

RESUME

Personal Details:

Dr. RAJA ADIL SARFRAZ

Officer Incharge, Central Hi-Tech Lab Since 2009 &

Associate Professor, Since 2019,

Department of Chemistry,

University of Agriculture, Faisalabad

Ph. Off. : +92-41-9200349

Cell # +92-345-2932949

E-mail. rajaadilsarfraz@gmail.com
rajaadilsarfraz@uaf.edu.pk

Educational Background

- **M. Phil leading to Ph.D. (2009)**

Analytical Chemistry

National Centre of Excellence in Analytical Chemistry, University of Sindh, Jamshoro, Pakistan.

- **M.Sc. Chemistry (2001)**

Major Subject; Inorganic / Analytical Chemistry

Department of Chemistry, Faculty of Sciences, Quaid-I- Azam University, Islamabad, Pakistan.

- **B.Sc. (1998)**

Major Subjects: Chemistry, Botany and Geography

University of the Punjab, Lahore, Pakistan.

Distinctions

- HEC Approved Supervisor
- Ranked as no. 9th young scientist of Pakistan for the year 2016 by Pakistan Council for Science & Technology

Research Career

Main areas of research:

- Exploration of anticancer and antidiabetic potential of synthetic and natural products

Teaching Experience

- At present serving as Officer Incharge, Central Hi-Tech Lab/Associate Professor at Department of Chemistry, University of Agriculture, Faisalabad, since August, 2019.

- As Assistant Professor at Department of Chemistry, University of Education, Lahore, Okara campus, Okara, from May-August, 2009.

SUPERVISION OF RESEARCH STUDENTS

| | | |
|--|----------|-----------|
| PhD produced (As Major Supervisor) | = | 08 |
| PhD produced (As Thesis Committee Member) | = | 05 |
| M.Phil. Students (Completed) (As Major Supervisor) | = | 125 |
| M.Sc. Students Produced (As Major Supervisor) | = | 32 |

RESEARCH PROJECT COMPLETED

| Project Title | Funding Agency | Amount (Rs. Million) | Duration/ Status |
|---|-----------------------|-----------------------------|------------------------------|
| Screening and Characterization of Anticancer Compounds from Some Local Medicinal Plants | HEC | 6.87 | Three years June, 2012-15 |

Administrative Services

1. Officer Incharge, Central Hi-Tech Laboratory w.e.f. 2009 till to date, UAF
2. Member, Various Tender/Purchase Committees, UAF
3. Member, Auction Committee, Department of Agri-Economics, UAF
4. Member, Committee for Service Structure of Lab. and Field Staff, UAF

Awards:

- I. Research Productivity Award (RPA), 2010** by Pakistan Council for Science & Technology
- II. Research Productivity Award (RPA), 2016** by Pakistan Council for Science & Technology

List of Publications

Impact Factor = 101.00

Citations = 3908

1. Qamar ul Hassan, Raja Adil Sarfraz, M. Mohsin, Munawar Iqbal, Naveed Ahmad, "Physico-chemical characterization, biological attributes and sensory evaluation of commercial ketchup" (2024), Natural Product Communications, 19(12), 1-7.
2. Sumaira Mumtaz*, Raziya Nadeem, **Raja Adil Sarfraz**, Muhammad Shahid, "Mechanism Study of Green Synthesis and Antibacterial Attribute of *Polyalthia longifolia* Based Gold Nanoparticles" (2022) Journal of Nano Research (75) 1-16 (IF: 2.929)
3. Zeeshan Akmal, Ayesha Taj, Ahmed Madni, **Raja Adil Sarfraz**, Muhammad Zubair Iqbal, Muhammad Afzal, Arshad Mahmood, Khalid Mahmood, Sadia Z. Bajwa & Waheed S. Khan, "Fabrication of bismuth molybdenum oxide nanoparticles as a dual interface for photocatalysis and biosensing" (2022) Applied Nanoscience (12), 2563–2577 (IF: 3.869)
4. **Raja Adil Sarfraz**, Rizwan Ashraf, Saira Bedi and Iqra Sardar, "Bioactivity-guided nanoparticle synthesis from *Zingiber officinale* and *Mentha longifolia*" (2021) Bioinspired, Biomimetic and Nanobiomaterials, <https://doi.org/10.1680/jbibn.21.00018> (1.291)
5. M. Zubair Sultan, Yasir Jamil, Yasir Javed and **Raja Adil Sarfraz**, "Synthesis, Characterization, and Study of Thermal Response of Cu-Doped Fe₃O₄ Nanoparticles" (2021) Journal of Superconductivity and Novel Magnetism 34 (12), 3209-3221. (1.506)
6. Mubashara Ishaq, Kashif Kamran, Yasir Jamil, **Raja Adil Sarfraz**, "Electric potential and current distribution in contaminated porous building materials under electrokinetic desalination" (2021) Materials and Structures 54 (4), 1-14 (3.428)
7. Sumaira Mumtaz, Raziya Nadeem, **Raja Adil Sarfraz** and Muhammad Shahid, "Synthesis, Characterization, and Evaluation of Antimicrobial and Antioxidant Potential of *Polyalthia longifolia* Mediated Copper Nanoparticles" (2021) Journal of Nano Research, 68, 35-51. (2.929)
8. Sumaira Mumtaz, Raziya Nadeem, **Raja Adil Sarfraz**, M. Shahid, "Medicinal aspects of *Murraya koenigii* mediated silver nanoparticles" (2021) Advances in nano research 11 (6), 657-665 (13.052)

9. Muhammad Asif Javed, Shazia Shukrullah, Muhammad Yasin Naz, **Raja Adil Sarfraz**, "Image Velocimetry and Statistical Analysis of a Mesh-Coupled Axial Blade Distributor for Mass Transfer in a Swirling Bed" **(2020)** Journal of Theoretical and Applied Mechanics, 58 (3) 779-790. (0.28)
10. Ghulam Sarwari, Bushra Sultana, **Raja Adil Sarfraz**, Muhammad Anjum Zia, "Cytotoxicity, antioxidant and antimutagenic potential evaluation of peels of edible roots and tubers" **(2019)** International Food Research Journal, 1773-1779. (0.82)
11. Muhammad Adnan Ayub, Muhammad Asif Hanif, **Raja Adil Sarfraz**, Muhammad Shahid, "Biological activity of *Boswellia serrata* Roxb. oleo gum resin essential oil: Effects of extraction by supercritical carbon dioxide and traditional methods" **(2018)** International Journal of Food Properties, 808-820. (1.39)
12. **Raja Adil Sarfraz**, Abdul Qayyum "Bio-inspired Synthesis of Nano-Silver Particles and Their Mechanism of Action towards Microbes and Onco-genes" **(2018)** Bioinspired, Biomimetic and Nanobiomaterials, 1-46. (0.97)
13. **Raja Adil Sarfraz**, Qamar Ul Hassan, Saniya Murtaza, "Effect of different solvents on the chemical composition and anti-diabetic activity of *Acacia Arabica* and *Zizyphus Mauritiana*" **(2018)** Journal of Medicinal Herbs and Ethnomedicine, 35-3
14. **Raja Adil Sarfraz**, Raziya Nadeem, Amer Jamil, "Assessment of antimicrobial activity of phytofabricated silver particles" (2018) Bioinspired, Biomimetic and Nanobiomaterials" **(2018)** 7 (3), 141-148. (0.97)
15. Qurat-Ul-Ain, **Raja Adil Sarfraz**, Abdul Qayyum, "Mechanism of action of bio-inspired nanosilver particles" **(2018)** Bioinspired, Biomimetic and Nanobiomaterials 7 (3), 174-186
16. Arfaa Sajid, Qaisar Manzoor, Munawar Iqbal, Amit Kumar Tyagi, **Raja Adil Sarfraz**, Anam Sajid, "Pinus Roxburghii essential oil anticancer activity and chemical composition evaluation" **(2018)** EXCLI journal 17, 233
17. Qamar Ul Hassan, **Raja Adil Sarfraz**, "Effect of different nutraceuticals on phytochemical and mineral composition as well as medicinal properties of home made mixed vegetable pickles" **(2018)** Food Biology, 24-27
18. Aisha Ashraf, **Raja Adil Sarfraz**, Adeel Mahmood, "Phenolic compounds' characterization of *Artemisia rutifolia* spreng from Pakistani flora and their relationships with antioxidant and antimicrobial

- attributes" **(2017)** International Journal of Food Properties 20 (11), 2538-2549
19. Nafisa Younas, Muhammad Abid Rashid, Sadia Nazir, Muhammad Usman, **Raja Adil Sarfraz**, Amer Jamil, "Spectroscopic and conductometric study of interaction of anionic surfactants with [Co(phen)₃]F₂·2H₂O complex" **(2017)** Journal of Molecular Liquids 240, 351-360
 20. Abdur Rehman, Sami Ullah, **Raja Adil Sarfraz**, Faisal Nawaz, Abdul Qayyum, Muhammad Javid, Syed Muhammad Imran Bin Riaz, Khalil Ullah Khan, "Evaluation of thrombolytic, antimicrobial and cytotoxicity potential of extract and its polar fractions of Heliotropium strigosum by in - vitro assay" **(2017)** International Journal of Biosciences. 10(1), 109-116.
 21. Saba Idrees, **Raja Adil Sarfraz**, Muhammad Riaz, Rasheed Ahmad Khera, A. Zia, Muhammad Asif Hanif and Muhammad Suleman, Evaluation of "Antidiabetic, Antioxidant, Antimicrobial and Cytotoxic properties of *Avena sativa* root extracts" **(2017)** Oxidation Communications. 40(2) 613-623
 22. Ayesha Mahmood, **Raja Adil Sarfraz**, Fatma Hussain, "In vitro Antidiabetic and Antioxidant Activities of Indigenous Plants of Punjab, Pakistan" **(2017)** Oxidation Communications. 40(2) 638-647.
 23. Muhammad Arshad, Muhammad Akhyar Farrukh, **Raja Adil Sarfraz**, Abdul Qayyum and Shaista Ali "Structural characterization of Fe/TiO₂ nanoparticles: antioxidant and antibacterial studies" **(2016)** Biointerface Research in Applied Chemistry. 6(5), 1497 – 1501.
 24. Muhammad Akhyar Farrukh, Muhammad Arshad, Muhammad Khaleeq-ur-Rahman, **Raja Adil Sarfraz**, Abdul Qayyum and Shaista Ali, "Structural Characterization of Fe/TiO₂ Nanoparticles: Antioxidant and Antibacterial Studies" **(2016)** Mitteilungen Klosterneuburg Journal, **Impact Factor [0.045]**.
 25. Muhammad Arshad, Muhammad Akhyar Farrukh, **Raja Adil Sarfraz** and Ayesha Imtiaz, "Synthesis, Characterization of Si/Fe₂O₃ Nanoparticles and their antibacterial Against *Staphylococcus aureus* and *Escherichia coli*" **(2016)** Asian Journal of Chemistry, 28(7) 1413-1416. **Impact Factor [0.21]**.
 26. Aisha Ashraf*, Raja Adil Sarfraz, Muhammad Abid Rashid, Adeel Mahmood and, Nadia Noor, "Chemical composition, antioxidant, antitumor, anticancer and cytotoxic effects of Psidium guajava leaf extracts" **(2016.)** Pharmaceutical Biology. 54(10) 1971-81. **Impact Factor [1.241]**.

27. Abdul Qayyum, **Raja Adil Sarfraz**, Aisha Ashraf and Shazia Adil, "phenolic composition and biological (anti diabetic and antioxidant) activities of different solvent extracts of an endemic plant (*Heliotropium strigosum*)" **(2016)** Journal of Chilean Chemical Society, 61(1) 2828-2831. **Impact Factor [0.469]**.
28. Hafizah Umaira Tahir, **Raja Adil Sarfraz**, Aisha Ashraf and Shazia Adil, "Chemical composition and anti-diabetic activity of essential oils obtained from two spices (*Syzygium aromaticum* and *Cuminum cyminum*)" **(2016)** International Journal of Food Properties. 19 (10) 2156–2164, **Impact Factor [0.915]**.
29. Ayesha Mehmood, **Raja Adil Sarfraz**, Ijaz Ahmad Bhatti and Fatma Hussain, "α-amylase inhibitory activity and blood glucose and lipid-lowering mechanisms of *Heliotropium strigosum* extracts" **(2016)** Oxidation Communications. 1 (1) 108-117. **Impact Factor [0.507]**.
30. Arfaa Sajid, **Raja Adil Sarfraz**, Muhammad Asif Hanif and Muhammad Shahid, "Evaluation of chemical composition and biological activities of *Citrus pseudolimon* and *Citrus grandis* peel essential oils" **(2016)** Journal of the Chemical Society of Pakistan. Vol. 38 (2) 266-273. **Impact Factor [0.345]**
31. Moin ud Din, **Raja Adil Sarfraz**, Abdullah Ijaz Hussain, Ijaz Ahmad Bhatti and Muhammad Shahid, "Chemical Composition and Biological Activities Guided Assessment of Essential Oils of Two Rutacea Species" **(2015)** Journal of Pure and Applied Microbiology. 9 (1) 159-168. **Impact Factor [0.073]**.
32. Aisha Ashraf, **Raja Adil Sarfraz**, Adeel Mahmood and Moin Uddin, "Chemical composition and in vitro antioxidant and antitumor activities of *Eucalyptus camaldulensis* Dehn. Leaves" **(2015)** Industrial Crops and Products. 74: 241-248. **Impact Factor [3.449]**.
33. Aisha Ashraf, **Raja Adil Sarfraz**, Farooq Anwar, Shaukat Ali Shahid and Khalid M. Alkharfy, "Chemical Composition and Biological Activities of Leaves of *Ziziphus Mauritiana* L. Native to Pakistan" **(2015)**, Pakistan Journal of Botany, 47(1), 367-376 **Impact Factor [0.658]**.
34. Aisha Ashraf, **Raja Adil Sarfraz**, Muhammad Shahid and Muhammad Abid Rashid, "Antioxidant, antimicrobial, antitumor and cytotoxic activities of an important medicinal plant (*Euphorbia royleana*) from Pakistan" **(2015)**, Journal of Food and Drug Analysis. 23(1), 109-115. **Impact Factor [1.980]**.
35. Moin Uddin, Tooba Shahid and **Raja Adil Sarfraz**, "Biological activity based assessment of essential oil emulsions" **(2015)** Journal of Food Processing and Preservation. 39(6), 1452–1456. **Impact Factor [0.938]**.

36. Huma Munir and **Raja Adil Sarfraz**, "Medicinal Attributes of *Aerva javanica* native to Potohar Plateau" **(2014)** Pakistan Journal of life and social sciences. 12(2), 80-86. **Impact Factor [1.029]**.
37. Huma Munir, **Raja Adil Sarfraz**, Abdullah Ejaz Hussain, Muhammad Shahid and Bushra Sultana, "Antioxidant and antimicrobial activities of different solvent extracts of *Asphodilus Tenifoliu*" **(2014)** Oxidation Communications. 37(3), 741-754. **Impact Factor [0.507]**.
38. Nadia Noor, **Raja Adil Sarfraz**, Shaukat Ali and Muhammad Shahid, "Antitumour and antioxidant potential of some selected Pakistani honeys" **(2014)**, Food Chemistry, 143, 362-366. **Impact Factor [3.334]**.
39. Ayesha Mehmood, **Raja Adil Sarfraz**, Abdul Qudoos and Fareena Akbar, "Appraisal of some heavy metals in organ meat from non industrialized areas of Faisalabad, Pakistan" **(2014)**, Global Veterinaria, 12, 98-103 **Impact Factor [0.667]**.
40. Abida Kousar, Haq Nawaz Bhatti, **Raja Adil Sarfraz** and Muhammad Shahid. "Prediction of optimum equilibrium and kinetic models for UV sorption onto rice husk: Comparison of linear and non- linear regression methods" **(2014)**, Desalination and water treatment, 52(7-9), 1495-1503. **Impact Factor [0.852]**.
41. Faiza Nazir, **Raja Adil Sarfraz**, Abdul Qudoos and Rabia Riaz "Trace Elements Profile of Hepatitis C Patients in Faisalabad, Pakistan" **(2013)** World Applied Sciences Journal 28 (8): 1093-1097.
42. Faiza Nazir, **Raja Adil Sarfraz**, Amer Jamil, Muhammad Asif Hanif, "Antitumor and antioxidant activity assessment of *Capparis aphylla*" **(2013)**, Oxidation Communications, 36, No 4, 1058–1066. **Impact Factor [0.46]**.
43. Shahid Iqbal, Umer Younas, Sirajuddin, Kim Wei Chan*, **Raja Adil Sarfraz** and Md. Kamal Uddin. "Proximate Composition and Antioxidant Potential of Leaves from Three Varieties of Mulberry (*Morus* sp.): A Comparative Study" **(2012)**, International Journal of Molecular Sciences, 13, 6651-6664. **Impact Factor [2.464]**.
44. Arain, M.B., Kazi, T.G., Baig¹, J.A., Jamali M.K., Afridi, H.I., Jalbani N., **Sarfraz R.A.** Shah, A.Q., Kandhro, G. A., "Respiratory effects in people exposed to arsenic via the drinking water and tobacco smoking in southern part of Pakistan" **(2009)**, **Science of The Total Environment**, 407, pp. 5524-5530. **Impact Factor [2.905]**.

45. Baig, J.A., Kazi, T. G., Arain, M. B., Shah, A.Q. **Sarfraz, R.A.**, Afridi, H. I., Kandhro, G. A., Jamali, M. K., Khan, S. Arsenic Fractionation 1 in Sediments of Different Origins using BCR Sequential and Single Extraction Methods. **(2009) Journal of Hazardous Materials, 167**, pp. 745-751. **Impact Factor [4.144]**.
46. Afridi, H. I., Kazi, T. G., Kazi, N., Baig, J.A., Jamali, M. K., Arain, M. B., **Sarfraz, R.A.** Kandhro, G. A., Shah, A.Q. "Status of essential trace metals in biological samples of diabetic mother and their neonates". **(2009), Archives of Gynecology and Obstetrics, 280**, 415-423. **Impact Factor [0.912]**.
47. Kandhro, G. A., Kazi, T. G., Afridi, H. I., Kazi N., Arain, M. B., Baig, J.A., Shah, A.Q., **Sarfraz, R.A.**, Jamali, M. K., Syed N. "Effect of Zinc Supplementation on the Zinc level in Serum and Urine and their Relation to Thyroid Hormone Profile in Male and Female Goitrous Patients." **(2009) Clinical Nutrition, 28**, pp. 162-168. **Impact Factor [3.274]**.
48. Baig, J.A., Kazi, T. G., Arain, M. B., Afridi, H. I., Kandhro, G. A., **Sarfraz, R.A.**, Jamal, M. K., Shah, A.Q. "Evaluation of Arsenic and other Physico-chemical Parameters of Surface and Ground Water of Jamshoro, Pakistan". **(2009) Journal of Hazardous Materials, 166**, pp. 662-669. **Impact Factor [4.144]**.
49. Shah, A.Q., Kazi, T.G., Arain, M.B., Jamali, M.K., Afridi, H.I., Jalbani, N., kandhro, G.A., Baig, J.A., **sarfraz, R.A.**, ansari, R. "Comparison of electrothermal and hydride generation atomic absorption spectrometry for the determination of total arsenic in broiler chicken". **(2009) Food Chemistry, 113**, pp. 1351-1355. **Impact Factor [3.146]**.
50. Kazi, T.G., Arain, M.B., Jamali, M.K., Afridi, H.I., Jalbani N., **Sarfraz, R.A.** Baig, J.A. Shah, A.Q. "The correlation of arsenic levels in drinking water with the biological samples of skin disorders". **(2009), Science of The Total Environment, 407**, pp. 1019-1026. **Impact Factor [2.905]**.
51. Arain, M.B., Kazi, T.G., Jamali, M.K., Afridi, H.I., Baig1, J.A. Shah, A.Q., Jalbani N., **Sarfraz R.A.** "Determination of arsenic levels in lake water, sediment, and foodstuff from selected area of Sindh, Pakistan: estimation of daily dietary intake". **(2009) Food and Chemical Toxicology 47**, pp. 242-248. **Impact Factor [2.321]**.
52. Kazi, T.G., Arain, M.B., Jamali, M.K., Jalbani, N., Afridi, H.I., **Sarfraz, R.A.**, Baig, J.A., Shah, A.Q. "Assessment of water quality of polluted lake using multivariate statistical techniques: A case study". **(2009) Ecotoxicology and Environmental Safety, 72 (2)**, pp. 301-309. **Impact Factor [2.133]**.

53. Arain, M.B., Kazi, T.G., Jamali, M.K., Afridi, H.I., Jalbani, N., **Sarfraz R.A.**
 "Comparison of Different Extracting Approaches for Heavy Metal Partitioning in Sediment Samples". (2009) **Pedosphere**, **19**, pp. 01-11, **Impact Factor [1.103]**.
54. Kazi, T.G., Jalbani, N., Kazi, N., Arain, M.B., Jamali, M.K., Afridi, H.I., Kandhro, G.A., **Sarfraz, R.A.**, Shah, A.Q., Ansari, R. "Estimation of Toxic Metals in Scalp Hair Samples of Chronic Kidney Patients". (2009) **Biological Trace Element Research**, **127**, pp. 16-27. **Impact Factor[0.95]**.
55. Kazi, T.G., Jalbani, N., Arain, M.B., Jamali, M.K., Afridi, H.I., **Sarfraz, R.A.**, Shah, A.Q. "Toxic metals distribution in different components of Pakistani and imported cigarettes by electrothermal atomic absorption spectrometer". (2009) **Journal of Hazardous Materials**, **163**, pp. 302-307. **Impact Factor [4.144]**.
56. Kazi, T.G., Jamali, M.K., Arain, M.B., Afridi, H.I., Jalbani, N., **Sarfraz, R.A.**, Ansari, R. "Evaluation of an ultrasonic acid digestion procedure for total heavy metals determination in environmental and biological samples". (2009) **Journal of Hazardous Materials**, **161(2-3)**, pp. 1391-1398. **Impact Factor [4.144]**.
57. Kandhro, G.A., Kazi, T.G., Afridi, H.I., Kazi, N., Arain, M.B., **Sarfraz, R.A.**, Sirajuddin, Syed, N., Baig, J.A., Shah, A.Q. "Evaluation of Iron in Serum and Urine and their Relation with Thyroid Function in Female Goitrous Patients". (2008) **Biological Trace Element Research**, **125**, pp. 203-212. **Impact Factor[0.95]**.
58. **Sarfraz, R. A.**, Kazi, T. G. Iqbal, S., Afridi, H. I., Jamali, M. K., Jalbani, N. and Arain, M.B. "Synthesis and X-Ray Structural Studies of Half Sandwich Amino Acids Complexes of Osmium(II)". (2008) **Turkish Journal of Chemistry**, **32**, pp. 237 – 247. **Impact Factor [0.727]**.
59. Arain, M.B., Kazi, T.G., Jamali, M.K., Afridi, H.I., Jalbani, N., **Sarfraz, R.A.**, Baig, J.A., Kandhro, G.A., Memon, M.A. "Time saving modified BCR sequential extraction procedure for the fraction of Cd, Cr, Cu, Ni, Pb and Zn in sediment samples of polluted lake". (2008) **Journal of Hazardous Materials**, **160 (1)**, pp. 235-239. **Impact Factor [4.144]**.
60. **Sarfraz, R. A.**, Kazi, T. G. Iqbal, S., Afridi, H. I., Jamali, M. K., Jalbani, N. and Arain, M.B. "Synthesis, Structure Determination and Chemoselective Catalytic Studies of Amino Acids Complexes of Osmium(II)". (2008) **Applied Organometallic Chemistry**, **22**, pp. 187–192. **Impact Factor [1.567]**.

61. Arain, M.B., Kazi, T.G., Jamali, M.K., Jalbani, N., Afridi, H.I., Kandhro, G.A., Ansari, R., **Sarfraz, R.A.** "Hazardous impact of toxic metals on tobacco leaves grown in contaminated soil by ultrasonic assisted pseudo-digestion: Multivariate study". **(2008) Journal of Hazardous Materials, 155 (1-2)**, pp. 216-224. **Impact Factor [4.144]**.
62. Arain, M.B., Kazi, T.G., Jamali, M.K., Afridi, H.I., Baig, J.A. Jalbani N., Shah, A.Q., **Sarfraz R.A.** "Evaluation of physico- chemical parameters of Manchar Lake water and their comparison with other global published values". **(2008) Pakistan Journal of Analytical & Environmental Chemistry. 9(2)** pp. 101-109.
63. Jamali, M.K., Kazi, T.G., Arain, M.B., Afridi, H.I., Jalbani, N., **Sarfraz, R.A.**, Baig, J.A. "A multivariate study: Variation in uptake of trace and toxic elements by various varieties of Sorghum bicolor L". **(2008) Journal of Hazardous Materials, 158 (2-3)**, pp. 644-651. **Impact Factor [4.144]**.
64. Afridi, H.I., Kazi, T.G., Kazi, N., Jamali, M.K., Arain, M.B., Jalbani, N., **Sarfraz, R.A.**, Shah, A., Kandhro, G.A., Shah, A.Q., Baig, J.A. "Potassium, Calcium, Magnesium, and Sodium Levels in Biological Samples of Hypertensive and Nonhypertensive Diabetes Mellitus Patients". **(2008) Biological Trace Element Research, 124**, pp. 206-224. **Impact Factor[0.95]**.
65. Afridi, H.I., Kazi, T.G., Kazi, N., Jamali, M.K., Arain, M.B., Jalbani, N., Baig, J.A., **Sarfraz, R.A.** "Evaluation of status of toxic metals in biological samples of diabetes mellitus patients". **(2008) Diabetes Research and Clinical Practice, 80 (2)**, pp. 280-288. **Impact Factor [2.1601.888]**.
66. Kazi, T.G., Afridi, H.I., Kazi, N., Jamali, M.K., Arain, M.B., **Sarfraz, R.A.**, Jalbani, N., Ansari, R., Shah, A.Q., Memon, A.-u.- R., Khandhro, G.A. "Distribution of zinc, copper and iron in biological samples of Pakistani myocardial infarction (1st, 2nd and 3rd heart attack) patients and controls". **(2008) Clinica Chimica Acta, 389 (1-2)**, pp. 114-119. **Impact Factor [2.535]**.
67. Kazi, T.G., Memon, A.R., Afridi, H.I., Jamali, M.K., Arain, M.B., Jalbani, N., **Sarfraz, R.A.** "Determination of cadmium in whole blood and scalp hair samples of Pakistani male lung cancer patients by electrothermal atomic absorption spectrometer". **(2008) Science of the Total Environment, 389 (2-3)**, pp. 270-276. **Impact Factor [2.905]**.
68. Iqbal S., Kazi, T.G., Bhanger M.I., Akhtar M., **Sarfraz, R.A.** "Determination of selenium content in selected Pakistani foods". **(2008) International Journal of Food Science and Technology, 43 (2)**, pp. 339-345. **Impact Factor [1.172]**.

69. Arain, M.B., Kazi, T.G., Jamali, M.K., Jalbani, N., Afridi, H.I., **Sarfraz, R.A.**, Shah, A.Q. "Determination of toxic elements in muscle tissues of five fish species using ultrasound-assisted pseudodigestion by electrothermal atomic absorption spectrophotometry: Optimization study". **(2007) Spectroscopy Letters**, , **40 (6)**, pp. 861-878. **Impact Factor [0.585866]**.
70. Afridi, H.I., Kazi, T.G., Jamali, M.K., Kazi, G.H., Arain, M.B., Jalbani, N., Shar, G.Q., **Sarfraz, R.A.** "Evaluation of toxic metals in biological samples (scalp hair, blood and urine) of steel mill workers by electrothermal atomic absorption spectrometry". **(2006) Toxicology and Industrial Health**, **22 (9)**, pp. 381-393. **Impact Factor [0.913]**.
71. Jamali, M.K., Kazi, T.G., Arain, M.B., Afridi, H.I., Jalbani, N., **Adil, R.S.** "The correlation of total and extractable heavy metals from soil and domestic sewage sludge and their transfer to maize (*Zea mays* L.) plants". **(2006) Toxicological and Environmental Chemistry**, **88 (4)**, pp. 619-632. **Impact Factor [2.565]**.
72. Jalbani, N., Kazi, T.G., Arain, B.M., Jamali, M.K., Afridi, H.I., **Sarfraz, R.A.** "Application of factorial design in optimization of ultrasonic-assisted extraction of aluminum in juices and soft drinks". **(2006) Talanta**, **70 (2)**, pp. 307-314. **Impact Factor [3.29]**.
73. Kazi, T.G., Afridi, H.I., Jamali, M.K., Kazi, G.H., Arain, M.B., Jalbani, N., **Sarfraz, R.A.**, Shar, G.Q. "Effect of ultrasound agitation on the release of heavy elements in certified reference material of human hair (CRM BCR 397)". **(2006) Journal of AOAC International**, **89 (5)**, pp. 1410-1416. **Impact Factor [1.122]**.

Conferences/Symposia Attended

1. As **Invited Speaker** for talk in two days National Symposium on "Chemistry an Emphathetic Scientific Pillar in Multidisciplinary Research : Recent Trends and Advancements" on December 3rd to 4th, 2019 Organized by Department of Chemistry, University of Gujrat, Gujrat, **Pakistan** .

2. As **Invited Speaker** for talk on in Conference "EsAn 2012 Chemistry Conference" on June 27-230, 2012 Organized by Department of Chemistry, Karadeniz Technical University, Trabzon, **Turkey**.
3. 10th International and 22nd National Chemistry Conference, 21-23 Nov., 2011 at Department of Chemistry & Biochemistry, University of Agriculture, Faisalabad, **Pakistan**.
4. Workshop on Vacuum Technology, October 3-4, 2011 at Department of Physics, University of Agriculture, Faisalabad, **Pakistan**.
5. 2nd Pak-Turk Seminar on Chemical Sciences, Organized by National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro on Feb 11 - 13, 2010 at Indus Hotel, Hyderabad, **Pakistan**.
6. **8th International and 20th National Chemistry Conference** (Feb. 15-17, 2010) at Department of Chemistry, Quaid-i-Azam University, Islamabad, **Pakistan**.
7. Recent Advances in Food Analysis on Feb 7, 2009, Organized by National Institute of Food Science and Technology, University of Agriculture, Faisalabad, **Pakistan**
8. International Workshop on Environmental Electroanalytical Techniques on January 19-21, 2009, Organized by National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro, **Pakistan**.
9. 18th National Chemistry Conference, **Organized by** Chemical Society of Pakistan on Feb. 25-27, 2008 at Institute of Chemistry, University of the Punjab, Lahore.
10. 2nd International Seminar on Analytical Sciences, on September 6-8, 2007 Organized by National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro, **Pakistan**.
11. 9th International Symposium on Analytical and Environmental Chemistry, on July 24-26, 2006 Organized by National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro & Institute of Chemical Sciences, University of Peshawar, Peshawar, **Pakistan**.
12. 8th Symposium on Analytical and Environmental Chemistry, February 7-8, 2005, NCEAC, University of Sindh Jamshoro, **Pakistan**.
13. 5th International and 15th National Chemistry Conference, on Nov 24-7, 2004, Organized by Chemical Society of Pakistan at Department of Chemistry, Quaid-e-Azam University Islamabad, **Pakistan**.
14. 4th International & 14th National Chemistry Conference, on May 16-18, 2004, Organized by Chemical Society of Pakistan at PCSIR Labs. Complex, Lahore-**Pakistan**.
15. Pakistan-Bangladesh-Iran International Seminar on Analytical Sciences, Dec. 8-9, 2003, NCEAC, University of Sindh, Jamshoro, **Pakistan**.
16. 7th National Symposium on Analytical and Environmental Chemistry, March 4th -5th, 2003, NCEAC, University of Sindh, Jamshoro, **Pakistan**.
17. 3rd International & 13th National Chemistry Conference, Dec. 28-31, 2002, University of Karachi, Karachi, **Pakistan**.

Trainings

1. Training on **“GHG Emissions in Rice Systems: Mechanisms and Measurement Standards”** conducted by IRRI HQ, Los Banos, **Philippines** November, 25-30, 2024 and sponsored by **Asian Development Bank (ADB)**.
2. **“ISO-9001:2015 Lead Auditor Training”** by Resource Inspections Canada Incorporated (**RICI**) w.e.f. September 15-19, 2019 held at Maisonette Hotel, Ghalib Road, Lahore. Pakistan.
3. **Community Based Prevention, Detection and Response to All-Hazards Training Program**, August 15-18, 2016, Kuala Lumpur, **Malaysia**.
4. **Indigenous on Campus Training Program**, May, 5-12th, 2015, organized by Office of Research Innovation and Commercialization, University of Agriculture, Faisalabad, **Pakistan**
5. As Invited Speaker for talk on in **“Imparting Practical Training in Molecular and Biochemical Techniques”** on June 6, 2011 at New Senate Hall organized by the Department of Chemistry and Biochemistry, University of Agriculture, Faisalabad, **Pakistan**
6. Organized **One Week Hands on Training on Hi-Tech Equipment (SEM, AAS, GC, HPLC, DLC)** during the years; 2015, 2016, 2017, 2018, 2022 and 2023.at Central Hi-Tech Lab, University of Agriculture, Faisalabad, **Pakistan**.