Curriculum Vitae

Name **ABDUL SHAKOOR**

Father's Name MUHAMMAD BUKHSH

Marital Status married

Date of Birth 6th April 1974

Nationality Pakistani

C**NIC No:** 32301-3857693-1

Higher Education Comission (HEC) Approved Supervisor

Institute Address; Department of Physics, Bahaudin Zakariya University Multan; Pakistan.

Contact **Cell No. + 92-3009675934**

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shakoor_47@bzu.edu.pk

Objective:

To explore the laws of nature by learning the Physics in it's most depth .To apply my knowledge and skills in the understanding of the hidden truth. Finally to work for the betterment of the humanity by joining a university or research institute. To help out industry in research of materials.

Academics:

PhD Physics

SUMMARY OF ACHIEVEMENTS

i. **Publications: 85 (ISI impact factor journals)** "Although all publications are on line and can be checked by provided link but some recent publications are attached with"

ii. **Supervision:** (i) Have successfully supervised 03 PhD scholars and more than 40 M.Phil thesis

iii. **Teaching:** have taught more than 12 courses to different graduate and undergraduate classes

iv. **Projects completed:** have completed 10 projects from internal source BZU and 01 Project from external source HEC

v. **Productivity Awards: RPA:** have won 04 RPA from Pakistan Science Foundation

vi. **Performance Based Increments:** 12

vii. **Honorarium:** 05

viii. **Thesis Evaluated of Different Universities:** 10

ix. **Book writing:** Have authored 01 book

Keeping the above mentioned in view, I stand worthy of Tenured Professorship. The case of the same is submitted for your kind perusal and sympathetic consideration. With kindest regards.

Dr. Abdul Shakoor,
Associate Professor (Tenured)
Institute of Physics
Date of Joining; 04-01-2011.
Promoted As Tenured Associate Professor 20-12-2019

Initial Appointment as Lecturer in Physics at Khawaja Farid Government College Rahim Rahim Khan 29-05-1999

Academics: **PhD Physics from QUAID I AZAM UNIVERSITY ISLAMABAD**
(A part of Research was conducted from Kinsgston University UK London

Title of my PhD thesis: "Preparation, characterization and studies of conducting polymers composites and blends: (2010)"

http://prr.hec.gov.pk/jspui/bitstream/123456789/1334/1/802S.pdf

Research; LIST OF PUBLICATIONS

Although All publications are online and can be viewed at the following link, Some Prominent and most cited papers are attached at the end of dossier (page 24-28)
(**https://scholar.google.com.pk/citations?hl=en&user=ta-l6PEAAAAJ&view_op=list_works&sortby=pubdate**)

1. A Bibi, **A Shakoor**, NA Niaz, S Haider, MS Akhtar. "Electrical transport properties and thermoelectric power studies of polyaniline–CaTiO3 composites" Polymer Bulletin 80 (5), 5005-5021 (2023)
2. Junaid Naeem, Tahir Sultan and **A Shakoor,** "Modification of Bitumen Properties using Polyethylene glycol and Titanium dioxide (TiO2)" Polymer and Polymer Composites 31 (1), 1-8 (2023)
3. N Anwar, **A Shakoor,** G Ali, H Ahmad, NA Niaz, A Mahmood "Synthesis and electrochemical characterization of polyaniline doped cadmium oxide (PANI-CdO) nanocomposites for supercapacitor applications" Journal of Energy Storage 55, 105446 (2022)
4. N Anwar, **A Shakoor,** NA Niaz, G Ali, M Qasim, M Irfan, A Mahmood. "Investigation of dielectric relaxation behavior, electric modulus and ac conductivity of low doped polyaniline cadmium oxide (PANI-CdO) nanocomposites" Polymer Bulletin 79 (8), 6581-6600 (2022)

5. A Bibi, **A Shakoor,** NA Niaz. "Polyaniline–Calcium Titanate Perovskite hybrid composites: Structural, Morphological, Dielectric and electric modulus analysis" Polymers and Polymer Composites 30, 09673911221102287 (2022)
6. N. A. Niaz, **A Shakoor,** F. Hussaina, M. Iqbal, N.R. Khalidc , M. K. Saleema N. Anwar, J. Ahmad "Structural and electronic properties of PANI-ZnO-TiO2 nanocomposite" Journal of Ovonic Research Vol. 18, No. 5, September – October 2022, p. 713 – 722 (2022)
7. Umbreen Rasheed, Muhammad Imran, **Abdul Shakoor,** Niaz Ahmad Niaz, Fayyaz Hussain, Rana Muhammad Arif Khalil, Mohammad Alkhedher and Sayed M. Eldin "Theoretical Investigation of Origin of Quantized Conduction in 2D Layered Ruddleson–Popper Perovskite Heterostructure for the RRAM Applications" Energies, 15, 9410 (2022)
8. N Anwar, N. A. Niaz , **A. Shakoor** and M.Ahmad. "The structural and electrical properties polyaniline carbon nanotubes (PANI-CNTs) composite." Digest Journal of Nanomaterials & Biostructures (DJNB) 17 (4) (2022)
9. Ariba Bibia, **Abdul Shakoor,** Seerat-ul-Arooja "Studies on Electrical, Dielectric and Seebeck Measurement of Polyaniline-Cadmium Oxide Nanocomposite" polymer science series B 6 (63), 925-935 (2021)
10. N Anwar, M Ishtiaq, **A Shakoor,** NA Niaz, TZ Rizvi, M Qasim, M Irfan, "Dielectric properties of polymer/clay nanocomposites" Polymers and Polymer Composites 29 (6), 807-813 (2021)
11. A Bibi, **A Shakoor** "Electrical Properties and Characteristics of Polypyrrole/Cadmium Oxide for Thermoelectric Applications" Polymer Science, Series A 63 (5), 585-590 (2021)
12. A Bibi, **A Shakoor** "Electrical, Structural, and Thermo-Electric Power Studies of Polypyrrole-MnO2 Composites" Polymer Science, Series B 63 (5), 606-613 (2021)
13. A Bibi**, A Shakoor** "Charge transport mechanism in dodecylbenzenesulfonic acid doped polyaniline/carbon black composites" Polymers and Polymer Composites, 09673911211040376 (2021)

14. N Anwar, **A Shakoor,** W Qamar, NA Niaz, M Qasim, M Irfan "Fabrication of Schottky Diodes Based on Cu Electrode and Polyaniline Cadmium Oxide (PANI/CdO) Composites" Polymer Science, Series B 63 (4), 432-440 (2021)
15. N Anwar, M Ishtiaq, **A Shakoor,** NA Niaz, TZ Rizvi, M Qasim, M Irfan "Dielectric properties of polymer/clay nanocomposites" Polymers and Polymer Composites, 0967391120953250 (2020)
16. M Irfan, **A Shakoor,** NA Niaz, N Anwar, G Ali "Optical and dielectric modulus Study of PPy-DBSA/Y 2 O 3 composites" Journal of Materials Science: Materials in Electronics 31 (24), 22365-22374 (2020)
17. Nadeem Anwar, M. Asif, **Abdul Shakoor** "Electrical Properties and Characteristics of Polypyrrole Cadmium Oxide (PPy-CdO) Nanocomposite Schottky Diodes" Polymer Science, Series A volume 62, pages543–549(2020) category X
18. Nighat Rashid, Niaz Ahmad Niaz, **Abdul Shakoor** & Asif Mahmood "Effect of neodymium on barium-based spinel ferrites" Journal of Materials Science: Materials in Electronics volume 31, pages9018–9025 (2020)
19. M. Irfan, **A. Shakoor** "Structural and electrical properties of dodecylbenzene sulphonicacid doped polypyrrole/zirconium oxide composite Rev. mex. fis. vol.65 no.6 México nov./dic. 2019 Epub 30-May2020
20. M Irfan, **A Shakoor,** A Majid, N Hassam, Niaz Ahmed Study of Structural, Thermal and Dielectric Modulus of PPy-DBSA / Zirconium Oxide Composites. Journal of Physical Chemistry B(13)1990-7931**(2019)**
21. Muhammad Irfan, Abdul Shakoor "Structural, Electrical and Dielectric Properties of Dodecylbenzene Sulphonic Acid Doped Polypyrrole Journal of inorganic and organometallic Polymers and materials Doi.org/10.1007/s10904-019-(2019)
22. T. Bashir, A. Shakoor, E. Ahmed, N. A. Niaz, Muhammad Saeed Akhtar, Hybrid Nanocomposites of Multi-walled Carbon Nanotubes (MWCNTs) and CuO as Electrode Materials for Energy Storage Devices" Journal of Electronic Materials **49(9)** 2019
23. A Majid, N Rani, MF Malik, N Ahmad, F Hussain, **A Shakoor** "A review on transition metal doped silicon carbide" Ceramics international 45(7) 2019

24. M. Maqsood, Seemab Afzal, Abdul Shakoor, Niaz Ahmad Niaz, Abdul Majid, Najamal Hassan, Hira Kanwal: "Electrochemical properties of PANI/MoS2 nanosheet composite as an electrode materials" Journal of Materials Science: Materials in Electronics" DOI 10.1007/s10854-018-9697-5 (2018).
25. Abdul Shakoor and Peter J. S. Foot "Polypyrrole-Fe2O3 Nanocomposites with High Dielectric Constant: In Situ Chemical Polymerisation" Journal of polymer and Polymer Composites 26(3) 2018.
26. Najamal Hassan, Abdul Majid and Abdul Shakoor "Vanadium oxide (V2O3) for energy storage applications through hydrothermal route" Doi: 10.1007/s10854-018-9689-5. Journal of Materials Science: Materials in Electronics, 29(18), 16021-16026 (2018)
27. Hafiz Farid, Bilal Aziz, Abdul Shakoor and Ishtiaq Ahmed:" Structural, Electric And Magnetic Properties Of Ferrite/Polymer Composites" Journal of Material Science Materials in Electronics; DOI: 10.1007/s11664-018-6542-9 (2018)
28. T. Bashir. A.Shakoor. E.Ahmed, N.A.Niaz. S.Iqbal, M.S.Akhter, M.Azad Malik: Magnetic, Electrical and Thermal studies of polypyrrole-Fe2O3 Nanocomposites: Polymer Science Series A 59(6) 902-908 (2017)
29. Amberene Ayoub, Abdul Shakoor, T.Z Rizvi and Asmat Elahi: "study of structural, electrical and dielectric behavior of cadmium selenide quantum dots/polyaniline nanocomposites" Polymer Science Series A,59(2) 233-241 (2017).
30. H. Anwar, Y. Jamil, G. Mustafa, M. U. Islam, A. Shakoor, M. I. Arshad, H. Akhtar, M. R.S Aleem "Effect Of Co-Substitution Of (Bi,Mn) Ions On Structural,Magnetic And Dielectric Properties Of (Dyfe2o3) Dysprosium Orthoferrite" Journal Of Ovonic Research Vol. 13, No. 5, 241 – 248 (2017)
31. Shakoor A. Niaz*, W. Khan, G. Asghar, N. R. Khalid, M. N. Rehman, T. Bashira, N. Anwer , T. Z. Rizvi "Dielectric Properties Of Polypyrrole Multi-Walled Carbon Nanotubes Nanocomposites" Digest Journal Of Nanomaterials And Biostructures Vol. 11, No. 4, October-December, P. 1145-1153 (2016)
32. Asmat Elahi, Abdul Shakoor, Muhammad Irfan, N. A. Niaz, Mukhtar Ahmad, and Khalid; Effect of ZnNiCrFe2O4 Content on Dielectric Properties of Polyaniline Based

Nanocomposites, Synthesized via In-Situ Chemical Polymerization Mahmood: Polymer Science, Series B, Vol. 58, No. 4, pp. 449–456 (2016).

33. Asmat Elahi, Abdul Shakoor, Muhammad Irfan, N. A. Niaz, Khalid Mahmood, M. S. Awan Effect of loading ZnNiCrFe2O4 nanoparticles on structural and microwave absorption properties of polyaniline nanocomposites, : Journal of Materials Materials in Electronics DOI 10.1007/s10854-016-4999 (2016).
34. Abdul Majid, Usman Ali Rana, Abdul Shakoor, Naeem Ahmad, Najam al Hassan, Salah Ud-Din Khan First order Raman scattering analysis of transition metal ions implanted GaN.: Journal of Physics and Chemistry of Solids (90) 35–39 (2016).
35. Asmat Elahi, Muhammad Irfan, Abdul Shakoor, Niaz Ahmad Niaz, Khalid Mahmood, Muhammad Qasim Effect of loading titanium dioxide on structural, electrical and mechanical properties of polyaniline nanocomposites: Journal of Alloys and Compounds (651) 328-332 (2015).
36. Tooba Khursheed, M.U. Islama, Irshad Alia, Abdul Shakoor, M.S Awanb, Aisha Iftikhara, M. Asif Iqbal "Dielectric Properties of Polyaniline-Hexaferrite Composites" Materials Today 2(10)-part B 5209-52013 (2015).
37. Muhammad Irfan, Muhammad Usman, Asmat Elahi, U. Khan, Tahira Khan, K. Javed, S. S. Ali and **Abdul Shakoor** "Influence of Nd3+ substitution on physical, electrical and dielectric properties of Ba2Zn2Fe12O22 hexagonal ferrites prepared by sol–gel auto combustion method" J Mater Sci: Mater in Electron DOI 10.1007/s10854-015-4202 (2015).
38. Shafiq Ur Rehman, Abdul Majid Najmul Hassan, Abdul Shakoor, G. Murtaza, Salah-Din Khan A DFT study of the effects of Sc doping on electronicand optical properties of CdS Materials Science-Poland, 33(4), 782-791 (2015).
39. Ambreen Ayub **Abdul Shakoor,** Tasneem Zahra Rizvi "Study of Structural, Electrical and Dielectric Behavior of Cadmium Selenide Quantum Dots/Polyanniline Nanocomposites" Applied Polymer Science DOI Electronics DOI 10.1007/s10854-016-47676 (2015).
40. Tooba Khursheed, MU Islam, M Asif Iqbal, Irshad Ali, **Abdul Shakoor,** MS Awan, Aisha Iftikhar, Muhammad Azhar Khan, Muhammad Naeem Ashiq "Synthesis and

characterization of polyaniline-hexaferrite composites" Journal of Magnetism and Magnetic Materials (393) 8-14a (2015)

41. Abdul Shakoor, Fayyaz Hussain, Najmul Hassan, Abdul Majid, Muhammad Tariq Bhatti "Morphological, and Electrical Properties of Polyaniline Fe2O3 Nanocomposites" Polymer Science Series A 57(3) p-57 (2015)
42. A Ayub, A .Shakoor, A Elahi, TZ Rizvi; "Optical and electronic properties of layer-by-layer and composite polyaniline-cadmium selenide quantum dot films, Superlattices and Bhatti, Hassan Siddique A Density Functional Theory Study of Raman Modes of CdPS3" Journal of Material Science Poland DOI: 10.1515/msp-2015-0041 (2015).
43. T Khursheed, MU Islam, MA Iqbal, I Ali, A. Shakoor, MS Awan, A Iftikhar "Synthesis and characterization of polyaniline-hexaferrite composites" Journal of Magnetism and Magnetic Materials 393, 8-14 (2015).
44. N.R khalid, E Ahmed, A Rasheed, M Ahmad, M Ramzan, **A. Shakoor** "Co-doping effect of carbon and yttrium on photocatalytic activity of TIO2 nanoparticles for methyl orange degradation" Journal of Ovonic Research Vol 11 (3), 107-112 (2015).
45. M Irfan, NA Niaz, I Ali, S Nasir, **A Shakoor**, A Aziz, N Karamat, NR Khalid "Dielectric Behavior and Magnetic Properties of Mn-Substituted Ni–Zn Ferrites" Journal of Electronic Materials, 1-9 (2015).
46. A Hakeem, M Ramzan, E Ahmed, AM Rana, NR Khalid, NA Niaz, Abdul Shakoor Effects of vacuum annealing on surface and optical constants of hafnium oxide thin films, , Materials Science in Semiconductor Processing 30, 98-103 (2014).
47. A Majid, A Imtiaz, A Shakoor, N Hassan A Computational study of anion photoelectron spectroscopy of zinc oxide nanoclusters, , Computational and Theoretical Chemistry 1050, 23-30 (2014).
48. F Hussain, M Imran, YQ Cai, H Ullah, A Shakoor, M Rashid, E Ahmad Electronic properties of two-dimensional ZnO atomically sheet on Cu substrate: a first-principles study, , Modern Physics Letters B 28 (26), 1450204 (2014).
49. A Hakeem, A Shakoor, M Irfan, Ialima Khan, B Ashiq, M Ishaq Synthesis and electrical properties of doped polypyrole with hexagonal ferrite;, Journal of Ovonic Research Vol 10 (5), 149-156 (2014).

50. A. Shakoor, M. Tariq Bhati, M. Farooq, Iftakhar Paracha, M. Nadeem On the Mechanism of Conductivity Enhancement in Polyaniline Dodecylbenzene Sulphonic acid through solvent treatment, , La Pensee 76 (7), 162-170 (2014).
51. A Shakoor, NA Niaz, A Majid, N Hassan, M Farooq, R Hussain "Opto-Electronic Properties Of Poly (P-Phenylene Vinylene)(PPV) Intercalated In CdPS3" Chalcogenide Letters 11 (7), 351-358 (2014).
52. MI Ghouri, E Ahmed, NR Khalid, M Ahmad, M Ramzan, A Shakoor "Gadolinium Doped Zno Nanocrystalline Powders And Its Photocatalytic Performance For Degradation Of Methyl Blue Under Sunlight" Journal of Ovonic Research Vol 10 (3), 89-100 (2014).
53. I. Ali, A Shakoor, MU Islam, M Saeed, MN Ashiq, MS Awan, "Synthesis and characterization of hexagonal ferrite Co2Sr2Fe12O3 with doped polypyrrole composites" Current Applied Physics 13 (6), 1090-1095 (2013).
54. M Saeed, A Shakoor and E. Ahmed "Structural and electronic properties of polyaniline/yittrium oxide composites" Journal of Materials Science: Materials in Electronics DOI 10.1007/s10854-013-1281-4 (2013).
55. A Shakoor, TZ Rizvi, HU Farooq, N Hassan, A Majid, M Saeed, M Farooq "Structural and electrical properties of doped polypyrrole and its composite with montmorillonite clay" Polymer Science Series A 55 (4), 279-284 (2013).
56. M Farooq, A Shakoor "Severe energy crises and solar thermal energy as a viable option for Pakistan" Journal of Renewable and Sustainable Energy 5, 013104 (2013).
57. Abdul Shakoor and M Farooq Giant Dielectric Constant and Low Loss Tangent in Polypyrrole Doped with Dodecylbenzene Sulfonic Acid Journal of polymer science series A 49 (3), 159-162 (2013).
58. A Majid, J Zhu, N Hassan, A Shakoor Structural modifications of GaN after cerium implantation, , Journal of Raman Spectroscopy 44 (1), 136-141 (2013).
59. Abdul Shakoor, Tasneem Zahra Rizvi, Hafiz Umer;Structural and Electrical Properties of Doped Polypyrrole and Its Composite with Montmorillonite Clay1, Journal of polymer science series A 55 (4), 279-284 (2013).

60. A Majid, A Dar, A Nabi, A Shakoor, N Hassan, A Junjua, Z Jianjun Optical, electronic and magnetic properties of Cr: GaN thin films "Materials Chemistry and Physics 136 (2-3) 809-815 (2012).
61. A Shakoor, TZ Rizvi, M Hina; Charge transport mechanism in intercalated polypyrrole aluminum-pillared montmorillonite clay nanocomposites Journal of Applied Polymer Science 124 (4), 3434-3439 (2012).
62. A Shakoor, TZ Rizvi, M Saeed Dielectric properties of polypyrrole/pillared clay nanocomposites, Polymer Science Series A 54 (5), 401-406 (2012).
63. N Hassan, M Irfan, NA Khan, S Khan, A Shakoor, A Majid, AM Jadoon, SS Hayyat Annealing effect on the excess conductivity of Cu 0.5 Tl 0.25 M 0.25 Ba 2 Ca 2 Cu 3 O 10-δ (M= K, Na, Li, Tl) superconductors, Journal of Applied Physics 111 (5), 053914-053914-6 (2012).
64. A Majid, R Ahmad, A Nabi, A Shakoor, N Hassan A Density Functional Theory Study of Raman Modes of Hydrogenated Cadmium Sulphide Nanoparticles, Nanomaterials and Nanotechnology, Vol. 2 No. Godište 2012.
65. N Hassan, M Irfan, NA Khan, S Hussain, A Shakoor, A Majid, S Mohammad;Reduced three-dimensional (3D) Conductivity in Fe doped CuTl-1223 superconductors Materials Chemistry and Physics 136 (2) (2012).
66. A Shakoor, TZ Rizvi, HU Farooq, N Hassan, A Majid, M Saeed;A comparative study of structural, thermal and electrical properties of undoped and doped with dodecylbenzenesulphonic acid polypyrrole, Polymer Science Series B 53 (9-10), 540-545 (2012).
67. A Shakoor, TZ Rizvi, A Nawaz; Raman spectroscopy and AC conductivity of polyaniline montmorillonite (PANI–MMT) nanocomposites, Journal of Materials Science: Materials in Electronics 22 (8), 1076-1080(2011).
68. A Shakoor, PJS Foot, TZ Rizvi "Conductive poly (methyl methacrylate)-polypyrrole dodecylbenzenesulfonate (PMMA-Ppy. DBSA) blends prepared in solution in the presence of hydroquinone" Journal of Materials Science: Materials in Electronics 21 (12), 1270-1276 (2011).

69. A Shakoor, TZ Rizvi, AN Sangra; Polyanilme-montmorilltonite (PANl-MMT) nanocomposites: Mechanochemical synthesis, structure, thermostability and electrical properties, Polymer Science Series A 52 (10), 1034-1043(2011).
70. A Shakoor, TZ Rizvi;Synthesis and characterization of polypyrrole dodecylbenzenesulfonate-titanium dioxide nanocomposites, Journal of Applied Polymer Science 117 (2), 970-973 (2010).
71. A Shakoor, TZ Rizvi, M Sulaiman, M Nasir, M Ishtiaq; Electronic properties of polyaniline doped with dodecylbenzenesulphonic acid (PANI-DBSA) and poly (methyl methacrylate)(PMMA) blends in the presence of hydroquinone, Journal of Materials Science: Materials in Electronics 21 (6), 603-607 (2010).
72. A Shakoor, TZ Rizvi; Raman spectroscopy of conducting poly (methyl methacrylate)/polyaniline dodecylbenzenesulfonate blends, Journal of Raman Spectroscopy 41 (2), 237-240 (2010).
73. A Shakoor, TZ Rizvi;Effect of hydroquinone on the electrical properties of dodecylbenzene sulfonic acid doped polypyrrole/aluminum Schottky junction; Polymer Science Series A 52 (1), 55-59 (2009).
74. A Shakoor, TZ Rizvi, H Anwar;Morphological, thermal, and conductivity studies of poly (methyl methacrylate)/polyaniline dodecylbenzenesulfonate blends; Polymer Science Series A 51 (8), 898-903 (2009).
75. TZ Rizvi, A Shakoor; Electrical conductivity and dielectric properties of polypyrrole/Na+–montmorillonite (Ppy/Na MMT) clay nanocomposites; Journal of Physics D: Applied Physics 42 (9), 095415 (2009).
76. A Shakoor, TZ Rizvi, PJS Foot; Synthesis and characterisation of polyaniline/montmorillonite nanocomposites; Polymers & polymer composites 17 (6), 359-363 (2009).
77. A Shakoor, H Anwar, TZ Rizvi “Preparation, Characterization and Conductivity Study of Polypyrrole-Pillared Clay Nanocomposites” Journal of composite materials 42 (20), 2101-2109 (2008)

Supervision

Ph.D Scholars Thesis Defended

03Ph.D students have defended their thesis under my super vision and 03 are under supervision whose letters of supervision are attached with (page 29-31)

1. ***Muhammad Saeed (2012-2015)***
   Synthesis and Characterization of Conducting Polymer and their application in Electronic Devices
2. ***Asmat Elahi (2013-2016)***
   Preparation and studies of polymer magnetic –Oxide composites for active applications.
3. ***Tahir Bashir (2014-17)***
   Expanded Metal Oxides/Conducting Polymers Composites: Synthesis, Properties and Potential Applications
4. ***Muhammad Irfan (2017-2021)***
   Congugated Polymer for Opto-electronics Applications

UNDER SUPERVISION (03)

1. ***Muhammad Nadeem Anwar (2017-21)****"The Conducting Polymer based Cadmium Oxide Composites as an Electrode Material for Energy Storage Applications"*
2. ***Muhammad Qassim (2017-21)*** *" Synthesis characterization of conducting polymer Based Transition Metal Oxide Nanocomposites for EMI Shielding"*
3. ***Syeda Ariba Bibi (2018-22) "****Development of Organic/Inorganic Nanostructured Hybrid Materials for Solar Cell Applications"*
4. ***Junaid Naeem (2019-23)*** *"A study of incarporation of Polymer Composites in Bitumen for its potential Applications"*

M.Phil. Supervised = 40

1. Hafiz Umer Farooq *(2009-2011)*	*Structural and electrical properties of doped Polypyrrole and its Composite with Montmorillonite clay*	**2011**
2. Muhammad Qasim *(2010-2012)*	*Charge transport properties of PANI-TiO2 Composite.*	**2012**

3. Niaz Ahmad Qazi *(2010-2012)*	*Charge transport mechanism in polyaniline-zno composites*	**2012**
4. AZHAR ABBAS *(2010-2012)*	*Synthesis and characterization of Polyaniline-zno composites*	**2012**
5. Muhammad Munawar *(2011-2013)*	*Dielectric properties of polypyrrole-polymethamethylacralate blends*	**2013**
6. Muhammad Javed *(2011-2013)*	*Structural and electrical properties of doped polyaniline and its composites with Zinc Oxide composites*	**2013**
7. Iftakhar Paracha *(2012-2014)*	*Synthesis characterization of Polyaniline – Ni-Zr composites*	**2014**
8. Muhammad Nadeem Anwar(2012-2014)	*The Structural, Morphological and Electrical properties of polyaniline carbon nanotubes (PANI-CNTs) composite*	**2014**
9. Naveed U Rehman (2013-2015)	*Synthesis and characterization of PANI-$Sr_2Ni_2Fe_{12}O_{22}$Composites*	**2015**
10. Ali Zia (2014-2016)	*The structural and Electrical Properties of Polyaniline Nickel OxideComposites*	**2015**
11. Misbah (2014-2016)	*Morphological and Electrical Properties of Sulpholated doped Polyaniline*	**2016**
12. Rabia Rasheed (2014-2016)	*Synthesis and Charactrization of Polypyrrole Ni-Zr Alloy Composites*	**2016**
13. 18. Farhan Aslam MP-16-19	*Doped Polyaniline as a switching material*	**2016**

14. **Naveed Akhter MP-16-20**	*The structural and Dielectric Properties of Poly(methyl methacrylate) composites.*	2016
15. **Umair Shahzad MP-16-26**	*Effect of dopant on conductivity of Polyacetylene*	2016
16. **Muhammad Abass MP-16-32**	*Junction Properties of Sulphonated doped Polypyrrole SchottkyBarriers*	2016
17. Muhammad Farhan MP-17-18	*Dielectric Properties of Polymethamethylacralate-ZnO Composites*	2017
18. 23. Kubra Sadaf MP-17-45	*Seeback Measurements of polyrrole Composites*	2017
19. Aysha Talib	*Seeback Measurement Studies of Polyaniline Composites*	2017
20. Muhammad Asif MP-17-48	*4-Probe Conductivity of Polypyrrolle CdO Composite*	2017
21. Irum Sharif MP-17-40	*Synthesis and Characterization of Polyaniline with Carbon Nano Tubes CNTs. Composites*	2017
22. Ayesha Nooor MP-17-29	*Impedance Studies of Polypyrrole MnO2 Composites*	2017
23. Bilal Aziz	*Charge Transport Mechanism in Nickel Oxide Polypyrole Composites.*	2018
24. Muhammad Nauman Qureshi MP-18-56	*Effect of Light Intensity on conductivity of Perosvskite Materials*	2018
25. MP-18-27	*Effect of Light Intensity on Conductivity of Polyaniline ZnO Composites*	2018

26. Muniba Shoukat MP-18-41	*Seeback Measurement Studies of Polypyrrole MnO2 Composites*	2018
27. Seerat ul Arooj MP-18-43	*Seeback Measurement Studies of PANI-CdO Composites*	2018
28. Ayesha Khan MP-18-49	*Synthesis of PPY DBSA CdO composites for thermoelectric properties.*	2018
29. Javed Iqbal MP-21-19	*Structural, Morphological and Electrical Properties of Ployaniline-MnO2 doped with Sulphuric Acid.*	2019
30. Ibrahim MP-21-11	*Preparation and characterization of doped Polyaniline-MnO2 composites for Seeback Measurements*	2019
31. M. Shahzad MP-20-12	*Conduction Mechanism of Ppy-Catio3 Composites*	2020
32. Maryium Iram MP-20-10	*Synthesis of polyaniline-CaTiO3 composites doped with hydrochloric acid*	2020
33. Javeed Iqbal MP-21-19	*Structural Morphological and electrical properties of Polyaniniline Mn02 doped with sulphuric Acid*	2021
34. Muhammad Shafqat MP-21-11	*Optical and Electrical properties of Polypyrrole Titanium dioxide Composites for photovoltaic characteristics*	2021
35. Muhammad Osama Ali MP-21-16	*Studies of Polyaniline CdO composites for supercapacitor applications*	2021
36. Zafar Iqbal MP-21-25	*Morphology and Electrical Properties of Polyaniline-Polythene Blends.*	2021

37. Arbaz Bashir	*Enhanced Electrical and Morphological Properties of Polyaniline Doped With Different Acids*	2021
38. Hafiz Amir Ali	*Percolation Threshold In Conductivity Of Polyaniline/Polymethyl Methacrylate Blends*	2021
39. Safeer Mehdi	*Photovoltaic Properties of Polyaniline Doped With Catio3.*	2021

PROJECTS

The letters of most recent projects and their source detail is attached with (Page 36-44)

1. Incorporation of Rare Earth Metals in Conducting Polymers for EMI Shielding D. No. ORIC /2023/146 dated 25-07-2023. Source Internal Amount Rs.250000/ in progress
2. Developing simple low-cost extruder for plastic waste modified bitumen for construction of flexible pavements. D.No.ORIC /2021/151 dated 25-05-202. Source Internal, Amount Rs.400000/ Completed clearance submitted
3. Incorporation Of Ferrite Materials with Polymer Blends and Composites For energy storage devices Applications HEC 2022 source external Rs. 7.5M (Under Review)
4. Award of Research grant 2018-19 from BZU ORIC D.No,/ ORIC /170-20/2018-19 dated 01-03-2021. Source Internal Rs. 150000/ Completed
5. Expanded Metal Oxides/Conducting Polymers Composites: Synthesis, Properties and Potential Applications. BZU Project No.Phys/12/1576 dated 8th August 2015. Soutrce Internal Rs. 324820/ Completed
6. Incorporation Of Magnetic Oxides In Polymer Matrix For Active Applications PSF/ Res/ /P-BZU/Phys(177) dated 24th January 2014.Source Internal Rs. 200000/ Completed
7. Investigation on organic in-organic interaction by using Raman spectroscopy HEC Project No: PM_IPFP.HRD/HEC/2012/2737.Feb 2012 Source External Rs.500000/ Completed
8. Conducting polymers as electronic device applications. BZU Project No.Phys/12/1576 dated 8th August 2012 Source Internal Rs.75000/ Completed

Conferences/Workshops Attended

The copy of Letters of most recent Conferences are attached with (page 44-55)

- Participated in Pak-UK Education Gateway, 04 days training course on Research Capacity Building Programme for Researchers in July 2022. Ramada Multan (Copy attached)
- Speaker on 1st International Conference of Emerging Trends in Physics 23-24 May 2022. Islamia University Bahawalpur.
- Participated in 2nd international conference on Physical Sciences and Engineering 12-14 December 2022 at Physics Department University of Engineering Information Technology (UEIT) Rahim Yar Khan Pakistan
- Invited Speaker on 1st International Conference on strongly Corelated Electron System and nanotechnology January 15-17 2019, Woman University Multan.
- 12th Regional Conference on Mathematical Physics, March 27-April 01, 2006, Quaid-i-Azam University, Islamabad, Pakistan.
- Conference on Physics 15-17 November 2011 at University of Gujrat, Punjab Pakistan
- International Conference on Condence Matter Physics and Engineering 29-31 December 2012 At Department of Physics BZU Multan
- International Spring NCP Islamabad 2011, 2012, 2013, 2014, 2015 and 2017
- 1st National conference on emerging trends in Materials Science 5-7 October 2017 oral presentation
- All International Symposiums on Conducting Polymer (from September 2007 to May 2008) at Kingston University Penrhyn Road Kingston Upon Thames. KT1 2EE (one symposium every month)
- 4th Workshop on Particle Physics, November, 2005, Quaid-i-Azam University, Islamabad, Pakistan

Productivity Awards RPA

Certificates issued by PSF are attached with (page 56-57)

I have been awarded RPA 4 times from 2011 to 2014 continuously by Pakistan Science Foundation and later on this programme was stopped by PSF Pakistan.

{ http://www.psf.gov.pk/}

Performance based increments and Honorariums

Some letters are attached with (page 58-62)

On the basis of my research publications and teaching experience two advance increments were awarded at the time of Joining and I won performance-based increments every year of my service from 2012 to 2021, while working as Assistant Professor from 2012 to 2017 and Honorarium for the year 2017, 2018 and 2019 as an Assistant Professor of Physics at BZU Multan, whereas 2020 and 2021 as an Associate Professor of Physics at BZU Multan. I qualify for performance-based increment as well as Honorarium for the year 2022, which has not yet been awarded by the university

TEACHING

Course Taught

	Course Title	**Course code**	***Class***	**Scope**
1.	Mathem.Methods for Physicists	PHY-301	***M.Sc APPLIED PHYSICS***	**Mathematical methods for physicists** refers to development of mathematical methods for application to problems in physics. "the application of mathematics to problems in physics and the development of mathematical methods suitable for such applications and for the formulation of physical theories
2.	MMP-II	PHY-302	***M.Sc APPLIED PHYSICS***	**T**he development of mathematical methods suitable for computational Physics and for the formulation of physical laws
3.	Classical Mechanics	PHY-305	***M.Sc APPLIED PHYSICS***	The rigorous, abstract and advanced re-formulation of Newtonian mechanics adopting the Lagrangian mechanics and the Hamiltonian mechanics .

4.	Waves and Oscillation	PHY-104	***BS-II***	Simple Harmonic motion applications and uses umdergards Level
5.	Lab I	PHY-311	***BS-V***	Basics experiments of Modern Physics
6.	Lab-II	PHY-312	***M.Sc Applied Physics***	Basics experiments of Spectroscopy

Courses Taught in M.Phil, Ph.D

Conduction Mechanism In Solids	PHY-605	M.Phil	Band theory, periodic potentials different models and different conduction mechanisms like schotkey, poolfrankel and ionic conduction etc etc
Electronic Properties Of Metals	PHY-705	Ph.D	Drude model, Hall effect AC and DC conduction mechanisms in different types of materials like metals, alloys, crystalline amorphous and polymeric materials
MMP	PHYS-501	M.Phil	Differential Equation solutions of Physical problems by different techniques. Green functions and applications
Magnetic Materials	PHYS-511	M.Phil	Measurements of Magnetic fields, properties uses and applications

Thesis Evaluated (10)

Most Recent thesis evaluatted of different universities are attached (page 66-68)

1. Ph.D thesis of Ms Naseem Titled “Carbon nanostructure based resistive Memory device for data storage Applications” Woman University Multan
2. Ph.D thesis of Muhammad Amjad, “Detection of Premature cancer of different types by optical techniques and contrast agent as Biomarker” Islamia University Bahawalpur 04-01-2022

3. M.Phil thesis of Muhammad Waqar 2020-ag-1857 department of Physisc UAF Fasalabad.
4. M.Phil thesis of Muhammad Waqar 2020-ag-1857 department of Physisc UAF Fasalabad.
5. M.Phil thesis Eveluation of Ms. Kiran Mustafa titled "Stability Anakysis Of Davydov Solitons in Alpha Helix Protein: University of Gujrat Punjab Pakistan 2015
6. M.Phil thesis Eveluationreport of Mr. Hafiz Muhammad Javed Afzal titled "Petrurbation Analysis of Optical Solitons in a non Kerr Law Medium University of Gujrat Punjab Pakistan 2014
7. M.Phil thesis Eveluation of Ms. Nosheen Zahra titled "MODELLING OF Oscillation Death In Cardiovascular System (Cvs) University Of Gujrat Punjab Pakistan 2012
8. Mr. Shabbeer Hussain, titled "Fabrlcation and Characterization of Cd1-x Znx S Thin Films by Closed Space Sublimation Technique" Under supervision of Dr. Nazir Ahmad (FUUAST,Islamabad).
9. M.Phil thesis Eveluation of Mr. Adna Ali title "Synthesis of Thalium based superconductors" Univesity of Hazara Malakand KPK Pakistan
10. M.Phil thesis Eveluation of Mr. Muhammad Irfan title Annealing effect on the excess conductivity of $Cu0.5Tl0.25M0.25Ba2Ca2Cu3O10-\delta$ (M= K, Na, Li, Tl) superconductors Univesity of Hazara Malakand KPK Pakistan 2012

Journal Reviews

I have reviewed many journals during my services, a few of them are listed below and their mails are attached with (Page 68-69)

1. Review the manuscript in the journal of Materials Science Materials in Electronics 2022
2. Review the Article in journal Heliyon Journal and has also act as Editor Manager 2022
3. Reviewed many manuscripts of the Journal Polymer and Polymer Composite

Member Societies: page 63-65

1. Life member Pakistan Physical Society Islamabad Pakistan
2. Life member Material Research Society Pakistan.
3. Pakistan Council of Science and Technology NCP Islamabad Pakistan

Services; (2019-23) Letters attached (page 69-73)

4. Member Board of Studies of Institute of Physics BZU Multan

5. Member DTRC OF institute of Physics BZU University Multan
6. Member Board of Studies of Department of Physics Emerson University Multan.
7. Member Board of Studies of Department of Physics Woman University Multan.
8. Member Doctoral Committee of Department of Physics Woman University Multan
9. Chairman Departmental Library Committee. IOP BZU Multan
10. In charge Building IOP, BZU Multan

Work experience; page 76-81

1. Teaching as Tenured Associate Professor of Physics in Institute of Physics at Bahaudin Zakariya University Multan from Dec 2019 to date.
2. Teaching as Assistant Professor of Physics on TTS at Bahaudin Zakariya University Multan from 2010 to Dec 2019
3. Teaching Physics undergraduate classes at Govt. Millat College Mumtazabad Multan from 2008 to 2011
4. Teaching as demonstrator at Kingston University London UK from October 2007 to May 2008. (copy attached page 68)
5. Research associate at Kingston University London UK and got 3rd prize on presentation day of the University on oral Presentation.
6. From September 2004 to August 2009 PhD in Physics at Quaid-i-Azam University Islamabad
7. Teaching as a lecturer in Physics at KH.F. Government college Rahim Yar khan Punjab, Pakistan. From 29th May 1999 to 31st August 2004.