

	<p style="text-align: center;"><u>Dr. Rubina Munir</u></p> <p>e-mail: organist94@gmail.com rubina.munir@kinnaird.edu.pk</p>
Personal Details	<p>Father's Name: Muhammad Munir</p> <p>Nationality: Pakistani</p>
Key Strengths	<ul style="list-style-type: none"> • Curriculum Development • Course Designing • Learning Outcome Designing • Problem-based Teaching • Research Supervision • Experiment Designing • Synthetic Scheme Designing • Organic Analysis • Solvents and Chemical Testing
Memberships:	<ul style="list-style-type: none"> • Member (MRSC) of Royal Society of Chemistry since 4th April 2023 (Membership No.: 742031) • Member of American Chemical Society since 25th February, 2023 (ACS No.: 31007892) • Affiliate Member of International Union of Pure and Applied Chemistry (IUPAC) since February 2023 • Member of Asian Council of Science Editors since 2016 • Life Time Member of Chemical Society of Pakistan (CSPID: P-0532) • Member of ACS Punjab Chapter since 2024 • Life Time Member of Khwarizmi Science Society since 1st February 2025 (Membership ID: 1243) • Reviewer of Several peer reviewed journals (Elsevier, SpringerNature, Wiley, Taylor & Francis and Publons) including: <ul style="list-style-type: none"> ➤ Journal of Molecular Structure (Elsevier) ➤ Arabian Journal of Chemistry (Elsevier) ➤ Heliyon (Elsevier) ➤ Scientific Reports (SpringerNature) ➤ ChemistrySelect (Wiley)

	<ul style="list-style-type: none"> ➤ Polycyclic Aromatic Compound (Taylor & Francis) ➤ Asian Journal of Chemical Sciences (Publons) ➤ Journal of Pharmaceutical Research International (Publons) ➤ Chemical Science International (Publons) ➤ International Journal of Environment and Climate Change (Publons) ➤ Journal of Material Science Research and Reviews (Publons) • External Examiner for BS and MS research for the following institutes: <ul style="list-style-type: none"> ➤ Government College University, Lahore ➤ Lahore College for Women University, Lahore ➤ University of Central Punjab, Lahore ➤ University of Lahore, Lahore • Consultant and reviewer for Chemistry related publications and digital material of Smart Practicals (since 2024) • Team Member for developing questions bank (Chemistry) for MDCAT at UHS, Lahore (2019 - 2020) • Member Academics Evaluation Committee for Intermediate Studies, Kinnaird College for Women (2013-2016) • PT Member for preparation of SARS, Chemistry Department, Kinnaird College for Women Lahore (2010-2018) • Member Research Committee, Chemistry Department, Kinnaird College for Women Lahore (2017 till date) • Member Curriculum Development and Revision Committee, Chemistry Department, Kinnaird College for Women Lahore (2008 till date) • Member Board of Studies of Chemistry Department, Kinnaird College for Women, Lahore (2019 till date) • Member M.Phil Committee of Chemistry Department, Kinnaird College for Women, Lahore (2021 till date) • Member Search Committee for Physics Department, Kinnaird College for Women, Lahore (2021 till date)
Employment Record:	<p> Duration: January 01, 2017 till date Position Title: Assistant Professor Institution: Kinnaird College for Women, Lahore </p> <p> Duration: August 18, 2009 to December 31, 2016 Position Title: Senior Lecturer Institution: Kinnaird College for Women, Lahore </p> <p> Duration: August 18, 2008 to August 17, 2009 Position Title: Lecturer Institution: Kinnaird College for Women, Lahore </p>

Academic Profile:	<p>Ph.D (Chemistry) 2018 Institute of Chemistry, University of the Punjab, Lahore (HEC PCD No.: 27188)</p> <p>M.Phil (Chemistry) 2007 Institute of Chemistry, University of the Punjab, Lahore</p> <p>M.Sc (Chemistry) 2004 Institute of Chemistry, University of the Punjab, Lahore</p> <p>B.Sc (Chemistry, Zoology, Botany) 2002 Lahore College for Women University, Lahore</p> <p>F.Sc (Pre-Medical) 1999 Lahore College for Women University, Lahore</p> <p>Matriculation (Sciences) 1997 Jinnah Ideal Girls Higher School, Muridke</p>
Research Experience:	<ul style="list-style-type: none"> • During Ph.D for thesis entitled “Synthesis and Characterization of Benzopyridine Derivatives” (2012 – 2018) • During M.Phil for thesis entitled “Vibro-Abrasive Polishing of Aluminum Metal” (2006 – 2007) • During M.Sc for thesis entitled “Vibro-Abrasive Polishing of Aluminum Metal and its Alloys” (2003 – 2004)
Research Interests:	<ul style="list-style-type: none"> • Organic Synthesis • Synthesis and Characterization of Heterocycles (N- and/or S-heterocycles) • Drug Design – Synthetic
Honors and Awards (Academic):	<ul style="list-style-type: none"> • 1st Position in Comprehensive Exam of Ph.D (Organic section) • 2nd Position Holder in M.Phil in University of the Punjab • Gold Medalist in M.Sc (Chemistry) from University of the Punjab • Merit Scholarship from University of the Punjab Lahore, 2005 & 2006 • Merit Scholarship from University of the Punjab Lahore, 2003 & 2004 • Roll of Honor and Merit Certificate in B.Sc from L.C.W.U • Bronze Medal in B.Sc (3rd position in whole B.Sc, 1st in Botany, Zoology, Chemistry) • 1st Position in Matriculation in Tehsil Ferozewala

Professional Achievements:	<ul style="list-style-type: none"> Delivered a Talk as Invited Speaker entitled “A Facile Synthesis of Tetracyclic Benzothiazino-quinoline framework by regioselective annulation of A Sulfostyryl-β-chloroaldehyde” in “International Conference on Material Chemistry and Industrial Technologies (MCIT)” at University of Lahore (24th April, 2024) Served as A Judge for “E-Poster Competition” at KC SciFest-I’25 organized by Science Club, Kinnaird College for Women, Lahore (21st January, 2025) Delivered a Talk as Invited Speaker entitled “Fused Benzothiazino-Quinoline Heterocycles; Synthesis And Mechanistic Study” in “3rd International Chemistry Conference on Emerging Trends in Chemistry (CCUMT)” at University of Management and Technology, Lahore (10th April, 2025) Serving as Scientific Committee Member for the multi-disciplinary conference titled “Emerging Scientist 2025” being organized by ACSE at Asian Digital Library, Faisalabad (scheduled on 8th November, 2025)
Grants / Projects Won:	<ul style="list-style-type: none"> Won ACS Festival Grant USD1475 from American Chemical Society (2025)
Service Activity:	<ul style="list-style-type: none"> Teaching BS Chemistry Theory Classes and Conducting Labs Supervising Lab Projects and Research Projects Handling of Instruments To check and monitor the purchase of Glassware in Chemistry Department, K.C.W To maintain Organic Lab in Chemistry Department, K.C.W To check the quality and purity of Solvents purchased by Chemistry Department, K.C.W To monitor the purchase, issuance and utility of solvents in Chemistry Department, K.C.W Designing and revising BS and M.Phil Curriculum for Chemistry Department, K.C.W Worked as Acting Head of the Chemistry Department, K.C.W from May-August 2010 and August-October 2017 Served as Advisor Science Club, Kinnaird College for Women Lahore (May 08, 2018 – August 18, 2023) Served as Advisor for “Science Vision” (The Annual Newsletter of Science Club, Kinnaird College for Women Lahore (May 08, 2018 – August 18, 2023)

Publications:	<ul style="list-style-type: none"> • Practical Notebook 9th and 10th Grade for all Boards of Punjab (2023) published by Ghani Practical • SLO based Practical Notebook for 9th and 10th Grade for Federal Board (2023) published by Smart Practicals • Practical Notebook F.Sc for all Boards of Punjab (August 2024) published by Smart Practicals
Research Publications:	<ol style="list-style-type: none"> 1. Yousaf, A., Hayat, A., Fatima, U., Naseem, L., Usma, Z., Huma, R., Munir, R. 2025. Comparative Assessment of Nicotine Content, Toxicity Level, and IC₅₀ Values in Nicotine Products: Public Health Implications. <i>Journal of Toxicology</i>, 2025(1), 7271677. (IF = 3.0) http://doi.org/10.1155/jt/7271677 2. Zaib, S., Khan, I., Ibrar, A., Ali, H.S., Rana, N., Munir, R., Zahra, S., Al-Odayni, A., McAdam, C.J., Hokelek, T., Frontera, A., 2025. Synergistic Effect of Hydrogen Bonding and C-H...π Interactions to Modulate the Supramolecular Assemblies of Isobenzofuranones: X-ray Crystallography, DFT Analysis and Antihyperglycemic Potential. <i>Journal of Molecular Structure</i>, 1321, 140263. (IF = 4.0) https://doi.org/10.1016/j.molstruc.2024.140263 3. Munir, R.*, Khan, I., Siddiqui, L., Javid, N., Zia-ur-Rehman, M., Ali, H.S., Saeed, M., Zaib, S., Awwad, N.S., Ibrahim, H.A., Yeow, C.H.S., White, J.M., Dera, A.A., 2024. Regioselective Metal-Free Synthesis of Sulfostyryl-Quinoline Hybrid Framework: Experimental and Computational Mechanistic Insights. <i>Journal of Molecular Structure</i>, 1315, 138894. (IF = 4.0) https://doi.org/10.1016/j.molstruc.2024.138894 4. Munir, R.*, Zaib, S., Zia-ur-Rehman, M., Javed, H., Roohi, A., Zaheer, M., Fatima, N., Bhat, M.A., Khan, I., 2024. Exploration of Morpholine-Thiophene Hybrid Thiosemicarbazones for the Treatment of Ureolytic Bacterial Infections via Targeting Urease Enzyme: Synthesis, Biochemical Screening and Computational Analysis. <i>Frontiers in Chemistry</i>, 12, 1403127. (IF = 5.5) https://doi.org/10.3389/fchem.2024.1403127 5. Zaib, S., Munir, R.*, Khan, I., Javed, N., Huma, R., Mustafa, U., Rana, N., McAdam, C.J., Yeow, C.H.S., White, J.M., Hokelek, T., Alotaibi, K.M., Alshalwi, M., Frontera, A., 2024. Supramolecular Networks Featuring Diverse Array of Noncovalent Interactions in Crystals of Hydrazinylidene-

Benzothiazinediones: X-ray Crystallographic, DFT and Biochemical Analysis. *Journal of Molecular Structure*, 1306, 137840. (IF = 3.8)
<https://doi.org/10.1016/j.molstruc.2024.137840>

6. Munir, R.*, Zaib, S., Khan, I., Yousaf, A., McAdam, C.J., Yeow, C.H.S., White, J.M., Hokelek, T., Awwad, N.S., Ibrahim, H.A., Frontera, A., **2024**. Cooperative Assemblies Featuring Hydrogen Bonding and C-H... π -Interactions in 2-(methanesulfonamido) benzohydrazide Derivatives: Experimental, Computational and Biochemical Assessment. *Journal of Molecular Structure*, 1295, 136752. (IF = 3.8) (Published online on 30th September, 2023)
<https://doi.org/10.1016/j.molstruc.2023.136752>
7. Munir, R.*, Zaib, S., Khan, I., Islam, Z.T., Gomila, R.M., McAdam, C.J., Yeow, C.H.S., White, J.M., Hokelek, T., Al-Askar, A.A., Elkaeed, E.B., Frontera, A., **2023**. Complex interplay of hydrogen bonding, halogen bonding and π -interactions in methyl 2-(7-chloro-1*H*-pyrazolo[3,4-*b*]quinolin-1-yl)acetate: Synthesis, X-ray crystallography, energetic features and anti-urease efficacy. *Journal of Molecular Structure*, 1287, 135625. (IF = 3.841)
<https://doi.org/10.1016/j.molstruc.2023.135625>
8. Hina, S., Zaib, S., Uroos, M., Zia-ur-Rehman, M., Munir, R., Riaz, H., Syed, Q., Abidi, S.H.I., **2023**. *N*-Arylacetamide Derivatives of Methyl 1,2-benzothiazine-3-carboxylate as Potential Drug Candidates for Urease Inhibition. *Royal Society Open Science*, 10(4), 230104. (IF = 3.653)
<https://doi.org/10.1098/rsos.230104>
9. Munir, R.*, Zaib, S., Zia-ur-Rehman, M., Hussain, N., Chaudhry, F., Younas, M.T., Zahra, F.T., Tajammul, Z., Javid, N., Dera, A.A., Ogaly, H.A., Khan, I., **2023**. Ultrasound-Assisted Synthesis of Piperidiny-Quinoline Acylhydrazones as New Anti-Alzheimer's Agents: Assessment of Cholinesterase Inhibitory Profile, Molecular Docking Analysis, and Drug-like Properties. *Molecules*, 28(5), 2131. (IF = 4.927)
<https://doi.org/10.3390/molecules28052131>
10. Chaudhry, F., Munir, R., Malik, N., **2023**. N-Heterocycles as Privileged Scaffolds in FDA Approved Different NMEs of 2021: A Review. *Letters in Organic Chemistry*, 20(4), 287-299. (IF = 0.797)
<https://doi.org/10.2174/1570178620666221026095145>

11. Javid, N., Jalil, S., Munir, R.*, Zia-ur-Rehman, M., Sahar, A., Arshad, S., Iqbal, J., **2023**. 2,1-Benzothiazine - (Quinolin/Thiophen)yl Hydrazone Frameworks as New Monoamine oxidase Inhibitory Agents; Synthesis, *in vitro* and *in silico* Investigation. *RSC Advances*, 13(3), 1701-1710. (IF = 4.036)
<https://doi.org/10.1039/d2ra07045f>
12. Chaudhry, F., Munir, R., Ashraf, M., Mehr-un-Nisa, Huma, R., Malik, N., Hussain, S., Munawar, M.A., Khan, M.A., **2023**. Exploring Facile Synthesis and Cholinesterase Inhibiting Potential of Heteroaryl Substituted Imidazole Derivatives for the Treatment of Alzheimer's Disease. *Arabian Journal of Chemistry*, 16, 104384. (IF = 6.212)
<https://doi.org/10.1016/j.arabjc.2022.104384>
13. Zaheer, M., Zia-ur-Rehman, M., Munir, R.*, Jamil, N., Ishtiaq, S., Saleem, R.S.Z., Elsegood, M.R.J., **2021**. (Benzylideneamino)triazole-Thione Derivatives of Flurbiprofen: An Efficient Microwave-Assisted Synthesis and *in vivo* Analgesic Potential. *ACS Omega*, 6(46), 31348-31357. (IF = 3.512) (PMCID # PMC8613847)
<https://doi.org/10.1021/acsomega.1c05222>
14. Zaib, S., Munir, R.*, Younas, M.T., Kausar, N., Ibrar, A., Aqsa, S., Shahid, N., Asif, T.T., Alsaab, H.O., Khan, I., **2021**. Hybrid Quinoline-Thiosemicarbazone Therapeutics as a New Treatment Opportunity for Alzheimer's Disease – Synthesis, In Vitro Cholinesterase Inhibitory Potential and Computational Modeling Analysis. *Molecules*, 26(21), 6573. (IF = 4.41)
<https://doi.org/10.3390/molecules26216573>
15. Mahmood, A., Munir, R.*, Zia-ur-Rehman, M., Javid, N., Shah, S.J.A., Noreen, L., Sindhu, T.A., Iqbal, J., **2021**. Synthesis of Sulphonamide Tethered (Hetero)aryl Ethylidenes as Potential Inhibitors of P2X Receptors. A Promising Way for Treatment of Pain and Inflammation. *ACS Omega*, 6(38), 25062-25075. (IF = 3.512) (PMCID # PMC8482771)
<https://doi.org/10.1021/acsomega.1c04302>
16. Munir, R.*, Javid, N., Zia-ur-Rehman, M., Zaheer, M., Huma, R., Roohi, A., Athar, M.M., **2021**. Synthesis of Novel *N*-Acylhydrazones and their C-N/N-N Bond Conformational Characterization by NMR Spectroscopy. *Molecules*, 26(16), 4908. (IF = 4.41) <https://doi.org/10.3390/molecules26164908>

17. Kausar, N., Murtaza, S., Arshad, M.N., Munir, R., Saleem, R.S.Z., Rafique, H., Tawab, A., **2021**. Design, synthesis, structure activity relationship and molecular docking studies of thiophene-2-carboxamide Schiff base derivatives of benzohydrazide as novel acetylcholinesterase and butyrylcholinesterase inhibitors. *Journal of Molecular Structure*, 1244, 130983.
<https://doi.org/10.1016/j.molstruc.2021.130983>
18. Munir, R.*, Zia-ur-Rehman, M., Murtaza, S., Zaib, S., Javid, N., Awan, S.J., Iftikhar, K., Athar, M.M., Khan, I., **2021**. Microwave-Assisted Synthesis of (Piperidin-1-yl) quinolin-3-yl)methylene)hydrazinecarbothioamides as Potent Inhibitors of Cholinesterases: A Biochemical and In Silico Approach. *Molecules*, 26(3), 656. (IF = 3.40)
<https://doi.org/10.3390/molecules26030656>
19. Munir, R.*, Zia-ur-Rehman, M., Athar, M. M., Javid, N., Roohi, A., Razavi, S. F., **2021**. Novel Quinolinyl – Sulphonamide Hybrid Schiff Bases as Potent Radical Scavengers to Combat Oxidative Stress. *Pakistan Journal of Zoology*, 53(1), 87-92.
<https://dx.doi.org/10.17582/journal.pjz/20190620180646>
20. Javid, N., Munir, R.*, Chaudhry, F., Imran, A., Zaib, S., Muzaffar, A., Iqbal, J. **2020**. Exploiting oxadiazole-sulfonamide hybrids as new structural leads to combat diabetic complications via aldose reductase inhibition. *Bioorganic Chemistry*, 99, 1-10.
<https://doi.org/10.1016/j.bioorg.2020.103852>
21. Munir, R.*, Athar, M. M., Zia-ur-Rehman, M., Javid, N., **2020**. Synthesis of 6/8-Methyl-2-(piperidin-1-yl)quinoline-3-carbaldehydes; A Facile CTAB Catalyzed Protocol. *Chiang Mai Journal of Science*, 47(1), 175-180.
<https://epg.science.cmu.ac.th/ejournal/journal-detail.php?id=10585>
22. Huma, R., Mahmud, T., Idrees, N., Saif, M. J., Munir, R., Akbar, N., **2020**. Crystal Structure and Quantum Chemical Studies of a Novel Push–Pull Enaminone: 3-Chloro-4-((4-bromophenyl)amino)pent-3-en-2-one. *Journal of Chemical Crystallography*, 50(3), 187-197.
<https://doi.org/10.1007/s10870-019-00786-5>
23. Huma, R., Mahmud, T., Munir, R., Awan, S.J., Iftikhar, K., Islam, M. T., **2019**. Cytotoxicity and Molecular Docking Studies of a Novel Enaminone and its Cadmium (II) Complex. *Pakistan Journal of Zoology*, 51(2).

	<p>http://dx.doi.org/10.17582/journal.pjz/2019.51.2.697.702</p> <p>24. Gulzar, A., Mahmud, T., Munir, R., Imran, M, Mitu, L., Iftikhar, K., 2019. Synthesis, Characterization and Biological Activities of a Schiff Base Derived from 2-[(1,3-Benzothiazol-2-yl)sulfanyl]-N-[4-(hydrazinecarbonyl)phenyl]acetamide and Its Complexes with Mn(II), Co(II), Ni(II), Cu(II) and Zn(II) Ions. <i>Revista De Chimie</i>, 70(2). https://revistadechimie.ro/pdf/48%20GULZAR%20%2019.pdf</p> <p>25. Gulzar, A., Mahmud, T., Munir, R., Anjum, A., 2018. Anti-Cancerous and Anti-Inflammatory Activities of some Novel Schiff Bases Derived from 2-[(1,3-benzothiazol-2-yl)sulfanyl]-N-[4-(hydrazinecarbonyl)phenyl]acetamide. <i>Pakistan Journal of Zoology</i>, 50(3). http://dx.doi.org/10.17582/journal.pjz/2018.50.3.1003.1009</p> <p>26. Chaudhry, F., Choudhry, S., Huma, R., Ashraf, M., al-Rashida, M., Munir, R., Sohail, R., Jahan, B., Munawar, M.A., Khan, M.A., 2017. Hetarylcoumarins: synthesis and biological evaluation as potent α-glucosidase inhibitors. <i>Bioorganic Chemistry</i>, 73, 1-9. https://doi.org/10.1016/j.bioorg.2017.05.009</p> <p>27. 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. <i>Spectroscopy Letters</i>, 50(2), 88-95. https://doi.org/10.1080/00387010.2017.1287096</p>
<p>Papers Presented in Conferences:</p>	<p>1. Nasir, H., Roohi, A., Yousaf, A., Munir, R., 2025. "Optimization of Conditions for the Removal of Methylene Blue Using Nickel Oxide Nanoparticles" presented in "3rd International Conference on Science, Technology and Innovation" at Kinnaird College for Women, Lahore (18th – 20th February, 2025).</p> <p>2. Asad, S. L., Munir, R.*, Fatima, R., Gohar, R., 2025. "Nitration of Methyl 2-[(methane sulfonyl)amino]benzoate; Optimization and Characterization" presented in "3rd International Conference on Science, Technology and Innovation" at Kinnaird College for Women, Lahore (18th – 20th February, 2025).</p> <p>3. Siddiqui, L., Munir, R., Chaudhry, F., Roohi, A., 2025. "Synthesis of Quinoline-Sultam Hybrid Scaffolds: Design, Optimization and Characterization" presented in "3rd International Conference on Science, Technology and</p>

	<p>Innovation” at Kinnaird College for Women, Lahore (18th – 20th February, 2025).</p> <ol style="list-style-type: none"> 4. Qamar, Z., Munir, R., Shahid, N., 2025. “4-(6-Methoxy-1<i>H</i>-pyrazolo[3,4-<i>b</i>]quinolin-1-yl)benzaldehyde: Synthesis, Purification and Characterization of the Novel Molecule” presented in “3rd International Conference on Science, Technology and Innovation” at Kinnaird College for Women, Lahore (18th – 20th February, 2025). 5. Zulfiqar, M., Roohi, A., Munir, R., Chaudhry, F., “Synthesis and Characterization of Nickel Oxide Nanoparticles using <i>Trapa natans</i> fruit extract and its application in the removal of Methylene Blue” presented in 4th International Conference on Chemical & Pharmaceutical Sciences: Innovation to Commercialization, at Department of Chemistry, Forman Christian College (A Chartered University), 2025. (22nd – 24th January, 2025) 6. Zulfiqar, M., Roohi, A., Munir, R., Bisma, I., Mushtaq, S., 2024. “Phytochemical Studies of <i>Swertia chirata</i> Leaves; Heavy Metal Determination and Evaluation of Antibacterial and Antioxidant Potential” presented in “International Conference on Material Chemistry and Industrial Technologies (MCIT)” at University of Lahore (24th April, 2024). 7. Khalil, A., Islam, Z.T., Munir, R.*, 2023. “Optimization of Conditions for the Synthesis of a New Ester containing Pyrazolo[3,4-<i>b</i>]quinoline Scaffold” presented in Kinnaird’s 2nd International Conference on Science, Technology and Innovation. 8. Choudhary, S., Roohi, A., Munir, R., Tasadduq, R., Shabir, S., Nizam, R., Saif, M. 2023. “Honey Assisted Green Synthesis of Silver Nanoparticles and Determination of their Antimicrobial Potential against <i>S. aureus</i> and <i>E. coli</i>” presented in Kinnaird’s 2nd International Conference on Science, Technology and Innovation. 9. Munir, R.*, Huma, R., Sheikh, A.A., Javid, N. and Roohi, A., 2019. “Assay of Pesticide Residues on the Surface of Selected Fruits and Vegetables Collected from Lahore, Pakistan”. <i>Proceeding Emerging Scientist 2019</i>. 10. Munir, R.*, Tariq, N., Javid, N., Roohi, A., Huma, R. and Hayat, A., 2019. “Synthesis and Antibacterial Activity of Anisidyl Azomethines”. <i>Proceeding Emerging Scientist 2019</i>.
<p>Poster Presentations:</p>	<ol style="list-style-type: none"> 1. Khalid, R., Fatima, L., Chaudhry, F., Huma, R., Munir, R., Roohi, A., “Synthesis and <i>In Silico</i> Pharmacokinetic Profiling of

	<p>4-(Furan-2-ylmethylene)-pyrazolones” presented in 4th International Conference on Chemical & Pharmaceutical Sciences: Innovation to Commercialization, at Department of Chemistry, Forman Christian College (A Chartered University), 2025. (22nd – 24th January, 2025)</p> <ol style="list-style-type: none"> 2. Shahid, N., Munir, R.*, Huma, R., Roohi, A., “Synthesis and Isolation of a Novel Aldehyde containing 6-Methoxy-1<i>H</i>-pyrazolo[3,4-<i>b</i>]quinoline Moiety” presented in 21st International, 1st Inter-Islamic, & 33rd National Chemistry Conference on Chemical Sciences: Technology, Innovation & Sustainability (CHEMCON2023) at Quaid-i-Azam University Islamabad, Pakistan, 2023. (23rd – 25th October, 2023) 3. Choudhary, S., Roohi, A., Tasadduq, R., Munir, R., Shakir, R., Razi, H.F., “Phytochemical Screening and Antimicrobial Studies of <i>Carica papaya</i> Fruit and Peel Extract and their Roles in Synthesis of Silver Nanoparticles” presented in 4th International Conference on Chemistry (ICC-2023) at Lahore Garrison University, Lahore, 2023. (20th – 21st March, 2023) 4. Sana, R., Roohi, A., Munir, R., Fatima, A. “Determination of Heavy Metals in Selected Samples of Potato Chips and Nimko collected from Local Market of Lahore” presented in Kinnaird’s 2nd International Conference on Science, Technology and Innovation, 2023. (8th – 10th March, 2023) 5. Munim, A., Munir, R.*, Huma, R., Roohi, A., Saeed, S.M., 2019. “Study on Variation of Reaction Time and Reactant Concentration on Refractive Index of Synthesized Resols”. <i>Proceeding Emerging Scientist 2019</i>. 6. Islam, Z.T., Roohi, A., Munir, R.*, Huma, R. and Hayat, A., 2019. “Synthesis and Antibacterial Screening of Toluidine-Based Anils against <i>Eschericia coli</i> and <i>Staphylococcus aureus</i>”. <i>Proceeding Emerging Scientist 2019</i>. 7. Munir, R.* 2019. “Synthesis of New Sulphonamide – Oxadiazole Conjugates” presented in conference on “Drug Development – Natural & Synthetic” at COMSATS University, Abbottabad Campus. 8. “Estimation of Nickel in Different Brands of Banaspati Ghee” presented in 1st International Conference on Chemistry at Lahore Garrison University, 2018.
Workshops Organized/Conducted:	<ul style="list-style-type: none"> • Conducted microteaching Presentation in NAHE, PCEPT Conducted by Higher Education Commission

- Organized **“Hands-on Training Workshop on ACD/Chemsketch Software”** as **Programme Coordinator** at **Kinnaird College for Women Lahore (24th November, 2018)**
- Conducted **“Hands-on Training Workshop on ACD/Chemsketch Software”** as **Resource Person** at **Kinnaird College for Women Lahore (24th November, 2018)**
- Managed **Technical Session 5** of **“Kinnaird’s 1st International Conference on Science, Technology and Innovation”** as **Moderator (2nd – 4th April, 2019)**
- Organized a seminar and inter-departmental quiz competition on **“Forensic Sciences”** at **Kinnaird College for Women Lahore** as **Advisor Science Club (9th April, 2019)**
- Organized a seminar on **“Molecular and Functional Nanomaterials”** at **Kinnaird College for Women Lahore (30th November, 2019)**
- Conduct **“Hands-on Training Workshop on ACD/Chemsketch Software”** annually for Semester V students (**Chemistry Department, KCW**) as **Resource Person**
- Organized a webinar entitled **“Awareness and Management of Children with Learning Disabilities”** as **Advisor Science Club** **Kinnaird College for Women Lahore (8th May, 2021)**
- Conducted **“Hands-on Training Workshop on ACD/Chemsketch Software”** as **Resource Person** at **Kinnaird College for Women Lahore (20th November, 2021)**
- Assisted in organizing a seminar entitled **“Applications and Optimization of Reaction Parameters for the Synthesis of Nanomaterials”** at **Department of Chemistry, Kinnaird College for Women, Lahore (30th May, 2022)**
- Organized first-ever **“Kinnaird Scienceporium 2022”** at **Kinnaird College for Women, Lahore (31st May, 2022)**
- Assisted in organizing a Workshop entitled **“Hands-on Training on Basics of Computational Chemistry”** at **Department of Chemistry, Kinnaird College for Women, Lahore (12th November, 2022)**
- Managed **Technical Session 3** of **“Kinnaird’s 2nd International Conference on Science, Technology and Innovation”** as **Moderator (8th March, 2023)**
- Organized a Creative Writing Competition on **“Environmental Fiction: Invest in Our Planet”** at **Kinnaird College for Women, Lahore as Advisor Science Club (18th April, 2023)**
- Assisted in organizing a Hands-On Training on **“Organizing References and Citations with Mendeley Software”** at

	<p>Department of Chemistry, Kinnaird College for Women, Lahore (22nd November, 2023)</p> <ul style="list-style-type: none"> Assisted in organizing a Seminar on “Navigating the Professional Landscape” at Department of Chemistry, Kinnaird College for Women, Lahore (7th May, 2024) Organized a Seminar on “Smog; An Environmental Threat” at Kinnaird College for Women, Lahore (14th November, 2024) Managed Technical Session 12 of “Kinnaird’s 3rd International Conference on Science, Technology and Innovation” as Moderator (18th February, 2025)
Seminars/Conferences /Workshops Attended:	<ul style="list-style-type: none"> Attended 18th National Chemistry Conference of Chemical Society of Pakistan held at PUIC, Lahore (25 – 27th February, 2008) Attended workshop on “Publishing Your Research” at COMSATS Institute of Information & Technology, Lahore (28th January, 2010) Certification of 2-days workshop on “How to Write a Winning Research Paper?” held at IB&M, UET, Lahore (27th – 28th January, 2011) Attended one day workshop on “Forensic Sciences” held by RCS (Royal Chemical society UK) and SCS (Speers Chemical Society Pk.) held at F.C.C (2011) Certification of Micro-Teaching from NAHE, PCEPT conducted by Higher Education Commission at Kinnaird College for Women Lahore Attended workshop on “Using Turnitin” at Kinnaird College for Women Lahore Attended five-day workshop on “How to Develop Research Culture in an Educational Institution of a Developing Country” held at Kinnaird College for Women Lahore (4th – 8th September, 2012) Attended International Chemistry Conference of Chemical Society of Pakistan held at PUIC (20th – 22nd October, 2014) Attended a workshop and hands on training on “Zotero Software” at Kinnaird College for Women Lahore (27th May, 2015) Attended a workshop on “Time and Stress Management” at Kinnaird College for Women Lahore (2014, 2016) Attended three days’ “Computational Chemistry Workshop” at Forman Christian College (A Chartered University)

Lahore (20th – 22nd January, 2016)

- Attended seminar on “**Technologies for Mineral based Chemicals and Materials**” at **University of the Punjab Lahore (2017)**
 - Attended Symposium entitled “**Fun Materials in Chemistry**” at **University of Engineering and Technology, Lahore (8th May, 2017)**
 - Attended Two Days National Workshop entitled “**Bioinformatics and Computational Drug Designing**” at **Kinnaird College for Women Lahore (27 – 28th January, 2018)**
 - Attended QEC Workshop entitled “**ISO 21001 Educational Organization Management System (EOMS)**” at **Kinnaird College for Women Lahore (3rd November, 2018)**
 - Attended 3 days conference on “**Nanotechnology: New Trends in Development and Applications**” at **Forman Christian College (29th – 31st January, 2019)**
 - Attended 2 days International symposium on “**Technologies and Materials for Renewable Energy, Environment and Sustainability**” at **University of Agriculture, Faisalabad (6th – 7th February, 2019)**
 - Attended 2 days Conference “**Emerging Scientist**” at **Asian Digital Library, Faisalabad (30th – 31st March, 2019)**
 - Attended 3 days “**Kinnaird’s 1st International Conference on Science, Technology and Innovation**” at **Kinnaird College for Women, Lahore (2nd – 4th April, 2019)**
-
- Attended workshop on “**Toxicological Screenings in the Process of New Drug Development**” (3rd April 2019)
 - Attended one day hands-on workshop entitled “**Advanced NMR Techniques in Structural Biology and Chemistry**” at **LUMS Lahore (30th April, 2019)**
 - Attended one day Hands-on training workshop on “**Bioinformatics: Converting Data to Knowledge**” at **COMSATS University, Abbottabad Campus (7th October, 2019)**
 - Attended two days conference on “**Drug Development – Natural & Synthetic: Current Approaches and Emerging Trends for the Development and Discovery of Drugs**” at **COMSATS University, Abbottabad Campus (29th – 30th November, 2019)**
 - Attended Workshop on “**NMR Data Acquisition, Processing**

and Structural Elucidation” at COMSATS University, Abbottabad Campus (**30th November, 2019**)

- Attended an Online Workshop on **“Outcome Based Education (OBE)”** organized by Kinnaird College for Women (**28th November, 2020**)
- Attended 2 days Online Conference **“Emerging Scientist 2021”** organized by **Asian Council of Science Editors** (**13th – 14th February, 2021**)
- Attended a webinar titled **“Retrosynthesis Enhancements in CAS SciFinder[®]”** organized by ACS CAS services (**19th August, 2021**)
- Attended 7th Annual Conference (virtual conference via ZOOM) of **Asian Council of Science Editors** themed **“Pandemic Driven Scholarly Publishing: Ways to Ensure Future Resilience and Sustainability”** (**21st August, 2021**)
- Attended an awareness session on **“Role of QEC in Kinnaird”** organized by QEC, Kinnaird College for Women (**28th October, 2021**)
- Attended a webinar titled **“More than Chemistry: Biosequence Searching in CAS SciFinder[®]”** organized by ACS CAS services (**16th February, 2022**)
- Attended one day conference entitled **“International Conference on Ionic Liquids for Sustainable Future”** at University of the Punjab, Lahore (**10th March, 2022**)
- Attended a webinar titled **“Navigating Women’s Leadership Advancement in Higher Education”** organized by aips (**30th March, 2022**)
- Attended a webinar titled **“Get the Best Results: Refining Your Reference Searches”** organized by ACS CAS services (**15th June, 2022**)
- Attended a webinar titled **“A Behind the Scenes Look at Automated qNMR Data Processing and Analysis”** organized by Mestrelab Research (**23rd June, 2022**)
- Attended online **“8th Annual Meeting of the Asian Council of Science Editors”** organized by ACSE (**21st August, 2022**)
- Attended **“Hands On Training for Growing Edible Gardens and Entrepreneurship”** organized by Kinnaird College for Women (**4th October, 2022**)
- Attended Elsevier’s webinar titled **“Navigating the Pathways of Publishing in High-Quality Journals by Using Scopus”** organized by HEC, Pakistan (**15th November, 2022**)

- Attended Elsevier's webinar titled **"Enabling A Perfect Research Ecosystem with Science Direct"** organized by HEC, Pakistan (28th November, 2022)
- Attended **"Virtual Organic & Medicinal Chemistry Symposium 2022"** organized by LUMS Lahore, Pakistan (9th December, 2022)
- Attended a webinar titled **"What's New in Version IV: Principles of Transparency and Best Practice in Scholarly Publishing"** organized by ACSE (5th February, 2023)
- Attended a webinar titled **"CAS SciFinder-n Live: What's New and Upcoming"** organized by ACS CAS services (15th February, 2023)
- Attended a webinar titled **"Robots in the Lab – Learn How Automation can Streamline your Workflow"** organized by Chemistry World Webinars (27th February, 2023)
- Attended **"Interactive Youth Dialogue with Policy Makers on Combating Novel Tobacco Products"** organized by Sustainable Social Development Organization (SSDO) at University of Home Economics (7th March, 2023)
- Attended 3 days **"Kinnaird's 2nd International Conference on Science, Technology and Innovation"** at Kinnaird College for Women, Lahore (8th – 10th March, 2023)
- Attended a workshop titled **"Ionic Liquids as Designer Green Solvents and their Wide Spread Applications"** hosted by Chemistry Department, Kinnaird College for Women, Lahore (9th March, 2023)
- Attended a webinar titled **"Exploring Chemical Neuroscience in the Human Brain"** organized by ACS Science Talks (15th March, 2023)
- Attended 2 days **"4th International Conference on Chemistry (ICC-2023)"** at Lahore Garrison University, Lahore (20th – 21st March, 2023)
- Attended a webinar titled **"Reviewer Webinar: Review Process Walkthrough"** organized by Learning and Content Management Team, Elsevier (28th March, 2023)
- Attended a webinar titled **"Uranus: Exploring the Ice-Cold Chemistry of the 'Frozen Frontier'"** organized by Chemistry World Webinars (4th April, 2023)
- Attended a webinar titled **"Smart Organic Crystalline Materials"** organized by ACS Webinars (American Chemical Society) (7th June, 2023)

- Attended a webinar titled **“How Student Feedback can Help us Teach Better”** organized by ACS Webinars (American Chemical Society) (13th July, 2023)
- Attended a webinar titled **“Fundamentals of Intellectual Property for Scientists”** organized by ACS Webinars (American Chemical Society) (19th July, 2023)
- Attended a webinar titled **“The Art of Securing Research Funding: Crafting Effective Grant Proposals”** organized by ACS Webinars (American Chemical Society) (27th July, 2023)
- Attended a webinar titled **“ChemCareers 2023: Applying for Fellow”** organized by Royal Society of Chemistry (2nd August, 2023)
- Attended a webinar titled **“Revising Technical Manuscripts: Improving Coherence, Clarity & Conciseness”** organized by ACS Webinars (American Chemical Society) (3rd August, 2023)
- Attended a webinar titled **“AI for Learning, Teaching, and Writing”** organized by ACS Webinars (American Chemical Society) (10th August, 2023)
- Attended a webinar titled **“CAS SciFinder-n Live: What’s New and Upcoming”** organized by ACS CAS services (30th August, 2023)
- Attended a webinar titled **“Mass Spectrometry Made Simple; or, How to Weigh a Molecule (Even Though There Isn’t a Way to Weigh a Molecule)”** organized by ACS Webinars (American Chemical Society) (14th September, 2023)
- Attended a webinar titled **“The Gut Microbiome-Brain Alliance: The Connection to Health and Disorders”** organized by ACS Webinars (American Chemical Society) (20th September, 2023)
- Attended a webinar titled **“Adapting to AI in Peer Review and the Publishing Process”** organized by ACS Webinars (American Chemical Society) (27th September, 2023)
- Attended a webinar titled **“Peer Review Week: Insights from RSC Journal Editors”** organized by Royal Society of Chemistry (28th September, 2023)
- Attended a webinar titled **“Peer Review Week: Insights from RSC Journal Editors”** organized by Royal Society of Chemistry (28th September, 2023)
- Attended a webinar titled **“The “Ins and Outs” of Networking”** organized by ACS Webinars (American Chemical Society) (5th October, 2023)

- Attended Elsevier's webinar titled **“Navigating the Pathways of Publishing in High-Quality Journals by Using Scopus”** organized by HEC, Pakistan (10th October, 2023)
- Attended a webinar titled **“Green-by-Design: Award-Winning Innovations in Biocatalysis”** organized by ACS Webinars (American Chemical Society) (12th October, 2023)
- Attended a webinar titled **“The Healing Power of Chemistry: Cutting Edge Antibiotic and Gene Therapy Research”** organized by ACS Webinars (American Chemical Society) (18th October, 2023)
- Attended a webinar titled **“A Bond Worth Forming: The Rise of Targeted Covalent Inhibitors”** organized by ACS Webinars (American Chemical Society) (19th October, 2023)
- Attended **“21st International, 1st Inter-Islamic, & 33rd National Chemistry Conference on Chemical Sciences: Technology, Innovation & Sustainability (CHEMCON2023)”** organized by Chemistry Department, Quaid-i-Azam University Islamabad (23rd – 25th October, 2023)
- Attended a webinar titled **“CAS SciFinder-n Live: What's New and Upcoming”** organized by ACS CAS services (25th October, 2023)
- Attended a webinar titled **“The James Webb Space Telescope: Astrochemistry's Exciting New Window”** organized by ACS Webinars (American Chemical Society) (8th November, 2023)
- Attended a webinar titled **“Psychological Safety is Lab Safety: Using RAMP to Assess DEIR Hazards”** organized by ACS Webinars (American Chemical Society) (9th November, 2023)
- Attended a webinar titled **“Unbreakable Design: The Polymer Mechanochemistry of Self-Healing Materials”** organized by ACS Webinars (American Chemical Society) (16th November, 2023)
- Attended a Hands-On Training on **“Organizing References and Citations with Mendeley Software”** at Department of Chemistry, Kinnaird College for Women, Lahore (22nd November, 2023)
- Attended a webinar titled **“Mastering Tricks for Improving Chromatography in Difficult Samples”** organized by c&en Webinars (American Chemical Society) (6th December, 2023)
- Attended a webinar titled **“How can Azure Quantum Elements Accelerate Scientific Discovery Today and in the Future”** organized by c&en Webinars (American Chemical Society) (11th

December, 2023)

- Attended a virtual workshop titled **“Finding Your Path: Evaluating and Introducing Yourself”** organized by ACS Career Consultants (American Chemical Society) (**20th March, 2024**)
- Attended a webinar titled **“CAS SciFinder-n Live: What’s New and Upcoming”** organized by ACS CAS services (**10th April, 2024**)
- Attended **“International Conference on Material Chemistry and Industrial Technologies (MCIT)”** at University of Lahore (**24th – 25th April, 2024**)
- Attended a Seminar on **“Navigating the Professional Landscape”** at Department of Chemistry, Kinnaird College for Women, Lahore (**7th May, 2024**)
- Attended an online workshop titled **“Your Career Story: Crafting CVs and Resumes”** organized by ACS Webinars (American Chemical Society) (**15th May, 2024**)
- Attended an online training titled **“ChemCareers 2024: How mentoring can help your career”** organized by Royal Society of Chemistry (**15th May, 2024**)
- Attended an online training titled **“Turnitin: Instructor Training Session”** organized by HEC, Pakistan (**23rd May, 2024**)
- Attended a workshop titled **“The Role of the Arts and Sciences in Preparing Women for Entrepreneurship and Financial Security”** organized by Kinnaird College for Women, Lahore (**6th June, 2024**)
- Attended a webinar titled **“Revealing Mona Lisa’s Secrets Through Advanced Analytical Chemistry”** organized by ACS Webinars (American Chemical Society) (**20th June, 2024**)
- Attended a webinar titled **“Crafting A Standout Grant Proposal: Tips and Success Stories”** organized by ACS Webinars (American Chemical Society) (**10th July, 2024**)
- Attended a webinar titled **“Demystifying the ACS Election Process”** organized by ACS Webinars (American Chemical Society) (**7th August, 2024**)
- Attended a Training Session on **“Outcome Based Education (OBE)”** organized by OQAIE, Kinnaird College for Women (**17th August, 2024**)
- Attended 3rd International Conference entitled **“Trends & Research in Chemistry (TRIC-2024)”** online, organized by Department of Chemistry, University of Education (**6th & 7th**

November, 2024)

- Attended an Online International Symposium “**Building Sustainable Future**” organized by Department of Chemistry, BGNU (18th December, 2024)
- Attended “**4th International Conference on Chemical & Pharmaceutical Sciences: Innovation to Commercialization**” at Department of Chemistry, Forman Christian College (A Chartered University) (22nd – 24th January, 2025)
- Attended A workshop on “**Empowering Chemists in Pakistan with ACS Pakistan Chapter: High-Impact Publishing, Science Outreach, and Entrepreneurship**” at Department of Chemistry, Forman Christian College (A Chartered University) organized by ACS Pakistan Chapter (23rd January, 2025)
- Attended a webinar titled “**From Stardust to Life: The Chemistry of Habitable Worlds**” organized by ACS Webinars (American Chemical Society) (23rd January, 2025)
- Attended a webinar titled “**Innovating Everyday Chemicals with Green Chemistry: More Sustainable Lubricants, Solvents, and Fertilizers**” organized by ACS Webinars (American Chemical Society) (24th January, 2025)
- Attended a webinar titled “**What Every Industrial Chemist Should Know: Ethics and Legal Considerations**” organized by ACS Webinars (American Chemical Society) (20th February, 2025)
- Attended “**Kinnaird’s 3rd International Conference on Science, Technology and Innovation**” organized by ORIC, Kinnaird College for Women, Lahore (18th – 20th February, 2025)
- Attended a Seminar entitled “**Iridium Catalyzed Aromatic C-H Activation-Borylation**” at Kinnaird College for Women, Lahore (18th February, 2025)
- Attended a Seminar entitled “**Decoding Life: from Linnaeus to Hebert**” at Kinnaird College for Women, Lahore (19th February, 2025)
- Attended a virtual workshop titled “**Careers in Industrial Chemistry: Identifying Your Role in the Value Chain**” organized by ACS Career Consultants (American Chemical Society) (22nd February, 2025)
- Attended Prime Minister’s Green Youth Movement Club’s Seminar entitled “**From Vision to Action: How PMYP is Shaping Youth Development**” at Kinnaird College for Women, Lahore (24th February, 2025)

	<ul style="list-style-type: none"> • Attended 11th Annual Conference (virtual conference via ZOOM) of Asian Council of Science Editors (25th February, 2025) • Attended online Conference (virtual conference via ZOOM) entitled “International Conference for Applied Chemistry and Biological Science” organized by Department of Applied Chemistry, GC University, Faisalabad (25th – 26th February, 2025) • Attended a webinar titled “How to break Through to Reach Science Deniers” organized by ACS Webinars (American Chemical Society) (28th February, 2025) • Attended a virtual workshop titled “LinkedIn Profiles for Chemists” organized by ACS Career Consultants (American Chemical Society) (7th March, 2025) • Attended a webinar titled “CAS SciFinder-n Live: What’s New and Upcoming” organized by ACS CAS services (12th March, 2025) • Attended a webinar titled “Introducing ScienceDirect AI” organized by Elsevier (26th March, 2025) • Attended “3rd International Chemistry Conference on Emerging Trends in Chemistry (CCUMT)” organized by Department of Chemistry, University of Management and Technology, Lahore (10th – 12th April, 2025) • Attended a webinar titled “Shared Roots with Divergent Paths: Exploring Discovery R&D in Pharma and Ag” organized by ACS Webinars (American Chemical Society) (15th May, 2025) • Attended a webinar titled “From Idea to Funding: Crafting Competitive Grant Proposals” organized by ACS Webinars (American Chemical Society) (22nd May, 2025) • Attended a webinar titled “The History, Heroes, and Theories That Created Quantum Mechanics” organized by ACS Webinars (American Chemical Society) (5th June, 2025) • Attended a webinar titled “Protecting the Formulas: The Role of Trade Secrets in Chemical Research” organized by ACS Webinars (American Chemical Society) (20th June, 2025)
Consultancy Services:	<ul style="list-style-type: none"> • Providing consultancy services to Smart Practicals regarding their publishing and digital projects of Chemistry (since 2024)
Certifications / Courses:	<ul style="list-style-type: none"> • Completed the online six modules course “ACS Reviewer Lab” offered by ACS Institute, American Chemical Society (Course completed on 30th April, 2023)

	<ul style="list-style-type: none"> • Completed the online course “How to Research and Write Using AI Tools” offered by LinkedIn Learning (Course completed on 15th October, 2023) • Completed the online course (17 Units) “Foundations of Chemical Safety and Risk Management” offered by ACS Institute, American Chemical Society (Course completed on 15th November, 2023) • Completed the online course “Nano Tips for Being a Professional Troublemaker: Lead at Work” offered by LinkedIn Learning (Course completed on 8th March, 2024) • Completed the online course “Nano Tips for Influencing Those More Senior than You with Shade Zahrai” offered by LinkedIn Learning (Course completed on 8th March, 2024) • Completed the online course “PowerPoint: Transforming Presentations with Cinematic Effects” offered by LinkedIn Learning (Course completed on 9th March, 2024) • Completed the online course “Critical Thinking for More Effective Communication” offered by LinkedIn Learning (Course completed on 13th March, 2024) • Completed the online course “How to Collaborate with Your Colleagues to Build Psychological Safety Together” offered by LinkedIn Learning (Course completed on 22nd April, 2024) • Completed the “ACS Outreach Training Program” (7 modules) offered by ACS Institute, American Chemical Society (Course completed on 16th February, 2025)
Collaborations:	<ul style="list-style-type: none"> • International <ul style="list-style-type: none"> ➤ Dr. Imtiaz Khan (Research Fellow in Integrated Catalysis, Department of Chemistry, The University of Manchester, Manchester, United Kingdom) ➤ Dr. Mashooq Ahmad Bhat (Professor, Department of Pharmaceutical Chemistry, King Saud University, Riyadh, Saudi Arabia) • National <ul style="list-style-type: none"> ➤ Dr. Jamshed Iqbal TI (Director, Centre for Advanced Drug Research, COMSATS University Islamabad, Abbottabad Campus, Abbottabad) ➤ Dr. Muhammad Zia-ur-Rehman (Head Applied Chemistry Research Centre, Chief Scientific Officer, PCSIR Laboratories Complex, Lahore-54600, Pakistan) ➤ Dr. Ejaz Ahmad (Director, Centre for Organic Chemistry, School of Chemistry, University of the Punjab, Lahore)

	<p>➤ Dr. Sumera Zaib (Professor, Department of Basic and Applied Chemistry, Faculty of Science and Technology, University of Central Punjab, Lahore)</p>
<p>Titles of Research Projects Supervised (BS):</p>	<ol style="list-style-type: none"> 1. Determination of Nickel in Samples of Banaspati Ghee (2009) 2. Determination of Na, Ca, Mg, Fe & Zn in Different Brands of Infant Formulae Milk (2009) 3. Synthesis of Phenol-Formaldehyde Based Resins (2011) 4. Qualitative Analysis of Pesticidal Residues in Fruits and Vegetables of Lahore (2011) 5. Vilsmeier-Haack Reaction of Different Anilines Reaction under Various Conditions (2013) 6. Synthesis and Characterization of Schiff Bases of Anisidines (2014) 7. Synthesis and Characterization of 1,3,4-Oxadiazole - Sulphonamide Hybrids (2015) 8. Synthesis And Characterization of 4-Chloro-1-methyl-1<i>H</i>-2,1-benzothiazine-3-carbaldehyde 2,2-dioxide Derivatives (2015) 9. Synthesis and Characterization of Few Sulphonamide - Hydrazide Hybrids (2016) 10. Synthesis and Characterization of Few 2,1-Benzothiazine Based Schiff Bases (2017) 11. Synthesis of Some Schiff Bases Containing Sulphonamide and Quinoline Moieties (2017) 12. Synthesis and Characterization of Few Novel Derivatives Containing Quinoline Ring System (2018) 13. Synthesis of Some Novel Heteroaryl Imine Derivatives of Methyl 2-[(methylsulphonyl)amino]benzoate (2018) 14. Synthesis and Characterization of Few Aryl Azomethines of Methyl 2-[(methylsulfonyl)amino]benzoate (2018) 15. Synthesis of Methyl (7-chloro-1<i>H</i>-pyrazolo[3,4-<i>b</i>]quinolin-1-yl)acetate; Optimization and Characterization (2019) 16. Optimization of Conditions for the Cyclocondensation of <i>N</i>-Acyldrazones to Azetidinones (2019) 17. Nitration of Methyl 2-[(methane sulfonyl)amino]benzoate; Optimization and Characterization (2020) 18. Preparation of Quinoliny-Thiosemicarbazones and Optimization of Synthesis Conditions for Few <i>N</i>-Substituted Pyrazolo[3,4-<i>b</i>]quinolines (2020) 19. Condensation of 4-Chloro-1-methyl-1<i>H</i>-benzo[<i>c</i>][1,2] thiazine-3-carbaldehyde 2,2-dioxide with <i>p</i>-Toluidine; Optimization and Characterization (2021) 20. Synthesis and Characterization of Few Novel Sultams (2021)

	<ol style="list-style-type: none"> 21. Synthesis of 4-Hydrazinylidene-1-methyl-3,4-dihydro-2λ⁶,1-benzothiazine-2,2(1<i>H</i>)-dione and its Derivatives (2021) 22. Synthesis and Structure Elucidation of Some New Morpholine-Thiophene Hybrid Thiosemicarbazones (2022) 23. Synthesis of Few <i>N</i>-Acylhydrazones of <i>N</i>-(2-(hydrazinecarbonyl)phenyl)methane sulfonamide (2022) 24. Synthesis of New Compounds by Structural Modification of Mefenamic Acid (2022) 25. Design and Synthesis of Few New Derivatives of Ibuprofen (2022) 26. Synthesis of Selected New Derivatives of Mefenamic Acid (2024) 27. Synthesis of Selected Substituted 1,2,4-Triazoles and their Characterization (2024) 28. Synthesis of Some Substituted 1,3,4-Oxadiazoles (2024) 29. Condensation of Thiosemicarbazide with Selected Substituted Acetophenones (2024) 30. Synthesis of Some Benzimidazoles and their Structure Elucidation (2024) 31. Synthesis of Selected Thiosemicarbazones and Their Characterization (2025) 32. Synthesis of Selected Derivatives from Flurbiprofen Hydrazide (2025) 33. Synthesis and Characterization of Selected Triazole Derivatives of Flurbiprofen (2025) 34. Extraction of Starch from Different Plant Sources and their Application in Starch Spray (2025)
Titles of Research Projects Co-Supervised (M.Phil):	<ol style="list-style-type: none"> 1. Synthesis and Monoamine oxidase Inhibitory Activity of Acetophenones and Thiophenes Substituted Hydrazide Derivatives: In-Silico Studies and in-vitro Bioevaluation (2022) 2. Extraction, Purification, Characterization and in vitro Analysis of Propanehydrazide Derivatives against Lipxygenase (2024)
Computer Skills:	<ul style="list-style-type: none"> • ChemSketch • ChemBioDraw Ultra • MestRenova • Zotero • Office 365