

## Curriculum Vitae

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**Dr. Fayez El Khatib**  
**Ph.D. Physical-Organic Chemistry**



### Personal Data

Date and place of birth: January 14, 1955 Amman-Jordan  
Marital Status: Married, four children  
Address: Jerash University Chemistry Department  
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Jerash - Jordan  
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### Present Status

Associate Professor; Chemistry Department - Jerash  
University /Jerash - Jordan

### Educational Background

Ph.D. Physical-Organic Chemistry  
Université Paul Sabatier de Toulouse (France) (1986)  
Title of thesis: New models of phosphorus ozonides:  
Singlet oxygen generators  
M.S. Chemistry (Diplôme d'Etudes Approfondies D.E.A)  
Université Paul Sabatier de Toulouse (France) (1981)  
B.S. Chemistry (Maîtrise de Chimie)  
Université Paul Sabatier de Toulouse (France) (1980)

## Research areas and techniques

- a) Synthesis of new patterns of Phosphite Ozonides.
- b) Kinetics of their decomposition using  $^{31}\text{P}$  NMR Spectroscopy.
- c) Measurement of the yield of singlet oxygen generated by ozonide decomposition.
- d) Ozonation of iminophosphorane derivatives
- e) Instrumentation: Techniques of Organic Synthesis; Separation techniques GC, HPLC... NMR ( $^1\text{H}$ ,  $^{31}\text{P}$ ,  $^{19}\text{F}$ ,  $^{13}\text{C}$ ), FTIR, UV, Fluorescence.

## Employment History

- 1) Postdoctoral Research Associate 1987 Chemistry Department University of Texas at Arlington U.S.A
  - a) Synthesis of capacitive polymer (polyphosphazenes)
  - b) Synthesis of monomeric units for conducting polymers (phospholes).
- 2) Dean of Community College, Teaching Staff 1988-1994 Ibn-Khaldoon College Irbid – Jordan.
- 3) Part time lecturer The Higher College for the certification of teachers 1990-1991
- 4) Assistant Professor 1994- April 2008 :Chemistry Department Jerash University Jerash- Jordan
- 5) Associate Professor April 2008 - present

## Teaching experience

At Jerash University

- 1) Physical Chemistry (Thermodynamics and Kinetics)
- 2) Organic Chemistry
- 3) Spectrometric identification of Organic Compounds
- 4) Chemistry of Heterocyclic Compounds.
- 5) Polymer Chemistry
- 6) General Chemistry
- 7) Biochemistry
- 8) English Language Skills for Chemistry Students

At the Higher College for the certification of teachers - Irbid

- 1) Principles of Physical Chemistry
- 2) Organic Chemistry

At Ibn-Khaldoun Community College

- 1) Organic Chemistry
- 2) Biochemistry

- 3) Analytical Chemistry
- 4) General Chemistry

### **Research Interests**

Computational studies of phosphite ozonide decomposition reaction.  
Kinetic studies of thermal and photochemical reactions.  
Photodegradation of drugs such as tenoxicam and pesticides such as carbaryl.  
Chemistry of Iminocoumarin derivatives.

### **Workshops and training sessions**

- 1) Use of Multimedia in elearning (Swish Max Software) Jerash University 26,27 Sept 2011
- 2) Chemical Safety and Security Officer Training, Jordan University of Science and Technology 14-18 February 2010
- 3) Measurement and evaluation workshop Jerash University 21-29 June 2009.
- 4) Chemical Safety and Security Workshop, Jordan University of Science and Technology 13/4/2009
- 5) Quality assurance and higher education outcomes workshop, Jordan University of Science and Technology 21/4/2008
- 6) International Computer Driving License (ICDL) Jerash University March 2007 – June 2007.
- 7) Higher education industry relations workshop Yarmouk University 7/3/2005.
- 8) High Performance Liquid Chromatography (HPLC) and Liquid Chromatography Mass Spectrometry (LC-MS) Workshop Organized by Waters Co. at Jordan Hotel- Amman 15/5/2000.

### **Research Works**

- 1) Laboratoire d'Hétérochimie fondamentale et Appliquée. UPRESA du CNRS 5069. Université Paul Sabatier, Toulouse- France 1/9-30/9/1999.
- 2) Research Works Laboratoire d'Hétérochimie fondamentale et Appliquée. UPRESA du CNRS 5069. Université Paul Sabatier, Toulouse- France 1/9-30/9/1997

## **Administrative experience**

- 1) Chairman of Science Department 1995- 1997  
Jerash University
- 2) Coordinator of Chemistry Department Oct 1997 -  
Oct 2001, Oct 2004 – 2010  
Oct 2018.

## **Committees membership**

- 1) Scientific Committee. The eighth Jordanian  
International Conference of Chemistry Irbid, Jordan  
23-26March 2020.
- 2) Scientific Research Faculty Committee 2010 -2020
- 2) University Council (Oct. 1994 – Oct. 1996),  
2007/2008, 2009/2010, 2020/2021
- 3) Editorial member board, Journal of Jerash for  
research and studies (!996)
- 4) Faculty Council (Oct. 1995 – Oct. 1997).
- 5) Department tender committee (October 1997 –  
October 1998)
- 6 Scientific equipment's committee (Oct. 1998 –  
present)
- 7) University Accreditation Committee 2007 /2008
- 8) Member of Committee for Studying Plan/ Faculty of  
Agriculture and Science Oct. 1999 – present.
- 9) Chief of Voting Committee for Students Council  
Election in the University 2000 – 2002, 2004 –  
2007.
- 10) Chief of Committee for Student Council Election in  
the University 2003.
- 11) Member of Research Department Committee  
2008/2009

## **Language Skills**

- 1) Arabic Language
- 2) English Language
- 3) French Language

مقالات منشورة في مجلة كلية العلوم/جامعة جرش

- 1) تأثير الرياضة على كيمياء الجسم (2017)
- 2) الفسفور و دوره في الحياة (2018)
- 3) المبلمرات الذكية (2018)
- 4) مضادات الاكسدة دواء و غذاء (2019)

### **Funded Projects**

Synthesis and photophysical properties of Imminocoumarin derivatives funded by Jerash University (2010).

### **Masters 's Discussion Committee Memberships**

- 1) Distribution of Polyphenols in Olive Mill Wastewater, Olive Oil and Jeft and their Potential Use  
Esmat Abdulkareem Showayat Yarmouk University (2019).
- 2) Oxidative dehydrogenation of n-butene over iron (III) oxide based catalysts.  
Iman khaled Mohammad Al-Qudah, Yarmouk University (2017).
- 3) Investigation of a Series of Ruthenium II Complexes as Potential Catalysts in the Hydrogenation of Ketones and Aldehydes  
Amal Muhsen Mohammad Mahmoud, Yarmouk University (2016)
- 4) Application of ZnO-Derived Heterogeneous Catalysts in the Production of Biodiesel From Rapeseed Oil. Radwan Al-Jarrah  
Nidal Al Jarrah, Yarmouk University (2012)

## Publications

1. Kinetics of Propane Hydrogenolysis catalyzed on Alumina supported Rh-Pt bimetallic catalyst. Fayez El Khatib and Sabri Mahmoud *Asian Journal of Chemistry* **20**, 2, 1179-1185 (2008).
2. Photodegradation of Carbaryl in acetonitrile solution Yaser A. Yousef, Fayez El Khatib, *Spectroscopy Letters* **40**, 573-582 (2007).
3. Temperature Dependence of Henry's Law Constant of Chlorine and Hydrogen Chloride in 1,2-Dichloroethane, 1,1,2-Trichloroethane and 1,1,2,2-Tetrachloroethane. Marwan Batiha, Fayez El Khatib *J. Saudi Chem. Soc* 10 (1) 2006
4. New carboxylate functionalized phosphodi- and trihydrazones as versatile chelating agents of metallic ions in organic solvents and in water. Fayez El Khatib, Nathalie Launay, Zong-Li He, Anne-Marie Caminade and Jean-Pierre Majoral *Phosphorus, Sulfur and Silicon* **180**, 321-330 (2005).
5. Synthesis and Characterization of iminocoumarin derivatives, Promising Properties in Laser Dye Applications Omar Ababneh, Fayez El Khatib, Yaser A. Yousef, Nail Saleh. *Abhath Al-Yarmouk Basic Sciences and Engineering* (**13**) 2, 239-248(2004).
6. Ozonation of bicyclo[3,2,1]-2,7,8-trioxo-1-phosphaoctane a new model of bicyclic phosphite ozonide. Fayez El Khatib *Jerash for researches and Studies* (**8**) 1, 13-21 (2003).
7. The kinetics of tenoxicam photodegradation in solution M. A. Hassan, S. S. Mahmoud, F. H. El Khatib, A. A. Obaidat and M. Sheikh-Salem *Reaction Kinetics and Catalysis Letters* (**70**) 119 (2000).
8. Reactivity of N-Phenyliminophosphoranes towards ozone: evidence of trioxoazaphospholane intermediates Fayez El Khatib, Jacques Bellan and Max Koenig *Phosphorus, Sulfur and Silicon* **134** 391 (1998).
9. Ozonation: An efficient method for the oxidation of halophosphines  
Anne-Marie Caminade, Fayez El Khatib, Antoine Baceiredo and Max Koenig *Phosphorus and Sulfur* **27**, 1145 (1987)
10. Oxydation et isomérisation de diphosphène.  
A.M. Caminade, F. El Khatib, C. Adès, M. Verrier, N. Paillous and M. Koenig *Phosphorus and Sulfur* **26**, 91 (1986).
11. Ozonides de phosphite source d'oxygène singulet, rendement, mécanisme A. M.Caminade, F, El Khatib M. Koenig and J. M. Aubry *Canadian Journal of Chemistry* **63**, 3203 (1985).

12. Ozonolyse d'oléfines perfluorées  
A.M. Caminade, M. Le Blanc F. El Khatib and M. Koenig *Tetrahedron Letters* **26**, 3007 (1985).
13. Nouveaux trioxophosphétanes générateur d'oxygène singulet à basse température. F. El Khatib, C. Tachon. A.M. caminade et M. koenig  
*Tetrahedron Letters* **26**, 3007 (1985).
14. Ozonides du phosphore: Stabilité et Stéréochimie  
F. El Khatib, A.M. Caminade and M. Koenig *Phosphorus and Sulfur* **20**, 55 (1984)
15. Phosphorus ozonide adducts A.M. Caminade F. El Khatib and M. Koenig *Phosphorus and Sulfur* **18**, 97 (1983).
16. Réactions de l'ozone sur des molécules phosphorées :  
Ozonides  
F. El Khatib, A.M. Caminade et M. Koenig *Phosphorus and Sulfur* **14**, 381 (1983).
17. Stabilisation d'ozonides du phosphore M. Koenig, F. El Khatib, A. Munoz et R. Wolf *Tetrahedron Letters* **23**, 421 (1982).

## International and national Conferences

- 1) The arab chemical week Perspectives of Applications of Modern Chemistry Science: Targeted Drug Delivery Systems. Jerash University 31 Oct, 2016.
- 2) International Conference on Advanced Materials. Jordan University of Science and Technology (Attendance) 27-28 April 2015.
- 3) 13<sup>th</sup> Jordanian Chemical Conference 'Chemistry and Scientific Contemporary Challenges" Jerash Nov 9, 2013 (Member of scientific committee, Attendance)
- 4) International Jordan Plastic Conference and Exhibition Amman, Jordan 8-10 Oct 2012 (Attendance)
- 5) The sixth Jordanian International Conference of Chemistry ,Yarmouk University, Irbid, Jordan.19 - 21 April 2011 (Attendance)
- 6) The Tenth Jordanian Chemical Conference, Jordan University of Science and Technology, Irbid, Jordan May 20, 2010 (Attendance).
- 7) Fifth Jordanian International Conference of Chemistry, Yarmouk University, Irbid, Jordan 16- 19 June 2008 (oral presentation).
- 8) International Conference of Heterocyclic Chemistry Rajashan University, Jaipur, India 16-20 December 2006 (oral presentation).
- 9) The fourth Jordanian International Conference of Chemistry, Yarmouk University Sept. 2005 (Poster presentation).
- 10) Symposium of Pesticides and Contemporary life, Jerash University, Jerash April 2004 (oral presentation).
- 11) 12th Chemical Arab Conference Al-Quods Hotel , Amman, Nov 2003 (oral presentation).
- 12) The third Jordanian International Conference of Chemistry, Yarmouk University April 2002 (oral presentation).
- 13) Forum of Faculty of literature and Science, Al al-Bayt University, Almafraq - Jordan May 5th, 2001 (oral presentation).
- 14) Second International Conference of Pure, Applied and Environmental Chemistry, Yarmouk University. Irbid - Jordan April 2000 (oral presentation).
- 15) First Symposium of Pure and Applied Chemistry. Yarmouk University. Irbid- Jordan April 1998 (oral presentation).
- 16) 5<sup>ème</sup> Colloque national sur la chimie du phosphore Yrivals (France) May 1985 (oral presentation).



- 17) Journées des formes activées de l'oxygène et de l'ozone "Société française de chimie" Toulouse (France) novembre 1984(Attendance).
- 18) Journées Franco-espagnoles Aix-en-Provence (France) May 1984 (oral presentation).
- 19) "International Conference of Phosphorus Chemistry" Nice (France) September 1983 (oral presentation).
- 20) "Colloque national sur la chimie du phosphore" Montpellier (France) septembre 1982(Attendance).