



Dr. Muhammad Sajid

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Institute of Chemical Science Bahauddin Zakariya University. Multan, Pakistan

Educational Qualification

- ❖ Ph.D. **Analytical Chemistry**; Beijing Normal University, Beijing, China, 2014.
- ❖ M.Phil. **Chemistry (Analytical)**; Bahauddin Zakariya University Multan, Pakistan, 2006.
- ❖ M.Sc. **Chemistry (Analytical)**, Islamia University Bahawalpur, Pakistan, 2000.
- ❖ B.Sc. **Chemistry**, Physics, Math; Bahauddin Zakariya University Multan, Pakistan, 1998.
- ❖ M.Ed. (**Teaching of Science**); Allama Iqbal Open University Islamabad, Pakistan, 2009.
- ❖ B.Ed. (**Teaching of Science**) Allama Iqbal Open University Islamabad, Pakistan, 2002
- ❖ Secondary and Higher Secondary Education, Government School and College, Chichawatni District Sahiwal Punjab Pakistan, .

Biography

I am currently serving as an Assistant Professor of Analytical Chemistry at the Institute of Chemistry, Bahauddin Zakariya University, Multan, since 2014. I earned my Ph.D. in Analytical Chemistry from Beijing Normal University, Beijing, China, where I developed extensive expertise in advanced analytical techniques and research methodologies.

My primary research focuses on residue analysis and the development of innovative analytical methods for detecting and quantifying contaminants in food and environmental samples. My work addresses critical issues in food safety and environmental sustainability, making significant contributions to the advancement of analytical sciences.

During my tenure at Bahauddin Zakariya University, I have supervised more than 40 MPhil and 7 PhD students, continuing to inspire and guide the next generation of scientists while making

Researches

Doctorate Research Topic:

“Quantitative analysis of drugs by one-dimensional and two-dimensional high performance liquid chromatography”

Main focus of research was the determination of sulfonamide drugs in honey using short C-18 column as online extraction method by HPLC with fluorescence detection. Beside one dimensional HPLC, two-dimensional high performance liquid chromatography (2D-HPLC) by employing three columns was also investigated for the analysis of Tablets sample. The 2D-HPLC was developed by coupling three columns in serial and parallel ways.

M Phil Research Topic:

“Prevalence of insulin resistance syndrome in obese type 2 diabetes”

The Insulin Resistance Syndrome is having a huge impact on the physical and social well-being of today's diabetic patients. Obesity promotes insulin resistance, which in turn is related to a number of problems including Type 2 Diabetes.

Publications:

1. Mariam Khan, Muhammad Mahboob Ahmed*, Muhammad Nadeem Akhtar, **Muhammad Sajid**, Nagina Naveed Riaz, Muhammad Asif, Muhammad Kashif, Bushra Shabbir, Khalil Ahmad, Muhammad Saeed, Maryam Shafiq, Tayyaba Shabir; Fabrication of CuWO₄@MIL-101 (Fe) nanocomposite for efficient OER and photodegradation of methylene blue, Heliyon 10 (2024) e40546 (I.F.: 3.4)
2. Zahra Nazar, Sidra Iram, **Muhammad Sajid***, Hafiz Muhammad Asif*, Hameed Ullah, Razan A. Alshgari, Zahra Mohammadi Zadeh Tahroudi; Efficient solid phase extraction and HPLC analysis of drug residues in Animal-Derived food products using Polyoxometalate-based ionic liquid composite; Microchemical Journal 206 (2024) 111650 (I.F: 4.9)
3. Sidra Iram, **Muhammad Sajid**, *, Muhammad Furqan Nawaz, Zahra Nazar, Muhammad Jamil, Saghir Hussain; Efficient extraction and HPLC determination of sulfonamide residues in milk samples using acylated graphene oxide-functionalized polyurethane sponges: A tailored approach for efficient analyte recovery; Journal of Food Composition and Analysis 136 (2024) 106665 (I.F: 4.0)
4. Sidra Iram, Zahra Nazar, **Muhammad Sajid***, Thomas William Chamberlain, Muhammad Furqan Nawaz, Muhammad Mahboob Ahmed, Muhammad Kashif; In-tube solid phase extraction with graphitic-based polyurethane sponge as a superhydrophobic sorbent and determination of drug residues in foodstuffs using high-performance liquid chromatography; Food Chemistry 448 (2024) 139022 (I.F: 8.8)
5. Atika Batool, Najla AlMasoud, Zahra Nazar, Hameed Ullah a, **Muhammad Sajid**, Taghrid S. Alomar , Muhammad Ali Khan,*, Hafiz Muhammad Asif ,*, Sidra Iram and Latif Ullah; Shahid Hussain Synthesis of Polyoxometalates-Ionic Liquids@Fe₃O₄@SiO₂ composites for the extraction of atrazine and deltamethrin pesticide residues from food samples and their determination by HPLC; Microchemical Journal 200 (2024) 110312 (I.F: 4.8)
6. Zeeshan Ali, **Muhammad Sajid***, Nadeem Raza, Younas Sohail, Muhammad Hayat, Suryyia Manzoor, Nasir Shakeel, Komal Aziz Gill, Ahmad A. Ifseisi, Mohd Zahid Ansari. Study of modified biomass of Gossypium hirsutum as heavy metal biosorbent; Arabian Journal of Chemistry; 16 (2023) 105332 (I.F. 6.212)
7. Muhammad Sajjad, Rasmiah Saad Almufarij, Zeeshan Ali, **Muhammad Sajid***, Nadeem Raza *, Suryyia Manzoor, Muhammad Hayat, Ehab A. Abdelrahman, Magnetic solid phase extraction of aminoglycosides residue in chicken egg samples using Fe₃O₄-GO-Agarose-Chitosan composite, Food Chemistry 430 (2024) 137092 (I.F.9.2)
8. Afshan Mushtaq, Muhammad Nadeem, Ibrahim A. Shaaban, Mohammed A. Assiri, **Muhammad Sajid**, Muhammad Ali Khan, Hafiz Muhammad Asif, Zahra Nazar, Shahid

- Hussain and Zeinhom M. El-Bahy, Catalytic oxidative desulfurization of thio-compounds by employing χ -Anderson-type polyoxometalates-porphyrin covalent organic framework (COF), *Tetrahedron* 144 (2023) 133575-87 (I.F. 2.33)
9. Nagina Naveed Riaz, Muhammad Mahboob Ahmed,* Muhammad Kashif, **Muhammad Sajid**, Muhammad Ali and Khalid Mahmood, Biologically potent organotin(IV) complexes of N-acetylated α -amino acids with spectroscopic, X-ray powder diffraction and molecular docking studies; *RSC Advances*; 13(2023), 10768–10789 (IF. 4.036)
 10. Muhammad Hayat, Suryyia Manzoor*, Hina Raza, Muhammad Imran Khan, Abdallah Shanableh, **Muhammad Sajid**, Tahani Mazyad Almutairi, Rafael Luque; Molecularly imprinted ormosil as a sorbent for targeted dispersive solid phase microextraction of pyriproxyfen from strawberry samples; *Chemosphere* 320 (2023) 137835-43 (I.F.: 8.943)
 11. Zeeshan Ali, **Muhammad Sajid***, Muhammad Mahboob Ahmed, Muhammad Hanif, Suryyia Manzoor, Synthesis of green, fluorescent cross-linked molecularly imprinted polymer bound with anti-cancerous drug (docetaxel) for targeted drug delivery; *Polymer Bulletin* <https://doi.org/10.1007/s00289-023-04714-8> (2023) (I.F.: 2.843)
 12. **Muhammad Sajid**, Muhammad Aamir, Muhammad Jamil, Mukhtar Ahmad, and Shahzada Qamar Hussain; Removal of Fluoride Ions (F⁻) from Contaminated Drinking Water using MnFe₂O₄ /Banana Peels Composite Synthesized through Chemical Co-Precipitation Method; *Journal of Materials and Physical Sciences*; 3(2022) 71-81 (I.F.)
 13. Zeeshan Ali, **Muhammad Sajid***, Suryyia Manzoor, Muhammad Mahboob Ahmad, Muhammad Imran Khan, Nouredine Elboughdiri*, Muhammad Kashif, Abdallah Shanableh, Wajdi Rajhi, Wael Mersni, Emin Bayraktar, and Sahbi Ben Salem; Biodegradable Magnetic Molecularly Imprinted Anticancer Drug Carrier for the Targeted Delivery of Docetaxel; *ACS Omega* 2022, 7, 28516–28524 (I.F.: 4.132)
 14. Faiz Rasool, Ajaz Hussain, Muhammad Yar, Khurshid Ayub, **Muhammad Sajid**, Muhammad Ali Khan, Hafiz Muhammad Asif, Muhammad Imran, Mohammed A. Assiri; Nonlinear optical response of 9,10-bis(phenylethynyl)anthracene mediated by electron donating and electron withdrawing substituents: A density functional theory approach; *Materials Science in Semiconductor Processing* 148 (2022) 106751 (I.F.: 4.644)
 15. Muhammad Ali Khan, Zainab Shakoor, Talal Akhtar, **Muhammad Sajid**, Hafiz Muhammad Asif; Exploration on χ -Anderson type Polyoxometalates based hybrids towards photovoltaic response in solar cell; *Inorganic Chemistry Communications* 133 (2021) 108875- (I. F: 2.495)
 16. Javeria Tayyab, Zeeshan Ali, Zeeshan Haider, **Muhammad Sajid***; Fast and Accurate Quantitative Determination of Prednisolone and Chlorpheniramine in Active Pharmaceutical Ingredients and Parenteral Dosage Forms; *Tropical Journal of Natural Product Research*, November 2021; 5(11):1922-1926 doi.org/10.26538/tjnpr/v5i11.5 (I.F.:0.32)
 17. Zeeshan Haider, Zeeshan Ali, Javaria Tayyab, Muhammad M. Ahmad, Muhammad Ahmad, **Muhammad Sajid***, Dilshad Hussain; Eco-Friendly and Cost-Effective Method for the Quantitative Determination of Ceftriaxone Sodium in Pharmaceutical Drug Formulations; *Tropical Journal of Natural Product Research*, October 2021; 5(10): 1716-1723 doi.org/10.26538/tjnpr/v5i10.4 (I.F.:0.32)
 18. Aqib Javed, Iqra Naeem, Noredine Benkerroum, Muhammad Riaz1, Saeed Akhtar, Amir Ismail*, **Muhammad Sajid**, Muhammad Tayyab Khan and Zubair Ismail; Occurrence and Health Risk Assessment of Aflatoxins through Intake of Eastern Herbal Medicines Collected from Four Districts of Southern Punjab—Pakistan; *International Journal of Environmental Research and Public Health* 2021, 18, 9531. <https://doi.org/10.3390/ijerph18189531> (I.F.: 3.39)

19. Muhammad M. Ahmed, *, Nagina N. Riaz, Muhammad Kashif, Muhammad Ashfaq, Muhammad N. Arshad and **Muhammad Sajid**; Synthesis, Hypoglycemic Effect, Antimicrobial and Molecular Docking Studies of Organotin (IV) Complexes Derived From N-Phthalimido β -Amino Acid Derivatives; Journal of the Brazilian Chemical Society, Vol. 32, No. 5, 1082-1099, 2021 (I.F.: 1.838)
20. Zeeshan Ali, Fatima Qureshi, Dilshad Hussain, Hira Munir and **Muhammad Sajid**. Polyacrylamide grafted Eucalyptus camaldulensis (EC-g-PAM) gum as an efficient binding agent in drug formulations, Materials Research Express 7 (2020) 045307 (I.F.: 1.609)
21. **Muhammad Sajid***, Muhammad Razzaq, Zeeshan Ali, Dilshad Hussain, Ajaz Hussain, Ahmad Yar, Muhammad Hayat Determination of Neonicotinoid (Nitenpyram, Imidacloprid and Acetamiprid) Pesticides Residues in Five Dried Vegetables by High Performance Liquid Chromatography; Journal of Chromatography & Separation Techniques Vol.11 Iss.3 (2020) No:431 (I.F.: 4.83)
22. Amir Ismail, Bruna L. Gonçalves, Diane V. de Neeff, Bárbara Ponzilacqua, Carolina F.S.C. Coppa, Henning Hintzsche, **Muhammad Sajid**, Adriano G. Cruz, Carlos H. Corassin, Carlos A.F. Oliveir Review: Aflatoxin in foodstuffs: Occurrence and recent advances in decontamination; Food Research International 113 (2018) 74–85 (I.F.: 6.475)
23. Muhammad Mazhar Ayaz*, **Muhammad Sajid**, Sanjota Nirmal Das and Muhammad Hanif An ex vivo up-take of levamisole molecules by cestode (*Monezia expansa*) of goat (*Capra hirs*) and its detection through RP-HPLC; Pakistan Journal of Pharmaceutical Sciences, Vol.31, No.3, (2018) 961-966 (I.F.: 1.103)
24. Muhammad Tariq, Muhammad Mansoor Iqbal, Abdul Aziz*, Muhammad Shafiq, **Muhammad Sajid** and Bashir Mohammad Recovery of Alumina from Khushab Bauxite by Leaching with Sulphuric Acid and Removal of Iron Impurity by Ethanol; Journal of Chemical Society of Pakistan., Vol. 36, No. 4, 2014. 624-629 (I.F.: 0.51)
25. **Muhammad Sajid**, Na Na, Muhammad Safdar, Xin Lua, Lin Ma, Lan He, Jin Ouyang Rapid trace level determination of sulfonamide residues in honey with online extraction using short C-18 column by high-performance liquid chromatography with fluorescence detection; Journal of Chromatography A, 1314 (2013) 173– 179 (I.F.: 4.759)
26. Na Na, Xianglan Cui, Thomas De Beer, Tingting Liu, Tingting Tang, **Muhammad Sajid**, Jin Ouyang The application of Au nanoclusters in the fluorescence imaging of human serum proteins after native PAGE: Enhancing detection by low-temperature plasma treatment; Biosensors and Bioelectronics 35 (2012) 313– 318 (I.F.: 10.62)
27. Lin Ma, **Muhammad Sajid**, Pingping Liu, Na Na, Dacheng He, Xueyuan Xiao and Jin Ouyang Effects of N,N,N',N'-tetramethylethylenediamine on the properties of CdTe quantum dots, Journal of Materials Chemistry, 21(2011) 13299–13305 (I.F.: 6.626)
28. Na Na, Xianglan Cui, Thomas De Beer, Tingting Liu, Tingting Tang, **Muhammad Sajid** and Jin Ouyang The use of silica nanoparticles for gas chromatographic separation Journal of Chromatography A, 1218 (2011) 4552– 4558 (I.F.: 4.759)

Conferences

1. **M Sajid**, N Na, J Ouyang Presented a poster at *The 15th Beijing Conference and Exhibition on Instrumental Analysis* with the Title: Analysis of active and inactive ingredients in tablets by two different columns connected to two different detectors by single injection high-performance liquid chromatography, October 23-26, 2013
2. **M Sajid** Attended and presented an online extraction strategy for sample preparation at the *Nano Club Conference* organized by the Chinese and International students of Nano Center Beijing, on Oct 30, 2013.

1. Certification of Appreciation in acknowledgment of presentation/Participation in the “STEM International Conference”
2. Certificate of Appreciation of Winning NRPU Projects by ORIC, Bahauddin Zakariya University Multan
3. Certificate of appreciation for Participation in an event: FIKER-E-IQBAL
4. Three Days International Pharmacy Conferences on “Recent Trends in Advancement of Pharmaceutical Sciences Challenges & Opportunities”
5. Participation in “Two Day National Training Workshop and One Day Symposium on Nanotechnology Research in Pakistan” NIBGE
6. Participation in “One-day Symposium on Nanotechnology Research in Pakistan” NIBGE
7. Bio-waste Derived Carbons for waste-to-bioenergy conversion and water purification
8. Workshop on Biomass Derived Carbons for Water Purification and Catalyst for Biofuel
9. Workshop on Science, Technology, and Entrepreneurship
10. A Day Long International Conference “Recent Challenges and Chemical Sciences”
11. Participation in the Awareness Seminar on “**Technology Development Fund (TDF)**” held on the 15th. May 2018 at Institute of Management Science (IMS Hall) BZU. Multan
12. Participation in the International Symposium on Technologies for Renewable Energy, Environment and Sustainability held on 6-7th February 2019. Department of Chemistry, University of Faisalabad.
13. 4th international conference “Food and Nutritional Security in Changing Climate organized by the Institute of Food Science and Nutrition, Bahauddin Zakariya University Multan, Pakistan (March 3-4, 2019)
14. Poster presented in Conference, Forefronts of Chemistry Celebrating The Periodic Table Year” Institute of Chemical Sciences, Bahauddin Zakariya University Multan, Pakistan. (27-29 March, 2019).
15. Muhammad Mahboob Ahmad, Nagina Naveed Riaz, Ashfaq Ahmad, Tariq Mahmood Ansari, **Muhammad Sajid**, M Naveed Arshad; Synthesis Spectroscopic Characterization of Biological studies and Hypoglycemic Effect of New Organotin (IV) Complex; 18th International Conference and 30th National Chemistry Conference on Recent Trends in Chemistry; March 27-28 2019, ISBN: 978 969-9368-65-3

Awards

Awarded Chinese Govt. Scholarship for PhD studies (2009-2013)

Research Grants

AWARD OF RESEARCH PROJECT UNDER NATIONAL RESEARCH PROGRAMME FOR UNIVERSITIES : No: 7494/Punjab/NRPU/R&D/HEC/2017 Date Printed: 02.06.2018

References:

- *PhD Supervisor:*
Prof. Dr. Jin Ouyang

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M.Phil Supervisor:

Prof. Dr. Tariq Mahmood Ansari

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