Dr. HASSAN AHMAD

Pharm.D., M.Phil., Ph.D. (Pharmacy)
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Dear HR Manager/ Registrar,

I am currently working as **Assistant Professor (Pharmaceutics)** in the Faculty of Pharmaceutical Sciences at University of Central Punjab, Lahore. With more than 13 years of university teaching and research experience across Pharm.D., M.Phil., and Ph.D. programs, a Ph.D. in Pharmaceutics from Bahauddin Zakariya University, Multan (cGPA: 3.63/4.00), and an M.Phil. in Pharmaceutics with Distinction from The Islamia University of Bahawalpur (cGPA: 3.65/4.00), I bring an established, high-output research and pedagogical portfolio in advanced drug delivery systems, stimuli-responsive biomaterials, and computational pharmaceutics.

Since December 2016, I have served as Assistant Professor of Pharmaceutics at the Faculty of Pharmaceutical Sciences, University of Central Punjab (UCP), Lahore, where I also serve as Incharge and Coordinator of the Pharmaceutical Quality Control and Instrumentation Laboratory (since January 2022). My scholarly profile encompasses **>20 peer-reviewed publications** in HEC-recognized, SCIE, and ESCI journals including **12 HEC W-Category publications** with Impact Factors reaching **~51.1** in (*International Journal of Nanomedicine*, *Pharmaceutics*, *Gels*, *International Journal of Pharmaceutics*, *Antibiotics*, *Journal of Drug Delivery Science and Technology*, *Molecules*, and *Pharmaceutical Research among others*). I have supervised four M.Phil. theses and co-supervised two additional M.Phil. scholars, and I am formally certified in doctoral supervision under the HEC Graduate Education Policy (2023).

Joining your esteemed organization represents a strategic scientific synergy. From 2012 to 2013, I also served as a Visiting Research Scholar at the Interdisciplinary Research Center in Biomedical Materials (IRCBM) at COMSATS Lahore. I aim to bridge the industry and academia by establishing a translational nanomedicine and smart hydrogel research cluster, securing extramural grants (HEC-NRPU, PSF, COMSTECH), and strengthening industrial R&D linkages across Pakistan's pharmaceutical sector.

Thank you for your time and consideration.

Yours sincerely,
Dr. Hassan Ahmad, B.Sc., Pharm.D., M.Phil., Ph.D. (Pharmaceutics)
Registered Pharmacist (Punjab Pharmacy Council) & HEC Approved Ph.D. Supervisor

DR. HASSAN AHMAD, Pharm.D., M.Phil., Ph.D.

Assistant Professor of Pharmacy | Laboratory Coordinator (QC & Instrumentation)

28/5/A-2, Township, Lahore, Punjab, Pakistan.

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RESEARCH PROFILE & TECHNICAL EXECUTIVE SUMMARY

- **Translational Pharmaceutics & Biomaterials Scientist** with >13 years of post-qualification academic, research, and laboratory leadership experience across undergraduate (Pharm.D.) and postgraduate (M.Phil. and Ph.D.) programs.
- **High-Impact Publication Record:** Author of **21 peer-reviewed articles** (including **12 HEC W-Category** SCIE/ESCI publications; cumulative Impact Factor **>50**; h-index: 10), featuring lead and collaborative studies in *International Journal of Nanomedicine* (IF: 8.7), *Pharmaceutics* (IF: 6.9), *Gels* (IF: 6.4), *International Journal of Pharmaceutics* (IF: 6.0), *Antibiotics* (IF: 5.5), *Journal of Drug Delivery Science and Technology* (IF: 5.2), *Molecules* (IF: 5.1), and *Pharmaceutical Research* (IF: 4.1).
- **Core Mechanistic Expertise:** Rational design and Quality-by-Design (QbD) optimization of thermosensitive *in-situ* injectable hydrogels (chitosan/glycerophosphate, pectin), functionalized lipid nanocarriers (thiomer-coated SLNs, transethosomes), hybrid polymeric nanosystems (Shellac–PLGA, cyclodextrin nanobeads), and biosurfactin micelles.
- **Computational-to-Preclinical Pipeline:** Integrates *in silico* molecular docking (Auto-Dock Vina), Density Functional Theory (DFT), and molecular dynamics simulations (GROMACS, LAMMPS) with physicochemical characterization (HPLC, DSC, XRD, FTIR, SEM, Rheometry) and *in vivo* pharmacokinetic validation.
- **Postgraduate Mentorship & Licensure:** Primary supervisor to **4 M.Phil.** scholars and co-supervisor to **2 M.Phil.** scholars; certified under the **HEC PhD Supervision Course (GEP-2023)**; Registered Pharmacist in Pakistan (PPC) with international licensure credentials from the **Dubai Health Authority (DHA)** and **Saudi Licensing Exam (SLE).**

EDUCATION & DOCTORAL DISSERTATION

- **Doctor of Philosophy (Ph.D.) in Pharmacy (Pharmaceutics)** | *October 2022*
  - **Bahauddin Zakariya University (BZU), Multan, Pakistan** (Department of Pharmaceutics, Faculty of Pharmacy)
  - ***cGPA*:** 3.63 / 4.00 | **Notification Date:** 10.10.2022 | **HEC PCD No.:** 29817 (https://www.hec.gov.pk/english/services/students/PCD/Pages/online_Application_PCD_No.aspx)
  - **Doctoral Focus:** Development, *in silico* modeling, and *in vitro*/*in vivo* evaluation of sustained-release *in-situ* injectable thermo-responsive polymeric hydrogels containing naproxen sodium.
  - **Supervisor:** Prof. Dr. Muhammad Sohail Arshad (Professor, Department of Pharmaceutics, BZU).
- **Master of Philosophy (M.Phil.) in Pharmacy (Pharmaceutics)** | *March 2013*

- **The Islamia University of Bahawalpur (IUB), Bahawalpur, Pakistan**
- **Academic Standing:** Distinction, ***cGPA*: 3.65 / 4.00** (PEEF Masters Merit Scholar).
- **Research Focus:** Synthesis and characterization of biodegradable polymeric microspheres, hydrogels, carbon-nanotubes and mesoporous silica-supported nanostructures (conducted in collaboration with IRCBM, COMSATS Lahore).
- **Principal Supervisor:** Prof. Dr. Muhammad Asadullah Madni.

❖ **Doctor of Pharmacy (Pharm.D.-5- Year Professional Program)** | *September 2005 – January 2011*

- **The Islamia University of Bahawalpur (IUB), Bahawalpur, Pakistan**
- **Academic Standing:** 1st Division (64.2% under Annual System; IUB Yearly Merit Scholar 2006–2010).
- **Undergraduate Research Thesis:** *"Comparison of Treatment of Hepatitis-C in Bahawal Victoria Hospital (B.V.H.) with Standard Guidelines by W.H.O."*
- **Clinical Clerkship:** Completed two weeks of training at the Drug Information Center (D.I.C.), IUB, and a one-month Community Pharmacy Clerkship at Bahawal Victoria Hospital (B.V.H.) supervised by Dr. Alam Sher (Clinical Pharmacist, V.A. Medical Center, Togus, U.S.A.) under the HEC Visiting Scholar Program (February 3, 2009)

PEER-REVIEWED PUBLICATIONS

- ***Total Publications: 22 | HEC W-Category: 12 | Cumulative Impact Factor: ~51.3***

A. Lead / First-Author Peer-Reviewed Publications

1. **Hassan Ahmad**, Sadia Jafar Rana, Tahir Ali Chohan, Haashim Iqbal, Rawdha Benziane, Manoochehr Rasekh, Saman Zafar, Muhammad Sohail Arshad, Zeeshan Ahmad. Development of Sustained Release Chitosan/β-Glycerol Phosphate-Based Injectable Thermo-Gels Containing Naproxen Sodium: In-Vitro and In-Vivo Evaluation. ***Pharmaceutical Research***, 22-09-2026; Volume 43, Issue 9. https://link.springer.com/article/10.1007/s11095-026-04197-y **(W-Category | Impact Factor: 4.1)**.
2. **Hassan Ahmad**, Tahir Ali Chohan, Jahanzeb Mudassir, Prina Mehta, Bushra Yousef, Aliyah Zaman, Amna Ali, Omar Qutachi, Ming-Wei Chang, Dimitris Fatouros, Muhammad Sohail Arshad, Zeeshan Ahmad. Evaluation of sustained-release in-situ injectable gels, containing naproxen sodium, using in vitro, in silico and in vivo analysis. ***International Journal of Pharmaceutics***, 25-03-2022; Volume 616: 121512. https://doi.org/10.1016/j.ijpharm.2022.121512 **(W-Category | Impact Factor: 6.0)**.
3. **Hassan Ahmad**, Asad Ali, Talha Mazhar, Wafa Majeed, Rabia Munir, Fazilat Mehboob Ahmad, Sadia Ilyas, Ayesha Imtiaz, Muhammad Asim, Zainab Siddique, Hafiz Muhammad Faisal, Waris Nawaz, Khurram Ashfaq, Jalil ur Rehman, Jannat Riaz, Jawad Zaheer. Pharmaceutics-Based Natural Products: Exploring Medicinal Properties for Novel Drug Discovery and Therapeutic Applications. ***Review Journal of Neurological & Medical Sciences Review***, 2026; 4(6): 116–134. https://doi.org/10.63075/5fs04339 | https://nmsreview.org/index.php/rjnmsr/article/view/989/761 **(HEC Recognized Y-Category)**.

B. Co-Authored Peer-Reviewed Publications

4. Hamid Saeed Shah, Samia Ghani, Faisal Usman, Tahir Ali Chohan, Nida Naeem, Riffat Khan, **Hassan Ahmad**, Usman Nasrullah, Seema Zargar and Tanveer A. Wani. Transcending Nano-Encapsulation: Engineering Campesterol-Loaded Shellac-PLGA Nanosystem for Breast Cancer Therapy Supported by DFT and Molecular Docking. ***International Journal of Nanomedicine***, 28-08-2026; Volume 2026:21, 614754. https://doi.org/10.2147/IJN.S614754 **(W-Category | Impact Factor: 8.7)**

5. Ayesha Samee, Faisal Usman, Tanveer A. Wani, Mudassir Farooq, Hamid Saeed Shah, Ibrahim Javed, **Hassan Ahmad**, Riffat Khan, Seema Zargar and Safina Kausar. Sulconazole-Loaded Solid Lipid Nanoparticles for Enhanced Antifungal Activity: In Vitro and In Vivo Approach. ***Molecules***, 09-11-2023; Volume 28, Issue 22: 7508. https://doi.org/10.3390/molecules28227508 **(W-Category | Impact Factor: 5.1)**.
6. Faisal Usman, Mudassir Farooq, Tanveer A. Wani, **Hassan Ahmad**, Ibraheem Javed, Mazhar Iqbal, Fatima Akbar Sheikh, Farhan Siddiqui, Seema Zargar and Saleh Sheikh. Itraconazole loaded Biosurfactin Micelles with enhanced antifungal activity: Fabrication, Evaluation and Molecular Simulation. ***Antibiotics***, 19-10-2023; Volume 12, Issue 10: 1550. https://doi.org/10.3390/antibiotics12101550 **(W-Category | Impact Factor: 5.5)**.
7. Muhammad Imran Qureshi, Qazi Adnan Jamil, Faisal Usman, Tanveer A. Wani, Mudassir Farooq, Hamid Saeed Shah, **Hassan Ahmad**, Ruqaiya Khalil, Muhammad Sajjad, Seema Zargar, Safina Kausar. Tioconazole loaded Transethosomal Gel using Box-Behnken design for Topical applications; In-vitro, In-vivo, and Molecular docking approach. ***Gels***, 21-09-2023; Volume 9, Issue 9: 767. https://doi.org/10.3390/gels9090767 **(W-Category | Impact Factor: 6.4)**.
8. Mudassir Farooq, Faisal Usman, Mahrukh Naseem, Hanan Y. Aati, **Hassan Ahmad**, Sirikhwan Manee, Ruqaiya Khalil, Kashif ur Rehman Khan, Muhammad Imran Qureshi and Muhammad Umair. Voriconazole Cyclodextrin Based Polymeric Nanobeads for Enhanced Solubility and Activity: In Vitro/In Vivo and Molecular Simulation Approach. ***Pharmaceutics***, 24-01-2023; Volume 15, Issue 2: 389. https://doi.org/10.3390/pharmaceutics15020389 **(W-Category | Impact Factor: 6.9)**.
9. Touqeer Zahra, Hafiz Shoaib Sarwar, Muhammad Sarfraz, Muhammad Zaman, **Hassan Ahmad**, Aamir Jalil, Gul Shahnaz, Muhammad Farhan Sohail. Thiomer coated solid lipid nanoparticles for the enhanced oral bioavailability of tacrolimus: in-vitro and in-vivo evaluation. ***Journal of Drug Delivery Science and Technology***, November 2022; Volume 77: 103892. https://doi.org/10.1016/j.jddst.2022.103892 **(W-Category | Impact Factor: 5.2)**.
10. Waqas Akram, Naeem Ijaz, **Hassan Ahmad**, Muhammad Jamshaid, Nahlah Elkudssiah Ismail. Barriers to the provision of asthma services and perceived practice towards asthma management among urban community pharmacists in Selangor, Malaysia. ***Brazilian Journal of Pharmaceutical Sciences***, 2018; 54(4): e17324. https://doi.org/10.1590/s2175-97902018000417324 **(W-Category | Impact Factor: 0.9)**.
11. N. M. Ranjha, A. Madni, A. AbuBakar, N. Talib, S. Ahmad and **Hassan Ahmad**. Preparation and Characterization of Isosorbide Mononitrate Hydrogels Obtained by Free-Radical Polymerization for Site-Specific Delivery. ***Tropical Journal of Pharmaceutical Research***, Dec 2014; 13(12): 1979–1985. https://doi.org/10.4314/tjpr.v13i12.4 **(W-Category | Impact Factor: 0.6)**.
12. I. Pervaiz, S. Ahmad, M. A. Madni, **H. Ahmad** and F. H. Khaliq. Microbial Biotransformation: A Tool for drug designing. ***Applied Biochemistry and Microbiology***, Sept 2013; 49(5): 437–450. https://link.springer.com/article/10.1134/S0003683813050098 **(W-Category | Impact Factor: 1.171)**.
13. Muhammad Khurram Shahzad, Mahboob-e-Rabbani, Asadullah Madni, Mahmood Ahmad, Muhammad Usman, Mahtab Ahmad Khan, **Hassan Ahmad** and MD Ekwal. Characterization and In-Vitro Release Study of Celecoxib Microspheres Synthesized from Biodegradable Polymethacrylate and Poly-Vinyl Pyrolidone. ***Journal of the Chemical Society of Pakistan***, 2012; 34(3): 737–743. https://jcsp.org.pk/issueDetail.aspx?aid=17e2723c-c19c-4c65-84e0-04953d246a3e **(W-Category | Impact Factor: 0.6)**.
14. Shehla Nargis, Ovais Ullah Shirazi, **Hassan Ahmad**, Tassawer-e-Meran, Waqas Akram, Ali Akhtar. Evaluation of urinary tract infections among chronic kidney disease patients in a tertiary care hospital in Lahore, Pakistan. (Manuscript Number: RMJ-2025-07-241. Accepted for publication in the ***Rawal Medical Journal*** in August 31, 2026 (**X-Category | Impact Factor: 0.2**
15. Waqas Akram, **Hassan Ahmad**, Muhammad Jamshaid and Nahlah E. Ismail. Assessment of asthma knowledge among urban community pharmacists in Selangor, Malaysia. ***Pak Armed***

Forces Med J (PAFMJ), 2018; 68(3): 651–657. https://pafmj.org/index.php/PAFMJ/article/view/2105 **(Scopus Indexed | Category Y)**.

16. Talha Mazhar, **Hassan Ahmad**, Rabia Munir, Aisha Rashid, Sameen Qamar, Maria Manan, Sarah Ahmad, Rimsha Tanveer, Ayesha Imtiaz, Zainab Siddique, Hafiz Muhammad Faisal, Saeeda Rafi, Subaina Rafi, Muhammad Alamgir, Waris Nawaz, Ali Abbas. Green synthesis and comparative therapeutic evaluation of Morin Hydrate-Stabilized Zinc Oxide and Iron Oxide nanoparticles. ***Review Journal of Neurological & Medical Sciences Review***, 2026; 4(6): 25–44. https://doi.org/10.63075/zqpcjj48 | https://nmsreview.org/index.php/rjnmsr/article/view/980/754 **(HEC Recognized Y-Category)**.
17. Mujahid Ali, Ali Akhtar, Waqas Akram, Mahtab Ahmad Khan, Muhammad Nadeem Alvi, Muhammad Abbas Raza, Israr Tanveer, Muhammad Hammad, Muhammad Sabtain Abbas, **Hassan Ahmad** and Mirza Usama. Assessment of medication adherence and factors among hypertensive patients. ***Cardiology and Vascular Research***, 20-08-2025. https://www.wecmelive.com/peer-review/assessment-of-medication-adherence-and-factors-among-hypertensive-patients-700.html.
18. Muhammad Umer, Ovais Ullah Shirazi, Waqas Akram, Mahtab Ahmad Khan, Muhammad Nadeem Alvi, Muhammad Bilal Aslam, Khadija-Tul-Kubra, **Hassan Ahmad**, Zainab Farooq, Eman Shahzad Khan, Mahnoor Asim, Shaina Rehman, Hira Foaad, Itzaz Aslam, Ali Akhtar. Risk factors associated with endometriosis-related fertility. ***Journal of Clinical Case Reports, Medical Images and Health Sciences***, 15-07-2025. https://jmedcasereportsimages.org/articles/JCRMHS-1505.pdf.
19. Faryal Fatima, Ovais Ullah Shirazi, Waqas Akram, Mahtab Ahmad Khan, Badar Muneer, Uqba Ijaz, Javeria Khan, Muhammad Nadeem Alvi, Shumaima-Tul-Salyha, **Hassan Ahmad**, Itzaz Aslam, Muqaddas Raza, Marwa Zaheer, Ameer Hamza, Muhammad Haris and Ali Akhtar. Awareness and Practices of cosmetovigilance among female cosmetic users in Lahore, Pakistan. ***Journal of Clinical Medicine and Healthcare***, 07-07-2025. https://oaskpublishers.com/article/awareness-and-practices-of-cosmetovigilance-among-female-cosmetic-users-in-lahore-pakistan .
20. Muhammad Zulqurnain, Ovais Ullah Shirazi, Muhammad Arham Amin, Huzaifa Ishtiaq, Muhammad Yasir Iqbal, Muhammad Nadeem Alvi, **Hassan Ahmad**, Waqas Akram, Muzamal Hussain, Gul Sher Ahmad, Muhammad Moiz Ahmad, Umda Tun Nisa, Muhammad Saad Rao, Itzaz Aslam, Saad Hassan and Ali Akhtar. Evaluating the awareness, accessibility and impact of Telepharmacy in enhancing healthcare delivery in Pakistan. ***Trends in Telemedicine and E-health***, 28-05-2025. https://crimsonpublishers.com/tteh/fulltext/TTEH.000620.php
21. Zaheer-ud-Din Babar, Asadullah Madni, Naveed Akhtar, Aubidallah Khan, Tariq Mahmood, **Hassan Ahmad**, Nayab Tahir. Diagnostic Measures in Childhood Tuberculosis: A Short Review. ***Journal of Pharmacy and Alternative Medicine***, 2013; 2(1): 3–5. https://iiste.org/Journals/index.php/JPAM/article/view/4375.
22. Z. Hussain, Muhammad Imran Din, Asadullah Madni, A. Iftikhar and **Hassan Ahmad**. Stability kinetics evaluation of pharmaceutical drug products. ***Archives Des Sciences***, Feb 2012; Vol. 65, No. 2. https://www.researchgate.net/publication/303252619_Stability_Kinetics_Evaluation_of_Pharmaceutical_Drug_Products

Conference Papers/Presentations

- **Ahmad Hassan and Hassan Ahmad.** Preparation and characterization of Pectin based in-situ hydrogels for sustained release of Naproxen Sodium. *2nd National Pharmacy Scientific Conference and Poster Exhibition: "Bridging the gap between Industry and Academia"*, held on 23rd November 2023, organized by FOPS, UCP, Lahore.

- **Hassan Ahmad and Muhammad Sohail Arshad.** Preparation and Characterization of Polymeric gels. *5th Annual International Pharmacy Scientific Symposium*, organized by Faculty of Pharmacy, University of Central Punjab, Lahore, Pakistan (29–30 March 2019).
- **Asma Tufail Shah, Imran Din, Asadullah Madni, Hassan Ahmad.** Synthesis of Copper nanoparticles supported on SBA-16 and their use for chemical vapor deposition growth of carbon nanotubes. *2nd National Pharmacy Conference and Exhibition: "Pharmacy Profession for Prosperous Health"* (February 8–9, 2013, Department of Pharmacy, The Islamia University of Bahawalpur in collaboration with H.E.C., Pakistan)

GRANTS, FELLOWSHIPS, HONORS & PROFESSIONAL LICENSURE

- **Punjab Educational Endowment Fund (PEEF) Masters Level Merit Scholarship** (March 2011 – March 2013).
- **The Islamia University of Bahawalpur Yearly Merit Scholarship** at undergraduate Pharm.D. level (2006 – 2010).
- **Punjab Benevolent Fund Scholarship** for children of government employees.
- **International Pharmacist Licensure:** Passed **Dubai Health Authority (DHA)** examination (U.A.E.) and **Saudi Licensing Exam (SLE)** for Pharmacists (K.S.A.).
- **National Professional Registrations & Memberships:**
  - Registered Pharmacist, **Punjab Pharmacy Council (PPC)**, Lahore & **Pharmacy Council of Pakistan (PCP)**.
  - Member, **Pakistan Scientific and Technological Information Centre (PASTIC)**
  - Member, **National Academy of Young Scientists (NAYS)**, Pakistan.
  - Member, **Foundation of Young Researchers (FYR)**, Pakistan.
  - Member, **Pakistan Pharmacists Association (PPA)**, Punjab & **Islamia University Pharmacists Association (IUPA)**.

TECHNICAL INSTRUMENTATION & METHODOLOGICAL PROFICIENCIES

- **Analytical & Physicochemical Characterization Instruments:** High-Performance Liquid Chromatography (HPLC with ChemStation), Differential Scanning Calorimetry (DSC), X-Ray Diffraction (XRD), Scanning Electron Microscopy (SEM) analysis, Fourier-Transform Infrared Spectrophotometry (FTIR), Rotational Rheometer/ Viscometer, Franz Cell Transdermal Diffusion Apparatus, USP Dissolution Apparatus, and UV-Vis Spectrophotometer.
- **Computational Pharmaceutics & Molecular Simulation Software:** AutoDock Vina (Molecular Docking), GROMACS & LAMMPS (Molecular Dynamics Simulations), Sybyl Sketch, ChemDraw, and Density Functional Theory (DFT) modeling workflows.
- **Quality-by-Design (QbD), Pharmacokinetics & Statistical Packages:** Design-Expert (Box–Behnken / Response Surface Methodology), WinNonlin (Pharmacokinetic modelling), DD-Solver (Drug dissolution kinetics), SPSS, Minitab, Sigma Plot, Origin, MS Office, and EndNote

RESEARCH EXPERIENCE & TRANSLATIONAL MILESTONES

- **Principal Investigator & Postgraduate Research Supervisor (Pharmaceutics)** *(Dec 2016 – Date)*
  - **Faculty of Pharmaceutical Sciences (FOPS), University of Central Punjab (UCP), Lahore**

- **Postgraduate Thesis Supervision:** Supervised **04 M.Phil.** students and co-supervised **02 M.Phil.** students in advanced formulation development and nanomedicine.
- **Stimuli-Responsive Injectable Depot Hydrogels:** Synthesized thermosensitive chitosan/glycerol phosphate and polymeric *in-situ* hydrogels encapsulating naproxen sodium, utilizing FTIR, DSC, XRD, rheological sol-gel transition profiling, *in silico* docking, and *in vivo* animal models to achieve sustained parenteral release over prolonged **hours** and a **multi-fold** enhancement in *in vivo* bioavailability/MRT (*Int. J. Pharm.* 2022; *Pharm. Res.* 2026).
- **Functionalized Lipid & Polymeric Nanocarriers:** Engineered thiomer-coated solid lipid nanoparticles (SLNs) for oral tacrolimus delivery (*J. Drug Deliv. Sci. Technol.* 2022) and campesterol-loaded Shellac–PLGA hybrid nanoparticles supported by DFT and molecular docking for breast cancer therapy (*Int. J. Nanomedicine* 2026), achieving enhanced encapsulation efficiency and increased oral bioavailability and anticancer potency.
- **QbD-Optimized Antifungal Nanomedicines:** Applied Box–Behnken factorial designs (Design-Expert) and molecular dynamics simulations to fabricate voriconazole cyclodextrin polymeric nanobeads (*Pharmaceutics* 2023), tioconazole transethosomal gels (*Gels* 2023), itraconazole biosurfactin micelles (*Antibiotics* 2023), and sulconazole SLNs (*Molecules* 2023), yielding sub-micron particle sizes and higher antifungal/transdermal permeation.

- **Visiting Research Scholar (Biomedical Nanomaterials)** ***(March 2012 – March 2013)***
  - **Interdisciplinary Research Center in Biomedical Materials (IRCBM), COMSATS University Islamabad (formerly CIIT), Lahore Campus**
  - **Supervisor:** Dr. Asma Tufail Shah.
  - **Mesoporous Silica Catalyst Engineering:** Synthesized copper nanoparticles supported on mesoporous SBA-16 silica matrices and demonstrated their catalytic utility for chemical vapor deposition (CVD) growth of carbon nanotubes.

TEACHING, MENTORSHIP & ACADEMIC SERVICE

- **Assistant Professor of Pharmacy (Pharmaceutics)** *(December 2016 – Date)*
  - **Faculty of Pharmaceutical Sciences (FOPS), University of Central Punjab (UCP), Lahore**
  - **Laboratory Governance:** Serving as Laboratory Incharge / Coordinator of the **Pharmaceutical Quality Control and Instrumentation Laboratory** from January 2022 to date.
  - **Postgraduate & Undergraduate Courses Taught:**
    - *Pharmaceutical Technology (Ph.D., M.Phil., and Pharm.D.):* Liposomes, niosomes, nanoparticulate drug delivery, formulation development, pharmacokinetic modeling, and *in vitro*, *in vivo*, and *in silico* evaluation of drugs.
    - *Industrial Pharmacy (4th Prof. Pharm.D.):* Applied pharmaceutical manufacturing unit operations (mixing, drying, tablet compression, compaction, heat/mass transfer) and pilot scale-up.
    - *Pharmaceutical Quality Management (4th Prof. Pharm.D.):* Pharmacopeial quality control testing parameters, cGMP compliance, and stability kinetics for pharmaceutical dosage forms.
    - *Advanced Pharmaceutical Microbiology (M.Phil. Pharmaceutics & 2nd Prof. Pharm.D.).*

- *Physical Pharmacy (1st Prof. Pharm.D.):* Physicochemical principles, rheology, disperse systems (emulsions, suspensions), and micromeritics.

- **Academic & Industrial Service:** Designed course outlines and authored standardized laboratory manuals for Industrial Pharmacy, Pharmaceutical Quality Management, and Physical Pharmacy labs; established academic–industrial linkages for practical student training.
- **Lecturer / Senior Lecturer, Pharmacy (Pharmaceutics)** *(December 2013 – November 2016)*
  - **Akhtar Saeed College of Pharmaceutical Sciences, Lahore**
  - Taught undergraduate Pharm.D. courses including *Physical Pharmacy*, *Dosage Form Science*, *Forensic Pharmacy*, *Hospital Pharmacy*, *Pharmaceutical Microbiology*, and *Clinical Pharmacy*.
  - Designed laboratory manuals for Clinical Pharmacy, Physical Pharmacy, and Pharmaceutical Microbiology labs; served as Class and Attendance Incharge for final-year Pharm.D. students.
  - **University Examining Appointments (2014–2016):**
    - *University of the Punjab, Lahore:* Internal Examiner for *Physical Pharmacy* and *Pharmaceutical Microbiology* annual examinations.
    - *University of Sargodha, Sargodha:* Internal Examiner for *Hospital Pharmacy*, *Clinical Pharmacy*, *Pharmaceutical Technology*, and *Forensic Pharmacy*.
- **Visiting Lecturer, Pharmaceutics** *(2011 – 2012)*
  - **Department of Pharmacy, Faculty of Pharmacy & Alternative Medicine, The Islamia University of Bahawalpur**
  - Taught *Physical Pharmacy and Pharmaceutical Calculations* to Final Year Pharm.D. (condensed class), covering physicochemical principles, alligation, isotonicity, dose/potency calculations, and formula scaling.
- **Clinical, Hospital & Medical Communications Experience**
  - **Medical Content Writer** *(April 2016 – October 2016)*: Health Units Inc. (https://healthunits.com/) — Authored and reviewed evidence-based articles on therapeutics and clinical guidelines referencing FDA, WHO, and peer-reviewed journals.
  - **Community Pharmacist (Full-Time)** *(1st March 2011 – 15th July 2013)*: Public Patient Care and Pharmacy, DC Road, Gujranwala.
  - **Hospital Pharmacist (Honorary)** *(1st January 2011 – 28th February 2011)*: Lahore General Hospital / PGMI, Lahore.

SELECTED WORKSHOPS, CONFERENCES & CERTIFICATIONS (NATIONAL & INTERNATIONAL)

1. **OIC-COMSTECH & IiLM Joint Workshop:** Certificate in *"Healthcare Leadership Global Models For Transforming System & Culture"* (17 July 2025).
2. **Coursera Project Network:** *"Introduction to Data Analysis Using Microsoft Excel"* (15 January 2025).
3. **HEC PhD Supervision Certification:** Completed *PhD Supervision Course* conducted from 05–15 August 2024 as per **HEC Graduate Education Policy (2023)** guidelines.

4. **Intellectual Property Training:** Workshop on *"Intellectual Property"* (7 August – 11 September 2024), Office of Research, Innovation & Commercialization (ORIC), UCP.
5. **Research Grants Training:** Workshop on *"Research Proposals & Grants—Challenges and Opportunities"* (5–6 September 2024), ORIC, UCP.
6. **Research Procurement Seminar:** *"Strategic Assessment and Procurement of Research Material"* by Sultan Group at FOPS, UCP Lahore (3 September 2024).
7. **Clinical Trials Training:** One-day workshop on *Good Clinical Practices (GCP)* by PACRA (Pan-Asian Clinical Research Association) and OrciTrials (Pvt.) Ltd. at UCP, Lahore (22 February 2024).
8. **International Nanomedicine Lecture:** Virtual Participation in *"Importance and Recent Development of Nanotechnology-based Drug Delivery Systems in Herbal Medicines"*, Center for Herbal Medicine, Universitas Gadjah Mada, Indonesia (28 December 2023).
9. **Conference Organizer & Member Registration Committee:** *2nd National Pharmacy Scientific Conference and Poster Exhibition: "Bridging the Gap between Industry and Academia"*, FOPS, UCP, Lahore (23 November 2023).
10. **Industrial Placement:** Completed 1-week *Faculty Industry Placement Program (FIPP)* organized by ORIC, UCP (11–17 September 2023).
11. **Conference Organizer & Participant:** *3rd National Conference on "Current Trends & Innovations in Drug Delivery" (CTIDD 2023)*, Bahauddin Zakariya University, Multan (23 February 2023).
12. **Computational & Molecular Modeling Certifications (16 September 2022):** Completed *"The Complete Introduction to LAMMPS"* (Philip Baldock), *"Introduction to Cheminformatics and Medicinal Chemistry"* (Dr. Guilherme Matos Passarini), and *"Bioinformatics: Learn Docking & Mol Dynamics Simulations"* (Muhammad Dujana).
13. **Pakistan Chemical Forum Session:** Expo Center, Johar Town, Lahore (5 August 2022).
14. **Nanopharmaceutics Webinar:** *"Frontiers of Advanced Nanopharmaceutics"* (30 June 2022).
15. **Member Organizing Committee:** *Pharmacy Scientific Symposium & Pharmaceutical Exhibition-2022*, UCP, Lahore (22 June 2022).
16. **Computational Chemistry Hands-On Training:** *"Application of Computational Chemistry Tools in Pharmaceutical Sciences"*, FOP, UCP (26 November 2021).
17. **5th Annual International Pharmacy Scientific Symposium & Exhibition:** *"Innovations in Pharmaceutical Sciences & Future Challenges"*, FOP, UCP, Lahore (29–30 March 2019).
18. **Pharmacoeconomics & Pharmacy Practice Workshops:** *"The Role of Pharmacoeconomics/Health Economics in Health Policy Making"* (12 December 2017) and *"Challenges & Priorities of Pharmacy Practice Research in Pakistan"* by Prof. Dr. Zaheer-ud-Din Babar, University of Huddersfield, UK (21 November 2017), PPA House, Lahore.
19. **Pedagogical Training:** *"Empowering Effective Teaching in Pharmacy Education"*, Punjab University College of Pharmacy, Lahore (19 November 2016).
20. **Grant Writing at COMSATS:** Research workshop on *"The Art of Scientific Writing" & "How to Win Grants"*, organized by **IRCBM, CIIT (COMSATS), Lahore** (17 December 2014).
21. **Additional National & International Seminars (2007–2013):** *Lasers and Nanotechnology* (UET Lahore, 14 June 2012); *Publishing Your Research* (IRP, 2 June

2012); *17th International Pharmacy Conference & Exhibition (IPCE)* (Islamabad, 19–21 April 2012); *New Paradigm in Drug Discovery-Research on MDR Reversal* by Prof. Dr. M. Iqbal Choudhary (IUB, 16 January 2012); *Medication Safety: A Paradigm Shift in Healthcare Systems* (UCP, 14 January 2012); *Improving Pharmacy Practice Research* by Assoc. Prof. Dr. Azmi Hassali, USM Malaysia (IUB, 27 April 2011); *1st International Conference Jinnah Hospital Pharmacy Practices* (AIMC, 12–14 February 2010); and *14th IPCE* (Karachi, 2007).

LANGUAGES & EXTRACURRICULAR ACTIVITIES

• **Languages:** English (Full Professional Academic & Technical Proficiency; IELTS Overall Band 6.5, July 2016), Urdu (Native), Punjabi (Native).

• **Personal Interests & Fitness:** Long-distance running (4–5 km daily), cricket (former school team captain), nature travel, classical/contemporary music, and classic literature (Tolstoy, Dickens, Brontë, Conan Doyle, Tolkien, Covey).

REFERENCES (Can be furnished on demand also)

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