



# Dr. Sidra Farid (Ph.D.)

Assistant Professor

Department of Chemistry

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<p><b>Professional Experience</b></p>	<ul style="list-style-type: none"><li>Assistant Professor (BS-19) Department of Chemistry, GC University Lahore 18-02-2022 till date</li><li>Lecturer (BS-18) Department of Chemistry, GC University Lahore 06-11- 2014 to 17-02-2022</li><li>Short-Term Visiting Scholar Dartmouth College, Hanover, New Hampshire State, USA. 1<sup>st</sup> June, 2019 to 30<sup>th</sup> November, 2019</li><li>Research/Teaching Assistant (BS-17) 01-10-2012 to 30-09-2014 Department of Chemistry, GC University, Lahore</li></ul>
<p><b>Education</b></p>	<ul style="list-style-type: none"><li>PhD in Chemistry 2021 Government College University, Lahore Pakistan Thesis Title: Synthesis, Computational studies and characterization of Organic-Inorganic Materials for potential applications in electronic devices.</li><li>M.Phil. Chemistry 2013 Government College University, Lahore Pakistan Thesis Title: Development of novel method for the evaluation of antioxidant activity.</li><li>B.Sc. (Hons) Chemistry 2011 Government College University, Lahore Pakistan Thesis Title: Evaluation of antioxidant potential of <i>Monotheca buxifolia</i> by novel and contemporary methods.</li></ul>
<p><b>Professional Development</b></p>	<ul style="list-style-type: none"><li>Completed STEM Faculty Professional Development Program, Kings College London under Pakistan-UK Education Gateway project funded by the British Council (July 7-12<sup>th</sup>, 2025).</li><li>Secured the HEC IRSIP fellowship and completed a research fellowship at Dartmouth College, New Hampshire, United States.</li><li>Completed Master Trainers Faculty Professional Development Programme (MT-FPDP) at Higher Education Commission Islamabad (March 21- May 11th, 2017).</li></ul>

<b><i>Brief Statement of Research Interest</i></b>	<ul style="list-style-type: none"> <li>• Design and develop biomaterials to promote angiogenesis and accelerate effective wound healing.</li> <li>• To design and fabricate the wearable sensors on flexible substrates.</li> <li>• To synthesize, compute and characterize new organic-inorganic hybrid materials (MOFs) for their potential applications in batteries &amp; energy storage devices.</li> </ul>
<b><i>Courses Taught</i></b>	<p><b>Graduate Level:</b> Organotransition metal Chemistry (CHEM-8206)</p> <p><b>Undergraduate Level:</b></p> <p>Inorganic Chemistry-I (CHEM-3102 and CHEM-3102P) Physical Chemistry-I (CHEM-3101 and CHEM-3101P) Analytical Chemistry-I (CHEM-2202 and CHEM-2202P) Biochemistry-I (CHEM-2201 and CHEM-2201P) Non-Aqueous Solvents (CHEM-459) Advanced Inorganic Chemistry (CHEM-3202 &amp; CHEM-3202P) Advanced Analytical Chemistry Paper-IV (CHEM-477) Inorganic Reaction Mechanism (CHEM-4126) Atomic Spectroscopy (CHEM-4138)</p> <p><b>Intermediate/Sophomore level</b> General Chemistry to sophomores</p>
<b><i>Courses Designed/Updated</i></b>	<ul style="list-style-type: none"> <li>• Organotransition metal Chemistry (CHEM-8206)</li> <li>• Principles of Inorganic Chemistry (CHEM-3103)</li> <li>• Inorganic Reaction Mechanisms (CHEM-4126)</li> <li>• Group Theory (CHEM-4226)</li> <li>• Inorganic Chemistry Lab-I (CHEM-4129P)</li> </ul>
<b><i>Service Activity</i></b>	<ul style="list-style-type: none"> <li>• Program Coordinator, Forensic Sciences, Institute of Chemical Sciences, GC University Lahore.</li> <li>• Advisor, GCU Anti-Narcotics Society (20-11-2020 till date).</li> <li>• Co-Advisor, Ravian Forensic Society, (12-12-2019 till date).</li> <li>• Serving as deputy chief proctor at GC University, Lahore (01-09-2022 till date).</li> <li>• Incharge Research Lab-I, Department of Chemistry GC University Lahore (01-08-2023 till date).</li> <li>• Member, Board of Studies, Department of Chemistry, University of Mianwali, Mianwali, (2021 till date).</li> <li>• Secretary, GCU's Anti-Drug and Tobacco Abuse (ADTC) committee, (February, 2023 till date).</li> <li>• Secretary GCU Pink Ribbon Committee, (2020 till date).</li> <li>• Focal Person GCU to Chughtai Healthcare (2021 till date).</li> <li>• Focal Person GCU to Pink Ribbon and Pink Pakistan Trust (2020 till date).</li> <li>• Member, Board of Studies, Department of Chemistry, GC University, Lahore (2016 till 2019).</li> <li>• Focal person QEC for Intermediate Faculty Evaluation (2016 till 2018).</li> </ul>

	<ul style="list-style-type: none"> <li>• Co-Advisor, Dunniciff Chemical Society (2015 to October 2018)</li> <li>• F.Sc. Coordinator, Department of Chemistry, GC University Lahore (2015).</li> <li>• In-charge Research Lab-I (2015 till date).</li> <li>• In-charge F.Sc. lab 2 (2019 to 2023).</li> </ul>
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	<b>Year</b>	<b>Class</b>	<b>Name of student</b>	<b>Status</b>
<b><i>Research Supervision</i></b>	2026	M.Phil Chemistry	Ayesha Shahzad	In-Process
	2026	M.Phil Chemistry	Sundas Shahzad	In-Process
	2026	M.Phil Chemistry	Ayesha Akram	In-Process
	2026	M.Phil Chemistry	Ayesha Noor	In-Process
	2026	M.Phil Chemistry	Azhar Mehmood	In-Process
	2025	M.Phil Chemistry	Mahnoor Nadeem	Completed
	2025	M.Phil Chemistry	Minahil Arif	Completed
	2025	M.Phil Chemistry	Ambreen Fatima	Completed
	2024	M.Phil Chemistry	Noor Fatima	Completed
	2024	M.Phil Chemistry	Swera	Completed
	2024	B.Sc. (Hons)	Ayesha Akram	Completed
	2023	M.Phil Chemistry	Touqeer Aslam	Completed
	2023	M.Phil Chemistry	Sofia Abid	Completed
	2023	M.Phil Chemistry	Hafsa Zafar	Completed
	2023	M.Phil Chemistry	Farhat Hanif	Completed
	2023	M.Phil Chemistry	Kamran Rafique	Completed
	2022	M.Phil Chemistry	Sana Shabbir	Completed
	2022	M.Phil Chemistry	Shanza Altaf	Completed
	2022	M.Phil Chemistry	Fatima Jamil	Completed
	2022	M.Phil Chemistry	Zakir Ullah	Completed
	2021	M.Phil Chemistry	Mona Munir	Completed
	2021	M.Sc. Chemistry	Iftikhar Ahmed	Completed

	2019	M.Phil Chemistry	Falak Naz	Completed
	2019	M.Sc. Chemistry	Sumbal Jamshaid	Completed
	2019	M.Sc. Chemistry	Rida Khan	Completed
	2018	M.Phil Chemistry	H. M. Amjad	Completed
	2018	B.Sc. (Hons)	Ammara Fawad	Completed
	2018	M.Sc. Chemistry	Abdul Jaleel	Completed
	2018	M.Sc. Chemistry	Faqia Jan	Completed
	2016	M.Phil Chemistry	M. Abu Bakar	Completed
	2016	M.Phil Chemistry	Sadia Alam	Completed
	2016	M.Phil Chemistry	Ayesha Sarwar	Completed
	2016	M.Phil Chemistry	Mehwish Aslam	Completed
	2016	B.Sc. (Hons)	Neelam Tariq	Completed
	2016	M.Phil Chemistry	Nadeem Anjum	Completed
	2015	M.Phil Chemistry	Samina Shaheen	Completed

## Publications

- ❖ **S. Farid**, S. Riasat, Bisma, M. Shahbaz, K. Rafique, F. Jamil, S. Sharif, Electrochemical Investigation of Nitrogen-Containing Copper Complex and 2D Copper MOF for Hybrid Supercapacitor Applications, *Microporous and Mesoporous Materials*, **2025** (*Submitted*).
- ❖ J. H. Shah, M. Shahbaz, M. Saeed, A. Shahzad, **S. Farid**, S. Shahzad, S. Muhammad, Electrochemical investigation of copper 1D conductive polymer for hybrid supercapacitor applications. *Journal of Energy Storage*, **2024**, 102, DOI: <https://doi.org/10.1016/j.est.2024.114058>.
- ❖ T. Arooj, Z-U-D. Khan, M. Akhtar, M. A. Raza, S. Muhammad, H. Shabbir, & **S. Farid**, Phytochemical profile, antimicrobial, antioxidant, antihelmintic and antiproliferative activities of *Asplenium trichomanes L.* of Malam Jabba, Swat valley KP, Pakistan. *The journal of population therapeutics and clinical pharmacology*, **2023**, 30, 17. DOI: <https://doi.org/10.53555/jptcp.v30i17.2718>
- ❖ M. Z. Iqbal; M. W. Khan; S. Siddique; **S. Farid**; S. Aftab; S. M. Wabaidur, Elucidating d-π conjugated two-dimensional 2,3,6,7,10,11-hexahydroxytriphenylene based conductive metal- organic framework for hybrid supercapacitors. *Journal of Electroanalytical Chemistry*, **2023**, 943, 117564.
- ❖ M. Z. Iqbal, M. Shaheen, M. W. Khan, S. Siddique, **S. Farid**, S. Aftab, The Rise of 2D Conductive Metal-Organic-Framework: Cu<sub>3</sub>(HHTP)<sub>2</sub> d-π MOF for Integrated Battery-Supercapacitor Hybrids, *Materials Today Sustainability*, **2023**, 22, 100331.
- ❖ Z. Meng, C. G. Jones, **S. Farid**, I. U. Khan, H. M. Nelson, K. A. Mirica, Unraveling Metal–Organic Framework With Atomic Precision, *Angewandte Chemie International Edition*, (2022), 134, 6, e202113569, DOI: 10.1002/anie.202113569.
- ❖ M. Riasat, S. Sharif, S. Khurshid, **S. Farid**, R. Bano, M. A. Gilani, O. Şahin, F. Perveen, Ultrasonic assisted synthesis of Zn(II) 2D coordination polymer and 4-nitroaniline photoluminescence sensing manifestation through DFT studies, *Journal of Coordination Chemistry*, (2022), 75, 4, 431-447.
- ❖ M. Roman, S. S. A Gillani, **S. Farid**, M. Shakil, R. Ahmad, M. Z Iqbal, M. M. Faisal, Exalted redox frameworks of Cu- MOF/polyaniline/RGO based composite electrodes by integrating silver nanoparticles as a catalytic agent for superior energy featured supercapatteries, *Electrochimica Acta*, (2021), 400, 139489.
- ❖ **S. Farid**, S. Ameen, S. Sharif, M. Tariq, I. A. Kundi, O. Sahin, M. Hassan Sayyad, I. U. Khan, Facile solvothermal syntheses of isostructural lanthanide(III) formates: Photocatalytic, photoluminescent chemosensing properties, and proficient precursors for metal oxide nanoparticles, *Journal of Coordination Chemistry*, 74, 2021, Issue 9-10, 1700–1719.
- ❖ M. Z. Iqbal, M. M. Faisal, S. R. Ali, **S. Farid**, A. M. Afzal (2020), Co-MOF/polyaniline-based electrode material for high performance supercapattery devices, *Electrochimica Acta*, 346, <https://doi.org/10.1016/j.electacta.2020.136039>.
- ❖ R. Khan, I. U. Khan, S. Sharif, **S. Farid**, H. Iqbal, S. Khan and N. Kanwal, High Performance Liquid Chromatographic– Diode Array Detector Method for Simultaneous Determination of Aspirin, Caffeine and Ephedrine in Weight Loss Formulations, Human Plasma and *in vitro* Drug–Drug Interaction Studies, 2020, *Journal of Analytical Chemistry*, 75, 12, 1589-1598.
- ❖ A. Shah, Z. Khan , S. Saleem , **S. Farid**, Antioxidant activity of ethnobotanically important plant *Quisqualis indica Linn*, 2019, *Pak. J. Pharm. Sci.*, 32(1), pp.095-102.

A. A. Sardar, Z. U Khan, A. Perveen, **S. Farid**, I. U. Khan (2017) GC-MS analysis, Phytochemical Screening and *In vitro* Antioxidant activity of pollen of *Centella asiatica* (Linn) Urban a traditional medicinal plant, submitted to *Pakistan journal of Pharmaceutical science*. 30 (6), 2239- 2245.

- ❖ M. Ajaib, T. Mehak, **S. Farid**, S. Perveen and S. Shah (2017), Antimicrobial and Antioxidant activity of *Citharexylum Spinosum*. *J. Chem. Soc. Pak.*, 39(2), 254- 260.
- ❖ N. Kanwal, I.U. Khan, E. A. Hussain, **S. Farid** and O. Sahin (2016). Efficient Syntheses, Crystal Structure, Thermal and Biological Evaluation of Amlodipine 4- chlorobenzene, 4- chlorobenzoyl and 2, 5- dichlorobenzene sulfonamide derivatives. *Comptes Rendus Chimie*, 19 (5), 594-603.
- ❖ U. Hanif, B. Ghazala, **S. Farid** and A. A. Farooqi (2016). Exploring new sources of antioxidants and phenolic contents from a marine red alga *agardhiella robusta* (grevi.) borg. Collected from karachi coast. *J. Anim. Pla sci.* 26 (5), 1445-1450.
- ❖ M. Ajaib, T. Arooj, K. M. Khan, **S. Farid**, M. Ishtiaq, S. Perveen and S. Shah (2016). Phytochemical, Antimicrobial and Antioxidant Screening of Fruits, Bark and leaves of *Lagerstroemia indica*. *J. Chem. Soc. Pak.* 38(3), 538-545.
- ❖ U. Hanif, H. A. Ali, D. Shahwar, **S. Farid**, S. Ishtiaq (2014). Bryophytes, *Funaria hygrometrica* and *Polytrichum commune*, Evaluation as a Source of Natural Antioxidant, *Asian J. Chem.*, 26 (14).
- ❖ A. A. Sardar, Z. D. Khan, A. Perveen, **S. Farid**, I. U. Khan (2014). In vitro antioxidant potential and free radical scavenging activity of various extracts of pollen of *Typha domigensis Pers.* *Pak. J. Pharm. Sci.* 27 (2), 279-284.
- ❖ J. Rehman, I. U. Khan, **S. Farid**, S. Kamal, and N. Aslam, (2013). Phytochemical screening and evaluation of *in-vitro* antioxidant potential of *Monotheca buxifolia*, *E3 Journal of Biotechnology and Pharmaceutical Research*, 4(4), 54-60.
- ❖ J. Rehman, Ejaz, I. U. Khan, W. T. A. Harrison and **S. Farid** (2011). *N*-(4-Ethylsulfamoyl) phenylacetamide. *Acta Cryst.* E67, o2455.
- ❖ I. U. Khan, Ejaz, **S. Farid**, and W. T. A. Harrison (2012). *N*-[4- (4-Chlorobenzenesulfonamido)-phenylsulfonyl]acetamide. *Acta Cryst.* E68, o1913.

**BOOKS**

- ❖ **Sidra Farid**, Islam Ullah Khan and Jeveria Rehman (2012) *In- vitro* evaluation of antioxidant activity of *Monotheca buxifolia*: A spectrophotometric approach. Lambert Academic Publishing, Germany. ISBN: 978-3- 8484-0265-6.

<p><b><i>Selected Professional Presentations/Seminar/Workshops</i></b></p>	<ul style="list-style-type: none"> <li>Delivered invited lecture on “Project-Based Learning in STEM Education” at Government Islamia Postgraduate College for Women, Cooper Road, Lahore on 13-11-2025.</li> <li>Served as resource person and delivered a session on Gender disparity in STEM Education and Role of AI in modern class room teaching at GC Women University Faisalabad on 30<sup>th</sup> October, 2025.</li> <li>Successfully completed, one day Hands-on Training on “Intellectual Property Rights” with a focus on Patent Writing, Drafting, and Submission” organized by ORIC GCU, on October 9<sup>th</sup>, 2024.</li> <li>Received training on “Advanced Teaching and Learning” organized by GC University Lahore from 17-07-2023 to 16-08-2023.</li> <li>Successfully completed 2-days training on ‘Outcome Based Education’ organized by Punjab Higher Education Commission at University of the Punjab, on June 7-8, 2023.</li> <li>Presented paper entitled, “Smart Textiles to Sniff out the Toxic Gases” at 4<sup>th</sup> International Conference on Chemistry organized by Lahore Garrison University on May 15<sup>th</sup>-16<sup>th</sup>, 2023.</li> <li>Successfully completed one day “Training Of Trainers” organized by Punjab Population Department and Green Star regarding Sexual and reproductive health and rights on October 21<sup>st</sup>, 2022.</li> <li>Completed one day training entitled, “Women in Learning &amp; Leadership for gender inclusive socioeconomic development” organized by Shaoor Foundation for education &amp; Awareness on 11<sup>th</sup> October, 2022. Completed a 3-Days long multisectoral leadership training entitled “Drug Demand Reduction at higher education institutions managed by Students government” jointly organized by Ministry of Narcotics Control and Anti-Narcotics Force at ANF Academy Islamabad from 21<sup>st</sup> March, 2021 to 24<sup>th</sup> March, 2021.</li> <li>Completed a leadership course entitled, “Bridges: Building a Supportive Community” from Dartmouth College, Hanover New Hampshire state, USA.</li> <li>Served as Training Coordinator in 5-Day long Cascading Workshop of Master Trainers Faculty Professional Development Training Program (MT-FPDP) from October 15-19, 2018.</li> <li>Served as resource person for the modules of “Teaching as Profession” and “Microteaching” in 5-Day long Cascading Workshop of Master Trainers Faculty Professional Development Training Program (MT-FPDP) from October 15-19, 2018.</li> <li>Attended 1<sup>st</sup> International Symposium on Sensors and Biosensors (ISSB-2018) at IRCBM, COMSATS University Islamabad, Lahore Campus on September 11, 2018.</li> <li>Delivered invited talk on ‘Metal Organic Frameworks-A newly emerging class of Photonic Materials’ at 2018 International Photonics Symposium (IPS'2018) and National Engineering Convention &amp; Optics Olympiad (NECOO'2018) held at Ghulam Ishaq Khan Institute of Science &amp; Technology, Topi on 30th March-1st April, 2018.</li> <li>Successfully organized 3 days international Chemistry Conference for the promotion of University-Industry linkage, January 24-26, 2018 and served as Convener Stage Committee.</li> <li>Successfully completed a workshop on “Science Teaching Methodology” at HEC Islamabad on October 16-17, 2017.</li> <li>Conducted a workshop as a resource person on ‘Teaching as Profession at University of Education, Bank Road Campus Lahore on 8th September, 2017.</li> </ul>
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- Successfully completed Master Trainers Faculty Professional Development Programme (MT-FPDP) at Higher Education Commission Islamabad from March 21st, 2017 to May 11th, 2017.
- Successfully completed one week long In service Short Term Training on “Andragogical & Communication Skills” from 23- 27 May, 2016.
- Attended DNA Strategy symposium jointly organized by British High Commission & Punjab Forensic Science Agency Lahore on January 19-20, 2016.
- Successfully completed Indigenous on Campus Training (IOT) under Modern University Governance Programme (MUGP) organized by QEC, GCU Lahore on May 25-29, 2015.
- Participated in workshop on Nanoscience & Nanotechnology organized by GC University, Lahore on August 27, 2015.
- Successfully completed Cascading Master Trainers Faculty Professional Development Programme (MT- FPDP) organized by QEC GCU Lahore on 12-15 October, 2015.
- Participated in Symposium on Forensic Sciences, organized by Punjab Forensic Science Agency, Lahore, 2014.
- Participated in Chromatography Techniques & Sample Preparation Seminar, organized by Agilent Technologies, 2014.
- Participated in Inter university poster competition, organized by Ravian Forensic Society, GCU Lahore, 2013.
- Two days XRD workshop on Crystallography, organized by Department of Chemistry, GCU, Lahore, 2011.
- Participated in a poster exhibition on the theme of "Chemistry- our life, our future" held at Department of Chemistry, GC University, Lahore, 2011.