Dr. Sobia Tabassum

Tenured Associate Professor

Interdisciplinary Research Centre in Biomedical Materials (IRCBM)

COMSATS University Islamabad, Lahore Campus

Personal Details

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Research Interests

- Functionalization of materials to create state-of-the-art and intelligent biomaterials for (1) targeted and responsive delivery and detection and (2) advanced biomaterials that can stimulate and mimic function of biological molecules for the treatment of oral, bone and spine defects.
- Fabrication of 2D/3D composite scaffolds and hydrogels that are moldable, shapeable, self-healable, injectable, or responsive to external stimuli for periodontal, endodontic, and orthopedic applications.
- Computational investigation of the effects of doping and functionalization on material properties for theragnostic and other applications.

Education

Doctor of Philosophy in Synthetic Organic Chemistry (2007-April 2010)

Clausthal University of Technology, Germany

Thesis: New Chiral Carbene Precursors for Catalysis and Chiral Recognitions

Advisor: Prof. Dr. René Wilhelm

• Master of Philosophy in Natural Product Chemistry (2002-2007)

International Center for Chemical and Biological Sciences, HEJ Research Institute of Chemistry, University of Karachi, Pakistan

Thesis: Chemistry of Two Solanaceous Plants from Nigeria: *Solanum erianthum* D. Don and *Solanum torvum* Sw.

Advisor: Prof. Dr. Muhammad Shaiq Ali

Advanced Courses in Organic Chemistry (Grade A)

• Master of Science in Chemistry (1999-2001)

Govt. College Sargodha, University of the Punjab, Pakistan, M.Sc (1st Division)

Thesis: Determination of Pesticide Residues in Water Samples by Using Solid Phase Extraction (SPE) and High-Performance Liquid Chromatography (HPLC).

• Advisor: Dr. Altaf Hussain, Research work at Nuclear Institute for Agriculture and Biology, Faisalabad

Chronological List of Positions

- Tenured Associate Professor September 2019 till date at Interdisciplinary Research Centre in Biomedical Materials (IRCBM), COMSATS University Islamabad, Lahore Campus
- Assistant Professor
 - 2 June 2010-August 2011, Assistant Professor at Department of Chemistry, Lahore College for Women University
 - 23 August 2011-10 September 2019, Assistant Professor at Interdisciplinary Research Centre in Biomedical Materials (IRCBM), COMSATS University Islamabad, Lahore Campus
 - o **January 2016 to July 2016**, Assistant Professor at Department of Chemistry, Sattam Prince.bin Abdulaziz University, Saudi Arabia
- February 2007-April 2010, Ph.D Scholar, Clausthal University of Technology, Germany
- **January 2001-January 2007**, Research Fellow, International Center for Chemical and Biological Sciences, HEJ Research Institute of Chemistry, University of Karachi, Pakistan

Awards

- The Higher Education Commission of Pakistan awarded a scholarship for Ph.D. studies in selected fields under the Overseas Scholarship Scheme, specifically in Germany (Overseas-IV-Germany-DAAD), from 2007-2010.
- The HEJ Research Institute of Chemistry, University of Karachi granted a merit scholarship for M.Phil/Ph.D. studies from 2001-2006.
- The Research Productivity Awards were received from The COMSATS University Islamabad in years 2011, 2013, 2014, and 2016.
- As part of the CATB Joint Research and Training Program in 2022, there were visits to various top universities in the UK.

Expertise in Analytical Techniques

Expertise in Nuclear Magnetic Resonance (NMR) (1D/2D), Mass (EI/FAB/HR), Ultraviolet/Visible (UV/Vis) Spectrophotometry, Differential Scanning Calorimetry (DSC), Thermal Gravimetric Analysis (TGA), Contact Angle Measurement, Dynamic Mechanical Analysis (DMA), Rheological study, X-ray Diffraction (XRD), Scanning Electron Microscopy (SEM) analysis. High-Performance Liquid Chromatography (HPLC), HPLC (Recycling preparative), Chiral HPLC, Flash Chromatography, Brunauer-Emmett-Teller (BET (used in surface area measurement), Fourier Transform Infrared Spectroscopy (FTIR), Fatigue Testing Equipment, Contact Angle measurement

Software Skills

Gaussian 16, Gauss View 6, Chem. Bio Draw, OriginLab, MDI jade, ACDLABS 12.0 NMR Predictor, MestReNova, Endnote.

Memberships

- Life time member of the Chemical Society of Pakistan
- HEC Approved Supervisor

List of publication

Sr.	of publication Publication Details	Impact	Web-link	Page #
no		Factor	WED-IIIK	rage #
1.	Eco-Friendly Synthesis of Mesoporous Bioactive Glass Ceramics and Functionalization for Drug Delivery and Hard Tissue Engineering Applications, Sobia Tabassum *, Muhammad Saqib, Madeeha Batool, Faiza Sharif, Mazhar Amjad Gilani, Olivier Huck. Biomedical Materials, 2024.	4, W	https://doi 10.1088/1748- 605X/ad2c19	Accepted
2.	A Rational Design of Covalent Organic Framework Supported Single Atom Catalysts for Hydrogen Evolution Reaction: A DFT Study, Maria Younas, Tariq Mahmood, Khurshid Ayub, Muhammad Yasin, Asim Khan, Sobia Tabassum . Mazhar Amjad Gilani International Journal of Hydrogen Energy, 2024	7.2, W	https://www.sciencedi rect.com/science/articl e/pii/S0360319923034 559	51/A, 758- 773
3.	Anti-inflammatory Potential and Structure-Activity Relationship of Sesquiterpenes isolated from Anvillea garcinia, Shagufta Perveen, Azadeh Hamedi, Reza Heidari, Muhammad, Sobia Tabassum , Shafiq ul Azam, Rashad Mehmood, Jiangnan Peng, Ardalan Pasdaran, Inflammopharmacology 2023	5.8, W	https://www.springer.c om/journal/10787	34, 3870- 3884
4.	Physico-Chemical properties and <i>in-vitro</i> biocompatibility of thermo-sensitive hydrogel developed with enhanced antimicrobial activity for soft tissue engineering, <i>Polymers for Advanced Technologies</i> , Uzma Shahzadi, Rabia Zeeshan, Sobia Tabassum , Hina Khadim, Muhammad Arshad, Arsalan Ahmad Ansari, Sher Zaman Safi, Rana Intisar ul Haq, Anila Asif, 2023	3.4, W	https://onlinelibrary.wi ley.com/doi/abs/10.10 02/pat.6188	34(12): 3870-3884.
5.	A Rational Design of Alkali Metal Doped Germanium Carbide Nanoflakes for High Nonlinear Optical Response and Ultraviolet Transparency" Junaid Yaqoob; Sobia Tabassum; Tariq Mahmood; Khurshid Ayub; Asim laeeq Khan; Muhammad Yasin; Mazhar Gilani, JOM-The Journal of The Minerals, Metals & Materials Society (TMS), 2023	2.6, W	https://www.springer.c om/journal/11837	75 , 5893–5908
6.	Exploring the Second-Order Polarizability of Copper Doped Silicon Carbide Nanocluster: Toward a New NLO Material" <i>Physica Scripta</i> , J Yaqoob, Sobia Tabassum , H AlMohamadi, T Mahmood, K Ayub, A Khan, M Yasin, M Gilani, Physica Scripta, 2023	2.9, W	https://iopscience.iop. org/article/10.1088/14 02-4896/acecc3/meta	98, 9
7.	Photoswitchable Nonlinear Optical Properties of Azobenzene-Based Supramolecular Complexes: Insights from Density Functional Theory, Nisar, Aqsa; Sobia Tabassum ; Ayub, Khurshid; Mahmood, Tariq; AlMohamadi, Hamad; Khan, Asim; Yasin, Muhammad; Nawaz, R.; Gilani, Mazhar" Physical Chemistry Chemical Physics, 2023	3.3, W	https://pubs.rsc.org/en/ content/articlelanding/ 2023/cp/d3cp01498c/u nauth	25, 20430- 20450
8.	Enhanced CO ₂ Separation Performance of Polysulfone Membranes via Incorporation of Pyrazole Modified MCM-41 Mesoporous Silica as a Nano-filler. Fuel. Farah Suhail; Tanzila Anjum; Asim Laeeq Khan; Sobia Tabassum ; Asma Tufail Shah, Hamad AlMohamadi; Mazhar Amjad Gilani; Madeeha Batool; Mohsin Najam 2023	7.4, W	https://www.sciencedi rect.com/science/articl e/pii/S0016236123014 539	350, 128840
9.	Diamondoid as potential nonlinear optical material by superalkali doping: A first principles study, <i>Diamond and Related Materials</i> , Rehana Bano, Khurshid Ayub, Tariq Mahmood, Muhammad Arshad, Ahsan Sharif, Sobia Tabassum , Mazhar Amjad Gilani, 2023	4.1, W	https://www.sciencedi rect.com/science/articl e/pii/S0925963523001 516	135, 109826135

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10.	Modeling the nocturnal/diurnal and seasonal real world absorption spectra of polycyclic aromatic hydrocarbons and their derivatives in two Chinese polluted cities, <i>Journal of Environmental Chemical Engineering</i> , Sahiba Fareed. Sobia Tabassu m, Tariq Mahmood, Khurshid Ayub, Asim Laeeq Khan, Muhammad Yasine, Arsalan Ahmad Raja, Mazhar Amjad Gilani, 2022	7.7, W	https://www.sciencedi rect.com/science/articl e/pii/S2213343722017 857	10, 6, 108912
11.	A DFT investigation on theranostic potential of alkaline earth metal doped phosphorenes for ifosfamide anti-cancer drug. Hira Karim, Shahnaz, Madeeha Batool, Mustansara Yaqub, Muhammad Saleem, Mazhar Amjad Gilani, SobiaTabassum* , <i>Applied Surface Science</i> , Applied Surface Science 2022	7.39, W	https://www.sciencedi rect.com/science/articl e/pii/S0169433222011 692	596, 153618
12.	Mixed superalkalis are better choice than pure superalkalis for B12N12 nanocage to design high performance nonlinear optical materials Check for updates, Rehana Bano, Khurshid Ayub, Tariq Mahmood, Muhammad Arshad, Ahsan Sharif, Sobia Tabassum and Mazhar Gilani, <i>Dalton Transactions</i> , 2022	5.39, W	https://pubs.rsc.org/en/ content/articlelanding/ 2022/dt/d2dt00321j	51, 8437-8453
13.	Assessment of alkali/alkaline-earth metals doped cubanes as high performance nonlinear optical materials by first-principles study, Javaria Naeem, Rehana Bano, Khurshid Ayub, Tariq Mahmood, Sobia Tabassum* , Anam Arooj, Mazhar Amjad Gilani, <i>Journal of Science: Advanced Materials and Devices</i> , 2022	7.38, W	https://www.sciencedi rect.com/science/articl e/pii/S2468217922000 417	7, 100457
14.	Shedding Light on the Second Order Nonlinear Optical Responses of Commercially Available Acidic Azo Dyes for Laser Applications, Muhammad Fahid Asif, RehanaBano, Robina Farooq, Shabbir Muhammad, Tariq Mahmood, Khurshid Ayub, SobiaTabassum , Mazhar Amjad Gilani <i>Dyes and Pigments</i> , 2022	4.88, W	https://www.sciencedi rect.com/science/articl e/pii/S0143720822002 066	202, 110284
15.	Potential sensing of toxic chemical warfare agents (CWAs) by twisted nanographenes: A first principle approach, Naila Sattar, Hasnain Sajid, Sobia Tabassum , Khurshid Ayub, Tariq Mahmood, Mazhar Amjad Gilani, <i>Science of The Total Environment</i> , 2022	10.73 W	https://www.sciencedi rect.com/science/articl e/pii/S0048969722009 500	824,153858
16.	Optimized nonlinear optical (NLO) response of silicon carbide nanosheet by alkali metals doping: a DFT insight, <i>The European Physical Journal Plus</i> , Junaid Yaqoob, Tariq Mahmood, Khurshid Ayub, Sobia Tabassum , Ather Farooq Khan, Shagufta Perveen, Jucai Yang and Mazhar Amjad Gilani, 2022	3.9, W	https://epjplus.epj.org/ articles/epjplus/abs/20 22/02/13360_2022_Ar ticle_2418/13360_202 2_Article_2418.html	137, 233
17.	Superalkali (Li ₂ F, Li ₃ F) doped Al ₁₂ N ₁₂ electrides with enhanced static, dynamic nonlinear optical responses, and refractive indices, Rehana Bano, Muhammad Arshad. Tariq Mahmood, Khurshid Ayub, Ahsan Sharif. Sobia Tabassum, Mazhar Gilani, <i>Materials Science in Semiconductor Processing</i> , 2022	3.92, W	https://www.sciencedi rect.com/science/articl e/pii/S1369800122000 66X	143, 106518
18.	A Theoretical Perspective on Strategies for Modeling High Performance Nonlinear Optical Materials, Rehana Bano, Maria Asghar, Khurshid Ayub, Tariq Mahmood, Javed Iqbal, Sobia Tabassum , Rozalina Zakaria, Mazhar Amjad Gilani, <i>Frontiers in Materials</i> , 2021	3.5, W	https://www.frontiersi n.org/articles/10.3389/ fmats.2021.783239/ful 1	8, 532
19.	Exploring the Interaction of Ionic Liquids with $Al_{12}N_{12}$ and $Al_{12}P_{12}$ Nanocages for Better Electrode Electrolyte Materials in Super Capacitors. Palwasha Khan, Muhammad Jamshaid Sobia Tabassum* , Shagufta Perveen, Tariq	6.1, W	https://www.sciencedi rect.com/science/articl e/pii/S0167732221025 538	344, 117828

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20.	Face specific doping of Janus all-cis-1,2,3,4,5,6-hexafluorocyclohexane with superalkalis and alkaline earth metals leads to enhanced static and dynamic NLO responses, Rehana Bano, Muhammad Arshad, Tariq Mahmood, Khurshid Ayub, Ahsan Sharif, Shagufta Perveen, Sobia Tabassum, Jucai Yang, Mazhar Amjad Gilani, Journal of Physics and Chemistry of Solids, 2022	3.99, W	https://www.sciencedirect.com/science/article/pii/S0022369721004273	160, 110361
21.	Asporychalasin, a bioactive cytochalasan with an unprecedented 6/6/11 skeleton from the Red Sea sediment <i>Aspergillus oryzae</i> , Raha Orfali, Shagufta Perveen, Muhammad F.KhanbAtallah F.Ahmed, Sobia Tabassum , Paolo Luciano, Giuseppina Chianese, OrazioT aglialatela-Scafati, <i>Phytochemistry</i> , 2021	4.07, W	https://www.sciencedir ect.com/science/article /pii/S00319422210030 10	192, 112952
22.	Turning diamondoids into nonlinear optical materials by alkali metal Substitution: A DFT investigation, Palwasha Khan, Tariq Mahmood, Khurshid Ayub, Sobia Tabassum* , Mazhar Amjad Gilani. Optics & Laser Technology, 2021	3.86, W	https://www.sciencedir ect.com/science/article /pii/S00303992210031 94	142, 107231
23.	Antiproliferative Illudalane Sesquiterpenes from the Marine Sediment Ascomycete Aspergillus Oryzae." Orfali, Raha, Shagufta Perveen, Muhammad Farooq Khan, Atallah F Ahmed, Mohammad A Wadaan, Areej Mohammad Al-Taweel, Ali S Alqahtani, Fahd A Nasr, Sobia Tabassum and Paolo Luciano. Marine Drugs 19, (2021)	5.1, W	https://www.mdpi.com /1660-3397/19/6/333	6 333
24.	First example of lanthanum as dopant on $Al_{12}N_{12}$ and $Al_{12}P_{12}$ nanocages for improved electronic and nonlinear optical properties with high stability. Faiqa Khaliq Khurshid Ayub, Tariq Mahmood, Shabbir Muhammad, Sobia Tabassum* , Mazhar Amjad Gilani, Materials Science in Semiconductor Processing, 2021 .	3.97, W	https://www.sciencedir ect.com/science/article /pii/S13698001210046 37	135, 106122
25.	Phytochemical Analysis of Anvillea Garcinii Leaves: Identification of Garcinamines F—H and Their Antiproliferative Activities, Aati, Hanan Y, Shagufta Perveen, Raha Orfali, Areej M Al-Taweel, Jiangnan Peng, Sobia Tabassum, Maged S Abdel-Kader, Hasan Soliman Yusufoglu and Orazio Taglialatela-Scafati. <i>Plants</i> 10, 2021	3.9, X	https://www.mdpi.com /2223-7747/10/6/1130	6 1130
26.	Influence of bi-Alkali Metals Doping over Al ₁₂ N ₁₂ Nanocage on Stability and Optoelectronic Properties: A DFT Investigation, Faiqa Khaliq, Tariq Mahmood, Khurshid Ayub, Sobia Tabassum* , Mazhar Amjad Gilani. <i>Radiation Physics and Chemistry</i> , 2021	2.85	https://www.sciencedir ect.com/science/article /pii/S0969806X21001 079	184, 109457
27.	Exploring Li ₄ N and Li ₄ O Superalkalis as Efficient Dopants for the Al1 ₂ N ₁₂ Nanocage to Design High Performance Nonlinear Optical Materials with High Thermodynamic Stability. Faiqa Khaliq; Tariq Mahmood, Khurshid Ayub, Sobia Tabassum* , Mazhar Amjad Gilani*, <i>Polyhedron</i> , 2021	3.052	https://www.sciencedir ect.com/science/article /pii/S02775387210012 73	200, 115145
28.	A New Strategy of bi-Alkali Metal Doping to Design Boron Phosphide Nanocages of High Nonlinear Optical Response with Better Thermodynamic Stability, Rimsha Baloach, Khurshid Ayub, Tariq Mahmood, Anila Asif, Sobia Tabassum*, Mazhar Amjad Gilani, Journal of Inorganic and Organometallic Polymers and Materials. 2021	3.54	https://link.springer.co m/article/10.1007/s10 904-021-02000-6	<i>31</i> (7), 3062-3076
29.	Highly CO ₂ selective mixed matrix membranes of polysulfone based on hetaryl modified SBA-16 particles.	9.14	https://www.sciencedir ect.com/science/article	258 117999

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30.	Synthesis and Characterization of Hexadecyltrimethyl Ammonium Encapsulated Silicovanadate and its antibacterial activity against Uropathogenic Escherichia coli, Fatima Khalil, Mustansara Yaqub, Sana Ahmad, Madeeha Batool, Sobia Tabassum, Saadat Anwar Siddiqi & Asma Tufail Shah, <i>Journal of the Iranian Chemical Society</i> , 2021	2	https://link.springer.co m/article/10.1007/s13 738-020-02089-5	18, 1035–1041
31.	Doping and Incorporation of Hydroxyapatite in Development of PU-PLA Electrospun Osteogenic Membranes, Waleed Mustafa, Usaid Azhar, Sobia Tabassum, Muddasar Jamal, Saadat Anwar Siddiqi, Muhammad Tariq, Nawshad Muhammad, Anila Asif, Aqif Anwar Chaudhry; Faiza Sharif, J. Polymers and the Environment, 2020	3.6	https://link.springer.co m/article/10.1007/s10 924-020-01764-1	28, 2988–3002
32.	Microwave-assisted synthesis of carbon dots as reductant and stabilizer for silver nanoparticles with enhanced- peroxidase like activity for colorimetric detection of hydrogen peroxide and glucose. Urooj Gul, Shamsa Kanwal, Sobia Tabassum , Mazhar Amjad Gilani, Abdur Rahim, Microchimica Acta, 2020	5.8	https://link.springer.co m/article/10.1007/s00 604-019-4098-x	187, 135
33.	Doping superalkali on $Zn_{12}O_{12}$ nanocage constitutes a superior approach to fabricate stable and high-performance nonlinear optical materials, Naveen Kosar, Tariq Mahmood, Khurshid Ayub, Sobia Tabassum , Muhammad Arshad, Mazhar Amjad Gilani, Optics & Laser Technology, 2019	3.3	https://www.sciencedir ect.com/science/article /pii/S00303992193058 21	120, 105753
34.	Enhanced Surface Properties of Hydroxyapatite by Grafting Tartaric Acid for Sustained Release of Moxifloxacin, Faiza Zarif, Faiza Sharif, Madeeha Batool, Ammar Haider, Urooj Gul, Mazhar A. Gilani, Ayesha Idrees, Sobia Tabassum *, <i>Chemistryselect</i> , 2019	2.3	https://chemistry- europe.onlinelibrary. wiley.com/doi/abs/10. 1002/slct.201803398	4, 4105-4111
35.	Surface-grafted remedial hydroxyapatite nanoparticles to avoid operational infections, Faiza Zarif, Sobia Tabassum* , Arshad Jamal, Urooj Gul, Mazhar Amjad Gilani, Faiza Sharif, Saba Zahid, Anila Asif, Aqif Anwar Chaudhry, Ihtesham ur Rehman, <i>Monatshefte für Chemie - Chemical Monthly</i> 2019	1.6	https://link.springer.co m/article/10.1007/s00 706-018-2339-z	150, 605-615
36.	Synthesis and characterization of immobilized 1-(1,3-diphenyl-5-hydroxy-1H-pyrazol-4-ypethanone on silica gel and its use for aqueous heavy metal removal, Farah Suhail, Madeeha Batool, Muhammad Imran Din, Misbahul Ain Khana, Khurshid Ayub, Sobia Tabassum , Asma Tufail Shah. <i>Desalination and Water Treatment</i> , 2019	1.25	https://www.cabdirect. org/cabdirect/abstract /20193185196	142, 213-224
37.	Bioresorbable Antibacterial PCL-PLA-nHA Composite Membranes for Oral and Maxillofacial Defects. Faiza Sharif*, Sobia Tabassum *, Waleed Mustafa, Anila Asif, Faiza Zarif, Muhammad Tariq, Saadat A. Siddiqui, Mazhar A. Gilani, Ihtesham Ur Rehman, Sheila MacNeil, <i>Polymer Composites</i> , 2019	3.1	https://onlinelibrary.w iley.com/doi/full/10.10 02/pc.24899	40, 1564-1575

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39.	Copper Doped Al ₁₂ N ₁₂ Nano-cages: Potential Candidates for Nonlinear Optical Materials, Mazhar Amjad Gilani, Sobia Tabassum, Urooj Gul, Tariq Mahmood, Abdulrahman I. Alharthi, Mshari A. Alotaibi, Mohammed Geesi, Rizwan Sheikh, Khurshid Ayub. <i>Applied Physics A</i> , 2018	2.68	https://link.springer.co m/article/10.1007/s00 339-017-1425-0	124, 14
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41.	Mixed matrix membranes based on polysulfone and rice husk extracted silica for CO ₂ separation, Nazim Waheed, Azeem Mushtaq, Sobia Tabassum , Mazhar Amjad Gilani, Fawad Ashraf, Younis Jamal, Muhammad Roil Bilad, Asad Ullah Khan, Ayesha Ilyas, Asim Laeeq Khan. <i>Separation and Purification Technology</i> 2016	9.136	https://www.sciencedir ect.com/science/article /pii/S13835866163028 05	170, 122–129
42.	In situ synthesis of mesoporous polyvinyl alcohol/hydroxyapatite composites for better biomedical coating adhesion. Riaz Hussain, Sobia Tabassum* , Mazhar Amjad Gilani, Ejaz Ahmed, Ahsan Sharif, Faisal Manzoor, et al. Applied Surface Science 2016	67.39	https://www.sciencedir ect.com/science/article /pii/S01694332150305 24	364, 117-123
43.	In situ synthesis of Copper Nanoparticles on SBA-16 Silica Spheres. Asma Tufail Shah, Sana Ahmad, Muhammad Farhan Khan, Khurram Shahzad, Sobia Tabassum , Adnan Mujahid, Arabian Journal of Chemistry, 2016	4.76	https://www.sciencedir ect.com/science/article /pii/S18785352140004 83	9, 537-41
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45.	First Examples of Carbene Catalyzed Allylation of Benzaldehyde: A Combined Experimental and Theoretical Study., Sobia Tabassum* , Mazhar Amjad Gilani, Khurshid Ayub, René Wilhelm. <i>Journal of the Iranian Chemical Society</i> , 2015	2	https://link.springer.co m/article/10.1007/s13 738-014-0582-8	12, 1199-1205
46.	Highly Regioselective Synthesis of Chiral Diamines via a Buchwald-Hartwig Amination from Camphoric Acid and their use in the Henry Reaction. Magdalena Uzarewicz-Baig, Maximilian Koppenwallner, Sobia Tabassum , René wilhelem, Applied <i>Organometallic Chemistry</i> , 2014	4.1	https://onlinelibrary.w iley.com/doi/full/10.10 02/aoc.3162	28(7) 552-558
47.	Total phenolic content, in vitro radical scavenging and antimicrobial activities of whole plant <i>Rumex hastatus</i> , Saira Afzal, Sobia Tabassum* , Mazhar Amjad Gilani, Natasha Hussain, Robina Farooq, Saba Zahid, Asma Tufail	(ISI indexed)	https://www.cabdirect. org/globalhealth/abstr act/20143295868	26(2), 721-727

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48.	DFT Studies of biphenyl derivatives, potential application as chiral dopants for liquid crystals. Tariq Mahmood-Mazhar Amjad Gilani, Sobia Tabassum , Farhan Ahmed Khan, Ather Farooq Khan, <i>J. Chem. Soc. Pak.</i> , 2014	0.393	https://jcsp.org.pk/Pub lishedVersion/ebf12b1 7-439d-453b-863b- d5fc11f68ff2Mnuscript %20no%2018,%20Fin al%20gally%20proof %20of%209884%20_ Tariq%20Mahmood pdf	36(3), 498- 502
49.	Cadmium Phytoremediation by Arundo donax L. from Contaminated Soil and Water Sabeen, Qaisar Mahmood, Muhammad Irshad, Iftikhar Fareed, Afsar Khan, Farid Ullah, Yousaf Hayat and Sobia Tabassum, BioMed Research International, 2013,	3.4	https://www.hindawi.c om/journals/bmri/201 3/324830/	2013, 9
50.	Imidazolinium sulfonate and sulfamate zwitterions as chiral solvating agents for enantiomeric excess calculations. Sobia Tabassum , Mazhar Amjad Gilani and René Wilhelm, <i>Tetrahedron: Asymmetry</i> , 2011	2	https://www.sciencedir ect.com/science/article /pii/S09574166110053 37	22, 1632-1639
51.	Naturally Occurring Antifungal Aromatic Esters and Amides. Muhammad Shaiq Ali, Shahnaz, Sobia Tabassum , Isiaka ajani ogunwande , Muhammad Kashif Pervez and Oladosu Adebayo Ibrahim, <i>J. Chem. Soc. Pak.</i> , 2010	0.3	https://www.ncbi.nlm. nih.gov/pmc/articles/P MC8745543/	32(4), 565- 570
52.	Novel Enantiopure NHCs Derived from Camphor. P. Vasu Govardhana Reddy, Sobia Tabassum , Amélie Blanrue, René Wilhelm, <i>Chem. Comm.</i> , 2009	6.2	https://pubs.rsc.org/en /content/articlelanding /2009/cc/b911476a/un auth	39, 5910- 5912
53.	Hindered Brønsted bases as Lewis Base Catalysts. Sobia Tabassum , Oksana Sereda, Peddiahgari Vasu Govardhana Reddy and René Wilhelm, <i>Org. Biomol. Chem.</i> , 2009	3.87	https://pubs.rsc.org/en /content/articlelanding /2009/ob/b908899g/un auth	7, 4009-4016
54.	Spirotorvoside: A New Steroidal-glycoside from Solanum torvum (Solanaceae). Muhammad Shaiq Ali, Sobia Tabassum , Shakeel Ahmad, <i>J. Chem. Soc. Pak.</i> , 2008	0.3	https://www.researchg ate.net/publication/28 8697867_Spirotorvosi de_A_new_steroidal- glycoside_from_Solati um_torvum_Solanace ae	30(3) 494-498

Review Article

Sr. no	Publication Details	Impact Factor	Web-link	Page #
55.	Review on metallic nanoparticles induced toxicity on renal function and overall health of kidneys, Ammara Waris, Saima Sharif, Shagufta Naz, Farkhanda Manzoor, Farzana Rashid, Sobia Tabassum , Farrukh Jamil, Murid Hussain, Yong Jun Choi, Young-Kwon Park, Environmental Engineering Research 2024.	3.99, W	https://doi.org/10.4491/eer. 2023.549	29/4, 230549-0
56.	Metal Ion Detection by Carbon Dots—A Review."Madeeha Batool, Hafiz Muhammad Junaid, Sobia Tabassum , Farah Kanwal, Kamran Abid, Zara Fatima, and Asma Tufail Shah. " <i>Critical Reviews in Analytical Chemistry</i> , 2020	6.5	https://www.tandfonline.co m/doi/full/10.1080/1040834 7.2020.1824117	52, 756-767
57.	Raman Spectroscopy of Natural Bone and Synthetic Apatites. Ather Farooq Khan, Muhammad Awais Younas, Abdul Samad Khan, Sobia Tabassum , Aqif Anwar Chaudhry, Ihtesham ur Rehman, <i>Applied Spectroscopy Reviews</i> , 2013	5.9	https://www.tandfonline.co m/doi/full/10.1080/0570492 8.2012.721107	48, 329-355
58.	Lewis Acid Organocatalysts in: "Asymmetric Organocatalysis", Oksana Sereda, Sobia Tabassum , and René Wilhelm, <i>Top. Curr. Chem.</i> 2009	7.4	https://link.springer.com/ch apter/10.1007/978-3-642- 02815-1_17	291 349-393
59.	Solanaceae (The Potato Family)". Muhammad Shaiq Ali, Sobia Tabassum . <i>Hamdard Medicus</i> , 2007		https://pesquisa.bvsalud.org /portal/resource/pt/emr- 128259	50(4) 116-124

Book Chapter

Sr.			Publisher
no	Title	Description	(if any)
60.	Role of Substitutions in Bioceramics, Sobia Tabassum*, Handbook of Ionic	Invited	Woodhead
	Substituted Hydroxyapatites, 1st Edition, Paperback ISBN: 9780081028346.	Book	Publishing,
	https://www.sciencedirect.com/science/article/abs/pii/B9780081028346000057	Chapter	2019
61.	Oksana Sereda, Sobia Tabassum, and René Wilhelm (2009), "Lewis Acid Organocatalysts in: "Asymmetric Organocatalysis"", Top. Curr. Chem. Asymmetric Organocatalysis, edited by: R. Noyori, pp: (291) 349-393 https://link.springer.com/chapter/10.1007/978-3-642-02815-1_17#page-1	Invited Book Chapter	Springer, Heidelberg Springer

List of Grants

Project Title	Amount- PKR	Agency	Duration
Multifunctional Smart Self-Healing Hydrogel for	2,082.,000-	HEC-PRP	3 Years/
Synergistic Periodontitis Treatment. (PI)	plus 17000		Awarded-
	Euro		on going
Efficient one pot synthesis of Principal Investigator	500,000	HEC	27/09/2010-
medicinally Important bicyclic Amidines. (PI)			01/06/2011
Organically modified HA particles for improved	200,000	CUI	01/01/2013-
biomedical coating Adhesion Development of high			30/06/2016
mobility (Co-PI)			
Results are published in Applied Surface Science			
2016, 364: 117-123. (IF=5.1) Sobia Tabassum* as			
cross ponding authors			
Synthetic bone graft substitutes using polymeric	499,000	IPFP-HEC	10/06/2013-
carriers (Co-PI)-Writing the patents for			16/05/2016

Biomaterials synthesized in this projects, Sobia			
Tabassum* as inventor			
Evaluation of novel bioactive osteogenic	500,000	IPFP-HEC	30/12/2014-
biomaterials for regenerative medical applications.			19/04/2019
(Co-PI)- Results published in <i>Polymer Composites</i> ,			
2019, 40, 1564-1575, (IF=2.3) Sobia Tabassum*			
as cross-ponding author			
Advanced and economical osteoconductive 3D-	22 million	PSF-NTIF	2 Years/
moldable putty for treatment of bone and spinal	PKR	Concept	
defects -Preclinical trials and scale up production-A		paper	
step forward from lab to patient, PSF/NTIF/P-		approved.	
COMSATS-IRCBM/(19) (PI)			
Multifunctional Smart Hydrogels to Combat	10 Million	PSF-	2 Years/
Infection and Modulate Inflammation: A	PKR	Concept	
Competent Therapy for Periodontitis (PI), Project		paper	
No.PSF/Res/CP/P-CUI/Med (282) (PI)		approved.	
Fine-tuning the photoluminescent properties of	10 Million	PSF,	2 Years/
carbonized polymer dots (CPDs) through	PKR		Submitted
functionalization to develop a potent nano-platform			2023
for intracellular sensing and elimination of disease-			
causing pathogens (PI)			
7 th -Proposals in the areas of Nanotechnology,			
Materials and Artificial Intelligence			

Teaching Contribution

In addition to research and administrative responsibilities, Dr. Sobia Tabassum has taught several courses to students at undergraduate, graduate including MS and PhD levels as mentioned in table given below.

Course Code	Course Title	Credit Hours	PhD / Master /Undergrad
CHM-748-FA19	Biopolymer	3(3, 0)	Master
CHM-748-SP20	Chemistry		
CHM-748-SP21			
CHM-748- SP-21	Biopolymer	3(3, 0)	PhD
	Chemistry		
PhOC-113	Asymmetric	3(3, 0)	Master
	synthesis in Organic		
PhOC-113	Asymmetric	3(3, 0)	PhD
	synthesis in Organic		
EC/Chem-427	Heterocyclic	4 (3+1)	Master
	Chemistry-Organic		
	Chemistry		
EC/Chem-427	Heterocyclic	4 (3+1)	PhD
	Chemistry-Organic		
	Chemistry		
Res / Chem-401	Organic Chemistry-	4 (3+1)	Undergrad
	Reactivity of		
	Carbonyl Compounds		
EC / Chem-410	Organic Synthesis	4 (3+1)	Undergrad

EC / Chem-412	Practical in Organic	4 (3+1)	Undergrad
	Chemistry		
Maj / Chem-102	Inorganic Chemistry	4 (3+1)	Undergrad
Chem 3420	Practical-Analytical	4 (3+1)	Undergrad
Chemistry (1)			
Chem 3430-	Organic Chemistry 2-	4 (3+1)	Undergrad
-Chem 3420-	Chemistry of	4 (3+1)	Undergrad
	Polymers		
Lab Chem 3420-	Organic Chemistry 2	4 (3+1)	Undergrad
Chem 3430	Analytical chemistry	4 (3+1)	Undergrad
	course)		

Service Activity

- Supervised MS students.
- Supervised research associates and interns.
- External Examiner for MS scholars at various universities, including Lahore College for Woman University, Govt. College University, and the University of the Punjab.
- In charge of the Journal Club.(2012-2015)
- In charge of the Biological Lab.(2011-2012)
- In charge of the Coating and Composite Lab. (2014-2016)
- Lab In charge of the Hard Tissue Engineering Lab. (2021-Till now)
- Advance user FTIR, DMA, Rheometer
- Member of the Printing Committee for the 3rd International Symposium on Biomedical Materials: Recent Advances and Challenges in Lahore (2012).
- Member of the Scientific Committee for the 4th International Symposium on Biomedical Materials: Translational Research and Commercialization (2014).
- Member of the Display Committee for the 6th International Symposium on Biomedical Materials: Synergizing Partnerships (2017).
- Served as a registration team member in a one-day Symposium and Launch of the Bone Repair and Regeneration Network on November 30, 2018.
- Convener of the Registration Committee for the 7th International Symposium on Biomedical Materials: Science & Technology Innovation and the Knowledge Economy (2019).
- Prepared content about IRCBM for Contributions towards COMSATS' bi-monthly newsletters. (2014-2017)
- Worked on the IRCBM's last 10-year activity report. (2016-2018
- Prepared weekly reports for the Bone Repair & Regeneration research group. (2018-2020)-
- Prepared BOQ for the CATBM project (2020-20210.
- Participated in different tasks related to the CATBM project.
- Part of the CATB Joint Research and Training Program in 2022.
- Received training on various characterization instruments, including particle size analysis, surface area and porosity measurement, Differential Scanning Calorimetry (DSC), Contact Angle measurement, etc. (2021-2022)

Additional Experience

- Advanced courses on Asymmetric Synthesis at Clausthal University of Technology, Germany (2009).
- Scored 77.43 percentile in Graduate Assessment Test, General, NTS, Pakistan (2006)

- Practical synthetic course, conducted by Prof. Dr. I. Ninomyiya, Japan (2005). Certificate course on "Basic Mathematics (2005).
- Course and training of Firefighting and Safety Management (2005).
- Qualified four advanced courses in organic chemistry in International Centre for Chemical and Biological Sciences, HEJ Research Institute of Chemistry (2004).
- Qualified in GRE (chemistry) conducted by Educational Testing Service, USA. (2004)
- A certificate course of X-ray crystallography, conducted by Prof. Dr. Masud Parvez, Calgary University, Canada (2003).
- Certificate for attending the lecture "Biochemical Basis of Diabetes and Ageing" by Dr. Nisar Ahmed, Department of Biological Sciences, Manchester Metropolitan Universities, UK organized by HEJ (2003).
- Certificate course on "An Introduction to Bioinorganic and Medicinal Chemistry of Metals" by Dr. Mohammad Mahroof Tahir, Assistant Professor, St. Cloud State University Minneola, USA (2003).

International Collaborators

- **Professor Olivier Huck**, Professor in Periodontology, PhD-DDS, and Chair of the Department of Periodontology, Dental Faculty, University of Strasbourg, France and affiliated with National Institute of Health and Medical Research (INSERM) UMR1260, regenerative medicine. huck.olivier@gmail.com
- **Professor Julie Gough**, Professor of Biomaterials and Tissue Engineering, Department of Materials Engineering, and Henry Royce Institute at University of *Manchester*. J.Gough@manchester.ac.uk

Conference Participations

- Bangladesh-Pakistan Binational Conference on Natural Product Chemistry, Sep 24-26, 2002, HEJ Research Institute of Chemistry, University of Karachi, Pakistan.
- 7th International Symposium on Protein Structure Function Relationship. January 20-24, 2003, HEJ Research Institute of Chemistry, University of Karachi, Pakistan
- 3rd international and 13t National chemistry conference under the auspices of chemical society of Pakistan, Dec. 28-31, 2003.
- 9th International Symposium on Natural Product Chemistry, HEJ Research Institute of Chemistry, January 14-16, 2004.
- Pak-Japan chemistry conference on Lashminiases, January 17-19, 2004.
- Pak-France symposium on natural product chemistry, January 2004.
- 4th International & 14th National Chemistry Conference under the auspices of Chemical Society of Pakistan 2005.
- 10th International symposium of Natural Product Chemistry, Jan 6-10, 2006 at International Center for Chemical Sciences, HEJ Research Institute of Chemistry.
- DAAD vom 15-17. Juni 2007 in Gießen für Stipendiatinnen und Stipendiaten an den Hochschulen in Rheinland-Pfalz, Hessen, Thüringen, Saarland und die Städte Heidelberg, Mannheim, Bamberg, Bayreuth, Coburg, Erlangen/Nürnberg, Würzburg, Göttingen und Clausthal-Zellerfeld.
- Science meets industry-Catalysis in fundamental research and industrial application", Nov 16-18. 2008, Universität Heidelberg und BASF Ludwigshafen, Germany.
- Pakistani and German Universities-Joining Foresees for Better Future, Islamabad Pakistan 29-31 October 2010.

- 9th international and 21st national chemistry conference, March 14-16, 2011 jointly organized by Department of chemistry, Karachi University, International Center for Chemical Sciences, and biological Sciences.
- World Water Day 22 March 2011. Water for Cities: Responding to the Urban Challenge, CIIT, Lahore Pakistan
- 3rd International Symposium on Biomedical Materials: Recent Advances and Challenges, Lahore, December 18-20, 2012
- Drug Development–Natural & Synthetic, August 25-27 2013, CIIT, Abbottabad
- 4th International Symposium on Biomedical Materials: Translational Research and Commercialization, 15-17 December 2014, CIIT, Lahore, Pakistan.
- Three-day work shop in computational chemistry, Department of chemistry, Forman Christian College (A chartered University) Lahore Pakistan. 7-9 January 2014
- The 1st International Conference on "Energy Systems for Sustainable Development (ESSD-2014), 20-22 May 2015, at CIIT, Lahore.
- Prepared a poster to showcase IRCBM research work for the Pak China Business Forum 2015.
- Presented in the summer camp of 2015.
- Presented a poster on "Bioceramics: Shapeability, Surface Modifications, and Coatings" at the Regulatory Affairs event (December 14-16, 2016, Lahore, Pakistan).
- Presented a poster on "Tuning the Surface Properties of Bone Implant Materials via Functionalization to Expand Their Bioactivity" at the 6th International Symposium on Biomedical Materials: Synergizing Partnerships (December 14-16, 2017, Lahore, Pakistan).
- 6th International Symposium on Biomedical Materials: Synergising Partnerships, 14-16 Dec 2017, Lahore, Pakistan
- Presented a poster in the one-day Symposium and Launch of the Bone Repair and Regeneration Network on November 30, 2018.
- Participated in and delivered a talk at the international conference "Modern Trends in Chemistry & Energy Technologies" on October 22-23, 2018, in Lahore, Pakistan. The topic of the presentation was "Development of Multifunctional Biomaterials for Tissue Engineering."
- 7th International Symposium on Biomedical Materials: Innovation and the Knowledge Economy (11-12 December 2019). Lahore, Pakistan
- International Workshop on Nanomedicine Development and Challenges", organized by COMSTECH Secretariat, Islamabad, during March 15-17, 2021.
- 5th One Day Symposium on Nanotechnology; Prospects from Research to Commercialization and Its Impact on Industrial Sector of Pakistan, November 24, 2021 NIBGE Faisalabad"
- 19th International & 31st National Conference on Emerging Trends in Chemistry-2ndCCUMT-2021", which will commence on December 16-18, 2021 at Department of Chemistry, University of Management and Technology, Lahore, Pakistan
- 1st International Conference Trends and Research in Chemistry (TRIC-2022) January 18-19, 2022
- An invited speaker 2nd International Conference Trends and Research in Chemistry (TRIC-2023) May 16-18, 2023.
- Invited speaker at the 1st International Conference on Innovations in Chemistry, Biotechnology, Biochemistry, and Bioinformatics (ICBBB-2022), held on December 15–17 at the Islamia University of Bahawalpur.
- Invited speaker at the 2nd Symposium on "Advancements in Dental Materials," on March 21, 2023, organized by Interdisciplinary Research Centre in Biomedical Materials (IRCBM) at COMSATS University Islamabad, Lahore campus.

• Invitation Committee member the 8th International Symposium on Biomedical Materials: Developing Commercialization Capacity in Innovative Ecosystems (4- 5 March 2024)

List of Students Supervised

Sr. No	Student Name	Thesis Title	MS/ PhD	Status
1	Aqsa Afzaal, CIIT/SP21- PPC-003CIIT/SP21-PPC- 003/LHR	Fabrication of Hydroxyapatite-Reinforced Multifunctional Shapeable Hydrogels for Hard Tissue Repair.	PhD, SP21	Registered
2	Saher Atiq- Chemistry, /18/LCWU-1287	Preparation and characterization of hemicellulose based solid polymer electrolyte.	MS	Registered
3	Muhammad Ejaz, CIIT/SP22-PPC-003/LHR	Detection of COVID-19 Biomarkers using Carbon-based Sensing Materials: A DFT Study	PhD, SP22	Registered
4	Ammara Waris- 2115338001, Reg. No. 09- B/LCWU-14292-2021- 2026	Toxic Effect of Zinc Oxide and Titanium Dioxide Nanoparticles on Vitamin D Metabolism and Ameliorating Role of Ginger in Rats.	PhD-2021-2026	Registered
5	Talia Ghaffar CIIT/SP22- R06-008/LHR	Biological Active Hydrogels with Efficient Drug Delivery Potential by B-O/- N Co-ordination for the Treatment of Periodontitis.	MS, FA21	Completed
6	Farhat Rafiq, School of Biological Sciences, 2018- udz-5	Regenerative and Self-healable Trigonella corniculata based Hydrogel for Rapid Healing of Infected Wounds.	MS	Completed
7	Shaista Shaukat, CIIT/FA21-RO6- 013/LHR	Self-healing hydrogels as an local drug delivery system to treat periodontitis	MS, FA21	Completed
8	Ameer Hamza, CIIT/FA21-RO6- 017/LHR	Sensing platforms based on metal-organic frameworks for the quantitative determination of antibiotic remains in animal derived food	MS, FA21	Completed
9	Dr. Madeeha Arif, NUMS/AM/21/MPHIL/11 5	Synthesis and characterization of novel antibacterial Chitosan-alginate microspheres for drug delivery in periodontal pockets	M.Phil., SP21	Completed
10	Rabiya Faryad, Chemistry, 16-B/LCWU- 1462	Synthesis and Characterization of Azo- Linked Porous Organic Framework as Electrochemical Sensors.	MS, 2020-2022	Completed
11	Warda Aziz, CIIT/SP21- R06-003/LHR	Peptide Infused Hydrogels for Rapid Healing of Periodontal Defects	MS, SP21	Completed
12	Muhammad Shahzad Aziz CIIT/SP21-R06-006/LHR	A DFT Investigation on Sensing Properties of Two Dimension B3O2 for detection of biomolecules	MS, SP21	Completed
13	Fakhira Bashir, CIIT/FA20-R06-004/LHR	Antibacterial Dual Crosslinked Hydrogels for Periodontal Regeneration	MS FA20	Completed
14	Dr. Tayyaba Waqar Ali, NUMS/AM/20/MPHIL/10	Development of a novel endodontic sealer based on Calcium Hydroxide containing carbon nanodot-stabilized silver nanoparticles	M.Phil. Dental Materials	Completed
15	Sana Rubab Mir, CIIT/SP20-R06-024/LHR	Fabrication of Thermosensitive Antibacterial Injectable Hydrogel for Periodontal Regeneration	MS, SP20	Completed
16	Azka Shahid, CIIT/FA19- R06-026/LHR	Antibacterial Functionally Graded Composite Membrane for Periodontal Regeneration	MS, FA19	Completed
17	Sabahat Sultana Hashmi, CIIT/FA19-R06-010/LHR	Phytochemical Loaded Functionally Graded Composite Regenerative	MS, FA19	Completed

		Membrane for Potential Application of		
18	Umar Younis, 18-UE- 01162	Osteochondral Regeneration CDs/Ag Functionalized Calcium Phosphate, Zein and Whey Protein Composite Scaffolds to Enhance tissue regeneration	MS, 2018-2020	Completed
19	Mehwish Khushi, 18-UE- 00887	Fabrication of Ovalbumin and Calcium Phosphate Scaffolds for Bone Regeneration	MS, 2018-2020	Completed
20	Mr. Muhammad Naeem Education university	DFT, AIM and NBO Analysis of Pristine and Al, Ca and Be Doped Magnesium Oxide Nano cages for Drug Delivery Applications	MS, FA18-2020	Completed
21	Hira Karim, CIIT/SP19- R06-004/LHR	Computational Evaluation of Metals Doped Phosphorene-Nano sheets for Cancer Treatment	MS, SP19	Completed
22	Iqra Karim, CIIT/SP19- R06-003/LHR	A DFT Study of Dopamine Functionalized Borospherenes for Effective Cancer Treatment	MS, SP19	Completed
23	Shahzaib Ijaz, CIIT/SP19- R06-001/LHR	Designing Donor-Acceptor Small Molecules for Organic Solar Cells with Promising Photovoltaic Parameters	MS, SP19	Completed
24	Palwasha Khan, CIIT/SP19-R06-012/LHR	Substitution of Alkali Metal Atoms: An Efficient Approach to Enhance Electronic and Nonlinear Optical Properties of Diamantane.	MS, SP19	Completed
25	Moiz U Din Khan, CIIT/FA18-R06-018/LHR	Preparation of Nature Mimicked Composite Materials for Tissue Regeneration.	MS, F18	Completed
26	Muhammad Jamshaid, CIIT/FA18-R06-019/LHR	Theoretical Investigation of Structural and Electronic properties of Ionic Liquids Adsorbed Al ₁₂ N ₁₂ Nano-Cages	MS, F18	Completed
27	Muhammad Sohail, CIIT/FA18-R06-019/LHR	Bio-doping of Alkali Metals M ₂ (M ₂ =Li ₂ , Na ₂ , and K ₂) on A ₁₂ N ₁₂ Nano-Cage: A New Effective Approach to Design Nonlinear Optical Materials	MS, F18	Completed
28	Sadaf Hanif, PU, Chemistry	Anionic Chemosensing by Phenazone based Schiff Bases	Msc, 2014-2016	Completed
29	Hafiza Sadia Gillani, PU, Chemistry	Colorimetric sensing of various ions be novel 4-amino phenazone based compounds	M.Phil., 2013- 2015	Completed
30	Ammar Haider, PU, Chemistry	Surface modification of hydroxyapatite with tartaric acid its application as an adsorbent	MSc, 2013-2015	Completed
31	Muhammad Saqib,PU, Chemistry	Targeted Drug Delivery by Silica Based Bioceramic Material	MSc, 2013-2015	Completed
32	Hafiz Muhammad Zubair, PU, Chemistry	A density function study of Schiff base <i>N</i> -(2-hydroxy-5-nitrophenyl) salicylidene anion sensor	MSc, 2012-2014	Completed
33	Kulsoom Bibi, PU, Chemistry	Modification of Mesoporous Silica with Heterocyclic Compounds by SN ₂ Reaction	Mphil, 2012- 2014	Completed
34	Muhammad Hammad-Ul- Haq CIIT, Chemical	Heterogeneous photocatalytic degradation of Drimarene blue K ₂ RL with TiO ₂	MS, FA11	Completed
35	Riaz Hussain, PU, Chemistry	In Situ Synthesis of Hydroxyapatite polymer composites for better biomedical coating adhesion	M.Phil., 2011- 2013	Completed
36	Fatima Khalil, Chemistry, LCWU, C	Comparison of Antioxidant Activity And Phenolic Contents of Syzygium Cumini Extract	B.Sc. (Hons), 2007-2011	Completed

37	Shazia Hafeez, LCWU, Chemistry	Synthesis of Biofeul by reactive extraction	B.Sc (Hons), 2007-2011	Completed
38	Saira Afzal, LCWU, Chemistry	Quantitative Analysis of Bioactive constituents of Different Extracts of Plants	B.Sc (Hons), 2007-2011	Completed
39	Sobia Saleem, LCWU, Chemistry	Soxhlet extraction of different parts of Sysygium cumini for the Comparative	B.Sc (Hons), 2007-2011.	Completed