

Prof. Dr. Jafar Khan Kasi

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EDUCATION

Asian Institute of Technology, Pathumthani, Thailand

PhD. in Microelectronics 2012

Dissertation: "Characterizations and applications of anodic aluminum oxide membrane for fabrication of three-dimensional microstructures"

Overall GPA: 3.5

Asian Institute of Technology, Pathumthani, Thailand

MS in Microelectronics 2010

Research: "Protein sensor for the waste dialysate material"

Overall GPA: 3.5

University of Balochistan, Quetta, Pakistan

M.Sc in Physics 1999

Areas of Concentration: Electronics

Overall Percentage: 71%

TEACHING EXPERIENCE

University of Balochistan, Quetta

Professor (Tenured on TTS) – Physics June 2023 – till date

University of Balochistan, Quetta

Associate Professor (Tenured on TTS) – Physics July 2020 – June 2023

University of Balochistan, Quetta

Assistant Professor (on TTS) – Physics Oct 2012 – July 2020

University of Balochistan, Quetta

Lecturer – Physics Jul 2007 – Oct 2012

Government Science College Quetta

Lecturer - Physics Apr 2007 – Jul 2007

Balochistan Residential College Loralai

Lecturer - Physics Jun 2000 – Apr 2007

ADMINISTRATIVE EXPERIENCE

Chairperson- Physics Department

University of Balochistan, Quetta Mar 2023 – Mar 2025

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Chairperson- Renewable Energy Department
University of Balochistan, Quetta

March 2017 – Feb 2023

RESEARCH CONTRIBUTION: Editor in chief of

Journal of Physics and Material Science

<https://www.jopms.com/index.php/jopms>

Google scholars link:

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PUBLICATIONS (RESEARCH ARTICLES) (68)

1. Hina rohi, Ajab Khan Kasi, Saima Kiran, Amin Ullah, **Jafar Khan Kasi**, Muzamil Bokhari, "Template-assisted growth of micro-excavated PDMS layer for fabrication of free standing TENG and its application as self-powered sensor for oscillation", Journal of Polymer Research, 32, 276 (2025). (**IF: 2.80**).
2. Ali, Muhammad, Qaisar Khan, Muhammad Faraz Ud Din, **Jafar Khan Kasi**, Ajab Khan Kasi, Asif Ali, and Sami Ullah. "Simulation-based optimization of CdS/CdTe solar cells incorporating MXene-enhanced SnO₂ buffer layer: insights from experimentally validated material properties." *Solar Energy* 294 (2025): 113510. (**IF: 6.00**)
3. Shazia Bugti, Ajab Khan Kasi, **Jafar Khan Kasi**, Samiullah, "Self-powered TENG probe for scanning surface charge distribution", *IoP Nanotechnology*, 35 (2024) 065707 (**IF = 3.50**)
4. Shehzad Ahmed, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari, Ahmed Bilal & Syed Wajahat Ali, "Phyto-mediated synthesis of enhanced band gap ZnO and TiO₂ nanoparticles using Pisum sativum peels extract: comparison of their structural, optical, photocatalytic and antifungal characteristics". *Chemical Papers*, Vol. 77(2023) 7697-7715 (**IF = 2.146**)
5. Ayaz, Muhammad, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari, and Gerrit Boschloo. "Improved Dye Regeneration through Addition of a Triphenylamine Electron Donor in Iodide-Based Electrolytes for Dye-Sensitized Solar Cells." *ACS Applied Energy Materials* Vol. 5 issue 4 (2022) 4240-4246. (**IF: 6.959**)
6. Ahmed Bilal, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari, Shehzad Ahmed, Syed Wajahat Ali, "Environment friendly synthesis of nickel ferrite nanoparticles using Brassica

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- oleracea var. capitata (green cabbage) as a fuel and their structural and magnetic characterizations”, Materials Chemistry and Physics, Vol. 290 (2022) 126483 (IF: 4.778)
7. Sami Ullah, M. Faraz Ud Din, **Jafar Khan Kasi**, Ajab Khan Kasi, Karol Vegso, Mario Kotlar, Matej Micusik, Matej Jergel, Vojtech Nadazdy, Peter Siffalovic, Eva Majkova, and Azhar Fakharuddin, “Mesoporous SnO₂ Nanoparticle-Based Electron-Transport Layer for Perovskite Solar Cells”, ACS Applied Nano Materials, Vol.06 (2022) 7822–7830 (IF:5.097)
 8. 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, Vol. 123 (2020) 110711 (IF:5.600)
 9. Bibi Najma, Ajab Khan Kasi, **Jafar Khan Kasi**, Ali Akbar, Muzamil Ali Bokhari, Izabela RC Stroe, ZnO/AAO Photocatalytic Membranes for Efficient Water Disinfection: Synthesis, Characterization and Antibacterial Assay, Applied Surface Science 448 (2018) 104–114 (IF: 7.392)
 10. Sumera Rafique, Ajab Khan Kasi, Amiullah, **Jafar Khan Kasi**, Muzamil Bokhari, Zafar Shakoor, Fabrication of Br doped ZnO nanosheets piezoelectric nanogenerator for pressure and position sensing applications, Current Applied Physics, 21(2021)72-79 (IF: 2.856)
 11. **Jafar Khan Kasi**, Ajab Khan Kasi, Nitin Afzulpurkar, Mahadi Hasan, Sirapat Pratontep, and Amporn Poyai “Fabrications of three dimensional anodic aluminum oxide micro shapes”, Nanoscience and Nanotechnology Letters, Vol. 4, Issue 5(2012) 537-543 (IF: 1.128)
 12. Aminullah, Ajab Khan Kasi, Jafar Khan Kasi, Muzamil Bokhari, “Fabrication of mechanically stable AAO membrane with improved fluid permeation properties” Microelectronic Engineering, Vol.187-188c (2018) 95-100. (IF:2.662)
 13. Muhammad Ali, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari, Muhammad Latif, Muhammad Ayaz, “The efficiency of Solar Cooker in Quetta (Pakistan) Region”, Polish Journal of Environmental Studies, Vol.28 Issue.6, (2019) 4213–4220. (IF: 1.871).
 14. Aminullah, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari, “Triboelectric Nanogenerator As Self-powered Impact Force Sensor For Falling Object”, Current Applied Physics, 20 (2020) 137-144 (IF: 2.856)
 15. Ajab Khan Kasi, **Jafar Khan Kasi**, Nitin Afzulpurkar, Mahadi Hasan, “Bending and Branching of Anodic Aluminum Oxide nanochannels and their applications”, Journal of Vacuum Science and Technology-B, Vol.30 Issue. 1, (2012)031805 (IF: 1.572).
 16. Ajab Khan Kasi, **Jafar Khan Kasi**, Nitin Afzulpurkar, Erik Bohez, Adisorn Tuantranont, “Continuous voltage detechement and etching (CVDE) technique for fabrication of nanoporous AAO tubular membrane”, Nanoscience and Nanotechnology Letter. Vol. 4 Issue. 5, (2012) 530-536 (IF: 1.128)

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17. Ajab Khan Kasi, Nitin Afzulpurkar, **Jafar Khan Kasi**, AdisornTuantranont, and PaweenaDulyaseree, "Utilization of cracks to fabricate anodic aluminum oxide nanoporous tubular and rectangular membrane". Journal of Vacuum Science and Technology: B, 29, Issue. 4 (2011) D1071-D1077. (IF: 1.572).
18. Mahadi Hasan, Ajab Khan Kasi, **Jafar Khan Kasi**, Nitin Afzulpurkar, "Anodic aluminum oxide (AAO) to AAO bonding and their application for fabrication of 3D microchannel", Nanoscience and Nanotechnology Letters' Vol. 4, Issue. 5(2012)569-573 (IF: 1.128)
19. Muzamil Bokhari, Muhammad Sohail, **Jafar Khan Kasi**, and 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: 3.419)
20. Muhammad 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, Vol.218 (2019) 111134 (IF: 2.662)
21. Sumera Rafique, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari, Amiullah, Zafar Shakoor, "Fabrication of Ag doped ZnO nanorods piezoelectric nanogenerator on cotton fabric to utilize and optimize the charging system" Nanomaterials and Nanotechnology SAGE journals, Vol.10 (2019) 1-12 (IF: 3.280)
22. Sabiha Ajmal, Muzamil Bokhari, Ajab Khan Kasi, Jafar Khan Kasi, Muhammad Sohail, "Effect of the Surface of a Titanium Substrate on the Pore Diameter of a Titanium Oxide Membrane Formed upon Anodization in the Presence of Fluoride Ions", Theoretical and Experimental Chemistry, Vol . 56, No.01 (2020) 28-34 (IF: 1.392)
23. Muhammad Ayaz, Jafar Khan Kasi, Ajab Khan Kasi, Muzamil Bokhari, Muhammad Sohail, Samil Ullah, Sami ullah, 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, Vol 30, Issue No.03 (2021) 872-880 (IF: 1.903)
24. Samiullah, Ajab Khan Kasi, and Jafar Khan Kasi, Growth of ZnO Nanoneedles by Thermal Oxidation of Metallic Zinc Microparticles in Air, International Journal of Chemical Engineering 3 (2016) 10-13 (IF:2.729)
25. W.A.H.S.S.Wewala, Jafar Khan Kasi, Ajab Khan Kasi, Nitin Afzulpurkar, "Design, simulation and comparison of ascending and descending curvilinear microchannel for cancer cell separation from blood", Biomedical Engineering: Applications, Basis and Communications (BME), Vol. 25, No. 4 (2013) 1350037 (IF: 1.020) HJRS- Y
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27. **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari, Nitin Afzulpurkar, “Synthesis of unique structures of carbon nanotube at anodic aluminum oxide template”, Applied Mechanics and Materials Vol. 421 (2013) pp 319-323 (IF: 0.30)
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29. Ajab Khan Kasi, **Jafar Khan Kasi**, Mahadi Hasan, Nitin Afzulpurkar, Sirapat Pratontep, Supanit Porntheeraphat, Apirak Pankiew, “Fabrication of low cost anodic aluminum oxide (AAO) tubular membrane and their application for hemodialysis”, Advanced Materials Research, Vols. 550-553 (2012) 2040-2045
30. **Jafar Khan Kasi**, Ajab Khan Kasi, Nitin Afzulpurkar, Erik Bohez, Amporn Poyai, “Bending behaviour of nanochannels in the edges of anodic aluminum oxide membrane”, Advanced Science, Engineering and Medicine, Vol.5 (2013) 239-244
31. Mahadi Hasan, Ajab Khan Kasi, **Jafar Khan Kasi**, Nitin Afzulpurkar, Supanit Porntheeraphat, Witsaroot Sripumkhai, “Fabrication of thinner anodic aluminum oxide based microchannels”, Advanced Materials Research, Vols. 550-553 (2012) 2046-2050
32. W.A.H.S.S.Wewala, Nitin Afzulpurkar, **Jafar Khan Kasi**, Ajab Khan Kasi, Amporn Poyai, Dhananjay W.Bodhale, “Design and simulation of ascending curvilinear micro channel for cancer cell separation from blood”, Advanced Materials Research, Vols. 557-559 (2012) 2361-2366
33. Ajab Khan Kasi, W.M. Ashraf, **Jafar Khan Kasi**, S. Tayyaba, and Nitin Afzulpurkar, “Low cost nano-membrane fabrication and electro-polishing system”. World Academy of Science, Engineering and Technology, Vol.64 (2010) 56-58.
34. W.A.H.S.S.Wewala, **Jafar Khan Kasi**, Ajab Khan Kasi, Nitin Afzulpurkar, “Cell Separation Through Ascending and Descending Curvilinear Microchannels”, Applied Mechanics and Materials Vols. 300-301 (2013) 1649-1653
35. Muzamil Bokhari, Ajab Khan Kasi, **Jafar Khan Kasi**, Om Prakash Gujela, Nitin Afzulpurkar, “Improving Photoelectric conversion efficiency of DSSC using ZnO/ ZnP composite materials”, International Journal of Nanomanufacturing 11, (2015) 56-63
36. **Jafar Khan Kasi**, Ajab Khan Kasi and Muzamil Bokhari, Electrochemical Performance of Carbon Nanotube Based Supercapacitor, International Journal of Chemical, Nuclear, Metallurgical and Materials Engineering, 8(2014) 1343-1346.

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37. Muhammad Ayaz, **Jafar Khan Kasi**, Ajab Khan Kasi, samiullah and Mustafa Ali, "Toward Eco Green Energy: Fabrication of DSSC from Recycled Phone Screen", The Open Access Journal of Resistive Economics (OAJRE), Vol.8, Issue No. 2 (2020) 63-68.
38. Muzamil Bokhari, **Jafar Khan Kasi**, Ajab Khan Kasi and Muhammad Sohail, Sleep mode adoptive to traffic for energy efficient EPON, (Bahria University Journal of Information & Communication Technologies, 9 (2016)01-07.
39. **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail, Characterization of Cracks in Tubular Anodic Aluminum Oxide Membrane, American Journal of Condensed Matter Physics 6(2016) 36-40.
40. Muhammad Usman, **Jafar Khan Kasi**, Ajab Khan Kasi and Muzamil Bokhari, "Fabrication of Comb-like humidity sensor based on ZnO nanomaterials" Journal of Physics and Materials Science 1:1 (2018) 21-24.
41. Muhammad Ayaz, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari, "Hydrothermal Growth of ZnO Nanorods for Photoelectrode of Dye-Sensitised Solar Cell", Journal of Physics and Materials Science 1:1 (2018) 09-11
42. Aleena Zahid, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Humaira Abdul Wahid, Fabrication of mini-dialyzers using Anodic Aluminum Oxide and Polysulfone membrane and their comparative study for the improvement of hemodialysis to treat renal failure patients, Pure Applid Biology, 7(2018) 643-654
43. Syed Najeebullah, Ajab Khan Kasi, **Jafar Khan Kasi**,. "Design, development and control of long range quadcopter". Scientific Journal of Mehmet Akif Ersoy University 1 / 1 (September 2018): 17-21.
44. Younas Khan, **Jafar Khan Kasi**, Ajab Khan Kasi, "Dehydration of vegetables by using indirect solar dryer". Scientific Journal of Mehmet Akif Ersoy University 1 / 1 (September 2018): 22-28
45. Muhammad Tariq, **Jafar Khan Kasi**, Samiullah, and Ajab Khan Kasi, Fabrication of ZnO Nanorods Based Biosensor via Hydrothermal Method International Journal of Chemical and Materials Engineering, Vol:12, No:10, (2018) 571-57
46. Naqeebullah Kakar, **Jafar Khan Kasi**, Ajab Khan Kasi, Samiullah Tareen, "Production Of Biogas As An Energy Source In Colder Area, Using Flat Plate Thermal Collector", Scientific Journal of Mehmet Akif Ersoy University 1 / 2 Special Issue (September 2018): 29-35
47. Rehana Nazir, Ajab Khan Kasi, **Jafar Khan Kasi**, "Fabrication of microinjector system (SIM) using anodic aluminum oxide", Scientific Journal of Mehmet Akif Ersoy University 1 / 2 Special Issue (September 2018): 36-39

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48. Nadia Sarwar, **Jafar Khan Kasi**, “Enhancing the Productivity of Water purification through Solar Basin Desalinization Process”, Journal of Physics and Materials Science 1:1(2018)25-27
49. **Jafar Khan Kasi**, Muhammad Ayaz, Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail “Eventually Dye Sensitized Solar Cell Moving Towards Naturel”, International Journal of Advances in Science Engineering and Technology, Vol-6, Iss-1, Spl. Issue-2 (Mar.-2018) 01-03
50. Sami Ullah and **Jafar Khan Kasi**, “Fabrication of Low Cost Solar Flat Plate Collector”, Scientific Journal of Mehmet Akif Ersoy University, techno-Science 2:2 (2019) 27-31
51. Masood-ur-Rehman, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail. Design and development of sEMG Prosthetics for recovering amputation of the human hand, Pure and Applied Biology 8:3 (2019)1935-1942
52. Sidra Dilshad, **Jafar Khan Kasi**, Sami Ullah and Ajab Khan Kasi, “Design and analysis of solar air heating system for room”, Scientific Journal of Mehmet Akif Ersoy University, techno-Science 2:3 (2019) 55-62
53. Asia Siddique, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail, “Design, Development and Performance of Soft Actuator Based orthotics for Paralysed Hand Rehabilitation”, Journal of Physics and Materials Science 2:1 (2019) 07-12
54. Muhammad Ayaz, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari, “Hydrothermal Growth of ZnO Nanorods for Photoelectrode of Dye-Sensitised Solar Cell”, Journal of Physics and Materials Science 1:1 (2018) 09-11
55. Nabeela Jogaizai, Muhammad Sohail, Muzamil Bokhari Ajab Khan Kasi and **Jafar Khan Kasi**, “Performance Investigation of Silicon Photo-Voltaic Solar Panel with Concentrator”, Journal of Physics and Materials Science 2:1 (2020) 36-39
56. Gul Jahan, Muhammad Sohail, Muzamil Bokhari Ajab Khan Kasi and **Jafar Khan Kasi**, “Polarization division multiplexed system for VLC using RGB LEDs”, Journal of Physics and Materials Science 2:1 (2019) 1-5
57. Muhammad Rameez, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, “Design and Development of Quadcopter for Counter Terror Attack”, Journal of Physics and Materials Science 3:1 (2020) 6-11
58. Ishaq Khan, Muhammad Sohail, Muzamil Bokhari Ajab Khan Kasi and **Jafar Khan Kasi**, “Assessment of Background Radiation Level in Children Hospital and Provincial Sandman Hospital Quetta City”, Journal of Physics and Materials Science 3:1 (2020) 42-48
59. Fahad Ahmed, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Mechanical design and gait control strategy for lower limb prosthesis, Journal of Physics and Materials Science 3:1 (2020) 1-5

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60. Muhammad Rameez, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, “Design and Development of Quadcopter for Counter Terror Attack”, Journal of Physics and Materials Science 3:1 (2021) 6-11
61. Asma Khaliq, Muhammad Sohail, Muzamil Bokhari, and **Jafar Khan Kasi**, (2023). Low Cost Compound Parabolic Concentrator for the Photovoltaic System. European Academic Research, X(12), 4271-4277
62. Shantul Jan, **Jafar Khan Kasi** and Ahmed Bilal, Green synthesis of metal oxide nanoparticles using plant extract, its structural and optical properties and application, Journal Of Applied Physics (IOSR-JAP) Volume 16, Issue 6 (2024)10-16
63. Iraj Batool, **Jafar Khan Kasi**, Ahmed Bilal, Shehzad Ahmed, Ajab Khan Kasi, Environment-Friendly Synthesis of Copper Ferrite Nanoparticles and Their Characterizations, Journal of Research in Environmental and Earth Sciences, Vol. 10, Issue 12 (2024) 66-70.
64. Kalsoom Bibi, Ajab Khan Kasi, Samiullah, **Jafar Khan Kasi**, Muzamil Bokhari, Fabrication of MXene Doped Triboelectric Nanogenerator for Sensing Application, Journal of Physics and Materials Science Volume 3 (2024) 30-32
65. Sumaira, Ajab Khan Kasi, Samiullah, **Jafar Khan Kasi**, Muzamil Bokhari, Growth of Metal Oxide Nanostructure Thin Film for Optoelectronics Application, Journal of Research in Environmental and Earth Sciences, Vol. 10, Issue 12 (2024) 71-74.
66. Hafsa Bibi, Ajab Khan Kasi, Samiullah, **Jafar Khan Kasi**, Muzamil Bokhari, Growth of Nickel Oxide Thin Film via Anodization Method, Journal of Physics and Materials Science Volume 3 (2024) 33-37
67. Bibi Zahida, **Jafar Khan Kasi**, Ahmed Bilal, Shehzad Ahmed, Syed Wajahat Ali, Ajab Khan Kasi, “Green Synthesis of Cobalt Doped Nickel Ferrite Nanoparticles via Extract of Vitis Vinifera and its impact on Structural, Optical and Magnetic Properties”, Journal of Nanoscope Volume 5, Issue 2, (2024) 101-118
68. Amanullah, **Jafar Khan Kasi**, Ahmed Bilal, Ajab Khan Kasi, Shehzad Ahmed, Syed Wajahat Ali, Brassica Rapa Extract-Mediated Green Synthesis of Zn-Doped Nickel Ferrite Nanocomposites and its Characterization, Volume 5, Issue 2, (2024) 147-157

(Total Impact Factor: 77.98)

CONFERENCE PROCEEDINGS (51):

1. **Jafar Khan Kasi**, Ajab Khan Kasi, Nitin Afzulpurkar. Effect of Adhesive Layer of Chromium on The Fabrication of Zinc Oxide Nanorods, 4th International Conference on Technology and Science, Turkey, November 18-21, 2021

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2. Younas Khan, **Jafar Khan Kasi**, Ajab Khan Kasi, Dehydration of Fruits and Vegetables by Using Indirect Solar Dryer, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
3. **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail, Characterization of Cracks in Tubular Anodic Aluminum Oxide Membrane, the World Conference on Engineering and Applied Sciences (WCEAS-2016), Kuala Lumpur, Malaysia, May 28-29, 2016.
4. Muhammad Ayaz, **Jafar Khan Kasi**, Ajab Khan Kasi, Samiullah and Mustafa Ali, "Fabrication of Dye Sensitized Solar Cells Using Dye N719 Efficiency and comparison under Sun, Indoor and Moon Light", 6th International Mechanical; Engineering Congress. (IMEC-2016), Karachi, Pakistan, July 15-16, 2016.
5. Khurram Shehzad, Ajab Khan Kasi and **Jafar Khan Kasi**, Effect of Pressure Increases During Increase of Temperature in An Autoclave for the Growth of Bulk ZnO Single Crystals, International Conference on Advanced Materials and Emerging Technologies (ICAMET 2016) Lahore, Pakistan, November 28–29, 2016.
6. **Jafar Khan Kasi**, Ajab Khan Kasi and Muzamil Bokhari, Study of Cracks in mom Planar Anodic Aluminum Oxide Membrane, 3rd International Conference on Agricultural, Biotechnology, Biological and Biosystem Engineering (ICABBBE 2016), Jakarta, Indonesia, December 16-17, 2016.
7. Muhammad Ahmad, Ajab Khan Kasi, **Jafar Khan Kasi**, "Development of rotor for radial flux micro motor", 1st International conference on advances in automotive technologies, Istanbul, Turkey, October 11-14, 2016
8. Ajab Khan Kasi, **Jafar Khan Kasi** and Nitin Afzulpurkar, "New method of fabricating nanoporous anodic aluminum oxide (AAO) tubes", Physics and chemistry of surface and interface (PCSI-38), Sandiego CA, USA, January 16-20, 2011.
9. **Jafar Khan Kasi**, Ajab Khan Kasi, Nitin Afzulpurkar, Naveed Sheikh, "Protein sensor for the waste dialysate material", 2nd International Conference on mechanical and electronics Engineering (ICMEE), Kyoto, Japan, August 1-3, 2010.
10. Ajab Khan Kasi, **Jafar Khan Kasi**, Muhammad Waseem Ashraf, Shahzadi Tayyaba, Nitin Afzulpurkar, and Adisorn Tuantranont, "Two layered novel anodic aluminum oxide

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- nanoporous membrane”, 2nd International Conference on mechanical and electronics Engineering (ICMEE), Kyoto, Japan, August 1-3, 2010.
11. Ajab Khan Kasi, **Jafar Khan Kasi**, Shahzadi Tayyaba, Muhammad Waseem Ashraf, Nitin Afzulpurkar, and Adisorn Tuantranont, “Fabrication of low cost nano-porous anodic aluminum oxide membrane” international conference on automation, Robotics and Control System, Orlando, FL, USA, July 12 – 14, 2010.
 12. Ajab Khan Kasi, Muhammad Waseem Ashraf, **Jafar Khan Kasi**, Shahzadi Tayyaba, and Nitin Afzulpurkar, “Low cost nano-membrane fabrication and electro-polishing system”, ICNOP 2010: International Conference on Nanotechnology, Optoelectronics and Photonics, Rome, Italy, April 28- 30, 2010.
 13. Ajab Khan Kasi, **Jafar Khan Kasi**, Nitin Afzulpurkar, Erik Bohez, Adisorn Tuantranont, Banchong Mahaisavariya, “Fabrication of anodic aluminum oxide (AAO) nano-porous membrane on both sides of aluminum sheet”, 2nd International Conference on mechanical and electronics Engineering (ICMEE), Kyoto, Japan, August 1-3, 2010.
 14. Ajab Khan Kasi, **Jafar Khan Kasi**, Nitin Afzulpurkar, Erik Bohez, Adisorn Tuantranont, Banchong Mahaisavariya, “Novel anodic aluminum oxide (AAO) nanoporous membrane for wearable hemodialysis device”, 3rd International Conference on Communications and Electronics (ICCE), NhaTrang, Vietnam, August 11-13, 2010.
 15. Muhammad Waseem Ashraf, Shahzadi Tayyaba, Nitin Afzulpurkar, Ajab Khan Kasi, AsimNisar, and **Jafar Khan Kasi**, “MEMS based biomedical microfluidic device” International Conference on Automation, Robotics and Control System, Orlando, FL, USA, July 12 – 14, 2010.
 16. Shahzadi Tayyaba, Muhammad Waseem Ashraf, Nitin Afzulpurkar, Ajab Khan Kasi, and **Jafar Khan Kasi** “Design, analysis and simulation of MEMS based polymeric piezoelectric actuator for drug delivery device” International Conference on Automation, Robotics and Control System, Orlando, FL, USA, July 12 – 14, 2010.
 17. Ajab Khan Kasi, **Jafar Khan Kasi**, “Actuation of robotic arm through artificial muscles and feedback network”, 2nd Annual computational Science conference, International Islamic University, Islamabad, Pakistan. October 20-25, 2013.
 18. Samiullah Tareen, Ajab Khan Kasi, **Jafar Khan Kasi**, “Actuation of robotic leg through human leg motion sensing using microcontroller”, 2nd Annual computational Science conference, International Islamic University, Islamabad, Pakistan. October 20-25, 2013.

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19. Muhammad Latif, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, "Fabrication and application of AAO tubular membrane system for water filtration", 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.
20. Moiz-uddin, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, "Design and development of microinduction device for charging energy storage components in microrobots ", 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.
21. Aminullah, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, "Enhancement of Mechanical stability of AAO membrane by Al mesh structure" 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.
22. Sabiha Ajmal, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, "Fabrication and Application of TiO₂ membrane for drinking watertreatment", 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.
23. Samiullah, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, "ZnO nanoballons based perovskite solar cell", 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.
24. Sumera Rafique, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, "Fabrication of ZnO piezoelectric nanogenerator by utilizing Cu nanorods top electrode", 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.
25. Samiullah, Ajab Khan Kasi, and **Jafar Khan Kasi**, "Growth of ZnO Nanoneedles by Thermal Oxidation of Metallic Zinc Microparticles in Air" 3rd International Conference On Advances in Applied Science and Environmental Technology (ASET- 2015), Bangkok. Thailand , December 28-29, 2015.
26. Muhammad Ayaz, **Jafar Khan Kasi**, Ajab Khan Kasi, and Mustafa Ali, "Natural Plant extraction for dye sensitized solar cell (DSSC)", 3rd International conference on Engineering and Emerging Technologies (ICEET-2016), Lahore, Pakistan, April 07-08, 2016.
27. Shamsullah Kakar, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bukhari, "Fabrication of anodic aluminum oxide (AAO) membrane based microfluidic filtration device", International

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Conference on Inventive Research in Science and Technology (ICIRST 2016), Pattaya, Thailand, April 16-17, 2016.

28. **Jafar Khan Kasi**, Muhammad Ayaz, Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail “Eventually Dye Sensitized Solar Cell Moving Towards Naturel”, 314th International conferences on Engineering and Natural Science (ICENS) 1st - 2nd January, 2018 Kuala Lumpur, Malaysia
29. **Jafar Khan Kasi**, “Natural Plants Dye Extraction for Dye Sensitized Solar Cell”, 2nd International Conference on materials science and nanotechnology (MSNano-2018) Faisalabad, Pakistan, February 19-20, 2018
30. Moizuddin Moiz, Ahmed Bilal, Ajab Khan Kasi and **Jafar Khan Kasi**, Synthesis of Magnetic Nano-rods of Cobalt using Templet from the Anodization of Aluminum as Anodic Aluminum Oxide, 1st International Conference on Advances in Engineering and Technology-(ICAET-2018), Quetta Pakistan, April 02-03, 2018
31. Huzaifa Durrani, **Jafar Khan Kasi**, Muhammad Sohail, Muzamil Bokhari and Ajab Khan Kasi, Implementation of unipolar OFDM based VLC transmission system under dimming constraint for high speed data through FPGA, 14th international conference on recent trends in Engineering and technology (RTET-2018) Pattaya, Thailand, April 24-26, 2018
32. Aleena Zahid, Ajab Khan Kasi, **Jafar Khan Kasi**, and Muzamil Bokhari, Fabrication of Minidialyzers using anodic aluminum oxide and polysulfone membrane and their comarative study for hemodialysis, 14th international conference on recent trends in Engineering and technology (RTET-2018) Pattaya, Thailand, April 24-26, 2018
33. Hikmatullah, Ajab Khan Kasi, **Jafar Khan Kasi** and Muzamil Bokhari, Fabrication of DSSCs using optimised length of Titania nanotubes on Ti substrate as an electron transporting medium, 14th international conference on recent trends in Engineering and technology (RTET-2018) Pattaya, Thailand, April 24-26, 2018
34. **Jafar Khan Kasi**, Natural Plants dyes Extraction for Dye Sensitized Solar Cell, 2nd international conference on material science and nanotechnology 2018 (MSnano-218), Faisalabad, Pakistan, February 19-20, 2018
35. Syed Najeebullah, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari, M. Sohail, Design, Development and Control of Long Range Quadcopter, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018

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36. Muhammad Ayaz, **Jafar Khan Kasi**, Ajab Khan Kasi, Hydrothermal Growth of ZnO Nanorods for Photoelectrode of Dye-Sensitised Solar Cell, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
37. Hafeez ur Rehman, **Jafar Khan Kasi**, Natural Resource Management Particular Focus on Energy, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
38. Gul Zareen, **Jafar Khan Kasi**, Ajab Khan Kasi, Aminullah, Design and Fabrication of Triboelectric Nanogenerator Based Table Tennis Racket for Monitoring and Training of Table Tennis Player, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
39. Samiullah, Ajab Khan Kasi, **Jafar Khan Kasi**, Hydrothermal Growth of ZnO nanorods on Zinc Microspheres by Sol-gel Seeded Method, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
40. Aleena Zahid, Ajab Khan Kasi, **Jafar Khan Kasi**, Comparative Study of High Flux and Low Flux Polysulfone Membrane Base Mini-dialyzers, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
41. Hikmatullah, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari, Muhammad Sohail, Effect of TiO₂ Nanotubes Length on the Performance of DSSCs on Ti Substrate, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
42. Nadia Sarwar, **Jafar Khan Kasi**, Enhancing the Productivity of Water purification through Solar Basin Desalinization Process, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
43. Sabiha Ajmal, Muzamil Bokhari, Ajab Khan Kasi, **Jafar Khan Kasi**, Muhammad Sohail, Desalination of Dye from Water through Nanoporous TiO₂, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
44. Muhammad Tariq, **Jafar Khan Kasi**, Samiullah, Ajab Khan Kasi, Fabrication of ZnO Nanorods Based Biosensor via Hydrothermal Method, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018

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45. Muhammad Tariq, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari, Electroplating for ZnO Based Biosensor, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
46. Syed Waseem Raza, Muzamil Bokhari, **Jafar Khan Kasi**, Ajab Khan Kasi, Dye-sensitized solar cell performance compared with different solvents in the electrolyte, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
47. Muhammad Ali Kakar, **Jafar Khan Kasi**, Ajab Khan Kasi, Samiullah Tareen, Growth of ZnO wires for the Fabrication of Perovskite Solar Cell, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
48. Naqeebullah Kakar, **Jafar Khan Kasi**, Ajab Khan Kasi, Samiullah Tareen, Production of Biogas as an Energy Source in Colder Area, Using Flat Plate Thermal Collector, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
49. Muhammad Usman, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari, Fabrication of Comb-like Humidity Sensor Based on ZnO Nanomaterials 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018
50. **Jafar Khan Kasi**, Sana Idrees, Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail “Microchannel Based Filter Fabrication Using Anodic Aluminum Oxide (AAO) Membrane”, International Conference on Chemical and Biochemical Engineering (ICCB) 5th -6th December, 2018, Krabi, Thailand
51. **Jafar Khan Kasi**, “Natural Plants Dye Extraction for Dye Sensitized Solar Cell”, 3rd International Conference on materials science and nanotechnology (MSNano-2019), February 18-20, 2019, Faisalabad, Pakistan

BOOKS

- 1- **Jafar Khan Kasi**, Ajab Khan Kasi, Nitin Afzulpurkar, “Protein sensor for the waste dialysate” (2013), LAP LAMBERT Academic Publishing, Saarbrücken, **GERMANY**
ISBN: 978-3-659-39275-7
- 2- **Jafar Khan Kasi**, W.A.H.S.S. Wewala, Ajab Khan Kasi, “Cancer Cell Separation Through Curvilinear Channel” (2013), LAP LAMBERT Academic Publishing, Saarbrücken, **GERMANY** ISBN: 978-3-659-42241-6

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3- **Jafar Khan Kasi**, Ajab Khan Kasi and Nitin Afzulpurkar, “Characterizations and Applications of Anodic Aluminum Oxide Membrane for Fabrication of Three Dimensional Microstructures” (2016), LAP LAMBERT Academic Publishing, Saarbrücken, **GERMANY**
ISBN: 978-3-659-87620-2

PROJECTS

1. Higher Education Commission **NRPU Project # 20-17152 /NRPU/R&D/HEC/2021**, for “Green synthesis of nanoparticles, and their applications for dye-removal, photocatalytic activity and pharmaceutical wastage removal” PI: **Dr. Jafar Khan Kasi**, Co.PI: Dr. Ajab Khan Kasi, Amount Granted: **Rs. 3.36525 million. Completed and received completion certificate on August 8, 2025.**
2. University of Balochistan Research Fund for “Regional Natural Plant Dye Extraction for Enhancement the Efficiency of Dyes Sensitized Solar Cell” PI: **Dr. Jafar Khan Kasi**,. Amount Granted: **Rs. 376,980/- Completed.**
3. Higher Education Commission Research grants for “Fabrication of metal oxide nanostructure-based perovskite solar cell” PI: Dr. Ajab Khan Kasi, Co.PI: **Dr. Jafar Khan Kasi**, Amount Granted: **Rs. 1.8 million. Completed.**

SEMINARS / WORKSHOPS

1. **44th International Nathiagali Summer College (INSC) on Physics and Contemporary Needs** held on 15th to 20th July 2019 at NCP, Islamabad.
2. Urban Infrastructure Asset Management Organized by Kyoto University Global Centre of Excellence on “**Human security engineering for Asia mega cities**” at Asian Institute of Technology Thailand, March 16-20, 2009.
3. Two days training Workshop on “**Semester System in UoB**”, conducted by Faculty Training and Developing Center (FTDC) University of Balochistan, Quetta, June 18-19, 2014.
4. “**Project Formulation Workshop**” held on 22-23 October, 2014 at Balochistan university of Information Technology, Engineering and Management Sciences, Quetta, organized by Pakistan Science Foundation, Islamabad.

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5. One day workshop on “**Developing industries driven technologies**” conducted by ORIC, University of Balochistan, Quetta, with the celebration of Institute of Research Promotion, April 14, 2015.
6. One day “**Training/Workshop on plagiarism detection service (Turitin)**”, conducted by Quality Assurance directorate (QAD), University of Balochistan, Quetta, August 26, 2015.

MEMBERSHIPS

1. Member, **Tenure track system (TTS) coommittee University of Balochistan Quetta.**
2. Member, **Anti harrassment coommittee University of Balochistan Quetta.**
3. Member, **National Technology Council (NTC) Pakistan.**
4. Member Editorial Board of international journal, **Nanoscience and Nanoengineering**, Horizon Research Publishing Corporation, CA 95134, USA
5. Member Editorial Board of **Iranian Journal of Chemistry and Chemical Engineering**
6. Member, **Europeain Nanoscience and Nanotechnology Association (ENNA).**
7. Member Reviwing committee in “**International Academy of Industrial, Mechanical & Aeronautical Engineering (IAIMAE)**”
8. Member Technical Committee of 5th International Conference on Chemistry and Chemical Engineering (**ICCCE 2014**), August 6-7, 2014 in Singapore.
9. Member of the Editorial board during the year 2013 in international journal **News in Engineering (ISSN: 1339-4886)**, Publisher: \Publishing Society Ltd., Zilina, Slovakia
10. Member Reviwing committee in the international peer-reviewed, scientific and technical journal **Bahria University Journal of Information and Communication Technologies (BUJICT) (ISSN: 1999-4974)**
11. **President**, Pakistan Students Association, in Asian Institute of Technology (AIT) Thailand, (Jan 2010 – Aug 2010)
12. Member Internal Reviwing Committee (**IRC**) / Provencial Reviwing Committee (**PRC**) for Balochistan Text Book (Since 2014).

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13. Member Advisory board, Techno-Science, Scientific Journal of Mehmet Akif Ersoy University, Turkey
14. Elected Member Academic Council, University of Balochistan, Quetta (2016-19).

PhD Produced (supervision) 05:

- 1- **Muhammad Latif**, Thesis Title: Fabrication of mechanically robust AAO tubular membrane and their applications for convective and conductive transfer, graduated in **July 2020**
- 2- **Muhammad Ayaz**, Exploring Alternative Electrolytes and Dyes for Dye-Sensitized Solar Cell, graduated in **July 2022**
- 3- **Shehzad Ahmad**, Title: Synthesis, Characterization and Applications of Metal Oxide Nanoparticles for Photocatalysis, graduated in **October 22, 2024**
- 4- **Ahmed Bilal**, Title: Environment friendly Synthesis of Nanoparticles, Their Characterizations and Application for Wastewater Treatment, graduated in **October 22, 2024**
- 5- **Muhammad Ali**, Title: Development of Cds/CdTe Solar Cell Using Nano Engineered Surface for Enhancement of Conversion Efficiency, graduated on **August 19, 2025**

PhD Produced (Co-supervision) 03:

- 1- **Aminullah Kakar**, Thesis Title: Fabrication of Alternating Current Nanogenerator using 3D-machining in Anodic Aluminum Oxide, graduated in **August 2020**
- 2- **Sumera Rafique**, Thesis Title: Template Assisted synthesis of ZnO nanorods and their application for energy harvesting device, graduated in **March 2021**
- 3- **Samiullah**, Thesis Title: Transport layer engineering of efficient perovskite solar cell, graduated in **December 2022**

PhD supervision (In Progress) 02:

- 1- **Syed Wajahat Ali**, Title: Green Synthesis of Nanoparticles, Characterizations, and its Multifunctional Applications.
- 2- **Huzaifa Durrani**, Title: Optimized Indoor MIMO-OFDM for Visible light communications.

PhD co- supervision (In Progress) 02:

- 1- **Sundas Zafar**: Thesis title: Synthesis and characterization of copperoxide, nickel oxide and zinc oxide layers for sensor applications.

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- 2- **Azizullah:** Thesis title: Environment friendly approach for synthesis of biocompatible nanoparticles capped with an antidote using bio waste for clinical application.

M.Phil Produced (supervision) 19:

1. Muhammad Ali, M.Phil. Thesis Title: Efficiency of Solar Cooker in Quetta Region graduated in 2015.
2. Muhammad Ayaz, Title: Optimization of ZnO based dye sensitized solar cell (DSSC) using different types of natural dyes, graduated in 2016.
3. Shehzad Ahmad, Title: Synthesis of Nanorods for Energy Harvesting, graduated in 2015.
4. Sana Idrees, Title: Filter Fabrication by using Anodic Aluminum Oxide Membrane, graduated in 2016.
5. Ahmed Bilal, Title: Synthesis of Magnetic Nanorods, graduated in 2016.
6. Syed Wajahat Ali, Title: Synthesis and Characterization of carbon nanotube (CNT) graduated in 2016.
7. Iram Naz, Title: Enhancement the efficiency of dye synthesized solar cell with the application of AAO template, graduated in 2017.
8. Muhammad Usman, Title: Fabrication of humidity sensors based on ZnO nanomaterials, graduated in 2018.
9. Huzaiifa Durrani, Title: Implementation of Unipolar OFDM with Dimming using FPGA, graduated in 2018.
10. Muhammad Younus, Title: Dehydration of Fruits and Vegetables by using Indirect Solar Dryer, graduated in March 2019.
11. Naqeeb Ullah, Title: Production of Biogas as an Energy Source in Colder Area, using flat plate thermal collector, graduated in March 2019.
12. Muhammad Tariq, Title: Fabrication of ZnO based biosensors with high efficiency detection, graduated in April, 2019.
13. Nadia Sarwar, Title: Enhancing the Productivity of Water purification through Solar Basin Desalinization Process.
14. Asia Siddique, An EMG Controlled Exoskeleton for Paralyzed Hand Rehabilitation
15. Gul Zareen, Design and Fabrication of (TENG) Based Smart Racket for Monitoring and Training of Table Tennis Player.
16. Sidra Dilshad, Design and Analysis of Solar Air Heating System for Room

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17. Natasha Saleem, Title: Green Synthesis of Ni Nanoparticles and applying these nanoparticles for antifungal activity.
18. Shantul Jan, Title: The Green Synthesis of Metal /Metal Oxide Nanoparticles using Caralluma Tubercullta Extract and its characterization. Graduated on May 21, 2025.
19. Iraj Batool, Title: Environment-Friendly Synthesis of Copper Ferrite Nanoparticles and Their Characterizations. Graduated on May 21, 2025.

M.Phil Produced (Co-supervision) 29:

1. Shamsullah, “Fabrication of microfluidic devices using anodic aluminum oxide membrane”, graduated in 2016.
2. Samiullah, “ZnO Nanoballoon based solar cell”, graduated in 2016.
3. Muhammad Ahmad, “Template Assistant Fabrication of High Aspect Ratio Micro Squirrel Cage Rotor Structure for Microelectrochemical System”, graduated in 2017.
4. Khurram Shahzad, “Making Local Setup for the Growth of Bulk ZnO” graduated in 2017.
5. Bibi Najma, “Photocatalytic fabrication of water by Photoinduced Hydrphilicity in AAO/ZnO Membrane”, graduated in 2018.
6. Hikmatullah, Fabrication of Perovskite Solar Cells using TiO₂ Membrane as an Electron Transporting Material, graduated in December 2018.
7. Aleena Zahid, Fabrication of AAO Membrane base device for Hemodialysis and their Comparison with Polysulfone Membrane, graduated in December 2018.
8. Rehana Nazeer, Fabrication of microinjector using AAO membrane, graduated in March 2019.
9. Syed Najeebullah, Design, development and Control of long range quadcopter, graduated in March 2019.
10. Masood ur Rehman, Thesis Title: Design, development and control of 3D Printed Myoelectric Prosthetic Hand, graduated in March 2020
11. Nabila Jomezai, Performance Investigation of Silicon Photo-Voltaic Solar Panel with Concentrator ,graduated in December 2020
12. Gul Jahan, Polarization division multiplexed system for VLC using RGB LEDs graduated in December 2020
13. Muhammad Rameez, Design and development of Quadcopter for counter terror attack, graduated in December 2020

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14. Fahad Ahmed, Mechanical design and gait control strategy for lower limb prosthesis, graduated in December 2020
 15. Nabila Khan, Atmospheric ozone column and its long term variation over Quetta, graduated in March 2020
 16. Aleena Younas, Noise analysis of Visible light transmission system using white LED 16 June 2021
 17. Ishaq Khan, Assessment of background radiation level in children and Sandeman Hospital Quetta City, 16 June 2021
 18. Hinna Rohi, “Hybridization of triboelectric nanogenerator for harvesting blue energy”, Graduated on July 16, 2021
 19. Saima Kiran, Fabrication of triboelectric nanogenerator based on textile for harvesting mechanical energy”, Graduated on July 16, 2021
 20. Serish Ghafoor, Optimizing the coverage range of LED based VLC Receiver”, Graduated on March 7, 2022
 21. Syed Samiullah Taran, Bidirectional Hybrid Optical Wireless Communication System for Indoor Network, Graduated in March 2022
 22. Gul Bahar Bano, Design and Fabrication of Triboelectric Nanogenerator for surface scanning, Graduated in October 2022
 23. Furqan Ahmed, Design and development of robot for laboratory applications, Graduated in October 2022
 24. Rehana Durrani, Design, Fabrication and Characterization of UV sensor, Graduated in October 2023
 25. Asma Khaliq, Low Cost Compound Parabolic Concentrator for the Photovoltaic System, Graduated in October 2023
 26. Bibi Hawa, BERPerformance of unipolar OFDMschemes under dimming constrains, August 2024.
 27. Kalsoom Bibi, Fabrication of MXene Doped Triboelectric Nanogenerator for Sensing Application. Graduated on May 21, 2025.
 28. Sumaira, Growth of Metal Oxide Nanostructure Thin Film for Optoelectronics Application. Graduated on May 21, 2025.
 29. Bibi Hafsa, Growth of Nickel Oxide Thin Film via Anodization Method, Graduated on May 21, 2025.

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M.Phil Supervision (In Progress)

1. Amanullah, Title: Green Synthesis of Zinc doped Ni Fe₂O₄ and its Application for Antimicrobial Activity
2. Muhammad Fazal, Title: Ecological Sound Fabrication of Doped ZnO NPs, Their Characterization and Waste Water Treatment
3. Muhammad Iqbal Uddin, Title: Green Synthesis of Ni-Doped ZnO Nanoparticles using Green Leaf, Roots Red Cabbage As A Fuel And their Structural Characterization
4. Naveeda Yousaf, Title: Green Synthesis of Cobalt Doped Zinc Ferrite Nanoparticles from Coriandrum Sativum: Characterization and Their Application for Antibacterial Activities
5. Bibi Zahida, Title: Synthesis of Cobalt Doped Nickle Ferrites Nanoparticles via Extract of Vitis Vinifer (raisin).

REFERENCES

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