

Khalid Aref Ibrahim Amman – Jordan Mobile:0799688081 Email: khalida@ahu.edu.jo <u>aref65@hotmail.com</u>

* Personal Information:

Full Name: Date of Birth: Nationality: Academic Position: Social Status: Khalid Aref Hussein Ibrahim 27/10/1964 Jordanian PhD in Chemical Engineering Married

Feb 2015 - present	King Saud University – Unpaid leave
Feb 2014 – Feb 2015	King Saud University – Sabbatical leave
May 2012-present	Associated professor
September 2011- 2013	Head of Chemical Engineering Department. Al-Husseien Bin Talal University.
Summer 2010	DFG Research visit, University of Freiburg, Freiburg, Germany
2007 – 2012	Assistant professor, Chemical Engineering Department. Al-Husseien Bin Talal University. I have been teaching the following courses:
	1. Heat and mass transfer
	 Fluid mechanics Polymer technology
	4. Fertilizers technology
	5. Energy engineering

* Personal Employment:

	 Corrosion engineering Petroleum refining engineering Chem.Eng. Thermodynamics I Chem.Eng. Thermodynamics II Advanced engineering math
October, 1992-2001	Instructor and Lab. Supervisor 1- (faculty of Basic Science, Applied Science University). I taught the following courses: General Chemistry (1&2), Analytical Chemistry, Industrial Chemistry, Physical Chemistry. 2- (Faculty of Engineering), I taught the following courses: Computer Aided Design Unit Operation, Mass Transfer Lab., Particulate Technology, Chemical Engineering Reaction Lab. I supervised two graduation projects.
1994-1997 (During My M.Sc. Study)	Teaching Asistant (chemical Engineering Department, University of Jordan). I worked for the following courses: Mathematical Methods for Chemical Engineering, Mass Transfer Operation, Process Modeling by Statistical Methods.
October, 1990-1992	Production Engineer and Shift Control Arab Company for Manufacturing of Vegetable Oils (Zallom Group).
June, 1988-1990	Computer Operator Royal Jordanian Air Force Medical Facility.

Note: The teaching language for all employment is <u>English</u>.

C.V. Cont. / page 2 * Education:

Period	University/School	Degree	Average
2002-2006	Helsinki University of Technology,	PhD	Very Good
	Department of Chemical Technology		
	Laboratory of Polymer Technology.		
	Helsinki - Finland		
1994-1997	The University of Jordan	M.Sc	Very Good
	Chemical Engineering Department.		-
	Amman - Jordan		
1983-1988	Jordan University of Science and Technology	B.Sc	High Good

Chemical Engineering Department.	
Irbid - Jordan	

Note: The teaching language during studying in all Universities is <u>English</u>.

* Workshops:

December 15 to 18 of December 1993	Jordanian Society for Control of Environment Pollution
May 1991 to May 1992	A Trainee Chemical Engineering Natural Resources Authority
June 13 to 13 of August	Jordan Petroleum Refinery Company Limited

***Membership:**

- 1. Academy of Finland.
- 2. Center of execellance research group in Finland.
- 3. Jordan Engineers Association.

* Master Thesis:

"Prediction of liquid densities of non-ideal mixtures using

Peng-Robinson-Stryjek-Vera (PRSV) Equation of state after volume axis translations"

Thesis submitted in partial fulfillment of the requirements for the Degree

of Master of Science in Chemical Engineering at University Of Jordan

* Doctoral Program:

1. Doctoral Thesis

a) Tittle

" STUDIES ON ATOM TRANSFER RADICAL POLYMERIZATION OF ACRYLATES AND STYRENES WITH CONTROLLED POLYMERIC BLOCK STRUCTURES "

b) Objectives

- i. Catalyst synthesis
- ii. Polymer synthesis
- iii. Polymer characterization
- iv. Polymer kinetics
- v. Industrial application

c) List of publications

I Ibrahim, K., Löfgren, B., and Seppälä, J., Towards more controlled poly(n-butyl methacrylate) by atom transfer radical polymerization, *Eur. Polym. J.* **39**, 939–944 (2003).

II Ibrahim, K., Löfgren, B., and Seppälä, J., Synthesis of tertiary-butyl acrylate polymers and preparation of diblock copolymers using atom transfer radical polymerization, *Eur. Polym. J.* **39**, 2005–2010 (2003).

III Ibrahim, K., Yliheikkilä, K., Abu-Surrah, A., Löfgren, B., Lappalainen, K., Leskelä, M., Repo, T., and Seppälä, J., Polymerization of methyl methacrylate in the presence of iron(II) complex with tetradentate nitrogen ligands under conditions of atom transfer radical polymerization, *Eur. Polym. J.* **40**, 1095–1104 (2004).

IV Ibrahim, K., Starck, P., Löfgren, B., and Seppälä, J., Synthesis and characterization of amphiphilic triblock copolymers by iron-mediated atom transfer radical polymerization, *J. Polym. Sci., Part A: Polym. Chem.* **43**, 5049-5061 (2005).

V Ibrahim, K., Salminen, A., Holappa, S., Kataja, K., Lampinen, H., Löfgren, B., Laine, J., and Seppälä, J., Preparation and characterization of polystyrene-poly(ethylene oxide) amphiphilic block copolymers via ATRP : potential application as paper coating materials, *J. Appl. Polym. Sci.*, **102**, 4304-4313 (2006).

VI Yliheikkila, K., Lappalainen, K., Castro, P., Ibrahim, K., Abu-Surrah, A., Leskelä, M., and Repo, T., Polymerization of acrylate monomers with MAO activated iron(II) and cobalt(II) complexes bearing tri- and tetradentate nitrogen ligands, *Eur. Polym. J.* **42**, 92–100 (2006).

VII Transworld Research Network 37/661 (2), Fort P.O., Trivandrum-695 023, Kerala, India Well-defined Metal Complexes-Catalyzed Polar Polymer Synthesis, 2008 ISBN: 978-81-7895-368-7 Editors: Adnan S. Abu-Surrah and Khalid Ibrahim

VIII Yahya S. Al-Degs & Adnan S. Abu-Surrah & Khalid A. Ibrahim, Preparation of highly selective solid-phase extractants for Cibacron reactive dyes using molecularly imprinted polymers. *Anal. Bioanal. Chem.* 393(3):1055-62(2009)

IX Khalid A. Ibrahim, Ala'a al-muhtasib, Jukka Seppala, Synthesis of Poly(fluorinated styrene)-block-Poly(ethylene oxide) Amphiphilic Copolymers via ATRP : Potential Application As Paper Coating Materials. J. *Polym. Intern*.58(8):927-32(2009).

X A. S. Abu-Surrah, K. A. Ibrahim, H. M. Abdel-Halim "Polymerization of t-butyl acrylate via MAO activated salicylaldiminato-based transition metal complexes", Transition metal Chemistry, 2009, 34 (7) 803-808.

XI Muhanned A. Hararaha, Khalid A. Ibrahimb, Ala 'a H. Al-Muhtasebb, Rushdi I. Yousef, A. Abu-Surrah, Ala'a Qatatshehe

"Removal of phenol from aqueous solutions by adsorption onto polymeric adsorbents", Journal of Applied Polymer Science, 117(4) (2010) 1908-1913.

XII A. S. Abu-Surrah, K. A. Ibrahim, M.Y. Abdalla, A. A. Issa, "Pentacoordinated iron(II) complexes with 2,6-bis[(imino)ethyl]pyridine-Schiff base ligands as new catalyst systems mediated atom transfer radical polymerization of (meth)acrylate monomers" J. Polym. Research, 2010,9391-7.

XIII KHALID A. IBRAHIM. "Atom Transfer Radical Copolymerization of Styrene and Poly(ethylene oxide)-alkyl Methacrylate Macromonomer". Asian Journal of Chemistry; Vol. 23, No. 2 (2011), 777-78.

XIV Ala'a H. Al-Muhtaseb, Khalid A. Ibrahim, Ahmad B. Albadarin, Omar Alikhashman, Gavin M. Walker, Mohammad N.M. Ahmad. 'Remediation of phenolcontaminated water by adsorption using poly(methyl methacrylate) (PMMA)'. Chemical Engineering Journal 168 (2011) 691–699

XV Omar Ali Al-Khashman, Ala'a H. Al-Muhtaseb, Khalid A. Ibrahim. 'Date palm (Phoenix dactylifera L.) leaves as biomonitors of atmospheric metal pollution in arid and semi-arid environments'. Environmental Pollution 159 (2011) 1635-1640.

XVI Khalid A. Ibrahim, Ala'a H. Al-Muhtaseb, Oswald Prucker, Jürgen Rühe. 'Preparation of hydrophilic polymeric nanolayers attached to solid surfaces via photochemical and ATRP techniques'. Journal of Polymer Research (2013), 20:124.

XVII Khalid A. Ibrahim, Khaeel A. Abu-Sbeih, Ibrahem Al-Trawneh, Laurance Bourghli, "Preparation and Characterization of Alkyd Resins of Jordan Valley Tomato Oil" J Polymers and the Environment, published online 22 June, 2014. DOI 10.1007/s10924-014-0664-9.

XVIII Ahmad Abu-Jrai Jehad A. Yamin Khalid A. Ibrahim, Omar A. Al-Khashman Mouath A. Al-Shaweesh Muhannad A. Hararah Umer Rashid, Mohammad Ahmad Gavin M. Walker Ala'a H. Al- Muhtaseb, "NOx removal efficiency and N₂ selectivity during selective catalytic reduction process over Al₂O₃ supported highly cross-linked polyethylene catalyst", *Journal of Industrial and Engineering Chemistry*, *vol 20, 2014, pp 1650-1655.*

2. Courses:

The following courses had been studied:

- i. Amphiphilic Polymers
- ii. Introduction to Physical Polymer Science
- iii. Calculation Collection of Polymer Technology
- iv. Polymer synthesis
- v. Polymer Physics II: Structure Formation in Block Copolymers
- vi. Plant Design Course: Inherently Safer Design
- vii. Metals and Ligand Reactivity
- viii. Metallo-Organic Chemistry
- ix. Combinatorial Chemistry

* Others:

- 1- General Chemistry, a laboratory manual (1993), shared with dept. members Applied Science University.
- 2- Industrial Chemistry, a laboratory manual (1993), shared with dept. members Applied Science University.
- 3- Chemical Engineering Reaction, Particulate Technology, Mass Transfer Laboratory manuals (1997), Chemical Engineering Department, Applied Science University.

* Conferences:

- 1- Bio-and Nanopolymers Research, Turku, 2003, Finland.
- 2- Euoropolymer Congress 2003, Stockholm, Sweden, June 23-27, 2003.
- 3- Bio-and Nanopolymers Research, Helsinki, 2004, Finland.
- 4- Bio-and Nanopolymers Research, Helsinki, 2005, Finland.
- 5- 1st INTERNATIONAL SOLAR ENERGY CONFERENCE & 4th GERMAN –JORDANIAN WORKSHOP 2012 The Potential of CSP and Solar Applications in Jordan February 27 – 29, 2012 Amman – Jordan.
 - 6- THE SIXTH JORDAN INTERNATIONAL CHEMICAL ENGINEERING CONFERENCE

12th-14th March 2012

Holiday Inn Hotel, Amman

References

- 1. Prof.Jukka Seppala. Helsinki University of Science and Technology-Department of Polymer Technology, Finland.
- 2. Prof. Jurgen Ruhe. Frieburg University, Department of chemistry and Physics of Interface, Germany.
- 3. Prof. Adnan Abu-Surah. Hashimite University, Department of chemistry, Jordan.