

GUL SHAHNAZ

gshahnaz@qau.edu.pk | 0092-51-90644137 | Islamabad, Pakistan

WEBSITES, PORTFOLIOS, PROFILES

https://orcid.org/0000-0003-0736-2277 https://scholar.google.com.pk/citations?user=KaTRdF4AAAAJ&hl=en https://www.adscientificindex.com/scientist/gul-shahnaz/353285

https://www.qau.edu.pk/profile.php?id=831008

PROFESSIONAL SUMMARY

A seasoned molecular Nanomedicine Formulation scientist with 10+ years of experience, I specialize in developing innovative formulations for cancer and antimicrobial-resistant infections. With a strong publication record and leadership skills, I've successfully led research teams and translated discoveries into pre-clinical applications. My expertise spans diverse dosage forms, including oral formulations, nanoparticles, emulsions, liposomes, micelles, and microneedle patches. As an Associate Professor of the Pharmacy Department, I'm committed to advancing pharmaceutical education and research, bridging the gap between academia and the Pharma industry.

OBJECTIVE

- > Dedicated and accomplished professional with extensive experience in pharmaceutical research and education, seeking a professor position in the field of Pharmacy.
- > Seeking a challenging role as Director or Senior Scientist in multidisciplinary Formulation Sciences to leverage team leadership, strategic planning, and innovative drug development expertise.
- ➤ Open to part-time opportunities in Medical Writing or Communications, utilizing skills in clinical trial management, P/IND submissions, and scientific communication.

SKILLS

Dosage Form Research and Development, Leadership and Team Management, Project Management, Data Analysis, Scientific Communication, Regulatory Knowledge, Innovation and Problem Solving, Collaboration and Networking, Passion for Advancing Cancer and Antimicrobial Research

PROFESSIONAL EXPERIENCE

Tenured Professor Pharmacy, 09/2024 to Current Quaid-i-Azam University – Islamabad, Pakistan

Tenured Associate Professor Pharmacy, 10/2019 to 09/2024

Quaid-i-Azam University – Islamabad, Pakistan

- **Instructed** undergraduate and graduate courses in drug delivery, nanomedicine, biochemistry, biostatistics, and pharmaceutical technology, achieving higher student satisfaction rate.
- **Developed and implemented** innovative curriculum and teaching methods, leading to a 20% increase in student engagement and academic performance.
- **Supervised** doctoral research projects and mentored over 30 graduate students, guiding them to successful thesis completion and publication.
- **Secured** \$30,000 in research grants to fund studies in pharmaceutical sciences, significantly advancing the department's research capabilities.
- Published 30 peer-reviewed articles in high-impact journals, contributing to advancements in drug therapy and clinical
 practice.
- **Collaborated** with interdisciplinary teams on research projects, fostering a cooperative academic environment and enhancing cross-departmental initiatives.
- Chaired the Pharmacy Department's curriculum committee, leading efforts to update and refine course offerings based on industry trends and academic feedback.
- **Presented** research findings at national and international conferences, establishing the university as a leader in pharmaceutical research

- Advised the university's administration on accreditation and compliance matters, ensuring adherence to educational standards and regulations.
- Engaged with the community through outreach programs, promoting public health awareness and education.

Investigator-Formulation Science, 08/2022 to 06/2023

Inimmune – Missoula, MT, USA

Led the design and enhancement of adjuvant vaccine platforms, including emulsions, liposomes, and ionizable lipid nanoparticles (iLNPs), targeting intracellular STING, cell surface receptors, and endosomal TLR pathways.

Ensured compliance with GLPs, GMPs, cGXPs, ICH guidelines, and USFDA regulations, effectively managing regulatory correspondence.

Collected, analyzed, and interpreted data and documentation related to nanoformulation investigations.

Represented the formulations function in cross-functional teams, building strong relationships with internal and external stakeholders.

Head of the Pharmacy Department, 02/2020 to 08/2022

Quaid-i-Azam University – Islamabad, Pakistan

- Provided visionary leadership, setting strategic goals and objectives for the department.
- Oversaw daily administrative operations, including budgeting and personnel management.
- Ensured effective delivery and continuous improvement of academic programs.
- Collaborated with faculty on curriculum development and review to meet accreditation standards and industry trends.
- Facilitated class scheduling and teaching assignments.
- **Fostered** a positive, collaborative academic environment.
- Conducted performance evaluations and provided feedback.
- Oversaw student admissions and welfare, addressing concerns and grievances.
- Encouraged student engagement in academic and extracurricular activities.
- **Promoted** collaboration with other departments, institutions, and industry partners.
- Secured research funding opportunities.
- Ensured compliance with accreditation standards and regulatory requirements.
- Implemented quality assurance measures for academic programs and research.
- **Developed** and implemented a strategic plan aligned with institutional goals.
- **Identified** emerging trends and opportunities in pharmacy education and research.
- Upheld ethical standards in research, teaching, and professional conduct.

Visiting Assistant Professor, 06/2017 to 09/2017

The Ohio State University, Columbus, OH-USA

• Accumulated data on transgenic Leishmania donovani parasites expressing red fluorescent protein DsRed2 by imaging-flow cytometry to investigate parasitic burdens inside bone marrow-derived macrophages ex vivo

Visiting Assistant Professor, 06/2015 to 09/2015

The University of Nebraska Medical Center, Omaha, NE-USA

• Development of long-acting nano-formulated anti-microbial therapy that facilitates clearance of parasites due to effective delivery to microbial sanctuaries

Assistant Professor Pharmacy (Tenure Track System), 01/2013 to 10/2019

Quaid-i-Azam University – Islamabad, Pakistan

Provided expertise in formulation development and delivery of small organic compounds, peptides, and proteins via depot, oral, and pulmonary/nasal technologies.

- **Conducted** research to enhance drug solubility, permeation, and dissolution using novel particle engineering technologies and multifunctional excipients.
- Applied innovative teaching methods to achieve student learning objectives.
- Created materials and exercises to demonstrate drug delivery applications.
- Facilitated academic and community collaborations for research proposals to extramural funders.
- Collaborated on curriculum revision, course syllabi evaluation, and Pharmaceutical Technology lesson plans.

Education

Ph.D.: Pharmaceutical Technology, 03/2012

Leopold-Franzens-Universität Innsbruck - Innsbruck, Austria

- · Honoree of Co-Chairman to preside a session at 3rd ICDDT, 7th 10th February, 2011, Dubai, UAE
- · Overseas scholarship by Higher Education Commission (HEC) Pakistan and Austrian Agency for International Cooperation in Education and Research (ÖAD) Recipient
- · Study Abroad: Innsbruck, Austria, (Pharmaceutical Technology)
- · Center for Molecular Biosciences (CMBI), Innsbruck Member
- · Austrian Association of Molecular Life Sciences and Biotechnology (ÖGMBT)
- · American Association of Pakistani Pharmaceutical Scientists
- · Thesis: Thiolated Polymeric Excipients: Promising Platform for Controlled and Targeted Drug Delivery

Master of Science: Pharmaceutics, 01/2007 **Islamia University Bahawalpur** - Pakistan

- · Completed AP course in Drug Delivery
- · Relevant Coursework: Advanced Pharmaceutical Technology
- · Biopharmaceutics and Pharmaceutical Biotechnology
- · Advanced Pharmaceutical Quality assurance
- $\cdot \ Professional \ Development: Quality \ control \ and \ statistics \ Development \ of \ SOPs \ for \ dosage \ forms, \ Process \ validations, \ Stability \ studies, \ and \ shelf \ life$
- · Thesis: Bioequivalence studies of two brands of Flurbiprofen Tablets in Normal Human Plasma

Bachelor of Science: Pharmaceutical Sciences, 03/2005

Islamia University Bahawalpur – Pakistan

 $\cdot \ Relevant\ Coursework:\ Pharmaceutics-IIA\ (Dosage\ Forms\ Science)\ ,\ Pharmaceutical\ Chemistry-IIIA\ (Pharmaceutical\ Analysis)\ ,\ Pharmaceutics-VA\ (Biopharmaceutics\ \&\ Pharmacokinetics)$

Professional Development: Computer and its Applications in Pharmacy , Relative Humidity and Temperature Measurements, *in vitro* ADME testing, including bioavailability assays, metabolic profiling, stability, and metabolite identification,

SKILL SET

Experimental Skills: Electron paramagnetic resonance (EPR), FTIR, Raman spectroscopy, Confocal microscopy, CVD, XRD, SEM, TEM, AFM, Zeta prob, DLS, UV/Vis, BET surface area analyzer, Tumor microenvironment research, Cell culture, Stem cell culture, Mammalian and human cell culture, Flow cytometry, Bioluminescence imaging, Optical imaging, Fluorescence and chemiluminescence spectroscopy, Photoluminescence spectrometry, In vivo testing, Conjugation, HPLC, LC-MS, NMR, IR, UV, Raman, Rheometer, Ussing-Chambr, Diffusion Chamber, Confocal laser scanning microscopy, Flourescence imaging

Software: ChemDraw, Design Expert, Pk Fit

Project Management Skills: Project Design, Planning & Documentation, Engineering Budgeting, Scheduling and Cost Estimation, Team Coordination, and Supervision. Detail-oriented team player with strong organizational skills

Organizational: Ability to handle multiple projects simultaneously with a high degree of accuracy, Organized and dependable candidate successful at managing multiple priorities with a positive attitude, Willingness to take on added responsibilities to meet team goals **Computer Skills:**

- Linux based software; Pymol, Gaussian View.
- Windows-based software; ACD NMR, Chemstation, Chem. Draw, Chem. Office, Chem. Sketch, Chemfinder, Ms. Office; Ms. World, Ms. Excell, Ms. Powerpoint, Ms. Publisher, etc.

ACCOMPLISHMENTS

Currently, I hold the position of Director of the Dosage Development Research Group, specializing in combating Infectious Diseases of Poverty (IDoP) and exploring the tumor microenvironment.

- Initiated and established the WHO-QAU Collaboration on the Antimicrobial Stewardship Program.
- Secured accreditation for the Professional Pharm.D. Evening Program from the Accreditation Council on Pharmacy Education.
- Provided effective supervision and mentorship to 08 Ph.D. students and 35 M.Phil students, emphasizing program-specific drug delivery.
- Ranked among the Top 2% of Scientists in a specific subject category according to the AD Scientific Index, both globally and nationally.
- Implemented an innovative combination of thiolation and mannosylation through EDAC/NHS chemistry, enhancing the effectiveness of antimicrobial agents.
- Successfully addressed solubility issues of Active Pharmaceutical Ingredients (APIs) by formulating multifunctional excipients within the laboratory facility.
- In 2014, I received the prestigious UNESCO-L'Oreal International Fellowship in recognition of groundbreaking work in nanotechnology aimed at addressing the challenge of drug resistance associated with traditional infectious disease therapies.
- Recognized with the Research Productivity Award for the years 2014/15 and 2016/17.
- Served as an assessor for Postdoctoral Fellowships Phase III, Human Resource Development Division, Higher Education Commission, Pakistan.
- Contributed as a panel consultant for the Academics & Accreditation Division, Higher Education Commission, Islamabad.
- Actively participated as a member of the Curriculum Assessment Committee.
- Acknowledged as an expert in selected fields for diagnostics and treatment of Coronavirus by the Prime Minister's Task Force on Science & Technology.

Book Edited

Multifunctional polymeric excipients for targeted drug delivery, Publisher: LAP LAMBERT Academic Publishing (June 19, 2017), Editor: Gul Shahnaz, ISBN: 3330082097

Book Chapters

- 1) Riaz, S., Khizar, S., Ahmad, N.M., Shahnaz, G., Lebaz, N. and Elaissari, A. (2021). Magnetic Polymer Colloids for Ultrasensitive Molecular Imaging. In Magnetic Nanoparticles in Human Health and Medicine (eds C. Caizer and M. Rai)
- 2) Shahnaz, Gul, Hafiz Shoaib Sarwar and M Masoom Yasinzai. "Crossing Biological Barriers for Leishmaniasis Therapy: From Nanomedicinal Targeting Perspective." *Leishmaniases as Re-emerging Diseases* (2018): n. pag.
- 3) Kiani, Maria Hassan, M Masoom Yasinzai and Gul Shahnaz. "Multifunctional Polymeric Enveloped Nanocarriers: Targeting Extracellular and Intracellular Barriers." Molecular Insight of Drug Design (2018): n. pag.

Editorial/Reviewer Services

- 1. Nanomedicine
- 3. AAPS PharmSciTech
- 5. European Journal of Pharmaceutics and Biopharmaceutics
- 7. International Journal of Pharmaceutics
- 9. Journal of Drug Delivery Science and Technology
- 11. Journal of Materials Chemistry B
- 13. International Journal of Nanomedicine
- 15. Future Medicinal Chemistry
- 17. Tropical Journal of Pharmaceutical Research
- 19. Archiv der Pharmazie
- 21. Scientific Reports
- 23. Chemical Biology & Drug Design
- 25. Free Radical Biology and Medicine
- 27. Carbohydrate Polymers
- 29. Analytical Biochemistry
- 31. Brazilian Journal of Pharmaceutical Sciences
- 33. Journal of Molecular Structure
- 35. Journal of Molecular Liquids

- 2. Drug Development and Industrial Pharmacy
- 4. Biomaterials
- 6. Journal of Controlled Release
- 8. Medicina
- 10. Nanomaterials
- 12. Toxicology Research
- 14. Journal of Colloid Science and Biotechnology
- 16. Inorganica Chimica Acta
- 18. Journal of Nanoparticle Research
- 20. Artificial Cells, Nanomedicine, and Biotechnology
- 22. DARU Journal of Pharmaceutical Sciences
- 24. Applied Nanoscience
- 26. European Journal of Pharmaceutical Sciences
- 28. Plos One
- 30. Critical Reviews in Therapeutic Drug Carrier Systems
- 32. International Journal of Biological Macromolecules
- 34. Latin American Journal of Pharmacy

Affiliations/Membership/Certification

Pakistan Pharmacy Council

- \cdot The *L'Oréal-UNESCO* For Women in Science
- · Pakistan Pharmaceutical Manufacturers' Association
- · The Pakistan Academy of Sciences

Member of Department Probe Threat Committee (2012 to date) Active participation in Pakistan Pharmaceutical Sector Assessment Survey-Level II and report writing The Third World Academy of Sciences (TWAS) Member Department Purchase Committee (2012 to 2015)

Member of Departmental Tenure Committee (2019 – Present)

Member of Departmental Board of Study (2019 – Present)

Member of Departmental Board of Faculty (2019 – Present)

Member of Academic Council (2019 - Present)

Member department Grievance Committee (2012 to date)

Member of Department Fact Finding Committee

Member Board of Studies, Ripha Institute of Pharmaceutical

Sciences (2016-to date)

Services to the executive committee, curriculum and research, and scholarly activity committee

Member Attendance Committee

Served as chair of the Department of Pharmacy, The University of Lahore, Islamabad Campus

Dossier preparation for Pharmacy Council of Pakistan for Department Recognition

MOU draft writing for various hospital affiliations with the Department

Member department admission committee (2012 to date)

Coordination of Conferences/Workshops (5 Workshops have been organized)

Certified Registered Pharmacist

Certified to conduct peer review for authoritative journals in the Formulation of Science

World Health Organization (WHO) Training to measure transparency in the pharmaceutical sector - [4 weeks]

Selected Grants/Projects

- 1) Comparative bioavailability & pharmacokinetic characterization of phenothiazines by using self-nano emulsifying drug delivery
- 2) Nanoparticles based on Thiolated Polymeric Excipients: Promising Tool for Amphotericin B Drug Delivery in Leishmaniasis Therapy
- 3) Mucoadhesive In Situ Gel based on Thiomeric Excipients: Novel Strategy for Leishmaniasis Drug Delivery
- 4) Monocyte-macrophage as targeted drug depots for long-acting anti-microbial medicines
- 5) Synthesis and characterization of Polyethyleneimine-g-Poly(caprolactone-co-lactic acid) for the control release of drugs
- 6) Evaluation of mannose-anchored thiolated nanocarriers for improved oral bioavailability of amphotericin B against leishmaniasis therapy
- 7) Synthesis and characterization of a disulfide cross-linked multifunctional in situ gelling cargo for oral peptide drug delivery
- 8) Development of Thiolated Polymer Coated Gel: Promising Platform for Controlled and Targeted Drug Delivery in Leishmaniasis
- 9) Synthesis and Evaluation of Doped Phototoxic Nanoparticles based Topical Skin-care Cream as a Novel, Cheap Substitute to Current Treatment for Leishmania Infection

COURSES TAUG	HT		
Course Title	Credit Hours	No. of Students	PhD/M Phil/M. Sc.
Spring 2013			
PHM-306: Pharmaceutical Biochemistry-II (secA & B)	6	60	Pharm-D
PHM-308:Pharmaceutical Biochemistry-II (secA & B) Lab	2	60	Pharm-D
Fall- 2013			
PHM-305:Pharmaceutical Biochemistry-I (secA & B)	6	60	Pharm-D
PHM-307:Pharmaceutical Biochemistry-I ((secA & B) Lab	2	60	Pharm-D
PHM-761: Pharmacy Practice-I	1.5	30	M.phil
PHM-751: Pharmaceutics-I (Advanced Pharma & Biopharma)	1.5	45	M.phil/PhD
PHM-817: Pharma. Nanotechnology-I	1.5	31	M.phil/PhD
Spring 2014			
PHM-306:Pharmaceutical Biochemistry-II (secA & B)	6	55	Pharm-D
PHM-308:Pharmaceutical Biochemistry-II (secA & B) Lab	2	55	Pharm-D
PHM-815: Enhancement in Drug Delivery	3	20	M.phil/PhD
Fall 2014			
PHM-401:Pharmaceutical Preparation-I (secA & B)	6	50	Pharm-D
PHM-403:Pharmaceutical Preparation-I (secA & B) Lab	2	50	Pharm-D
Spring 2015			
During spring 2015, I was on Post-Doctoral Training at University of	of Nebraska Me	dical Center, Or	naha, Nebraska,

USA			
Fall 2015			
PHM-511: Pharma- Chemistry-II (Instrumentation)	3	60	Pharm-D
PHM-513: Pharma- Chemistry-II (Instrumentation) (secA & B) Lab	2	60	Pharm-D
PHM-815: Enhancement in Drug Delivery	3	31	M.phil/PhD
Spring 2016			
PHM-325-A: Pharma, chemII B Bio chm	3	60	Pharm-D
PHM-341-A: Pharmaceutics-II B Theory	3	60	Pharm-D
PHM-342-A: Pharmaceutics-II B Laboratory	1	56	Pharm-D
PHM-837-A: Public health pharmacy	3	21	M.phil/PhD
Fall 2016			-
PHM-314-A: Pharmaceutical Chm- II ABC Th	3	53	Pharm-D
PHM-315-A: Pharmaceutical chm- II A BC lab	1	53	Pharm-D
PHM-815-1: Enhancement in drug delivery	3	36	M.phil/PhD
Spring 2017			
PHM 325-A: Pharma.Chem-IIB Bio Chem	3	55	Pharm-D
PHM 602-A: Pharmaceutics VII	3	45	Pharm-D
PHM 743-A: Research planning & report writing	3	67	M.phil/PhD
Fall 2017			1 '
PHM-314: Biochemistry-A	3	55	Pharm-D
PHM-410: Hospital Pharmacy-I	3	50	Pharm-D
PHM-842: Advance Preventive Pharmacy	3	12	M.phil/PhD
Spring 2018	-		r
PHM-325-A: Pharma, chemII B Bio chm	3	60	Pharm-D
PHM-326-A: Pharma, chemII B Bio chm	1	60	Pharm-D
PHM-420-A: Hospital Pharmacy-I	3	55	Pharm-D
Fall 2018	-		
PHM 314-A: Pharmaceutical Chm-IIA BC Theory	3	54	Pharm-D
PHM 415-A: Pcutcs-VA(Biopcutcs & pmcokin)Th	3	51	M.phil/PhD
PHM 416-A: Pcutcs-VA(Biopcutcs & pmcokin) Lb	1	51	Pharm-D
Spring 2019			
PHM-325-A: Pharmaceutics-VB (B & P)Theory	3	56	Pharm-D
PHM-326-A: Pharmaceutics-VB (B & P) Lab	1	56	Pharm-D
PHM-837-A: Public Health Pharmacy	3	11	M.phil/PhD
Fall 2019 PHM 314-A: Pharmaceutical Chm-IIA BC Theory	3	54	M.phil/PhD
PHM 415-A: Pcutcs-VA(Biopcutcs & pmcokin)Th	3	5 4 55	Pharm-D
PHM 416-A: Pcutcs-VA(Biopcutcs & pmcokin) Lb	1	55	Pharm-D
Spring 2020			
PHM-842: Advance Preventive Pharmacy	3	8	M.phil/PhD
PHM- 821: Advanced Nanomedecine	3	32	M.phil/PhD
Fall 2020	2	17	M phil/PhD
PHM-837-A: Public Health Pharmacy PHM-815-1: Enhancement in drug delivery	3 3	17 38	M.phil/PhD M.phil/PhD

M. Phil/PhD Supervision (HEC Approved Supervisor)

	M. Phil Supervision			
S.No	Student's Name	Thesis title	Year	
1.	Fatima Balquis	Evaluating the Potential of Private Pharmacies to Circumvent the Tuberculosis Burden	2017	
2.	Azhar Hussain Tahir	Exploration of health care professionals' involvement and attitudes toward alternative medicines	2017	
3.	Rabia Arshad	Development and characterization of thiolated bandage for post- operative surgical site infections	2017	

	4.	Iqra Afzal	Targeted mannosylated nanoparticles for Paromomycin delivery in leishmaniasis therapy	2017
	5.	Bushra	Evaluation of wound vaccination services in community pharmacies	2017
	(Nawaz Cheema	Commenting analysis for the effectiveness of sombinations	2017
	6.	Sidra Butt	Comparative analysis for the effectiveness of combinatory antihypertensive therapy in clinical setting of Pakistan	2017
	7.	Tehniat Zahra	Parental vaccine hesitancy as a barrier for immunization coverage	2017
	7.	Termut Zumu	rate	2017
	8.	Beenish Ashfaq	Prevalence of airborne allergens in Pakistan and association of	2017
		1	trigger factor with allergenic diseases	
	9.	Hajra Zafar	Amoxicillin loaded mucoadhesive thiomer based nanoparticles for	2017
			H.pylori infection therapy	
	10.	Iqra Chaudhery	Development of long-acting enema for intracolonic administration of	2017
			vancomycin in lieu of pediatric infectious colitistherapy	
	11.	Uswa Rasheed	Malnutrition in surgical patients: Evaluation of pre- and postoperative	2018
		6 6 111	outcomes and effectiveness of nutritional screening tools	2010
	12.	Sara Shahid	Impact of Educational Intervention regarding Metered Dose Inhaler	2018
	10	A 1 1	Technique on Pharmacists and Asthma Patients	2010
	13.	Asma kanwal	Formulation and evaluation of thiolated mucoadhesive composite	2018
	14.	Sundus Maria	polymeric periodontal membrane of doxycycline Synthesis and characterization of nanoparticles based on	2019
	14.	Surious Maria	preactivated thiolated chitosan for oral delivery of octreotide	2019
	15.	Ayesha Batool	Formulation and evaluation of mucoadhesive self- nanoemulsifying	2019
	10.	Try cond battoor	drug delivery system (snedds) for tamoxifen	2017
	16.	Muhammad Shakeel	Synthesis and evaluation of thiolated emulgel based silver	2019
			nanoparticles for cutaneous leishmaniasis	
	17.	Sumbal Sohail	Educational intervention for Tuberculosis Prevention by health belief	2020
			model	
	18.	Muska	Management of maternal antenatal associated insomnia and anxiety	2020
			during pregnancy: pharmacist led implementation of cognitive	
			behavioral therapy	
	19.	Tania Mazhar	Mapping the potential of thiolated bandage against Staphylococcus	2020
	20	A 1 . 1 . 1 . 1	aureus.	2020
	20.	Ayesha bibi	Maternal iron deficiency anemia: impact of pharmacist-led intervention on hemoglobin level	2020
	21.	Sidra Ashraf	Synthesis and evaluation of thiolated hyaluronic acid based	2021
	21.	Sidia Asiliai	transferosomes for umblical cord infections	2021
	22.	Aiman Qaisar	Synthesis and evaluation of thiolated hyaluronic acid and papain	2021
		2	modified nanoparticles for treating <i>H.pylori</i>	
	23.	Muhammad Zahoor	Formulation and evaluation of silver/chlorhexidine/chitosan	2022
			nanocomposite as a modern wound dressing	
	24.	Anam Arshad	Natural product-based Nano formulated surgical hands wash: For an	2022
			enhanced antibacterial and antifungal activity.	
	25	Ramsha Khan	Design and synthesis of ciprofloxacin loaded stereocomplex	2022
			polymeric nano micelles against prostitis	
			PhD Supervision	
	1.	Muhammad Farhan Sohail	Design, synthesis and characterization of targeted thiolated	2017
			nanocargoes in cancer therapy	
	2.	Hafiz Shoaib Sarwar	Formulation and Evaluation of Macrophage Targeted Thiolated	2019
	2	Dalia Amala d	Nanocarriers for the Enhanced Efficacy of <i>Anti-Leishmanial</i> Drugs	2021
	3.	Rabia Arshad	Multi-functionalized SEDDS for mucosal and cellular trafficking against Salmonella typhi	2021
	4.	Ayesha Rauf	Macrophage Targeted Thiolated Nanocarriers against Tuberculosis	2022
	1.	11,0011011011	macrophage rangeled initiated realiseances against ruberediosis	_0
	5.	Maria Hassan Kiani	Multi-functional polymeric micelles for targeted intracellular delivery	2022
			of Rifampicin against Tuberculosis	-
	6.	Sobia Razzaq	Papain decorated multi-functional polymeric micelles for targeted	2022
			intracellular delivery of Paclitaxel	
_				

Conference Presentations

- 1) **Gul Shahnaz**, Glen Perera, Andreas Bernkop-Schnürch. The influence of efflux pumps on mucosal uptake of therapeutic peptides rich in hydrophobic amino acids, EuroNanoMedicine 2009, September 2009, Bled, Slovenia
- 2) **Gul Shahnaz**, Glen Perera, Andreas Bernkop-Schnürch. Synthesis, characterization, mucoadhesion and biocompatibility of thiolated carboxymethyldextran-cysteine conjugate, Annual Meeting CMBI, September 2009, Igls, Austria
- 3) Deni Rahmat, Duangkamon Sakloetsakun, **Gul Shahnaz**, Federica Sarti, Andreas Bernkop Schnürch. Enhanced transport of rhodamine 123 in presence of thiolated hydroxyethylcellulose in Caco-2 cells, 2nd Annual Meeting CMBI, September 2010, Igls, Austria
- 4) **Gul Shahnaz**, Deni Rahmat, Andreas Bernkop-Schnürch. Novel thiolated mucoadhesive nanoparticles: for sustained delivery and drug targeting, 2nd Annual Meeting CMBI, September 2010, Igls, Austria
- 5) Javed Iqbal, **Gul Shahnaz**, Andreas Bernkop-Schnürch. Enhanced oral bioavailabilty of paclitaxel in the presence of poly(acrylic acid)- cysteine conjugates, 6th Meeting of the Doctoral students from Innsbruck's Medical University and of the life sciences disciplines of the Leopold-Franzens Universität Innsbruck, November 24th, 2010, Austria
- 6) Deni Rahmat, Duangkamon Sakloetsakun, **Gul Shahnaz**, Federica Sarti, Andreas Bernkop Schnürch, The role of d-glucose units on the backbone of thiolated hydroxyethyl cellulose in permeation enhancing properties, 6th Meeting of the Doctoral students from Innsbruck's Medical University And of the life sciences disciplines of the Leopold-Franzens Universität Innsbruck, November 24th, 2010, Austria
- 7) **Gul Shahnaz**, Javed Iqbal, Andreas Bernkop-Schnürch Nasal Delivery Of Leuprolide Loaded Nanoparticles: Influence on ciliary beat frequency (cbf) of human nasal primary cell cultures, 6th Meeting of the Doctoral students from Innsbruck's Medical University And of the life sciences disciplines of the Leopold-Franzens Universität Innsbruck, November 24th, 2010, Austria
- 8) Deni Rahmat, **Gul Shahnaz**, Andreas Bernkop Schnürch. The application of thiolated hydroxyethylcellulose (hec) in cosmetic. International seminar on cosmetics: Recent development in cosmetics, Bandung, 26-27th November, Indonesia.
- 9) <u>Gul Shahnaz</u> and Andreas Bernkop Schnürch, Thiolated polymer conjugation with peptide drug: formulation, design and in vivo pharmacokinetic characterization, 3rd International Conference on Drug Discovery and Therapy (ICDDT), 7th 10th February, 2011, Dubai, UAE.
- 10) Deni Rahmat, <u>Jan Barthelmes</u>, Christiane Müller, Gul Shahnaz, Andreas Bernkop-Schnürch, Modulation of disulfide bonds for design of a mucoadhesive nanoparticulate peptide/protein drugs delivery system, Joint Meeting of the Austrian and German Pharmaceutical Societies, University of Innsbruck, September 20th – 23rd, 2011, Austria
- 11) <u>Gul Shahnaz</u>, Javed Iqbal, Flavia Laffleur, Deni Rahmat, Andreas Bernkop-Schnürch, Sustained parenteral peptide delivery providing extended plasma half life, Joint Meeting of the Austrian and German Pharmaceutical Societies, University of Innsbruck, September 20th 23rd, 2011, Austria
- 12) Javed Iqbal, <u>Gul Shahnaz</u>, Sarah Dünnhaupt, Christiane Müller, Andreas Bernkop-Schnürch, Mucoadhesive properties of novel preactivated poly(acrylates), Joint Meeting of the Austrian and German Pharmaceutical Societies, University of Innsbruck, September 20th 23rd, 2011, Austria
- 13) Flavia Laffleur, <u>Fabian Hintzen</u>, <u>Gul Shahnaz</u>, Andreas Bernkop-Schnürch, Enzymatic degradation of thiolated chitosan, Joint Meeting of the Austrian and German Pharmaceutical Societies, University of Innsbruck, September 20th 23rd, 2011, Austria
- 14) Deni Rahmat, **Gul Shahnaz**, Duangkamon Sakloetsakun, Glen Perera, Andreas Bernkop Schnürch, Chitosan-HIV 1 Tat peptide conjugate:Synergisim with thiomer in enhanced gene transfection efficiency, 7th Meeting of the Doctoral students from Innsbruck's Medical University And of the life sciences disciplines of the Leopold-Franzens Universität Innsbruck, November 11th, 2011, Austria.

Conferences/Seminars/Workshops

- 1) Conference on "5th Annual Meeting Center for Molecular Biosciences (CMBI)" 26th 27th 2008, Igls, Tyrol, Austria
- 2) Conference on "Life Science Meeting" 18th -19th September 2009, Igls, Tyrol, Austria
- 3) Conference on "EuroNanoMedicine" 28th 30th September 2009, Bled, Slovenia
- 4) Conference on "6th Meeting of the Doctoral students from Innsbrucks Medical University and of the life sciences disciplines of the Leopold-Franzens Universitat Innsbruck" 24th November, 2010, Innsbruck, Austria
- 5) Conference on "2nd Annual Meeting for Life Sciences" 24th -25th 2010 September, Igls, Tyrol, Austria
- 6) Conference on "Joint Meeting of the Austrian and German Pharmaceutical Societies" 20th -23rd September, 2011, Innsbruck, Austria
- 7) Conference on "3rd International Conference on Drug Discovery and Therapy (ICDDT)" 7th -10th February 2011, Dubai, UAE
- 8) Conference on "7th Meeting of the Doctoral students from Innsbrucks Medical University and of the life sciences disciplines of the Leopold-Franzens Universitat Innsbruck" 11th November 2011, Innsbruck, Austria
- 9) 17th International Pharmacy Conference & Exhibition, 19th 21th September 2012, Islamabad, Pakistan
- 10) Conference on "9th Biennial International Conference of Pakistan Society for Microbiology" Karachi 28th -31th January, 2013, Karachi, Pakistan
- 11) Engaging Private Pharmacies in TB Care & Control Training Workshop, 15th July, 2013, Network of Development Professionals, Islamabad, Pakistan

- 12) 1st International conference on Drug Development-Natural & Synthetic, 25th 27th August, 2013, Comsats-Abbottabad, Pakistan
- 13) International Symposium on Nanomaterials. "Nanomaterials Potential Applications & Challenges, 31th October, 2013, Lahore University of Management Sciences, Lahore, Pakistan
- 14) 18th International Pharmacy Conference & Exhibition, 31th October 2nd November, 2013, Pakistan Pharmacist Association, Lahore, Pakistan.
- 15) Promoting Research and Publication in Pharmaceutical Policy and Practice 20th December 2013 Health Services Academy, Islamabad, Pakistan
- 16) Recent Advances in Nanotechnology, January 6, 2014, PINSAT, Preston University Islamabad
- 17) For Women in Science Week, 16th -20th March, 2014, UNESCO head office, Paris, France
- 18) Good Governance for Medicines (GGM),21th 23th April, World Health Organization Lahore, Pakistan
- 19) Pharmaceutical Sector Assessment Survey Level II, 15th -17th September 2014, World Health Organization, Islamabad, Pakistan
- 20) 2nd International Workshop Pharmacy Practice/Clinical Pharmacy,15th -19th December 2014,Quaid-i-Azam , Islamabad, Pakistan
- 21) Sixth Structural Biology & Molecular Biophysics Workshop,9th July 2015, University of Nebraska Medical Center (UNMC), Durham Research Center, Omaha, USA
- 22) Seminaraqa on Adventures in the Small World: A Novel Approach to Understanding Intracellular Events During HIV-1 Infection of the CNS, 17th July 2015, University of Nebraska Medical Center (UNMC), Eppley Science Hall, Omaha, USA
- 23) Seminar on Hybridtides and the Artisan Biology platform Towards oral delivery and novel therapeutic mechanisms 28th July 2015, University of Nebraska Medical Center(UNMC), Durham Research Center, Omaha, USA
- 24) International Nanomedicines Symposium on Nanotheranostics, 26th November 2015, NORI, Islamabad
- 25) International Symposium, Nanomedicines: Development, Testing and Application Possibilities, 1st March 2016, NORI, Islamabad
- 26) ISESCO Women in Science Conference on Contributions of Pakistani Women in Scientific and Social Development2, 8th March 2016, QAU, Islamabad
- 27) Regional Workshop On Biosafety and Biosecurity for Life Sciences Researchers, 26th -27th April, 2016 Pakistan Academy of Sciences, Islamabad
- 28) 3rd Conference on Frontiers of Nanoscience and Nanotechnology, 25th October 2016, PINSTECH, Islamabad.
- 29) 4th conference on Frontiers of Nanoscience and Nanotechnology, 12-13 December, 2017 PINSTECH, Islamabad
- 30) Research protocol development workshop for Implementation research, 9-12 May 2017 Health Services Academy, Islamabad
- 31) 2nd International Workshop on Experimental Biology-IWEB-2017 "Nanotheranostics: From Bench to Bedside and Beyond"22-24 November 2017, NILOP, Islamabad
- 32) National Workshop "Nanomedicine; Advancements and Challenges in Pakistan" November 27-29, 2017 Department of Pharmacy, Quaid-i-Azam University, Islamabad
- 33) 1st Annual Health Research Conference on "Health Research- A Step towards Attaining SDGs 2030" Pakistan Health Research Council (PHRC), September 2018, Marriot Hotel, Islamabad
- 34) Regional conferences on reinforce the themes for young university lecturers and professors on counter-radicalization by The Center for Research and Security Studies, June 30, 2018 at Hill View Hotel, Islamabad.
- 35) 9th Annual Public Health Conference on Global Public Health: Thinking globally and acting Locally by Pakistan Health Services Academy, 4-5th December 2018, Islamabad
- 36) National Dialogue on Women in Science, organized by UNESCO in partnership with UNWOMEN, Pakistan Alliance for Maths and Science and Lahore College for Women University (LCWU), 11-12 February 2019 at LCWU, Lahore
- 37) 3rd International Conference on "Recent Advancement in Pharmaceutical Research and Drug Delivery" February 19-20, 2019, QAU, Islamabad
- 38) International "One-Health Research Symposium" Pakistan Academy of Sciences, November 17, 2019
- 39) International Conference and workshop on "Dengue Infection in Pakistan and its Controlling Strategies "organized by Department of Animal Sciences, QAU, 17-12- 2019 Venue Geo Auditorium QAU
- 40) International Conference on Health and Migration by The Department of Sociology in collaboration with Edinburgh University, UK and International Centre for Migration Policy Development on 19th December 2019 in the Earth Sciences Auditorium
- 41) World Antimicrobial Awareness Week (November 18-24th, 2020), QAU, Islamabad
- 42) 6th International Conference on Public Health 2020, (ICOPH 2020), 09th 11th July 2020, in Bangkok, Thailand
- 43) Fourth International Conference on "Integrative multidisciplinary nanomedicine: a game changing strategy for emerging infectious disease, October 10, 2020, QAU
- 44) Fighting Breast Cancer in a Developing Country: Insight from Pink Pakistan Trust's Technology driven Initiatives on March 8, 2021 at COMSTECH secretariat
- 45) Launch of ISAAA Brief 55 and Seminar on "Science Communication and Public Engagement" on March 9, 2021 at COMSTECH secretariat

PUBLICATIONS

List of Publications

	Authors/Title of Research Paper (Impact Factor ~350, Citation: 2556, h-index:32,i10-index 57)	Journal Name/ISSN Volume (Issue No): Page No (Year)	Category W/X/Y/Z (Impact Factor)
1.	Balquis F, Sohail MF, Hamid H, Ullah W, Khan AH, Shahnaz G. Potential and	Front Public Health. 2023	W
	weak links in the management of tuberculosis by Pakistani private pharmacy staff.	Mar 9;11:983997	5.18
2.	Ahmed, N., Sohail, M.F., Khurshid, Z. <i>et al.</i> Synthesis, Characterization, and In Vivo Distribution of ^{99m} Tc Radiolabelled Docetaxel Loaded Folic Acid-Thiolated Chitosan Enveloped Liposomes.	BioNanoSci. 13, 134–144 (2023).	W 3.63
3.	Shakeel M, Kiani MH, Sarwar HS, Akhtar S, Rauf A, Ibrahim IM, Ajalli N, Shahnaz G, Rahdar A, Díez-Pascual AM. Emulgel-loaded mannosylated thiolated chitosan-coated silver nanoparticles for the treatment of cutaneous leishmaniasis	Int J Biol Macromol. 2023 Feb 1;227:1293-1304	W 8.025
4.	Zahra T, Shoaib Sarwar HS, Sarfraz M, Zaman M, Ahmad H, Jalil A, Shahnaz G, Sohail MF Thiomer coated solid lipid nanoparticles for the enhanced oral bioavailability of tacrolimus: in-vitro and in-vivo evaluation	J Drug Deliv Sci Technol ISSN:1773-2247	W 5.062
5.	Kiani M., et. Al., Cholesterol decorated thiolated stereocomplexed nanomicelles for improved anti-mycobacterial potential via efflux pump and	J. Mol. Liq. ISSN:0167-7322	W
	mycothione reductase inhibition	2022	6.16
6.	Qaisar A., Design and synthesis of multifunctional polymeric micelles for targeted delivery in Helicobacter pylori infection	J. Mol. Liq. ISSN:0167-7322 2022	W 6.16
7.	Arshad R, Arshad MS, Tabish TA, Shah SNH, Afzal S, Shahnaz G. Amidated Pluronic Decorated Muco-Penetrating Self-Nano Emulsifying Drug Delivery System (SNEDDS) for Improved Anti-Salmonella typhi Potential.	Pharmaceutics. 2022 Nov 10;14(11):2433.	W 5.55
8.	Jahan F, Zaman SU, Syed MA, Arshad R, Amjad O, Ali I, Gul R, Shahnaz G, Aamir MN, Hanif S. HPLC method development and validation for in vitro and in vivo quantification of vancomycin in rabbit plasma.	Pak J Pharm Sci. 2022 Nov;35(6(Special)):1683- 1690.	W 0.79
9.	Shahid S, Ahmed F, Shahnaz G, Saqlain M, Ans M, Sana A, et al. The Impact of Theoretical and Practical Guidance Regarding Metered dose Inhaler Technique on Asthma Patients. J Young Pharm. 2022;14(3):327-32	J Young Pharm. 2022;14(3):327-32	
10.	Faiqa Nazir, Tanveer A. Tabish, Fatima Tariq, Shanza Iftikhar, Rijja Wasim, Gul Shahnaz, Stimuli-sensitive drug delivery systems for site-specific	Drug Discovery Today, 6, 1698-1705,	W 8.369
	antibiotic release,	2022	0.507
11.	Javed QUA, Syed MA, Arshad R, Rahdar A, Irfan M, Raza SA, Shahnaz G,	Pharmaceutics Apr 7;14(4):807	W 6 525
	Hanif S, Díez-Pascual AM. Evaluation and Optimization of Prolonged Release Mucoadhesive Tablets of Dexamethasone for Wound Healing: In Vitro-In Vivo Profiling in Healthy Volunteers.	2022	6.525
12.	Habib, R.; Azad, A.K.; Akhlaq, M.; Al-Joufi, F.A.; Shahnaz, G.; Mohamed, H.R.H.; Naeem, M.; Almalki, A.S.A.; Asghar, J.; Jalil, A.; Abdel-Daim, M.M.	Polymers , 14, 415 2022	W 4.967
	Thiolated Chitosan Microneedle Patch of Levosulpiride from Fabrication, Characterization to Bioavailability Enhancement Approach.	2022	4.907
13.	Razzaq, S.; Rauf, A.; Raza, A.; Akhtar, S.; Tabish, T.A.; Sandhu, M.A.; Zaman,	Nanomaterials	W 5.710
	M.; Ibrahim, I.M.; Shahnaz, G.; Rahdar, A.; Díez-Pascual, A.M. A Multifunctional Polymeric Micelle for Targeted Delivery of Paclitaxel by the Inhibition of the P-Glycoprotein Transporters.	11, 2858 2021	5.719
14.	Design of Mannose-Coated Rifampicin Nanoparticles Modulating	Arab. J. Chem.	TAT
	the Immune Response and Rifampicin Induced Hepatotoxicity with Improved Oral Drug Delivery. Rauf A, Tabish TA, Tehseen S, Sandhu MA, Pandey S, Shahnaz G, Rahdar A.	ISSN: 18785352 2021	W 5.16

15.	Polyethylene imine conjugated supramolecular stereocomplexed	Colloids Surf. B0927-7765	W
	nanomicelles for intracellular delivery of rifampicin against Mycobacterium	2021	5.26
	bovis. Kiani MH, Ali S, Qadry A, Arshad R, Aslam A, Shahnaz G.		
16.	Papain decorated multi-functional polymeric micelles for the targeted	Poly for adva.	W
	intracellular delivery of paclitaxel. Razzaq S, Rauf A, Tabish TA, Raza A,	Tech.	3.66
	Shahnaz G.	ISSN:1099-1581 2021	
17.	A Hyaluronic Acid Functionalized Self-NanoEmulsifying Drug Delivery	Nanomaterials	W
	System (SNEDDS) for Enhancement in Ciprofloxacin Targeted Delivery	ISSN: 1743-5889	5.06
	against Intracellular Infection. Arshad R, Tabish TA, Kiani MH, Ibrahim MI, Shahnaz G, Rahdar A, Kang M, Pandey S	May;14(4):387-406, (2021)	
18.	Development of poly-L-lysine multi-functionalized muco-penetrating self-	J. Mol. Liq.	W
	emulsifying drug delivery system (SEDDS) for improved solubilization and	ISSN:0167-7322	6.16
	targeted delivery of ciprofloxacin against intracellular Salmonella typhi. Arshad A, Tabish TA, Naseem AA, Hassan AB, Hussain I, Hussain Shahzad, Shahnaz G.	2021	
19.	Enhanced solubility and biopharmaceutical performance of atorvastatin and	Eur. J. Pharm. Sci.	W
	metformin via electrospun polyvinylpyrrolidone-hyaluronic acid composite	ISSN:0928-0987	3.616
	nanoparticles. Iqbal R, Yousaf MA, Sohail MF, Rehman M, Hussain SZ, Huma Z, Shahnaz G, Quereshi OS, Shahnaz G. 3.	2021	5.010
20.	A review of nanomaterial use for the diagnosis and therapy of Salmonella	J. Mol. Struct.	W
	typhi. Arshad R, Paul K, Sabir F, Rahdar A, Bilal M, Shahnaz G, Kyzas	ISSN:0022-2860	3.16
		2021	
21.	Mapping the potential of thiolated pluronic based nanomicelles for the safe	J Drug Deliv Sci Technol	W
	and targeted delivery of vancomycin against staphylococcal blepharitis. Jahan	ISSN:1773-2247	3.96
	F, Zaman S, Arshad R, Tabish TA, Shahnaz G		
22.	Investigating the intracellular bactericidal effects of rifampicin loaded S-	J Drug Deliv Sci Technol	W
	protected thiomeric chitosan nanocargoes against Mycobacterium	ISSN:1773-2247	3.96
	tuberculosis. Rauf A, Razzaq S, Tabish TA, Tehseen S, Sandhu MA, Shahnaz G.	2020	
23.	Fabrication and optimization of PH sensitive mannose anchored nano vehicle	Applied nanoscience	X
	as a promising approach for macrophage uptake. Mukhtar A, Zeeshan M, Khan S, Shahnaz G, Khan SA, Sarwar HS, Pasha RA, Ali H	ISSN: 1388-0764 2020	3.66
24.	Green synthesized selenium doped zinc oxide nano antibiotics synthesis	J. Mater. Chem. B	W
	characterization and evaluation of antimicrobial nanotoxicity and	ISBN:2050-750X	4.889
	teratogenicity potential. Sohail MF, Rehman M, Hussain SZ, Huma Z,		
	Shahnaz G, Quereshi OS, Khalid Q, Hussain		
25.	Green Synthesis of Zinc Oxide Nanoparticles by Neem Extract as Multi-facet	J Drug Deliv Sci Technol	W
	Therapeutic Agents. Sohail MF, Rehman M, Hussain SZ, Huma Z, Shahnaz G,	ISSN:1773-2247	6.3
26	Quereshi OS, Khalid Q, Hussain I	2020 Nanomaterials	1 47
20.	Amphotericin B Loaded Polymeric Nanoparticles for Treatment of Leishmania Infections. Saqib M, Bhatti S, Ahmad N, Ahmed N, Shahnaz G,	ISSN: 1743-5889	W 3.96
	Lebaz N	Feb;14(4):387-406, (2020)	3.90
27.	Oral delivery and enhanced efficacy of antimonal drug through macrophage-	Eur J Pharm Biopharm.	W
	guided multifunctional nanocargoes against visceral Leishmaniasis. Sarwar	79(1):171-80	5.06
	HS, Varikuti S, Sohail M, F, Sarwar M, Satoskar AR, Shahnaz G.		
28.	Synthesis and characterization of pre-activated thiolated chitosan	J Drug Deliv Sci Technol	W
	nanoparticles for oral delivery of octreotide. Maria S, Sarwar HS, Sohail MF,	ISSN:1773-2247	4.604
	Imran M, Salman O, Ahmad N, Iqbal A, Shahnaz G.	2020	
29.	Multi-functionalized nanocarriers targeting bacterial reservoirs to overcome	DARU J. Pharm. Sci	W
	challenges of multi drug-resistance. Kiani MH, Imran M, Raza A, Shahnaz G	ISSN:1773-2247	3.96
20	Formulation and avaluation of hydronic and hard and hard	2020 Int. J. Biol. Macromol.	
30.	Formulation and evaluation of hyaluronic acid-based mucoadhesive self nanoemulsifying drug delivery system (SNEDDS) of tamoxifen for targeting	ISSN:1773-2247	W 2 117
	breast cancer. Batool, A., Arshad Khan, R., Razzaq, S., Nousheen, K., Kiani, M.,	2020	3.117
	& Shahnaz, G.	4040	
31.	Fabrication and Characterization of Thiolated Chitosan Microneedle Patch for	AAPS PharmSciTech. ISSN:	W
	Transdermal Delivery of Tacrolimus Ahmad Z, Khan MA, Siddiqui MI,	1530-9932	3.2
	Sarwar HS, Sohail MF, Rehman M, Hussain I, Shahnaz G,	7;21(2):60.	-
	, , , , , , , , , , , , , , , , , , ,	2020	

	32.	Design of enzyme decorated mucopermeating nanocarriers for eradication of H. pylori infection, Zafar H, Kiani MH, Raza F, Rauf A, Chaudhery I, Ahmad NM, Akhtar S, Shahnaz G,	J. Nanoparticle Res. ISSN: 1388-0764 2020	W 2
	33.	Development and Characterization of Bioadhesive Film Embedded with	AAPS PharmSciTech.	W
		Lignocaine and Calcium Fluoride Nanoparticles. Ghafar H, Khan MI, Sarwar HS, Yaqoob S, Hussain SZ, Tariq I, Madni AU, Shahnaz G, Sohail MF	ISSN: 1530-9932 7;21(2):60.	3.2
			2020	
	34.	Formulation and Evaluation of Novel Thiolated Intra Pocket Periodontal	AAPS PharmSciTech.	W
		Composite Membrane of Doxycycline. Kanwal A, Iqbal A, Arshad R, Akhtar	ISSN: 1530-9932	3.2
		S, Razzaq S, Ahmad NM, Naz H, Shahnaz G.	28;20(8):325. 2019	
	2-		AADODI C'T I	XA7
	35.	Development and Evaluation of Optimized Thiolated Chitosan Proniosomal	AAPS PharmSciTech.	W
		Gel Containing Duloxetine for Intranasal Delivery. khatoon M, Sohail MF,	ISSN: 1530-9932	3.2
		Shahnaz G, Rehman F, Din FU, Rehman Au.	18(4):1043-1055.	
			2019	
	36.	ZnO-NPs embedded biodegradable thiolated bandage for postoperative		
		surgical site infection: in vitro and in vivo evaluation. Arshad R, Sohail MF,	PLOS ONE	
		Sarwar HS, Saeed H, Ali I, Akhtar S, Hussain SZ, Afzal A, Jehan J, Rehman A	ISSN: 1932-6203	3.2
		and Shahnaz G.	(2019)	
	37.	Drug Delivery System (SNEDDS) for Improved Oral Bioavailability of	Medicina (Kaunas).	W
	0	Chlorpromazine: In Vitro and In Vivo Evaluation Baloch J, Sohail MF, Sarwar	ISSN: 1010-660X	2.43
		HS, Kiani MH, Khan GM, Jahan S, Rafay M, Chaudhry MT, Yasinzai M,	May 24;55(5).	2.10
			•	
	30	Shahnaz G. Self-Nanoemulsifying.	(2019)	147
	38.	Mannosylated thiolated paromomycin-loaded PLGA nanoparticles for the	Nanomedicine (Lond).	W
		oral therapy of visceral leishmaniasis. Afzal I, Sarwar HS, Sohail MF, Varikuti	ISSN: 1743-5889	5.3
		S, Jahan S, Akhtar S, Yasinzai M, Satoskar AR, Shahnaz G.	Feb;14(4):387-406 (2019)	
	39.	Folate-Functionalized Thiomeric Nanoparticles for Enhanced Docetaxel	AAPS PharmSciTech.	W
		Cytotoxicity and Improved Oral Bioavailability Sajjad M, Khan MI, Naveed S,	ISSN: 1530-9932	3.2
		Ijaz S, Qureshi OS, Raza SA, Shahnaz G, Sohail MF	Jan 15;20(2):81.	
		Jul 9, Quicom 99, man 914, ordinan 9, oordin 111 "	(2019)	
	40	Evaluation of Turmeric Nanoparticles as Anti-Gout Agent: Modernization of	Medicina (Kaunas).	W
	10.	a Traditional Drug Kiyani MM, Sohail MF, Shahnaz G, Rehman H, Akhtar MF,	ISSN: 1010-660X	2.43
		• •		2.43
		Nawaz I, Mahmood T, Manzoor M, Bokhari SAI	Jan 11;55(1)	
			(2019)	
	41.	Polymeric nanocapsules embedded with ultra-small silver nanoclusters for	Sci Rep.	W
		synergistic pharmacology and improved oral delivery of Docetaxel Sohail MF,	ISSN: 2045-2322.	4.6
		Hussain SZ, Saeed H, Javed I, Sarwar HS, Nadhman A, Huma ZE, Rehman M,	Sep 6;8(1):13304. (2018)	
		Jahan S, Hussain I, Shahnaz G		
	42.	Advancements in the oral delivery of Docetaxel: challenges, current state-of-	Int J Nanomedicine.	W
		the-art and future trends. Sohail MF, Rehman M, Sarwar HS, Naveed	ISSN: 1178-2013	6.4
		S, Salman O, Bukhari NI, Hussain I, Webster TJ, Shahnaz G.	Jun 8;13:3145-3161	
		, , , , , , , , , , , , , , , , , , ,	(2018)	
	43	Design of mannosylated oral amphotericin B nanoformulation: efficacy and	Artif Cells Nanomed	
	10.	safety in visceral leishmaniasis.Sarwar HS, Sohail MF, Saljoughian N, Rehman	Biotechnol.	W
		, 0	ISSN: 21691401	5.6
		AU, Akhtar S, Nadhman A, Yasinzai M, Gendelman HE, Satoskar		5.0
4.4		AR, Shahnaz G.	Jan 31:1-11. (2018)	
44.		Mannosylated thiolated polyethylenimine nanoparticles for the enhanced	Nanomedicine (Lond).	¥47
		efficacy of antimonial drug against Leishmaniasis. Sarwar HS, Ashraf S,	ISSN: 1743-5889	W
		Akhtar S, Sohail MF, Hussain SZ, Rafay M, Yasinzai M, Hussain I, Shahnaz	Jan;13(1):25-41	4.727
		G.	(2018)	
45.		Biosynthesized colloidal silver mand gold nanoparticles as emerging	Nanomedicine (Lond).	
		leishmanicidal agents: an insight. Ovais M, Nadhman A, Khalil AT, Raza A,	ISSN: 1743-5889	
		Khuda F, Sohail MF, Islam NU, Sarwar HS, Shahnaz G , Ahmad I, Saravanan	12(24):2807-2819.	W
		M, Shinwari ZK.	(2017)	4.727
46.		Redox biology of Leishmania and macrophage targeted nanoparticles for	Nanomedicine (Lond).	
		therapy Sarwar HS, Akhtar S, Sohail MF, Naveed Z, Rafay M, Nadhman A,	12(14):1713-1725	W
		Yasinzai M, Shahnaz G	(2017)	4.727
		THORIZON ITH ORIGINAL O	(2017)	1./ 4/

47.	Cell to rodent: toxicological profiling of folate grafted thiomer enveloped nanoliposomes, Sohail MF, Sarwar HS, Javed I, Nadhman A, Hussain SZ, Saeed H,	Toxicol. Res. ISSN:19768257	W
	Raza A, Bukhari NI, Hussain I, Shahnaz G	6, 814-821 (2017)	1.969
48.	Development of mannose-anchored thiolated amphotericin B nanocarriers for	Nanomedicine (Lond).	
10.	treatment of visceral leishmaniasis Shahnaz G , Edagwa BJ, McMillan J,	12(2):99-115.	W
	Akhtar S, Raza A, Qureshi NA, Yasinzai M, Gendelman HE	(2017)	4.727
40			4.727
49.	Formulation and in Vitro Characterization of Thiolated Buccoadhesive Film of	AAPS PharmSciTech.	
	Fluconazole Naz K, Shahnaz G , Ahmed N, Qureshi NA, Sarwar HS, Imran M,	ISSN: 1530-9932	W
	Khan GM	18(4):1043-1055.	2.451
		(2017)	
50.	In-vitro antileishmanial potential of peptide drug hirudin.Khan H, Nadhman	Chem Biol Drug Des.	
	A, Azam SS, Anees M, Khan I, Ullah I, Sohail MF, Shahnaz G , Yasinzai M.	ISSN: 1747-0285	W
		89(1):67-73.	2.39
		(2017)	
51.	Rise of single organopathy theory from ayurveda system- a short	World J Pharma	
51.			
	report from pakistan's perspective.wjps Tahir AH, Tanveer M, Ahmed A,	5(12):12-19	
	Arshad A, Shahnaz G . 2016	(2016)	
52.	Folate grafted thiolated chitosan enveloped nanoliposomes with enhanced oral	J Mater Chem B.	
	bioavailability and anticancer activity of docetaxel Sohail MF, Javed I, Hussain SZ,	ISSN:20507518	
	Sarwar HS, Akhtar S, Nadhman A, Batool S, Bukhari NI, Saleem RSZ, Hussain I,	4: 6240-6248.	W
	Shahnaz G, ,	(2016)	4.543
53.	Annihilation of Leishmania by daylight responsive ZnO nanoparticles: a	Int J Nanomedicine.	
	temporal relationship of reactive oxygen species-induced lipid and protein	ISSN: 1178-2013	
	oxidation Nadhman A, Khan MI, Nazir S, Khan M, Shahnaz G , Raza A, Shams	31;11:2451-61.	W
- 4	DF, Yasinzai M	(2016)	4.543
54.	Antileishmanial, DNA Interaction, and Docking Studies of Some Ferrocene-	Arch Pharm (Weinheim).	
	Based Heteroleptic Pentavalent Antimonials. Rauf MK, Shaheen U, Asghar F,	ISSN: 1521-4184	
	Badshah A, Nadhman A, Azam S, Ali MI, Shahnaz G , Yasinzai M.	349(1):50-62.	W
		(2016)	1.994
55.	Thiolated nanocarriers for oral delivery of hydrophilic macromolecular drugs.	Carbohydr Polym.	
	Dünnhaupt S, Barthelmes J, Köllner S, Sakloetsakun D, Shahnaz G, Düregger	ISSN: 0144-8617	W
	A, Bernkop-Schnürch A.	6;117:577-84	4.81
	, 1	(2015)	
56.	Synthesis, characterization and evaluation of lecithin-based nanocarriers for the	J Mater Chem B.	
50.	enhanced pharmacological and oral pharmacokinetic profile of amphotericin B, J	ISSN:20507518	
			TA7
	Mater Chem B Javed I, Hussain SZ, Ullah I, Khan I, Ateeq M, Shahnaz G, Rehman	3 (42), 8359-8365, (2015)	W
	H, Razi MT, Shah MR, Hussain I.		4.543
57.	PEGylated silver doped zinc oxide nanoparticles as novel photosensitizers for	Free Radic Biol Med.	
	photodynamic therapy against Leishmania. Nadhman A, Nazir S, Khan MI,	ISSN: 1873-4596	W
	Arooj S, Bakhtiar M, Shahnaz G , Yasinzai M.	77:230-8	5.736
		(2014)	
58.	Drug resistance in leishmaniasis: current drug-delivery systems and future	Future Med Chem.	
	perspectives. Yasinzai M, Khan M, Nadhman A, Shahnaz G .	ISSN: 1756-8927	W
		5(15):1877-88.	3.556
		(2013)	0.000
E0.	Development and in witre evaluation of clippers, paperarticles for enhanced	Nanomedicine (Lond).	
59.	Development and in vitro evaluation of slippery nanoparticles for enhanced		
	diffusion through native mucus. Laffleur F, Hintzen F, Shahnaz G , Rahmat D,	9(3):387-96.	***
	Leithner K, Bernkop-Schnürch A.	(2014)	W
			4.727
60.	Design and in vitro evaluation of a novel polymeric excipient for buccal	Future Med Chem.	
	applications Laffleur F, Shahnaz G, Islambulchilar Z, Bernkop-Schnürch A	ISSN: 1756-8927	W
	•	5(5):511-22	3.556
		(2013)	-
61.	Development of thiolated poly(acrylic acid) microparticles for the nasal	Drug Dev Ind Pharm.	
J1.	administration of exenatide, Millotti G, Vetter A, Leithner K, Sarti F, Shahnaz	ISSN: 1520-5762	W
	G, Augustijns P, Bernkop-Schnürch A.	40(12):1677-82	2.101
		(2014)	

62.	Organotin(IV) complexes of carboxylate derivative as potential	Inorganica Chimica Acta	
	chemotherapeutic agents against Leishmania.Qureshi QAH, Nadhman	ISSN: 0020-1693	W
	A, Sirajuddin M, Shahnaz G , Ali S, Shah A, Yasinzai M,	423 :Part B: 220-228. (2014)	2.064
63.	Efficient MRI labeling of endothelial progenitor cells: design of thiolated	Eur J Pharm Biopharm.	
	surface stabilized superparamagnetic iron oxide nanoparticles. Shahnaz G,	ISSN: 1873-3441	
	Kremser C, Reinisch A, Vetter A, Laffleur F, Rahmat D, Iqbal J, Dünnhaupt S,	85(3 Pt A):346-55.	W 4.150
64.	Salvenmoser W, Tessadri R, Griesser U, Bernkop-Schnürch A. Thiolated hydroxyethyl cellulose: design and in vitro evaluation of	(2013) Eur J Pharm Biopharm.	4.159
04.	mucoadhesive and permeation enhancing nanoparticles Rahmat D, Müller C,	ISSN: 1873-3441	
	Barthelmes J, Shahnaz G , Martien R, Bernkop-Schnürch A	83(2):149-55	W
	•		4.159
65.	Enzymatic degradation of thiolated chitosan. Laffleur F, Hintzen F, Rahmat	Drug Dev Ind Pharm.	W
	D, Shahnaz G, Millotti G, Bernkop-Schnürch A	ISSN: 1520-5762	2.101
		39(10):1531-9	
66.	HEC-cystamine particles: influence of particle size, zeta potential, morphology	(2013) Drug Dev Ind Pharm.	W
00.	and sulfhydryl groups on permeation enhancing properties Rahmat D, Müller	ISSN: 1520-5762	2.101
	C, Shahnaz G, Leithner K, Laffleur F, Khan MI, Martien R, Bernkop Schnürch	39(9):1338-45	
	A	(2013)	
67.	A. Thiomers: influence of molar mass on in situ gelling properties. Hintzen F,	Int J Pharm.	W
	Laffleur F, Sarti F, Shahnaz G , Bernkop-Schnürch	ISSN: 1873-3476	3.694
		436(1-2):120-6. (2012)	
68.	Thiolated chitosan nanoparticles for the nasal administration of leuprolide:	Int J Pharm.	
00.	bioavailability and pharmacokinetic characterization. Shahnaz G , Vetter A,	ISSN: 1873-3476	W
	Barthelmes J, Rahmat D, Laffleur F, Iqbal J, Perera G, Schlocker W, Dünnhaput	428(1-2):164-70	3.694
	S, Augustijns P, Bernkop-Schnürch A.	(2012)	
69.	Synergistic effects of conjugating cell penetrating peptides and thiomers on	Biomaterials	W
	non-viral transfection efficiency. Rahmat D, Khan MI, Shahnaz G ,	ISSN: 0142-9612	8.402
	Sakloetsakun D, Perera G, Bernkop-Schnürch A.	33(7):2321-6 (2012)	
70.	Preactivated thiomers as mucoadhesive polymers for drug delivery. Iqbal J,	Biomaterials	W
	Shahnaz G, Dünnhaupt S, Müller C, Hintzen F, Bernkop-Schnürch A.	ISSN: 0142-9612	8.402
		33(5):1528-35	
		(2012)	***
71.	HEC-cysteamine conjugates: influence of degree of thiolation on efflux pump inhibitory and permeation enhancing properties Rahmat D, Sakloetsakun D,	Int J Pharm. ISSN: 1873-3476	W 3.694
	Shahnaz G, Sarti F, Laffleur F, Schnürch AB	17;422(1-2):40-6	3.094
	Similar S, said 1, 2miled 1, semidicit 12m	(2012)	
72.	Development and in vivo characterization of a novel peptide drug delivery	J Control Release.	W
	system providing extended plasma half-life Shahnaz G , Iqbal J, Rahmat D,	ISSN: 0168-3659	7.786
	Perera G, Laffleur F, Rossi D, Bernkop-Schnürch A	157(3):375-82.	
73.	Poly(acrylic acid)-cysteine for oral vitamin B12 delivery Sarti F, Iqbal J, Müller	(2012) Anal Biochem.	W
73.	C, Shahnaz G, Rahmat D, Bernkop-Schnürch A.	ISSN: 0003-2697	2.334
	e, ormania e, ramana e, ramana e e e e e e e e e e e e e e e e e e	420(1):13-9	
		(2012)	
74.	Thiolated chitosan: development and in vivo evaluation of an oral delivery	Eur J Pharm Biopharm.	W
	system for leuprolide.Iqbal J, Shahnaz G , Perera G, Hintzen F, Sarti F,	80(1):95-102	4.159
75	Bernkop-Schnürch A. Design and synthesis of a novel cationic thiolated polymer Rahmat D,	(2012) Int I Pharm	W
75.	Sakloetsakun D, Shahnaz G , Perera G, Kaindl R, Bernkop-Schnürch A.	Int J Pharm. ISSN: 1873-3476	vv 3.694
	2	411(1-2):10-7	3.071
		(2011)	
76.	Uptake of phenothiazines by the harvested chylomicrons ex vivo model:	Eur J Pharm Biopharm.	W
	influence of self-nanoemulsifying formulation design Shahnaz G , Hartl M,	79(1):171-80	4.159
	Barthelmes J, Leithner K, Sarti F, Hintzen F, Rahmat D, Salvenmoser W,	(2011)	
	Bernkop-Schnürch A		

77. Microencapsulation of Diclofer	nac Sodium by Non-solvent Addition	Trop J Pharm Res W
Technique Murtaza G, Ahmad M,	Shahnaz G	ISSN: 1596-9827 0.569
		9(2):187-195
		(2010)
78. Synthesis, characterization, muco	adhesion and biocompatibility of thiolated	J Control Release. W
carboxymethyl dextran-cysteine	e conjugate. Shahnaz G , Perera G,	ISSN: 0168-3659 7.786
Sakloetsakun D, Rahmat D, Bernk	op-Schnürch A.	21;144(1):32-8
		(2010)
	References	
Prof. Dr. Andreas Bernkop-Schnürch	Prof Thakur Raghu Raj Singh	Irshad Hussain, FRSC,
Center for Chemistry and Biomedicine,	Professor in Pharmaceutics	Professor and Chair,
Innrain 80/82,	Founder & CTO Re-Vana Therapeutics	Department of Chemistry & Chemical
A-6020 Innsbruck, Austria	McClay Research Centre	Engineering.
Tel: +43 512 507-58600	School of Pharmacy	SBA School of Science & Engineering,
Fax: +43 512 507-58699	Queen's University Belfast	Lahore University of Management Science
E-mail: Andreas.Bernkop@uibk.ac.at	Medical Biology Centre	(LUMS).
	97 Lisburn Road	Fellow, Pakistan Academy of Sciences.
	Belfast, BT9 7BL	Ph. +92 42 35608133
	United Kingdom	(Office); +92 3016042336 (Mobile &
	Tel: +44 (0) 28 9097 5814	WhatsApp)
	E-mail: r.thakur@qub.ac.uk	Email: ihussain@lums.edu.pk