Curriculum Vita

- 1. Name: Prof. Dr. Kays Shareef Majdi Al-Imarah
- 2. Field of specialization: Physics/
 - Transport (electrical & thermal) properties of solids
- 3. Scientific grade: Professor (since 19-6-2002)
- 4. Date of birth: 23/4/1951 Basrah, Iraq.
- 5. Address: Iraq University College, Basrah, Iraq. E. mail: <u>majdikays@gmail.com</u>, <u>KAYS.MAJDI@iuc.edu.iq</u>, <u>kays_majdi@yahoo.com</u>
- 6. Place of work: Iraq University College, Basrah, Iraq.

7. The University degrees:

- (i) B.Sc. (Physics), 1974 from Basrah University, College of Science, Basrah, Iraq.
- (ii) M.Sc. (Electrical contact), 7 January 1980 from University of Wales (Swansea), UK.
- Thesis Title: "A critical review of measurement of metal transfer in electrical contact"
- (iii) Ph.D. (Thermal properties of solid), 21 March 1983, from University of Wales (Swansea), UK.
- Thesis Title:" The temperature variation of the thermal conductivity of certain polymers"
- (iv) Postgraduate Certificate in Professional Development, (2014) from University of St. Mark and St. John (Marjohn), UK.
- 8. Languages: Arabic & English

9. Teaching

University of Basrah, Iraq: 1983, 9 – 2006, 1								
(Subjects)	(Level)	(Dept.)						
Various subject in solid state and thermal physics	Ph.D. student	Physics						
Various subject in solid state and thermal physics	M.Sc. student	Physics						
All subjects of the undergraduate in physics	First, second, third &forth levels	Physics						
Applied Mathematics	Forth level	Physics						
Linear Algebra	First level	Physics						
Geophysics	Second level	Geology						
Logic circuits	Third level	Physics						
Al – Fattah University, Libya: 1999, 10 – 2000, 10								
Electronics	Second level	Geophysics						
General Physics	First level	Physics						
University of Sana'a and Ammran University, Yemen:2006, 3 – 2011, 7								
College of Education and applied sciences (Hajjah)								
All subjects of the undergraduate in physics	First, second, third &forth levels	Physics						
Logic circuits	Second level	Electronics						
Digital Electronics	Second level	Electronics						
College of Education (Univers	ity of Sana'a, College of Science) 2009 - 2	010						
Plasma Physics	Forth level	Physics						
Modern Physics	Third level	Physics						
Optics and Lasers	Third level	Physics						
General Physics 1	First level	Mathematics						
Faculty of Education (Soran University) $\frac{29}{10}\frac{2011}{2011} - \frac{7}{2014}$	a 1a 1						
Heat and Optics	Second Level	General Science						
Mechanics	First Level	General Science						
Nuclear Physics	Third Level General Scie							
Solid State Physics	Fourth Level General Science							
General Physics Lab.	First Level	General Science						
Faculty of Science (Soran University) $1/10/2012 - 28/2/2013$								
Seismic method 1	Seismic method I Second Level Geopetrol							



		Sciences				
Faculty of Education (Soran University) 2014/2015						
Applied Mathematics	Second Level	Mathematics				
Foundation of Mathematics	First Level	Mathematics				
General Physics Lab.	First Level	First Level General Science				
Faculty of Education (Soran University) 2015/2016 and 2016/2017						
Applied Mathematics	Second Level	Mathematics				
Mathematical Modeling	Third Level	Mathematics				
Iraq University College, Basrah, Iraq 2017-2018						
Microwave	Fourth Level	Communication Eng.				
Wave propagation	Third Level	Communication Eng.				
Electronic Instruments production	Fourth Level	Computer Technology Engineering				
Fiber Optics	Fourth Level	Computer Technology Engineering				
Microwave	Third Level	Communication Eng.				
Engineering Economy	Third Level Computer Te Enginee					
Electromagnetic Fields	Third Level Communication Eng.					

10. Fields of research:

- 1. Transport (electrical & thermal) properties of solids
- 2. Optical & dielectric properties of solids
- 3. Photoelectronic and Optical fibers
- 4. Microwave
- 5. Radiation physics.

11. Membership of scientific societies:

1. British Institute of Physics (IOP).

12. Published papers: 30

- Optical properties of Zn_xCd_{1-x}S thin films prepared by the sputtering technique.
 J. Phys. Condense Matter 2(1990) 6619-6622 (UK).
 W A S Abdul Ghafor and K S Majdi
- Electrical properties of polyacrylic acid and the dependence on temperature in temperature range 0-85°C.
 J. Math. &Phys.12 (2) 1991.Iraqi Soc. Phys. & Math.
 K. S. Majdi and A. Y. Hashim
- Thermal conductivity of polycarbonate makrofol-D irradiated by Gamma ray. J. Math. &Phys.F/55/343 (1991). Iraqi Soc. Phys. & Math. K. S. Majdi and R Ch. Abo-Alhayl
- Optical parameters of chemically deposited cadmium sulphide thin films. J. Math. &Phys.13 (1) 1992.Iraqi Soc. Phys. & Math. W A S Abdul Ghafor and K. S. Majdi
- Thermal properties of polyacrylic acid and the effect of neutron irradiation. Basrah J. Science. Supplement 133-139(1994).
 K. S. Majdi and H I Aboud
- 6. Electrical properties of conducting polymer (polythiophene) prepared electrochemically on PVC film.
 J. of Basrah researches Vol.13, Part 1, (1997).
 K. S. Majdi, H A Al-Attar and K M Ziadan
- 7. Electrical conduction of PMMA and the effect of graphite addition. Iraqi J. Polymers, Vol.1, No.1, 15-20, 1997.K. S. Majdi and H J Fadhel
- Temperature dependence thermal conductivity of PMMA and the effect of neutron irradiation. Iraqi J. Polymers, Vol.1, No.1, 51-58, 1997.
 K. S. Majdi and H J Fadhel

- 9. Optical properties of polythiophene /PVC conducting polymer alloys film. Iraqi J. Polymers, Vol.1, No.1, 155-162, 1997.
 K. S. Majdi and K M Ziadan
- Electrochemical polymerization of Polythiophene and application in rechargeable battery. Iraqi J. Polymers, Vol.1, No.1, 117-126, 1997. H A Al-Attar, K M Ziadan and K S. Majdi
- The effect of some parameters on polythiophene as a rechargeable battery. The proceeding of the 4th Basrah Eng. Conference, May (11-12) 1997. K M Ziadan, H A Al-Attar and K S Majdi
- The electrical conductivity study of the epoxy resin composites consisting some organic dyes and inorganic fillers. Basrah J. Science, C, Vol.16, No.1, 95-104, 1998.
 A. A. Tasonian, M Jawad, K S Majdi and B A Abdulla
- Electrical properties of PT, PT/PTFE and PT/PVC composed films prepared electrochemically. Basrah J. Science, A, Vol.17, No.1, 1-4, 1999.
 K M Ziadan, K S Majdi and H A Al-Attar
- Electrical conductivity in conducting PT, PT/PTFE and PT/PVC films. Basrah J. Science, A, Vol.17, No.1, 5-12, 1999. K M Ziadan, K S Majdi and H A Al-Attar
- The dielectric properties of crown ether polymer. Iraqi J. Polymers, Vol.3, No.1, 21-28, 1999.
 K S Majdi, H J Fadhel, B A Abdulla and R J Muhsin
- 16. Study of the thermal conductivity for some ester & ether unsaturated polymers J. of Basrah researches Vol.25, Part 3, 1-11(2000) F J Jabar, K S Majdi and H I Aboud
- 17. Study on optical properties of PMMA and the effect of graphite addition. Iraqi J. Polymers, Vol.4, No.1, 1-6, 2000. K S Majdi and H J Fadhel
- Study in optical properties of new polymers,(BDPS),(NBDU) & (TNEB). Basrah J. Science, A, Vol.18, No.1, 129-140, 2000. K S Majdi, H M Jabar and S. S. Hashim
- Sample preparation and crystallographic studies of AgIn_{1-x} Al_x Se_{2(1-y)}Te_{2y} compound. Basrah J. Science, A, Vol.18, No.1, 1-12, 2000. W A Taha, N A K Abdul Hussein and K S Majdi
- Dielectric properties of cured epoxy resin. Iraqi J. Polymers, Vol.5, No.1, 1-14, 2001. B A Abdulla, K S Majdi and A A Tasonian,
- Optical properties and electronic transition of AgIn_{1-x} Al_xSe_{2(1-y)}Te_{2y}: B semiconductor compounds. Basrah J. Science, A, Vol.19, No.1, 141-148, 2001. W A Taha, N A K Abdul Hussein and K S Majdi
- Thermodynamic properties and thermal conductivity of the polymer Bis {3.5-Dimethyl ethyl ethyl-4-Hydroxyl phenyl} Sulphone. (BDPS). Basrah J. Science, A, Vol.20, No.1, 1-12, 2002. K. S. Majdi
- Electronic properties of metallic-conducting polymer PT (BF₄). Basrah J. Science, A, Vol.20, No.1, 13-24, 2002. M J Al- Ambar, K M Ziadan and K S Majdi
- 24. Preparation and study in the optoelectronic properties of ZnGe_{0.5} Si_{0.5}As₂ thin films using flash evaporation technique.
 Basrah J. Science A, Vol. 20. No. 2.1-12.2002
 W A Taha, K S Majdi, N A K Abdul Hussein and J. J. Hassan

- 25. The temperature variation of thermal conductivity and heat losses by radiation from the surface of polyethylene in temperature range 80K-300K.
 The 15thconference, College of education, University of Al-Mustansiria, Baghdad, 949 (15 April 2002) K S Majdi
- 26. Preparation and growth of single crystal from the compound Bi₂S₃ and study the structural properties. The 15th conference, College of education, University of Al-Mustansiria, Baghdad, 948 (15 April 2002).

A H Abdul- Kadhim, K S Majdi and W A Taha

- 27. Electrochemical polymerization of Polythiophene doped with (BF₄) ion.
 J.of Basrah researches, College of education, University of Basrah, 393 (5/2/2003)
 K S Majdi, K M Ziadan and M J Al- Ambar
- New technology to change the insulating polymer, polytetrafloroethylene (PTFE) to conducting polymer PT/PTFE. Patent, International classification: CO8F114/26, Iraqi classification: 4, 20/12/2002. K M Ziadan and K S Majdi
- 29. The effect of neutron irradiation on glass-transition temperature and rigidity of PMMA. Journal of Radiation Research and Applied Sciences 10(2017) pp 53-56. Production and hosting by Elsevier B.V. Kays S. Majdi, and Heidar J. Fadhel
- 30. Bridging cultures: a programme of academic development in the Kurdistan Region of Iraq Journal: *Studies in Higher Education* (CSHE). Taylor & Francis Group. <u>https://doi.org/10.1080/03075079.2018.1564261</u> 16 Jan 2019 Helen Goodall, Herish Khalil, Zina Adil Ismail, Syako Sulaiman Shekho & Kays Shareef Majdi

31 تسمية الإختراع: تكنولوجيا جديدة في تحويل البولمر العازل بولي تترافلوروأثيلين (PTFE) الى بوليمر موصل PT/PTFE رقم البراءة: 3163 تاريخ منح البراءة: 2002/12/30 اسم المخترع: دكريمه مجيد زيدان و دقيس شريف مجدي

13. Training Certificates:

1. Fiber Optic Training on Splicing machine and OTDR training

14. Postgraduate Supervision:

(i) M.Sc.: Eleven students have degrees

- 1. Transport properties of some polymers (Electrical conduction in polyacrylic acid).
- 2. Thermal conductivity of polycarbonate makrofol-D irradiated by gamma ray.
- 3. Thermal properties of polyacrylic acid and the effect of neutrons.
- 4. Thermal, electrical and optical properties of polymers in different temperatures
 - [Polymethyl methacrylate (PMMA)]
- 5. Thermal, electrical and optical properties of polymers TNEB, NBDU and BPDS.
- 6. Study of dielectric properties of some amorphous polymers.
- 7. Electronic properties in metallic conducting polymer (Polythiophene doped with BF₄)
- 8. Fabrication of flash evaporation device and study some physical properties of crystal growth and thin films prepared for the quaternary compound ZnGe _{0.5} Si _{0.5} As.
- 9. Growth of Bi₂ S₃ and Sb₂ S₃ crystals, preparation thin films from the compounds and from the mixture $Bi_{2x} Sb_{2(1-x)} S_3$, and study their structural, optical and electrical properties.
- 10. Designing a computer system to estimate the thermodynamical properties for amorphous polymers.
- 11. Planning for harvesting solar energy in the Kurdistan Region: case study Soran district. (2015)

(ii) Ph.D.: Four students have degrees

- 1. The, electrical and optical properties of conductive polymers (PT, PT/PTFE & PT/PVC) and their applications in rechargeable batteries.
- 2. Crystal growth and electronic properties of some multinary chalcopyrite semiconductors (AgInSe 1.75Te0.25, AgAlSe 0.5 Te 1.5 & AgIn 0.6 Al 0.4 Se 0.75 Te 0.25).
- 3. Preparation and growth of the quaternary semiconductor compound CuGa _{0.4} In _{0.6} Se₂ .Fabrication the Zn_{0.9} Cd _{0.1} Se/CuGa_{0.4} In_{0.6} Se ₂ heterojunction, and study their physical properties.
- 4. New theoretical analysis to the lattice thermal conductivity of semiconductors: application to Ge and GaAs.

15. Employment history:

Item. No.	Position	College	From	То	University
1	Dean Assistant	Education	10/9/1984	8/10/1985	Basrah, Iraq
2	Head of Physics department	Education	29/10/1986	1/11/1990	Basrah, Iraq
3	Head of Physics department	Science	20/5/1991	17/6/1996	Basrah, Iraq
4	Director of the polymer research center	-	31/11/1995	14/10/1999	Basrah, Iraq
5	Head of Physics department	Science	1/1/2001	22/4/2003	Basrah, Iraq
6	Head of Physics department And Electronics Department	Education (Hajjah)	15/9/2006	14/8/2008	Sana'a, Yemen
7	Head of Physics department And Electronics Department	Education (Hajjah)	15/8/2008	15/7/2011	Ammran, Yemen
8	Head of the School of Basic Education and Dean Assistant for scientific affairs	Faculty of Education	1/10/2012	1/10/2016	Soran University, Kurdistan, Iraq
9	Head of Mathematics Department	Faculty of Education	1/9/2013	1/10/2017	Soran University, Kurdistan, Iraq
10	Chairman of the promotion central committee in Soran University	-	1/10/2014	1/10/2017	Soran University, Kurdistan, Iraq
11	Chairman of the Examination committee of the Faculty of Education	Faculty of Education	2014/2015	1/10/2017	Soran University, Kurdistan, Iraq
12	Head of Computer Technology Engineering Department	Iraq University College	7/10/2017	7/10/2018	Iraq University College
13	Chairman of the promotion central committee in Iraq University College	Iraq University College	7/10/2017		Iraq University College