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EDUCATION

Asian Institute of Technology, Pathumthani, Thailand

Ph. D. 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%

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HONOURS

Best Paper Award In International Conference on Innovation Challenges In Multidisciplinary Research and Practice (ICMRP 2013), Malaysia

Best Paper Award In 3m-Nano 2013 Conference , China

Best Paper award in 2nd Annual Computational Science Conference 2013, International Islamic University, Islamabad, Pakistan

MS Research report was marked as “Excellent” by Examination Committee in Asian Institute of Technology, Thailand

3rd Position in MSc Department of Physics, University of Balochistan, Quetta

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TEACHING EXPERIENCE

University of Balochistan, Quetta
Chairperson- Renewable Energy Department March 2017 - till date

University of Balochistan, Quetta
Assistant Professor - Physics Oct 2012 - till date

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

Balochistan Residential College Turbat
Lecturer - Physics Feb 1999 - May 1999

ADMINISTRATIVE EXPERIENCE

Coordinator M.Phil/ PhD Programme
Department of Physics,
University of Balochistan, Quetta May 2014 - till date

Housemaster
Balochistan Residential College,
LORALAI March 2005- Feb. 2007

PUBLICATIONS AND PAPERS

1. Aminullah, Ajab Khan Kasi, Jafar Khan Kasi, Moiz uddin, Muzamil Bokhari, “ Fabrication of piezoelectric nanogenerator using 3D-ZnO nanosheets and optimization of charge storage system”, Materials Research Bulletin, Vol. 123 (2020) 110711(IF:3.355)
2. 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: 5.155)
3. 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

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- 5(2012) 537-543 (IF: 2.917)
4. 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:2.020)
 5. 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)1-8. (IF: 1.186).
 6. 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: 2.01)
 7. 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: 1.48).
 8. Ajab Khan Kasi, **Jafar Khan Kasi**, Nitin Afzulpurkar, Erik Bohez, AdisornTuantranont, “Continuous voltage detechement and etching (CVDE) technique for fabrication of nano-porous AAO tubular membrane”, *Nanoscience and Nanotechnology Letter*.Vol. 4 Issue. 5, (2012) 530-536 (IF: 2.917)
 9. 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: 1.48).
 10. 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: 2.917)
 11. 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: 1.113)
 12. 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:2.020)
 13. Sumera Rafiq, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari, Amiullah, Zafar Shakoor, “Fabrication of Ag doped ZnO nanorods piezoelectric nanogenerator on

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cotton fabric to utilize and optimize the charging system” *Nanomaterials and Nanotechnology SAGE journals*, Vol.10 (2019) 1-11 (IF:1.60)

14. 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:0.75)
15. 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*, Accepted in Press (2020) XX (IF:0.86)
16. 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:0.24)
17. **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari and Nitin Afzulpurkar, Fabrication of Zinc Oxide Nanorods based Gas Sensor, *World Applied Science Journal*, 30 (2014) 194-204 (IF: 0.23)
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19. **Jafar Khan Kasi**, Ajab Khan Kasi, Winadda Wongwiriyanon, Nitin Afzulpurkar, Paweena Dulyaseree, Mahadi Hasan and Adisorn Tuantranont, “Synthesis of carbon nanotube and carbon nanofiber in nanopore of anodic aluminum oxide template by chemical vapor deposition at atmospheric pressure”, *Advanced Materials Research*, Vol. 557-559 (2012) 544-549
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28. 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)*, 10 (2016)2345-2354.
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Growth of ZnO Nanorods for Photoelectrode of Dye-Sensitised Solar Cell”, Journal of Physics and Materials Science 1:1 (2018) 09-11

34. 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 Applied Biology, 7(2018) 643-654
35. 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.
36. 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
37. 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
38. 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
39. 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
40. 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
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42. 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
43. 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

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44. 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
45. Asia Siddique, **Jafar Khan Kasi**, Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail, "Design, Development and Performance of Soft Actuator Based orthotics for Paralyzed Hand Rehabilitation", Journal of Physics and Materials Science 2:1 (2019) 07-12
46. 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

CONFERENCE PROCEEDINGS

1. 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.
2. **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.
3. Ajab Khan Kasi, **Jafar Khan Kasi**, Muhammad Waseem Ashraf, Shahzadi Tayyaba, Nitin Afzulpurkar, and Adisorn Tuantranont, "Two layered novel anodic aluminum oxide nanoporous membrane", 2nd International Conference on mechanical and electronics Engineering (ICMEE), Kyoto, Japan, August 1-3, 2010.
4. 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.
5. 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.
6. 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

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Conference on mechanical and electronics Engineering (ICMEE), Kyoto, Japan, August 1-3, 2010.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

15. Sabiha Ajmal, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bokhari and Muhammad Sohail, “Fabrication and Application of TiO₂ membrane for drinking

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watertreatment”, 2nd conference on Frontiers of Nanoscience and Nanotechnology, Islamabad, Pakistan. September 08-10, 2015.

16. 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.

17. 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.

18. 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.

19. 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.

20. Shamsullah Kakar, Ajab Khan Kasi, **Jafar Khan Kasi**, Muzamil Bukhari, “Fabrication of anodic aluminum oxide (AAO) membrane based microfluidic filtration device”, International Conference on Inventive Research in Science and Technology (ICIRST 2016), Pattaya, Thailand, April 16-17, 2016.

21. **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.

22. 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.

23. 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.

24. **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.

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25. 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
26. **Jafar Khan Kasi**, Muhammad Ayaz, Ajab Khan Kasi, Muzamil Bokhari and Muhammad Sohail “Eventually Dye Sensitized Solar Cell Moving Towards Nature!”, 314th International conferences on Engineering and Natural Science (ICENS) 1st - 2nd January, 2018 Kuala Lumpur, Malaysia
27. **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
28. 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
29. 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
30. Aleena Zahid, Ajab Khan Kasi, **Jafar Khan Kasi**, and Muzamil Bokhari, Fabrication of Minidialyzers using anodic aluminum oxide and polysulfone membrane and their comparative study for hemodialysis, 14th international conference on recent trends in Engineering and technology (RTET-2018) Pattaya, Thailand, April 24-26, 2018
31. 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
32. **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
33. 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
34. 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

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Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018

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36. 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

37. 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

38. 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

39. 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

40. 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

41. Nadia Sarwar, **Jafar Khan Kasi**, Enhancing the Productivity of Water purification through Solar Basin Desalination Process, 1st International conference on material science and Nanotechnology 2018 (ICMSN-2018), Quetta, Pakistan, September 3-4, 2018

42. 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

43. 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

44. 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

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45. 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
46. 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
47. 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
48. 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
49. **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
50. **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

INTERNATIONAL POSTER PRESENTATION

1. Ajab Khan Kasi, **Jafar Khan Kasi** and Nitin Afzulpurkar, “Synthesis of Cu Nano Rods and Au Nanodots Using Anodic Aluminum Oxide Membrane”, 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'12), San Diego, California, USA, August 28 - September 1, 2012.
2. 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.
3. Moizuddin, Ajab Khan Kasi, **Jafar Khan Kasi**, “Synthesis of Magnetic Nanorods of Cobalt by Controlling the Barrier Layer of Anodic Aluminum Oxide”, 2nd international conference on Energy Syses for sustainable development (ESSD-2018) Lahore, Pakistan, February 21-23, 2018.

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PROJECTS 1- University of Balochistan Research Fund for “Regional Natural Plant Dye Extraction for Enhancement the Efficiency of Dyes Sensitized Solar Cell”. Amount Granted: **Rs. 376,980/-**

2- 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**.

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. Workshop on “**Research Methodology and Technical Writing**” by Department of Physics, University of Balochistan Pakistan, July 01-02, 2013

4. 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.

5. “**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.

6. 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.

7. One day “**Training/Workshop on plagiarism detection service (Turitin)**”, conducted by Quality Assurance directorate (QAD), University of Balochistan, Quetta, August 26, 2015.

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

LANGUAGES

English - Speak fluently and Read / Write with high proficiency

Urdu - Native Language

Pashto- Mother Language

MEMBERSHIPS

1. Member, **National Technology Council (NTC) Pakistan.**
2. Member Editorial Board of international journal, **Nanoscience and Nanoengineering**, Horizon Research Publishing Corporation, CA 95134,USA
3. Member, **European Nanoscience and Nanotechnology Association (ENNA).**
4. Member Reviwing committee in “**International Academy of Industrial, Mechanical & Aeronautical Engineering (IAIMAE)**”
5. Member Technical Committee of 5th International Conference on Chemistry and Chemical Engineering (**ICCCE 2014**), August 6-7, 2014 in Singapore.
6. Member of the Editorial board during the year 2013 in international journal **News in Engineering (ISSN: 1339-4886)**, Publisher: \Publishing Society Ltd., Zilina, Slovakia
7. Member Reviwing committee in the international peer-reviewed, scientific and technical journal **Bahria University Journal of Information and Communication Technologies (BUJICT) (ISSN: 1999-4974)**
8. **President** , Pakistan Students Association, in Asian Institute of Technology (AIT) Thailand,(Jan 2010 - Aug 2010)
9. Member Internal Reviwing Committee (**IRC**) / Provencial Reviwing Committee (**PRC**) for Balochistan Text Book (2014-2019)
10. Member Advisory board, Techno-Science, Scientific Journal of Mehmet Akif

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Ersoy University, Turkey

11. Elected Member Academic Council, University of Balochistan, Quetta (2016-19).

SUPERVISION (M.Phil. Produced)

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 Aluminium 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. **Huzafa 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.

Co-Supervision (M.Phil. Produced)

1. **Shamsullah**, "Fabrication of microfluidic devices using anodic aluminum oxide membrane", graduated in 2016.

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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.

SUPERVISION (Ph.D)

1. **Muhammad Latif**, Title: Fabrication of mechanically robust AAO tubular membrane and their applications for convective and conductive transfer (Thesis Submitted)
2. **Shahab Naseem**, Title: Fabrication of ZnO nanostructures to improve the sensitivity of gas sensors
3. **Muhammad Ali**, Title: Development Of Cds/Cdte Solar Cell Using Nano Engineered Surface For Enhancement Of Conversion Efficiency
4. **Muhammad Ayaz**, Exploring Alternative Electrolytes And Dyes For Dye-Sensitized Solar Cell.
5. **Shehzad Ahmad**, Title: Synthesis, Characterization and Applications of Metal Oxide Nanoparticles for Photocatalysis
6. **Ahmed Bilal**, Title: Enviroment- friendly Synthesis of Nanoparticles, Their Characterizations and Application for Waste Water Treatment
7. **Syed Wajahat Ali**, Title: Green Synthesis of Nanoparticles, Characterizations and

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its Multifunctional Applications.

SUPERVISION

(M.Phil Enrolled)

1. **Nadia Sarwar**, Title: Enhancing the Productivity of Water purification through Solar Basin Desalinization Process.
2. **Asia Siddique**, An EMG Controlled Exoskeleton for Paralyzed Hand Rehabilitation
3. **Gul Zareen**, Design and Fabrication of (TENG) Based Smart Racket for Monitoring and Training of Table Tennis Player.
4. **Sidra Dilshad**, Design and Analysis of Solar Air Heating System for Room

REFERENCES

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