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## **Prof. Dr. nat. Ismail Khalil Warad**

Ph.D in Organometallic Chem. from Tuebingen University/Germany/ supervisor Prof. E. Lindner

### ***Post Address:***

\* Full Professor, Department of Chemistry College of Science, An-Najah National University, P.O box

7, Nablus, Palestine [warad@najah.edu](mailto:warad@najah.edu)

[i.kh.warad@gmail.com](mailto:i.kh.warad@gmail.com)

For more information please visit me at <http://staff.najah.edu/warad/publications>

Professor at Department of Chemistry, King Saud University, P. O. Box 2455, Riyadh 11451, Saudi Arabia.

[E-mail warad@ksu.edu.sa](mailto:warad@ksu.edu.sa)

For more information please visit me at <http://faculty.ksu.edu.sa/73826/default.aspx>

<http://scholar.google.com.eg/citations?user=vvcH6FcAAAAJ&hl=en>

[https://www.researchgate.net/profile/Ismail\\_Warad/contributions/?ev=prf\\_act](https://www.researchgate.net/profile/Ismail_Warad/contributions/?ev=prf_act)

\* Visiting researcher to Chemistry Department, Ioannina University, Ioannina, Greece

\* Visiting researcher to Chemistry Department, Valencia polytechnic University, Valencia, Spain.

\* Visiting researcher to Institute of Organic Chemistry, Auf der Morgenstelle 18, 72076, Tübingen,

Deutschland (GERMANY)

**Marital status:** Married and I have three kids [Khalil 12 years, Ikram 9 years, and Aya 8 years old, Abdullah 3 year, Dana 6 months old]

## Publications:

### Submitted.

- 1- Taibi Ben Hadda, Vijay Masand, Naziyanaz B. Pathan, Ali Parvez, **Ismail Warad**, Usama Shaheen, Ammar Bader and Mohamad Aljofan, POM Analyses of Raltegravir Derivatives: A New Reflection Enlighing the Mechanism of HIV-Integrase Inhibition, *Research on Chemical Intermediates* 2014
- 2- Nabil Al-Zaqri, Mohammed Suleiman, Mousa Al-Noaimi , Belkheir Hammouti, Smaail Radi, Taibi Ben Hadda, Ahmed Boshala and **Ismail Warad** New Catalyst  $\text{RuCl}_2\{\text{H}_2\text{C}=\text{C}(\text{CH}_2\text{PPh}_2)_2\}/\text{H}_2\text{NCH}_2\text{CH}_2\text{NHCH}_2\text{-CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$  in Homogenous and Heterogeneous: Synthesis, Spectral, Thermal and their Catalytic Activity in Hydrogenation of Cinnamic Aldehyde, *Int. J. Mol. Sci.* 2014, 15, 1-x; doi:10.3390/ijms140x000x
- 3- **Ismail Warad** et al Crystal structure of Di(2-pyridinyl)methenone N-(2-pyridinyl)hydrazone C16H13N5, *Z. Kryst.* NCS 229 (2014).
- 4- **Ismail Warad** et al Anti-corrosive Properties and Quantum Chemical Study of (Methoxybenzylidene)Aniline and (4-Methoxybenzylidene)-4-Nitroaniline Coating on Mild Steel in Molar Hydrochloric. *Int. J. Electrochem. Sci.*, 9 (2014).
- 5- Orange H. M. Odeh, Mohammed A. Al-Nuri, Belkheir Hammouti, Taibi B. Hadda, **Ismail Warad**, Isolation of Anticancer Natural Ingredients from Sour, *Physical Chemical News*, 2014.
- 6- **Ismail Warad**, et al, *Cis*-[Dichloro-Ruthenium(1,4-bis(diphenylphosphino)butane)(2,2-dimethyl-1,3-propanediamine)].CH<sub>2</sub>Cl<sub>2</sub> Complex: Synthesis, Spectral, EXAF, EDX, Thermal and Single Crystal Structure Analyses, *Arab. J. Chem.* 2014.
- 7- Taibi Ben Hadda1, Vijay Masand, Naziyanaz B. Pathan, Ali Parvez, **Ismail Warad**, Usama Shaheen, Ammar Bader, Mohamad Aljofan POM Analyses of Raltegravir Derivatives: A New Reflection Enlighing the Mechanism of HIV-Integrase Inhibition, *Research on Chemical Intermediates*, 2014.
- 8- Moulay H. Youssoufi, Pramod K. Sahu, Praveen K. Sahu, Dau D. Agarwal, Shazia Sultana, Mushtaq Ahmad, **Ismail Warad**, and Taibi B. Hadda Evaluation of 4-aryl substituted 3,4-dihydropyrimidinone derivatives of curcumin for antimicrobial and antitumor activities using POM analyses in comparison with experimental data to realization of ideal confirmation, Arabian Journal of Chemistry 2014.

### Chapter in a Book

- A. Zarrouk, H. Zarrok, R. Salghi, B. Hammouti, R. Touir, **I. Warad**, F. Bentiss, H. Abou El Makarim, N. Benchat, Quantum Chemical Study of Some Triazoles Compounds as Corrosion Inhibitors of Copper in Acid Media, Ch3, pp 30-44, Lap Lambert Academic publisher 2012.
- B. A. Zarrouk, H. Zarrok, R. Salghi, B. Hammouti, S.S. Al-Deyab, R. Touzani, M. Bouachrine, **I. Warad**, T. B. Hadda, Theoretical Investigation on the Corrosion Inhibition of Copper by Quinoxaline Derivatives in Nitric Acid Solution, Ch4, pp 45-60, Lap Lambert Academic publisher 2012

## Patents

Saud Resayes, **Ismail Warad**, M. Iqbal Choudhary, Atia-tul-Wahab and Saima Rasheed, **Heterocyclic Schiff's Bases as Novel and New Antiglycation Agents, US patent, 2013, no 00000600162.**

UNITED STATES PATENT AND TRADEMARK OFFICE							
U.S. PATENT AND TRADEMARK OFFICE Correspondence Address: P.O. Box 1450, Washington, DC 20590-1450 Telephone: (571) 272-1100 Fax: (571) 272-1106							
APPLICATION NUMBER	FILED ON	EXAMINER	ART UNIT	SEARCHED	SEARCHED NO.	TOP CLAIM	INDEX CLAIMS
14/794,096	12/24/2014	16739	6034		20113,1121	1	8

CONFIRMATION NO. 5109  
CORRECTED FILING RECEIPT

27134  
SARFARAZ K. NIARI  
Therapeutic Proteins International, LLC  
3440 S. Dearborn Street  
Suite 300  
Chicago, IL 60616

Date Mailed: 04/17/2013

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections.

### Inventor(s)

Saud Ibrahim Al-Resayes, Riyadh, SAUDI ARABIA;  
Ismail Warad, Nairobi, KENYA; WAFI HANKIYA/A;  
Mohammed A. Al-Nuri; Nebius, WEST BANK/PALESTINE;  
Muhammad Iqbal Choudhary, Karachi, PAKISTAN;  
Atia-tul Wahab, Karachi, PAKISTAN;  
Saima Rasheed, Karachi, PAKISTAN;

### Applicant(s)

## 2014

Online 2014-03-14

- Ismail Warad**, Mohammad Azam, Saud I. Al-Resayes, Mohd. Shahnawaz Khan, Mohammed Al-Nuri, Shehdeh Jodeh, Ahmad Husein, Salim F. Haddad, Belkheir Hammouti, Mousa Al-Noaimi Structural studies on Cd(II) complexes incorporating di-2-pyridyl ligand and the X-ray crystal structure of the chloroform solvated DPMNPH/CdI<sub>2</sub> complex Inorganic Chemistry Communications, 2014, 43, 155-161.  
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## 2012

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106. **I. Warad** "Synthesis and crystal structure of cis-dichloro-1,2-ethylenediamine-bis[1,4-(diphenylphosphino)butane]ruthenium(II) dichloromethane disolvate, RuCl<sub>2</sub>(C<sub>2</sub>H<sub>8</sub>N<sub>2</sub>)<sub>2</sub>(C<sub>28</sub>H<sub>28</sub>P<sub>2</sub>).<sub>2</sub>CH<sub>2</sub>Cl<sub>2</sub>, *Z. Kristallogr. NCS* 222, 415-417 (2007).
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## 2006

112. **I. Warad**, S. Al-Reasyes, K. Eichele, "Crystal structure of Neutral 1,3-propanediamine-bis[(2-methoxyethyl)(diphenyl)phosphine]-trans-dichlororuthenium(II) [RuCl<sub>2</sub>(C<sub>15</sub>H<sub>17</sub>OP)<sub>2</sub>(C<sub>3</sub>H<sub>10</sub>N<sub>2</sub>)] Complex, *Zeitschrift für Kristallographie*, NCS 221, 275-277 (2006).
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## 2005

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116. **I. Warad**, S. Al-Gharabli, A. Al-Alabadi, A. Rayyan, "Synthesis, Characterization and NMR Studies of Novel1 Hemilabile Neutral and Dicationic Palladium(II) Complexes: Pd(h<sub>2</sub>-Ph<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>OCH<sub>3</sub>)<sub>2</sub> and Pd(h<sub>1</sub>-Ph<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>O-CH<sub>3</sub>)<sub>2</sub>diamine by using Ether-phosphine Ligand. *J. Saudi. Chem. Soc.* 9, 507 -518 (2005).

## 2004

117. **I. Warad**, E. Lindner, K. Eichele, H. A. Mayer, "Supported Organometallic Complexes part 39: Cationic Diamine(ether-phosphine)ruthenium(II) Complexes as Precursors for the Hydrogenation of trans-4-phenyl-3-butene-2-one, *Inorg. Chim. Acta* 357, 1847-1853 (2004).
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119. **I. Warad**, M. Regnik, D. Wu, Z-L. Lu, H. A. Mayer, and E. Lindner, "Diamine(Ether-phosphine)ruthenium(II) as a Selective Homogenous Hydrogenation Catalysts, Conference of ISHC-14, July 2004, P0300, Munch, Grammy.

## 2003

120. **I. Warad**, K. Eichele, E. Lindner, H. A. Mayer, "Supported Organometallic Complexes Part 34: Synthesis and Structures of an array of Diamine(ether-phosphine)ruthenium(II)

- Complexes and their Application in the Catalytic Hydrogenation of,trans-4-phenyl-3-butene-2-one, *Inorg. Chim. Acta*, 350, 49 (2003).
121. E. Lindner, A. Ghanem, **I. Warad**, K. Eichele, H. A. Mayer, V. Schurig, "Asymmetric hydrogenation of an unsaturated ketone by Diamine(ether–phosphine)ruthenium(II) complexes and lipase-catalyzed kinetic resolution: a consecutive approach. *Tetrahedron: Asymmetry* 14, 1045 (2003).
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### **As supervisor**

**I supervised until now 2 Ph.D students, 8 master students; I was also examiner for more 10 graduate students.**

### **Teaching Courses:**

#### **Courses taught in Saudi Arabia**

##### **Undergraduate**

- |              |   |
|--------------|---|
| 1- 101 Chem  | General Chemistry / Science and Engineering Colleges- First year Students |
| 2- 105 Chem  | General Chemistry / Medical College- Second year Students                 |
| 3- 425 Chem  | Mechanism in inorganic chemistry  |
| 4- 428 Chem  | Coordination Chemistry  |
| 5- 325 Chem. | Actinide and lanthanide chemistry   |
| 6- 421 Chem  | Organometallic chemistry  |
| 7- 221 Chem  | Main element Chemistry  |
| 8- 321 Chem  | Transition metals chemistry   |

##### **Graduated**

##### **Master**

- 1- 521 Chem Organometallic Chemistry

## 2- 600 Chem Topics in inorganic Chemistry

### Doctoral

- 1- 623 chem Special topics in inorganic and catalysts
- 2- 625 chem Advance inorganic Materials
- 3- 620 chem Advance inorganic and Coordination Chemistry

In general I taught the following courses

- 1- Inorganic Analytical Chemistry
- 2- Organic Chemistry
- 3- Inorganic and Organometallic chemistry

### Community service

- 1- Graduate Studies Committee-KSU (2009-2011).
- 2- Hiring Committee-Select researchers to work in KAIN (2008-2010).
- 3- Commission to take advantage of the capacity of the KSU University (2008-2012).
- 4- Curriculum development committee teaching KSU (2007-2012).
- 5- Scientific Committee in Chemistry Department KSU (2007-2012).
- 6- Scientific Committe of several local Chem. Conferences 2006-2013.

### Projects

Names	Title	Sub. Side	State	Year
<b>I. Warad</b> and Zeid Al-othman	Direct Synthesis and Characterization of Hybrid Inorganic-Organic Materials by Using Several Cross-Linkers in the Presence of <i>n</i> -Hexadecylamine as Surfactant	SABIC	20000 SR	2009-2011
<b>I. Warad</b> and A. Hakami	Synthesis, Reactions and Crystal Structure of [1,1-bis(diphenylphosphinomethyl) ethene]Ruthenium(II) and Other Derivative Complexes	St. Project	Grant 2500 SR	2008-2010
<b>I. Warad</b> and S. Al-	Ruthenium(II) Complexes and Their	SABIC	Grant	2008-

Resayes	Application as an -Intelligent Catalysts for Catalytic Supercritical Reaction (scCO <sub>2</sub> ) and Selective Hydrogenation of Functionalized Ketones			2009
<b>I. Warad</b> and S. Al-Resayes	Synthesis and Spectroscopic Characterization of Palladium(II): Pd( <sup>2</sup> -Ph <sub>2</sub> PCH <sub>2</sub> CH <sub>2</sub> OCH <sub>3</sub> ) <sub>2</sub> and [Pd( <sup>1</sup> -Ph <sub>2</sub> PCH <sub>2</sub> CH <sub>2</sub> OCH <sub>3</sub> ) <sub>2</sub> -diamine].2BF <sub>4</sub> Complexes Using Ether-Phosphine as a Hemilabile Ligand	<i>Research Center</i>	Grant 5000 SR	2007-2008
I. Warad and S. Al-Resayes	Synthesis, Characterization, Thermal Study and A refined X-Ray of: Bis(1,2-Ethelyne-Diphosphine)-Ruthenium(II) and their Complexes Derivatives	<i>Research Center</i>	Grant 2500 SR	2007-2008
<b>I. Warad</b> and S. Al-Resayes	Design and Synthesis of Novel Family of Palladium(II) Complexes with/ without P-N Ligands as Efficient for Palladium-Catalyzed Suzuki-Miyaura and Heck Cross-Coupling Reactions	High Edu. Min.	Grant 1 million SR	2011-20013
<hr/>				
<b>I. Warad</b> , S. Al-Resayes and R. Mahfouz	Synthesis, Characterization and Supporting of Novel Hybrid Organic Inorganic Catalysts in Interphase Chemistry by Sol-Gel and Surface Modification Techniques	Chair of Research 10000 SR		2012
<b>I. Warad</b> and S. Al-Resayes	Molecular Structures and Syntheses of Novel Palladium(II) and Ruthenium(II) Complexes of Atropisomeric Chiral Ligands to be Use as New Enantioselective Hydrogenation and Coupling Intelligent Catalysts	King Abdul-Aziz City for Science and Technology	Submitted 2013	
<b>I. Warad</b> S. Al-Resayes and R.	Molecular Structures and Syntheses of Novel	Catalysis Chair Project		2009

Mahfouz	Palladium(II) and Ruthenium(II) Complexes of Atropisomeric Chiral Ligands to be Use as New Enantioselective Hydrogenation and Coupling Intelligent Catalysts	20000 SR	
I. Warad S. Al-Resayes, R. Mahfouz, A. A. Alwrthan and E. Lindner	Synthesis, Structural Analysis and Nanoparticles Supporting of Novel Diphosphine Palladium(II), Platinum(II) and Ruthenium(II) Complexes via Achiral Ligands to be Use in Field of Hydrosilylation, Bromotion, Supercritical CO <sub>2</sub> , and Hydrogenation Catalysts	Research center 5000 SR	2012
I. Warad and S. Al-Resayes	Synthesis and Characterization of Two New Hemilabile ether-phosphine ligands and their complexation with Ruthenium(II) and Palladium (II)	Research Center	2500 SR
I. Warad and S. Al-Resayes	Phenanthrouline -derivatives ligands and their T.M complexes DNA binding role	Research Center	2500 SR

## Workshops

- 1- Mobility and Accessibility Studies on Sol–Gel Processed Phosphines and Ru(II) Catalysts, *Workshop des Graduiertenkollegs „Chemie in Interphasen“*, Blaubeuren, Swezerland, November 2001.
- 2- Synthesis and Characteristic Diamine(phosphine)ruthenium(II) Complexes, "Workshop des Graduiertenkollegs „Chemie in Interphasen“", Blaubeuren, Swezerland, November 2002.
- 3- Transtion Metal Complexes as Catalysts in several fields. , *Workshop of Tuebingen*, Tuebingen , Germany, 2002.
- 4- Asymmetric Hydrogenation of an Unsaturated Ketone by Diamine(ether-phosphine) ruthenium(II) Complex and Lipase-Catalyzed Kinetic Resolution: a consecutive approach, *Workshop des Graduiertenkollegs „Chemie in Interphasen“*, Blaubeuren, Swezerland, November 2002.
- 5- Hydrogenation of an -Unsaturated Ketone by Diamine(ether-phosphine) ruthenium(II):SCEM Screening During the Process to Discover the Relation Between the Electrochemical Behavior and Catalytic Activity, *Workshop of Overjoch „Chemie in Interphasen“*, Oberjoch, Germany, January 2003.
- 6- Modern NMR Techniques, *Workshop of Overjoch „Chemie in Interphasen“*, Overjoch, Germany, September 2003.

**7-** Techniques to Separate B- Carotene from Natural Products Using Fixed-bed Capillary Column- LC-NMR. *Workshop of Tuebingen, Tuebingen* , November, 2003.

**8-** Surface Modification and Sol- Gel Chemistry. *Workshop of Ioannina „Ioannina University*, Ioannina, Greece January 2004.

**9-** Problems and Techniques in HPLC Separation. *Workshop of Munch Technical University (MTU)* , Munch, Germany, February, 2004.

**10-** New Inorganic-Organic Hybrid Materials Ruthenium Complexes for follow up HPLC Separation and Catalysis, *Workshop of Lauterbad, compact seminar, Lautergad*, Germany, March 2004.

**11-** New Inorganic-Organic Hybrid Materials for HPLC Separation Obtained by Direct Synthesis using Several Cross-linkers in the Presence of a Surfactant *Workshop of EKA Chemical-Sweden, Tuebingen*, Germany, April 2004.

**12-** Develop of the Chemistry Department Website in KSU. *Workshop of King Saud University*, Riyadh, KSA, September, 2007.

**13-** End of *Graduiertenkollegs „Chemie in Interphasen*, Wiengarten, Bodensay, Germany, October 2007.

## ***Education***

### **Graduate**

1) B.Sc./Chemistry from An-Najah University –Nablus, June 1995 with very good average

### ***Post Graduate:***

2) Master/Physical Chemistry from An-Najah University –Nablus, March 1998 with excellent average entitle:

### **Kinetics and Mechanism of Oxidation of Cysteine by Complexation Process Using Iron(III) and Nitrogen Chelate Organic Ligands DPKTH and Ferrozine**

3) Ph.D./Inorganic Chemistry (Catalysis) from Eberhard-Karls-Univ. Tuebingen 2003, Germany entitle:

### **Diamine(phosphine)ruthenium(II) Complexes and Their Application in The Catalytic Hydrogenation of $\gamma,\beta$ -Unsaturated Ketones in Homogeneous and Heterogeneous Phase**

4) Post-doctoral position for one year in Institute Of Organic and Inorginic Chemistry, Tuebingen 2003-2005, Ak /Prof. K. Albert and E. Lindner.

### **Hybrid Inorganic and Organic Material Mesoporous compound to be used in Catalysis and Chromatography**

5) Assistant professor at Department of Chemistry, Riyadh University, Saudi Arabia 2005-2006

6) Assistant professor at Department of Chemistry, Science College, King Saud University, Riyadh, Saudi Arabia 2006-2008.

**7) Associate professor at Department of Chemistry, Science College, King Saud University, Riyadh, Saudi Arabia 2008- 2012.**

**8) Full professor at Department of Chemistry, Science College, King Saud University, Riyadh, Saudi Arabia 2012- now.**

9) Associate professor at Department of Chemistry, Science College, An-Najah National University, Nablus, Palestine, 2013.

### ***Specialization:***

Selective and enantioselective catalysts design, Hydrogenation, Solid state NMR, X-ray diffraction, Hybrid organic-inorganic material, Sol-gel immobilization of Gd-DOTA- complexes.

### ***Area of Research Interest:***

1. Ligand design and synthesis (chiral and achiral), asymmetric catalysts. Complexes (Kinetics, preparation and application, electrochemical studies that coupled with organometallic subjects).
2. Sol-Gel and surface modification immobilization.
3. Lipase-Metals coupling reaction.
4. HPLC chromatography packing and separation, Hybrid Inorganic and Organic Material to prepare novel RP-stationary phase, nanoparticle

### ***Languages:***

**Arabic:** Native language

**English:** V. Good in speaking, reading and writing

**German:** good

### ***Computer Knowledge:***

Microsoft office and most well-known programs in Chemistry and Internet. (diploma).

### **Accomplishments**

1. Three years in Graduiertenkollegs, Chemie in Interphasen Group (scholarships for specialists).
- 2- Parallel Hydrogenation Technique Design and Application.
- 3- Novel method to discover the relation between hydrogenation and electrochemical behavior of Ru(II) complexes the fastest method for synthesis.
- 4- Two years postdoctoral position in Graduiertenkollegs, Chemie in Interphasen Group.
- 5- Solving several problems in field of complexation (inorganic) and phase separation (organic).
- 6- Certificated of Analysis from the Standard Reference Material (ASRM).
- 7- DAAD scholarship to teach and do research in Chemistry Department at Ioannina Uni. Greece.

### **Fellowship Awarded:**

Doctoral Research Work, from, the Inorganic Department, Tuebingen University Germany (2001-2003).

Post-Doctoral Research Work, from, the Organic Department, Tuebingen University Germany (2003-2005).

Research Advisor in EKA Chemical-Sweden company- project with Organic institute of Tuebingen University Germany (2003-2004).

Study Visit from German Academic Exchange Service (DAAD), Ioannina University, Greece (Sep. 9, 2004-Nov. 11, 2004)

Study Visit from DFG (German Research Establishment), Tuebingen University Germany (summer 2005).

Study Visit from GK (Graduiertenkollegs), Weingarten, Germany ( summer 2007).

### **Skills**

Practice in the following instruments

1) X-ray diffraction 2) Liquid-NMR spectroscopy (Bruker DRX 250 Spectrometer). 3) CP/MAS solid-state NMR spectroscopy (Bruker DRX 200 and Bruker ASX 300 Spectrometer). 4) FTIR spectroscopy (Bruker IFS 48 FTIR Spectrometer). 5) Uv-visible spectrophotometer (2 year experience). 6) Autoclave and parallel autoclave hydrogenation reactors. 7) GC-MS and HPLC chromatography and columns packing techniques.

## Professional Societies

- 1- German Chemical Society.
- 2- Saudi Chemical Society.
- 3- Graduiertenkollegs -Chemie in Interphasen.
- 4- Palestinian Chemical Society.

## Referee of the following Journals

- 1- Spectro. Chem.. Acta.
- 2- Journal of Saudi Chemical Society.
- 3- Journal. King. Saud. Uni. Science 2.
- 4- SABIC evalouation Suported Chemical Projects.
- 5- 7th Saudi Engineering Conference (papers).
- 6- Two books in Chemistry
- 7- Arabian Journal of Chemistry

## References:-

- 1) Prof. Ekkehard Lindner, Inorganic Chemistry Eberhard-Karls-Univ. Tuebingen (**Germany**), [ekkehard.lindner@uni-tuebingen.de](mailto:ekkehard.lindner@uni-tuebingen.de)
- 2) Prof. Hermann Mayer, Inorganic Chemistry Eberhard-Karls-Univ. Tuebingen (**Germany**), [hermann.mayer@uni-tuebingen.de](mailto:hermann.mayer@uni-tuebingen.de)
- 3) Prof. Wolfgang Voelter, Organic Chemistry Eberhard-Karls-Univ. Tuebingen (**Germany**), [wolfgang.voelter@uni-tuebingen.de](mailto:wolfgang.voelter@uni-tuebingen.de)
- 4) Prof. Klaus Albert, Organic Chemistry Eberhard-Karls-Univ. Tübingen (**Germany**), [klaus.albert@uni-tuebingen.de](mailto:klaus.albert@uni-tuebingen.de)
- 5) Prof. Saud. Ibraheem Al-Resayes, Inorganic Chemistry, Chemistry Department, King Saud University, (**KSA**). [sreasyes@ksu.edu.sa](mailto:sreasyes@ksu.edu.sa)
- 6) Prof. Rajab Abu Elhalawa Organic Chemistry, Chemistry Department Al al-Bayt University, (**Jordan**) [halawarajab@yahoo.com](mailto:halawarajab@yahoo.com).
- 7) Prof. Avelino Corma Instituto de Tecnología Química, UPV-CSIC Universidad Politécnica de Valencia Avda. de los Naranjos s/n 46022Valencia – SPAIN.

**Tel.: 34 96 3877800, New Fax: 34 96 3879444, e-mail :[acorma@itq.upv.es](mailto:acorma@itq.upv.es)**