1)

2. Shakeel, F., Al-Shdefat, R., Altamimi, M.A. and Ahmad, U., 2024. Solubility and thermodynamic analysis of aceclofenac in different {Carbitol+ water} mixtures at various temperatures. [*BMC chemistry*](#), 18(1), p.168. (I.F 5.1)

3. Ahmad, U., Akhtar, J., Singh, S.P., Badruddeen, Ahmad, F.J., Siddiqui, S. and Wahajuddin, 2017. Silymarin nanoemulsion against human hepatocellular carcinoma: development and optimization. [*Artificial cells, nanomedicine, and biotechnology*](#), 46(2), pp.231-241. (I.F 5.6)

MEMBERSHIP

- American Association for Cancer Research, (USA)
- [Academy of Pharmaceutical Sciences, Nanomedicine Focus Group \(UK\)](#)

APPOINTMENTS AT INTEGRAL UNIVERSITY

- Associate Professor: 2022- till date
- Assistant Professor: 2017-2022
- Lecturer: 2015-2017
- JRF (SERB-DST): 2013-2015

EDUCATION

- Ph.D from Integral University, award year 2018
- M.Pharm (Pharmaceutics) from Amity University, 2011-2013
- B.Pharm from SSITM, Aligarh (affiliated to UPTU, Lucknow), 2007-2011