

CURRICULUM VITAE

Family name: Al Jghami الجغامي

First name: Issam عصام

Second name: Fawaz فواز

Ph.D. in Mathematical Physical Sciences

دكتوراه دولة في العلوم الفيزيائية الرياضية



PERSONAL DATA

NATIONALITY: Syrian

DATE OF BIRTH: June, 25, 1961

PLACE OF BIRTH: Salkhad, Syria

LANGUAGES: Russian, English

MARITAL STATUS: married

CHILDREN: Ammar, Nawwar, Farah, Karam

Place of work: Physics Department, Faculty of Science, Damascus University, Damascus, Syria

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EDUCATION

1- Bachelor of Chemical and Physical Sciences, Damascus University, Damascus, Syria, 1983.

2- Ph.D. in Mathematical Physical Sciences, Belarussian State University, Minsk, Belarus, 1991.

Specialty: Atomic and Molecular Spectroscopy.

PROFESSIONAL EXPERIENCE

Lecturer	Physics Department, Faculty of Science, Damascus University, Damascus, Syria	13/5/1984	29/12/1992
Ph.D Student	Belarussian Academy of Sciences	5/11/1985	23/12/1991
Instructor	Physics Department, Faculty of Science, Damascus University, Damascus, Syria	29/12/1992	8/5/2001
Researcher	Higher Institute for Applied Sciences and Technology	1/9/1992	31/12/1996
Assistant Professor	Physics Department, Faculty of Science, Damascus University, Damascus, Syria	9/5/2001	18/11/2003
Researcher	Higher Institute for Laser Researches and Applications	2/1/1997	18/11/2003
Assistant Professor	Department of Sciences, Faculty of Applied Science, Alrustaq, Sultanate of Oman	19/11/2003	20/1/2010

Associate Professor	Physics Department, Faculty of Science, Damascus University, Damascus, Syria	21/1/2010	20/10/2015
Professor	Physics Department, Faculty of Science, Damascus University, Damascus, Syria	21/10/2015	Until now

SOCIETIES & COMMITTEES /MEMBERSHIPS

Euro- Mediterranean Photobiological Society
 Syrian Computer Society
 National Committee for Monitoring Air & Water Pollution
 National committee of Syrian Science Olympiad

PROFESSIONAL EXPERIENCE

- 1- Damascus University, Laser Spectroscopy, Classical Field Theory, 1992-1997.
- 2- Damascus University, Wave Optics, Atomic and molecular Spectroscopy, 1997-2003.
- 3- Damascus University, Vibrations & Waves, Electricity & Magnetism, 1997-2003.
- 4- Damascus University, Atomic and molecular Spectroscopy, Electrodynamics, 2010- now.
- 5- IUST, General Physics (1) & (2) for Engineering, 2013- now.

POST GRADUATE RESEARCH WORK

Ozone & UV-B Irradiation Measurements (1992-1996)
 Air & Water Pollution Monitoring (1996- now)
 Preparing & studying Two-dimensional Photonic Crystal(1997-2003)
 Absorption & Emission Spectroscopy of diatomic molecules(2010- now)

PROFESSIONAL DEVELOPMENT

- 1- Advanced School of Laser and Applications. Damascus University, Syria, 4-9 November 2002.
- 2- 1st Palmyra School of Physics Sciences. Al Baath University, Syria, 2-7 February 2002.
- 3- Winter School on " Laser Spectroscopy and Applications". The Abdus Salam International Center for Theoretical Physics, Trieste, Italy, 19 February- 2 March 2001.
- 4- Workshop on " Laser Techniques and Applications". Supreme Council of Sciences, Damascus, Syria, 13-15 March 2001.
- 5- ICS Training Course on " Laser Diagnostics of Combustion Processes" NILES, Cairo University, Egypt, 18-22 November 2000.
- 6- Workshop on " Physics, Information Sciences, Technology and Environment Laser Techniques and Applications, Tishreen University, Lattakia, Syria, 10-18 November 2000.
- 7- ICS Advanced Training Course on " Industrial Laser Applications " NILES, Cairo University, Egypt, 27 May-8 August 2000.
- 8- Spring School(Activity) on " Optical Properties of Microcavities". The Abdus Salam International Center for Theoretical Physics, Trieste, Italy, 3 August- 8 September 1998.
- 9- Training Course on " Laser Equipments". North China Institute of Electro-Optics, Beijing, China, 1 July-2 August 1997.
- 10- All- Union Soviet Conference on " Luminescence" Dedicated Centenary of Academician Vavilov, Moscow, Russia, 1991.

- 11- All- Union Soviet Conference on" Photochemistry " Novosibirsk, Russia, 1990.
- 12- All- Union Soviet Conference on" Molecular Luminescence " Karaganda, Russia, 1989.

PUBLICATIONS

- 1- Voigt deconvolution method and its applications to pure oxygen absorption spectrum at 1270 nm band. Muhammad A. Al-Jalali, **Issam F. Aljghami**, Yahia M. Mahzia. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Vol.157, No.---, pp 34-40. 2016.
- 2- Absorption Spectrum Deconvolution of Zero Air at 1270 nm Band. Al-Jalali, M. A., Mahzia Y., **Al Jghami I. F.**, International Journal of ChemTech Research, Vol. 8., No. 7, pp. 116-127, 2015.
- 3- Viritial Expansion and Its Application to Oxygen Spectroscopic Measurements at 1270 nm Band. Al-Jalali, M. A., Mahzia Y., **Al Jghami I. F.**, Journal of the Chemical Society of Pakistan, Vol. 37, No. 6, 2015.
- 4- Effect of pressure on the molecular absorption spectrum of pure oxygen at 1270 nm band. Yahia M. Mahzia, Issam F. Aljghami, Damascus University Journal for the Basic Sciences, Vol. , No. , 2015.
- 5- The impact of argon as a collision partner with oxygen on the collision induced absorption band of oxygen at wavelength region of 1.27 μm . **Al Jghami I.F.** Damascus University Journal for the Basic Sciences, Vol.32, No. 1, pp. 15-38, 2016.
- 6- Extracting the self-broadening coefficients of the rotational lines R(N=9) and R(N=11) in the absorption band of gaseous molecular oxygen at 760 nm. **Al Jghami I.F.** Research Journal of Aleppo University- Basic Sciences, Vol.100, 2014.
- 7- Analytical study of MOPA amplifier of pulsed Nd:YAG Laser. **Al Jghami I.F.** Altaleb K. Al-Furat Univ. J.- Basic Scien. Series. Vol. , No. , 2014.
- 8- The influence of elevated temperature on Collision induced absorption in gaseous oxygen ($\text{O}_2\text{-O}_2$) and mixtures of oxygen and nitrogen gases ($\text{O}_2\text{-N}_2$) in the wavelength range of 1.06 μm . **Al Jghami I. F.**, Mahzia Y., Alsabbagh N. Damascus University Journal for the Basic Sciences, Vol.29, No. 2, pp.15-31, 2013.
- 9- The temperature influence on Collision induced absorption in gaseous oxygen ($\text{O}_2\text{-O}_2$) and mixtures of oxygen and nitrogen gases ($\text{O}_2\text{-N}_2$) in the wavelength range of 1.27 μm . Mahzia Y., **Al Jghami I. F.**, Alsabbagh N. Research Journal of Aleppo University- Basic Sciences, Vol.83, 2012.
- 10- Collisions induced absorption in gaseous oxygen ($\text{O}_2\text{-O}_2$) and mixtures of oxygen and nitrogen gases ($\text{O}_2\text{-N}_2$) in the wavelength range of 1.06 μm . Alsuqia I. A, Alsabbagh N., **Al Jghami I. F.** Research Journal of Aleppo University- Basic Sciences, Vol.83, 2012.
- 11- Absorption and Collisions induced absorption in gaseous oxygen ($\text{O}_2\text{-O}_2$) and mixtures of oxygen and nitrogen gas ($\text{O}_2\text{-N}_2$) in the wavelength range of 762 nm and at pressure from 1 bar to 25 bar. Alsuqia I. A., Alsabbagh N., **Al Jghami I. F.** Research Journal of Taz University- Basic Sciences, Vol. , 2012.
- 12- Spectroscopic Measurements of Total Ozone and UV-B Radiation in Damascus. **Al Jghami I.F.** Research Journal of Aleppo University- Basic Sciences, Vol.39, 2003.

- 13- Lidar Techniques and Applications in Detection of Some Gaseous Pollutants (Review). **Al Jghami I.F.** Damascus University Journal for the Basic Sciences, Vol.19, No.2, pp. 219-257, 2003.
- 14- Estimation of the Energy Losses During Solar Eclipse of August the 11-th 1999 in Syria by Spectrum, Saiof F.N., **Al Jghami I.F.** Damascus University Journal for the Basic Sciences, Vol.19, No.1, pp. 27-42, 2003.
- 15- Investigating of the Rotational Structure of Absorption Band of Molecular Oxygen at 760nm Using a Tunable Distributed Feed- Back Semiconductor Diode Laser. **Al Jghami I.F.**, Proceeding of 42th Science Week, Laser and Applications, Aleppo University Aleppo, Syria, 2002.
- 16- Singlet Oxygen Luminescence in Solvents and Mechanism of Removing Prohibition of the Radiative $^1\Delta_g \rightarrow 3\Sigma_g^-$ Transition in Oxygen. **Al Jghami I.F.**, Proceeding of 40th Science Week, Tishreen University, Lattakia, Syria, 2000.
- 17- Photonics of Molecular Oxygen. Gurinovich G.P., **Al Jghami I.F.**, J. Appl. Spectr. Vol.58, pp. 243-249, 1993.
- 18- The Perturbing Effect of Solvents on the Luminescence of Singlet Molecular Oxygen. Losev A.P., Nichiporovich I.N., Byteva I.M., Drozdov N.N., **Al Jghami I.F.**, Chem. Phys. Lett. Vol. 181, No.1, pp. 45-50, 1991.
- 19- The Perturbing Effect of Solvents on the Probability of Luminescence of Singlet Molecular Oxygen. Losev A.P., Nichiporovich I.N., Byteva I.M., Drozdov N.N., **Al Jghami I.F.**, Sov. J. Chem. Phys. Vol. 10, No.7, pp. 949-955, 1991.
- 20- Luminescence of Oxygen Dimolecules in the Gas Phase. **Al Jghami I.F.**, Byteva I.M., Gurinovich G.P., Chernikov V.S., Sov. Phys. Dokl. Acad. Scien. USSR, Vol. 35, No.6, pp. 558-560, 1990.
- 21- The Role of Specific Intermolecular Interactions in Forming of the Luminescence Specter of Oxygen. **Al Jghami I.F.**, Byteva I.M., Gurinovich G.P., Chernikov V.S., Bull. Acad. Scien. USSR, Phys. Ser. Vol. 54, No.3, pp. 448-452, 1990.
- 22- The Role of Intermolecular Interactions in the Processes of the Excited Molecules by Oxygen. **Al Jghami I.F.**, Byteva I.M., Gurinovich G.P., Chernikov V.S., Vietsi Akademii Navuk BSSR Ser. Fiz. Mat. No.6, pp. 75-80, 1989