

Curriculum Vitae

1. Personal Information	
Name	Prof. Dr. MOHAMMAD AL-SHARE'
Nationality	Jordanian
Contact Information	Physics Department Mu'tah University P O Box 7 Mu'tah- Karak - JORDAN Email: alshareem@mutah.edu.jo Tel : 962-3-2372380 EXT 4182 Mobile (Jordan) : 962-7-95999345

2. Academic Qualifications				
	University	Year	Country	Major
B.A	Yarmouk	1981	Jordan	Physics
M.A	University of Joran	1984	Jordan	Physics
Ph.D	University of North Texas	1990	USA	Atomic & Molecular Physics

3. Research and Teaching Interests
<p>A. Research Interests</p> <p>1. Atomic and Molecular Physics: Currently studying structure and spectrum of CD_3CCD, CD_3CCH, CH_3CCD, CH_3CCH, CH_3CN molecules and Hydrogen bonding in water systems.</p> <p>2. Polymers: Currently studying the morphological and thermal behaviour of the following polymers IPP and PVC</p> <p>B. Teaching Interests</p> <p>I have taught these courses: Atomic and molecular physics (graduate course), general physics 1(mechanics), general physics 2 (electricity & magnetism), general physics for medicine, general physics for agriculture students, vibration and waves, mathematical physics, optics, modern physics, quantum physics, electron microscopy and thin films, molecular physics, atomic physics, thermodynamics, statistical physics, advanced experimental physics laboratory, intermediate physics laboratory, experimental optics, general physics laboratory 1 and general physics laboratory 2. physical science (All courses were taught in English)</p>

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4.Publication

A. Books

None

B. Articles

Title	journal	Date	Vol. & No.	Pages
1. " Frequency Measurements of Some Rotational Spectra in the $\nu_8=2$ and $\nu_8=3$ vibrational States of the $^{12}\text{CH}_3^{13}\text{C}^{15}\text{N}$ Molecule in the Frequency Range 17-95 GHz.	J. Mol. Spectrosc.	1990	141	290-298).
2. " Microwave Spectra of the $^{13}\text{CH}_3^{13}\text{C}^{15}\text{N}$ and $^{13}\text{CH}_3^{12}\text{C}^{15}\text{N}$ Molecules in the $3\nu_8$, ν_7 and ν_4 Vibrational Energy Levels Over the Frequency Range 17-95 GHz	J. Phys. B: At. Mol. Opt. Phys.	1990	23	2531-2541
3. " AN Experimental Study of the Collision Broadening of Rotational Spectra Lines of $^{13}\text{CH}_3^{13}\text{C}^{15}\text{N}$ in the Ground and $n\nu_8$, $n=1$ and 2 Vibrationally Excited States at Microwave Frequencies, ,	J. Chem. Phys.	1992	96 (5)	3416-3421
4. " Calculation of the Rotational	Structural Chemistry	1994	5, No.2	109-115

Constants A and C For Isotopic Species Of Slightly Perturbed CH ₃ CN Symmetric Top Molecules."				
5. " Rotational Spectra of the ¹³ C and ¹⁵ N Tagged Isotopes of the CH ₃ CN Molecules in the Vibrational Hot Band $\nu_{7+} \nu_{8-} \nu_8$ "	" Mu'tah Journal For Research and Studies	1996	11	431-445
6. " Microwave Spectra of CD ₃ CCD in the 24-42 GHz. Region",	Mu'tah Journal For Research and Studies	1996	11 No. 5	
7. " Isotactic Polypropylene Crystallized From The Melt. Part A: Morphological Study"	Journal of Applied Polymer Science	1998	67	
8. " Isotactic Polypropylene Crystallized From The Melt. Part B: Thermal Melting Behaviour"	Journal of Applied Polymer Science	1998	67	
9. " <i>Morphology of Polyethylene Spherulite Crystallized From Melt</i> "	J. of Applied Polymer Science	1999	72	
10. " Vibration - Rotation Components in the Deuterated Methyl Acetylene (CD ₃ CCD) Molecule for the $\Delta J=3 \leftarrow 2$ and $\Delta J=2 \leftarrow 1$ Rotational Transitions"	Journal of the Korean Physical Society	1999	34, NO. 3	
11. "Study of the MgO-coated W emitters by Field emission microscopy"	Ultramicroscopy North Holland	1999		
12. " The Effect of the Rotation of Methyl Group on	, Al-Manarah For Research and Studies (Basic	2006	Vol.12, No. 2	31-44

the Rotational constants A, B, and C of the CH ₃ CN Molecule"	Sciences) Journal			
13. " Some Rotational Frequencies of CH ₃ ¹³ C ¹⁵ N Molecule In the Range 17-95 GHz."	ABHATH AL-YARMOUK JOURNAL: "Basic Sci. & Eng.	2003	Vol. 12 No. 1	1-11
14. " Microwave Spectra of ¹³ CH ₃ C ¹⁵ N and ¹³ CH ₃ ¹³ C ¹⁵ N Molecules In the Range 17-95 GHz."	Qatar univ. Sci. J.	2002	22	61-72
15. " Determination of the HCH bond angle of CH ₃ CN and CD ₃ CN Molecules"	ACTA CIENCIA INDICA Journal	2002	28 P, No. 3.	133-136
16. "I-V characteristics of ultra thin Ag-SiO multilayer structures"	Physica B, Condensed Matter	2002	325, No 1-3	157-163
17. "Microwave Measurements of the Ground, $\nu_{10}=1$ and $\nu_{10}=2$ Vibrational Modes of Propyne-d ₃ Molecule In the Range 14-45 GHz."	Mu'tah Lil-Buhuth Wad-Dirasat	2003	18, No 2	11-25
18. "Microwave Rotational Components of the $\nu_9=1$ and $\nu_{10}=2$ Vibrational Modes of ¹³ CH ₃ CCH Molecule In the Range 16-50 GHz."	Turk J Phys	2003	27	247-254
19. "Determination of the Rotational Constants A and C for a Slightly	Indian Journal of Pure and applied Physics	2004	42, June	423-428

Perturbed SiH ₃ CCH Molecule"				
20. "Determination of the Rotational Constants A ₀ and the bending angle CNC for CH ₃ NC and CH ₃ ¹⁵ NC Molecule"	Turk J Phys, ,	2004	28	247-256
21. "Determination of the Rotational Constants A ₀ and the bending angle CCN for CF ₃ CN Molecule"	ACTA CIENCIA INDICA Journal ACTA CIENCIA INDICA Journal	2008	Vol. 28 P, No. 3.	133-136
22. " Enthalpies of nano-scale structures by ball milling of Al-Ni- Ti	J. of Materials and Chemical Engineering	accepted		

5.Patents
None

السيرة الذاتية

١. المعلومات الشخصية	
أ.د. محمد عبد الكريم الشرع	الاسم
اردني	الجنسية
Physics Department Mu'tah University P O Box 7 Mu'tah- Karak - JORDAN Email: alshareem@mutah.edu.jo Tel : 962-3-2372380 EXT 4182 Mobile (Jordan) : 962-7-95999345	معلومات الاتصال

٢. المؤهلات العلمية				
التخصص	الدولة	السنة	الجامعة	
الفيزياء	الاردن	1981	اليرموك	البكالوريوس
الفيزياء	الاردن	1984	الاردنية	الماجستير
الفيزياء الذرية و الجزئية	الولايات المتحدة الامريكية	1990	جامعة شمال تكساس	الدكتوراه

٣. الاهتمامات البحثية والتدريسية
<p>A. Research Interests</p> <p>1. Atomic and Molecular Physics: الفيزياء الذرية و الجزئية Currently studying structure and spectrum of CD₃CCD, CD₃CCH, CH₃CCD , CH₃CCH, CH₃CN molecules and Hydrogen bonding in water systems.</p> <p>2. Polymers: المبلمرات Currently studying the morphological and thermal behaviour of the following polymers IPP and PVC</p> <p>B. Teaching Interests الفيزياء الذرية و الجزئية (ماجستير), ذرية, نووية, جزئية, حديثة ١, حديثة ٢, رياضية, احصائية, ديناميكا حرارية, كهرومغناطيسية, اهتزاز و امواج, بصريات, فيزياء عامة ١, فيزياء عامة ٢, طبية</p>

٤. المنشورات
أ. الكتب
لا يوجد

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ب. الأبحاث				
العنوان	المجلة	تاريخ النشر	العدد والمجلد	الصفحات
انظر السيرة الذاتية بالانجليزي				

هـ. براءات الاختراع	
لا يوجد	