

Curriculum Vitae

Dr. Lo'ay Ahmed Al-Momani

Associate Professor

Personal Details

Date of birth: 1970
Place of birth: Al-Ramtha, Jordan
Nationality: Jordanian
Marital status: Married, have two daughters

Contact Information

Working address

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Home Address

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Jordan
e-mail: loay1970@yahoo.com, loay.al-momani@daad-alumni.de
homepage: <http://www.al-momani.de.tl/>

Education

23/07/2004

Ph.D in Chemistry, Philipps-University Marburg, Germany "Synthesis, Structural and Functional Analysis of Membrane Permanent Ion Channels"
Overall grade: Very Good.

10/2001-12/2004

Philipps-University Marburg, Germany. Supported by [DAAD](#) and [DFG](#).

10/1999-10/2001

Humboldt-University Berlin, Germany. Ph.D. student, Organic Chemistry, as a scholarship holder of the [DAAD](#) (German Academic Exchange Service). Supervisor: [Prof. Dr. Ulrich Koert](#).

01/1993-12/1995

Master degree in Chemistry, Yarmouk University, Jordan. "*Synthesis, Study and Reactions of Isoxazole and Isoxazoline compounds via 1,3-Dipolar Cycloadditions of Aromatic Nitrile Oxide*". Cumulative Average: 88.6%.

08/1988-06/1992

Bachelor Degree in Chemistry, [Yarmouk University](#), Jordan. Cumulative Average: 74.9%.

07/1988

The general Secondary Education Examination, Percentage Average: 82.2%

Administrative Positions**09/2013-09/2015**

Dean, Faculty of Science at [Tafila Technical University](#)/Jordan

09/2007-09/2009

Chairman of chemistry department at [Tafila Technical University](#)/Jordan.

Teaching and Research Activities**09/2015-Now (Sabbatical Leave)**

Associate professor for general and organic chemistry at [Mutah University](#)/Jordan.

01/2013-09/2015

Associate professor for general and organic chemistry at [Tafila Technical University](#)/Jordan.

10/2006-01/2013

Assistant professor for general chemistry (Chem. 101 and 102) and organic chemistry (all organic chemistry courses, special topics in organic chemistry and organic spectroscopy) at [Tafila Technical University](#)/Jordan.

09/2005-10/2006

Full time lecturer for general and organic chemistry at [Tafila Technical University](#)/ Jordan.

01/2005-09/2005

Postdoctoral research, in the research group of [Prof. Dr. Michael Müller](#) at the Albert Ludwig University/ Freiburg, Germany. In this research, products of the chorismate biosynthesis pathway are used as building block for chemical synthesis of some bioactive natural products. The other mission of me in the pharmaceutical chemistry institute is the assistant and the organiser the second semester lab. for general chemistry.

01/2005-09/2005

Teaching assistant of general chemistry lab for pharmacy students at [Albert-Ludwig-University](#)/ Freiburg, Germany.

04/2002-07/2004

Teaching assistant of general chemistry lab for biology and medicine students at [Philipps University](#), Germany.

02/2001-07/2004

Supervisor of undergraduate students in organic synthesis during the Ph.D. thesis.

12/1996-12/1998

Teaching assistant for general and organic chemistry laboratories at [Al al-Bayt University](#), Jordan.

10-02/1996

Part-time lecturer for general chemistry and general chemistry laboratories at Jerash University, Jordan.

1994-1996

Teacher of chemistry and science for secondary school students, ministry of education, Jordan.

1993-1994

Teaching assistant for the general chemistry lab 107 at Yarmouk University during the preparation of M.Sc.

Languages

04/1999-10/1999

Intensive course of German language in Goethe Institute in Göttingen, Germany. The DSH exam “The German as a foreign language”

Languages

Arabic as a mother language, English and German as foreign languages.

Software

Standard software. MS-Word .Power point, Excel, Origin, and Corel Draw.

Awards

06/2012-09/2012

[DFG](#), Research Stays and Study Visits for University Academics and Scientists. The research group of Prof. Dr. Michael Müller at the Albert-Ludwig-University/ Freiburg, Germany.

06/2011-09/2011

[**DFG**](#), Research Stays and Study Visits for University Academics and Scientists. The research group of Prof. Dr. Michael Müller at the Albert-Ludwig-University/ Freiburg, Germany.

06/2010-09/2010

[**DFG**](#), Research Stays and Study Visits for University Academics and Scientists. The research group of Prof. Dr. Michael Müller at the Albert-Ludwig-University/ Freiburg, Germany.

06/2009-09/2009

[**DFG**](#), Research Stays and Study Visits for University Academics and Scientists. The research group of Prof. Dr. Michael Müller at the Albert-Ludwig-University/ Freiburg, Germany.

07/2006

[**DAAD**](#), Research Stays and Study Visits for University Academics and Scientists, re-invitation Programme for Former Scholarship Holders.

Conferences

1. Member of the scientific committee of the "[The Sixth Jordanian International Conference of Chemistry](#)" organized by Yarmouk University/Irbid-Jordan and Jordanian Chemical Society, held from 19-21. April, 2011.

2. Member of the scientific committee of the "[11th EuAsC₂S](#)" organized by University of Jordan/Amman-Jordan and Jordanian Chemical Society, 6-10. October. 2010, The Dead Sea, Jordan.

3. "14th Arab Chemistry Conference and Exhibition (acc-14)", Tripoli (Libya) on 31 March- 03 April, 2008, Abstract IL-BIO 01, p 83.

4. Member of the organizing committee of the "[Petra International Conference of Chemistry and Transmediterranean Colloquium of Heterocyclic Chemistry \(TRAMECH -5\)](#)" organized by Tafila Technical University/Tafila-Jordan and Jordanian Chemical Society, 25-28, June 2007.

Publications

Before 2004

1. Abu-Orabi S.T., Jibrill. and **Al-Momani L. A.**, "Synthesis of Isoxazole and Isoxazoline Derivatives and their Reactions with Hydrazine". [Asian Journal of Chemistry](#) **1999**, *11*, 1276-1282

2004

1. **Al-MomaniL.**, "Synthesis, Structural and Functional Analysis of Membrane Permanent Ion Channels". VVB Laufersweiler Verlag, Wettenberg/Germany **2004**, ISBN 3-89687-694-5.

2. Andronesi O. C., Pfeifer J. R., **Al-Momani L.**, Özdirekcan S., Rijkers D. T. S., Angerstein B., Luca S., Koert U., Killian J. A., Baldus M., "Probing Membrane Protein Orientation and Structure under Fast Magic-Angle-Spinning Solid State NMR", [Journal of Biomolecular NMR](#) **2004**, *30*, 253-265.

3. Koert U., **Al-Momani L.**, Pfeifer J., "Synthetic Ion Channels", [Synthesis](#) **2004**, 1129-1146.

2005

1. Xie X, **Al-Momani L.**, Reiß P., Griesinger C., KoertU., "An Asymmetric Ion Channel Derived from Gramicidin A: Synthesis, Function and NMR Structure". [European Journal of Biochemistry](#) **2005**, *272*, 975-986.

2. **Al-Momani L.**, Reiß P., Koert U., "A Lipid Dependence in the Formation of Twin Ion Channels". [Biochemical and Biophysical Research Communications](#) **2005**, *328*, 342-347.

2006

1. Abu-Orabi S.T., Saleh M, **Al-Momani L.**, Jibril I., Yousef Y., "Synthesis of Mono- and Bis-Triazoles via 1,3-Dipolar Cycloaddition Reactions of Azide Derivatives with Naphtho- and Benzoquinone" [Jordan Journal of Chemistry](#) **2006**, *1*, 109-120.
2. Saparov S.M., Pfeifer J.R., **Al-Momani L.**, Portella G., de Groot B.L., Koert U., Pohl P., "Mobility of a one-dimensional confined file of water molecules as a function of the file length". [Phys. Rev. Lett.](#) **2006**, *96*, 148101.

2008

1. Sultan T. Abu-Orabi, Nuha A. Abu-Naaj, Sami Klaib, **Lo'ay Al-Momani**, Ibrahim Jibril, "Synthesis of some 1,2,4-Triazolyl-1,2,3-Triazole Derivatives: (1,3-Dipolar Cycloaddition Reaction)" [Jordan Journal of Chemistry](#) **2008**, *3*, 337-347.
2. Bisel Ph., **Al-Momani L.**, Müller M., "tert-Butyl group in Chemistry and Biology" [Org. Biomol. Chem.](#), **2008**, *6*, 2655-2665.
3. Reiß Ph., **Al-Momani L.**, Koert U. "A Voltage-Responding Ion Channel Derived by C-Terminal Modification of Gramicidin A" [ChemBioChem](#) **2008**, *9*, 377-379.

2010

1. Sultan, T. Abu-Orabi, Nuha A. Abu-Naaj and **Lo'ay Al-Momani**, "Synthesis, study and Characterization of some 1,2,3-Triazolo-1,3,4-oxadiazole Derivatives via Dehydration Reactions of Carbohydrazides" [Jordan Journal of Chemistry](#) **2010**, *5*, 325-330.

2011

1. Johannes Bongaerts, Simon Esser, Volker Lorbach, **Lo'ay Al-Momani**, Michael A. Müller, Dirk Franke, Christoph Grondal, Anja Kurutsch, Robert

Bujnicki, Ralf Takors, Leon Raeven, Marcel Wubbolts, Roel Bovenberg, Martin Nieger, Melanie Schürmann, Natalie Trachtmann, Stefan Kozak, Georg A. Sprenger and Michael Müller. "Diversity-Oriented Production of Metabolites Derived from Chorismate and Their Use in Organic Synthesis" [*Angew. Chem. Int. Ed.*](#) **2011**, 50, 7781-7786.

2012

1.Lo'ay Al-Momani, "Hydroxy-L-Prolines as Asymmetric Catalysts for Aldol, Michael addition and Mannich reactions" [*Arkivoc*](#), **2012**, vi, 101-111.

2.Lo'ay Al-Momani, "Synthesis and Characterization of Hydroxyproline Ferrocene-Conjugated Derivatives" [*Jordan Journal of Chemistry*](#), **2012**, 7, 141-155.

2013

1.Lo'ay Al-Momani, Anas Lataifeh, "Novel O-Ferrocenoyl Hydroxyproline conjugates: Synthesis, Characterization and Catalytic Properties" [*Inorganica Chimica Acta*](#), **2013**, 394, 176-183.

2.Waleed Azzam, Lo'ay Al-Momani, "A new Striped-phase of Decanethiol Self-Assembled Monolayers on Au (111) Formed at a High Solution Temperature" [*Applied Surface Science*](#), **2013**, 266, 239-244.

3. Khalid Abu-Shandi, Qasem D. Mohammed, Munib M. Saket , Ali M. Qaisi, Fawaz Deabas, Adnan M. Massadeh, Omar Al-Ayed, Lo'ay Al-Momani, Eyad S. M. Abu-Nameh, "Simultaneous Determination of Cetirizine and Pseudoephedrine Combined in Tablet Dosage Form by High Performance Liquid Chromatography" [*Jordan Journal of Pharmaceutical Sciences*](#), **2013**, 6, 188-202.

2014

1. Lo'ay A. Al-Momani, "Enzymatic-Synthesized Hydroxy-L-Prolines as Asymmetric Catalysts for Green Synthesis" *Green Syntheses*, CRC Press

2014, Vol. 1, Edited by Pietro Tundo and John Andraos, , Pages 163–182.
Print ISBN: 978-1-4665-1320-4, eBook ISBN: 978-1-4665-1319-8.

2. Lo'ay Al-Momani, “Synthesis, Characterization and Catalytic Behavior of Some L-Hydroxyprolines Dimers for Asymmetric Aldol Reaction” [*Jordan Journal of Chemistry*](#), **2014**, 9, 289-300.

2015

1. Lo'ay Al-Momani, Volker Lorbach, Jean Detry, Petra Geilenkirchen, and Michael Müller, “ β - and δ -Amino Acids (2,3- and 3,4-trans-CHA) as Catalysts in Knoevenagel Condensation and Asymmetric Aldol Reactions” **In preperation**