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Publications:

1	Tailoring corner-fractured 3D rod-like copper phosphate into four-edged 3D plate-like copper@ cobalt phosphate: Enhanced electrocatalytic activity for uric acid screening. Microchemical Journal, 112426 (IF 4.9) SCIE
2	Dual-Function Polymeric Nanomaterials for Adsorption/Photo-Treatment of Oil Spills in Aqueous Solutions. Chemical Methodologies 8 (12), 930-943 (IF 3.5) ESCI
3	Electrochemical Sensor of 3-Aminophenol-Formaldehyde Polymer Nanosphere/phosphotungstic acid Nanocomposite Modified Electrode for Nitrite Detection. Environmental Engineering and Management Journal. 2024 (IF 1.1) SCIE
4	Demonstration of efficient separation, surface investigation and thermodynamics study of sodium -4-[(4-dimethylamino) phenyldiazenyl] Benzene sulphonate dye from aqueous solution onto acid activated modified purple knight. Journal of the Chemical Society of Pakistan. 2024 SCIE
5	Advancements in TiO ₂ -based photocatalysis for environmental remediation: Strategies for enhancing visible-light-driven activity. Chemosphere 2024 (IF 8.943) SCIE
6	Synthesis, Characterization, Antioxidant and Biological Activities of Polyglucose Based Hydrazides and their Metal Nano Composites. FRONTIERS IN CHEMICAL SCIENCES.2023
7	Tailoring the solar cell efficiency of Y-series based non-fullerene acceptors through end cap modification. Spectrochimica Acta Part A.2023 (IF 4.831) SCIE
8	Hard Carbons as Anodes in Sodium-Ion Batteries: Sodium Storage Mechanism and Optimization Strategies. Molecules 27 (19), 6516. 2022 (IF 4.927) SCIE

9	Electrochemical Detection of Dopamine using a phenyl Carboxylic Acid-Functionalized Electrode Made by Electrochemical Reduction of a Diazonium Salt. ChemistryOpen 11(12), 2022 (IF 2.630) SCIE
10	In-vitro study of hydrogel for diclofenac potassium release, Acta Chemica Malaysia, 6(2), 2022. (IF 1.219)
11	Synthesis of a Novel Electrochemical Probe for the Sensitive and Selective Detection of Biothiols and Its Clinical Applications. Analytical Chemistry 2022 (IF 8.008) SCIE
12	Development of Ru (bpy) ₃ ²⁺ electrochemiluminescence sensor for highly sensitive detection of carcinogenic and mutagenic hexamethylphosphoramide. J. Electroanal. Chem.904, 115954 2022. (IF 4.598) SCIE
13	A new approach for the growth of copper nitrides thin films by thermal evaporation using nitrogen as source gas. Optik. 245, 16766 2021 (IF 3.1) SCIE
14	Electrochemiluminescence of [Ru(bpy) ₃] ²⁺ /tripropylamine at glassy carbon, platinum, and Palladium electrodes. Sensors and Actuators Reports. (IF 6.37) ESCI
15	Lucigenin-pyrogallol chemiluminescence for the multiple detection of pyrogallol, cobalt ion, and tyrosinase. JOURNAL OF FOOD AND DRUG ANALYSIS 2021;29:510-520 (IF 6.157) SCIE
16	Mechanistic insights into the microwave-assisted cinnamyl alcohol oxidation using supported Iron and palladium catalysts. Molecular Catalysis. 2019 (IF 5.089) SCIE
17	Monodisperse Bulk Boron and Nitrogen Doped Carbon Nano/Microspheres for High Performance Supercapacitors. J Material Chem A. 2018 (IF 14.511) SCIE
18	Facile surfactant-free synthesis of polybenzoxazine-based polymer and nitrogen-doped carbon nanospheres. Polym.Chem (2018) (IF 5.364) SCIE
19	Autocatalysis Synthesis of Poly(benzoxazine-co-resol)-Based Polymer and Carbon Spheres. Macromolecules. (2018) (IF 5.5) SCIE
20	Microwave assisted benzyl alcohol oxidation using iron particles on furfuryl alcohol derived supports. Catalysis Communications 104 (2018) 67-70 (IF 3.51) SCIE

21	Electrochemical Sensing of Nitrite at Aminophenol-Formaldehyde Polymer/Phosphomolybdic Acid Nanocomposite Modified Electrode. Chin J Anal Chem, 2017, 45(4), e1709–e1712. (IF 1.193) SCIE
22	Facile surfactant-free synthesis and characterization of Fe ₃ O ₄ @3-aminophenol-formaldehyde core-Shell magnetic microspheres. J. Mater. Chem. A, 2014, 2015, 3 (2), 519– 524 (IF 14.511) SCIE
23	Hydroxylamine-O-sulfonic acid as an efficient coreactant of Luminol chemiluminescence for selective and sensitive detection. Chem. Commun., 2015, 51, 6536–6539 (IF 6.222) SCIE
24	Non-enzymatic hydrogen peroxide sensor by electroreduction of p-nitrophenyl aldehydes in the presence of nitrous acid on glassy carbon Electrode. J. Electroanal. Chem. 2015.05.004. (IF 4.598) SCIE
25	Peptide-Based Nanostructures for Cancer Diagnosis and Therapy. Current Medicinal Chemistry, 2014, 21, 2453-2466 (IF 4.1) SCIE
26	Electrochemical Applications of single-walled Carbon Nanohorns. J. Electrochem. 2014, 20(6):501-506 (IF 1.777)
27	Covalent Conjugation of Fluorescence Probes to Nanoparticles for Signal Enhancement. Chem. Lett. 2013, 42 (IF 2.329) SCIE
28	Electrogenerated chemiluminescence of Ru(phen) ₃ ²⁺ /2-(dibutylamino)ethanol system. J. Electroanal. Chem. 688 (2013) 45–48 (IF 4.598) SCIE

Book Chapters:

- 1) Electrospun Materials
Sustainable Materials for Electrochemical Capacitors, 361-390
- 2) Metal Hydroxides
Sustainable Materials for Electrochemical Capacitors, 33-64
- 3) In Vitro and In Vivo Methods Used to Assess the Biological Potential of Essential Oils
Essential Oils: Extraction Methods and Applications, 501-519
- 4) Essential Oil-Based Therapies
Essential Oils: Extraction Methods and Applications, 903-931
- 5) Self-cleaning coating materials
Antiviral and Antimicrobial Smart Coatings, 289-308

- 6) Lincosamide and glycopeptide antibiotics
Antibiotics-Therapeutic Spectrum and Limitations, 183-202
- 7) Copper nanofertilizers: synthesis and applications.
Nanofertilizer Synthesis, 247-267
- 8) Principles of Molecular Biology for Bioanalysis
Bioanalytical Techniques: Principles and Applications, 39-77

Conferences/Seminar/Webinar/Workshops/Trainings:

- 1- Participation as Speaker in International Conference on Clean Water, Air, & Soil (CleanWAS) 2025.
- 2- Participation as **Invited Speaker** in 7th International Conference on Materials Science & Nanotechnology. Organized by Department of Physics GCUF, Faisalabad
- 3- **Participation** in Cyberbiosecurity Training Workshop. Organized by ORIC BZU, Multan.
- 4- Participation as **Invited Speaker** in 6th International Conference on Materials Science & Nanotechnology. Organized by Department of Physics GCUF, Faisalabad
- 5- Attended 2023 International **Training** School on the Theory and Experiment of Disease Biomarkers Detection for Countries along the Belt and Road & Developing Countries. Organized By CIAC, China.
- 6- **Oral Presentation** in the 19th International Symposium on Electroanalytical Chemistry. Organized By CIAC, China.
- 7- Participation as **Invited Speaker** in 2nd International Conference on Global Challenges in Energy and Environment Development. Organized by Department of Physics WUM, Multan.
- 8- Participation as **Invited Plenary Speaker** in 2nd International Conference of Sustainable Chemical Industry, Pakistan Chemical Expo 2023. Organized by UMT, Lahore.
- 9- Presented **Oral Presentation** at 1st International Conference “**Trends & Research in Chemistry (TRIC 2022)**” held on January 18, 19-2022. Organized by Department of Chemistry of UoE Lahore.
- 10- Attended webinar “**Level up your nanoparticle quant and sizing on stunner.**” Held on March 10, 2022. Organized by Select Science.

- 11- **Invited Speaker** of ‘**International Conference on Materials and Nanotechnology**’ held on August 22, 23-2022. Organized by Department of Physics of GCUF.
- 12- Four Posters presented at **3rd International Conference on Innovation in Chemical and Allied Sciences CSSD-2022**. Organized by The Women University Multan.
- 13- **JACS webinar** Metal- Organic Framework: Outlooks and opportunities on June 8, 2021
- 14- **DTU Chemistry Webinar** Electron transfer in electrochemistry and biochemistry on June 21, 2021
- 15- Participation in 3-Days Training on Critical Thinking, Social Cohesion & leadership Skills, 23rd June to 25th June 2021. Organized by BZU.
- 16- **Poster Presentation** The 18th International symposium on Electroanalytical Chemistry. August 25-27, 2021, Changchun, China.

Editorial Board/ Reviewer of Journal:

- 1- Editor in Chief of Acta Chemica Malaysia (ACMY) (IF:1.219)
- 2- Reviewer of Journal of Electroanalytical Chemistry. (IF:4.598)
- 3- Reviewer of Korean Journal of Chemical Engineering. (IF: 3.146)
- 4- Reviewer of Journal of Bioelectrochemistry. (IF:5.76)
- 5- Reviewer of Microchemical Journal. (IF: 5.304)
- 6- Reviewer of Biosensor and Bioelectronics. (IF:12.54)
- 7- Reviewer of Journal of Physica B. (IF:2.988)
- 8- New Journal of Chemistry. (IF:3.591)
- 9- Journal of Cancer Research and Therapeutics. (IF:1.3)

Supervision:

PhD Students:

1) **Hina Sahar**

Dissertation Title: Synthesis, Characterization and Applications of some modified Phenol Aldehyde polymer Nanomaterials.

2) **Rida Fatima**

Dissertation Title: Synthesis, Characterization, Electrochemical Studies and Biological Activities of Polymer Materials Containing Hydrazide Unit.

3) Ruhama Rasheed

Dissertation Title: Swift Synthesis of Conducting Polymer/Mixed Metal Oxide for Photocatalytic and Biological Applications.

4) Waqar Aslam

Dissertation Title: Synthesis of Transition MetalOxide/Hydroxide Nanocomposites for Electrochemical Sensing of Physiological Biomarkers.

MPhil Students:

Sr#	Roll Number	Name	Dissertation Title:
1	MPH-C-20-31	Tehmina Faiz	Facile Synthesis of Graphene Oxide Ormosil as Adsorbent for Drugs Analysis.
2	MPH-C-20-33	Muhammad Sajjad	Facile and Straightforward Synthesis of Hydrazone Derivatives and Their Applications.
3	MPH-C-21-36	Hafiza Samin Anjum	Evaluation of Celecoxib labeling with ^{99m} Tc by Analytical Techniques.
4	MPH-C-21-39	Yasra Batool	Labelling of Ceftriaxone with ^{99m} Tc and its evaluation in Infection Imaging
5	MPH-C-22-31	Iqra Saeed	Phenolic Resin based Mesoporous Nanosorbent for Removal of Organic and Inorganic Contaminants from Water
6	MPH-C-22-51	Maryam Sana	Ecological Synthesis of Punica Grantum based Metal Nanoparticles for Remediation of Hazardous Organic Pollutants.
7	MPH-C-22-72	Ume Habiba	Synthesis and Surface Functionalization of Phenol Formaldehyde Carbon Dots and Their Biological Applications.
8	MPH-C-22-83	Tehreem Razia	Technetium- ^{99m} Labelling and loading of Anticancer Drug on biodegradable Polymer
9	MPHS-C-23-17	Sawaira Khan	Hydrothermally Synthesized Ni/Co Nanospheres for Glucose Sensing in Human Body Fluids.
10	MPHS-C-23-35	Saheefa Ramzan	Tailored Ni/Co Hydroxide Nanoarchitectures for Electrochemical Biosensing.
11	MPHW-C-22-39	Muhammad Nouman Hassan	Design and Synthesis of Bimetallic MOF Ho-Dy@NF/Graphene Oxide Nanocomposite for Energy Storage in Asymmetric Supercapitors.

12	MPHW-C-22-42	Sara Ahmed	Development of Sustainable Hydrazone-Based Catalyst for Biodiesel Production.
13	MPH-C-23-07	Qurat ul Ain	Radiolabeling of Hydroxyurea with Technetium-99m: A Novel Diagnostic Probe for Spinal Cord Tumors
14	MPH-C-23-85	Fareeha Islam	^{99m} Tc-Labeled 6-Mercaptopurine as a Diagnostic Radiotracer for Detecting Inflammatory Activity in Autoimmune Hepatitis
15	MPH-C-23-121	Bakhtawar Bibi	Technetium-99m Radiolabeled Levetiracetam for Specific Imaging of Brain Disorders: A Promising Diagnostic Tool
16	MPH-C-23-124	Nimra Khalid	Technetium-99m-Ivabradine: A Novel Radiopharmaceutical for Simultaneous Assessment of Cardiac Function and Renal Evaluation
17	MPH-C-23-38	Muhammad Shokat Haroon	Role of CTAB Surfactant in Augmenting Brinzolamide's Therapeutic Efficacy as a Carbonic Anhydrase Inhibitor
18	MPH-C-23-73	Uroosa Tariq	Bioinspired Synthesis of ZnO-TiO ₂ -NiO Nanocomposites via <i>Azadirachta indica</i> for Photocatalytic Degradation
19	MPH-C-23-100	Ayesha Ashraf	Moringa Oleifera-Mediated Green Synthesis of ZnO-Co ₃ O ₄ -TiO ₂ Nanocomposites for Efficient Electrochemical Water Splitting
20	MPHW-C-23-72	Muhammad Ijaz ul Haq	Synthesis and Structural Characterization of Hydrazone Derivatives: Promising Candidates for Bioactive Applications.

Administrative Assignments in Department and University:

- Departmental Student Advisor
- Focal Person PM Laptop Scheme.
- Departmental Focal Person for University Website.
- Departmental Focal Person for CMS Fee.
- Supervisor CM, Internship Program.
- Focal Person for CM Honhaar Scholarship.
- Incharge Hi-Tech Lab of ICS, Bahauddin Zakariya University, Multan, Pakistan.
- Member Sports Committee of ICS, Bahauddin Zakariya University, Multan, Pakistan.
- Member Organizing Committee of the Blood Camp by Regional Blood Centre Multan.