

Misbah Naz

Assistant professor of chemistry

Address: University of Education, Division of Science and Technology,
Township, Lahore Pakistan.

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Research Interests:

Catalysis, Biomedical Engineering, Biomaterials and Nanotechnology (Bio-Interfaces/Drug Delivery)
Nanomedicines, Material Sciences, Medicinal Chemistry, Green /organic synthesis,

Research Experience:

2016 Visiting Research Fellow (02/2016-08/2016)

College of Engineering and Computer Science, Nanotechnology Research Laboratory, Research School of
Engineering ANU (Australian National University) (with Group Leader [Antonio Tricoli](#))

Proficient in, UV-Visible Spectrophotometer, XRD, FTIR, SEM, TEM, AFM, Spin coater. TGA, BET, Field Emission
Scanning Electron Microscope (FESEM),

Employment History

❖ **University of Education, Lahore Pakistan**

2021-12-6 to present | Assistant Professor (Division of science and technology)

Education

2012-2018 **Ph.D.** - Chemistry Government College Lahore University Pakistan

2009-2011 **MS-** Pharmaceutical Chemistry, Government College LahoUniversity Pakistan

2006-2008 **MSc-** Industrial Chemistry, Government College University, Lahore, Pakistan

2004-2006 **BSc-**Chemistry, Government College University, Lahore, Pakistan

Details of Funding

2012-2016

Indigenous 5000 PhD fellowship program by Higher Education Commission Pakistan 2016

International Research Support Initiative Program (IRSIP), Higher Education Commission of Pakistan with
collaboration of Australian National University (ANU). Visiting research scholar at the *Australian National University*
/ ANU, Research School of Engineering Canberra.

Conferences

- Workshop on Nanoscience & Nanotechnology, Nano-chemistry Lab., GC University Lahore 27 Aug. 2015
- 1st international conference on forensic science and justice 22-24 Oct. 2014
- International chemistry conference on Recent advances in chemistry 2-3 Nov.2007.
- 1st International Conference on Trends & Research in Chemistry (TRIC-2022) Department of Chemistry,
Division of Science and Technology, University of Education, Lahore 18-19 Jan. 2022
- 9. International Istanbul Scientific Research Congress 14-15 May 2022
- 8th International Mardin Artuklu Scientific Researches Conference 4-6 June 2022
- 2. International Mediterranean Scientific Research And Innovation Congress 30-31 July 2022

- IV international turkic world congress on science and engineering 23-24 June 2022

Full List of Publications

2022

1. Muhammad Ikram, Ayesha Khalid , Anum Shahzadi, Ali Haider, Sadia Naz, **Misbah Naz**, Iram Shahzadi, Anwar Ul-Hamid, Junaid Haider, Walid Nabgan, Alvina Rafiq Butt. Enhanced Photocatalytic Degradation with Sustainable CaO Nanorods Doped with Ce and Cellulose Nanocrystals: In Silico Molecular Docking Studies. *ACS Omega* 2022, 7, 31, 27503–27515. <https://doi.org/10.1021/acsomega.2c02732>
2. Muhammad Ikram, Rabiya Asghar, Muhammad Imran, **Misbah Naz**, Ali Haider, Anwar Ul-Hamid, Junaid Haider, Anum Shahzadi, Walid Nabgan, Souraya Goumri-Said, Mohammed Benali Kanoun, and Alvina Rafiq Butt. Experimental and Computational Study of Zr and CNC-Doped MnO₂ Nanorods for Photocatalytic and Antibacterial Activit. *ACS Omega* 2022 7 (16), 14045-14056. DOI: [10.1021/acsomega.2c00583](https://doi.org/10.1021/acsomega.2c00583)
3. Muhammad Bilal, Muhammad Ikram,* Tahira Shujah, Ali Haider, Sadia Naz, Anwar Ul-Hamid, **Misbah Naz**, Junaid Haider, Iram Shahzadi, and Walid Nabgan. Chitosan-Grafted Polyacrylic Acid-Doped Copper Oxide Nanoflakes Used as a Potential Dye Degradation and Antibacterial Agent: In Silico Molecular Docking Analysis <https://doi.org/10.1021/acsomega.2c04650>
4. Ikram, Muhammad, Farzana Jamal, Ali Haider, Sobia Dilpazir, Tahira Shujah, **Misbah Naz**, Muhammad Imran et al. "Efficient Photocatalytic Dye Degradation and Bacterial Inactivation by Graphitic Carbon Nitride and Starch-Doped Magnesium Hydroxide Nanostructures." *ACS Omega* (2022).
5. Ikram, Muhammad, Huma Shahid, Junaid Haider, Ali Haider, Sadia Naz, Anwar Ul-Hamid, Iram Shahzadi, **Misbah Naz**, Walid Nabgan, and Salamat Ali. "Nb/Starch-Doped ZnO Nanostructures for Polluted Water Treatment and Antimicrobial Applications: Molecular Docking Analysis." *ACS Omega* (2022).
6. Muhammad Ikram, Izan Hafeez, **Misbah Naz**, Ali Haider, Sadia Naz, Anwar Ul-Hamid, Junaid Haider, Anum Shahzadi, Muhammad Imran, Walid Nabgan, and Salamat Ali. Highly Efficient Industrial Dye Degradation, Bactericidal Properties, and In Silico Molecular Docking Analysis of Ag/Cellulose-Doped CuO Nanostructures. *ACS Omega* 2022 7 (20), 17043-17054. DOI: [10.1021/acsomega.2c00240](https://doi.org/10.1021/acsomega.2c00240)

2021

7. Perveen R, Shujat S, **Naz M**, Qureshi Z, Nawaz S, Shahzad K, Ikram M. Green synthesis of antimicrobial silver nanoparticles with Brassicaceae seeds. *Mater.Res.Express* 8 (2021) 055007 IF: 1.929
8. Muhammad Ikram, Ali Raza, Shahnaila Altaf, **Misbah Naz**, Sarfraz Ali, Ossama Syed, Junaid Haider, "High Temperature Superconductors", IntechOpen, Book Title: Transition Metals. ISBN: 978-1-839680496, Feb. 10 th 2021. IF: 0.01
9. **Misbah Naz**, Asma Rafiq, Muhammad Ikram, Ali Haider, Syed Ossama Ali Ahmad, Junaid Haider. Elimination of Dyes by Catalytic Reduction in the absence of light: A Review. Accepted in *Journal of Materials Science (JMASC- D-21-01304R2)*

2020

10. M. Aqeel, M. Ikram, A. Asghar, A. Haider, A. Ul-Hamid, **M. Naz**, M. Imran, S. Ali. Synthesis of capped Cr-doped ZnS nanoparticles with improved bactericidal and catalytic properties to treat polluted water, *Applied Nanoscience* 10, 2045–2055 (2020). IF: 2.88

11. S. Altaf, H. Ajaz, M. Imran, A. Ul-Hamid, **M. Naz**, M. Aqeel, A. Shahzadi, A. Shahbaz, M. Ikram. Synthesis and characterization of binary selenides of transition metals to investigate its photocatalytic, antimicrobial and anticancer efficacy. 10, 2113–2127 *Applied Nanoscience* (2020). IF: 2.88
12. S. Altaf, A. Haider, S. Naz, A. Ul-Hamid, J. Haider, M. Imran, A. Shahzadi, **M. Naz**, H. Ajaz and M. Ikram, Comparative Study of Selenides and Tellurides of Transition Metals (Nb and Ta) with Respect to its Catalytic, Antimicrobial, and Molecular Docking Performance, *Nanoscale Research Letters* (2020) 15:144 IF:3.581
13. Yaqub, Atif, Naila Malkani, Arifa Shabbir, Sarwar Allah Ditta, Fouzia Tanvir, Shaista Ali, **Misbah Naz**, Syed Akif Raza Kazmi, and Rehan Ullah. "Novel Biosynthesis of Copper Nanoparticles Using Zingiber and Allium sp. with Synergic Effect of Doxycycline for Anticancer and Bactericidal Activity." *Current Microbiology* 77, 2287–2299 (2020):1-13. IF:1.610
14. Yaqub, Atif, Sharafat Ali, Sarwar Allah Ditta, Fouzia Tanvir, Shaista Ali, and **Misbah Naz**. "Enhanced bactericidal activity of Azithromycin-coated silver nanoprisms in comparison to their spherical-shaped counterparts." *Micro & Nano Letters* 15, 834-839 (2020). IF: 0.975.
15. Altaf, S., H. Ijaz, J. Haider, **M. Naz**, M. Aqeel, A. Ul-Hamid, M. Ikram, S. Zulfiqar, S. A. Ditta, and A. Shahbaz. "Influence of various transition metals incorporated into tellurium used as antimicrobial agent and textile dye degrader." *Applied Nanoscience* 10, 4241–4254 (2020): 1-14.
16. M. Ali, S. Sharif, S. Anjum, M. Imran, M. Ikram, **M. Naz** and S. Ali. Preparation of Co and Ni doped ZnO nanoparticles served as encouraging nano-catalytic application *Mater. Res. Express* 6 (2020) 1250d5 DOI:[10.1088/20531591/ab6383](https://doi.org/10.1088/20531591/ab6383)
17. A. Haider, M. Ijaz, M. Imran, **M. Naz**, H. Majeed, J. A. Khan, M. M. Ali, M. Ikram Enhanced bactericidal action and dye degradation of spicy roots' extract-incorporated fine-tuned metal oxide nanoparticles *Applied Nanoscience*, 10, 1095–1104 (2020). IF: 3.198 DOI: [10.1007/s13204-019-01188-x](https://doi.org/10.1007/s13204-019-01188-x)

2019

18. M. Junaid · M. Imran · M. Ikram · **M. Naz** · M. Aqeel · H. Afzal · H. Majeed · S. Ali, The study of Fe-doped CdS nanoparticle-assisted photocatalytic degradation of organic dye in wastewater *Applied Nanoscience*, 9, 1593–1602 (2019). IF: 3.198 DOI: [10.1007/s13204-018-0933-3](https://doi.org/10.1007/s13204-018-0933-3)
19. A. Wahab, M. Imran, M. Ikram, **M. Naz**, M. Aqeel, A. Rafiq, H. Majeed, S. Ali, Dye degradation property of cobalt and manganese doped iron oxide nanoparticles *Applied Nanoscience* 9, 1823–1832 (2019). IF: 3.198 DOI: [10.1007/s13204-019-00970-1](https://doi.org/10.1007/s13204-019-00970-1)
20. A Rafiq, M Imran, M Ikram, **M Naz**, M Aqeel, H Majeed, S G Hussain and S Ali, Photocatalytic and catalytic degradation of organic dye by uncapped and capped ZnS quantum dots *Mater. Res. Express* 6 055801 (2019). IF: 1.449 DOI: [10.1088/2053-1591/aaff8e](https://doi.org/10.1088/2053-1591/aaff8e)
21. Fouzia Tanvir, Atif Yaqub, Sarwar Allah Ditta, **Misbah Naz**, Khalid Mahmood Anjum, and Muhammad Zubair Yousaf Mosquito Larvicidal and Catalytic Activity of Spherical-Shaped Silver Nanoparticles as Nano-Catalysts *Nanosci. Nanotechnol. Lett.* **11(6)** (2019) 827-833(7). IF: 2.917 DOI: [10.1166/nnl.2019.2951](https://doi.org/10.1166/nnl.2019.2951)
22. M Aqeel, S Anjum, M Imran, M Ikram, H Majeed, **M Naz**, S Ali and M A Ahmad TiO₂ @ RGO (reduced graphene oxide) doped nanoparticles demonstrated improved photocatalytic activity *Mater. Res. Express* 6 086215 (2019). IF: 1.449 DOI: [10.1088/2053-1591/ab244a](https://doi.org/10.1088/2053-1591/ab244a)
23. Rafiq, M. Imran, M. Aqeel, **M. Naz**, M. Ikram, S. Ali Study of Transition Metal Ion Doped CdS Nanoparticles for Removal of Dye from Textile Wastewater *J INORG ORGANOMET P.*, 30, 1915–1923, 2019. IF: 1.637 ISSN: 1574-1443 DOI:[10.1007/s10904-019-01343-5](https://doi.org/10.1007/s10904-019-01343-5)

2018

24. A Saleem, M Imran, A Shahzadi, M Junaid, H Majeed, A Rafiq, I Shahzadi, M Ikram, **M Naz** and S Ali¹. Drastic improvement in catalytic, optical and visible-Light photocatalytic behavior of cobalt and nickel doped TiO₂ nanopowder. *Materials Research Express* (2018) 6. IF: 1.499 DOI: [10.1088/2053-1591/aae28e](https://doi.org/10.1088/2053-1591/aae28e)

25. W. T. Salam, M. Ikram, I. Shahzadi, M. Imran, M. Junaid, M. Aqeel, S. Anjum, A. Shahzadi, H. Afzal, U. Sattar, Asghar, A. Wahab, **M. Naz**, M. Nafees, and S. Ali. Doping Dependent Structural, Optical, Thermal and Catalysis Properties of Synthesized Cadmium Sulfide Nanoparticles. *Nanosci. Nanotechnol. Lett.* (2018) 10, 1662-1670. IF: 2.917 DOI: [10.1166/nnl.2018.2839](https://doi.org/10.1166/nnl.2018.2839)
26. **Misbah Naz**; Muhammad Zahid Qureshi; Ali Haider; Muhammad Ikram; Muhammad Nafees, PhD; Salamat Ali; Antonio Tricoli. Bio-inspired synthesis of nanoparticles (*Cenchrus ciliaris*): anticancer drug carrier, catalytic and antibacterial potential. *Nanosci. Nanotechnol. Lett.* 10, 889-899 (2018). IF: 2.917 DOI: [10.1166/nnl.2018.2711](https://doi.org/10.1166/nnl.2018.2711)

2017

27. **M. Naz**, M. Z. Qureshi, N. Nasiri, M. Ikram, M. Nafees, S. Ali, A. Tricoli. Eco-friendly biosynthesis, anticancer drug loading and cytotoxic effect of capped Ag-nanoparticles against breast cancer. *Appl Nanosci* 7, 793–802 (2017). IF: 3.198 DOI: [10.1007/s13204-017-0615-6](https://doi.org/10.1007/s13204-017-0615-6)
28. **Misbah Naz**, Ali Haider, Muhammad Ikram, Muhammad Zahid Qureshi, Salamat Ali, Green synthesis (A. *indica* seed extract) of silver nanoparticles (Ag-NPs), Characterization, their catalytic & bactericidal action potential *Nanosci. Nanotechnol. Lett.* 9, 1649–1655 (2017). IF: 2.917 DOI: [10.1166/nnl.2017.2517](https://doi.org/10.1166/nnl.2017.2517)

2012

29. D. Shahwar, **M. Naz**, M. A. Raza, G. Ara, A. Yasmeeen, A. Saeed, S. Bokhari, M. Ajaib, N. Ahmad Acetylcholine Esterase Inhibitory Potential and Antioxidant Activity of two different plant species. *Asian Journal Of Chemistry* 24 (7) (2012), 3151-3154. IF: 0.27
30. D. Shahwar, M. Tahir, **M. Kashif**, Crystal report of (5z)-5-(2-hydroxybenzylidene)-3-(4-methylphenyl)2sulfanylidene1,3-thiazolidin-4-one, *ActaCryst.* (2012). E68, 01818. DOI: [10.1107/S1600536812021630](https://doi.org/10.1107/S1600536812021630) IF: 0.27