

NAZEER HASAN

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Google Scholar: https://scholar.google.com/citations?user=-MIJ4OAAAAJ&hl=en

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Hasan/research?ev=prf_act

ABOUT

Being a Pharmaceutical researcher, I work in the nanotechnology domain for the development of advanced drug delivery systems to improve the therapeutic efficacy of drugs against various disease. I am passionate and disseminate the knowledge of pharmacy and specifically, pharmaceutics, pre-clinical and Clinical domain, I acquired from the prestigious institutions and pharmaceutical laboratories.

EDUCATION

> Doctor of Philosophy (PhD in Pharmaceutics) 2019- Current

Under supervision of Prof. Farhan J. Ahmad

Jamia Hamdard, New Delhi Major: Pharmaceutics

Thesis Topic "Nano lipid carrier based targeted dual drug delivery of 5-fluorouracil and cannabidiol for treatment of skin cancer"

> M.Pharm. (Pharmaceutics) 2017-19

Master of Pharmacy, Delhi Pharmaceutical Sciencesand Research University (DPSRU), New Delhi Major: Pharmaceutics (Industrial Pharmacy)

Thesis Topic: Intranasal delivery of Naloxone-loaded solid lipid nanoparticles as a promising simple and non-invasive approach for the management of opioid overdose

> B.Pharm. 2013-17

Bachelor of Pharmacy, Jamia Hamdard, New Delhi, India

Majors: Pharmacology, Pharmaceutics, Medicinal Chemistry, Pharmaceutical analysis, Pharmacognosy

➤ Higher Secondary School

Hamdard Public School

Accredited by Central Board of Secondary Education, New Delhi, India Majors: Chemistry, Physics, Biology and English in 2013.

PROFESSIONAL EXPERIENCE

Senior Research Fellow, under supervision of Prof. Farhan J. Ahmad, Department of Pharmaceutics, Jamia Hamdard. 2021-current.

Major Projects Undertaken

- ➤ Development And Optimization of Intelligent Leucocyte Membrane Camouflaged Nanoparticles Containing Combitorial Drugs For Management Of Triple Negative Breast Cancer.
- ➤ Fabrication and Comparative evaluation of lung deposition pattern from newly designed 3D printed vertical spacer with traditional horizontal spacer
- ➤ Clinical Study to Compare Serum and Sebum Kinetics of Orally Administered Conventional Itraconazole 100 mg twice daily vs Conventional Itraconazole 200 mg once daily vs Super Bioavailable Itraconazole 130 mg once daily for

28 Days.

- ➤ Comparative safety, tolerance and haemoglobin response following four-week administration of ferrous ascorbate, ferrous fumarate and iron amino acid chelate in healthy subjects.
- ➤ Comparison of dispersion properties of a novel fast-dissolving paracetamol and standard paracetamol tablet formulations using scintigraphy.
- ➤ Nano lipid carrier based targeted dual drug delivery of 5-fluorouracil and cannabidiol for treatment of skin cancer.

Research Fellow, under supervision of Prof. Farhan J. Ahmad, Department of Pharmaceutics, Jamia Hamdard. **2019-2020**

> Dual drug (synthetic and neutral anti-cancer molecules) loaded Targeted nanoparticles used in the chemotherapy of drug resistant solid tumor: Development of a nanotechnology platform

Trainee Research Fellow, under supervision of Dr. Aseem Bhatnagar. Department of CEPIN, Institute of Nuclear Medicine and Allied Sciences (INMAS) Defence Research and Development Organisation (DRDO), Ministry of Defence, Govt. of India

- ➤ Intranasal Delivery of Naloxone Loaded Solid Lipid Nanoparticles For Management Of Opioid Overdose: Development, Optimization, And Evaluation.
- > Development of novel HOCL products

TRANSFERABLE /NONTRANSFERABLE SKILLS

Radiolabeling • Gamma scintigraphy• 3D printing• Clinical studies • Animal handling •Rheometer • Microscopy • HPLC • Lyophilizer • ZetaSizer &Zeta Potential • Centrifugation machine • Biomimetic nanoparticles • Kinetics • In vitro Experiments • Statistical software- GraphPad Prism 8• Illustrator software • Microsoft office •Bio-render • Referencing software.

PATENTS

- ➤ Nazeer Hasan, Arif Nadaf, Shadaan Ahmad, Farhan Jalees Ahmad "Development and optimization of leukocyte membrane camouflaged nanoparticles: a novel combination therapy for treatment of triple-negative breast cancer"
- ➤ Nazeer Hasan, Gaurav Kumar Jain, Aseem Bhatnagar, Kushagra Khanna, Saurabh Chandra & Saurabh Chandr
- ➤ Nazeer Hasan, Gaurav Kumar Jain, Aseem Bhatnagar, Kushagra Khanna, Saurabh Chandra, Vivek and Farhan Jalees Ahmad, "Vertical Spacer", Application No 202011022518, 2020.

FEATURED PUBLICATIONS

- Lubna Siddiqui, Nazeer Hasan, Pawan K Mishra, Neha Gupta, Anu T Singh, Alka Madaan, Manu Jaggi, Suma Saad, Adam Ekielski, Zeenat Iqbal, Prashant Kesharwani, Sushama Talegaonkar. "CD44 mediated colon cancer targeting mutlifaceted lignin nanoparticles: Synthesis, in vitro characterization and in vivo efficacy studies" in International Journal of Pharmaceutics https://doi.org/10.1016/j.ijpharm.2023.123270 Impact Factor 5.8
- ➤ Sukhmeet Tangri, **Nazeer Hasan**, Jasmeet Kaur, Saurabh Maan, Prashant Kesharwani, Farhan Jalees Ahmad "Drug loaded bioglass nanoparticles and their coating for efficient tissue and bone regeneration" in Journal of Non-

Crystalline Solids https://doi.org/10.1016/j.jnoncrysol.2023.122469 Impact Factor-3.5

- ➤ Suma Saad, Nazeer Hasan, Lubna Siddiqui, Sarwar Beg, Asgar Ali, Anshul Gupta, Gaurav K Jain, Farhan J Ahmad "Novel gamma linoleic acid encased in situ lipogel for augmented anti-tumor efficacy against solid tumor: In vitro and in vivo evaluation" in Journal of Drug Delivery Science and Technology https://doi.org/10.1016/j.jddst.2023.104768 Impact Factor 5.0
- ➤ Jyoti Chandra, **Nazeer Hasan**, Nazim Nasir, Shadma Wahab, Punniyakoti Veeraveedu Thanikachalama, Amirhossein Sahebkar, Farhan Jalees Ahmad, Prashant Kesharwani "Nanotechnology-empowered strategies in treatment of skin cancer" in Environmental Research https://doi.org/10.1016/j.envres.2023.116649 **Impact Factor 8.3**
- ➤ Nazeer Hasan, Mohammad Imran, Afsana Sheikh, Nidhi Tiwari, Abhinav Jaimini, Prashant Kesharwani, Gaurav Kumar Jain, Farhan Jalees Ahmad "Advanced multifunctional nano-lipid carrier loaded gel for targeted delivery of 5-flurouracil and cannabidiol against non-melanoma skin cancer" in Environmental Research. https://doi.org/10.1016/j.envres.2023.116454 Impact Factor 8.3
- Entesar Hanan, Nazeer Hasan, Sultan Zahiruddin, Sayeed Ahmad, Vasudha Sharma, Farhan J Ahmad "Metabolite profiling and Ameliorative effect of quince (Cydonia oblonga) leaves against doxorubicin induced cardiotoxicity in Wistar rats." In Food Bioscience https://doi.org/10.1016/j.fbio.2023.102691 Impact Factor 5.2
- Fauziya, Akash Gupta, Arif Nadaf, Shadaan Ahmad, Nazeer Hasan, Mohammad Imran, Gaurav Kumar Jain, Prashant Kesharwani, Farhan J. Ahmad. "Dasatinib: A potential tyrosine kinase inhibitor to fight against multiple cancer malignancies" in medical oncology. https://doi.org/10.1007/s12032-023-02018-5
 Impact factor 3.4
- ➤ Dhara Jain, **Nazeer Hasan**, Sobiya Zafar, Jitesh Thakur, Kashif Haider, Suhel Parvez, Farhan Jalees Ahmad "Transferrin functionalized nanostructured lipid carriers for targeting Rivastigmine and Resveratrol to Alzheimer's disease: Synthesis, in vitro characterization and brain uptake analysis" https://doi.org/10.1016/j.jddst.2023.104555 in Journal of drug delivery science and technology **Impact factor 5.0**
- ➤ Mohammad Imran, Areeba Insaf, Nazeer Hasan, Vrushabh V Sugandhi, Deumaya Shrestha, Keshav Raj Paudel, Saurav Kumar Jha, Philip M Hansbro, Kamal Dua, Hari Prasad Devkota, Yousuf Mohammed "Exploring the Remarkable Chemotherapeutic Potential of Polyphenolic Antioxidants in Battling Various Forms of Cancer" in molecules https://doi.org/10.3390/molecules28083475. Impact factor 4.6
- Nazeer Hasan, Mohammad Imran, Masood Nadeem, Afsana Sheikh, Dhara Jain, Kashif Haider, M. Moshahid Alam Rizvi, Prashant Kesharwani, Gaurav Kumar Jain, Farhan Jalees Ahmad. "Formulation and development of novel lipid-based combinatorial advanced nanoformulation for effective treatment of non-melanoma skin cancer" in International Journal of Pharmaceutics 10.1016/j.ijpharm.2022.122580.Impact factor 5.8
- > S.M Kawish, **Nazeer Hasan**, Sarwar Beg, Abdul Qadir, Gaurav K Jain, Mohd Aqil, Farhan Jalees Ahmad "Docetaxel-loaded borage seed oil nanoemulsion

- with improved antitumor activity for solid tumor treatment: Formulation development, in vitro, in silico and in vivo evaluation. Journal of Drug Delivery Science and Technology 10.1016/j.jddst.2022.103693 impact factor 5 0
- ➤ A. Nadaf, A. Gupta, **N. Hasan**, Fauziya, S. Ahmad, P. Kesharwani, F.J. Ahmad Recent update on electrospinning and electrospun nanofibers: Current trends and their applications. RSC advances. Https://Doi.Org/10.1039/d2ra02864f. **Impact factor 4.03**
- ➤ S. Ahmad, N. Hasan, A. Gupta, A. Nadaf, L. Ahmad, M. Aqil, P. Kesharwani, M. Aqil Professor, Review on 3D printing in dentistry: Conventional to personalized dental care, Journal of Biomaterials Science Polymer Edition (2022) 1–29. <u>Https://Doi.Org/10.1080/09205063.2022.2099666</u>. Impact factor- 3.6
- M. Imran, L.A. Jha, N. Hasan, J. Shrestha, R. Pangeni, N. Parvez, Y. Mohammed, S.K. Jha, K.R. Paudel, "Nanodecoys" Future of drug delivery by encapsulating nanoparticles in natural cell membranes, Int. J. Pharm. 621 (2022) 121790. https://doi.org/10.1016/J.IJPHARM.2022.121790. Impact factor-6.51
- A. Nikhat, **N. Hasan**, Z. Iqbal, P. Kesharwani, S. Talegaonkar, Enhanced transdermal delivery of lutein via nanoethosomal gel: Formulation optimization, in-vitro evaluation, and in-vivo assessment, J. Drug Deliv. Sci. Technol. (2022) 103447. https://doi.org/10.1016/J.JDDST.2022.103447. Impact factor-5.0
- M.Z. Ahmed, A. Gupta, M.H. Warsi, A.M.A. Ali, N. Hasan, F.J. Ahmad, A. Zafar, G.K. Jain, Nano Matrix Soft Confectionary for Oral Supplementation of Vitamin D: Stability and Sensory Analysis, Gels 2022, Vol. 8, Page 250. 8 (2022) 250. https://doi.org/10.3390/GELS8050250. Impact factor-4.6
- ➤ S.M. Danish, A. Gupta, U.A. Khan, N. Hasan, F.J. Ahmad, M.H. Warsi, A.M.A. Ali, A. Zafar, G.K. Jain, Intranasal Cerium Oxide Nanoparticles Ameliorate Cognitive Function in Rats with Alzheimer's via Anti-Oxidative Pathway, Pharm. 2022, Vol. 14, Page 756. 14 (2022) 756. https://doi.org/10.3390/PHARMACEUTICS14040756. Impact factor-5.4
- ➤ N. Hasan, M. Imran, A. Sheikh, S. Saad, G. Chaudhary, G.K. Jain, P. Kesharwani, F.J. Ahmad, Cannabis as a potential compound against various malignancies, legal aspects, advancement by exploiting nanotechnology and clinical trials, Journal of Drug Targeting (2022) 1–17. https://Doi.Org/10.1080/1061186X.2022.2056188. Impact factor-5.0
- R. Karwasra, S. Ahmad, K. Raza, K. Khanna, S. Singh, N. Sharma, S. Sharma, N. Hasan, D. Kaushik, S. Varma, Engineering macrophage targeted punicalagin nanoparticles by computational modeling to alleviate methotrexate induced neutropenia, (2022). https://doi.org/10.21203/RS.3.RS-1441489/V1. Impact factor-4.5
- M. Imran, S.K. Jha, N. Hasan, A. Insaf, J. Shrestha, J. Shrestha, H.P. Devkota, S. Khan, N. Panth, M.E. Warkiani, K. Dua, P.M. Hansbro, K.R. Paudel, Y. Mohammed, Overcoming Multidrug Resistance of Antibiotics via Nanodelivery Systems, Pharm. 2022, Vol. 14, Page 586. 14 (2022) 586. https://doi.org/10.3390/PHARMACEUTICS14030586. Impact factor-5.4
- > N. Hasan, M. Imran, D. Jain, A. Shamim, S. Beg, P. Kesharwani, G. Jain, F.J.

- Ahmad, Rapid analytical method development and validation for the simultaneous estimation of 5-Fluorouracil and Cannabidiol in plasma and lipid-based nanoformulations, Curr. Anal. Chem. 18 (2022). https://doi.org/10.2174/1573411018666220304085236. Impact factor-1.8
- M. Fatima, A. Sheikh, N. Hasan, A. Sahebkar, Y. Riadi, P. Kesharwani, Folic acid conjugated poly(amidoamine) dendrimer as a smart nanocarriers for tracing, imaging, and treating cancers over-expressing folate receptors, Eur. Polym.
 J. 170 (2022) 111156. https://doi.org/10.1016/J.EURPOLYMJ.2022.111156. Impact factor- 6.0
- ➤ D. Modi, J. Nirmal, M.H. Warsi, M. Bhatia, **N. Hasan**, P. Kesharwani, G.K. Jain, Formulation and development of tacrolimus-gellan gum nanoformulation for treatment of dry eye disease, Colloids Surfaces B Biointerfaces. 211 (2022) 112255. https://doi.org/10.1016/J.COLSURFB.2021.112255. **Impact factor-5.99**
- Gaurav, N. Hasan, A.K. Malik, V. Singh, K. Raza, F.J. Ahmad, P. Kesharwani, G.K. Jain, Recent update of 3D printing technology in pharmaceutical formulation development, J. Biomater. Sci. Polym. Ed. 32 (2021) 2306–2330. https://doi.org/10.1080/09205063.2021.1967702. Impact factor-3.4.
- N. Hasan, M. Imran, P. Kesharwani, K. Khanna, R. Karwasra, N. Sharma, S. Rawat, D. Sharma, F.J. Ahmad, G.K. Jain, A. Bhatnagar, S. Talegaonkar, Intranasal delivery of Naloxone-loaded solid lipid nanoparticles as a promising simple and non-invasive approach for the management of opioid overdose, Int. J. Pharm. 599 (2021). https://doi.org/10.1016/j.ijpharm.2021.120428. Impact factor- 5.8
- K. Khanna, N. Sharma, S. Rawat, N. Khan, R. Karwasra, N. Hasan, A. Kumar, G.K. Jain, D.K. Nishad, S. Khanna, H. Popli, A. Bhatnagar, Intranasal solid lipid nanoparticles for management of pain: A full factorial design approach, characterization & Gamma Scintigraphy, Chem. Phys. Lipids. 236 (2021) 105060. https://doi.org/10.1016/j.chemphyslip.2021.105060. Impact factor-3.4
- ➤ U.A. Khan, U. Parveen, **N. Hasan**, M.Z. Ahmed, S. Saad, F.J. Ahmad, G.K. Jain, Parenteral sustained release lipid phase-transition system of ziprasidone: Fabrication and evaluation for schizophrenia therapy, Drug Des. Devel. Ther. (2020). https://doi.org/10.2147/DDDT.S247196. **Impact factor- 4.31**
- > Smruti Rekha Rout, Ravi Bandaru, Kenguva Gowtham, Nazeer Hasan, Mohammad, Sarwar Alam, Rahul Shukla, Prashant Kesharwani, Rambabu Dandela "Dendrimers in photodynamic therapy" Elsivier.
- ➤ Urushi Rehman, Amirhossein Sahebkar, **Nazeer Hasan**, Gaurav K Jain, Prashant Kesharwani. Transdermal drug absorption: Mathematical modelling. CRC press
- ➤ Received Scientific award 2022 from Malvern Panalytical awards.
- ➤ Worked as Organizing committee member in Two days International Conference on Nanotechnology and Drug Delivery (ICNDD-23) Jamia Hamdard, New Delhi on 9-10 February 2023.
- > Worked as Organizing committee member in DST STUTI training Programme

BOOK CHAPTERS

SPECIAL ACHIEVEMENTS & EXTRA CURRICULAR ACTIVITIES

- organized by Delhi Pharmaceutical Sciences and Research University (DPSRU), December 2022.
- ➤ Worked as Organizing committee member in One day seminar on Cancer therapeutics, Jamia Hamdard on 15th December 2022.
- ➤ Worked as Organizing committee member in Hands on training on particle sizer, Jamia Hamdard on 23rd September 2022.
- ➤ Worked as Organizing committee member in conference IPACONVENTION 2019.
- ➤ Worked as Organizing committee member in conference cum workshop on MOLECULAR IMAGING & DRUG DELIVERY(MIDD-2018)
- ➤ Act as organizer of Pharmahire 2018 Jamia Hamdard.
- ➤ Act as organizer of Pharmahire 2017 pharmacy recruitment Programme in Jamia Hamdard.
- > Participated in national science day in poster making competition.
- ➤ Participated in 6th &7th environment competition in 2010.
- ➤ Worked as tour in charge and organized two successful college tour toOoty Kanyakumari in 2015 and goa tour in 2016.
- ➤ Represent school in English debate competition at interschool level in year 2008,2009,2010 and won 3rd 2nd and 1st prize respectively. And awarded as best speaker in 2010.
- ➤ Represent school in carrom at interschool level and won 2nd prizein year 2010.
- ➤ Participated in national science and math's Olympiad in year 2008,2009,2010 and won gold medal in 2009 and 2010.
- ➤ Designated as school vice-head-boy in 2010-11.
- ➤ Designated as school prefect for session 2009-10 & 2010-11

➤ Presented oral presentation on "Combination therapy for treatment of skin Cancer" in International Conference on Nanotechnology and Drug Delivery (ICNDD-23) Jamia Hamdard, New Delhi on 9-10 February 2023.

- ➤ Presented oral presentation on "The Development of Novel Lipid-Based Combinatorial Topical Chemotherapy For The Effective Treatment Of Non-Melanoma Skin Cancer in "International Conference on Nanotechnology: opportunities and challenges" held during 28th-29th November 2022. Jamia Millia Islamia, New Delhi
- ➤ Presented e poster entitled "Rapid analytical method Development and validation for the simultaneous estimation of 5-flurouracil and cannabinoid in plasma and lipid based nanoformulations" During Two Days Virtual National Conference on Biosimilars and Pharmaceuticals organized by B Pharmacy College, Rampura, sponsored by GUJCOST DST from 13 08 2021 to 14 08 2021.
- ➤ Attended two days international conference "Nanomedicine: Biomolecules for Human Health (NBHH- 2021)", Small molecules: Big Opportunities!!, held on 27th 28th September 2021.
- > Attended IPA convention 2019 as Organizing committee member being organized by Jamia Hamdard University and Indian Pharmaceutical

SEMINAR
CONFERENCES
&
WORKSHOP
ATTENDED

Association at VigyanBhavan, on 11th – 12th September 2019.\

- ➤ Attended "The **finishing school of post graduate students**" organized by **Delhi Pharmaceutical Sciences and Research University (DPSRU)** on 22 April 2019.
- ➤ Attended National Conference on Unani Medicine organized by Central Council in research in Unani Medicine, Ministry of AYUSH on 11-12 February 2019 at VigyanBhavan, New Delhi.
- ➤ Attended 6th world Congress on Nanomedical sciences as volunteer organized by Jamia Hamdard university and University of Delhi at Vigyan Bhavan, on 7-9th January 2019
- Attended International conference on "Recent advances in food fortification with emphasis on Vitamin D Deficiency in human health" organized by Department of food technology, School of Interdisciplinary Sciences & Technology Jamia Hamdard, New Delhi on 15-16 September 2018.
- ➤ Participated in the National CME titled: "Uniting to create leaders to end tuberculosis" Organized by Department of Microbiology, HIMSR & HAHC Hospital & School of Unani Medical Education And Research, JamiaHamdard New Delhi on 27 march 2017.
- Participated in conference cum workshop Molecular Imaging & Drug Delivery (MIDD-2018) and Presented paper titled Synthesis and characterization of 2-Hydroxyethyl Methacrylate grafted chitosan organized by JH-Institute of Molecular Medicine, School of Interdisciplinary Sciences & Technology Jamia Hamdard, New Delhi on 26-27 march 2017.
- Participated as delegate during International conference on challenges for global competitiveness of AYUSH and Natural products and IASTAM oration award function 2018 organized by Delhi Pharmaceutical Sciences and Research University (DPSRU) on February 2-4.2018.
- > Attended workshop on Prescribing generic vs branded: impact and implications on healthcare organized by Delhi Pharmaceutical Sciences and Research University (DPSRU) on 21 November 2017.
- ➤ Attended workshop on Patent awareness for startups organized by Delhi Pharmaceutical Sciences and Research University (DPSRU) on 16 November 2017.
- ➤ Organizing events.
- ➤ Bike Riding and Visiting new places.
- > watching cricket, playing badminton

HOBBIES

PERSONAL PROFILE

DECLARATION

Father's Name : Mr. Mohammad Buksh

Mother's Name : Mubina

Date of Birth:17th-march-1996Marital Status:UnmarriedReligion:Muslim

Languages know : Hindi, English & Urdu

Nationality : Indian

REFERENCES

I hereby declare that all the above statements are true, correct and to the best of my knowledge and belief.

Date: 20th July 2023 **Place:** New Delhi

(NAZEER HASAN)

➤ Dr. Farhan J. Ahmad

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➤ Dr. Prashant Kesharwani

Assistant Professor.

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➣ Dr. Gaurav Kumar Jain

Associate Professor, Professor, Department of Pharmaceutics, Delhi Pharmaceutical Sciences and Research University (DPSRU), New Delhi.

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> Dr. Aseem Bhatnagar

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