

Dr. Amjad Hussain

Associate Professor (Pharmaceutics)



B.Sc., B.Pharm Gold Medalist, R.Ph(Pb)
M.Phil. (Pharmaceutics), Pb
PhD (Pharm Tech.) DMU, UK
HEC Approved Supervisor

Contact Details:
Office: +92(0)42-99211616,
Mobile +92(0)333-4274049
amjad_husein@hotmail.com
amjadhussain.pharmacy@pu.edu.pk
Skype ID: amjadhussain3347
ORCID ID: 0000-0002-9427-2677

PERSONAL INFORMATION

Father's Name	Ghulam Muhammad	Nationality	Pakistani
Address: 100-D, Nawab Town 2-Km Raiwind Road Lahore (Home)			
University College of Pharmacy, University of the Punjab, Lahore Pakistan-54550 (Office)			

OBJECTIVE

To excel the academic and research activities through innovative contribution in the field of Pharmaceutical Technology and Pharmacy.

PROFILE SUMMARY

A dynamic professional with more than 17 years' experience of working as teacher, researcher and professional pharmacist in university, hospital, community and a regulatory authority of Pakistan. His research expertise includes; Formulation design, Solubility and/dissolution enhancement via co-milling and solid dispersions, Centrifugal spinning, 3D printing of pharmaceuticals, Microencapsulation, Microneedle and Transdermal drug delivery, orally disintegrating tablets & films, THz spectroscopy, Broadband Dielectric Spectroscopy (BDS) and Differential Scanning Calorimetry (DSC). He has worked at many managerial position including purchase officer of teaching hospital, manager retail pharmacy, and many other administrative responsibilities at University College of pharmacy, University of the Punjab.

A trained postgraduate supervisor with 70 M.Phil. (25 as supervisor and 45 co-supervisor) and 02 PhD students (underway) and 01 PhD completed. He has completed 04 research projects funded by University of the Punjab (worth 0.6 million rupees) and currently undertaking 03 research project (as Principal Investigator, worth ~5 million rupees, Two from HEC, Pakistan and one from PU) and 03 research projects (as co-investigator). He has published one book and more than 45 Articles in well reputed international and national Journals and has cumulative impact factor around Sixty (~65) and 100 citations. He has participated in many international (UK, Europe) and national conferences (more than 30) and presented his research as a podium presentation (more than 13) or as poster (more than 35).

EDUCATION

1	PhD (Pharmaceutical Technology) from Leicester School of Pharmacy, Faculty of Health and Life Sciences, De Montfort University (DMU), Leicester, United Kingdom (2015). (Research Supervisor Prof. Geoff Smith)	Title "A study of mechanisms of milling induced enhancement of solubility and dissolution rate of poorly soluble drugs"	
<p style="text-align: center; color: red;">This PhD research includes the exploration of underlying mechanisms of solubility and dissolution rate enhancement by milling and co-milling and involves</p> <ul style="list-style-type: none"> i) Changes brought by milling & co-milling that help in solubility/ dissolution rate enhancement ii) Quantification of amorphous/crystalline content iii) Molecular mobility in amorphous phase. iv) Comparison of THz and DSC techniques for the quantification of crystalline content v) Comparison of Broadband dielectric spectroscopy and DSC in studying the molecular mobility during crystallization 			
2	M.Phil (Pharmaceutics), 2007, University of the Punjab, Lahore	1 st division	First Position in M.Phil (Pharmaceutics)
3	Bachelor of Pharmacy (B.Pharmacy) 2002, University of the Punjab, Lahore	1 st division	Gold Medalist (Got overall First position in university)
4	Bachelor of Science (English only), 2001 University of the Punjab, Lahore	1 st division	
4	F.Sc. (Pre Medical) 1996, BISE, Lahore	1 st division	
5	Matriculation (Science) 1993, BISE, Lahore	1 st division	Secured 3rd position in School

CAREER HISTORY

S. No.	Position	Date employed/ experience	Status	Employer
1	Associate Professor (current job)	09-12 2019 to date	Regular BPS-20	University of the Punjab, Lahore, Pakistan
2	Assistant Professor	7 years	Regular BPS-19	University of the Punjab, Lahore, Pakistan
3	Lecturer	4 years	Regular BPS-18	University of the Punjab, Lahore, Pakistan
4	Hospital Pharmacist /Drug Inspector	4 years	Regular BPS-17	Health Department Government of the Punjab Under this job worked at i) Mayo Hospital Lahore ii) THQ Hospital Kamoki iii) EDO (H) office Gujranwala iv) Children Hospital Lahore
5	Hospital Pharmacist (purchase officer)	2 years	Contract BPS-17	The Children Hospital and Institute of Child Health Lahore
6	Manager Pharmacy	6 months	Private	Fazal Din & Sons (Chemist & Druggist, Lahore)

ALLIED JOB EXPERIENCES

- Part time Lecturer (Pharmaceutics) in University College of Pharmacy University of the Punjab from August 2007 to February 2009.
- Teaching Experience (2 years) of Clinical Biochemistry to B.Sc. Lab Technology students at School of Allied Health Sciences, Children Hospital Lahore.
- Teaching experience at various academics at both F.sc & B.Sc. Level
- Demonstrator for Training of Undergraduate Pharmacist in Clinical Pharmacy and Pharmaceutical aspects of patient care in Children Hospital Lahore.

RESEARCH INTERESTS

- Formulation design and Pre-formulation studies.
- Solubility and/dissolution rate enhancement techniques including Milling and co-milling, Solid dispersion, Hot Melt Extrusion & Co-crystallization
- Study of changes in crystalline/Amorphous phase (THz, BDS and DSC analysis)
- Microencapsulation, Preparation and Characterization of Microcapsules
- 3D printing for personalized delivery of medicine and printing of prosthesis
- Micro-needles and transdermal delivery
- Orally disintegrating films (ODFs)
- Microfibers generated by Centrifugal Spinning Technique and
- Pharmacy Practice

REVIEWER OF JOURNALS

I have been appointed as reviewer of various national and international journals including

- Pharmaceutical Development and Technology (Taylor & Francis)
- Journal of Dispersion Science and Technology (Taylor & Francis)
- Asian Journal of research in medical and Pharmaceutical sciences
- Pakistan Journal of Pharmacy

PROFESSIONAL MEMBERSHIPS

- Registered Pharmacist (R.Ph) with Punjab Pharmacy Council
- Member Pakistan Pharmacist Association.
- Member Academy of Pharmaceutical Sciences (APS), PharmSci, UK.
- Member Controlled Release Society (CRS).
- Member Punjab University Alumni Association
- Member Punjab University Pharmacy Alumni (PUPA).
- Member Alumni De Montfort University, Leicester, UK.

PROFESSIONAL DEVELOPMENT TRAININGS FOR UNIVERSITY TEACHERS

S. No	Title	Organizer	Venue	Year
1	Beginning to Teach in Higher Education	DMU, Leicester, UK	DMU, Leicester, UK	2012
2	One month Professional competency enhancement program	Higher Education Commission (HEC), Pakistan	IER, University of the Punjab.	2010
3	One week workshop on "Competency Enhancement of teachers	Higher Education Commission (HEC), Pakistan	UVAS, Lahore	2010
4	One week workshop on "Faculty orientation	University of the Punjab	Institute of Administrative Sciences	2010
5	One week Indigenous on-campus training course for management team	Higher Education Commission (HEC), Pakistan	University of the Punjab.	2012

RESEARCH PROJECTS/GRANTS

S. No	Title of project	Funding Agency	Amount awarded	Role	Status
1	Development of 3D Printed tablets for personalized delivery of drugs	HEC (NRPU Scheme)	2.33 million rupees	PI***	Underway
2	Addressing the challenge of poor solubility of BCS Class-II Drugs using some novel approaches	HEC* (NRPU Scheme)	2.4 million PKR	PI	Underway
3	Development and characterization of polymeric based microneedles, a novel approach for the delivery of biopharmaceuticals"	HEC* (NRPU Scheme)	2.43 million PKR	Co-PI	Underway
4	Effect of co-crystallization on the properties of Drug and its dosage form	HEC* (NRPU Scheme)	1.4 million PKR	Co-PI	Waiting for funds
5	Study of Centrifugal Spinning: A novel method for the enhancement of dissolution rate of poorly soluble drugs	Punjab University (2019)	150,000/ PKR	PI	Underway
6	Formulation and Evaluation of Orally Disintegrating Films (ODFs) of Promethazine HCl	Punjab University (2017)	150,000/ PKR	PI	Completed
7	A study of techniques for the enhancement of solubility and dissolution rate of poorly soluble drugs	Punjab University (2016)	1,50,000/ PKR	PI	Completed
8	Micellar Solubilization of Mefenamic Acid using Soluplus	Punjab University (2014)	1,50,000/ PKR s	PI	Completed
9	A Study of Solid Dispersions Prepared by Co-Milling A Quality by Design (QbD) Approach to Improve the Solubility and Dissolution Rate of Poorly Soluble Drugs	Punjab University (2013)	1,25000 PKR	PI	Completed

* HEC stands for Higher Education Commission of Pakistan

** NRPU is the National Research project for Universities

***PI is Principal investigator

ACADEMIC ACHIEVEMENTS & AWARDS

S.No	Title	Awarding agency	Year of award
1	Gold medal on getting overall first position in B.Pharm examination 2002.	University of the Punjab & Schazoo Laboratories Pvt.Ltd.	2002
2	Certificate of Honor on getting highest total marks in B. Pharmacy	Chairman Pharmacy Department, University of the Punjab	2002
3	Certificate of Honor on getting first position in B. Pharmacy	Qarshi Foundation Pakistan	2002
4	Honorarium and on air interview on getting first position in B.Pharm examination	Radio, Pakistan	2002
5	2 nd position award in podium presentation competition held among the class.	College of Pharmacy, University of the Punjab	1999
6	Merit Scholarships during 1 st , 2 nd , 3 rd and final Prof. B. Pharmacy.	University of the Punjab	1998-2001
7	Attempt certificate for passing all four Professionals of B. Pharmacy in First Attempt	College of Pharmacy, University of the Punjab	2002
8	Certificate by for getting First Position in M.Phil. (Pharmaceutics).	Principal College of Pharmacy, University of the Punjab	2006
9	Five advance increment when selected as lecturer	University of the Punjab	2009
10	Overseas scholarship for PhD in UK	University of the Punjab	2011
11	Certificate for delivering honorary lectures	DMU, Leicester, UK.	2012
12	Five advance increment in pay when selected as Assistant Professor	University of the Punjab	2012
13	Performance evaluation award for overall performance during the year	University of the Punjab	2014
14	Incentive award on research publication	University of the Punjab	2015
15	Performance evaluation award for overall performance during the year	University of the Punjab	2015
16	Incentive award on research publication	University of the Punjab	2016
17	Performance evaluation award for overall performance during the year	University of the Punjab	2016
18	HEC Approved supervisor	Higher Education Commission of Pakistan	2016
19	Incentive award on research publication	University of the Punjab	2017
20	Performance evaluation award for overall performance during the year	University of the Punjab	2017
21	Incentive award on research publication	University of the Punjab	2018
22	Performance evaluation award for overall performance during the year	University of the Punjab	2018
23	Incentive award on research publication	University of the Punjab	2019
24	Performance evaluation award for overall performance during the year	University of the Punjab	2019

RESEARCH PUBLICATIONS

International Journals

1. Faisal Mahmood, **Amjad Hussain**, et.al. (2019). Effect of Solubilizing Aids on The Entrapment of Loratidine in Pre-Fabricated PVA Filaments Used for FDM Based 3D-Printing. *Acta Polonea Drug research, just accepted*.
2. Arshad, M. S., Fatima, S., Nazari, K., Ali, R., Farhan, M., Muhammad, S. A., Abbas, N., **Hussain, A.**, Kucuk, I., & Chang, M.-W. (2019). Engineering and Characterisation of BCG-loaded polymeric microneedles. *Journal of Drug Targeting* (just-accepted), 1-25.
3. Arshad, M. S., Hassan, S., **Hussain, A.**, Abbas, N., Kucuk, I., Nazari, K., . . . Ahmad, Z. (2019). Improved transdermal delivery of cetirizine hydrochloride using polymeric microneedles. *DARU Journal of Pharmaceutical Sciences*. doi: 10.1007/s40199-019-00301-3
4. Arshad, M. S., Shahzad, A., Abbas, N., AlAsiri, A., **Hussain, A.**, Kucuk, I., Ahmad, Z. (2019). Preparation and characterization of indomethacin loaded films by piezoelectric inkjet Printing: A personalized medication approach. *Pharmaceutical Development and Technology*, 1-21. doi: 10.1080/10837450.2019.1684520
5. **Amjad Hussain**, M. F., Nasir Abbas, Muhammad Irfan, Muhammad Sohail Arshad, Nadeem Irfan Bukhari. (2019). Effect of low melting hydrophilic carriers on the solubility and dissolution rate of Piroxicam using solid dispersion technique. *Pakistan journal of Pharmaceutical Sciences*, 32(5S).
6. Qamar, N., Abbas, N., Irfan, M., **Hussain, A.**, Arshad, M. S., Latif, S., Ghori, M. U. (2019). Personalized 3D printed ciprofloxacin impregnated meshes for the management of hernia. *Journal of Drug Delivery Science and Technology*, 53, 101164.
7. Hussain, K., Qamar, A., Bukhari, N. I., **Hussain, A.**, Shehzadi, N., Qamar, S., & Parveen, S. (2019). Impact of Particle-Size Reduction on the Solubility and Antidiabetic Activity of Extracts of Leaves of Vinca rosea. *Turkish journal of Pharmaceutical Sciences*, 16(3), 335-339.
8. Arshad, M. S., Sedhain, K., **Hussain, A.**, Abbas, N., Mudassir, J., Mehmood, F., Latif, S. (2019). Quantification of carbon dioxide released from effervescent granules as a predictor of formulation quality using modified Chittick apparatus. *Tropical Journal of Pharmaceutical Research*, 18(3)
9. Abbas, N., Parveen, K., **Hussain, A.**, Latif, S., uz Zaman, S., Shah, P. A., & Ahsan, M. (2019). Nanosponge-based hydrogel preparation of fluconazole for improved topical delivery. *Tropical Journal of Pharmaceutical Research*, 18(2), 215-222.
10. Batool, S., Abbas, N., Mudassir, J., **Hussain, A.**, & Arshad, M. S. (2019). Gastroretentive Clarithromycin Loaded Sodium Alginate Microbeads: Effect of Needle Size and Drying Processes on the Swelling and Release Profile. *Latin American Journal of Pharmacy*, 38(2), 271-280.
11. **Hussain, A.**, Smith, G., Khan, K. A., Bukhari, N. I., Pedge, N. I., & Ermolina, I. (2018). Solubility and dissolution rate enhancement of ibuprofen by co-milling with polymeric excipients. *European Journal of Pharmaceutical Sciences*, 123, 395-403.
12. **Hussain, A.**, Latif, S., Abbas, N., Irfan, M., Arshad, M. S., & Bukhari, N. I. (2018). Hydroxypropyl cellulose-based orally disintegrating films of promethazine HCl for the treatment of motion sickness. *Tropical Journal of Pharmaceutical Research*, 17(6), 991-996.
13. Smith, G., **Hussain, A.**, Bukhari, N. I., & Ermolina, I. (2018) Correlation between molecular dynamics and physical stability of two milled anhydrous sugars: lactose and sucrose. *International Journal of Pharmaceutics*, 551(1).
14. Latif, S., Abbas, N., **Hussain, A.**, Arshad, M. S., Bukhari, N. I., Afzal, H., Riffat, S., & Ahmad, Z., 2018. Development of paracetamol-caffeine co-crystals to improve compressional, formulation and in vivo performance. *Drug. Development & Industrial Pharmacy*, 1-10.

15. Abbas, N., Latif, S., Afzal, H., Arshad, M. S., **Hussain, A.**, Sadeeqa, S., & Bukhari, N. I. (2018). Simultaneously Improving Mechanical, Formulation, and In Vivo Performance of Naproxen by Co-Crystallization. *AAPS PharmSciTech*, 19(7), 3249-3257.
16. Qadir, M., Irfan, M., Abbas, N., Zahoor, A. F., Syed, H. K., Khan, I., **Hussain, A.**, (2018). How to Eliminate Curing Effect and Improve Storage Stability of Eudragit (R) NE 30D Coatings. *Latin American Journal of Pharmacy*, 37(6), 1203-1210.
17. Ijaz, Q. A., Abbas, N., Arshad, M. S., **Hussain, A.**, Shahiq uz, Z., & Javaid, Z., 2018. Synthesis and evaluation of pH dependent polyethylene glycol-co-acrylic acid hydrogels for controlled release of venlafaxine hcl. *Journal of Drug Delivery Science and Technology*, 43, 221-232.
18. Qurat-ul-ain Shoaib, N. A., Muhammad Irfan, **Amjad Hussain**, Muhammad Sohail Arshad, S. Z. H., Sumera Latif, Nadeem Irfan, & Bukhari. (2018). Development and evaluation of scaffold-based nanosponge formulation for controlled drug delivery of naproxen and ibuprofen. *Tropical Journal of Pharmaceutical Research*, 17(8), 1465-1474.
19. Nasir Abbas*, Komal Sarwar, **Amjad Hussain**, et. al, (2018) Formulation and Evaluation of Indomethacin Loaded Nanosponges for Oral Delivery, *Acta Polonea* 75(5).
20. Ejaz Ali, Najma Arshad, Nadeem Irfan Bukhari, Nawaz Muhammad, Tahir, Shamail Zafar, **Amjad Hussain**, et. al., (2018) Linking traditional anti-ulcer use of rhizomes of *Bergenia ciliata* (Haw.) to its anti-Helicobacter pylori constituents, *Natural Product Research*, 32(19).
21. Khalid Hussain, A. Q., Nadeem Irfan Bukhari, **Amjad Hussain**, et.al. (2018). Impact of particle-size reduction on solubility and antidiabetic activity of extracts of leaves of *Vinca rosea*. *Turkish Journal of Pharmaceutical Sciences*, 16(4).
22. **Hussain, A.**, Qureshi, F., Abbas, N., Arshad, M. S., & Ali, E., 2017. An evaluation of the binding strength of okra gum and the drug release characteristics of tablets prepared from it. *Pharmaceutics*, 9, 20.
23. Abbas, N., M.S. Arshad, **A. Hussain**, and M. Irfan, *Development and validation of a spectroscopic method for the simultaneous analysis of miconazole nitrate and hydrocortisone acetate in pharmaceutical dosage form*. Ahsan, Muhammad, 2017. 16(2): p. 413-420.
24. Rabia GULSHAN, M.I., Ameer F. ZAHOOR, Muhammad Sohail Arshad, **Amjad Hussain**, H., *Effect of Formulation and Process Parameters on Drug Release from Controlled Release Matrix Tablets of Terbutaline Sulphate*. *Latin American Journal of Pharmacy*, 2017. 36(2): p. 314-25
25. Gondal, S. A., Abbas, N., & **Hussain, A.** (2017). Microencapsulation: A taste and odour masking approach for garlic (*Allium sativum*) powder. *British Journal of Pharmacy*, 2(2), 19-20.
26. Abbas, N., **Hussain, A.**, Ahsan Hafiz, M., & Perveen, K. (2017). Formulation and evaluation of fluconazole loaded nanosponges for improved topical drug delivery. *British Journal of Pharmacy*, 2(2), 41-42.
27. Abbas, N., Amir Ijaz, Q., **Hussain, A.**, & Irfan Bukhari, N. (2017). Synthesis and evaluation of pH dependent hydrogels for controlled release of Venlafaxine HCl. *British Journal of Pharmacy*, 2(2), 43-44.
28. **Hussain A.**, Syed M.A., Abbas N., Hanif S., Arshad M.S., Bukhari N.I., et al. Development of ANN optimized mucoadhesive buccal tablet containing flurbiprofen and lidocaine for dental pain. *Acta Pharmaceutica*. 2016;66(2):245-56.
29. M. Rasekh, Nazari K., Arshad M., Kucuk I., Haj-Ahmad R., **Hussain A.**, et al. Polymeric based therapeutic delivery systems prepared using electrohydrodynamic processes. *Current Pharmaceutical Design*. 2016;22(19):2873-85.
30. Muhammad I., Aasma A., Ameer F. Zahoor, M. I. Qadir, **Hussain A.**, Formulation Parameters Affecting Floating Behaviour and Drug Release from Extended Release Floating Tablets of Ranitidine Hydrochloride. *Latin American Journal of Pharmacy*. 2016;35(Suppl.1):1206-16.

31. **Amjad Hussain**, Ahmad Mehmood Mumtaz, Muhammad Sohail Arshad, et al. Effect of cellulose acetate phthalate and polyethylene glycol on physical properties and release of theophylline from microcapsules. *Brazilian Journal of Pharmaceutical Sciences*. 2016;52(1):27-34.
32. Smith, G., **Hussain, A.**, Bukhari, N. I., Ermolina, 2015. Quantification of residual crystallinity in ball milled commercially sourced lactose monohydrate by thermo-analytical techniques and terahertz spectroscopy. *European Journal of Pharmaceutics and Biopharmaceutics*, 92, 180-191.
33. Smith, G., **Hussain, A.**, Bukhari, N., Ermolina, I., 2015. Quantification of residual crystallinity of ball-milled, commercially available, anhydrous β -lactose by differential scanning calorimetry and terahertz spectroscopy. *Journal of Thermal Analysis and Calorimetry*, 121:327–333.
34. Ahsan, M., Abbas, N., **Hussain, A.**, Saeed, H., Shah, P. A., Mohammad, S., Arshad, M. S., 2015. Formulation Optimization and In-vitro Evaluation of Oral Floating Captopril Matrix Tablets using Factorial Design. *Tropical Journal of Pharmaceutical Research*, 14(10), 1737-1748.
35. Hussain, T., **Hussain, A.**, Shamim, R., Shehzad, M. K., Danish, Z., Hussain, K., Irfan, B. N., 2015. Development and In-Vitro Evaluation of Floating Gastro-Retentive Matrix Tablet for a Model Water Soluble Drug Prepared with the Novel Blends of Chitosan and Polycaprolactone. *Latin American Journal of Pharmacy*, 34(9), 1849-1857.
36. Akhlaq, M., Arshad, M. S., Mudassir, A. M., **Hussain, A.**, Kucuk, I., Haj-Ahmad, R., Rasekh, M., Ahmad, Z., 2015. Formulation and evaluation of anti-rheumatic dexibuprofen transdermal patches: a quality-by-design approach. *Journal of drug targeting*(just-accepted), 1-27.
37. Haj-Ahmad, R., Khan, H., Arshad, M. S., Rasekh, M., **Hussain, A.**, Walsh, S., Li, X., Chang, M.-W., Ahmad, Z., 2015. Microneedle Coating Techniques for Transdermal Drug Delivery. *Pharmaceutics*, 7(4), 486-502.
38. Amjad, S., Hussain, K., Bukhari, N. I., Khan, M. T., Latif, A., Islam, M., Karim, S., Hashmi, F. K., **Hussain, A.** 2014. Analytical, nutritional and biological evaluation of various brands of fortified and non-fortified wheat flour. *Pakistan journal of pharmaceutical sciences*, 27(3), 445-452.
39. Khan, M. N., Hussain, K., Bukhari, N. I., Latif, A., Hashmi, F. K., **Hussain, A.**, 2012. Evaluation of seeds of phoenix sylvestris as novel candidate adsorbent in paracetamol poisoning. *Latin American Journal of Pharmacy*, 31.
40. Latif, A., Hussain, K., Bukhari, N. I., Karim, S., **Hussain, A.**, 2013. Analytical and Biological Studies of Kanji and Extracts of its Ingredient, Daucus carota L. *Journal of The Chemical Society of Pakistan*, 35(6), 1481-1489.
41. **A. Hussain**, Bukhari N.I., Hussain K., et al. Preliminary assessment of the prescribing errors in outpatient department of public sector teaching hospitals in Lahore. *HealthMED*. 2011;5(1):101-5
42. Sohail, I., Hussain, K., Irfan Bukhari, N., Islam, M., Tanveer Khan, M., Khurshid Hashmi, F., Latif, A., **Hussain, A.**, 2014. Analytical, Antioxidant and Hepatoprotective Studies on Extracts of Oxalis corniculata Linn. *Journal of The Chemical Society of Pakistan*, 36(4).

National Journals

43. Sohail A., Mariah I., and **Amjad H.**, Evaluation of Antibiotic Use Behavior In Cold And Flu Amongst The Students Of Bahauddin Zakariya University Multan Pakistan. *Pakistan Journal of Pharmacy*. 2010;20-23(1 & 2):15-22.
44. **Amjad H**, Nadeem I. , Furqan K.i, et.al., Study Of Non-Compliance And Its Reasons In Outdoor Patients With Mental Illness Of A Public Hospital. *Pakistan Journal of Pharmacy*. 2003-2006;16-19(1 & 2):21-4.

45. Khalid H., Furqan K., **Amjad H.**, and Abida L. The Pharmacy Act XI of 1967: Quackery And Irrational Use Of Drugs. Pakistan Journal of Pharmacy. 2003-2006;16-19(1 & 2):35-6.

PARTICIPATION IN CONFERENCES, SEMINARS AND WORKSHOPS

INTERNATIONAL

S. No	Conference Name	Date	Venue
1	CRS annual (46 th) meeting and exposition 2019 organized by Controlled Release Society	2019	Valencia Spain
2	10 th BDS conference 2018, organized by international dielectric society (IDS)	2018	University de Bruxell (ULB) Brussels, Belgium
3	APS UK PharmSci 2017, the Science of Medicines	2017,	De Havarld Campus Hertfordshire University Hatfield, UK.
4	APS UK PharmSci 2016, the Science of Medicines	2016.	Technology and innovation Centre, Strathclyde University, Glasgow, UK
5	3 rd Quality by design symposium organized by De Montfort University, Leicester, UK.	2015,	De Montfort University, Leicester, UK.
6	APS UK PharmSci 2014, the Science of Medicines	2014	De Havarld Campus Hertfordshire University Hatfield, UK.
7	APS PharmSci 2013, the Science of Medicines	2013	Heriot Watt University Conference center Edinburgh, Scotland, UK
8	Workshop on skill of teaching "Beginning to Teach in higher education"	2013	De Mont fort University, Leicester, UK.
9	APS PharmSci 2012, the Science of Medicines	2012	East Midland Conference Centre University of Nottingham, UK
10	APS PharmSci 2011, the Science of Medicines	2011	East Midland Conference Centre University of Nottingham, UK
11	Technology Showcase	2011	De Montfort University, Leicester UK.

NATIONAL

S.No	Conference/workshop Name	Date	Venue
1	International Conference of Drug delivery	2019	University of Faisalabad
2	8 th invention to innovation summit organized by ORIC University of the Punjab	2019.	University of the Punjab, Lahore
3	6 th Rashid Latif Medical and Pharmacy Conference	2019.	Rashid Latif Pharmacy College, Lahore
4	International Pharmacy Conference (IPC-19):	2019.	Bahauddin Zakariya University, Multan
5	Pak Lab Expo 2018, Pakistan 2 nd international Laboratory and analytical equipment Exhibition	2019	Expo Center Lahore, Pakistan
6	3 rd International Health Trigon (IHT) Summit	2018	Faculty of Pharmacy University of Lahore

7	5 th Annual Conference of Rashid Latif College of Pharmacy	2018	Rashid Latif Pharmacy College, Lahore
8	1 st National conference on recent advancement in Pharmaceutical sciences	2018	University of Sargodha, Sargodha
9	International Pharmaceutics Conference	2018.	Bahauddin Zakariya University, Multan
10	One-day seminar on celebration of 'Freedom of Information day'	2018.	organized by Lahore, Museum,
11	4 th Annual Conference of Rashid Latif College of Pharmacy	2017	Rashid Latif Pharmacy College, Lahore
12	National conference on recent innovations in Pharmaceutical sciences (NCRIPS)	2016	Margala Hotel, Islamabad, Pakistan
13	National Pharmacy Conference	2015	University of Peshawar, Baragali Campus
14	International conference on recent innovation in Pharmaceutical Sciences	2015	RIPHA Islamabad.
15	Workshop on Contemporary Pharmacy Practice,	2013	Lahore College of Pharmaceutical Sciences.
16	16 th International Pharmacy conference by Pakistan Pharmacist Association	2011	Pakistan Pharmacist Association, PC Hotel, Lahore
17	International conference of Hospital Pharmacy Practices	2009	Jinnah Hospital & AIMC Lahore
18	15 th International Pharmacy conference and exhibition	2009	Pakistan Pharmacist Association, PC Hotel, Lahore
19	13 th International Pharmacy conference and exhibition 2006	2006	Pakistan Pharmacist Association, PC Hotel, Lahore
20	Two-day "National seminar and workshop"	2003	Ministry of Health, Government of Pakistan in Collaboration with WHO

CONFERENCES PROCEEDINGS/ABSTRACT/POSTER PRESENTED

International

1. **Amjad Hussain** MI, Nasir Abbas, Muhammad Sohail Arshad, Muhammad Tayyab,. Effect of co-formers on the release of theophylline from Hydroxypropyl cellulose based microcapsules Controlled Release Society Annual Meeting & Exhibition; 2019 24-26 July; Valencia, Spain.
2. Nasir Abbas QA, **Amjad Hussain**, Development of Carbonate Nano-sponges: A way to improve in-vitro and in-vivo performance of Naproxen. Controlled Release Society Annual Meeting & Exhibition; 2019 24-26 July; Valencia, Spain.
3. Muhammad Sohail arshad, **Amjad Hussain**, N. Shafiq, Muhammad Tayyab, Preparation and characterization of Carvedilol loaded HPMC based fast dissolving films using Piezoelectric inkjet printing:Ex-vivo buccal permeation studies using iontophoresis . Controlled Release Society Annual Meeting & Exhibition; 2019 24-26 July; Valencia, Spain.
4. **Amjad Hussain**, Geoff Smith, Irina Ermolina, Correlation between molecular dynamics and physical stability of two milled anhydrous sugars: lactose and sucrose. 10th BDS conference 2018, organized by international dielectric society, 26-31 August, 2018, Brussels, Belgium.
5. Nasir Abbas, Sumera Latif, **Amjad Hussain**, Improvement of formulation, in-vitro and in-vivo performance of naproxen by co-crystallization. 78th FIP@APS Congress, 2-6 September 2018, Glasgow, UK.
6. Nasir Abbas, Sumera Latif, **Amjad Hussain**, Improvement of compressional, in-vitro and in-vivo performance of naproxen by co-crystallization. 78th FIP@APS Congress, 2-6 September 2018, Glasgow, UK
7. **Amjad Hussain**, Sonia Ashfaq Gondal, Nasir Abbas,.Microencapsulation: A taste and odor masking approach for garlic (*Allium sativum*) powder. 8th APS UK PharmSci 2017, the Science of Medicines, Weston Auditorium Hertfordshire University, Hatfield UK, 5 - 7 September 2017.
8. **Amjad Hussain**, Javairia Masood, Rahat Shamim, A novel method for determining the flow of cohesive pharmaceutical powders and improving the flow by using co-milling technique. 8th APS UK PharmSci 2017, the Science of Medicines, Weston Auditorium Hertfordshire University, Hatfield UK, 5 - 7 September 2017.
9. Nasir Abbas, **Amjad Hussain**, Muhammad Ahsan Formulation and evaluation of fluconazole loaded nano-sponges for improved topical drug delivery. 8th APS UK PharmSci 2017, the Science of Medicines, Weston Auditorium Hertfordshire University, Hatfield UK, 5 - 7 September 2017.
10. Nasir Abbas, Qazi Amir, **Amjad Hussain**, Synthesis and evaluation of pH dependent hydrogels for controlled release of valnaxefine HCl. 8th APS UK PharmSci 2017, the Science of Medicines, Weston Auditorium Hertfordshire University, Hatfield UK, 5 - 7 September 2017.
11. Khizar, Nosheen, **Hussain Amjad**, et.al. "Co-milling of Naproxen with aluminium hydroxide and colloidal silica for the improvement of flow, solubility and dissolution properties" in The Control Release Society (CRS) Germany local chapter, annual conference, 2-3 March 2017, Phillips university Marburg
12. **Hussain, A.**, Misbah M., Abbas N., Bukhari, N.I Arshad M.S., Preparation of orally disintegrating modified release tablets of naproxen sodium using soluplus. APS UK PharmSci 2016, the Science of Medicines, Technology and innovation Centre, Strathclyde University, Glasgow UK, 5 - 7 September 2016.
13. **Hussain, A.**, Qeshi F., Abbas N., Bukhari, N.I Arshad M.S., Study of okra gum in comparison with starch paste as a binder in naproxen sodium tablets. APS UK PharmSci 2016, the Science of Medicines, Technology and innovation Centre, Strathclyde University, Glasgow UK, 5 - 7 September 2016.
14. **Hussain, A.**, Ermolina, I., Bukhari, N.I., Smith, G., Study of Changes in Crystallinity of Ball Milled Mefenamic Acid using Terahertz Pulsed Spectroscopy. APS UK PharmSci 2014, the

Science of Medicines, Weston Auditorium Hertfordshire University, Hatfield UK, 8 - 10 September 2014.

15. **Hussain, A.**, Ermolina, I., Bukhari, N.I., Khan, K.A., Smith, G., Milling and Co-milling with various excipients for the improvement of intrinsic dissolution rate of Ibuprofen. APS UK PharmSci 2013, the Science of Medicines, Heriot Watt University, Edinburgh Scotland UK, 1 - 3 September 2013.
16. **Hussain, A.**, Ermolina, I., Bukhari, N.I., Smith, G., Surface percolation of protons a probe for the creation of crystal defects in lactose monohydrate following short milling times, Poster Presentation. APS UK PharmSci 2012, the Science of Medicines, East Midland Conference Centre, Nottingham UK, 12 - 14 September 2012.
17. **Hussain, A.**, Ermolina, I., Bukhari, N.I., Smith, G., A study of the amorphization of lactose monohydrate following extended milling times Poster Presentation. APS UK PharmSci 2012, the Science of Medicines, East Midland Conference Centre, Nottingham UK, 12 - 14 September 2012.

National

1. **Amjad Hussain**, Faisal Mahmood, 3D Printing of pharmaceuticals – A way forward to customized drug delivery. International Pharmacy Conference on drug delivery: organized by University of Faisalabad, on 9, November, 2019
2. **Nasir Abbas**, Sumaira Latif, **Amjad Hussain**, Improvement of formulation, in-vitro and in-vivo performance of naproxen by co-crystallization, International Pharmacy Conference on drug delivery: organized by University of Faisalabad, on 9, November, 2019
3. **Amjad Hussain**, Addressing the challenge of Poor Solubility of BCS class II drugs – An overview of strategies and techniques, International Pharmacy Conference (IPC-19): organized by Bahauddin Zakariya University, Multan on 14-16 February, 2019
4. Faisal Mahmood, **Amjad Hussain***, Nasir Abbas, Customized delivery of drugs through 3D printing – Exploring the challenges and opportunities, International Pharmacy Conference (IPC-19): organized by Bahauddin Zakariya University, Multan on 14-16 February, 2019.
5. Sidra Noreen, **Amjad Hussain***, Nasir Abbas, Mechano-chemical activation of Oxcarbazepine with Soluplus for the enhancement of its Dissolution **rate**, International Pharmacy Conference (IPC-19): organized by Bahauddin Zakariya University, Multan on 14-16 February, 2019.
6. Javaria Khalid, **Amjad Hussain***, Nasir Abbas Development of Oxcarbazepine –Soluplus Solid dispersions by HME for the improvement of solubility, International Pharmacy Conference (IPC-19): organized by Bahauddin Zakariya University, Multan on 14-16 February, 2019
7. Noman Asif, Ghazi Mustansar, Nasir Abbas, **Amjad Hussain**, Nadeem Irfan Bukhari, In-vitro chemical equivalence: a possible alternative to chemical equivalence International Pharmacy Conference (IPC-19): organized by Bahauddin Zakariya University, Multan on 14-16 February, 2019.
8. Sumaira Latif, Nasir Abbas, **Amjad Hussain**, Muhammad Sohail Arshad, Development of Paracetamol-Caffeine co-crystals to improve formulation properties and in-vivo performance. International Pharmacy Conference (IPC-19): organized by Bahauddin Zakariya University, Multan on 14-16 February, 2019.
9. Maryam Farruk **Amjad Hussain**, Study of solid dispersion: Technique for solubility enhancement of Poor soluble drugs. Poster presented in 3rd international Health Trigon Summit 2018, organized by University of Lahore, 17-18th April, 2018.

10. **Amjad Hussain**, Madiha Imtiaz, Effect of co-former on drug release from HPC based microcapsule of theophylline in 1st National conference on recent advancement in Pharmaceutical sciences, organized by University of Sargodha on 7-8 March, 2018.
11. **Amjad Hussain**, Characterization of milled surfaces – opportunities for improving solubility and dissolution rate of pharmaceuticals in International Pharmaceutics Conference, organized by Bahauddin Zakariya University, Multan on 12-13 February, 2018
12. **Amjad Hussain**, Impact of Ball Milling on the Properties of Lactose Monohydrate, at national conference on recent innovations in Pharmaceutical sciences (NCRIPS), (Margala Hotel, Islamabad, Pakistan on 25 October, 2016.
13. Nasir Abbas, **Amjad Hussain**, Muhammad Sohail Arshad, Search of elusive/dispersing polymorphism of pharmaceutical compounds by high pressure techniques, at national conference on recent innovations in Pharmaceutical sciences (NCRIPS), (Margala Hotel, Islamabad, Pakistan on 25 October, 2016.
14. **Hussain, A.** Younas.S, Use Okra gum as binder in Naproxen sodium tablets presented at National Pharmacy Conference University of Peshawar (Baragali campus), 20- 23 August, 2015.
15. **Hussain, A.**, Anjum, Z., Ehsan, N., Bukhari, N.I., Abbas, N., Micellar solubilization of poorly soluble drugs using a new surfactant-Soluplus presented at 1st International conference on recent innovations in Pharmaceutical sciences Margala Hotel, Islamabad, Pakistan, 3- 5 March, 2015.
16. **Hussain. A.**, “Study of Prescribing Errors and Their Effect on Patient Perception and Compliance in Psychiatric Patients of a Mental Hospital” presented at 16th International Pharmacy conference and exhibition 2011, organized by Pakistan Pharmacist Association.
17. **Hussain. A.**, “Preliminary assessment of the prescribing errors in outpatient department of public hospitals” International conference of Hospital Pharmacy Practices 2009, organized by Jinnah Hospital & AIMC Lahore.
18. **Hussain A.**, Rasheed Huma., Ali A., Imtiaz A., Orphan drugs” 8th annual symposium of the children’s hospital and institute of child health Lahore, Pakistan 2003.

PODIUM PRESENTATION/TALKS (NATIONAL AND INTERNATIONAL CONFERENCES)

S. No	Title of Talk	Conference name	Organized by/Venue	Date
1	3D printing of pharmaceuticals– A way forward to customized drug delivery.	International Conference of Drug delivery	Organized by University of Faisalabad	2019
2	Exploring the 3D Printing: A New Era in Development of Patient Specific Pharmaceuticals	Technology Stall at 8 th invention to innovation summit	ORIC, University of the Punjab at CEMB	2019
3	3D Printing - A New Horizon in the customized delivery of Pharmaceuticals	Rashid Latif Medical and Pharmacy Conference	Rashid Latif Pharmacy College	2019
4	Addressing the Challenge of poor solubility of drugs	International Pharmacy Conference 2019	Bahauddin Zakariya University, Multan	2019
5	Importance of particle size in solid state characterization	Pak Lab Expo 2018	Expo Center, Lahore	2018
6	Characterization of milled surfaces – opportunities for improving solubility and dissolution rate of pharmaceuticals	International Pharmaceutics Conference	Bahauddin Zakariya University, Multan	2018
7	Impact of Ball Milling on the Properties of Lactose Monohydrate	national conference on recent innovations in Pharmaceutical sciences (NCRIPS)	organized by RIPHA institute/Margala Hotel, Islamabad	2016
8	Use of okra gum as binder in naproxen tablets	national pharmacy conference	University of Peshawar	2015
9	Solubility and dissolution rate enhancement by Co-milling	1 st International conference on recent innovations in Pharmaceutical Sciences	RIPHA institute/Margala Hotel, Islamabad	2015
10	A study of the amorphization of lactose monohydrate following extended milling times	APS, UK PharmSci 2012 the Science of Medicines	East Midland Conference Centre, Nottingham UK	2012
11	Study of Prescribing Errors and Their Effect on Patient Perception and Compliance in Psychiatric Patients of a Mental Hospital	16 th International Pharmacy conference	Pakistan Pharmacist Association	2011
12	Preliminary assessment of the prescribing errors in outpatient department of public hospitals	International conference of Hospital Pharmacy Practices	Jinnah Hospital & AIMC Lahore	2009
13	“Orphan drugs	8 th annual symposium of the children’s hospital	children’s hospital and institute of child health Lahore,	2003

FORMAL RESEARCH TRAININGS

S. No	Title	Organizer/Venue	Year
1	2 days' work shop on patent filling and introduction to intellectual property system of Pakistan	Office of research innovation & Commercialization (ORIC) University of the Punjab	2018
2	World quality day	University of the Punjab and Virtual University of Pakistan	2016
3	Drug and food safety congress	Dimension development foundation and Punjab University College of pharmacy	2016
4	Workshop on Mastering Research Tools using SPSS, AMOS, STATA and EndNote	RCTD and Superior University, Laho	2012
5	Effective presentation skills using PowerPoint	De Montfort University, Leicester, UK	2011
6	Managing data using Microsoft excel	De Montfort University, Leicester, UK	2011
7	National Seminar & Workshop on environmental Toxicology and health	UVAS, Lahore	2011
8	One-day seminar on "Good Clinical practices"	UVAS, Lahore	2011
9	National seminar on use of animals in Science-Ethical and practical considerations	University College of Pharmacy, University of the Punjab	2011
10	Workshop on "Academic writing for research	IRP and UMT, Lahore	2011
11	Academic writing for research", seminar	University of the Punjab	2011
12	"Clinical Research Certified Professional (CRCP)	Clinical trial Unit, Dow University of Health sciences, Karachi and Services Institute of Medical Sciences, Lahore	2011
13	Workshop on "Managing Research projects"	IPA in UVAS, Lahore	2009
14	5 day training work on "Good pharmacy Practices"	Punjab Pharmacy Council	2005
15	National Pharmacy Conference on "Impact of WTO on Pharmaceutical Trading	University College of Pharmacy	2007
16	Training workshop on Logistic Support System (LSS)	WHO, Pakistan	2008
17	National seminar & workshop	Ministry of Health (MoH), Government of Pakistan	2003
18	Internship (6 weeks)"	Highnoon Laboratories Pvt. Ltd.	2001

MANAGERIAL AND ADMINISTRATIVE RESPONSIBILITIES

S.No	Description	Duration/Year
1	In-charge examination (Undergraduate & Postgraduate) at Punjab University College of Pharmacy.	Since 2016
2	Student advisor University College of Pharmacy, PU	2014 to 2018
3	Deputy Student Advisor University College of Pharmacy.	2011 to 2014
4	Incharge Central Research Lab of University College of Pharmacy	Since 2016
5	Member Purchase committee of University College of Pharmacy	Since 2016
6	Member University admission management committee, University of the Punjab	2015 & 2016
7	Member disciplinary committee of University Convocation, University of the Punjab.	2013 to 2018
8	Inquiry officer for non-teaching staff (under PEEDA Act) of Punjab University.	2018 & 2019
9	Co-opted member election convener committee for ASA of Punjab university election	2016
10	Member Board of studies , College of Pharmacy, PU.	2012 and 2018.
11	Focal person for the Hostels/ Accommodation of students	2012
12	Tutor of various Pharm D classes at College of Pharmacy, University of the Punjab	Since 2009
13	Organizing Secretary of Seminar organizing committee of College of Pharmacy, University of the Punjab.	2012 to 2017
14	Member Convocation organizing committee of College of Pharmacy, University of the Punjab.	Since 2015
15	Signatory on behalf of Principal for Pharmacy Council for the Registration of graduate Pharmacists	Since 2014
16	Coordinator for the renovation and up gradation of Animal House	2010 to 2013
17	Focal person for provision of data/preparation of Reports of College for University and HEC.	Since 2013
18	Focal person of Quality enhancement cell (QEC) of University College of Pharmacy, University of the Punjab.	Since 2015
19	Secretary Alumni Association of College of Pharmacy (PUPA), University of the Punjab.	Since 2014
20	Focal Person Alumni Association of University of the Punjab for College of Pharmacy.	2019
21	Focal person of Government (PM & CM) Laptop scheme for students.	Since 2012
22	Lab Manager "Formulation design lab" of College of Pharmacy, University of the Punjab	2017
23	Incharge Character Building Society (CBS) at university College of Pharmacy set up by National Accountability Bureau (NAB) Pakistan at university and college levels	Since 2016
24	Member Doctoral Program Committee (DPC) of College of Pharmacy, University of the Punjab	2015
25	Resident Inspector of various examination (Pharm D, B.A, M.A, LLB etc.) conduction by University of the Punjab	Since 2013
26	Tour Incharge of study tours of 2 nd and 4 th prof. classes at College of Pharmacy, University of the Punjab	Since 2010
27	Member committee for organizing annual sports at PUCP	Since 2015
28	Member Pharmacy & Therapeutic Committee, health center, PU,	Since 2018

PAPER SETTER/EXAMINER PHARM-D EXAMINATION

I have been appointed as External examiner/Paper setter for Pharm-D and M.Phil examination since 2009 in different universities of Pakistan including

- Bahauddin Zakariya University Multan.
- University of Sargodha.
- Gomal University Dera Ismail Khan.
- Ripha Institute of Pharmaceutical sciences, Islamabad.
- University of Health Sciences (UHS) Lahore.
- Superior University Lahore.
- Government College University Faisalabad.
- Lahore College for Women University (LCPW).
- University of Health Sciences Lahore.
- Shifa Tameer-e-Millat pharmacy Institute, Islamabad

MEMBER SELECTION BOARD

- Member selection committee at Lahore Pharmacy College affiliated with University of health sciences, Lahore

RESEARCH SUPERVISED

Ph.D

S. No	Student Name	Title	Session/Status	Supervisor
1	Sumaira Latif	Pharmaceutical Co crystals: A New Paradigm of Crystal Engineering to modify Physiochemical and Pharmaceutical Properties of drugs	2014-2019/ completed	2 nd supervisor
2	Faisal Mahmood	Design, fabrication and characterization of FDM based 3D printed objects for personalized dosing of model drugs	2015-2020/ underway	1 st supervisor
3	Sidra Rashid	Study of Centrifugal spinning for enhancing the solubility and dissolution rate of poorly soluble drugs	2015-2020/ underway	1 st supervisor
4	Sana Javaid	Design, fabrication and evaluation of orodispersible films of sumatriptan succinate and prochlorperazine maleate for relief of migraine and associated nausea	2015-2020/ underway	2 nd supervisor
5	Nadia Qamar	3D printing of Hernial Mesh	2015-2020/ underway	2 nd supervisor
6	Nosheen Khizar	Effect of Milling and Co-milling on Physicochemical and Pharmaceutical Properties of BCS Class II drugs, Naproxen and Mefenamic Acid	2015-2020/ underway	2 nd supervisor
7	Qazi Amir Javaid	3D printing of antibiotics/yet to be finalized	2015-2020/ underway	2 nd supervisor

M.Phil

S. No	Student Name	Title	Session/Status	Supervisory status
1	Saira Naeem	Prevalence of vitamin D deficiency and perception of selected physicians in Lahore on its treatment	2012-13	1 st supervisor
2	Ali Sayed	Development and optimization of a novel dental analgesic system containing flurbiprofen and lidocaine	2012-13	1 st supervisor
3	Khalid Iqbal	Study of the factors affecting the properties of griseofulvin after ball milling applying design of experiment	2012-13	1 st supervisor
4	Nadia Mazhar	Effect of the selected absorption enhancers on permeation of mefloquine using Franz diffusion cells	2013-14	1 st supervisor
5	Nosheen Khizer	Study of Selected Surfactant and Inorganic Materials on Properties of Naproxen after Co-milling	2013-14	1 st supervisor
6	Nigarish Ehsan	Micellar solubilization of Ibuprofen using Soluplus®, a newly developed surfactant	2014-15	1 st supervisor
7	Zunaira Anjum	Micellar solubilization of Mefenamic acid using Soluplus®, a newly developed surfactant	2014-15	1 st supervisor
8	Nazia Rasheed	Public and patient perception about role of Pharmacist in Health care system	2014-15	1 st supervisor

9	Farah Qureshi	Study of Okra gum in comparison with starch paste as a binder in naproxen sodium tablets	2015-16	1 st supervisor
10	Maham Misbah	Preparation and in vitro evaluation of orally disintegrating modified release tablets of naproxen sodium	2015-16	1 st supervisor
11	Javeria Masood	Study of different methods for the modification of flow properties of cohesive pharmaceutical powders	2015-16	1 st supervisor
12	Mahmood	Study of exhaled carbon monoxide levels and its effect on health of susceptible population	2015-16	1 st supervisor
13	Sonia Gondal	Microencapsulation: A taste and odor masking approach for garlic (<i>Allium Sativum</i>) powder	2016-17	1 st supervisor
14	Madiha Imtiaz	Formulation and Evaluation of Hydroxypropyl cellulose (HPC) based Microcapsules of Theophylline	2016-17	1 st supervisor
15	Azka Rehman	Formulation and evaluation of mucoadhesive buccal films of Flurbiprofen	2016-17	1 st supervisor
16	Anum Azeem	Study of Co-milling: a technique for the improvement of solubility and dissolution rate of a poorly soluble drug from BCS class II	2016-17	1 st supervisor
17	Anam Sohail	Preparation and evaluation of solid dispersion of indomethacin for the improvement of solubility and dissolution rate	2016-17	1 st supervisor
18	Sadia Latif	Formulation and evaluation of Hydroxy-Propyl cellulose (HPC) based Orally Disintegrating Films (ODFs) of Promethazine HCl	2016-17	1 st supervisor
19	Sara Zia	Study of Flaxeed as Pharmaceutical Excipient	2017-18	1 st supervisor
20	Maryam Farrukh	Preparation and characterization of solid dispersion for the improvement of solubility and dissolution rate of Piroxicam	2017-18	1 st supervisor
21	Komal Younas	Solid dispersion of lornoxicam for the improvement of its solubility and dissolution profile	2017-18	1 st supervisor
22	Javaria Khalid	Study of mechano-chemical methods for the improvement of solubility and dissolution rate of a BCS class II drug	2018-19	1 st supervisor
23	Sidra Noreen	Development and evaluation of co-milling based solid dispersions for the improvement of solubility and dissolution rate of a poorly soluble drug	2018-19	1 st supervisor
24	Sana Javed	Study of solubility and dissolution of naproxen, a Biopharmaceutical classification system class II drug, using solid dispersion	2012-13	2nd supervisor
25	Ume-Salma	Study of factors affecting properties of ketoprofen after ball milling using quality by design approach	2012-13	2 nd supervisor
26	Sana Qamar	Evaluation of the properties of milled and mucilage of flaxseeds as tablet excipient using paracetamol as a model drug	2012-13	2 nd supervisor
27	Ayesha Mehmood	Study of changes in liver profile induced by pemetrexed alone or pemetrexed based chemotherapy regimens in adult cancer patients	2012-13	2 nd supervisor
28	Bushra Shehbaz	Treatment of vitamin D deficiency and its effects on the Vitamin D levels	2012-13	2 nd supervisor

29	Bilal Tahir	Development of a novel dental analgesic system using artificial intelligence	2012-13	2 nd supervisor
30	Kashif Riaz	Occurrence of medication errors and comparison of manual and computerized prescription systems in public sector hospitals	2012-13	2 nd supervisor
31	Marina Rehman	Occurrence of medication errors and comparison of manual and computerized prescription systems	2013-14	2 nd supervisor
32	Kanwal Fatima	Study of the effect of selected excipients on the stability of naproxen-Gelucire solid dispersion	2013-14	2 nd supervisor
33	Naveel Atif	Patients' health literacy and comprehension of CVS disorder and their effect on the concordance and therapeutic outcome	2013-14	2 nd supervisor
34	Zunaira Rafique	Study of effect of selected absorption enhancers on permeation of artemether using Franz diffusion cells	2013-14	2 nd supervisor
35	Mehwish Mahtab	Development and optimization of a palatable sodium benzoate formulation using artificial intelligence approach	2013-14	2 nd supervisor
36	Zobia Mubarak	Evaluation of different forms of date syrup as an excipient using paracetamol as a model drug	2013-14	2 nd supervisor
37	Zaigham Ghaffar	Cross sectional study of the prevailing factors for two current and the most prevailing ailments at community level in Lahore	2013-14	2 nd supervisor
38	Memoona Rashid	<i>In silico</i> prediction of pediatric dose of methotrexate from adult pharmacokinetic data and study on the effect of factors affecting its pharmacokinetic parameters	2014-15	2 nd supervisor
39	Ayesha Khadija	Formulation of a novel trans-lip drug delivery system of estradiol	2014-15	2 nd supervisor
40	Maham Shafiq	Study of potential trans-lip delivery of estradiol as a novel dosage form	2014-15	2 nd supervisor
41	Ayesha Mehwish	Formation and development of palatable dosage form of sodium benzoate using computer aided approach	2014-15	2 nd supervisor
42	Iram Sohail	Study of the factors affecting the characteristics of sodium benzoate formulation	2014-15	2 nd supervisor
43	Tahira Noreen	Effect of polymorphism of mefenamic acid in tablet dosage form	2014-15	2 nd supervisor
44	Nadia Qamar	Comparison of the effectiveness of branded and generic iron supplements in anemic pregnant women	2014-15	2 nd supervisor
45	Farhan Ali	Study of the potential involvement of retail/community pharmacy sector for the initiation of public awareness programs	2014-15	2 nd supervisor
46	Arooj Rasool	Effect of Polymorphism on the release of Piroxicam from tablet dosage form	2015-16	2 nd supervisor
47	Mehreen Aftab	Preparation and characterization of solid dispersion of ibuprofen prepared by different techniques	2015-16	2 nd supervisor

48	Javeria Arshad	Preparation and characterization of solid dispersion of naproxen prepared by different techniques	2015-16	2 nd supervisor
49	Ahmad Kamal Moosa	Preparation and evaluation of modified and sustained release double layer tablet of Trimetazidine and Nifedipine	2015-16	2 nd supervisor
50	Sana Ijaz	Study of the effect of modified starch as tablet excipient using Lyophilization	2015-16	2 nd supervisor
51	Obaid Anwar	Study of the effect of tablet excipient modification using Lyophilization	2015-16	2 nd supervisor
52	Malia Pervaiz	Taste masking of sodium benzoate using ethylcellulose based optimized microsphere	2015-16	2 nd supervisor
53	Amna Hafeez	Formulation of ethylcellulose based sodium benzoate coacervates by non-solvent addition method using central composite design	2015-16	2 nd supervisor
54	Riffat Khan	Modification of starch as tablet excipient using freeze drying	2015-16	2 nd supervisor
55	Sameen Khan	Study of stability chloramphenicol in water based eye drops using CMC sodium, PEG-400 and PEG-4000	2016-17	2 nd supervisor
56	Hira Khurshid	Effect of temperature and pressure on pharmaceutical properties during milling of mefenamic acid	2016-17	2 nd supervisor
57	Rashida Sarwar	Effect of temperature and pressure on pharmaceutical properties during milling of ibuprofen	2016-17	2 nd supervisor
58	Ayesha Siddiq	Assessment of clinical risk of external infection in patients after cardiac bypass surgery	2016-17	2 nd supervisor
59	Iqra Saeed	Development and evaluation of sustained release preparation of Diclofenac sodium and mefenamic acid applying Fused deposition modeling (FDM) technique	2016-17	2 nd supervisor
60	Nida Saeed	Development and evaluation of tablets of Cefixime and ciprofloxacin applying Fused deposition modeling (FDM) technique	2016-17	2 nd supervisor
61	Esha Tariq Bhatti	Effect of polymorphism of indomethacin on its solid dispersion by quench cool method	2016-17	2 nd supervisor
62	Rabia Mehmood	Formulation and evaluation of Piroxicam loaded nano-sponges for topical delivery	2016-17	2 nd supervisor
63	Komal Sarwar	Formulation and Evaluation of indomethacin loaded nano-sponges for oral delivery	2016-17	2 nd supervisor
64	Fareeha Nosheen	Design, evaluation and stability optimization of ibuprofen nano-emulsion for topical use	2017-18	2 nd supervisor
65	Wajeeha Ishtiaq	Design, characterization analytical method validation and stability studies of Racecadol 100mg capsule	2018-19	2 nd supervisor
66	Asma Shah Rukh	Formulation and evaluation of cyclodextrin based nano-sponges of mefenamic acid	2018-19	2 nd supervisor

Undergraduate projects (Pharm D, Pharmaceutical technology)

S. No	Student Name	Title	Session
1	Khula Taj	Development of rice based ORS formulation	2012-13
2	Sana Tauheed	Development of Sodium Chloride mouthwash	2012-13
3	Lubna Mohsin	Development of Mefenamic acid Tablets	2012-13
4		Development of Ibuprofen Tablets	2014
5	Farah	Development of cinnamon toothpaste	2014
6	Kiran Pervaiz	Product development of Aloe Vera Soap	2015
7	Jamila Saleem	Effect Of Milling, Co-Milling On Bulk Properties, Solubility And Dissolution Rate Of Mefenamic Acid	2018
8	Fahad Hussain	Development of Ibuprofen Suspension	2018
9	Laila Iqtidar	Enhancement of dissolution rate of Ibuprofen by solid dispersion technique	2018
10	Areeba Maqsood	Preparation And Characterization Of Solid Dispersion Of Ibuprofen For The Improvement Of Solubility And Dissolution Rate	2018
11	Madeeha Rasool	Solubility And Dissolution Rate Enhancement Of Indomethacin By Solid Dispersion Technique Using	2018
12	Krishna	Enhancement of dissolution rate of Ibuprofen by co-milling technique	2018
13	Nyla Anwar	Effect of milling and co-milling on bulk properties of Diclofenac sodium	2018
14		Development Paper soap	2019
15	Warisha	Cotton candy based pediatric formulation	2019
16	Saif-Ullah	Adhesive strength of adhesive tapes	2019
17	Nimra	Development of Aloe Vera soap	2019
18		Transdermal patches of diclofenac sodium	2019
19		Microcapsules of diclofenac sodium	2019
20		Preparation and characterization of orally disintegrating films	2019

REFERENCES

1. Prof. Geoff Smith

Professor of Process Analytical Technologies
Leicester School of Pharmacy,
De Montfort University (DMU), Leicester, UK
(gsmith02@dmu.ac.uk)
+44 (0) 116 2506298

2. Prof. Nadeem Irfan Bukhari

Professor of Pharmaceutics
University College of Pharmacy,
University of the Punjab, Lahore, Pakistan.
(Nadeem_irfan@hotmail.com)
+92 (0) 42 99211616