Laraib Kiran

Ph.D
Department of Chemistry
Quaid-i-Azam University (QAU),
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Academic Qualification

- **Ph.D in chemistry**
  Department of Chemistry, Quaid-I-Azam University, Islamabad, Pakistan
  Project: Development of Carbon Nanomaterials/Transition Metal Oxides based Hybrid Composites as High- Performance Anode Materials for Lithium-Ion Batteries
- **M.Phil in physical chemistry (2016-2018)**
  Department of chemistry, Govt. College University, Faisalabad, Pakistan
  Thesis: Computational approach towards energetics and mechanism of chloroacetyl chloride with 4-methoxy aniline
- **BS (Hons) Chemistry (2012-2016)**
  Department of Physical Chemistry, Govt. College University, Faisalabad, Pakistan
- **FSC pre-Medical (2010-2012)**
  Punjab College for Women, Faisalabad Pakistan
  Subjects: Physics, Chemistry, Biology

Professional Experiences

- Visiting Lecturer at Quaid-i-Azam, university Islamabad (September 2023-To date)
- Lecturer at Baba Guru Nanak University
- Coordinator of Director of students affairs
- Member of board of studies at BGNU
- 01 Year - YTB Turkey Burslari Scholarship 2021
- 01-year teaching experience at GCUF
- Prime Minister Youth Training Scheme Phase-I (July-2017 to June 2018)
- 2 year educators experience at BPS-14

Research Skills and Experience

Over 3 years' experience of working in various synthesis and characterization labs of national and international institutes. The firsthand research expertise includes;

- Synthesis of Transition metals oxides, phosphides, and sulfides using Wet Chemical Techniques (Chemical Precipitation, Hydrothermal)
- Coin cells Fabrication and Testing
- Cyclic Voltammetry, EIS, GCD measurement using EC-Lab program
- ORR, OER and HER studies of electro catalyst.
- Reproducible synthesis of graphene oxide using Modified Hummer's Method and Mxenes synthesis.

Computer Skills and Expertise

- Microsoft Office, OriginLab, Endnote, X'pert Highscore, Casa XPS, Guassian, Hyperchem, Chemdraw, instrument, Origin, Veda4, Avogadro, Moltran, Maud, Pearson crystal, EC-Lab

Honors & Awards

- YTB Turkey burslari Scholarship 2021
- Awarded Laptop by PMYTS
- HEC IRSIP scholarship

Workshop and Trainings

- English Spoken Course (Agriculture university Faisalabad)
- Prime Minister Youth Training Scheme Phase-I (July-2017 to June 2018)

Conferences and Schools

- CHEMCON 23 QAU ISLAMABAD, 21 International, 1st Inter islamic , 33rd National chemistry Conference
- Certificate of appreciation as oral presenter in the 1st international conference on applied sciences and technology (ICAST-2024)
- Certificate of participation for attending one day workshop on Programmer review for effectiveness and enhancement (pree)
- Certificate of Participation on APS Satellite march meeting jointly organized by Amrican Physical Society (APS),USA , National center for physics, March 6 2024
- Certificate of participation for interntional school on physics and allied disciplines jointly organized by National center for physics and the Abdus salam international center for theoretical physics ,Trieste ,Italy March 4-8 2024
- Poster presentation at National center for physics , Islamabad ,Pakistan march 7,2024
- Certificate of Participation in the Third International Chemistry Conference on "Recent Trends in Chemistry" held in AIOU, Islamabad (November 2017)
- Attended "One day symposium on Chemical Approach to cope with Environmental hazards" on November 20, 2014. Organized by Department of Chemistry, Government college women university, Faisalabad.
- Certificate of Participation on international workshop on progress in nanomaterials and technology (IWPNT-2021) organized by NCP, Islamabad Pakistan.
- Membership in Pakistan membrane society 2020.
- Contribution in writing inorganic laboratory practical notebook during PMYTS internship.

List of Publications Total impact factor =45.583

Sr. No	Paper title	Impact factor
1	Kiran, L., Aydınol, M. K., Ahmad, A., Shah, S. S., Bahtiyar, D., Shahzad, M. I., ... & Bahajjaj, A. A. A. (2023). Flowers Like α-MoO3/CNTs/PANI Nanocomposites as Anode Materials for High-Performance Lithium Storage. Molecules, 28(8), 3319.	**4.927**
2	Rehman, A., Nisa, M. U., Usman, M., Ahmad, Z., Bokhari, T. H., Rahman, H. M. A. U., ... & Kiran, L. (2021). Application of cationic-nonionic surfactant based nanostructured dye carriers: Mixed micellar solubilization. *Journal of Molecular Liquids*, *326*, 115345.	**6.63**

3	Kiran, L., Aydınol, M. K., Shah, S. S., Anwar, A., Abbas, S. M., Bahtiyar, D., ... & Shahzad, M. I. (2023). Mesoporous Cr2O3/MWCNTs/PANI nanocomposite as a high performance anode material for rechargeable lithium ion batteries. *Fuel*, *352*, 128961.	**8.035**
4	Bibi, S., Shah, S. S., Muhammad, F., Siddiq, M., Kiran, L., Aldossari, S. A., ... & Sarwar, S. (2023). Cu-doped mesoporous TiO2 photocatalyst for efficient degradation of organic dye via visible light photocatalysis. *Chemosphere*, *339*, 139583.	**8.943**
5	Ahmad, M. I., Bahtiyar, D., Khan, H. W., Shah, M. U. H., Kiran, L., Aydinol, M. K., ... & Rezania, S. (2023). Ionic liquids-assisted electrolytes in aqueous zinc ion batteries. *Journal of Energy Storage*, *72*, 108765.	**8.907**
6	Sumreen, P., Mukhtar, M., Khalid, M. A., Mubeen, M., Kiran, L., Iqbal, A., & Iqbal, A. (2024). Photo-Driven Electron Transfer from FAPbBr3 Perovskites Nanocrystals to the Photodeactivatable 4-(phenylazo) Benzoic Acid. *New Journal of Chemistry*.	**3.591**
7	L kiran , et al .A Mini Review on Progress of Nanostructured Anode Materials for Sodium Ion Battery. (2024). Proress in petrochemical science.	**3.994**
8	Abid, A., Nazeer, S., Kiran, L., Raza, S., Ahmad, I., Masood, H. T., ... & Choi, D. (2024). Synthesis, characterization, thermal stability, and application of microporous hyper cross-linked polyphosphazenes with naphthylamine group for CO2 uptake. Nanotechnology Reviews, 13(1), 20230197.	**6.1**
9	Karamat, S., Marawat, F., Batool, U., Talha, M., Iftikhar, F. J., Aydinol, M. K., ... & Kiran, L. (2024). Synergetic electrochemical behavior of magnesium-doped ZnO nanorods with reduced graphene oxide. Journal of Electroanalytical Chemistry, 967, 118434.	**4.1**
10	A review on the recent progress of two-dimensional (2D) MXenes and graphene based anode materials for advanced sodium-ion batteries	**Under review**
11	Farooq, K., Murtaza, M., Kiran, L., Farooq, K., Shah, W. A., & Waseem, A. (2025). Construction of an MXene/MIL Fe-53/ZIF-67 derived bifunctional electrocatalyst for efficient overall water splitting. Nanoscale Advances.	**4.8**
12	Haleem, A., Ullah, M., Kiran, L., Fan, W., Pan, J., & Li, H. (2025). Recent advancements and assessments in MXene-based composites stability for efficient solar-heating water evaporation: A systematic and comprehensive review. Green Carbon	**-------**

References

- **Dr. M. Imran Shahzad**

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- **Prof. Dr. Syed Sakhawat Shah**

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