

Usman Latif, PhD

Doctorate

Analytical Chemistry

Education

PhD, Institute of Analytical Chemistry, University of Vienna, Austria, 2008-2011

MSc, Applied Chemistry, Department of Chemistry, University of Engineering and Technology, Pakistan, 2002-2004

BSc, University of the Punjab, Pakistan, 1998-2001

Experience

Professor (Tenured), COMSATS University Islamabad, Pakistan, 2026-Continued

Associate Professor (Tenured), COMSATS University Islamabad, Pakistan, 2022-2026

Assistant Professor (Tenured), COMSATS University Islamabad, Pakistan, 2011-2022

Assistant Professor, King Saud University, Kingdom of Saudi Arabia, 2013-2015

PostDoc Fellow, University of Vienna, Austria, 2011

PhD Fellow, University of Vienna, Austria, 2008-2011

Lecturer, Punjab College of Science, Pakistan, 2004-2007

Research Interests

- Chemical Sensors
- Biosensors
- Electrochemical Sensors
- Mass Sensitive Sensors
- Point-of-Care Diagnostics

Last 5 Publications

Tariq, A., Alanazi, S. J. F., Nawaz, M. H., Latif, U., Andreescu, S., & Hayat, A. (2025). Engineering high-affinity and selective molecular recognition redox active imprinted platform on carbon cloth for electrochemical sensing of aflatoxin B1 in milk samples. *Food Chemistry*, 497, 147076. <https://doi.org/https://doi.org/10.1016/j.foodchem.2025.147076>

Din, M. M., Hayat, A., Khan, S. I., Khan, P., Gilani, M. A., Mujahid, A.,...Afzal, A. (2026). Electrochemically patterned biomimetic polypyrrole integrating ZnO·CuO nanoleaves for picomolar acetylcholine detection in cancer and neurological disorders. *Sensors & Diagnostics*, 5(1), 42-55. <https://doi.org/10.1039/d5sd00169b>

Latif, U., Yaqub, S., & Dickert, F. L. (2024). Sensitive Coatings Based on Molecular-Imprinted Polymers for Triazine Pesticides' Detection. *Sensors*, 24(18), 5934. <https://doi.org/10.3390/s24185934>

Tariq, A., Arif, A., Akram, M., Latif, U., Nawaz, M. H., Andreescu, S.,...Hayat, A. (2024). Tailoring molecular recognition in predesigned multifunctional enzyme mimicking porphyrin imprinted interface for high affinity and differential selectivity; sensing etoposide in lung cancer patients. *Biosensors and Bioelectronics*, 245, 115833.

<https://doi.org/https://doi.org/10.1016/j.bios.2023.115833>

Latif, U., Seifner, A., & Dickert, F. L. (2023). Selective Detection of Erythrocytes with QCMs—ABO Blood Group Typing. *Sensors*, 23(17), 7533. <https://doi.org/10.3390/s23177533>

Patents

Latif, U., Din, M. M. (Inventors). (2024, September 03). Electrochemically patterned polypyrrole embedded with ZnO.CuO nano-leaves for highly sensitive direct detection of neurotransmitter – acetylcholine. IPO Pakistan (Filed).

Memberships

Chemical Society of Pakistan, 2012 - Present

Awards

HEC Overseas Scholarships for MS/MPhil Leading to PhD, 2008-2011

COMSATS Research Productivity Award, 2012-2015

Ernst Mach Fellowship, OeAD Austria, 2025