**OBJECTIVE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Seeking a fulfilling work experience with a reputed institute that operates in a meritocratic environment, encourages progressive research, and will allow me to utilize my education, skills and experience effectively to contribute towards its success.

**EDUCATION\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* **Imperial College London*, U.K (1992)***

Ph.D Physics (Laser Spectroscopy)

**Thesis**: f-Value Measurements for Sr, Mg, and Cd to High Rydberg Members by Pulsed Laser

Based Magneto-Optical Spectroscopy

* **Queen Mary College University of London, *U.K. (1988)***

MS. Nuclear Engineering

* **Gomal University Dera Ismail Khan*, Pakistan***  ***(1978)***

MSc Physics

**PROFESSIONAL EXPERIENCES\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* **King Saud University, *KSA (Sept 2009-Present)***

*Professor of Physics at College of Science*

1. Teaching Laser Physics, General Physics, Nuclear Physics and Modern Physics to undergraduates.
2. Teaching Atomic & Molecular Physics, Lasers & their applications and Laser material interaction to Postgraduates.

**Research Projects:**

Two projects approved of NPST(2 million SR grant for each).

1. Highly Efficient Quantum Dots Sensitized Solar Cells (QDSSCs) Based on Nano-Metal Oxide Semiconductors. (Running)
2. Fabrication and characterization of thermoelectric nanocomposite materials for sustainable energy technologies. (Grant awaited)

* **Pakistan Institute of Laser and Optics (PILO) *(1992-2009)***

*Head (Chief Scientific Officer)*

1. Set up Laser Material Processing facilities and supervised following activities:

* Laser cutting, welding, heat treatment with different materials using 50W to 2.5KW CO2 lasers.
* Laser marking and engraving with Nd:YAG / CO2 lasers
* Scoring of Ceramic with Nd:YAG laser.
* Generation of nano-particles of Sm/ Co using lasers
* Etching of quartz in micron range. Wet etching of quartz with excimer laser.

1. Set up laboratory for laser spectroscopy equipped with Excimer pumped dye laser, atomic beam chamber, thermionic diode and data acquisition system. Performed multi-photon excitation and ionisation experiments.
2. Design, development and fabrication of laser systems. 200 W slow flow CW CO2 and 2mJ Pulsed Nitrogen lasers.
3. Excellent background in the development of vacuum systems for various applications.

* **COMSATS University, *Islamabad (2006-2009)***

*Visiting Professor, Physics Department*

Taught Laser Physics and its applications to postgraduates.

* **Alama Iqbal Open University, *Islamabad (2006-2009)***

*Visiting Professor Physics Department*

Taught Laser Physics and its applications to postgraduates.

* **Army Public College of Management and Sciences*, Islamabad (2001-2009)***

*Professor Physics Department*

Taught Physics to undergraduate students of Electrical Engineering, Software Engineering and Telecom Engineering.

**HONORS & AWARDS\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* Awarded postdoctoral fellowship by **Beckman Institute of lasers University of California U.S.A** in **2001**.
* Awarded ***Tamgha-e-Baqa*** by president of Pakistan for recognition of hard work and best performance in **1998**.
* Awarded **Science and Technology scholarship** for higher education in advanced countries in **1985**.
* Awarded **Merit scholarship during postgraduate studies** in **1977**.
* I have been selected to receive **funding support for supervision of Ph.D**. level students under the scholarship programmes of the **Ministry of Science and Technology.**

**OTHER RELEVANT EXPERIENCES\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* **Thesis Examined:**
* Ph.D Thesis Quaid-i-Azam University Islamabad Pakistan. Title: *Laser Spectroscopic Studies of Bound and Autoionizing Spectra of Tin.* By Ali Nadeem
* M.Phil Thesis Quaid-i-Azam University Islamabad Pakistan. By Muhammad Rafiq.
* MS Thesis Pakistan Institute of Engineering & Applied Sciences(PIEAS) Islamabad Pakistan. Title: *Laser/IR based Remote Surveillance System.* By NasimUllah
* M.Phil Thesis Allama Iqbal Open University Islamabad Pakistan. Title: *Laser Indused Breakdown Spectroscopy Of Optical Crystals*. By Muhammad GulfamMazhar.
* Ph.D Thesis Quaid-i-Azam University Islamabad Pakistan. Title: Studies on the Ultra Cold Rubidium Rydberg Atoms.

*(4 MS thesis examined in King Saud university)*

* **External Examiner for MSc, M.Phil and Ph.D:**
* Quaid-i-Azam University Islamabad, Pakistan
* Gomal University Dera Ismail Khan, Pakistan
* Pakistan Institute of Engineering & Applied Sciences(PIEAS) Islamabad, Pakistan.
* Alama Iqbal Open University (AOU) Islamabad, Pakistan.
* Federal Urdu University Islamabad, Pakistan
* 4 MS thesis examined in King Saud University Saudi Arabia.
* **Thesis Supervised:**
  + **8 MS thesis supervised in King Saud University.**
* **Courses Taught**
* Phys-145 -general Physics for medical students- undergraduates
* Phys-104 - general Physics for computer engineering students - undergraduates
* Phys-103 - general Physics for engineering students - undergraduates
* Phys-335- Laser and Applications- undergraduates
* Phys-435- Laser Physics – undergraduates
* Phys-331- Optics- undergraduates
* Phys-456- Atomic and molecular Spectroscopy - undergraduates
* Phys-536- Atomic and molecular Spectroscopy-graduate
* Phys-532- Advance Laser Physics- graduate
* Phys-633- Laser material interaction-Post graduate

**RESEARCH PUBLICATIONS\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Atomic f-value measurements of high rydberg members by pulsed laser based magneto-optical spectroscopy. J.P.Connerade, **W.A.Farooq**, H. Ma, M. Nawaz and N. Shen (1992) J.Phys. B: 25 1405
2. On anomalies in the high Rydberg spectrum of Sr.M.Nawaz, **W.A.Farooq**, J.P. Connerade (1992) J.Phys.B: 25 1147
3. Magneto-optical rotations in vacuum ultraviolet. **W.A.Farooq**, M.Nawaz, J.P. Connerade and J. P. Morangos (1992) J.Phys.B: 25 4141.
4. Magneto-optical spectroscopy of autoionizing resonance’s. P.Connerade, **W. A.Farooq** and Nawaz (1992) J.Phys B: 25 L181.
5. The influence of the Paschen-Back effect on magneto-optical rotation spectra. M. Nawaz, **W.A. Farooq**, J. P. Connerade (1992) J.Phys B: 25 3283.
6. Magneto-optical spectra of Lithium and Sodium. M. Nawaz, **W.A. Farooq**, J.P.Connerade (1992) J. Phys B: 25 5327.
7. Many-electron atoms in high magnetic fields J. P.Connerade, G. Droungas, R. Elliott, X He, N.Karapanagioti, W. A. Farooq, H. Ma, J. P. Marangos and M. Nawaz (1994) J Phys B: 27, 2753.
8. **W.A.Farooq**. “Laser: a super tool of the century” (1995) VISION COMSATS Vol 1, 52.
9. **W.A.Farooq.** “ Gas Lasers” (1996). VISION COMSATS Vol 4.
10. **W. A. Farooq**, K. Ahmed, A. Rashid, S. Shahdin& M. A. Atta; “Study of single and two photon ionization of resonance excitation of sodium atom”, Proceeding of 7th National Symposium on “Frontier in Physics” Quaid-i-Azam University, Islamabad (19-21 November 1998) pp-88-94 (2001).
11. **W. A. Farooq**, K. Ahmed, S. Shahdin& M. A. Atta; “*Some results on the Laser Ionisation based on resonance saturation (LIBORS) in sodium Vapour*”, 11th International School on Quantum Electronics (*Laser Physics and Application*), P. A. Atanasova and S. Cartalevam, Editors (18-22 September 2000, Varna, Bulgaria) Proceedings of SPIE Vol. 4397, pp221-225 (2001).
12. **W.A.Farooq.** “Research on the high rydberg states of Strontium by using narrow band dye laser” Chinese Journal of Laser APLS-2000 Vol B10.
13. **W.A. Farooq** Research on autoionization resonances of Barium in magnetic field using narrow band Dye Laser: “Proceedings of the ninth National Symposium on Frontiers in Physics” pp192-199 (2003).
14. W. A.Farooq*. “f-value measurement of high Rydberg members for Mg & Cd by pulsed laser based magneto-optical spectroscopy”.* (Summer school Nathiagali Pakistan, October 1994)
15. W.A.Farooq*. “Laser based magneto-optical spectroscopy in Ultraviolet”*. (PIP Annual Conference Lahore Pakistan, April 1993)
16. W.A.Farooq*. “probe measurements of laser plasma obtained at laser ablation by means of N2 laser from YBa2Cu3O7-x”.* (8th International School Varna Bulgaria, September 1994)
17. W.A Farooq. A. Hamdani, S.Shahdin “*Generation of 100W CO2(10.6 micron) laser*” (PIP Annual Conference Bahawalpur Pakistan, May 1995)
18. A.Hamdani. W. A. Farooq, S.Shahdin “ *Paramitric studies of a high pulse power Nitrogen laser*” (PIP Annual Conference Bahawalpur Pakistan, May 1995)
19. W.A.Farooq. “*Introduction to Laser Technology*” International Workshop on Laser and Industrial Applications 16th September 1995, Islamabad Pakistan
20. A.Rauf, A. Hussain, R. Akhterc, **W.A. Farooq** and M. Aslam  **“***Role of Combustion Energy in Laser Cutting of Austenitic Stainless Steel”*Key Engineering Materials Vol. 442 (2010) pp 81-87
21. R. Akhter , A. Hussain, **W.A. Farooq** and M. Aslam “*Laser Surface Hardening of GCr15 Bearing Steel Ring” Key* Engineering Materials Vol. 442 (2010) pp 130-136.
22. M.M. Ashrafa, A. Hussain, R. Akhter, **W.A. Farooq** and M. Aslam “*Estimation of the Hardness for Laser Surface Hardening of Plain Carbon Steel”* Key Engineering Materials Vol. 442 (2010) pp 164-171
23. A.H. Hamdani, W. Ahmed, A. Ansar, R. Akhter, **W.A. Farooq** and M. Aslam “*Parametric Study of Ablation Depths for Different Optical Glasses Using High Fluence Laser Induced Plasma Assisted Ablation (LIPAA)”*Key Engineering Materials Vol. 442 (2010) pp 172-177
24. A.Hussain, R. Akhter, **W.A. Farooq** and M. Aslam “*LaserSurface Alloying of Ni-Co Electroplated Low Carbon Steel”* Key Engineering Materials Vol. 442 (2010) pp 137-143
25. A.A. Farag , B. Gunduz, FahrettinYakuphanoglu, **W. A. Farooq “** *Controlling of electrical characteristics of Al/p-Si Schottkydiod by tris(8-hydroxyquinolinato) aluminium organic film***”** Synthetic Metals 160 (2010) 2559-2563.
26. FahrettinYakuphanoglu, **W. A. Farooq** “*Threshold voltage control of 2,3 benzanthracene organic thin-film transistors by visible light for integration of transistors into electronic circuits*” Synthetic Metals 161 (2011) 51-55.
27. FahrettinYakuphanoglu, **W. Aslam Farooq “**[*The effect of SiO2 dielectric layer on ultraviolet detecting properties of pentacene thin film transistor*](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6TY7-51NMYCP-3&_user=1454611&_coverDate=01%2F31%2F2011&_alid=1624592490&_rdoc=7&_fmt=high&_orig=search&_origin=search&_zone=rslt_list_item&_cdi=5611&_sort=d&_st=13&_docanchor=&view=c&_ct=27&_acct=C000052544&_version=1&_urlVersion=0&_userid=1454611&md5=6bc96735429d1b9c53978c4e1a8f8506&searchtype=a)” Synthetic Metals 161 (2011) 132-135.
28. FahrettinYakuphanoglu, **W. Asalm Farooq “***Flexible pentacene organic field-effect phototransistor”* Synthetic Metals. V-161, issue: 5-6, P 379-383, 2011
29. F. Yakuphanoglu, I.S. Yahia, B.F. Senkal, G.B. Sakr**, W. A. Farooq, “**Impedence Spectroscopy properties of Polypyrrole doped with boric acid”*Synthetic Metals*, *Volume 161, Issues 9-10*, *Pages 817-822, 2011*
30. Mehmet Enver Aydın , Murat Soylu , FahrettinYakuphanoglu , **W. A.Farooq**,“*Controlling of electronic parameters of GaAs Schottky diode by poly(3,4-ethylenedioxithiophene)-block-poly(ethylene glycol) organic interlayer*” Microelectronic Engineering, V-88, issue 6, P 867-871, 2011
31. I.S. Yahia, M.Fadel, G.B.Sakr, F.Yakuphanoglu, S.S.Shenouda, , **W. A.Farooq** “*Analysis of current–voltage characteristics of Al/p-ZnGa2Se4/n-Si nanocrystalline heterojunction diode”* Journal of Alloys and Compounds, V-509, issue 12, P 4414-4419, 2011
32. M. Soylu, F.Yakuphanoglu, **W. A Farooq**, “ [*The pinch-off effect and inhomogeneous barrier height analysis in Al/p-GaAs Schottky barrier diodes*](http://apps.isiknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=1&SID=2EF89K43fEC4d3GFLgp&page=1&doc=4&colname=WOS)”.  OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS   Volume: 5   Issue: 1-2   Pages: 135-142, 2011.
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37. I.S. Yahia, A.A .M. Farag, F. Yakuphanoglu,**W.A.Farooq** , “*Temperature dependence of electronics parameters of organic schottky diode based on fluorescein Sodium Salt*” Synthetic Metals, V-161,Issues 9-10,P 881-887
38. FahrettinYakuphanoglu, W. Aslam Farooq, “Organic*-inorganic photosensor controlled by frequency based on nanostructure 1,4-diaminoanthraquinone and p-silicon*”SYNTHETIC METALS   Volume: **161**   Issue: **3-4**   Pages: **324-329, (2011)**
39. A.A.M. Farag, ,**W.A.Farooq** F. Yakuphanoglu *“*[**Characterization and performance of Schottky diode based on wide band gap semiconductor ZnO using a low-cost and simplified sol–gel spin coating technique**](http://www.sciencedirect.com/science/article/pii/S0167931711002759?_alid=1760988080&_rdoc=4&_fmt=high&_origin=search&_docanchor=&_ct=37&_zone=rslt_list_item&md5=be107ac337dccc131eb631b40c6b7f8b)”  *Microelectronic Engineering*,*Volume 88, Issue 9*, *September 2011*, *Pages 2894-2899*
40. F. Yakuphanoglu, Y.S. Ocak, T. Kıl.ıçoğlu,**W.A.*Farooq****“*[Interface control and photovoltaic properties of n-type silicon/metal junction by organic dye](http://www.sciencedirect.com/science/article/pii/S0167931711004539?_alid=1760988080&_rdoc=16&_fmt=high&_origin=search&_docanchor=&_ct=37&_zone=rslt_list_item&md5=9c778b1e868b9ecdad9fcd122225874a)” Microelectronic Engineering,Volume 88, Issue 9, September 2011, Pages 2951-2954
41. FahrettinYakuphanoglu,**W. Aslam Farooq**, “[***Photoresponse and electrical characterization of photodiode based nanofibers ZnO and Si***](http://www.sciencedirect.com/science/article/pii/S136980011100059X?_alid=1760988080&_rdoc=32&_fmt=high&_origin=search&_docanchor=&_ct=37&_zone=rslt_list_item&md5=06a73bb6dd06f989b33f6230af6a47a6)” *Materials Science in Semiconductor Processing*, ***In Press,***
42. FahrettinYakuphanoglu, **W. Aslam Farooq**, “[***Electronic and Photovoltaic Properties of p-Si/PCBM:MEH-PPV Organic-Inorganic Hybrid Photodiode”***](http://apps.webofknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=1&SID=R1AHl874m7mFlMjag9p&page=1&doc=1)PHYSICA POLONICA A  Volume: **119**   Issue: **6**   Pages: **890-894**   Published: **JUN 2011**
43. ArmağanGünsel, Mehmet Kandaz, FahrettinYakuphanoglu, **W.A.Farooq**, “[Extraction of electronic parameters of organic diode fabricated with NIR absorbing functional manganasephthalocyanine organic semiconductor](http://www.sciencedirect.com/science/article/pii/S0379677911001408?_alid=1806654646&_rdoc=7&_fmt=high&_origin=search&_docanchor=&_ct=43&_zone=rslt_list_item&md5=fb64b49788451e3371816e9c29fe1820)” *Synthetic Metals*, *Volume 161, Issues 15-16*, *August 2011*, *Pages 1477-1482*
44. M.S. AlSalhi**\***, W.A.Farooq, M.R.Baig, A.H Al-Fareikh and S.S Al-Ghamdi, “ CO2 Laser Induced Micro structural Variation in alpha-irradiated Polyallydigycol Polymer” IEEE Saudi Arabia Sect. Book No. 978-1-4577-0068-2 (2011)
45. I. S. Yahia, M. Fadel, B, G, Sakr, W. A. Farooq, “ Impedance Spectroscopy of Nanostructure p-ZnGa(2)Se(4)/n-Si Hetrojunction Diode” PHYSICA POLONICA A  Volume: **120**   Issue: **3**   Pages: **563-566**   (2011)
46. F. Yakuphanoglu, M. Shah, W. A. Farooq, “ Elactrical and Interfacial Properties p-Si/P3HT Organic-on-Inorganic Junction Barrier” ACTA PHYSICA POLONICA A  Volume: **120**   Issue: **3**   Pages: **558-562**   (2011)
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50. Murat Soylu,I. S. Yahia, FahrettinYakuphanoglu, and W. A. Farooq, “Modification of electrical properties of Al/p-Si Schottky barrier device based on 20-70 dichlorofluorescein” JOURNAL OF APPLIED PHYSICS 110, 074514 (2011)
51. W. A. Farooq, F. N. Al\_Mutairi, A. E. M. Khater, A. S. Al\_Dwayyan, M. S. AlSalhi, and M. Atif**, “**ELEMENTAL ANALYSIS OF FERTILIZER USING LASER INDUCED BREAKDOWN SPECTROSCOPY” *Optics and Spectroscopy, , Vol. 112, No. 6, pp. 874–880 (2012)*
52. RavikumarRamakrishnaiah, Wazirzada Aslam Farooq, Abdul-Aziz Abdullah Al Kheraif, Saad bin Qasim and Abdullah Saleh Aldwayyan*, “*Laser Induced Breakdown Spectroscopic Analysis of Dental Elastomeric Impression Materials**”** Middle-East Journal of Scientific Research 11 (8): 1003-1008, 2012
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55. **W. A. Farooq**, AmanullahFatehmulla, K. Ocakoglu, F. Yakuphanoglu, “THE CHARGE TRANSPORT AND PHOTOCONDUCTION MECHANISMS OF TiO2-BASED DYE SENSITIZED SOLAR CELL” IEEE explore 2012. DOI:[10.1109/HONET.2012.6421439](http://dx.doi.org/10.1109/HONET.2012.6421439)
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65. W. Aslam Farooq, Syed Mansoor Ali, Jan Muhammad, Syed Danish Ali, Muhammad Hammad Aziz, Naeem-urRehman, Muhammad Hussain, “Synthesis and characterization of Sn1Mg12xO2thin filmsfabricated by aero-sole assisted chemical vapor deposition” J Mater Sci: Mater Electron, v 24, 12, pp.5140-5146, 2013
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Note: 4 papers on LIBS are in process

**Reviewer of the following journals**:

1. Journal of Alloys and Compounds
2. Journal of Inorganic Materials
3. Microelectronic Engineering
4. SpectrochimicaActa Part A: Molecular and Biomolecular Spectroscopy
5. Synthetic Metals
6. Silicon
7. Surface Review and Letters
8. Materials Science in Semiconductor Processing
9. Photodiagnosis and Photodynamic Therapy
10. Surface Review and Letters
11. Journal of Optoelectronics and Advanced Materials

**Conference presentations:**

* **Eighth International School On Quantum Electronics, Laser, Physics And Applications**

**29th September to 4th October 1994, Varna, Bulgaria.**

**Presentation:** *probe measurements of laser plasma obtained at laser ablation by means of N2 laser from YBa2Cu3O7-x*

* **The Second Asian Pacific Laser Symposium (APLS, 2000) August 21 to 24, 2000,Shanghai, China**.

**Presentation**: *Research on the high rydberg states of Strontium by using narrow band dye laser*

* **11th International School On Quantum Electronics, Laser, Physics And Applications**

**18th September to 22nd September 2000, Varna, Bulgaria**.

**Presentation**: *Some results on the Laser Ionisation based on resonance saturation (LIBORS) in sodium Vapour*

* **Saudi International Electronics, Communications and Photonics**Conference**Riyadh, Saudi Arabia**April**23rd - 26th 2011.  (**KACST)

**Presentation:***CO2 laser induced micro structural variation in alpha-irradiated Polyallydigycol polymer*

* **3rd NASLIBS 2011:  July 18-20, 2011 in Clearwater Beach, FL, USA.**

**Presentation:**Analysis of Rocks around Capital of Kingdom of Saudi Arabia Using Laser Induced Breakdown Spectroscopy

* **International Laser Physics Workshop (LPHYS’ 12), 23-27 July 2012, Calgary, Canada**

**Presentation:***Elemental Analysis of Alumina- TiC composite using Laser Induced Break down Spectroscopy.*

* **7th International Conference On Laser Induced Breakdown Spectroscopy (LIBS 2012), 29 Sept- 4 Oct 2012, Luxor-Egypt**

**Presentation:** *Role of purging gases in analysis of polycarbonate with Laser Induced Breakdown Spectroscopy.*

* **9th INTERNATIONAL CONFERENCE, (HONET-2012), 12-14 Dec 2012, Istanbul Turkey**

**Presentation:** *Synthesis and Electrical Characterization of Dye-sensitized solar cell with Fluorescein Sodium Salt:* (DOI: [10.1109/HONET.2012.6421442](http://dx.doi.org/10.1109/HONET.2012.6421442))

* **16th International Conference on Materials Methods and Technologies-11-15 June 2014 Elenite, Bulgaria.**

**Presentation:** *Comparison of Photovoltaic Parmeters of CdSe QD and Safranin Dye based Solar cell.*

<http://www.scientific-publications.net/en/article/1000218/>

* **NanoNG14, International Conference, 22-24 August 2014, Firat University Turkey.**

**Presentation:** *Photovoltaic and impedance spectroscopic analysis of CdSe Quantum dot solar cell.*

http://www.nanong2014.org/Dokumanlar/program.pdf

* **LIBS-2014, The 8th International conference on Laser Induced Breakdown Spectroscopy, 8th – 12th September 2014 -Beijing China.**

**Presentation:** *Application of Laser Induced Breakdown Spectroscopy in early detection of red palm weevil: (Rhynchophorusferrugineus) infestation in date palm*

* **2nd Annual Meeting of Atomic, Molecular and Optical Physics (AMOP), 31st March - 1st April 2015, Aljouf University, Aljouf, Saudi Arabia**

**Presentation:***Fluorescence spectroscopy of Nanometallic Oxides and their Ligands in Osteosarcoma Cells*

* **SCIX 2015: North American Society for Laser Induced Breakdown Spectroscopy.**

**27 Sept – 2 Oct 2015. Conventional centre Providence, RI, USA.**

**Presentation:** *Study of Plasma and Identification of hazardous elements in the polystyrene using Laser Induced Breakdown Spectroscopy*

* Fifth Saudi International Meeting on Frontiers of physics. 16-18 February 2016, Jazan University Saudi Arabia.

Presentation: Synthesis and characterization of cadmium selenide quantum dots at different parameter using chemical method

* Nanoscience and nanotechnology for new generation (NANONG2016). 20-22 Oct 2016, KEMER-Antalya Turkey.

Presentation: Effect of Pulsed UV Laser on Optical and Nano-Structural Characteristics of Alpha Irradiated PM-355 Polymeric Detectors

* 2nd International conference Advanced and Functional Materials Technologies (AFMAT2016) 20-22 Oct 2016, KEMER-Antalya Turkey.

Presentation: Analysis of chemical modifications and formation of Nano- structure by proton beam irradiation in PM-355 polymer

**Non-Peer Reviewed Presentations**

1. *Application of lasers in material processing*– (Presented at King Khalid University Abha-Saudi Arabia)- 9- April-2014.
2. *Fabrication of axial flow CO2 laser for material processing*-( Presented at The Pakistan Institute of Physics Annual Conference, 22nd -24th April 1995, Bahawalpur Pakistan).
3. *Lasers and their industrial applications*- (Presented at International Workshop on Laser and Industrial Applications- 16th September 1995, Islamabad Pakistan).
4. *Measurement of oscillator strength using magneto-optical spectroscopy-*(Presented at 19th International Nathiagali Summer College on Physics and Contemporary Needs 23rd June to 4th October 1994 Nathiagali, Pakistan).
5. *Fabrication of Nitrogen laser* -( Presented at The Pakistan Institute of Physics Annual Conference 2-5th April 1993, Lahore Pakistan).

**Conferences Attended (Local):**

# The Pakistan Institute of Physics Annual Conference

# 2-5thApril 1993, Lahore Pakistan.

# The Pakistan Institute of Physics Annual Conference

22nd -24th April 1995, Bahawalpur Pakistan.

* **19th International Nathiagali Summer College on Physics and Contemporary Needs**

23rd June to 4th October 1994 Nathiagali, Pakistan.

* **International Workshop on Laser and Industrial Applications**

16th September 1995, Islamabad Pakistan

* **22nd International Nathiagali Summer College on Physics and Contemporary Needs**

28th July to 9th August 1997 Islamabad Pakistan.

* **7th National Symposium on FROTIERS IN PHYSICS**

19- 21 November 1998, Islamabad Pakistan

* **24th International Nathiagali Summer College on Physics and Contemporary Needs,** 28th June to 10th July 1999, Murree Pakistan
* **Preparatory School On Biophotonics**

7-9thOctober, 2002, Department of Physics QAU Islamabad Pakistan

* **9th National Symposium on FROTIERS IN PHYSICS**
  1. anuary 2003, Lahore Pakistan
* **29th International Nathiagali Summer College on Physics and Contemporary Needs,**

08th July to 10th July 2004, Nathiagali Pakistan

* **31st International Nathiagali Summer College on Physics and Contemporary Needs**

20th July to 26th July 2006, Nathiagali Pakistan

Conferences attended (Abroad):

* Eighth International School On Quantum Electronics, Laser, Physics And Applications

29th September to 4th October 1994, Varna, Bulgaria.

* High Power Lasers – Science And Engineering

NATO Advanced Study Institute, July 16 to 29-1995 Karlovy Vary, Czech Republic

* The Second Asian Pacific Laser Symposium (APLS, 2000)

August 21 to 24, 2000,Shanghai, China.

* 11th International School On Quantum Electronics, Laser, Physics And Applications

18th September to 22nd September 2000, Varna, Bulgaria.

* LIBS-King Fahad University

Damam, Kingdom of Saudi Arabia 2010

* Saudi International Electronics, Communications and Photonics Conference

April 23rd - 26th 2011, (KACST) Riyadh, Saudi Arabia

* 3rd NASLIBS 2011

July 18-20, 2011, Clearwater Beach, FL, USA.

* International Laser Physics Workshop (LPHYS’ 12)

23-27 July 2012, Calgary, Canada

* 7th International Conference On Laser Induced Breakdown Spectroscopy (LIBS 2012)

29 Sept- 4 Oct 2012, Luxor-Egypt

* 9th INTERNATIONAL CONFERENCE, (HONET-2012)

12-14 Dec 2012, Istanbul Turkey

* One day workshop on “The Role of PV in the future Electricity/Energy Market”

20th April 2013, King Abdullah City for Atomic and Renewable Energy (K A CARE), Riyadh Saudi Arabia.

* Saudi International Electronics, Communications and Photonics Conference (IEEE) April 27rd - 30th 2013, (KACST) Riyadh, Saudi Arabia
* 16th International Conference on Materials Methods and Technologies

11-15 June 2014 Elenite, Bulgaria

* NanoNG14, International Conference

22-24 August 2014, Firat University Turkey.

* LIBS-2014, The 8th International conference on Laser Induced Breakdown Spectroscopy

8-12 September 2014 Beijing China

* Workshop on “Environmental Applications of Nanotechnology”

29th March 2015, King Saud University, Riyadh, Saudi Arabia

* 2nd Annual Meeting of Atomic, Molecular and Optical Physics (AMOP)

31st March - 1st April 2015, Al Jouf University, Al Jouf, Saudi Arabia

* The 3rd Saudi International Electronics, Communications and Photonics Conference 2015

27th - 28th April, 2015, Riyadh Saudi Arabia

* SCIX 2015: North American Society for Laser Induced Breakdown Spectroscopy

27 Sept – 2 Oct 2015, Conventional centre Providence, RI, USA

* INTERNATIONAL CONFERENCE ON NANOSCIENCE&NANOTECHNOLOGY FOR NEXT GENERATION 2015 (Nanong2015)

29- 31 October, 2015, Antalya, Sherwood Club Kemer, Turkey

* The Second Saudi International Conference on Scientific Publication abs Exhibition. 11-12 Oct 2015. King Saud University Riyadh
* Fifth Saudi International Meeting on Frontiers of physics

16-18 February 2016, Jazan University Saudi Arabia

* One day workshop on “Optics and Photonics” by AMOP Saudi Physical Society

Feb 21st 2016, Riyadh, Saudi Arabia

* Nanoscience and nanotechnology for new generation (NANONG2016)

20-22 Oct 2016, KEMER-Antalya Turkey

* 2nd International conference Advanced and Functional Materials Technologies (AFMAT2016)

20-22 Oct 2016, KEMER-Antalya, Turkey

* **The 4th Saudi International Nanotechnology Conference (SINC2016)**

25-27 Oct 2016 KFUPM, Dhahran, Saudi Arabia

**Invited Talks**

* **2nd International conference Advanced and Functional Materials Technologies (AFMAT2016)** 20-22 Oct 2016, KEMER-Antalya Turkey.

**“Quantum-Dot-Sensitized Solar Cells (QDSCs)”**

* **Nanoscience and nanotechnology for new generation (NANONG2016)** 20-22 Oct 2016, KEMER-Antalya Turkey.

**“Laser Induced Breakdown spectroscopy (LIBS) for analysis of materials”**

**Grants Received:**

1. SR- **1,044,749.00-** 1st Oct 2012 to 30 April 2015 -NPST-**Highly Efficient Quantum Dots Sensitized Solar Cell (QDSSCs) Based on Nano- Metal Oxide Semiconductors**. (Two million SR)
2. SR-**60000** - Sept 2014 to Sept 2015-Deanship of Scientific Research at King Saud University –**Laser Applications**-(150000 SR).
3. SR- **800000.00-**1st June 2014 to 30th June 2016 -NPST-**Fabrication and characterization of thermoelectric nanocomposite materials for sustainable energy technologies**. (Two million SR)
4. SR-**150000**.- Sept 2013 to Sept 2014- Deanship of Scientific Research at King Saud University –**Laser Applications**

**Membership of Professional Societies**:

1. Pakistan Institute of Physics (PIP)
2. Pakistan Physical Society ( PPS)
3. Saudi Physical Society, Atomic, Molecular and Optical Physics (AMOP)
4. Pakistan Vacuum Society.
5. ASLIBS-China
6. Nanoscience and Nanotechnology for Next Generation (NANONG)-Turkey
7. International conference Advanced and Functional Materials Technologies (AFMAT) -Turkey.
8. Advisory Committee Energy Materials and Nanotechnology (EMN) -Ackland, New Zealand

**Other Professional Activities:**

1. Member of editorial board of “OrganoOpto-Electronics, An International Journal, Natural Sciences Publishing”.
2. Referee for promotion of faculty member of Iman University Riyadh
3. Referee for promotion of faculty member of Tayyaba University Madina
4. Reviewed projects from many universities.

**REFEREES\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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