



Syed Muzamil Bokhari

Education

- 2010–2013 **PhD**, *Asian Institute of Technology*, Bangkok, Thailand, .
- 2008–2010 **M.S in Telecommunications**, *Asian Institute of Technology*, Bangkok, Thailand,
Thesis Title:
Investigation Of Transmission Coverage for Indoor Optical Wireless Communications Using ASAP
- 2002–2003 **PGD-IT**, *COMSATS*, Islamabad, Pakistan, *Specialization*.
ORACLE-DBMS
- 1997–1999 **M.Sc-Physics**, *University of Balochistan*, Quetta, Pakistan, *Specialization*.
Electronics

Professional Summary

Dedicated academic and researcher with extensive experience in higher education administration, optical communications, and digital competence. Proven track record in managing academic data, promoting research, and facilitating online learning platforms. Strong publication record in optical communications and nanotechnology, with a focus on energy efficiency and innovative research.

Research Promotion: Spearheaded initiatives to promote research and innovation, fostering collaborations with industry and academic partners.

Experience: Teaching Experience

- 2024–Present **Tenured Professor**, DEPARTMENT OF PHYSICS, University of Balochistan.
Quetta, Pakistan
- 2020–Present **Tenured Associate Professor**, DEPARTMENT OF PHYSICS, University of Balochistan.
Quetta, Pakistan
- 2013–Present **Assistant Professor**, DEPARTMENT OF PHYSICS, University of Balochistan.
Quetta, Pakistan
- 2007–2013 **Lecturer**, DEPARTMENT OF PHYSICS, University of Balochistan.
Quetta, Pakistan

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2003–2007 **Lecturer**, DEPARTMENT OF PHYSICS, Govt. Science College.
Quetta, Pakistan

Administrative Experience

2021–Present **Director ORIC**, UNIVERSITY OF BALOCHISTAN.
Quetta, Pakistan

2017–2021 **Manager Research Promotion ORIC**, UNIVERSITY OF BALOCHISTAN.
Quetta, Pakistan

Awards

- 2013 Best Paper Award in 3M Nano International conference held at Suzhou, China 26-30 Aug. 2013.
- 2013 Best Paper Award In International Conference on Innovation Challenges In Multidisciplinary Research and Practice (ICMRP 2013), Malaysia
- 2013 Best Paper award in 2nd Annual Computational Science Conference 2013, International Islamic University, Islamabad, Pakistan

Courses Taught

- PhD Satellite Communication System, MEMS/NEMS
- M.Phil/M.S Research Methodology, Telecommunications Network
- BS Electromagnetic Theory I and II, Optics

Research Interests

- Quantum Information Theory, Optical Communications and Networks,
- Mathematical analysis of Telecommunication Networks, Optical Access Networks, Queueing Theory
- Visible Light Communications System, Channel Characterization
- MEMS, NEMS & Nano Fabrication, Photonic devices & fabrication

Research Experience

- Design and analyze protocols for energy efficient communications, including optical networks and wireless ad hoc networks.
- Design, analyze, and implement indoor visible light communications system.
- Design and analyze protocols for future optical communication networks, wireless ad hoc networks.

Research Advisee

- | | | |
|-----|---------------------|--|
| PhD | Ms. Sabiha Ajmal | Fabrication of TiO ₂ sensor |
| PhD | Mr. Mohammad Jameel | AAO Magnetic Motor |
| M.S | Ms. Beenish Durrani | ZnO gas Sensor |
| M.S | Mr. Maqbool Pirkani | Design and Analysis of Ultra-wide Band Antenna |

Refereed Journal Publications

- 2025 ARohi Hinna, Kasi · Ajab Khan, Kiran · Saima, Ullah., **Muzamil Bokhari**, "Template-assisted growth of micro-excavated PDMS layer for fabrication of free standing TENG and its application as a self-powered sensor for Oscillation *Journal of Polymer Research*, 32(276) (2025), 1-11. (IF - 2.8)
- 2023 Shehzad Ahmed, Jafar Khan Kasi, & **Muzamil Bokhari**, Phyto-mediated synthesis band gap ZnO and TiO₂ nanoparticles using Pisum sativum peels extract: comparison of their structural" *Chemical Papers*, 77(12), 7697-7715(2023) (IF 2.89)
- 2022 Ayaz, M., Khan Kasi, J., Khan Kasi, A., **Muzamil Bokhari**, & Boschloo, G. "Improved Dye Regeneration through Addition of a Triphenylamine Electron Donor in Iodide-Based Electrolytes for Dye-Sensitized Solar Cells" *ACS Applied Energy Materials*, 5(4), 4240-4246 (2022) (IF - 6.95)
- 2022 Bilal, A., Kasi, J. K., Kasi, A. K., **Muzamil Bokhari**, Ahmed, S., Ali, S. W., "Environment friendly synthesis of nickel ferrite nanoparticles using Brassica oleracea var. capitata (green cabbage) as a fuel and their structural and magnetic characterizations" *Materials Chemistry and Physics*, 290, 126483 (2022) (IF - 4.56)
- 2021 Ayaz, M., Kasi, J. K., Kasi, A. K., **Muzamil Bokhari**, Sohail, M., & Ullah, S. "Natural Plant Trifolium Pratense, Mirabilis Jalapa and Bassia Scoparia Extract Used as Photosensitizer in Dye-Sensitized Solar Cell" *Iranian Journal of Chemistry and Chemical Engineering* 40(3), 872-880 (2021) (IF - 1.9)
- 2021 Rafique, S., Kasi, A. K., Kasi, J. K., **Muzamil Bokhari**, & Shakoor, Z. "Fabrication of Br doped ZnO nanosheets piezoelectric nanogenerator for pressure and position sensing applications" *Current Applied Physics* 21, 72-79 (2021) (IF-2.85)
- 2020 S. Ajmal, **Muzamil Bokhari**, A. K. Kasi "Effect of Titanium Substrate Surface on the Titanium Oxide Membrane Pore Diameter, Formed upon Anodization in the Presence of Fluoride Ions" *Theoretical and Experimental Chemistry* 56 (1), 26-32 (2020)(IF - 1.9)
- 2020 Kasi, A. K., Najma, B., Kasi, J. K., Rafique, S., & **Muzamil Bokhari**. "Fabrication of piezoelectric nanogenerator using 3D-ZnO nanosheets and optimization of charge storage system" *Materials Research Bulletin*, 123, 110711, (2020) (IF -5.4)
- 2020 Rafique, S., Kasi, A. K., Kasi, J. K., Aminullah, **Muzamil Bokhari**, & Shakoor, Z. "Fabrication of silver-doped zinc oxide nanorods piezoelectric nanogenerator on cotton fabric to utilize and optimize the charging system" *Nanomaterials and Nanotechnology* 10, (2020) (IF - 3.7)
- 2020 Aminullah, Ajab Khan Kasi, Jafar Khan Kasi, Moizuddin, **Muzamil Bokhari**, "Triboelectric nanogenerator as self-powered impact force sensor for falling object" *Current Applied Physics* 20:1 (2020): 137-144 (IF - 2.85).
- 2019 Aminullah, Ajab Khan Kasi, Bibi Najma, Jafar Khan Kasi, Sumera Rafique, **Muzamil Bokhari**, "Fabrication of Piezoelectric nanogenerator using 3D-ZnO nanosheets and optimization of charge storage system" *Materials Research Bulletin* (2019): 110711 (IF -5.4).
- 2019 M Latif, Ajab Khan Kasi, Jafar Khan Kasi, **Muzamil Bokhari**, "Strengthening of alumina tubular membrane by Al support and its application for oil-in-water stable emulsion" *Microelectronic Engineering* 218 (2019): 111134 (IF -2.69).

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- 2019 Muhammad Ali Kakar, Jafar Khan Kasi, Ajab Khan Kasi, **Muzamil Bokhari**, Muhammad Latif, Muhammad Ayaz, "The Efficiency of a Solar Cooker in Pakistan's Quetta Region" *Polish Journal of Environmental Studies* 28:6 (2019): 110711 (IF -1.9) .
- 2018 Bibi Najma, Jafar Khan Kasi, Ajab Khan Kasi, **Muzamil Bokhari**, and Izabela RC. "ZnO/AAO photocatalytic membranes for efficient water disinfection: Synthesis, characterization and antibacterial assay." *Applied Surface Science* 448 (2018): 104-114 (IF -7.39).
- 2017 Jafar Khan Kasi, Ajab Khan Kasi, & **Muzamil Bokhari**. "Study of Cracks in Non-Planar Anodic Aluminum Oxide Membrane." *Science International* 29 (2018): 71-75 (IF - 2.4).
- 2017 Aminullah, Ajab Khan Kasi, Jafar Khan Kasi & **Muzamil Bokhari**. "Fabrication of mechanically stable AAO membrane with improved fluid permeation properties." *Microelectronic Engineering* 187 (2018): 95-100 (IF - 2.66).
- 2016 **Muzamil Bokhari**, Muhammad Sohail, Jafar Khan Kasi, & Ajab Khan Kasi. "Performance analysis of passive optical networks with energy saving through the integrated sleep mode." *Optical Switching and Networking* 21 (2016): 16-30 (IF - 1.9).
- 2015 **Muzamil Bokhari**, Ajab Khan Kasi, Jafar Khan Kasi, Om Prakash Gujela, and Nitin Afzulpurkar. "Improving photoelectric conversion efficiency of DSSC using ZnO/ZnP composite nanorods." *International Journal of Nanomanufacturing* 11, no. 1-2 (2015): 56-63 (IF - 0.6) .
- 2013 **Muzamil Bokhari** and Poompat Saengudomlert, "Analysis of Mean Packet Delay for Upstream Transmissions in Passive Optical Networks with Sleep Mode" *Optical Switching and Networking (Elsevier)*, 10 (3) , pp. 195-210, 2013 (IF - 1.9)

Conference Proceedings

- 2012 Muzamil Bokhari and Poompat Saengudomlert, "Integrated Sleep Mode for Improving Energy Efficiency of NG-PONs", *ICOON The 11th International Conference on Optical Communications and Networks (ICOON 2012)*.

Seminars/Workshops

- 2016 Organized "1st Invention to Innovation Summit Quetta 2016", organized by ORIC, University of Balochistan, Quetta, in collaboration with IRP, PASTIC, PSF, SATHA May 4-5, 2015.
- 2015 One day workshop on "Developing industries driven technologies" conducted by ORIC, University of Balochistan, Quetta, in collaboration with IRP, April 14, 2015.
- 2014 2-Day Training Workshop on "Semester System in UoB", conducted by Faculty Training and Developing Center (FTDC) University of Balochistan, Quetta, June 18-19, 2014.

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- 2014 "Project Formulation Workshop" held on 22-23 October, 2014 at Balochistan university of Information Technology, Engineering and Management Sciences (BUIITEMS), Quetta, organized by Pakistan Science Foundation, Islamabad.
- 2013 Workshop on "Research Methodology and Technical Writing" by Department of Physics, University of Balochistan Pakistan, July 01-02, 2013

References

- AIT Poompat Saengudomlert, Associate Professor Asian Institute of Technology (AIT) E-mail: poompats@ait.ac.th
- AIT TeerapatSanguankotchakorn, Associate Professor Asian Institute of Technology (AIT) E-mail: teerapat@ait.ac.th