



293, SECTOR E1
W.E.C.H.S.
LAHORE-54770
PAKISTAN

PHONE +92 42 9923 3133
FAX +92 42 9923 1139
E-MAILS
Shahzad_Naseem@yahoo.com
director.cssp@pu.edu.pk

Prof. Dr. Shahzad Naseem

Personal Information

Date of Birth: September 07, 1958
Marital status: Married
Nationality: Pakistani
Place of Birth: Sahiwal (Pakistan)
Father's Name: Abdul Rauf Khan

Present Employment

Centre of Excellence in Solid State Physics
University of the Punjab, QAC
Lahore-54590, Pakistan Tel: +92 42 9923 1136; +92 42 9923 3133 – 5

Education

1973 – 1985

S.S.C.	Govt. Comprehensive School, Sahiwal (Multan Board)	1973
F.Sc.	Govt. College, Sahiwal (Multan Board)	1975
B.Sc.	Govt. College, Sahiwal (B.Z.U. Multan)	1978
M.Sc.	Govt. College, Sahiwal (B.Z.U. Multan)	1980
Ph.D.	University of Northumbria at Newcastle, UK	1985
Post-Doc	University of Cambridge, UK	1996

Professional Memberships

Fellow, Pakistan Institute of Physics (PIP)
Founder President, Society for Solid State Physics (S³P)
Member, Pakistan Society for Semiconductor Science & Technology (PS³T)
Member, Pakistan Physical Society (PPS)
Member, American Vacuum Society (AVS)
Member, Institute of Electrical & Electronic Engineers (IEEE)
Member, IEEE Magnetics Society
Member, IEEE Communications Society

Awards Received

Gold Medal for Outstanding Achievements, awarded by the Pakistan Academy of Sciences, 2013
Post-Doctoral Award of Association of Commonwealth Universities, 1996
Quaid-e-Azam Scholarship, Ministry of Education, Govt. of Pakistan, 1983-85
Gold Medal for standing 1st on Merit in M.Sc. (Physics), B.Z. University Multan, 1981
Research Productivity Award – PCST, MOST, 2001 – 2017

Experimental Techniques Handled

Surface Techniques (AES, SIMS, LEED, RHEED, Scanning Kelvin Probe, Surface Photovoltage Spectroscopy)
Scanning Electron Microscopy (SEM)
Spectroscopic Ellipsometry (SE)
Vibrating Sample Magnetometer (VSM)
Powder X-Ray Diffractometer (XRD)
Optical Mask Aligner (OMA)
Scanning Probe Microscope (SPM)

Publications

TOTAL: 1084
Journal Papers: 330 **Impact Factor: 434.448** **Citations: 2570**
Conference Proceedings: 754 **h10-index: 25** **i10-index: 87**

Students Supervised

TOTAL: 220
MS / MPhil: 205 **PhD: 15**

Professional Experience

1985 – 2018

Centre for Solid State Physics	Director	April 2009 - Date
Microelectronics Research Centre University of the Punjab, Lahore	Director	Oct 04 – 2011
Centre for Solid State Physics	Professor	June 02 – Date
Centre for Solid State Physics University of the Punjab, Lahore	Associate Professor	April 01 – June 02
Microelectronics Research Centre University of Cambridge, UK (on leave from CSSP)	Research Associate	April 99 – April 01
Centre for Solid State Physics University of the Punjab, Lahore	Associate Professor	Oct 97 – April 99
Microelectronics Research Centre University of Cambridge, UK (on leave from CSSP)	Post-Doctoral Fellow	Oct 96 – Sep 97
Centre for Solid State Physics University of the Punjab, Lahore	Associate Professor	April 95 – Sep 96
Centre for Solid State Physics University of the Punjab, Lahore	Assistant Professor	May 89 – April 95
Centre for Solid State Physics University of the Punjab, Lahore	Lecturer	March 86 – May 89
Solar Energy Research Institute (Presently NREL), Colorado, USA	Visiting Scientist	May 85 – July 85

Additional Professional Activities

- Chairman, International Conference on Solid State Physics (ICSSP'17), December 10 – 14, 2017, Punjab University, Lahore, Pakistan
- Chairman, International Conference on Solid State Physics (ICSSP'15), December 13 – 17, 2015, Punjab University, Lahore, Pakistan
- Co-Chairman, 2013 World Congress on Advances in Nano, Biomechanics, Robotics and Energy Research (ANBRE), August 25-28, 2013, COEX, Seoul, Korea
- Chairman, International Conference on Solid State Physics (ICSSP'13), December 01 – 06, 2013, Punjab University, Lahore, Pakistan
- Editor-in-Chief, Proceedings of the International Conference on Solid State Physics (ICSSP'13), December 01 – 06, 2013, Punjab University, Lahore, Pakistan; available at www.sciencedirect.com
- Member, Organising Committee, Pakistan Institute of Physics Conference, April 3-6, 1995
- Member, Organising Committee, Pakistan Institute of Physics Annual Conference, April 2-5, 1993
- Member, Organising Committee, 5th National Conference on Solid State Physics, October 26-29, 1991
- Editor, Proc. 5th National Conference on Solid State Physics, October 26-29, 1991, held at Centre for Solid State Physics, University of the Punjab, Lahore
- Member, Organising Committee, Pakistan Institute of Physics Annual Conference, March 2-5, 1990
- Outstanding Reviewer, Journal of Magnetism and Magnetic Materials, 2018
- Outstanding Reviewer, Materials Chemistry and Physics, 2017
- Outstanding Reviewer, Computational Materials Science, 2017
- Outstanding Reviewer, Physics Letters A, 2017
- Outstanding Reviewer, Surface and Coatings Technology, 2017
- Outstanding Reviewer, Materials Science and Semiconductor Processing, 2017
- Outstanding Reviewer, Materials Letters, 2017

- Outstanding Reviewer, Materials Letters, 2017
- Outstanding Reviewer, Thin Solid Films, 2016
- Outstanding Reviewer, OPTIK – International Journal for Light and Electron Optics, 2016
- Outstanding Reviewer, Materials Research Bulletin, 2016
- Outstanding Reviewer, Journal of Alloys and Compounds, 2016
- Member, Board of Governors, Govt. MAO College, Lahore
- Member, Board of Directors, School of Physical Sciences, University of the Punjab, Lahore
- Member, Departmental Doctoral Program Committee, Department of Physics, University of the Punjab, Lahore, 2008 to date
- Member, Departmental Doctoral Program Committee, Department of Physics, University of Engineering & Technology, Lahore, 2009 to date
- Member, Board of Studies, Centre for Advanced Studies in Physics, GC University, Lahore, 2014 to date
- Member, Board of Studies, Department of Physics, GC University, Lahore, 2014 – 2016
- Member, Academic Council, GC University, Lahore, 2014 – 2016
- Member, National Commission on Nano-Science and Technology, Pakistan
- Editor, Directory of Physicists, Pakistan Institute of Physics,
- Member, Selection Board, Lahore College for Women University, Lahore
- Member, Selection Board, GC University, Lahore
- Principal Investigator, UGC Project – Current Voltage Analysis of Solar Cells
- Principal Investigator, UGC Project – 2D Modelling of Solar Cells
- Principal Investigator, UGC Project – Surface & Interface Analyses of SS & SIS junctions
- Principal Investigator, UGC Project – Design & Implementation of Solar Thermal Electric Power Generator
- Principal Investigator, HEC Project – Establishment of Microelectronics Research Facilities
- Principal Investigator, HEC Project – Establishment of Nanoceramics Research Facilities
- External Examiner, M.Phil. & Ph.D. Exams, UoP, IUB, BZU, GCU, UET, LCWU, MUST & AJK Universities
- Member, Federal Curriculum Review Committee (Electronics)
- Member, Provincial (Punjab) Curriculum Review Committee (Physics)
- Established Nanoelectronics-Chemistry-Research (NCR) Group in collaboration with LCWU, Lahore
- Member, Ph.D. Committee, Lahore College for Women University, Lahore
- Member, Board of Faculty of Engineering & Technology, University of the Punjab, Lahore (nominee of the Punjab University Academic Council)
- Honorary Member, Board of Governors, JAST Computer Training College, Lahore
- Honorary Member, Board of Governors, Sialkot College of Computer Sciences, Sialkot

Offices Held

President, Physics Society, Govt. College, Sahiwal, 1980-81

Member, Executive Council, Punjab University Academic Staff Association, University of the Punjab, Lahore, 1992-93

Member, Executive Council, Punjab University Academic Staff Association, University of the Punjab, Lahore, 1993-94

Joint Secretary, Pakistan Institute of Physics, 1994-95
 Member, Executive Council, Punjab University Academic Staff Association, University of the Punjab, Lahore, 1994-95
 Joint Secretary, Pakistan Institute of Physics, 1996-97
 Honorary Judge, National Science Olympiad held under the auspices of MOE, INTEL, 2004
 Honorary Judge, National Science Olympiad held under the auspices of MOE, INTEL, 2005
 Founder President, Society for Solid State Physics (S³P), 2014

**Conferences
/ Meetings
Attended**

1. Institute of Physics Meeting, London, 1984
2. Summer School on Surface Physics, Dublin, 1984
3. 6th EC Photovoltaic Solar Energy Conference, London, 1985
4. UK-ISES Meeting on Applications of Photovoltaics, Newcastle upon Tyne, 1985
5. 30th Pakistan National Science Conference, Faisalabad, 1987
6. 1st International Symposium/Workshop on Silicon Technology Development and its Role in the Sun-belt Countries, Islamabad, 1987
7. The Pakistan Institute of Physics Annual Conference, Lahore, 1990
8. 5th National Conference on Solid State Physics, Lahore, 1991
9. The Pakistan Institute of Physics Annual Conference, Lahore, 1993
10. 2nd International Symposium/Workshop on Silicon Technology Development and its Role in the Sun-belt Countries, Islamabad, 1993
11. 6th Hitachi – Cambridge Seminar on Ultrafast Physics and Devices for Terabit Communications, Cambridge, 1997
12. 91st Kelvin Lecture, Institute of Electrical Engineers Meeting, London, 1999
13. Micro 2000, Annual Exhibition of Surface Characterization Techniques and Users Meeting, London, 2000
14. Institute of Physics' Device Microscopy and Users Meeting, London, 2000
15. The 2nd Annual Thermomicroscopes' Scanning Probe Microscopy Conference and Users Meeting, Cambridge, 2000
16. National Symposium on Nanotechnologies, Islamabad, 2002
17. Pakistan Physical Society 9th National Symposium on Frontiers in Physics, GC University, Lahore, 2003
18. One Day Seminar on "Creation of Wealth through Manufacturing Management", Jointly Organized by The British Council and Institute of Quality & Technology Management, University of the Punjab, Lahore, 2005
19. Conference on "Nano-Science and Technology in Pakistan", Organized by COMSTECH, Islamabad, 2005
20. One Day Seminar on "The Innovative View into the World of Nanostructures", Lahore, 2005
21. International Conference on Physics, Organized by Pakistan Institute of Physics, University of Engineering & Technology, Lahore, 2006
22. International Conference on Physics, Organized by Pakistan Institute of Physics, University of Engineering & Technology, Lahore, 2009
23. National Meeting on "Nanotechnology Research in Pakistan", organized by COE in Solid State Physics, University of the Punjab, Lahore, 2010
24. National Meeting on "LASERS", jointly organized by Khwarzimi Science Society and COE in Solid State Physics, University of the Punjab, Lahore, 2010
25. The 2012 Intl. Conf. on Adv. In Mater. Res. (ICAMR), August 26-29, 2012, Seoul, Korea
26. International Conference on Advanced Materials and manufacturing Science (ICAMMS), December 17-21, 2012, Beijing, China
27. 40th International Conference on Metallurgical Coatings and Thin Films, April 29 – May 3, 2013, San Diego, CA, USA
28. International Conference on Advanced Complex Inorganic Nanomaterials (ACIN), Namur, Belgium, July 15 – 19, 2013

29. 2013 World Congress on Advances in Nano, Biomechanics, Robotics and Energy Research (ANBRE), August 25-28, 2013, COEX, Seoul, Korea
30. International Conference on Solid State Physics (ICSSP'13), December 1-6, 2013, Punjab University, Lahore, Pakistan
31. International Conference on Materials and Engineering Technology, December 19-20, 2013, Beijing, China
32. The 2014 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'14), August 24-28, 2014, BEXCO, Busan, Korea
33. International Conference on Solid State Physics (ICSSP'15), December 13-17, 2015, Punjab University, Lahore, Pakistan
34. 20th International Vacuum Congress (IVC-20) August 21-26, 2016, BEXCO, Busan, Korea
35. The 2016 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'16), August 28-September 1, 2016, ICC Jeju, Jeju Island, Korea
36. International Conference on Solid State Physics (ICSSP'17), December 10-14, 2017, Punjab University, Lahore, Pakistan

Conferences / Meetings Organized

- The Pakistan Institute of Physics Annual Conference, Lahore, 1990
- 5th National Conference on Solid State Physics, Lahore, 1991
- The Pakistan Institute of Physics Annual Conference, Lahore, 1993
- National Meeting on “Nanotechnology Research in Pakistan”, COE in Solid State Physics, University of the Punjab, Lahore, 2010
- National Meeting on “LASERS”, jointly organized by Khwarzimi Science Society and COE in Solid State Physics, University of the Punjab, Lahore, 2010
- Mini Symposium “Iron Oxide – A promising material for Spintronic and Biomedical Applications”, The 2012 International Conference on Advances In Materials Research (ICAMR), August 26-29, 2012, Seoul, Korea
- Mini Symposium “Nanomaterials for Photovoltaic Applications”, The 2012 International Conference on Advances In Materials Research (ICAMR), August 26-29, 2012, Seoul, Korea
- Mini Symposium “Significance of Iron Oxide Nanostructures” World Congress on Advances in Nano, Biomechanics, Robotics and Energy Research (ANBRE), August 25-28, 2013, COEX, Seoul, Korea
- Mini Symposium “Advanced Materials for PV Applications” World Congress on Advances in Nano, Biomechanics, Robotics and Energy Research (ANBRE), August 25-28, 2013, COEX, Seoul, Korea
- Mini Symposium “Nanomaterials for Electronic / Biomedical Applications” World Congress on Advances in Nano, Biomechanics, Robotics and Energy Research (ANBRE), August 25-28, 2013, COEX, Seoul, Korea
- International Conference on Solid State Physics (ICSSP'13), December 01 – 06, 2013, Punjab University, Lahore, Pakistan
- Mini Symposium “Semiconductor Formation through Chemical Routes”, The 2014 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'14), August 24-28, 2014, BEXCO, Busan, Korea
- Mini Symposium “Iron Oxide and it's allied Nanomaterials”, The 2014 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'14), August 24-28, 2014, BEXCO, Busan, Korea
- Mini Symposium “Nano-oxides for Optical Applications”, The 2014 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'14), August 24-28, 2014, BEXCO, Busan, Korea
- Mini Symposium “Magnetic Nanostructures for various High-Tech Applications”, The 2014 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'14), August 24-28, 2014, BEXCO, Busan, Korea

- International Conference on Solid State Physics (ICSSP'15), December 13 – 17, 2015, Punjab University, Lahore, Pakistan
- Mini Symposium “Nanobiotechnology: Materials and Applications - I”, The 2016 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'16), August 28-September 1, 2016, ICC Jeju, Jeju Island, Korea
- Mini Symposium “Nanobiotechnology: Materials and Applications - II”, The 2016 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'16), August 28-September 1, 2016, ICC Jeju, Jeju Island, Korea
- Mini Symposium “2 Dimensional Materials in Modern Perspective”, The 2016 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'16), August 28-September 1, 2016, ICC Jeju, Jeju Island, Korea
- Mini Symposium “Nanoceramics and Nanocomposites”, The 2016 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'16), August 28-September 1, 2016, ICC Jeju, Jeju Island, Korea
- Mini Symposium “Recent Advances in Nanomaterials Research - I”, The 2016 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'16), August 28-September 1, 2016, ICC Jeju, Jeju Island, Korea
- Mini Symposium “Recent Advances in Nanomaterials Research - II”, The 2016 World Congress on Advances in Civil, Environmental and Materials Research (ACEM'16), August 28-September 1, 2016, ICC Jeju, Jeju Island, Korea
- International Conference on Solid State Physics (ICSSP'17), December 10-14, 2017, Punjab University, Lahore, Pakistan

Thesis Supervised

1. Ijaz A. Rauf 1985-87 "Preparation and characterisation of In_2O_3 thin films for photovoltaic applications" **M.Phil.**
2. Abdul Ghafoor Alvi 1985-87 "Preparation and characterisation of CdS thin films" **M.Phil.**
3. M. Izhar-ul-Hassan 1986-88 "Structural and electrical properties of Cu_2O thin films prepared by evaporating Cu in O_2 environment" **M.Sc. (Co)**
4. Hummayun Mohsin 1986-88 "Characterisation of CdS:I thin films prepared with varying substrate temperature" **M.Sc. (Co)**
5. Muhammad Iqbal 1986-88 "Effects of annealing on the properties of reactively evaporated In_2O_3 thin films" **M.Phil.**
6. Rehana Rafiq 1986-88 "Optical, electrical and structural properties of CdS:I thin films" **M.Phil.**
7. Lt. A.D. Khan 1986-88 "Effects of substrate temperature variations on the properties of reactively evaporated In_2O_3 thin films" **M.Phil.**
8. Riffat Mumtaz 1986-88 "Doping effects of CdCl_2 on the properties of thermally evaporated CdS thin films" **M.Phil.**
9. Naseer-ud-Din 1987-89 "Study of optical and structural properties of vacuum evaporated CdTe thin films" **M.Phil.**
10. S. Nasir A. Abidi 1988-90 "Fabrication and characterisation of heterojunction solar cells" **M.Phil.**
11. Nazar Abbas Shah 1988-90 "Preparation and study of Cu-doped CdTe thin films" **M.Phil.**
12. Hafiz Abdul Nasir 1988-90 "A study of preparation and properties of CdS & CdTe materials for PV applications" **M.Phil. (Co)**
13. M. Amin Mughal 1989-91 "Preparation and characterisation of $\text{Zn}_x\text{Cd}_{1-x}\text{S}$ thin films" **M.Phil.**
14. Ishtiaq Ahmed 1989-91 "Study of the variation in electro-optical properties of $\text{Zn}_x\text{Cd}_{1-x}\text{S}$ thin films" **M.Phil.**
15. Iftikhar Ahmed 1990-92 "Computational analysis of ITO/InP solar cells" **M.Phil. (Co)**
16. Khalid Mansoor 1990-92 "Numerical analysis of ITO/InP solar cell data" **M.Phil. (Co)**
17. Qayyum N. Chohan 1990-92 "Preparation and characterisation of organo-metallic compound thin films" **M.Phil. (Co)**
18. S. Rizwan A. Alvi 1990-92 "Preparation and characterisation of doped $\text{Zn}_{0.1}\text{Cd}_{0.9}\text{S}$ thin films" **M.Phil.**
19. M. Shafiq Ahmed 1991-93 "Preparation of CdS/ Cu_2S solar cells" **M.Sc. (Co)**
20. Naveed Ahmed 1991-93 "A study of the electro-optical properties of $\text{Zn}_x\text{Cd}_{1-x}\text{S}$ thin films" **M.Sc. (Co)**
21. Dilawaiz Nazir 1991-93 "I-V modelling of heterojunction PV devices" **M.Phil.**
22. Aslam Mahboob 1991-93 "Preparation and characterisation of doped $\text{Zn}_{0.2}\text{Cd}_{0.8}\text{S}$ thin films" **M.Phil.**

23. Ghazanfer S. Malik 1991-93 "Preparation and Auger electron spectroscopy of SiC/Si samples" **M.Phil.**
24. Ejaz Ahmed 1991-93 "Preparation and characterisation of SiC thin films" **M.Phil.**
25. Naureen Yousaf 1991-93 "Current-voltage modelling of NIST silicon solar cells" **M.Phil.**
26. Mrs. Razia K. Rai 1992-94 "Preparation and study of optical and electrical properties of CdS films from industrial pigment material" **M.Phil. (Co)**
27. Rai Khalid M. Khan 1992-94 "The preparation and study of optical properties of manganese phosphate glasses" **M.Phil. (Co)**
28. Shazia Yasin 1992-94 "Effect of ohmic contacts on the properties of CdS/CdTe solar cells" **M.Phil.**
29. Aneela Ruby 1992-94 "Preparation of TiO₂ thin films for application in photo-electrochemical solar cells" **M.Phil.**
30. Ambreen Mirza 1992-94 "Preparation and characterisation of ZnTe thin films for photovoltaic applications" **M.Phil.**
31. Bashir A. Tahir 1992-94 "A study of crystalline Si solar cells" **M.Phil.**
32. Majida Chaudhry 1992-94 "One diode modelling of heterojunction solar cells" **M.Phil.**
33. Kamila Rehman 1993-95 "Preparation and characterisation of SEL deposited CuInSe thin films" **M.Phil.**
34. M. Hammad Asghar 1993-95 "Fabrication, characterisation and interface study of CdS/CdTe thin film solar cells" **M.Phil.**
35. Nadeem Ahmed 1994-96 "Two diode modelling of solar cells" **M.Sc. (Co)**
36. Muhammad Ashraf 1994-96 "Numerical modelling of ITO/InP solar cells" **M.Sc. (Co)**
37. Maj. M.I. Munawwar 1997-99 "2-diode modelling of heterojunction solar cells" **M.Phil.**
38. S. Nudrat Humera 1997-99 "AES analysis of Josephson tunnel junctions" **M.Phil.**
39. Javed Rafiq 1997-99 "Auger electron spectroscopic analysis of multi-layered quantum well structures" **M.Phil.**
40. Lt. Ashfaq A. Naz 1997-99 "Preparation and characterization of multi-stack SEL deposited CuInSe_x films" **M.Phil.**
41. M. Abbas Bari 1998-00 "Study of residual electrical resistivity in Cu_{1-x}Au_x, Cu_{1-x}Ag_x, Ni_{1-x}Au_x, Fe_{1-x}Ni_x and Pt_{1-x}V_x binary alloys due to short range order" **M.Phil. (Co)**
42. Mazhar H. Bokhari 2000-02 "Deposition and study of structural, optical, photoconductivity and dielectric properties of Al₂O₃ thin films" **M.Phil.**
43. Athar Javed 2000-02 "Preparation and characterization of CIGS thin films" **M.Phil.**
44. M. Ashfaq 2000-02 "Deposition of AlN thin films and its structural and dielectric characterization" **M.Phil.**
45. Humera Nosheen 2000-02 "Numerical analysis and theoretical fitting of experimental current voltage data of ITO/InP solar cells" **M.Phil.**

46. Fouzia Jabeen 2000-02 "Optical, structural and electrical analysis of Zn_xCdTe " **M.Sc. (Co)**
47. Kamran-ul-Hassan 2000-02 "Thin film deposition of CdTe and study of its optical and structural properties" **M.Sc. (Co)**
48. Aneeqa Bashir 2000-02 "Investigation of PL spectra in self-assembled QDs" **M.Phil. (Co)**
49. Muneer A. Shad 2001-03 "Dielectric properties of chlorine doped ZnS", **M.Phil.**
50. Aamir Mukhtar 2001-03 "Optoelectrical and structural properties of cadmium chalcogenides" **M.Phil.**
51. Ayesha Farooq 2001-03 "Phase variation and optical characterization of $CdSe_{0.1}Te_{0.9}$ and $CdSe_{0.6}Te_{0.4}$ thin films" **M.Phil.**
52. Ambreen Ayub 2001-03 "Phase transformation studies of CIGS thin films by XRD" **M.Phil. (Co)**
53. Altaf Hussain 2001-03 "Critical Evaluation of atmospheric pressure glow discharges" **M.Phil. (Co)**
54. Sher Muhammad 2001-03 "X-ray diffraction analyses of locally available $ZnCl_2$ & S mixtures at different temperatures" **M.Phil.**
55. Rizwan Ahmad 2001-03 "Use of mass spectrometry for analysis of various compounds" **M.Phil.**
56. Imran Akram 2002-04 "Feasibility of utilization of domestic hot water in Pakistan" **M.Phil.**
57. Mahmood-ul-Hassan 2002-04 "Dependence of structural properties of CIGS thin films on reaction time at 250 & 450 °C" **M.Phil.**
58. Muhammad Umer 2002-04 "On the use of X-ray Diffraction for in-depth characterization of solid materials" **M.Phil.**
59. Salman Mahmood 2002-04 "Dependence of optical and structural characteristics of CdSeTe thin films on reaction time at different temperatures" **M.Phil.**
60. M. Farooq Sabir 2002-04 "Optical and structural properties of $CdSe_{0.6}Te_{0.4}$ thin films on reaction time at different temperatures" **M.Phil.**
61. S. Uzma Kafayat 2003-05 "Preparation & characterization of alumina films by sol-gel method" **M.Sc. (Co)**
62. Mehrun-Nisa 2003-05 "Preparation & characterization of silica films by sol-gel method" **M.Sc. (Co)**
63. Raheel Abbas 2003-05 "Use of spark source mass spectrometry for analysis of various materials" **M.Phil.**
64. Shumaila Islam 2004-06 "Mullite transformation kinetics in B_2O_3 -enhanced aluminum silicate gels" **M.Phil.**
65. Samreen Usman 2004-06 "Preparation, phase transformation and crack alleviation in sol-gel based titania" **M.Phil.**
66. Muhammad Imran 2004-06 "Fabrication and study of various absorbing media based systems for solar thermal generation of energy" **M.Phil.**

67. Sikander Hayat 2002-06 "Construction and study of a test chamber for electrical testing" **B.Sc. (Hons) (Co)**
68. Muhammad Ijaz 2002-06 "A study of the memory devices in controlled environment" **B.Sc. (Hons) (Co)**
69. Zaib-un-Nisa 2002-06 "Elemental analyses of metallic materials by using spark source mass spectrometry" **B.Sc. (Hons) (Co)**
70. Sana Batool 2002-06 "Elemental analyses of semiconductor materials using spark source mass spectrometry" **B.Sc. (Hons) (Co)**
71. Qurat-ul-Ain 2003-07 "ESR studies of aluminium based thin films" **B.Sc. (Hons) (Co)**
72. Kamran Siddique 2004-06 "Preparation and ESR studies of aluminium and its compound thin films" **M.Phil.**
73. Samiullah Khan 2004-06 "Preparation and characterization of Cu-doped CdTe thin films" **M.Phil.**
74. Salma Iqbal 2004-06 "Preparation and characterization of TiO₂ thin films for photoelectrochemical solar cells" **M.Phil.**
75. M. Junaid Amjad 2004-06 "Preparation and characterization of CoFeNi magnetic thin films" **M.Phil.**
76. Qamer Zia 2004-06 "Dielectric properties of barium titanate" **M.Phil.**
77. Saima Fazal 2004-06 "Study of deep levels in p-Si using Deep Level Transient Spectroscopy" **M.Phil.**
78. Sumera Siddique 2004-06 "Creation of diffused Si p-n junction and study of deep level defects in it by using DLTS" **M.Phil.**
79. Saira Riaz 2004-07 "Preparation and characterization of advanced materials for electronic and opto-electronic devices" **Ph.D.**
80. M. Hammad Asghar 2004-07 "Design, preparation and characterization of optical coatings in visible and infrared band" **Ph.D.**
81. Farooq Ahmed 2004-06 "Fabrication and characterization of CdTe Schottky junctions for optoelectronic devices" **M.Phil.**
82. Muhammad Ahmed 2004-06 "Simulation of FEM of resist profile using PROLITH" **M.Phil.**
83. Saima Shafique 2004-06 "Study of levels in n-type 4-H SiC through DLTS and effect of metal on barrier height" **M.Phil.**
84. Asif Mirza 2004-06 "Modelling & designing of MEMS bent beam electrothermal actuators using ANSYS" **M.Phil.**
85. M. Saeed Akhtar 2004-06 "Photoresist modelling and simulation of critical dimension of positive photoresist using PROLITH" **M.Phil.**
86. Aamir Farooq Malik 2005-07 "Modelling and designing of RF MEMS switch using ANSYS" **M.Phil.**
87. Mansoor Ahmed 2005-07 "Preparation and characterization of CoPt and CoCrPt nanowires using sol-gel technique" **M.Phil.**

88. Muhammad Khalid 2005-07 “Modelling of self-heating effect in fully depleted SOI n-MOSFET using SPICE” **M.Phil.**
89. M. Zafar ullah Kazim 2005-07 “SPICE modelling of parasitic BJT effect in partially depleted SOI n-MOSFET” **M.Phil.**
90. M.A.K. Lodhi 2005-07 “Optimization of images using Scanning Probe Microscope” **M.Phil.**
91. Aftab Farrukh 2005-07 “Characterization of MTJs for the i-layer using spectroscopic ellipsometer” **M.Phil.**
92. Muhammad Shoaib 2005-07 “Modelling and designing of MEMS actuators using ANSYS” **M.Phil.**
93. Waheed Ahmed 2005-07 “Optimization of resist development for optical lithography” **M.Phil. (Co)**
94. Farman Z. Malik 2005-07 “Preparation and characterization of CoNiFe thin films using electrochemical deposition” **M.Phil.**
95. M. Waseem Ashraf 2005-07 “SPM imaging, device fabrication and surface characterization” **M.Phil.**
96. Mohsin I. Piracha 2005-07 “Preparation and characterization of Cu(In,Al)Se₂ thin films at reaction temperature of 250 °C and 450 °C” **M.Phil.**
97. M. Altaf-ul-Haq 2005-07 “Modelling of temperature dependent kink effect in partially depleted n-MOSFET” **M.Phil.**
98. M. Usman Ansari 2005-07 “Carbon nanotube synthesis and their characterization” **M.Phil.**
99. M. Ghayas ud Din 2005-07 “A study on VLSI design methodologies and development of design flow” **M.Phil.**
100. Ayesha Younis 2005-07 “Semiconductor LASER fabrication and its characterization” **M.Phil.**
101. Muhammad Saeed 2005-07 “Study of changes in the properties of CoB under various conditions” **M.Phil.**
102. Ayesha Kanwal 2006-08 “Use of spark source mass spectrometry for analysis of aerosol material” **M.Phil.**
103. Amber Islam 2006-08 “Optical characterization of copper indium aluminium diselenide (CIAS) thin films by spectroscopic ellipsometry” **M.Phil.**
104. Zohra N. Kayani 2005-08 “Preparation and characterization of ferroelectric and ferromagnetic thin films” **Ph.D.**
105. Rehana Zia 2005-08 “Preparation and characterization of CdTe based thin film solar cells” **Ph.D. (Co)**
106. Naveed Ahmed 2005-08 “Urban aerosol measurements and their study by the use of XRD and mass spectrometry” **Ph.D. (Co)**
107. Ayesha Sadiqa 2007-09 “Fabrication and electrical characterization of Schottky field effect transistors” **M.Phil.**
108. Zoobia Ameer 2007-09 “Preparation possibilities of template assisted nano-growth”, **M.Phil. (Co)**

109. Sobia Jabeen 2007-09 "Fabrication and characterization of plasma treated $\text{Co}_{78}\text{B}_{22}$ magnetic tunnel junctions" **M.Phil. (Co)**
110. Qurat-ul-Ain 2007-09 "Structural and magnetic properties of ZnO thin films through sol-gel route" **M.Phil. (Co)**
111. Murtaza Saleem 2008-12 "Preparation and characterization of ZnO based diluted magnetic semiconductor (DMS) materials" **Ph.D. (Co)**
112. Muhammad Khalid 2008-10 "Designing and simulation of silicon carbide based devices for power applications" **Ph.D.**
113. Muhammad Farooq 2008-10 "Development & characterization of zirconia yttria thermal barrier coatings (TBCs) produced by low pressure plasma spraying techniques" **Ph.D.**
114. M. Altaf Hussain 2008-10 "Noise optimization of low power CMOS charge amplifier using simulation environment of ELDO^(R)" **M.Phil.**
115. Arfan Bukhtiar 2008-10 "Influence of gate oxide thickness on 20nm PD SOI n-channel MOSFET using TCAD" **M.Phil.**
116. S. Shahbaz Ali 2008-10 "Power macro-modelling for CMOS inverter with parasitic capacitances using 0.12 μm technology" **M.Phil.**
117. Nazia Erum 2008-10 "Modelling of experimental data of p-n heterojunction for opto-electronic applications" **M.Phil.**
118. Muhammad Nadeem 2008-10 "Theoretical and experimental determination of optical properties of sol-gel deposited ZnO thin films" **M.Phil.**
119. M. Yasir Rafique 2008-10 "Design and simulation of Class D amplifier with control of modulation frequency by voltage" **M.Phil.**
120. Bilal Arif 2008-10 "Study of CMOS inverter with parasitic capacitances in 0.12 μm technology for low power applications" **M.Phil.**
121. Muhammad Azam 2008-10 "Designing and simulation of optoelectronic devices using Synopsys TCAD" **M.Phil.**
122. Muhammad Yasir 2008-10 "Fabrication and characterization of carbon nanostructure based Field Effect Transistor" **M.Phil. (Co)**
123. M Saeed Akhtar 2008-15 "Preparation and characterization of ZnS based half metallic ferromagnets" **Ph.D.**
124. Imran Sadiq 2009-12 "Influence of rare earth elements on hexagonal ferrites for high frequency applications" **Ph.D. (Co)**
125. Muhammad Umer 2009-11 "Influence of active silicon thickness on 20nm FD SOI n-channel MOSFET using Synopsys TCAD" **M.Phil.**
126. M. Farooq Saleem 2009-11 "Designing and simulation of electrical characteristics of normally-off 4H-SiC vertical junction FET using Sentaurus TCAD" **M.Phil.**
127. Tayyab Abbas Shah 2009-11 "Study of the effects of Co nanoparticles on the properties of carbon nanotubes" **M.Phil. (Co)**
128. Rizwana Nawaz 2009-11 "Sol-Gel deposited ZnO for solar cell applications" **M.Phil. (Co)**

129. Muhammad Rashid 2009-11 "Fabrication and characterization of carbon nanostructures based photodetectors" **M.Phil. (Co)**
130. Mian Kashif Safeen 2009-11 "Preparation and characterization of transition metal doped ZnO thin films" **M.Phil. (Co)**
131. Mian Akif Safeen 2009-11 "Preparation and characterization of undoped ZnO thin films" **M.Phil. (Co)**
132. M. Imran Irshad 2009-11 "Preparation and characterization of FeNiCo multi-layered magnetic thin films by electrodeposition" **M.Phil. (Co)**
133. Farhan Ahmed 2009-11 "Determination of optical constants of sol-gel deposited SiO₂ thin films using spectroscopic ellipsometry" **M.Phil. (Co)**
134. Farzana Majid 2009-14 "Experimental investigations of bismuth iron oxide based nanostructures and their correlation with theory" **Ph.D.**
135. Amjad Farid 2010-12 "Study of ion beam irradiation effects on structural properties of single-crystal GaN thin films by RBS/Channeling" **M.Phil.**
136. Karim Khan 2010-12 "Study of ion beam irradiation effects on structural properties of single-crystal AlN thin films by RBS/Channeling", **M.Phil.**
137. Yasir Abdul Haleem 2010-12 "Characterizations and functionalization of diamond nanocrystalline samples" **M.Phil.**
138. Shahid Iqbal 2010-12 "Study of high energy (MeV) ion beam irradiation effects on physical properties of multi-walled carbon nanotubes" **M.Phil.**
139. Shandana Fatima 2010-12 "Modeling and simulations of advanced optical materials" **M.Phil.**
140. Abdul Aziz 2010-12 "Fabrication and characterization of photoelectrochemical cells" **M.Phil.**
141. Tahir Mahmood 2010-12 "Development and confocal images of nanoparticles in photodynamic therapy" **M.Phil.**
142. Sajid Farooq 2010-12 "ZnO/Si solar cell fabrication through sol-gel route" **M.Phil.**
143. M. Sulaman 2010-12 "Fabrication of carbon nanotube based back gate FET" **M.Phil.**
144. Imran Ali 2010-12 "Fabrication of screen printed CdS/CdTe solar cell" **M.Phil.**
145. Usman Khan 2010-12 "Preparation and characterization of superconducting thin films and devices" **M.Phil.**
146. Muhammad Ashraf 2010-12 "Fabrication and characterization of ZnCdS/CdTe thin film solar cells" **M.Phil.**
147. Muhammad Habib 2010-12 "Preparation and characterization of ZnO based gas sensors" **M.Phil.**
148. Fakhar Abbas 2010-12 "SiC based trench implant VJFET for blocking voltage analysis" **M.Phil.**
149. M. Wasim Raza 2010-12 "SiC based trench implant VJFET for switching analysis" **M.Phil.**

150. Zeeshan Muhammad 2010-12 “Simulation of visible-band UV photodetector based on GaN” **M.Phil.**
151. Arsalan Ahmad 2010-12 “Optical and electrical characterization of thin transparent conducting oxides for photovoltaic applications” **M.Phil.**
152. M. Amer Mustafa 2010-12 “Study of impact ionization in the 3D FinFET structures by varying channel doping concentration at higher temperature using SYNOPSIS TCAD” **M.Phil. (Co)**
153. Iqra Jafer 2010-12 “Modelling and designing of SMA actuated RF MEMS switch using ANSYS” **M.Phil. (Co)**
154. Kaleem Ullah 2010-12 “Study of the effect of channel doping concentration and temperature on the impact ionization of n-channel FD SO MOSFET using TCAD” **M.Phil. (Co)**
155. Hareem Arif 2010-12 “Simulation and modelling of GaN/AlGaIn VHFET using TCAD” **M.Phil. (Co)**
156. Azim Khan 2011-13 “Fabrication and characterization of functionalized multi-walled carbon nanotube-epoxy composites” **M.Phil.**
157. Khalil Ahmad 2011-13 “Numerical analysis and theoretical fitting of experimental current voltage data of ITO/InP solar cell” **M.Phil.**
158. Faisal Nazir 2011-13 “Design and simulation of optical filters using MATLAB” **M.Phil.**
159. Basit Ali 2011-13 “Deposition and characterization of YBCO thin film by sputtering” **M.Phil.**
160. Raja Shehryar Ali 2011-13 “Study of structural, optical and electrical properties of iron oxide thin films fabricated by RF magnetron sputtering” **M.Phil.**
161. Sajid Nadeem 2011-13 “Fabrication and characterization of iron oxide thin films at various sputtering gas pressure by RF magnetron sputtering” **M.Phil.**
162. Sulaiman 2011-13 “Electromagnetic interference shielding in the 2 to 18 Ghz frequency range using multilayer and uniform layer nanocomposite” **M.Phil.**
163. Asif Hussain 2011-13 “Implementation of SMA based actuated RF MEMS reconfigurable antenna” **M.Phil.**
164. Mehboob Ahmed 2011-13 “Simulation of forward and breakdown characteristics of normally-off 4H-SiC VJFET using TCAD simulator” **M.Phil.**
165. Shoaib Anwer 2011-13 “Natural dye sensitized solar cell” **M.Phil.**
166. M. Ahsan Ali 2011-13 “Study of structural, optical and electrical properties of chromium nitride thin films fabricated by RF magnetron sputtering” **M.Phil.**
167. Haroon M. Jaral 2011-13 “Influence of magnetic annealing on structural and magnetic properties of magnetite (Fe_3O_4) thin films fabricated by RF magnetron sputtering” **M.Phil.**
168. Haroon C. Sam 2011-13 “Development of titanium dioxide nano-coatings by sol-gel and sputtering” **M.Phil.**

169. Anam Azam 2011-13 "Preparation, characterization and optimization of $\text{CuIn}(\text{Ga}_{1-x}\text{Al}_x)\text{Se}_2$ for $x=0.0, 0.2, 0.4, 0.6, 0.8$ and 1.0 thin films for photovoltaic applications" **M.Phil. (Co)**
170. S. Sohail A Shah 2012-14 "Fascile decoration of carbon nanostructures with magnetic nanoparticles for device fabrication and biotechnological applications" **M.Phil.**
171. Abdur Rauf 2012-14 "Characterization of grapheme decorated with chemically synthesized magnetic nanoparticles" **M.Phil.**
172. Lubna Naheed 2012-14 "Development and characterization of $\text{AlYiN}/\text{Si}_3\text{N}_4$ nanocomposite coatings produced by lateral arc rotation cathode technology" **M.Phil.**
173. Muhammad Tahir 2012-14 "Extraction of nano-silica from rice husk ash" **M.Phil.**
174. Kanwal Amanat 2012-14 "Designing a magnitude comparator for servo loop testing method using Mentor Graphics tools" **M.Phil.**
175. Sumbal Zahoor 2012-14 "Design and implementation of an efficient FIR filter using Mentor Graphics tools" **M.Phil.**
176. M. Faisal Iqbal 2012-14 "Effect of N_2 pressure variation on the structural and dielectric properties of the RF-magnetron sputter deposited CrN thin films", **M.Phil.**
177. Zahid Ali 2012-14 "Effect of N_2 pressure variation on the structural and dielectric properties of the RF magnetron sputter deposited CrN thin films", **M.Phil.**
178. Farman U Khan 2012-14 "Effect of annealing temperature on the structural and optical properties of TiO_2 thin films prepared by sol-gel method" **M.Phil.**
179. Mutee ur Rehman 2013-15 "Effect of Al doping on structural and magnetic properties of iron oxide thin films prepared by sol-gel method" **M.Phil.**
180. Abdul Qayyoom 2013-15 "Effect of Co doping on structural and magnetic properties of hematite thin films" **M.Phil.**
181. Faizan Ali 2013-15 "Design and simulation of multi arithmetic operations integrated circuit using Mentor Graphics (EDA) tools" **M.Phil.**
182. Ali Hassan 2013-15 "Effect of N-doping on structural, optical dielectric and magnetic properties of RF sputtered ZnO thin films" **M.Phil.**
183. Munazza Gul 2013-15 "Synthesis of grapheme-silver nanowires heterostructure and their nanocomposites for microwave absorption" **M.Phil.**
184. Sidra Shuja 2013-15 "Proton induced gamma-ray emission standardization at 5UDH-2 tandem accelerator facility (EPD) NCP" **M.Phil.**
185. M. Faisal Iqbal 2013-15 "Effect of N_2 pressure variation on the structural and optical properties of the RF-magnetron sputter deposited CrN thin films" **M.Phil.**
186. M. Zubair 2013-15 "Ion beam irradiation of polycrystalline graphite and its effect on structural changes and radiation defects in graphite" **M.Phil.**

187. Khalil ur Rahman 2013-15 “Ion beam irradiation induced modification of ZnO nanowires thin films on ITO coated glass” **M.Phil.**
188. Maryam Basit 2013-15 “Synthesis of ZnO/CNT nanocomposites for ultraviolet sensors” **M.Phil.**
189. M. Hussain Iqbal 2013-15 “I-V modelling of heterojunction PV devices”, **M.Phil.**
190. S. Shahzad Hassan 2013-15 “I-V modelling of RF sputtered thin film ITO/GaAs p-type single crystal heterojunction space solar cells” **M.Phil.**
191. Abbas Ahmed Khan 2013-15 “TCAD based designing and simulations of GaN detector” **M.Phil.**
192. S. Mazhar H. Shah 2013-16 “Preparation and characterization of BiFeO₃ thin films through chemical routes” **Ph.D. (Co)**
193. Adnan Ali 2013-15 “Effect of pH variation on the properties of sol-gel deposited iron oxide thin films” **M.Phil.**
194. Awais Sarwar 2013-15 “Fabrication and photovoltaic characteristics of CuO₂ / TiO₂ thin film heterojunction” **M.Phil.**
195. M. Salman Jutt 2014-16 “Structural and optical investigations of nano ball milled materials for optical applications” **M.Phil.**
196. M. Shakeel 2014-16 “Effect of chemical bath deposition (CBD) deposited ZnO thin films on the reflection properties of stainless steel (201) substrate” **M.Phil.**
197. Briya Tariq 2014-16 “Exploring the possibilities of rolling advanced materials for tube formation” **M.Phil.**
198. Kiran Idrees 2014-16 “Synthesis and characterization of graphene based pH sensors” **M.Phil.**
199. Faiza Arshad 2014-16 “Fabrication of gold nanoparticles based multiple tunnel junction field effect transistor (MTJFET)” **M.Phil.**
200. Fida Ali 2014-16 “Fabrication and characterization of ZnO nanotubes based solar cell” **M.Phil.**
201. H. Nouraz Mushtaq 2014-16 “Chemical bath deposition of ZnO thin films: Effect of reactants concentration” **M.Phil.**
202. M. Favad Qadir 2014-16 “Designing and simulation of CMOS based multiplier ASIC for electronic circuitry in instrumentation” **M.Phil.**
203. M. Sarfraz Arshad 2014-16 “Effect of carbonate ion on proton conducting and oxide ion conducting nanocomposite electrolytes for solid oxide fuel cells” **M.Phil.**
204. Zobia Arshad 2014-16 “Solution based synthesis, characterization and antibacterial properties of gold nanoparticles” **M.Phil.**
205. Ajmal Khan 2014-16 “Epoxy / glass fiber composites reinforced with 0D and 2D nanofillers” **M.Phil.**
206. Sajid Ali 2014-16 “Effect of Chemical Bath Deposition (CBD) deposited ZnO thin films on the reflection properties of aluminium alloy (2024) substrate” **M.Phil.**

207. Sadaf Jabbar 2014-16 "Extraction of graphene oxide from coal" **M.Phil.**
208. Rana Ali Ahmad 2014-16 "Fabrication and characterization of carbon nanostructure based field effect transistors (CNFETs) **M.Phil.**
209. Shehla Jabeen 2014-16 "Fabrication of silver nanoparticles based multiple tunnel junction field effect transistor (MTJFET) **M.Phil.**
210. Iqra Haroon 2014-16 "Fabrication and characterization of carbon nanostructure based gas sensors" **M.Phil.**
211. Maryam Nadeem 2014-16 "Liquid phase synthesis, characterization and anti-bacterial activity of nickel nanoparticles" **M.Phil.**
212. Izhar-ul-Haq 2014-16 "Microwave properties of nanocomposites filled with dielectric and magnetic nanoparticles" **M.Phil.**
213. Sundas Yasin 2014-16 "Fabrication and characterization of carbon nanotubes based cholesterol detection sensor" **M.Phil.**
214. Anum Rauf 2014-16 "Liquid based synthesis, characterization and antibacterial activity of silver nanoparticles" **M.Phil.**
215. Aseya Akbar 2012-17 "Preparation and characterization of different iron oxide phases for advanced applications" **Ph.D. (Co)**
216. Fouzia Hanif 2014-16 "Effect of exposure time on the sensitivity of chemically prepared BFO nanoparticles based gas sensor" **M.Phil.**
217. Umbar Hanif 2014-16 "Exploring the possibilities for tube formation by curling of thin films" **M.Phil.**
218. M Favad Malik 2014-16 "Designing and simulation of CMOS based multipliers ASIC for electronic circuitry in instrumentation" **M.Phil.**
219. Mahwish Bashir 2012-17 "Stabilization of zirconia using different experimental methods and their applications" **Ph.D. (Co)**
220. Shehla Honey 2012-17 "Ion beam irradiation effects in metallic nanowires used for transparent electrodes" **Ph.D.**