**Biodata**

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| **Personal Information** | | | | | | | | | | | |
| Name: | | Gul Shahnaz | | | | | | | | | |
| Discipline: | | Pharmaceutical & BioMedical Sciences | | | | Institution: | | | | Quaid-i-Azam University | |
| Gender: | | Female | | | | Department | | | | Pharmacy | |
| Specialization: | | Pharmaceutical Technology | | | | Present Position | | | | Assistant Professor | |
| Address: | | Department of Pharmacy, Faculty of Biological Sciences, Quaid-i-Azam University, Islamabad, Pakistan | | | | City | | | | Islamabad | |
| E-mail: | | [gshahnaz@qau.edu.pk](mailto:gshahnaz@qau.edu.pk) | | | | Phone | | | | 0092-306-8672851 | |
| Fax: | | 051-90644087 | | | | CNIC | | | |  | |
| **History of Education** | | | | | | | | | | | |
| **Year** | **Degree** | | **Field of Study** | | | | **Institution/University** | | | | |
| 2004 | B-Pharmacy | | Clinical Pharmacy | | | | Islamia University of Bahawalpur | | | | |
| 2007 | MPhil | | Pharmaceutical Sciences | | | | Islamia University of Bahawalpur | | | | |
| 2012 | PhD | | Pharmaceutical Technology | | | | University of Innsbruck, Austria | | | | |
| **Professional Experience** | | | | | | | | | | | |
| **Institution/Organization** | | | | | **Position/Job Title** | | | | **Period** | | |
|  | | | | |  | | | | **From** | | **To** |
| Quaid-i-Azam University | | | | | Assistant Professor | | | | 04/10/2012 | | Present |
| Ohio State University | | | | | Visiting Assist. Professor | | | | 12/07/2017 | | 08/09/2017 |
| University of Nebraska Medical Center | | | | | Visiting Assist. Professor | | | | 02/09/2015 | | 08/31/2015 |
| University of Lahore, Islamabad Campus | | | | | Head of Department (Pharmacy) | | | | 09/1/2007 | | 04/25/2008 |
| University of Innsbruck | | | | | Research Assistant (Pharma. Tech.) | | | | 05/1/2008 | | 02/1/2012 |
| **Carrier Goal** | | | | | | | | | | | |
| To make the best use of my technical expertise in the administration of biologically active moieties at the right dose, at the right time and at the right site in a research based career; hence to acquire and apply advanced knowledge in a particular field, “**Pharmaceutical Technology**” | | | | | | | | | | | |
| **Research Interests** | | | | | | | | | | | |
| Formulation of controlled and targeted drug delivery systems, Engineering of Pharmaceutical polymeric excipients, Synthesis and characterization of nanomedicine delivery, Development of Nanoparticles, Nasal nanoparticles drug delivery systems, Superparamagnetic iron oxide nanoparticles (SPIONs),Stem cell labeling and tracking, Magnetic resonance imaging contrast agents, Mucoadhesive drug targeted delivery systems, Bioavailability, Bioequivalence and Pharmacokinetic characterization, Drug resistance in Leishmaniasis | | | | | | | | | | | |
| **SCHOLARSHIPS/AWARDS** | | | | | | | | | | | |
| * Award of merit based scholarship titled” Overseas scholarship Phase-2 Batch-2 for MS leading to PhD” by Higher Education Commission (HEC) Pakistan and Austrian Agency for International Cooperation in Education and Research (ÖAD) * Co-Chairman to preside a session at 3rd ICDDT, 7th - 10th February, 2011, Dubai, UAE * Nominated and notified by L’Oréal-UNESCO for For Women in Science (FWIS)-2014 * Elective member-2014 Pakistan Academy of Sciences * Research Productivity Award-2014/15 | | | | | | | | | | | |
| **Media Interview** | | | | | | | | | | | |
| Pakistani researcher wins UNESCO fellowship http://waqasnaeem.com/pakistani-researcher-wins-unesco-fellowship/ Dr.Gul Shahnaz is among 15 selected women from around the world http://www.geotv.com.pk/dr-gul-shahnaz-is-among-15-selected-women-from-around-the-world/   * UNESCO Fellowship 2014 Award Winner Dr. Gul Shahnaz in VOA's program ITN with Asad Hassan   https://www.youtube.com/watch?v=eFN79-4rgcQ Researchers Working to Change the Way We Take Our Medicine <http://www.fox42kptm.com/story/28266357/researchers-working-to-change-the-way-we-take-our-medicine> | | | | | | | | | | | |
| **Thesis title** | | | | | | | | | | | |
| **PhD:** Thiolated Polymeric Excipients: Promising Platform for Controlled and Targeted Drug Delivery  **M.Phil**: Bioequivalence studies of two brands of Flurbiprofen Tablets in Normal Human Plasma | | | | | | | | | | | |
| **Research Grants** | | | | | | | | | | | |
| 1. "Comparative bioavailability & pharmacokinetic characterization of phenothiazines by using self-nanoemulsifying drug delivery system" (0.5 million) **By:** Higher Education Commission, Pakistan ( **Completed**; 2012-2013) P.I (Dr. Gul Shahnaz) Co-PI ( Dr. Gul Majid Khan) 2. “Nanoparticles based on Thiolated Polymeric Excipients: Promising Tool for Amphotericin B Drug Delivery in Leishmaniasis Therapy” (34,000)  **By:** URF,Quaid-i-Azam University ( **Completed**; 2012) P.I (Dr. Gul Shahnaz) 3. Mucoadhesive In Situ Gel based on Thiomeric Excipients: Novel Strategy for Leishmaniasis Drug Delivery (24,000)  **By:** URF,Quaid-i-Azam University( **Completed**; 2013) P.I (Dr. Gul Shahnaz) 4. Monocyte-macrophage as targeted drug depots for long acting anti-microbial medicines (20,000 US dollars)  **By:** L'Oréal-UNESCO (**Completed**; 2014-2015) P.I (Dr. Gul Shahnaz) 5. Synthesis and characterization of Polyethyleneimine-g-Poly(caprolactone-co-lactic acid) for the control release of drugs (50,000)  **By:** URF,Quaid-i-Azam University ( **Completed**; 2014) P.I (Dr. Gul Shahnaz) 6. Synthesis and characterization of Polyethyleneimine-g-Chitosan nanoparticles for drug delivery (100,000)  **By:** URF,Quaid-i-Azam University ( **Completed**; 2015) P.I (Dr. Gul Shahnaz) 7. Evaluation of mannose-anchored thiolated nanocarriers for improved oral bioavailability of amphotericin B against leishmaniasis therapy  **By:** L'Oréal-UNESCO (**Approved** for 2015-2016) P.I (Dr. Gul Shahnaz) 8. Development and evaluation of mannose-anchored thiolated nanocarriers for leishmaniasis therapy **By:** COMSTECH-TWAS (4,400 US dollars) (**Approved** for 2016-2017) P.I (Dr. Gul Shahnaz) 9. Synthesis and characterization of a disulfide cross-linked multifunctional in situ gelling cargo for oral peptide drug delivery  **By:** Pakistan Academy of Sciences (0.927 Millions)  (**Approved** for 2016-2018) P.I (Dr. Gul Shahnaz) 10. Development of Thiolated Polymer Coated Gel: Promising Platform for Controlled and Targeted Drug Delivery in Leishmaniasis  **By:** Higher Education Commission, Pakistan (14.5 Millions)  (**Approved** for 2016-2019) Co-P.I (Dr. Gul Shahnaz), P.I (Dr. Gul Majid Khan) 11. Synthesis and Evaluation of Doped Phototoxic Nanoparticles based Topical Skin-care Cream as a Novel, Cheap Substitute to Current Treatment for Leishmania Infection **By:** Pakistan Science Foundation (7 Millions)  (**Approved** for 2015-2018) Co-P.I (Dr. Gul Shahnaz), P.I (Prof. Dr. Masoom Yasinzai) | | | | | | | | | | | |
| **Projects Submitted** | | | | | | | | | | | |
| 1. Development of thiolated nanoparticles to overcome drug resistance in leishmaniasis therapy **(PSF)** 2. Macrophage Targeted Thiolated Nanocarriers: Next Generation of Antimicrobial Drug Development **(HEC)** | | | | | | | | | | | |
| **Publications in Impact Factor Journals (**impact factor ~ 175; citations 661; H-index 16**)** | | | | | | | | | | | |
| |  |  |  | | --- | --- | --- | | **Authors/Title of Research Paper**  **(Impact Factor 175)** | **Journal Name/ISSN**  **Volume (Issue No): Page No**  **(Year)** | **Category**  **W/X/Y/Z**  **(Impact**  **Factor)** | | 1. Development and Evaluation of Optimized Thiolated Chitosan Proniosomal Gel Containing Duloxetine for Intranasal Delivery. khatoon M, Sohail MF, Shahnaz G, Rehman F, Din FU, Rehman Au. 2. ZnO-NPs embedded biodegradable thiolated bandage for postoperative surgical site infection: in vitro and in vivo evaluation. Arshad R, Sohail MF, Sarwar HS, Saeed H, Ali I, Akhtar S, Hussain SZ, Afzal A, Jehan J, Rehman A and Shahnaz G. | **AAPS PharmSciTech.**  ISSN: 1530-9932  18(4):1043-1055.  **2019**  **PLOS ONE**  ISSN: 1932-6203  **(2019)** | W  2.6  2.8 | | 1. Drug Delivery System (SNEDDS) for Improved Oral Bioavailability of Chlorpromazine: In Vitro and In Vivo Evaluation Baloch J, Sohail MF, Sarwar HS, Kiani MH, Khan GM, Jahan S, Rafay M, Chaudhry MT, Yasinzai M, Shahnaz G. Self-Nanoemulsifying. | **Medicina (Kaunas).**  ISSN: 1010-660X  May 24;55(5).  **(2019)** | W  1.42 | | 1. Mannosylated thiolated paromomycin-loaded PLGA nanoparticles for the oral therapy of visceral leishmaniasis. Afzal I, Sarwar HS, Sohail MF, Varikuti S, Jahan S, Akhtar S, Yasinzai M, Satoskar AR, Shahnaz G. | **Nanomedicine (Lond).**  ISSN: 1743-5889  Feb;14(4):387-406  **(2019)** | W  4.727 | | 1. Folate-Functionalized Thiomeric Nanoparticles for Enhanced Docetaxel Cytotoxicity and Improved Oral Bioavailability Sajjad M, Khan MI, Naveed S, Ijaz S, Qureshi OS, Raza SA, Shahnaz G, Sohail MF.. | **AAPS PharmSciTech**.  ISSN: 1530-9932  Jan 15;20(2):81.  **(2019)** | W  2.6 | | 1. Evaluation of Turmeric Nanoparticles as Anti-Gout Agent: Modernization of a Traditional Drug Kiyani MM, Sohail MF, Shahnaz G, Rehman H, Akhtar MF, Nawaz I, Mahmood T, Manzoor M, Bokhari SAI. . | **Medicina (Kaunas).**  ISSN: 1010-660X  Jan 11;55(1)  **(2019)** | W  1.42 | | 1. Polymeric nanocapsules embedded with ultra-small silver nanoclusters for synergistic pharmacology and improved oral delivery of Docetaxel Sohail MF, Hussain SZ, Saeed H, Javed I, Sarwar HS, Nadhman A, Huma ZE, Rehman M, Jahan S, Hussain I, Shahnaz G.. | **Sci Rep.**  ISSN: 2045-2322.  Sep 6;8(1):13304. (2018) | W  4.6 | | 1. Advancements in the oral delivery of Docetaxel: challenges, current state-of-the-art and future trends.[Sohail MF](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sohail%20MF%5BAuthor%5D&cauthor=true&cauthor_uid=29922053), [Rehman M](https://www.ncbi.nlm.nih.gov/pubmed/?term=Rehman%20M%5BAuthor%5D&cauthor=true&cauthor_uid=29922053), [Sarwar HS](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sarwar%20HS%5BAuthor%5D&cauthor=true&cauthor_uid=29922053), [Naveed S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Naveed%20S%5BAuthor%5D&cauthor=true&cauthor_uid=29922053), [Salman O](https://www.ncbi.nlm.nih.gov/pubmed/?term=Salman%20O%5BAuthor%5D&cauthor=true&cauthor_uid=29922053), [Bukhari NI](https://www.ncbi.nlm.nih.gov/pubmed/?term=Bukhari%20NI%5BAuthor%5D&cauthor=true&cauthor_uid=29922053), [Hussain I](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hussain%20I%5BAuthor%5D&cauthor=true&cauthor_uid=29922053), [Webster TJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Webster%20TJ%5BAuthor%5D&cauthor=true&cauthor_uid=29922053), [Shahnaz G](https://www.ncbi.nlm.nih.gov/pubmed/?term=Shahnaz%20G%5BAuthor%5D&cauthor=true&cauthor_uid=29922053). | **Int J Nanomedicine.**  ISSN: 1178-2013  Jun 8;13:3145-3161  **(2018)** | W  4.543 | | 1. [Design of mannosylated oral amphotericin B nanoformulation: efficacy and safety in visceral leishmaniasis](https://www.ncbi.nlm.nih.gov/pubmed/29385910)**[.](https://www.ncbi.nlm.nih.gov/pubmed/29385910)**Sarwar HS, Sohail MF, Saljoughian N, Rehman AU, Akhtar S, Nadhman A, Yasinzai M, Gendelman HE, Satoskar AR, **Shahnaz G**. | **Artif Cells Nanomed Biotechnol**.  ISSN: 21691401  Jan 31:1-11. (**2018**) | W  5.6 | | 1. Mannosylated thiolated polyethylenimine nanoparticles for the enhanced efficacy of antimonial drug against Leishmaniasis. Sarwar HS, Ashraf S, Akhtar S, Sohail MF, Hussain SZ, Rafay M, Yasinzai M, Hussain I, **Shahnaz G**. | **Nanomedicine (Lond).**  ISSN: 1743-5889  Jan;13(1):25-41  **(2018)** | W  4.727 | | 1. Biosynthesized colloidal silver mand gold nanoparticles as emerging leishmanicidal agents: an insight**.** Ovais M, Nadhman A, Khalil AT, Raza A, Khuda F, Sohail MF, Islam NU, Sarwar HS, **Shahnaz G**, Ahmad I, Saravanan M, Shinwari ZK. | **Nanomedicine (Lond).**  ISSN: 1743-5889  12(24):2807-2819.  **(2017)** | W  4.727 | | 1. Redox biology of Leishmania and macrophage targeted nanoparticles for therapy Sarwar HS, Akhtar S, Sohail MF, Naveed Z, Rafay M, Nadhman A, Yasinzai M, **Shahnaz G**.. | **Nanomedicine (Lond).**  12(14):1713-1725  **(2017)** | W  4.727 | | 1. Cell to rodent: toxicological profiling of folate grafted thiomer enveloped nanoliposomes, Sohail MF, Sarwar HS, Javed I, Nadhman A, Hussain SZ, Saeed H, Raza A, Bukhari NI, Hussain I, **Shahnaz G** | **Toxicol. Res.**  ISSN:19768257  6, 814-821  **(2017)** | W  1.969 | | 1. Development of mannose-anchored thiolated amphotericin B nanocarriers for treatment of visceral leishmaniasis **Shahnaz G**, Edagwa BJ, McMillan J, Akhtar S, Raza A, Qureshi NA, Yasinzai M, Gendelman HE.. | **Nanomedicine (Lond).**  12(2):99-115.  **(2017)** | W  4.727 | | 1. Formulation and in Vitro Characterization of Thiolated Buccoadhesive Film of Fluconazole Naz K, **Shahnaz G**, Ahmed N, Qureshi NA, Sarwar HS, Imran M, Khan GM.. | **AAPS PharmSciTech**.  ISSN: 1530-9932  18(4):1043-1055.  **(2017)** | W  2.451 | | 1. In-vitro antileishmanial potential of peptide drug hirudin.Khan H, Nadhman A, Azam SS, Anees M, Khan I, Ullah I, Sohail MF, **Shahnaz G**, Yasinzai M. | **Chem Biol Drug Des**.  ISSN: 1747-0285  89(1):67-73.  **(2017)** | W  2.39 | | 1. Rise of single organopathy theory from ayurveda system- a short report from pakistan's perspective.wjps Tahir AH, Tanveer M, Ahmed A, Arshad A, **Shahnaz G**. 2016 | World J Pharma  5(12):12-19  **(2016)** |  | | 1. Folate grafted thiolated chitosan enveloped nanoliposomes with enhanced oral bioavailability and anticancer activity of docetaxel Sohail MF, Javed I, Hussain SZ, Sarwar HS, Akhtar S, Nadhman A, Batool S, Bukhari NI, Saleem RSZ, Hussain I, **Shahnaz G**, , | **J Mater Chem B.**  ISSN:20507518  4: 6240-6248.  **(2016)** | W  4.543 | | 1. Annihilation of Leishmania by daylight responsive ZnO nanoparticles: a temporal relationship of reactive oxygen species-induced lipid and protein oxidation Nadhman A, Khan MI, Nazir S, Khan M, **Shahnaz G**, Raza A, Shams DF, Yasinzai M. . | **Int J Nanomedicine.**  ISSN: 1178-2013  31;11:2451-61.  **(2016)** | W  4.543 | | 1. Antileishmanial, DNA Interaction, and Docking Studies of Some Ferrocene-Based Heteroleptic Pentavalent Antimonials. Rauf MK, Shaheen U, Asghar F, Badshah A, Nadhman A, Azam S, Ali MI, **Shahnaz G**, Yasinzai M. | **Arch Pharm (Weinheim).**  ISSN: 1521-4184  349(1):50-62.  **(2016)** | W  1.994 | | 1. Thiolated nanocarriers for oral delivery of hydrophilic macromolecular drugs. Dünnhaupt S, Barthelmes J, Köllner S, Sakloetsakun D, **Shahnaz G**, Düregger A, Bernkop-Schnürch A. | **Carbohydr Polym.**  ISSN: 0144-8617  6;117:577-84  **(2015)** | W  4.81 | | 1. Synthesis, characterization and evaluation of lecithin-based nanocarriers for the enhanced pharmacological and oral pharmacokinetic profile of amphotericin B, J Mater Chem B Javed I, Hussain SZ, Ullah I, Khan I, Ateeq M, **Shahnaz G**, Rehman H, Razi MT, Shah MR, Hussain I,. | **J Mater Chem B.**  ISSN:20507518  3 (42), 8359-8365, **(2015)** | W  4.543 | | 1. PEGylated silver doped zinc oxide nanoparticles as novel photosensitizers for photodynamic therapy against Leishmania. Nadhman A, Nazir S, Khan MI, Arooj S, Bakhtiar M, **Shahnaz G**, Yasinzai M. | **Free Radic Biol Med.**  ISSN: 1873-4596  77:230-8  **(2014)** | W  5.736 | | 1. Drug resistance in leishmaniasis: current drug-delivery systems and future perspectives. Yasinzai M, Khan M, Nadhman A, **Shahnaz G**. | **Future Med Chem.**  ISSN: 1756-8927  5(15):1877-88.  (2013) | W  3.556 | | 1. Development and in vitro evaluation of slippery nanoparticles for enhanced diffusion through native mucus. Laffleur F, Hintzen F, **Shahnaz G**, Rahmat D, Leithner K, Bernkop-Schnürch A. | **Nanomedicine (Lond).**  9(3):387-96.  **(2014)** | W  4.727 | | 1. Design and in vitro evaluation of a novel polymeric excipient for buccal applications Laffleur F, **Shahnaz G**, Islambulchilar Z, Bernkop-Schnürch A.. | **Future Med Chem.**  ISSN: 1756-8927  5(5):511-22  **(2013)** | W  3.556 | | 1. Development of thiolated poly(acrylic acid) microparticles for the nasal administration of exenatide, [Millotti G](https://www.ncbi.nlm.nih.gov/pubmed/?term=Millotti%20G%5BAuthor%5D&cauthor=true&cauthor_uid=24131355), [Vetter A](https://www.ncbi.nlm.nih.gov/pubmed/?term=Vetter%20A%5BAuthor%5D&cauthor=true&cauthor_uid=24131355), [Leithner K](https://www.ncbi.nlm.nih.gov/pubmed/?term=Leithner%20K%5BAuthor%5D&cauthor=true&cauthor_uid=24131355), [Sarti F](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sarti%20F%5BAuthor%5D&cauthor=true&cauthor_uid=24131355), [Shahnaz G](https://www.ncbi.nlm.nih.gov/pubmed/?term=Shahnaz%20Bano%20G%5BAuthor%5D&cauthor=true&cauthor_uid=24131355), [Augustijns P](https://www.ncbi.nlm.nih.gov/pubmed/?term=Augustijns%20P%5BAuthor%5D&cauthor=true&cauthor_uid=24131355), [Bernkop-Schnürch A](https://www.ncbi.nlm.nih.gov/pubmed/?term=Bernkop-Schn%C3%BCrch%20A%5BAuthor%5D&cauthor=true&cauthor_uid=24131355). | [**Drug Dev Ind Pharm.**](https://www.ncbi.nlm.nih.gov/pubmed/24131355)  ISSN: 1520-5762  40(12):1677-82  **(2014)** | W  2.101 | | 1. Organotin(IV) complexes of carboxylate derivative as potential chemotherapeutic agents against Leishmania.[Qureshi](https://www.infona.pl/contributor/0@bwmeta1.element.elsevier-d6583de9-48dc-316d-9067-42026d762e2e/tab/publications) QAH, [Nadhman](https://www.infona.pl/contributor/1@bwmeta1.element.elsevier-d6583de9-48dc-316d-9067-42026d762e2e/tab/publications) A, [Sirajuddin](https://www.infona.pl/contributor/2@bwmeta1.element.elsevier-d6583de9-48dc-316d-9067-42026d762e2e/tab/publications) M, [**Shahnaz**](https://www.infona.pl/contributor/3@bwmeta1.element.elsevier-d6583de9-48dc-316d-9067-42026d762e2e/tab/publications) **G**, [Ali](https://www.infona.pl/contributor/4@bwmeta1.element.elsevier-d6583de9-48dc-316d-9067-42026d762e2e/tab/publications) S,  [Shah](https://www.infona.pl/contributor/5@bwmeta1.element.elsevier-d6583de9-48dc-316d-9067-42026d762e2e/tab/publications) A,  [Yasinzai](https://www.infona.pl/contributor/6@bwmeta1.element.elsevier-d6583de9-48dc-316d-9067-42026d762e2e/tab/publications) M, | [**Inorganica Chimica Acta**](https://www.infona.pl/resource/bwmeta1.element.elsevier-1f48698b-540f-32e5-ade7-5314f74553a3/tab/jContent)  ISSN: 0020-1693  [423](https://www.infona.pl/resource/bwmeta1.element.elsevier-1f48698b-540f-32e5-ade7-5314f74553a3/tab/jContent/facet?field=%5ejournalYear%5ejournalVolume&value=%5e_02014%5e_00423) :[Part B](https://www.infona.pl/resource/bwmeta1.element.elsevier-1f48698b-540f-32e5-ade7-5314f74553a3/tab/jContent/facet?field=%5ejournalYear%5ejournalVolume%5ejournalNumber&value=%5e_02014%5e_00423%5ePart_B): 220-228.  **(**[**2014**](https://www.infona.pl/resource/bwmeta1.element.elsevier-1f48698b-540f-32e5-ade7-5314f74553a3/tab/jContent/facet?field=%5ejournalYear&value=%5e_02014)**)** | W  2.064 | | 1. Efficient MRI labeling of endothelial progenitor cells: design of thiolated surface stabilized superparamagnetic iron oxide nanoparticles. **Shahnaz G**, Kremser C, Reinisch A, Vetter A, Laffleur F, Rahmat D, Iqbal J, Dünnhaupt S, Salvenmoser W, Tessadri R, Griesser U, Bernkop-Schnürch A. | **Eur J Pharm Biopharm.**  ISSN: 1873-3441  85(3 Pt A):346-55.  **(2013)** | W  4.159 | | 1. Thiolated hydroxyethyl cellulose: design and in vitro evaluation of mucoadhesive and permeation enhancing nanoparticles Rahmat D, Müller C, Barthelmes J, **Shahnaz G**, Martien R, Bernkop-Schnürch A.. | **Eur J Pharm Biopharm.**  ISSN: 1873-3441  83(2):149-55 | W  4.159 | | 1. Enzymatic degradation of thiolated chitosan. Laffleur F, Hintzen F, Rahmat D, **Shahnaz G**, Millotti G, Bernkop-Schnürch A | [**Drug Dev Ind Pharm.**](https://www.ncbi.nlm.nih.gov/pubmed/24131355)  ISSN: 1520-5762  39(10):1531-9  **(2013)** | W  2.101 | | 1. HEC-cystamine particles: influence of particle size, zeta potential, morphology and sulfhydryl groups on permeation enhancing properties Rahmat D, Müller C, **Shahnaz G**, Leithner K, Laffleur F, Khan MI, Martien R, Bernkop Schnürch A.. | [**Drug Dev Ind Pharm.**](https://www.ncbi.nlm.nih.gov/pubmed/24131355)  ISSN: 1520-5762  39(9):1338-45  **(2013)** | W  2.101 | | 1. A. Thiomers: influence of molar mass on in situ gelling properties. Hintzen F, Laffleur F, Sarti F, **Shahnaz G**, Bernkop-Schnürch | **Int J Pharm.**  ISSN: 1873-3476  436(1-2):120-6.  **(2012)** | W  3.694 | | 1. Thiolated chitosan nanoparticles for the nasal administration of leuprolide: bioavailability and pharmacokinetic characterization. **Shahnaz G**, Vetter A, Barthelmes J, Rahmat D, Laffleur F, Iqbal J, Perera G, Schlocker W, Dünnhaput S, Augustijns P, Bernkop-Schnürch A. | **Int J Pharm.**  ISSN: 1873-3476  428(1-2):164-70  **(2012)** | W  3.694 | | 1. Synergistic effects of conjugating cell penetrating peptides and thiomers on non-viral transfection efficiency. Rahmat D, Khan MI, **Shahnaz G**, Sakloetsakun D, Perera G, Bernkop-Schnürch A. | **Biomaterials**  ISSN: 0142-9612  33(7):2321-6  **(2012)** | W  8.402 | | 1. Preactivated thiomers as mucoadhesive polymers for drug delivery. Iqbal J, **Shahnaz G**, Dünnhaupt S, Müller C, Hintzen F, Bernkop-Schnürch A. | **Biomaterials**  ISSN: 0142-9612  33(5):1528-35  **(2012)** | W  8.402 | | 1. HEC-cysteamine conjugates: influence of degree of thiolation on efflux pump inhibitory and permeation enhancing properties Rahmat D, Sakloetsakun D, **Shahnaz G**, Sarti F, Laffleur F, Schnürch AB.. | **Int J Pharm.**  ISSN: 1873-3476  17;422(1-2):40-6  **(2012)** | W  3.694 | | 1. Development and in vivo characterization of a novel peptide drug delivery system providing extended plasma half-life **Shahnaz G**, Iqbal J, Rahmat D, Perera G, Laffleur F, Rossi D, Bernkop-Schnürch A.. | **J Control Release.**  ISSN: 0168-3659  157(3):375-82.  **(2012)** | W  7.786 | | 1. Poly(acrylic acid)-cysteine for oral vitamin B12 delivery Sarti F, Iqbal J, Müller C, **Shahnaz G**, Rahmat D, Bernkop-Schnürch A. | **Anal Biochem.**  ISSN: 0003-2697  420(1):13-9  **(2012)** | W  2.334 | | 1. Thiolated chitosan: development and in vivo evaluation of an oral delivery system for leuprolide.Iqbal J, **Shahnaz G**, Perera G, Hintzen F, Sarti F, Bernkop-Schnürch A. | **Eur J Pharm Biopharm.**  80(1):95-102  **(2012)** | W  4.159 | | 1. Design and synthesis of a novel cationic thiolated polymer Rahmat D, Sakloetsakun D, **Shahnaz G**, Perera G, Kaindl R, Bernkop-Schnürch A. | **Int J Pharm.**  ISSN: 1873-3476  411(1-2):10-7  **(2011)** | W  3.694 | | 1. Uptake of phenothiazines by the harvested chylomicrons ex vivo model: influence of self-nanoemulsifying formulation design **Shahnaz G**, Hartl M, Barthelmes J, Leithner K, Sarti F, Hintzen F, Rahmat D, Salvenmoser W, Bernkop-Schnürch A.. | **Eur J Pharm Biopharm.**  79(1):171-80  **(2011)** | W  4.159 | | 1. Microencapsulation of Diclofenac Sodium by Non-solvent Addition Technique Murtaza G, Ahmad M, **Shahnaz G**.. | **Trop J Pharm Res**  ISSN: 1596-9827  9(2):187-195  **(2010)** | W  0.569 | | 1. Synthesis, characterization, mucoadhesion and biocompatibility of thiolated carboxymethyl dextran-cysteine conjugate.**Shahnaz G**, Perera G, Sakloetsakun D, Rahmat D, Bernkop-Schnürch A. | **J Control Release.**  ISSN: 0168-3659  21;144(1):32-8  **(2010)** | W  7.786 | | | | | | | | | | | | |
| **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. [**Gul Shahnaz**](http://pubget.com/search?q=authors%3A%22Gul%20Shahnaz%22)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,[Jan Barthelmes](http://pubget.com/search?q=authors%3A%22Jan%20Barthelmes%22)*,* 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. [**Gul Shahnaz**](http://pubget.com/search?q=authors%3A%22Gul%20Shahnaz%22), 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, [**Gul Shahnaz**](http://pubget.com/search?q=authors%3A%22Gul%20Shahnaz%22), 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, [Fabian Hintzen](http://pubget.com/search?q=authors%3A%22Fabian%20Hintzen%22), [**Gul Shahnaz**](http://pubget.com/search?q=authors%3A%22Gul%20Shahnaz%22), 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. | | | | | | | | | | | |
| **Instruments Worked** | | | | | | | | | | | |
| HPLC, LC-MS, NMR, IR, UV, Raman, SEM, TEM, AFM, XRD, Ultracentrifuge, Lyophilizer, Rheometer, Ussing-Chambr, Diffusion Chamber, Confocal laser scanning microscopy, Flourescence imaging | | | | | | | | | | | |
| **Computer Skills** | | | | | | | | | | | |
| * **Linux based softwares;** Pymol, Gaussian View. * **Windows based softwares;** ACD NMR, Chemstation, Chem. Draw, Chem. Office, Chem. Sketch, Chemfinder, * **Ms. Office;** Ms. World, Ms. Excell, Ms. Powerpoint, Ms. Publisher, etc. | | | | | | | | | | | |
| **Courses Taught** | | | | | | | | | | | |
| Pharmaceutical Quality Management-I, Pharmaceutical Technology-I, Pharmaceutical Preparations-I, Pharmaceutical Microbiology-I, Biostatistics, Pharmaceutical Biochemistry-I, Pharmaceutical Nanotechnology, Enhancement in Drug Delivery, Advanced preventive pharmacy, Pharmaceutical Chm- II ABC Th, Pharma chemistry-80 III, Public health pharmacy, Advanced pharmaceutics & Bioph, Pharmacy Practice-I | | | | | | | | | | | |
| **Memberships** | | | | | | | | | | | |
| 1. Pakistan Pharmacist Association 2. Pakistan Academy of Sciences 3. American Society for Molecular Biology (ASM) 4. National Academy of Young Scientists, (NAYS) Pakistan 5. [American Association of Pakistani Pharmaceutical Scientists](http://www.linkedin.com/e/-ak4dql-hpv88ygb-3s/ava/5810195625995706372/2161119/eml-anet_dig-b_pd-ttl-cn/?hs=false&tok=3wcHL6poMc7m41) 6. Center for Molecular Biosciences (CMBI), Innsbruck 7. Austrian Association of Molecular Life Sciences and Biotechnology (ÖGMBT) | | | | | | | | | | | |
| **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  Nawaz Cheema | Evaluation of wound vaccination services in community pharmacies | 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 rate | 2017 | | 8. | Beenish Ashfaq | Prevalence of airborne allergens in Pakistan and association of trigger factor with allergenic diseases | 2017 | | 9. | Hajra Zafar | Amoxicillin loaded mucoadhesive thiomer based nanoparticles  for H.pylori infection therapy | 2017 | | 10. | Iqra Chaudhery | Development of long-acting enema for intracolonic administration of vancomycin in lieu of pediatric infectious colitistherapy | 2017 | | 11. | Uswa Rasheed | Malnutrition in surgical patients: Evaluation of pre- and postoperative outcomes and effectiveness of nutritional screening tools | 2018 | | 12. | Sara Shahid | Impact of Educational Intervention regarding Metered Dose Inhaler Technique on Pharmacists and Asthma Patients | 2018 | | 13. | Asma kanwal | Formulation and evaluation of thiolated mucoadhesive composite polymeric periodontal membrane of doxycycline | 2018 | | 14. | Sundus Maria | Synthesis and characterization of nanoparticles based on preactivated thiolated chitosan for oral delivery of octreotide | 2019 | | 15. | Ayesha Batool | Formulation and evaluation of mucoadhesive self nanoemulsifying drug delivery system (snedds) for tamoxifen | 2019 | | 16. | Muhammad Shakeel | Synthesis and evaluation of thiolated emulgel based silver nanoparticles for cutaneous leishmaniasis | 2019 | | 17. | Sumbal Sohail | Educational intervention for Tuberculosis Prevention by health belief model |  | | 18. | Muska | Management of maternal antenatal associated insomnia and anxiety during pregnancy: pharmacist led implementation of cognitive behavioral therapy |  | | **PhD Supervision** | | | | | 1. | Muhammad Farhan Sohail | Design, synthesis and characterization of targeted thiolated nanocargoes in cancer therapy | 2017 | | 2. | Hafiz Shoaib Sarwar | Formulation and Evaluation of Macrophage Targeted Thiolated Nanocarriers for the Enhanced Efficacy of *Anti-Leishmanial* Drugs | 2019 | | | | | | | | | | | | |
| **Administrative/Departmental Services** | | | | | | | | | | | |
| * Member department purchase committee (2012 to 2015) * 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) * Member of Department Probe Threat committee (2012 to date) * Active participation for Pakistan Pharmaceutical Sector Assessment Survey-Level II and report writing * Services to the executive committee, curriculum and research and scholarly activity committee * Member Attendance Committee * 6 months of experience as a chair of 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 affiliation with Department * Member department admission committee (2012 to date) * Coordination of Conferences/Workshops (2 Workshops have been organized) | | | | | | | | | | | |
| **Book Edited** | | | | | | | | | | | |
| Multifunctional polymeric excipients for targeted drug delivery, Publisher: LAP LAMBERT Academic Publishing (June 19, 2017), Editor: Gul Shahnaz, ISBN: 3330082097 | | | | | | | | | | | |
| **Editorial/Reviewer Services** | | | | | | | | | | | |
| * Molecular Pharmaceutics * Journal of Photochemistry & Photobiology, B: Biology * Karbala International Journal of Modern Science * Asian Pacific Journal of Tropical Medicine * European Polymer Journal * Journal of Tissue Science & Engineering * Open Pharmaceutical Sciences Journal * Pharmaceutical science Journal * Biological Sciences * International Journal of Nanomedicine | | | | | | | | | | | |
| **Conferences/Seminar/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 TBCare *&* Control *-* TrainingWorkshop, 15th July, 2013, [Network of Development Professionals](http://www.google.com.pk/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=2&cad=rja&ved=0CDQQFjAB&url=http%3A%2F%2Fdevnet.org.pk%2F&ei=or94UqvJIsWk4ASM-YDoDA&usg=AFQjCNEQMuNPBec8PeYUnsOKVjyZjuDlsA&sig2=ntdCa4CkUtbA8bvd1Wp_uA&bvm=bv.55980276,d.bGE), 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](http://events.unmc.edu/durham_research_center_i_965) ,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](http://events.unmc.edu/durham_research_center_i_965) ,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 | | | | | | | | | | | |
| **References** | | | | | | | | | | | |
| Prof. Dr. Andreas Bernkop-Schnürch  Center for Chemistry and Biomedicine, Innrain 80/82, A-6020 Innsbruck**, Austria**  Tel: +43 512 507-58600  Fax: +43 512 507-58699  E-mail: [Andreas.Bernkop@uibk.ac.at](mailto:Andreas.Bernkop@uibk.ac.at) | | | | Prof. Dr. Masoom Yasinzai  Vice-Chancellor,  Quaid-e-Azam University,  Islamabad 45320, Pakistan.  Tel: +92-51-90644050  Fax: +92-51-90644087  E-mail: [vco@qau.edu.pk](mailto:vco@qau.edu.pk) | | | | Prof. Dr. Gul Majid Khan  Chairman, Department of Pharmacy,  Quaid-e-Azam University,  Islamabad 45320, Pakistan.  Tel: +92-51-90644144  Fax: +92-51-90644144  E-mail: drgulmajeed@yahoo.com | | | |