

CURRICULUM VITAE

Name: **Akram K. S. Aqili**
Date of Birth: Sept 11, 1969
Nationality: Jordanian
Home Address: Azraq Shamali – Jordan
Phone: 00962-777-289962.
E-mail:- akram_aqili@yahoo.com
akramaq@hu.edu.jo

ACADEMIC RECORD:

Exam. Passed	Year	University	Major Subjects
B.Sc	1991	Yarmouk University Irbid / Jordan	Physics
M.Sc	1994	Q. A. U Islamabad / Pakistan	Physics
Ph. D.	2002	Q. A. U Islamabad / Pakistan	Physics / Semiconductor Thin Films and devices

Official address: Department of Physics / The Hashemite University /Zerka / Jordan

Related Activity: Semiconductor thin films materials and devices.

Current responsibilities: Assistant Professor

THESIS

Ph. D. Thesis title: “Studying the Effect of Deposition Condition and Doping on the Properties of ZnTe Films”.

RESEARCH INTEREST

Semiconductor and dielectric thin films which cover:

- Fabrication
- Optical properties (transmittance, reflectance, absorption, optical band gap, optical constants, etc.)
- Structural and morphology (X-ray, AFM, SEM, etc.)
- Electrical properties (conductivity, activation energy, carrier concentration and mobility, etc.)
- Applications (junctions, contacts, range of operation, etc.)

SKILLS

I. EXPERIMENTAL AND RESEARCH SKILLS

- Different physical measurements (including optical, Structural and electrical).
- Mathematical calculation and modeling

3. Operating and repairing of vacuum unit including leak detection etc.
4. Operating and accessory installing / repairing of coating units.

II. COMPUTER SKILLS

1. Installing and using windows operating system, packages and drivers.
2. Scientific packages Such as Mathematica, Origin, UV-winLab, Scientific workplace.

III LANGUAGES

Arabic and English

Experiences:

- Research at National Institute of Silicon Technology/ Islamabad from 1995-1997.
- Establishing and running of Thin Film Laboratory, at Physics Department, Quaid-i-Azam University/ Islamabad/ Pakistan, from 1997-2002.
- Co-supervise six Master Student, completed there research successfully, at Thin Film Lab QAU.
- Supervise two master students at Physics Department, Hashemite University.
- Lecturer at Physics Department / The Hashemite University / Zarqa / Jordan. Sep. 2004. 2005.
- Assistant professor at Physics Department / The Hashemite University / Zarqa / Jordan. 2005-2013
- Associated professor at Physics Department / The Hashemite University / Zarqa / Jordan 2013-

Courses taught

- Semiconductor Physics.
- Advanced Semiconductor.
- Special topics/ Electric circuits.
- Special topics/ Physical electronics.
- Solid state Physics.
- Electronics.
- Mathematical Physics I.
- Mathematical Physics II.
- Electronics Lab
- General Physics (1), Mechanics.
- General Physics (2), Electromagnetism.

CONFERNCES ATTENDED:

1. 21st international Nathiagali summer college: 27 June-11July (1996), Nathiagali, Pakistan.
2. US-Pakistan Symposium workshop in silicon technology, March 8-11,1998, Islamabad, Pakistan.
3. Tutorial Course and symposium on topics in semiconductor physics: 08-10 April, 1999: Organized by Pakistan National Center for Physics and Pakistan Society for semiconductor Science and Technology, Islamabad.

4. A short course on wastewater treatment, technology and legal issues, Institute of Environment Science and Engineering, NUST, Rawalpindi, 10-11 May 1999.
5. 6th International Symposium on Advanced Materials ISAM-1999, Sept 19-23(1999), Islamabad, Pakistan
6. 26th international Nathiagali summer college: 26 June-14 July (2001), Pakistan.
7. 7th International Symposium on Advanced Materials ISAM-2001, Sept 17-21(2001), Islamabad, Pakistan .
8. 30th international Nathiagali summer college on physics and contemporary needs: Nathiagali, Pakistan, 27 June – 13 July, 2005.
9. 6th SESAME Users' Meeting November 17 - 19, 2007 Amman, Jordan.

RESEARCH PUBLICATIONS

I. International Journals:

1. **A. K. S. Aqili**, Z. Ali and A. Maqsood “Optical and X-ray studies of low resistivity CdS films, *Journal of Materials Science Letters*, **19**(2000) 1229-1231.
2. **Akram K. S. Aqili**, Zulfiqar Ali and Asghari Maqsood “Optical and structural properties of two-sourced evaporated ZnTe thin films” *Applied Surface Science*, **167**(2000)1-11.
3. **Akram K. S. Aqili**, Asghari Maqsood and Zulfiqar Ali “Properties of copper-doped ZnTe thin films by immersion in Cu solution” *Applied Surface Science*, **180**(2001) 73-80.
4. **Akram K. S. Aqili** and Asghari Maqsood “Determination of thickness, refractive index, and thickness irregularity for semiconductor thin films from transmission spectra” *Applied Optics-OT*, **41**(2002) 218-224.
5. **Akram K. S. Aqili**, Asghari Maqsood and Zulfiqar Ali “Properties of Ag doped ZnTe thin films by an ion exchange process” *Applied Surface Science*, **191**(2002) 280-285.
6. Muneeb-UR-Rehman, **A. K. S. Aqili**, M. Shafique, Z. Ali, A. Maqsood, A. Kazmi “Properties of silver-doped CdS thin films prepared by closed space sublimation (CSS) techniques” *Journal of Materials Science Letters*, **22**(2003) 127-129.
7. Zulfiqar Ali, **Akram K.S. Aqili**, Asghari Maqsood and S.M. J. Akhtar "Properties of copper-doped low resistive ZnSe films deposited by two-sourced evaporation" *Vacuum*, **80**(2005)302-309.
8. N. Abbas Shah, A. Ali, Z. Ali, A. Maqsood and **A.K.S. Aqili** " Properties of Te-rich cadmium telluride thin films fabricated by closed space sublimation technique " *Journal of Crystal Growth*, **284**(2005) 477-485.
9. Zulfiqar Ali, **Akram K.S. Aqili**, M. Shafique and Asghari Maqsood “Physical properties of ZnSe films prepared by two-source evaporation and a study of post doping effect” *Journal of Non-Crystalline Solids*, **352**(2006) 409-414.
10. **A. K. S. Aqili**, N. Shah, A. Ali and A Maqsood “ Effect of antimony doping on the physical properties of tin oxide thin films” *Science International –Lahore-*, **18** (2006)1-4.
11. N. Abbas Shah, A. Ali, **A.K.S. Aqili** and A. Maqsood “ Physical properties of Ag-doped cadmium telluride thin films fabricated by closed-space sublimation technique” *Journal of Crystal Growth*, **290**(2006) 452-458.

12. A. Ali, N. A. Shah, **A. K. S. Aqili** and A. Maqsood "Impact of Evaporation Rates of Cd and Te on Structural, Morphological, Optical, and Electrical Properties of CdTe Thin Films Deposited by a Two-Sourced Evaporation Technique "*Crystal Growth & Design*, **6** (2006) 2149 -2154.
13. A Ali, N A Shah, **A K S Aqili** and A Maqsood, "Investigation of Cu-containing low resistivity CdTe thin films deposited by the two-source evaporation technique" *Semicond. Sci. Technol.* **21**(2006) 1296-1302.
14. **Akram K.S. Aqili** , Zulfiqar Ali , Asghari Maqsood "Characterization of zinctelluride thin films deposited by two-source Technique and post-annealed in nitrogen ambient" *Journal of Crystal Growth* 317 (2011) 47–51
15. S. Al-Omari, M. Al-Noaimi, K. Raba'eh, G. Alna'washi1, M.S. Bawa'aneh, F. Al-Dweri and **A. K. S. Aqili** "Photophysical Properties of Sodium zinc(II)-2,9,16,23-phthalocyanine Tetracarboxylate in Aqueous Solution" *International Journal of Pure and Applied Physics*, Volume 7, Number 1 (2011) 57–72
16. **Akram K. S. Aqili** , Ahmad J. Saleh , Zulfiqar Ali, S. Al-Omari " Ag doped ZnTe films prepared by Closed Space Sublimation and an ion exchange process" **Journal of Alloys and Compounds**, 520(2012) 83-88.
17. Saleh Al-Omari , Nawash Algezawi , Mousa Al-Noaimi, **Akram Aqili** , Ibrahim F. Al-Hamarneh, Mohammad Marashdeh " Observation on Symmetry Properties of Sodium Zinc(II)-2,9,16,23-phthalocyanine Tetracarboxylate in Water:NaOH Solution", *J Fluoresc* 24 (2014) 835.
18. S. Al-Omari, A. A. Mubarak, M. Al-Noaimi, F. Afaneh, **A. Aqili**, I. Hamarneh" Multielemental analysis of pharmaceuticals derived from plant seeds by energy dispersive Xray fluorescence spectrometry" *Instrumentation Science & Technology* ,44(2016)98

II. Conferences Proceedings:

1. **Akram. K. S. Aqili**, Z. Ali, A. Maqsood "ZnTe thin films prepared by two sources evaporation methods", *Proceeding of 6th International Symposium on advanced Materials*, Islamabad, September 1999, Islamabad, p.525-528.
2. **Akram K. S. Aqili**, M. Shafique, A. Maqsood and Z. Ali "Properties of Copper Doped ZnTe Thin Films by an Ion Exchange Process", *Proceedings of 7th International Symposium on Advanced Materials*, Islamabad, 2001, pp. 353-359.
3. Zulfiqar Ali, **Akram K. S. Aqili**, Asghari Maqsood, S. M. J. Akhtar, A. Ahmed "Optical and Structural Properties of Two Sourced Evaporation of CdTe Films". *Proceedings of 7th International Symposium on Advanced Materials*, Islamabad, 2001, pp. 425-430.
4. Abbas, M.M.; Maqsood, A.; **Aqili, A.K.S.**; Qureshi, N.A, Ali, Z.; Akhtar, S.M.J; Ahmad, M.; "Properties of silver doped ZnSe thin films prepared by closed space sublimation using an ion exchange process", *Proceedings of 8th International Symposium on Advanced Materials*, Islamabad, 8-11 Sep. 2003, pp. 106-111.
5. Ali, Z.; Akhtar, S.M.J.; Ashraf, M. ; Maqsood, A.; **Aqili, A.K.S.** "Post doping effects on ZnSe thin films evaporated by two sourced evaporation". *International conference on frontiers of advanced engineering materials*, Lahore (Pakistan), 4-6 Dec 2006; pp. 355-363.

6. Ali, A.; Ali, Z.; Shah, N.A.; Hannan, M.; Basharat, M.; Maqsood, A.; **Aqili, A.K.S.** " Cu containing CdTe thin films deposited by two sources technique" International conference on frontiers of advanced engineering materials, Lahore (Pakistan), 4-6 Dec 2006; pp. 387-395
7. Ali, Z.; **Akram K.S Aqili**, Masood, A.; Ali, A. "Doping effect in ZnSe thin films". Proceedings of 10th International Symposium on Advanced Materials, Rawalpindi(Pakistan)3-7 Sep2007, pp. 212-220.
8. **Akram Aqili** , Zulfiqar Ali and Zahid Husain" Optical and structural properties of ZnSe thin films prepared by CSS and ion exchange process" Proc. SPIE, Thin Film Solar Technology IV,84700H(October 10,2012) doi:10.1117/12.945963.