

Samiullah

EMPLOYMENT

Department of Chemistry, University of Balochistan	Quetta, Pakistan
Chairman, Department of Chemistry	2024-Present
Professor in Chemistry	2023-Present
Associate Professor of Chemistry	2018-2023
Assistant Professor of Chemistry	2012-2018
Undergraduate Coordinator	2017
Department of Chemistry, University of Copenhagen	CPH, Denmark
Post Doc Research Fellow	March - Nov 2023
Visiting Faculty, Sardar Bahadur Khan Women University, Quetta	2014-2017
Teaching and Research Supervision	

EDUCATION

University of Warwick	Coventry, UK
PhD in Chemistry (Organic Synthesis)	2008-2012
University of Balochistan	Quetta, Pakistan
MSc in Organic Chemistry (Gold Medalist)	2004-2005
University of Balochistan	Quetta, Pakistan
BSc Chemistry, Zoology and Geography	2002-2004

RESEARCH INTERESTS

Synthesis of small molecules, MBH adducts their glycosylated, piperidine and piperzine derivatives of MBH adducts, hydroxamic acids, acylthiourea, transition metal complexes of hydroxamic acids and acylthiourea, micro RNAs.

PUBLICATION

1. Baqi, A., **Samiullah**, Khan, J., Sadiq, A., Khan, Y., et al. (2025). Computational identification and experimental validation of novel *Saccharum officinarum* microRNAs along with their targets through RT-PCR approach. *Plant Signaling & Behavior*, 20(1), 2452334.
2. Baqi, A., **Samiullah**, Khan, G. M., Asadullah, Khan, N., & Attiq-Ur-Rehman. (2025). *In silico* based profiling and characterization of functional microRNAs and their crucial targets in *Saccharum officinarum*. *Indian Journal of Biochemistry and Biophysics* (IJBB), 62(2), 154-160.
3. Hakeem, A., **Samiullah**., Khan, N., & Khan, G. M. (2025). Determination of Heavy Metals in Domestic and Broiler Chickens Meat in Quetta City. *Portugaliae Electrochimica Acta*, 43, 355–363
4. Baqi, A., **Samiullah**., Ayub, M., Saleem, M. Z., Khan, G. M., & Asadullah. (2024). Genome-wide profiling of novel conserved *Zea mays* microRNAs along with their key biological, molecular and cellular targets and validation using an RT-PCR platform. *Karbala International Journal of Modern Science*, 10(1), 4.

5. Baqi, A., **Samiullah.**, Saleem, M. Z., Ayub, M., & Saeed, S. (2024). Identification and annotation of the 21 novel sugarcane (*Saccharum officinarum*) microRNA clusters and their significant biological, molecular and cellular targets. *Tropical Plant Biology*, 1-17.
6. Baqi, A., **Samiullah.**, Saleem, M. Z., Ayub, M., & Habibullah. (2024). Experimental validation and characterization of Sugarcane Genome-Encoded MicroRNAs and their targets using PCR-based expressional methodology. *Journal of Agricultural Science and Technology*, 26(5), 1057-1071.
7. Baqi, A., **Samiullah**, Khan, G. M., Asadullah, Khan, N., & Ahmed, A. (2024). Identification and characterization of functional microRNAs and their significant targets in maize plants. *Journal of Plant Biochemistry and Biotechnology*, 33(4), 700-704.
8. Aslam, S., **Samiullah.**, Ullah, H., Rehman, A. U., Khan, N., Baqi, A., & Khan, Y. (2024). Synthesis, in vitro anti-urease, In-silico molecular docking study and ADMET predictions of piperidine and piperazine Morita-Baylis-Hillman Adducts (MBHAs). *Zeitschrift für Naturforschung C*, (0).
9. Khan, R. W., Kakar, A. U. R., Khan, N., Hakeem, A., & **Samiullah.** (2024). Determination of selected metal concentrations in potatoes with different brands of potato chips in Quetta. *South African Journal of Chemistry*, 78, 158-161.
10. Jaffar, K. U. N., Kakar, A. U. R., Asghar, M., **Samiullah.**, Khan, N., Hakeem, A., & Afsar, S. (2024). Flow injection chemiluminescence determination of copper oxychloride (fungicide) in freshwater and fruits samples employing 1, 10-phenanthroline—H₂O₂ reaction system. *Journal of Liquid Chromatography & Related Technologies*, 1-11.
11. Hakeem, A., **Samiullah.**, Khan, N., et al. (2024). Flow injection determination of paracetamol in pharmaceutical formulations using Luminol–diperiodatoargentate (III) system with chemiluminescence detection. *Journal of Population Therapeutics & Clinical Pharmacology*, 31(5), 1578–1590.
12. Jaffar, K. U. N., Kakar, A. U. R., Asghar, M., **Samiullah.**, & Khan, N. (2024). Flow injection chemiluminescence determination of lambda-cyhalothrin and clodinafop-propargyl in freshwater samples. *International Journal of Environmental Analytical Chemistry*, 1-21.
13. Khan, F., **Samiullah.**, Khan, N., et al. (2024). Heavy metals assessment in camel meat, beef and mutton through atomic absorption spectrophotometer in Quetta. *Pure and Applied Biology*, 14(2), 327-331.
14. Mustafa, S., Kakar, A. U. R., Malik, Y., Khan, N., & **Samiullah.** (2024). Tolerance pattern against the heavy metals and pesticides in *Escherichia coli* isolated from water samples. *Brazilian Journal of Microbiology*, 1-6.
15. Ghaffar, A., Khan, N., Ali, I., **Samiullah.**, Shah, W. A., & Khan, M. J. (2024). Exploring the hidden world of muskmelon miRNAs: experimental hunts of computational predicted miRNAs and their protein targets. *Genetic Resources and Crop Evolution*, 1-15.
16. Ghaffar, A., Khan, N., Saleem, M. Z., Ali, I., Rehman, A. U., Shah, W. A., & **Samiullah.** (2024). Identification and Characterization of Evolutionary Conserved Muskmelon Non-coding miRNAs and Their Target Proteins. *Biochemical Genetics*, 1-22.
17. Ghaffar, A., Khan, N., Ali, I., **Samiullah.**, & Shah, W. A. (2024). Bioassays, characterization and electronic transitions studies of organotin (IV) dithiocarbamates of p-Bromo-N methylbenzylamine dithiocarbamates. *Discover Chemistry*, 1(1), 1-8.
18. Baqi, A., **Samiullah**, Rehman, W., Bibi, I., Menaa, F., Khan, Y., & Sattar, A. (2023). Identification and validation of functional miRNAs and their main targets in *Sorghum bicolor*. *Molecular Biotechnology*, 1-15.
19. Nisa, K. U., Kakar, A. U. R., Asghar, M., **Samiullah**, Naqeebullah, Niamatullah, & Shah, A. (2023). Flow injection chemiluminescence determination of acetochlor and cartap-HCl in freshwater samples using an acidic KMnO₄–rhodamine-B reaction system. *Luminescence*, 38(5), 647-661.

20. Ghaffar, A., Baqi, A., Ali, I., **Samiullah.**, & Shah, W. A. (2023). In-Silico prediction and profiling of novel non-coding miRNAs and their target proteins in muskmelon (*Cucumis melo*). *Pakistan Journal of Agricultural Sciences*, 60(2).
21. Haleem, A., Ullah, H., **Samiullah**, Akbar, A., Ahmad, N., Ellahi, M., & Nawaz, M. (2022). Synthesis and biological activity of morita baylis hillman adducts and their oximes. *Pharmaceutical Chemistry Journal*, 56(2), 185-190.
22. Gul, Z., Akbar, A., Ali, I., Muhammad, J., **Samiullah.**, Rehman, Z. U., Bano, A., & Rabaan, A. A. (2022). High throughput screening for bioactive components of *Berberis Baluchistanica ahrendt* root and their functional potential assessment. *BioMed Research International*, 2022(1), 1746116.
23. Achakzai, R., Khan, N., **Samiullah.**, & Tareen, A. H. (2022). Determination of heavy metals in the dates (*P. dactylifera* L.) of Balochistan (Panjgoor and Turbat). *Baghdad Journal of Biochemistry and Applied Biological Sciences*, 3(03), 220-228.
24. Rashid, N., Shafee, M., Iqbal, S., Samad, A., Khan, S. A., Hasni, M. **Samiullah.**, & Akbar, A. (2021). Enterotoxigenic methicillin resistant *Staphylococcus aureus* contamination in salted fish from Gwadar Balochistan. *Brazilian Journal of Biology*, 83, e247701.
25. Ayaz, M., Kasi, J. K., Kasi, A. K., Bokhari, M., Sohail, M., & **Samiullah.** (2021). Natural Plant *Trifolium Pratense*, *Mirabilis Jalapa* and *Bassia Scoparia* Extract Used as Photosensitizer in Dye-Sensitized Solar Cell. *Iranian Journal of Chemistry and Chemical Engineering*, 40(3), 872-880.
26. Qahir, A., Khan, N., Hakeem, A., **Samiullah.**, & Kamal, R. (2021). The antioxidant, antimicrobial, and clinical effects with elemental contents of pomegranate (*Punica granatum*) peel extracts: A review. *Baghdad Journal of Biochemistry and Applied Biological Sciences*, 2(01), 21-28.
27. Bibi, M., **Samiullah.**, Khan, S., Khan, N., Tareen, A. H., Bibi, S., & Taj, H. (2021). Determination of essential and non-essential elements in *Xylanthemum macropodum* of Balochistan, Pakistan. *Baghdad Journal of Biochemistry and Applied Biological Sciences*, 2(02), 95-105.
28. Hakeem, A., **Samiullah.**, Khan, N., & Khan, S. (2020). A Comparative Study of the Heavy Metals in the Meat of Chickens in Different Cities of Pakistan. A Review. *Al-Nahrain Journal of Science*, 23(2), 75-79.
29. Khan, M., Khan, N., Ghazal, K., Shoaib, S., **Samiullah**, Ali, I., & Rehman, A. U. (2020). Synthesis, characterization, crystal structure, in-vitro cytotoxicity, antibacterial, and antifungal activities of nickel (II) and cobalt (III) complexes with acylthioureas. *Journal of Coordination Chemistry*, 73(12), 1790-1805.
30. Tareen, A. H., Mandokhail, A., **Samiullah.**, Khan, N., Tariq, S., & Kakar, N. (2020). Determination of Antioxidants by Four Different Methods in Medicinally Important Plant *Ebenus Stellata* of Balochistan. *Al-Nahrain Journal of Science*, 23(4), 13-18.
31. Ghazal, K., Shoaib, S., Khan, M., **Samiullah.**, Rauf, M. K., Khan, N., & Ali, I. (2019). Synthesis, characterization, X-ray diffraction study, in-vitro cytotoxicity, antibacterial and antifungal activities of nickel (II) and copper (II) complexes with acyl thiourea ligand. *Journal of Molecular Structure*, 1177, 124-130.
32. Akbar, A., Sadiq, M. B., Ali, I., Samiullah., Anwar, M., Muhammad, N., Muhammad, J., & Anal, A. K. (2019). *Lactococcus lactis* subsp. *lactis* isolated from fermented milk products and its antimicrobial potential. *CyTA-Journal of Food*, 17(1), 214-220.
33. Behlil, F., **Samiullah.**, Akbar, A., Tareen, R. B., Achakazai, A. K. K., Ali, I., & Rehman, A. (2019). Phytochemical screening and antioxidant activity determination of some medicinally important plants of Balochistan. *Pakistan Journal of Botany*, 51(2), 1-8.
34. Leghari, S. K., Akbar, A., Qasim, **Samiullah.**, Asrar, M., Rohail, H., & Ali, I. (2019). Estimating anticipated performance index and air pollution tolerance index of some trees and ornamental plant species for the construction of green belts. *Pol J Environ Stud*, 28, 1759-1769.

35. Akbar, A., Ali, I., **Samiullah**, N. U., Khan, S. A., Rehman, Z. I. A. U. R., & Rehman, S. U. (2019). Functional, antioxidant, antimicrobial potential and food safety applications of curcuma longa and cuminum cyminum. *Pakistan Journal of Botany*, 51(3), 1129-1135.
36. Ghaffar, A., Khan, N., **Samiullah**, I. A., Akbar, A., Attiq-ur-Rehman, W. A. S., & Abdul Baqi, S. (2019). Biological and electronic transition studies of the previously reported organotin (IV) dithiocarbamates of p-Fluoro-Nmethylbenzylaminedithiocarbamate. *Pure and Applied Biology (PAB)*, 8(1), 672-679.
37. Muhammad, A., Attiq-Ur-Rehman, N. K., **Samiullah**, Asghar, M., Baqi, A., & Mohammad Hussain, H. (2019). 79. Spectrophotometric determination of phenolic antioxidants in four varieties of apples (*Pyrus malus*) from Balochistan, Pakistan. *Pure and Applied Biology (PAB)*, 8(1), 768-779.
38. Ghaffar, A., Khan, N., **Samiullah**, I. A., Akbar, A., Attiq-ur-Rehman, W. A. S., & Abdul Baqi, S. (2019). 67. Biological and electronic transition studies of the previously reported organotin (IV) dithiocarbamates of p-Fluoro-Nmethylbenzylaminedithiocarbamate. *Pure and Applied Biology (PAB)*, 8(1), 672-679.
39. Irshad, A., Khan, N., **Samiullah**, Farina, Y., Baloch, N., Ali, A., Mun, L. K., & Murtaza, G. (2018). Synthesis, spectroscopic characterization, X-ray diffraction studies and in-vitro antibacterial activities of diorganotin (IV) derivatives with N-methyl-4-bromobenzohydroxamic acid. *Inorganica Chimica Acta*, 469, 280-287.
40. Khan, N., Waseem, N. A., **Samiullah**, & Rehman, F. U. (2018). The Applications of Flow Injection Analysis Coupled with LuminolChemiluminescence in Basic Medium. *Journal of the Chemical Society of Pakistan*, 40(6), 1103-1103.
41. Asghar, M., Yaqoob, M., Samiullah., Ali, S., Munawar, N., & Nabi, A. (2018). Development of flow injection spectrophotometric method for 1-naphthylthiourea using sodium nitrite and sulphanilic acid diazotization reaction. *Journal of Spectroscopy*, 2018(1), 3920289.
42. Bano, A., Hussain, J., Akbar, A., Mehmood, K., Anwar, M., Hasni, M., **Samiullah**, & Ali, I. (2018). Biosorption of heavy metals by obligate halophilic fungi. *Chemosphere*, 199, 218-222.
43. Alam, F., Aslam, S., Tareen, R. B., Khan, A., Khan, N., Akber, A., **Samiullah**, & Khan, S. S. (2017). Determination of Chemical Composition, Total Phenolic Content and Antioxidant Activity of Xylanthemum Macropodum. *Journal of the Chemical Society of Pakistan*, 39(1).
44. Khan Achakzai, A. K., Yaqoob, M., **Samiullah**, & Khan Barozai, M. Y. (2017). Chemical Structure, Occurrence and Health Hazard Status of Ochratoxin A (OTA) in Cereal Food and Feeds of Pakistan: A Review. *Journal of the Chemical Society of Pakistan*, 39(5).
45. Ali, I., Akbar, A., Aslam, M., **Samiullah**, Anwar, M., Punnapayak, H., & Rakshit, S. K. (2016). Comparative study of physical factors and microbial diversity of four man-made extreme ecosystems. *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences*, 86, 767-778.
46. Alam, M., Khan, A., Wadood, A., Bashir, S., Aman, A., Farooq, U., **Samiullah**, & Al-Harrasi, A. (2019). Bioassay-guided isolation of urease inhibitors from Ferula narthex Bioss. *South African Journal of Botany*, 120, 247-252.
47. Turner, P. A., Geden, J. V., White, A., **Samiullah**, Clarkson, G. J., & Shipman, M. (2015). New strategies for the synthesis and functionalization of tetrahydroxanthones. *Tetrahedron*, 71(50), 9433-9438.
48. Turner, P. A., Whatmore, J. L., & Shipman, M. (2013). Stereocontrolled synthesis of a d-amictose functionalised tetrahydroxanthone related to kigamicin A. *Tetrahedron Letters*, 54(48), 6538-6540.

WORKING PAPERS

- 1 Studies for the synthesis and biological potential evaluation of advanced intermediates from Morita-Baylis-Hillman (MBH) adducts, funded by the Higher Education Commission Aghaze Haqooqe Balochistan package.
- 2 Identification and analysis of microRNAs and their targets in important members of Poaceae, funds from the University of Balochistan Research Fund (UBRF) will be used here.
- 3 Heavy metal determination in the fruits available at Quetta City funded by Higher Education Commission through Aghaze Haqooqe Balochistan Package.

GRANTS

University of Balochistan, Quetta, Pakistan

Topic: Phytochemical investigation of Plants of Balochistan 2014-2018

Role: Principal Investigator; Amount: Rs. 382000

Higher Education Commission of Pakistan

Topic: Mangroves of Balochistan 2014-2016

Role: Co-Investigator; Amount Rs 2100000

The Prime Minister's Research Scheme, Pakistan

Topic: Synthesis of acylthiourea ligands and transition metal complexes 2015-2016

Role: Principal Investigator; (02 Year MPhil funding for 05 students)

Aghaze haqooqe Balochistan Project, Pakistan

Topic: Phytochemical screening of some medicinal plants of Balochistan, synthesis of transition metal complexes and evaluation of their biological activities. 2014-2018

Role: Principal Investigator; (Full funding for one PhD student for 04 years)

Aghaze haqooqe Balochistan Project, Pakistan

Topic: MBH adducts and their derivatives 2019-2024

Role: Principal Investigator; (Full funding for one PhD student for 04 years)

AWARDS

Faculty Development Scholarship

University of Balochistan 2008-2012

Gold Medalist- Student of the Year

Department of Chemistry, University of Balochistan 2004-2005

Teacher of the Year Award

Chief Minister of the Balochistan 2013

PRESENTATION AND TALK

- 2023 Danish Chemical Society, Department of Chemistry, University of Copenhagen, Denmark
- 2018 4th Invention to innovation summit Balochistan, University of Balochistan, Pakistan
- 2018 1st International Conference on Material Science and Nanotechnology, University of Balochistan, Pakistan
- 2016 3rd International Conference on Green Economics, Iran
- 2016 6th International conference on Green system and Innovation, Higher Education Commission, Pakistan
- 2010 Loughborough synthesis, Loughborough, U.K
- 2010 Leicester synthesis Meeting, Leicester, UK
- 2010 Post Graduate Symposium, University of Warwick, UK
- 2009 Birmingham Meeting, Birmingham, UK
- 2009 Bristol Synthesis, Bristol, UK
- 2008 Bristol Synthesis, Bristol, UK

COURSES DESIGN AND EVALUATIONS

- 2022 MPhil and PhD courses evaluated and designed in the Department of Chemistry at the University of Balochistan, Pakistan.
- 2019 M.Sc Chemistry and BS Chemistry courses designed at the University of Balochistan, Pakistan.
- 2015 M.Sc Chemistry course evaluated for SBK, Women University, Pakistan.
- 2014 BS Chemistry course evaluated for SBK, Women University, Pakistan.
- 2018 IX, X, XI, and XII classes Chemistry text book evaluation, Balochistan Book Board, Pakistan

PROFESSIONAL MEMBERSHIP

- 2024 Member of the academic council, University of Balochistan, Quetta.
- 2022 Member of the academic council, University of Balochistan, Quetta.
- 2021 Member of the academic council, University of Balochistan, Quetta.
- 2019 Member of the academic council, University of Balochistan, Quetta.
- 2018 Member of the academic council, University of Balochistan, Quetta.
- 2017 Member of the academic council, University of Balochistan, Quetta.

ADMINISTRATIVE ROLE

- 2024 Chairman Department of Chemistry, University of Balochistan, Quetta.
- 2024 Chairman of the Board of studies, Department of Chemistry, University of Balochistan, Quetta.
- 2022 Member of the Board of studies, Department of Chemistry, University of Balochistan, Quetta.
- 2019 Member of the academic council, University of Balochistan, Quetta.
- 2018 Member of the syndicate, University of Balochistan, Quetta.
- 2017 Member of of the Board of studies, Sardar Bahadur Khan, Women University, Quetta.

TEACHING

University of Balochistan, Quetta

PhD, MPhil, Masters and UG Courses 2012-Present
(A separate document of the taught courses over the years is attached)

Sardar Bahadur Khan Women University, Quetta (Visiting Faculty)

Advanced Stereochemistry (MPhil)	2014
Chromatography I (MPhil)	2015
Molecular Spectroscopy (MPhil)	2016
Chromatography II (MPhil)	2017

RESEARCH SUPERVISION

PhD University of Balochistan, Pakistan

Farida Behlil (Phytochemistry and hydorxamic acid complexes) (Graduated) 2014

Samina Aslam (MBH Adducts and their derivatives) (Thesis write up stage) 2019

Abdul Baqi (micro RNAs) (Graduated) 2019

MPhil University of Balochistan, Quetta, Pakistan. 2012-present

I have supervised over 10 MPhil students in conducting research on the extraction and antioxidant properties of various medicinal plant extracts from Balochistan.

MPhil SBK Women University, Quetta, Pakistan. 2014-2018

I have produced more than 05 MPhil students by research working on the synthesis of acylthiourea ligands and their transition metal complexes at SBK Women University

EXTERNAL EXAMINER

Sardar Bahadur Khan Women, University

MPhil, MChem and BS thesis evaluation and viva voce exams 2017-2022

University of Turbat, Kech

MPhil thesis evaluation and viva voce exams 2017-present