

CURRICULUM VITAE

Name Anum Khaleeq
Designation Lecturer of Chemistry
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“Dedicated and research driven lecturer of Chemistry at Kinnaird College with strong commitment to academic excellence, student mentorship and innovative teaching methodologies. Seeking to further contribute to advancement of chemical education and interdisciplinary research by fostering critical thinking and scientific inquiry among students”.

Academic qualification

Degrees	Institutions attended	Marks/Grade
PhD Scholar	Lahore College for Women University	On going
M Phil	Institute Of Chemistry, University of The Punjab (2011-2013)	3.53/4.0 A+
BS (Hons)	Institute Of Chemistry, University of The Punjab (2007-2011) 16 years of education	3.83/4.0 A+
FSc (pre-medical)	Govt. Kinnaird College for Women, Lahore (2006-2007)	896/1100 A+
Matric	The Punjab School for Girls, Town Ship, Lahore	747/850 A ⁺

Thesis Topic B.S

Determination of Phytochemistry and Anti-fungal Activity of *Glycyrrhiza glabra* (Malathi)

Thesis Topic MPHIL

Synthesis and Characterization of Some Novel heterocyclic sulfa Drugs

Papers Published

1. **Anum Khaleeq** Mahmood Ahmed and Saghir Ahmad, (2014),” Anti-fungal and Antioxidant Activity of Aqueous and organic extracts of liquorice” World Applied Science Journal 30 (11):1664-1667, 2014. ISSN 1818-4952.
2. Qadir, M. A., Ahmed, M., & **Khaleeq, A.** (2015). Synthesis and biological evaluation of amino terminal modified new sulfonamides of contemporary drugs. *Lat. Am. J. Pharm*, 34(4), 719-724.
3. Qadir, M. A., Ahmed, M., & Khaleeq, A. (2015). Synthesis and biological evaluation of amino terminal modified new sulfonamides of contemporary drugs. *Lat. Am. J. Pharm*, 34(4), 719-724.
4. Ahmed, M., Imtiaz Shafiq, M., **Khaleeq, A.**, Huma, R., Abdul Qadir, M., Khalid, A., ... & Samad, A. (2016). Physiochemical, biochemical, minerals content analysis, and antioxidant potential of national and international honeys in Pakistan. *Journal of Chemistry*, 2016(1), 8072305. <https://doi.org/10.1155/2016/8072305>.
5. Ahmed, M., **Khaleeq, A.**, Huma, R., Qadir, M. A., Shafiq, M. I., Israr, A., ... & Shahzad, S. (2016). Optimization and validation procedure for elemental composition of fresh and pasteurized milk in Pakistan employing microwave digestion followed by ICP-OES: A contribution to risk assessment. *Food Analytical Methods*, 9, 2933-2942. [10.1007/s12161-016-0491-9](https://doi.org/10.1007/s12161-016-0491-9).
6. Ahmed, M., Khaleeq, A., Huma, R., & Munir, S. (2017). Atomic absorption and inductively coupled plasma–optical emission spectroscopic method for determination of micronutrients and toxic metals in *Curcuma longa L.* to characterize human health toxicity. *Spectroscopy Letters*, 50(8), 432-439. <https://doi.org/10.1080/00387010.2017.1352604>
7. Ahmed, M., **Khaleeq, A.**, Munir, R., Huma, R., Muddassar, M., & Naseem, S. (2017). Determination of macronutrients, micronutrients, non-essential elements in milk based-infant formulas by atomic absorption and inductively coupled plasma-optical emission spectroscopy after microwave and ultrasound assisted digestion. *Spectroscopy Letters*, 50(2), 88-95. <https://doi.org/10.1080/00387010.2017.1287096>
8. Ahmed, M., Shahzadi, S. K., Qadir, M. A., Durrani, A. I., Ahmad, S., KHAN, I., ... & **Khaleeq, A.** (2020). Exploring the antioxidant potential of some common marketed nutraceuticals/drugs in Pakistan by different in vitro models. *Lat Am J Pharm*, 39, 372-375.
9. Ahmed, M., Ahmad, S., Hussain, R., **Khaleeq, A.**, & Khan, I. (2021). A Validated Non-compendial Method for Determination of Haemodialysis Concentrate’s Contents and its Comparison with Compendial Method: Application of ISO 13958: 2014 Standard. *Current Pharmaceutical Analysis*, 17(9), 1240-1248. <https://doi.org/10.2174/1573412916999200801023950>.

10. **Khaleeq, A.**, Ahmed, M., Huma, R., Mujtaba, A., Noor, S., Rehman, R., ... & Hameed, A. (2022). Evaluation of trace and heavy metals in different varieties of sauces to characterize their impact on human health. *Journal of Food Composition and Analysis*, 114, 104789. <https://doi.org/10.1016/j.jfca.2022.104789>.
11. **Anum Khaleeq**, Ahmed, M., Yousaf, A., Saddiqa, A., Sanauallah, M., Ahmad, W., ... & Zargar, S. (2024). Chemometric analysis and human health implications of trace and heavy/non-essential metals through ingestion of carbonated and non-carbonated beverages. *Biological Trace Element Research*, 1-22.
12. **Abstracts Published in conference Abstract Book: 20. Anum Khaleeq**, Shabnam Javed & Zaid Mehmood, Phytochemical, pharmacological & antioxidant potential of *Glycyrrhiza glabra* (malathi) root extracts, In Abstracts 8TH National Conference of Pakistan Phytopathological Society, November 28-29,2011, University of Agriculture, Faisalabad :108
13. Participated and presented In **2nd International conference on trends and research in chemistry (TRIC 2023)** Date May 16-18, 2023. Title of paper: Heavy Metal contamination and mineral assessment of commonly consumed cakes in Pakistan by FAAS. Venue: Department Of Chemistry University Of Education
14. Participated and presented in Kinnaird second international conference on science and technology, Date March 8-10, 2023, Title of paper: “Determination of heavy metal in biscuits from Lahore. Venue: Kinnaird college, Organized by: ORIC Kinnaird.
15. Attended And presented in 1st international virtual conference for young researchers on applied chemical and biological sciences, **Date:** 25-26 February 2025, **Venue:** Department Of Applied Chemistry Government College University Faisalabad, **Paper Title:** Kinetic study of the ascorbic acid degradation in thermally blanched samples
16. Attended And Presented in 3rd International Conference on Science and Technology And Innovation **Date:** 18 February 2025, **Venue** Kinnaird College For Women Lahore_ **Paper title-1** Determination Of Antioxidant Activity, Flavonoids and Phenolic Content In Seeds Of *Syzygium Cucumini*, *Anum Khaleeq, Alveena Faisal, Maryam Shahzad, Rahila Huma* , **Paper title-2** Comprehensive Qualitative and Quantitative Assessment Of Aspartame In Popular Refreshing Beverages , Anum Khaleeq, Aila Ishaq Ayesha Waseem , Rahila Huma

Technical Skills

Expert user of lab equipment, FTIR, UV-vis spectrometer, bench top furnace, box furnace, UTM, rotary evaporator, freeze dryer, centrifuge, incubator, sieve shaker, freeze dryer, hydraulic press, mechanical grinder, autoclave, Soxhlet apparatus.

Work Shops Attended

- Technologies for Mineral based chemicals and materials (University of the Punjab) GCCU on 2nd March 2016
- UMT (February 24, 2016) Intellectual property Rights (February 24, 2016)
- Kinnaird College For Women SPSS (March 2016).
- Kinnaird's 1st International Conference of Science, Technology and Innovation, 2nd-4th April 2019
- Seminar on "Toxicology Screenings in the Process of New Drug Development"
- Data Analysis using nonparametric means conducted by Dr Kalsoom, Quality Enhancement Cell (QEC), Kinnaird College. 2019
- "Hands-on Training Workshop on ACD/Chemsketch Software" 2019 Attended Seminar on "Molecular and Functional Nanomaterials"
- Workshop on innovative aspects of nanotechnology an interactive session, 2019
- Workshop on "Quality Assurance parameter for Effective Teaching" 2021
- **Arranged and attended** 2nd Hands-on Training Workshop Entitled "ACD/ChemSketch Software" 20th Nov 2021
- Attended one-day International Conference on **Title** "Ionic Liquids for Sustainable Future" **Date** March 10, 2022, Arranged by university of the Punjab, Venue School of chemistry
- **Attended** Kinnaird's first-ever "Kinnaird Science porium May 2022
- Attended seminar **entitled** "Nanomaterials synthesis Protocol for Heterogeneous Catalyst" **organized** by the Department of Chemistry, Faculty of Science and Technology (FOST), University of Central Punjab, Lahore on 8th June 2022. Speaker: Mr. Awais Ahmad Venue: Webinar Hall, Building C, Time: 9:00 to 11:00 am.
- **Arranged and attended** Seminar on "Applications & Optimization of Reaction Parameters for the Synthesis of Nanomaterials" 30th May 2022

- **Attended workshop** entitled “Chemistry lab safety workshop Organized by department of chemistry, FCCU. In collaboration with American chemical society (ACS Pakistan chapter) Number of participants =more than 100. Date March 13, 2023
- **Attended workshop** entitled Ionic liquids as designer green solvents and their widespread applications Date March 8-10, 2023, Venue: Kinnaird college, Organized by: ORIC Kinnaird
- **Attended workshop** entitled “Hands on training on basic computational training date 12 November 2022 Venue: Kinnaird college Organized by: ORIC Kinnaird
- Completed 8 days faculty **training** undergraduate STEM education in Pakistan, Pakistan 2022. arranged by ORIC LCWU.
- Organized and attended workshops on references and citations with Mendeley software. **Date November 22,2023**
- Attended synergy climate change and green sustainability conference at Kinnaird college for women Lahore. Date December 5, 2023.
- Attended workshop on "The role of the arts and sciences in preparing women for entrepreneurship and financial security" on 6th June 2024 from 9:00am- 12:00 noon in the Video Conferencing room Kinnaird College for Women Lahore
- Attended Seminar on Iridium catalyzed aromatic C-H activation /Borylation, **Date:** 18 February 2025, **Venue** Kinnaird College for Women Lahore

Thesis Supervised/Co-supervised

Year	Degree	Name	Title
2025	BS Chemistry	Amana Qurban And Ramna Rizwan	Phytochemical Screening and Antioxidant Activity OF <i>Pureria Montana</i> and <i>Quercus Infectoria</i> Extracts
2025	BS Chemistry	Alishba Sardar And Eisha Adnan	Determination Of Potassium Sorbate and Sodium Benzoate In Selective Dairy Products Using Hplc
2024	BS Chemistry	Alveena Faisal and Maryam Shehzad	Determination of Antioxidant Activity, flavonoids and phenolic content of <i>Syzygium cumini</i>
2023	BS Chemistry	Haifa Rasheed	Phytochemical Screening And Antioxidant Activity Of <i>Cucumis Sativus</i> Seeds Extracts

2023	BS Chemistry	Hnia Abid Sidra Tul Mutaha	Detection Of Selected Heavy Metals in Various Biscuits By AAS
2023	BS Chemistry	Aila Ayesha Waseem	Qualitative And Quantitative Analysis f Selective Artificial Sweeteners in Different Refreshing Drinks Available in Local Markets of Lahore
2022	BS Chemistry	Sakina Khan Maheen Mumtaz Zainab Hafeez	Detection Of Selected Heavy Metals In Various Toothpaste, Mouthwashes and Toothpowders By AAS
2022	BS Chemistry	Iqra Khalid) co supervisor)	Detection of DEET in different insect repellents by HPLC
2022	BS Chemistry	Laryab Attique	Detection of some heavy metals and minerals in various cake brands of Pakistan by FAAS
2021	BS Chemistry	Safia Asif Saima Jalil	Extraction, Phytochemical Screening And Radical Scavenging Assay of <i>Trigonella Foenum-Graecum</i> <i>Leguminosae</i> and <i>Mentha Spicata Extracts</i>
2020	BS Chemistry	Kainat Nazir Chaudhry	Evaluation Of Selected Essential And Toxic Metals In Different Chocolate Brands Marketed In Pakistan By Atomic Absorption Spectrophotometry
2020	BS Chemistry	Urba Saigha	Detection Of Trace and Heavy Metals In Various Cake Brands In Lahore By FAAS.
2020	BS Chemistry	Aimen Mujtaba Rimsha Rehman Sara Noor	Assessment Of Selected Trace and Heavy Metals, Contamination in Different Sauces Consumed In Lahore By FAAS
2020	BS Chemistry	Saima Jalil	Extraction, Phytochemical Screening and Radical Scavenging Assay Of <i>Trigonella Foenum-Graecum</i> <i>Leguminosae</i> And <i>Mentha Spicata Extract</i>
2020	BS Chemistry	Kazvin Nayyab Maira Shoaib	Optimization Of Parameters For The Extraction And Isolation Of Pigments From Selected Edible Plants
2018	BS Chemistry	Iqra Saleem Khan	Estimation Of Radical Scavenging Potential, MetallicContent And Screening Of Tpc And TFC Of <i>Nigella Sativa</i> And <i>Cichorium Intybus</i> Seed Extracts

2018	BS Chemistry	Saira Bedi Fiza Hameed Samia Tahira	Detection And Evaluation Of Heavy Metal Remnants In Meat, Feed, Water, Eggs And Claws Of Chicken Marketed In Selected Areas Of Punjab
2017	BS Chemistry	Mahnoor Ayaz	A Model Study On The Rate Of Degradation And Retention Of L-Ascorbic Acid In Selected Beverages By Thermal Blanching
2016	BS Chemistry	Nail Batool	Physico-Chemical, Biochemical, Mineral Content And Antioxidant Potential Of Various Food Cereals In Pakistan
2015	BS Chemistry	Ayeaha Israr	Detection And Evaluation Of Heavy Metal Remnants In Milk samples

Brief Statement of Research Interest

My research focusses on the development and application of advanced analytical techniques, Nano material synthesis, Metal Organic Frameworks and Analysis. I am particularly interested in chromatography spectroscopy and electrochemical methods with emphasis on sensitivity and environmental sustainability.

Service Activity

- Administrative duties at departmental level
- Member of college dengue control committee
- Paper checker in Lahore board of FSC chemistry
- Collaborated with Dr. Mahmood from the department of chemistry University of the Education.

Computer Skills

Ms. Word, Ms. Excel, Ms. Power Point, origin pro, expert high score

References will be provided on demand