

Dr Sadia Mehmood

Assistant Professor/ Chemical and Energy Engineering

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Google Scholar Profile Link : <https://scholar.google.com/citations?user=ZLcj07kAAAAJ&hl=en&oi=ao>

Biography

Dr. Sadia Mehmood is a passionate academician and researcher with international collaborations in Canada, Australia and Oman. Her research journey in the realm of nanotechnology-driven sustainable solutions is underpinned by an unwavering commitment to resources restoration and remediation. Her aim is to forge innovative and sustainable solutions that adeptly confront the burgeoning global challenges, concurrently advancing our understanding of nanomaterials and their myriad applications in environmental contexts. Through robust collaboration, educational initiatives, and an unceasing quest for discovery, she aspires to exert a meaningful and lasting impact on the preservation and rejuvenation of pristine natural resources for the benefit of current and future generations.

Dr Mehmood actively collaborates with experts hailing from diverse fields, including environmental science, materials science, chemistry, and engineering. Her commitment extends not only to the development and implementation of cutting-edge nanotechnology solutions for the efficient removal and remediation of pollutants but also to their transformation into valuable products, thereby contributing significantly to environmental sustainability and public health.

Education (Last Two Academic Details)

- **Ph-D Chemistry:**
- Quaid-i-Azam University, Islamabad/University of Alberta, Edmonton, Canada
- 2016
- **M-Phil Physical Chemistry**
- Quaid-i-Azam University, Islamabad
- 2010

Experience

1: Teaching Experience:

Assistant Professor (Jan 2020- to date)

Quaid-i-Azam University, Islamabad, Pakistan

Assistant Professor (May-2016- Jan 2020)

- To develop courses regarding Sustainable Development, SDGs, Climate Change, Adaptation and Mitigation,
- Teaching courses and Research.
- Scientific research work (publishing papers and fund raising).
- International Cooperation/Collaboration.
- Federal Urdu University of Arts Science and Technology, Islamabad

Lecturer (Feb-2010- August-2015)

- Teaching to undergraduate and master's degree students.

- Supervision of research students (B.S and Master students)
- Submission of research proposals and concept papers and fund raising

2: Research Supervision Experience:

- 1. MS Thesis supervision, 2. BE, Final Year Project.
- Career Fest Beat Project Award, 2024 for BE , Final Year Project.

Projects & Awards

- Consultant for NED, University in Project Title: Development of Phase change material (PCM) from plant waste
- Manufacturing of Polyethylene reinforced Polypropylene Bags as Packaging of Pink Salt, funded by PMDC.

Patent & Publications

8 International Publications in ISI indexed journals, impact factor of 23, citations 83, h-index 5:

- **Innovative Solutions for Palm Oil Mill Effluent Treatment: A Membrane Technology Perspective:** Journal: ACS ES&T Water, 2024: Khan, Imran Ullah; Othman, Mohd Hafiz Dzarfan; A Rahman, Mukhlis; Iftikhar, Musawira; Jilani, Asim; Rizwan, Muhammad; Shakoor, Muhammad Bilal; Yong, Jean; Mehmood, Sadia.
- **Piezoelectric materials: Advanced applications in electro-chemical processes.** Energy Reports, Volume 6 (2023): Hamna Shaukat, Ahsan Ali, Saira Bibi, Sadia Mehmood, Wael A. Altabey, Mohammad Noori, Sallam A. Kouritem.
- **Cost effective synthesis approach for green food packaging coating by gallic acid conjugated gold nanoparticles from Caesalpinia pulcherrima extract.** Results in Chemistry, Volume 4 (2022): (6) Sadia Mehmood, Naveed Kausar Janjua, Saira Tabassum, Shaheen Faizi, Hicham Fenniri
- **Electrochemical investigations of DNA-Intercalation potency of bisnitrophenoxy compounds with different alkyl chain lengths.** Heliyon, Volume 6 (2020): (5) Maria Shakeel, Tehmeena Maryum Butt, Maria Zubair, Humaira Masood Siddiqi, Naveed Kausar Janjua, Zareen Akhtar, Azra Yaqub, Sadia Mahmood.
- **Synthesis, characterization, docking and electrochemical studies of nitroaromatic amides.** Journal of Molecular Structure, Volume 1176 (2019): (4) Asifa Nigar, Muhammad Shabbir, Zareen Akhtar, Sana Sabahat, M.Qaiser Fatimi, Micheal Bolte, Iqbal Ahmad, Naveed Kausar Janjua.
- **Ferrocene derivatives: Potential anticancer material.** Journal of Chemical Society of Pakistan, Volume 40 (2018): Asifa Nigar, Naveed Kausar Janjua, Askari Gul, Zareen Akhtar, Sana Sabahat, Sadia Mehmood.
- **Electrochemical Properties of Barium Cerate Doped with Zinc for Methanol Oxidation,** Journal of Chemical Society of Pakistan, 37 (2015): (2) Naveed Kausar Janjua, Mahwish Jabeen, Mehrosh Islam, Azra Yaqub, Sana Sabahat, Sadia Mehmood, Misbah Mumtaz, Ayesha Mujtaba, Rizwan Raza, Ghazanfer Abbas.
- **AuCu@Pt Nanoalloys for Catalytic Application in Reduction of 4-Nitrophenol,** Journal of Spectroscopy, Volume 2016 (2016): (1) Sadia Mehmood, Farhat Saira, Naveed Kausar Janjua and Hicham Fenniri.