CURRICULUM VITAE FOR MOHAMMAD S. MUBARAK

PERSONAL DATA

NAME: **Mohammad S. Mubarak**
Professor of Chemistry
DATE OF BIRTH: **July 22, 1954**
NATIONALITY: **American**
MARITAL STATUS: **Married with three children**
ADDRESS: **Chemistry Department**
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EDUCATION

1. Ph.D. Chemistry, July 1982. Indiana University, Bloomington, IN. 47405, U.S.A. **(GPA 3.93/4)**
2. M.Sc. Chemistry, February 1978. The University of Jordan, Amman, Jordan Average**: 87.2% (TOP OF CLASS)**
3. B.Sc. Chemistry with a minor in Education, February 1976. The University of Jordan, Amman, Jordan. Average: **78.9% (TOP OF CLASS).**

ADMINSTRATIVE POSITIONS

1. **Chairman of the Department of Chemistry, The University of Jordan**; Sept. 2008 to Dec. 2009.
2. **Vice Dean of the Faculty of Science,** the University of Jordan, Dec. 6, 2009 to Sept. 10, 2011.

3. **Academic Consultant and Vice Dean,** Al-Ghad International Colleges for Health Sciences, Riyadh, Saudi Arabia, Sept. 10, 2011 to Sept. 2012.

COMMITTEES

1. Member of the **Faculty of Science council** for the years 95/96, 96/97, and 2003/2004
2. Member of the **University council** as a representative of the faculty of science for the year 2001/2002.
3. Chairman of the **Faculty of Science** sports and social committee for the years 96/97 and 97/98.
4. Member of the **Faculty of Science** appointment and promotion committee for the year 2004/2005.
5. Member of the **Faculty of Science** Students' disciplinary Committee for the years 96/97, 2001 to present.
6. Member of the **Faculty of Science** research committee for the year 2007/2008.
7. Member of the **Faculty of Science** graduate studies committee for the year 2008/2009.
8. Member in several **departmental committees** for a number of years including: Scientific Research Committee, Graduate studies committee, Curriculum committee, Conferences, Seminars, and Symposia Committee.
9. **Chairman of the Faculty of Science** appointment and promotion committee from Dec. 6, 2009 to Sept. 2011.
10. **Chairman of the Faculty of Science scientific** research committee from Dec. 6, 2009 to Sept. 2011.
11. **Chairman of the Faculty of Science graduate studies** committee from Dec. 6, 2009 to Sept. 2011.
12. **Chairman of the Faculty of Science** curriculum committee from Dec. 6, 2009 to Sept. 2011.
13. **Member of the university research council** for a two-year term starting in November, 2009 to Sept. 2011.
14. Member of the **graduate studies committee of the integrated water resources management program**, Dec. 2009 to Sept. 2011.
15. **Member of the university research council** for a two-year term starting in October, 2012.

RESEARCH INTERESTS

Our research interests focus on the following areas:

1. Synthetic organic chemistry in its very broadest sense. Generally, our

Efforts are focused on the preparation of organic compounds and new heterocyclic compounds that may display biological activity and may have pharmacological significance. Present studies are directed toward the synthesis of new agents that may have anti-parasitic, antimicrobial, and antitumor activities. Several spectroscopic techniques, such as NMR spectroscopy, FTIR, Mass spectrometry, will be utilized for the identification of the new products, in addition to microanalysis. Examples of research projects ongoing in our laboratory include the following: (1) Synthesis of new coumarin derivatives that may have some antitumor activities. (2) Development of synthetic strategies for the preparation of new heterocyclic compounds that incorporate imidazole moieties.

2. Medicinal Chemistry, involving bioactive compounds.
3. Chemistry of Natural Products.
4. Drug Discovery and Drug design.
5. Organic electrochemistry; use of electroanalytical, methods (cyclic Voltammetry and coulometry) to investigate the mechanisms of reduction and oxidation processes involving organic and organometallic species at various electrodes in nonaqueous solvents. This kind of work is normally done in collaboration with Indiana University, Bloomington, In. USA.
4. Medicinal chemistry, natural products, and medicinal plants.

PROFESSIONAL ORGANIZATIONS

1. The American Chemical Society, many years
2. The Jordanian Chemical Society, many years
3. The Electrochemical Society, Active member for many years
4. Member in the Advisory Board of *Jordan Journal of Applied Science, Natural Sciences* published by the Deanship of Scientific Research, Applied Science University.
5. Member of the editorial board of **Jordan Journal of Chemistry** from June 20, 2007 to May 2011.
6. Member of the editorial board of **Journal of Organic Chemistry Research-Natural Sciences Publishing**, An International Journal from March 2012.
7. Member of the editorial board of **Journal of Chemistry and Applications**, Avens Publishing Group, Since July 2014.
8. Member of the editorial board of **Journal of Chemistry & Applied Biochemistry**, Open Science Publications, since July 2014.
9. Member of the editorial board of **International Journal of Advanced Research and Review (IJARR).**
10. Member of the editorial board of **International Journal of Nanomaterial and Chemistry,** Natural Sciences Publishing.
11. Member of the editorial board of **International Journal of Pharmaceutics and Pharmacology,** Publisher: Edwiser International.
12. **Anti-Cancer Agents in Medicinal Chemistry, Bentham**

HONORS AND AWARDS

1. Royal Award for first place B. Sc. Students awarded by His Majesty, the late King Hussein of Jordan, 1976.
2. Royal Award for first place M. Sc. Students awarded by His Majesty, The late King Hussein of Jordan, 1978.
3. Recipient of the 2006/2007 Distinguished Researcher Award from University of Jordan.
4. Recipient of an award from the University of Jordan for bringing external fund from the EU, 2006/2007.
5. Jordan Scopus Award of Most Active Author at the University of Jordan, March 31, 2009, under the patronage of HRH Princess Sumaya Bint El Hassan.
6. Adjunct Professor of Chemistry, Indiana University, Bloomington, In. 47405, USA. March 2009-March 2012.
7. Recipient of distinguished researcher award from the University of Jordan, for 2009.
8. Recipient of distinguished researcher award from the University of Jordan, for 2010.
9. Recipient of distinguished researcher award from the University of Jordan, for 2011.
10. The Ali Mango award for the distinguished scientist of the year 2011, awarded by Hamdi Mango Center of Scientific Research, The University of Jordan, on April 26, 2012.
11. Distinguished Researcher, The University of Jordan, 2017/2018.
12. Highly cited Researcher, 2022.
13. Highly cited Researcher, 2023.

Funded Research Projects

1. Synthesis and biological activity of some derivatives of N1-(5-nitrothiazol-2-yl) amidrazones, **2011**. Haythem a. Saadeh and Mohammad S. Mubarak. Project funded by Deanship of Scientific Research, The University of Jordan, 9900 JD.

2. Discovery of new HER2 inhibitors *via* Ligand-Based Pharmacophore Modeling and hit optimization for potential use in cancer disease, **2012**. Hiba M. Zalloum, Mohammad S. Mubarak, and others. Project funded by Deanship of Scientific Research, The University of Jordan, 20600 JD.

3. Investigation, Revival and Optimization of Traditional Mediterranean Coloring Technology for the Conservation of the Cultural Heritage (MED-COLOUR-TECH), **Jan 2066-Dec. 2008**. Mohammad S. Mubarak and Mahmoud Alawi in addition to partners from seven other Mediterranean institutions. Project funded by the European Community under the Sixth Framework Program Integrating and strengthening the European

research area INCO CT 2005 015406 MED-COLOUR-TECH. EU 142,000 € (total Budget 1,200000 €).

4. Synthesis and Bioassay of some N1-(coumarin-7-yl) amidrazones and related congeners**, 2010**. Mohammad S. Mubarak and Mustafa M. El Abadelah; Project funded by Deanship of scientific research, The University of Jordan, 16,600 JD.

5. Synthesis and Bioassay of some N1-(falvon-7-yl)amidrazones and related congeners, **2010**. Mohammad S. Mubarak and Mustafa M .El-Abadelah. Project funded by Deanship of Scientific Research, The University of Jordan, 9000 JD.

6. Immobilization of 1-hydroxy-2-pyridinethione-4-carboxylic acid on Chitosan and the sorption properties of the newly modified chitosan toward some heavy metal ions (lead, copper, zinc, and nickel, **2010**. Mohammad S. Mubarak and Kamal I. Abu-Dari Project funded by Deanship of Scientific Research, The University of Jordan 12800 JD.

7. Discovery of new inhibitors of glucosidases through molecular modeling and *in silico* screening and *in vitro* evaluation and subsequent chemical optimization into more potent leads, **2008**. Mutasem Taha and Mohammad Mubarak, Project funded by Deanship of Scientific Research, The University of Jordan, 13,000 JD.

8. Synthesis, Characterization, and Possible Biological Activities of New 1,2,4-Triazoles and 1,2,4-thiazole-3-thiones, **2007**. Mohammad S. Mubarak and Haythem A. Saadeh. Project funded by Deanship of Scientific Research, The University of Jordan, 2750 JD.

9. Synthesis and Characterization of Novel Pyridine-Based Polymers and their Chelating Properties Towards Heavy metal Ions in Aqueous solutions, **2006**. Mohammad S. Mubarak and Haythem A. Saadeh
Project funded by Deanship of Scientific Research, The University of Jordan, 5550 JD.

   Chelation Properties of Modified Chitosan towards Heavy Metal Ions, **2005**. Mohammad S. Mubarak. Project funded by Deanship of Scientific Research, The University of Jordan, 5400 JD.

10. Synthesis and Characterization of Some 2-Glucosaminobenzimidazole, **2002**. Mohammad S. Mubarak and Raid J. Abdel–Jalil. Project funded by Deanship of Scientific Research, The University of Jordan, 4500 JD.

11. Synthesis and Properties of Some Oxime-Containing Mannich Polymers, **1999**. Kais A. Ibraheem and Mohammad S. Mubarak
Project funded by Deanship of Scientific Research, The University of Jordan, 6000 JD.

12. Direct and Indirect Electrochemical Reduction and Oxidation of Organic Compounds and Some Biologically Important Ligands and Complexes, **1996**. Mohammad S. Mubarak. Project funded by Deanship of Scientific Research, The University of Jordan, 11,000 JD.

13. Synthesis and Chelate-forming Properties of Some Phenol-Formaldehyde Polymers and Related derivatives, **1995**. Kais A. Ibraheem; Fawwaz Khalili; Mohammad S. Mubarak. Project funded by Deanship of Scientific Research, The University of Jordan, 6400 JD.

ADVISOR AND/OR CO-ADVISOR OF THE FOLLOWING M.SC. THESES

1. Majed Hammad Mohammad Attari "Synthesis and Characterization of New Schiff Bases and their Complexes With Some Metal Ions. 15/11/1995

2. Khaldoon A. Al-Sou'od "Preparation and Characterization of New Oxadiazole Derivatives and their Complexes With Some Metal Ions". 10/2/96

3. Abeer Farid Sweiss "Synthesis and Characterization of Some 1,2-Disubstituted Ethenediol Diesters". 2/12/1997.

4. Ziad Yassein "Synthesis of Some Phenol-Formaldehyde Polymers and Their chelate-Forming Properties With Some Heavy Metal Ions". 15/12/1996.

5. Samer Al-Gharabili "Synthesis, Characterization, and Chelation Properties of Some Oxime Containing Polymers". 14/4/1998.

6. Nuha Salem "Synthesis, Characterization, and Chelation Properties of New Polymers Through Mannich-Type Condensation". 20/9/2000.

7. Ali I. Ismail "Synthesis and Chelation Properties, Toward Some Trivalent Lanthanide Ions, of New Polymers via Mannich-Type Condensation". 16/9/2001.

8. Fuad Rimawi "Chelation Properties of Some Phenolic-Formaldehyde Polymers Toward Some Trivalent Lanthanide Ions". 28/5/2002

9. Ayman Ahmad "Chelation Properties of Some Condensation Polymers Toward Some Trivalent Lanthanide Ions by Complexometric Titrations". 31/7/2002

10. Remah N. Yaghmour" Chelation Properties of Modified Humic Acids Towards Some Trivalent Lanthanide Ions" 15/1/2003

11. Ibraheem Ezziddin “Synthesis and Characterization of Some New Pentadienoic Acid Derivatives”. 8/2003

12. Kifah Salladdin Mohammad Saleh” Synthesis of Some New Coumarin Derivatives” 20/5/2004

13. Chelation Properties of Some Mannich-Type Polymers Towards Some Metal Ions”. 23/2/2004.

14. Fadi Al-Akhras “Chelation Properties of Some Poly Amidoxime-Hydroxamic Acid Polymers Towards Some Trivalent Lanthanide Ions”. 8/7/2004.

15. Khadejeh H. A. Al-Zghoul “Synthesis and Characterization of New Coumarin Derivatives, Part II” 23/12/2004.

16. Eman M. Hammad “Chelation Properties of Poly(B-diketone)polymer and its Oxime Toward Heavy Metal-ions”. 29/12/2004.

17. Hiba Zalloum”Chelation and Isothermal Behavior of Copper(II) Ions with Chitosan-Derived Sciff-Bases”. December 7, 2005.

18. Ruba Zalloum” Chelation and Isothermal Behavior of Copper(II) Ions with Poly(2-Hydroxy-4-acryloyloxybenzophenone) Resins”. December, 15, 2005.

19. Eman A. Abu-Shaireh “Synthesis and Characterization of New Metronidazole Derivatives” May, 16, 2007.

20. Aymen S. Abu-Hatab “Synthesis and Reactions of Some New 4-Substituted-3-alkoxy-2-butenoic Acid Ester Derivatives”. Oct. 26, 2007.

21. Ahmed T. Al-Masri “Synthesis, characterization, and Biological Activities of New Compounds Derived from Metronidazole and Amino Acids and Their Esters”. May, 13, 2008.

22. Ahmed Mutanabbi Abdula”Design, Discovery and Synthesis of New β-D-Glucosidase and β-D-Galactosidase Inhibitors” March, 2009.

23. Maysoon M. Alkiswani” Synthetic Studies on Ethyl (*2E*)-4-Bromo-3-ethoxybut-2-enolate: Synthesis of Some New Five-Membered Heterocyclic Compounds”, April 19, 2009.

24. Noureddine Charef” Sorption Properties of Functionalized Metal–Chelate Resin Toward Divalent Metals And Human Immunoglobulin G”, May, 12, 2009.

25. Asma’a A. Al-Rifai” Synthesis of Some Coumarin Derivatives With expected Biological activity” Dec., 6, 2009.

26. Mohammad S. Mustafa”Synthesis and Bioassay of some N1-(coumarin-7-yl)amidrazones and Related Congeners” Dec. 2010.

27. Rabab F. Tayyem" Discovery and Optemization of New Fructose-1,6-Bisphosphatase (FBPase) Inhibitors as Potential Antidiabetic agents", April 14, 2011.

28. Faryza J. Muhanna" Synthesis, characterization, and chelation Properties Towards Heavy Metal ions of a Chitosan-linked 1-Hydroxy-2-pyridinethione Polymer" April 27, 2011.

29. Eman D. Awad" Synthesis, Characterization, and Biological Activity of Some 3-(Piperazin-1-yl)cinnoline derivatives", May 2, 2011.

30. Marwa Abu Aisheh"Synthesis and Bioassay of Some N1-(Flavon-7-yl)amidrazones and Related Congeners" July 12, 2011.

31. Nabil Elbezri Kassan " Synthesis and Biological Activity of Novel Schiff Bases Derived from Metronidazole" August 7, 2011.

32. Abla Salman Al-Zaganeem"Synthesis and Bioassay of Novel Substituted Pyrano[2,3-f]cinnolin-2-ones" August 10, 2011.

33. Hadeel Tahseen Al-Sinjilawi " Synthesis and Biological Activity of Novel 4-Oxopyrido[2,3-a]phenothiazines" August 11, 2011.

34. Dua'a Yusef Mohammad Alawadi" Synthesis and Characterization of New Metronidazole Diamide" May 3, 2012.

35. Malath Ahmad Al-Haj Saleh Alqtaitat "Synthesis and Characterization of New Metronidazole Derivatives Containing Piperazine Group" May 3, 2012.

36. Yasmin Rabah Hasan AL-Haj Saleh" Synthesis of Novel Hybrid Compounds Containing 5-Nitrothiazole Moiety as Potential Antiparasitic Agents" Dec. 29, 2013.

37. Bushra Nayef Khalifeh"Synthesis of D-Glucosamine Derivatives of 1-Hydroxy-2-pyridinethione-4-carboxylic Acid and Their Zinc, Copper, And Nickel Complexes" Jan.2, 2014.

TEACHING EXPERIENCE:

I. **The University of Jordan**, **Department of Chemistry, Amman 11942, Jordan:**
Associate professor, Jan. 1993 to Feb. 8, 1998
Professor: Feb. 8, 1998 to present

Courses taught:

1. General Chemistry for medical and dentistry students.
2. General Chemistry for engineering students.

3. Organic Chemistry 1, 2, and 3 for Chemistry majors.
4. Pharmaceutical Organic Chemistry 1 and 2 for Pharmacy students.
5. Organic Chemistry for non-chemistry majors.
6. Electroanalytical chemistry for chemistry M.Sc. and Ph. D. students.

II. **King Saud University at Abha**, Department of Chemistry, Abha, Saudi Arabia
Assistant Professor, September 1983 to Sept. 1992
Associate Professor, October 1992

Courses taught:

1. General and Organic chemistry for junior and senior level Undergraduates
2. Organic reaction mechanisms for seniors.

Coordinator of the Premedical Program. September 1986 to Sept. 1992.

III. **University of Oklahoma**, Department of Chemistry, Norman, Oklahoma 73019, U.S.A.
Post - Doctorate Research Fellow, October 1982 to June 1983.

IV. **Indiana University**, Department of Chemistry, Bloomington, Indiana 47405, U.S.A.
Visiting Professor: Summer of 1996, summer of 1997, and summer of 1999.
Courses taught: C341 (Organic Chemistry 1), C342 (Organic Chemistry 2), and C125 (General Chemistry Laboratory).
Visiting Scientist: Summer of 1984, 1989, 1990, 1994, 2005, 2006, and 2008.
Associate Instructor: January 1979 to May 1982
Courses taught: Organic laboratory courses for junior and senior level undergraduates; Duties included teaching basic organic chemistry techniques and the systematic identification of organic compounds. Also aught freshman chemistry laboratory courses.

PUBLICATIONS

1. Jarrar, A. A.; El-Zaro, R. A.; Mubarak, M. S. "Kinetics of Oxidation of Benzoins by Hexacyano-ferrate (III) in an Alkaline Medium" *Dirasat-Natural Sciences*. **1979**, *6*, 7–18.
2. Mubarak, M. S.; Peters, D. G. "Electrochemiscal Reduction of 2-Iodooctane and 2-Bromooctane at Mercury Cathodes in Dimethylformamide" *J. Org. Chem*. **1982**, *47*, 3397–3403.
3. Mubarak, M. S.; Peters, D. G. "Electrochemical Reduction of

Diphenyliodonium Salts and Phenyl Mercuric Halides in Dimethylformamide" *J. Electroanal. Chem. Interfacial Electrochem*. **1983**, *152*, 183-196.

4. Vieira, K. L.; Mubarak, M. S.; Peters, D. G. "Use of Deuterium Labeling to Assess the Roles of Tetramethylammonium Cation, Dimethylformamide, and Water as Proton Donors for Electro-generated tert-Butyl Carbanions: Evidence for the Formation of an Ylide (Trimethylammonium Methylide)" *J. Am. Chem*. *Soc*. **1984**, *106*, 5372–5373.
5. Mubarak, M. S.; Peters, D. G. " Electrochemical Reduction of Asymmetrically Substituted Diphenyliodonium Salts at Mercury Cathodes in Dimethylformamide" *J. Org. Chem*. **1985**, *50*, 673–677.
6. Cleary, J. A.; Mubarak, M. S.; Vieira, K. L.; Anderson, M. R.; Peters, D. G. "Electrochemical Reduction of Alkyl Halides at Vitreous Carbon Cathodes in Dimethylformamide" *J. Electroanal. Chem. Interfacial Electrochem*. **1986**, *198*, 107–124.
7. Mubarak, M. S.; Peters, D. G. "Use of Nafion Coatings on Glassy Carbon Electrodes as Localized Sources of Protons for Electrogenerated Redical-Anions in Acetonitrile" *J. Electroanal. Chem. Interfacial Electrochem*. **1989**, *273*, 283–292.
8. Mubarak, M. S.; Karras, L. L.; Murcia, N. S.; Bart, J. C.; Stemple, J. Z.; Peters, D. G. "Electrochemical Reduction of 4-Iodo- and 4-Bromoanisole at Mercury and Carbon Cathodes in Dimethyl-formamide" *J. Org. Chem*. **1990**, *55*, 1065–1070.
9. Mubarak, M. S.; Nguyen, D. D.; Peters, D. G. "Electrochemical Reduction and Intramolecular Cyclization of 6-Iodo-1-phenyl-1-hexyne at Vitreous Carbon Cathodes in Dimethylformamide" *J. Org. Chem*. **1990**, *55*, 2648–2652.
10. Urove, G. A.; Mubarak, M. S.; Peters, D. G. "Electrolytic Reductions of Heptanoyl Chloride, Phthaloyl Dichloride, and Benzoyl Chloride at Carbon and Mercury Cathodes in Acetonitrile" In **Electroorganic Synthesis-Festschrift for Manuel M. Baizer**, R. D. Little and N. L. Weinberg, eds., Marcel Dekker, New York, **1991**, pp. 91–98.
11. Urove, G. A.; Peters, D. G.; Mubarak, M. S. " Production of Aldehydes via Electrochemical Reduction of Acyl Halides at Mercury and Carbon Cathodes in Acetonitrile" *J. Org. Chem*. **1992**, *57*, 786–790.
12. Mubarak, M. S.; Peters, D. G. "In Situ Electrogeneration of [2,2'-Ethylenebis(nitriblomethylidyne)diphenolato]nickelate (I)-Nickel (I) Salen-As a Catalyst for Reductive Intramolecular Cyclizations of 6-Iodo- and 6-Bromo-1-phenyl-1-hexyne" *J. Electroanal. Chem*. *Interfacial Electrochem*. **1992**, *332*, 127–134.
13. Mubarak, M. S.; Urove, G. A.; Peters, D. G. "Electrochemical Reduction of Phenylacetyl Chloride and Hydrocinnamoyl Chloride at Mercury Cathodes in Acetonitrile" *J. Electroanal. Chem. Interfacial Electrochem*. **1993**, *350*, 205–216.
14. Mubarak, M. S.; Peters, D. G. "Quantitative Electrochemical Reduction of 1-Adamantanecarbonyl Chloride to 1-Adamantanecarboxaldehyde at Carbon and Mercury Cathodes in Acetonitrile" *J. Electrochem. Soc*. **1995**, *142*, 713–715.
15. Mubarak, M. S.; Peters, D. G. "Electrochemical Reduction of 1,6-

Dihalohexanes at Carbon Cathodes in Dimethylformamide" *J. Org. Chem*. **1995**, *60*, 681–685.

16. Mubarak, M. S.; Peters, D. G. "Homogeneous Catalytic Reduction of α,ϖ-Dihaloalkanes with Electrogenerated Nickel(I) Salen" *J. Electroanal. Chem. Interfacial Electrochem*. **1995**, *388*, 195–198.
17. Peters, D. G.; Dahm, C. E.; Bhattacharya, D.; Butler, A. L.; Mubarak, M. S. "Use of Transition-Metal Complexes as Homogeneous and Polymer-Based Catalysts for Electroorganic Synthesis" In **Novel Trends in Electroorganic Synthesis**, S. Torii, ed., Kodansha, Tokyo, **1995**, pp. 67–70.
18. Mubarak, M. S. "Electrochemical Reduction of 2-Thiophenecarbonyl Chloride at Carbon and Mercury Cathodes in Acetonitrile" *J. Electroanal. Chem. Interfacial Electrochem*. **1995**, *394*, 239–243.
19. Mubarak, M. S.; Peters, D. G. "Electrochemical Reduction of 1,8-Dibromo- and 1,8-Diiodooctane and of 1,10-Dibromo- and 1,10-Diiododecane at Carbon Cathodes in Dimethylformamide" *J. Electrochem. Soc*., **1996**, *143*, 3833–3838.
20. Mubarak, M. S.; Peters, D.G. "Electrochemical Reduction of Mono-and Dihalothiophenes at Carbon Cathodes in Dimethylformamide. First Example of an Electrolytically Induced Halogen Dance" *J.Org. Chem*. **1996**, *61*, 8074–8078.
21. Mubarak, M. S.; Peters, D. G. "Electrochemical Reduction of Mono-and Dihalopyridines at Carbon Cathodes in Dimethylformamide" *J. Electroanal. Chem. Interfacial Electrochem*., **1997**, *425*, 13–17.
22. Mubarak, M. S.; Peters, D. G. "Electrochemical Reduction of Di-, Tri-, and Tetrahalobenzenes at Carbon Cathodes in Dimethylformamide. Evidence for a Halogen Dance During the Electrolysis of 1,2,4,5-Tetrabromobenzene" *J. Electroanal. Chem. Interfacial Electrochem*. **1997**, *435*, 47–53.
23. Attari, M. H.; Mubarak, M. S.; and Khalili, F. I. "Preparation and Characterization of Some Tetradentate Schiff Bases and Their Complexes with Co(II), Ni(II), and Cu(II)". *Synth React. Inorg. Met.- Org. Chem*. **1997**, *27*, 1–16.
24. Ebraheem, K. A. K.; Mubarak, M. S.; Yassien, Z. J.; and Khalili, F. "Chelation Properties of Poly(8-hydroxyquinoline 5,7-diylmethylene) towards some Trivalent Lanthanide Metal Ions. *Solvent Extraction and Ion Exchange, **1998**, 16,* 637–649.
25. Mubarak, M. S.; Pagel M.; Marcus, L. M.; and Peters D. G. "Formation of 2-(3'-Oxocyclohexyl)-2-cyclohexene-1-one via Reduction of. 2-Cyclohexene-1-one with Electrogenerated Nickel(I) Salen" *J. Org. Chem*. **1998**, *63*, 1319–1322.
26. Mubarak M. S.; *Inroduction to Chemistry*, a text book in Arabic published by King Saud University, Saudi Arabia, **1998**.
27. Alleman, K. S.; Samide, M. J.; Peters, D. G.; and Mubarak, M. S.,"Catalytic Reduction of Organohalogen Compounds with Electrogenerated Homogeneous-Phase and Polymer-Bound Cobalt(I) and Nickel(I) Salen" In *Current Topics in Electrochemistry*, J. O M. Bockris, E. J. Cairns, M. Forment, Z. Galus, Y. Ito, S. Trasatti, and T. J. Vander Noot, eds., Research Trends, Trivandrum, India, **1998**.
28. Mubarak, M. S.; Peters, D. G. "Addition to Activated Olefins of Radicals

Formed from Reaction of Alkyl Halides with Electrogenerated Ni(I) Salen". *J. Saudi Chem. Soc.* **1999**, *3*, 135–146.

29. Sweiss, A. F.; Mubarak, M. S. "Synthesis and Characterization of Some 1,2-Disubstituted Ethenediol Diesters", *J. Saudi Chem. Soc*. **2000**, *4(1)*, 95-102.
30. Al-Sau'd, K. A.; Khalili, F. I.; and Mubarak, M. S. "Preparation and Characterization of New Oxadiazole Derivatives and their Complexes with Some Metal Ions" *J. Saudi. Chem. Soc*. **2000**, *4(2)*, 143–152.
31. Ebraheem, K. A. K.; Mubarak, M. S.; Yassien, Z. J.; and Khalili, F. "Chelation Properties of Poly(8-hydroxyquinoline 5,7-diylmethelene) Crosslinked with Bisphenol-A Towards La(III), Ce(III), Nd(III), Sm(III), and Gd(III) Ions" *Separation Science and Technology*, **2000**, *35(13)*, 2115–2125.
32. Mubarak, M. S. and Peters, D. G. "Survey of the Electrochemical Behavior of Chlorinated Pyrazines, Quinoxalines, and Pyridazines at Carbon and Mercury Cathodes", *J. Electroanal. Chem*. **2001**, *507(1-2)*, 110–117.
33. Ji. C., Mubarak, M. S., Peters, D. G., Karty, J. A., and Reilly, J. P. "Direct and Catalytic Reduction of 2,6-Bis(chloromethyl)pyridine at Carbon Cathodes in Acetonitrile", *Reactive Intermediates in Organic and Biological Electrochemistry: Proceedings of the Symposium in Honor of the Late Professor Eberhard Steckhan*, D. G. Peters, H. J. Schäfer, M. S. Workentin, and J. –I. Yoshida, eds., The Electrochemical Society, Inc., Pennington, New Jersey, **2001**, pp. 85–88.
34. Fang, D. M.; Peters, D. G.; and Mubarak, M. S. "Catalytic Reduction of 6 Bromo-1-hexene by Nickel(I) Salen Electrogenerated at Glassy Carbon Cathodes in Acetonitrile", *J. Electrochem. Soc*. **2001,** *148(12)*, E464–E467.
35. Ji, C.; Peters, D. G.; Karty, J. A., Reilly, J. P.; and Mubarak, M. S., "Direct and Cobalt(I) Salen-Catalyzed Reduction of 2,6-Bis(chloromethyl)pyridine at Carbon Cathodes in Acetonitrile", *J. Electroanal. Chem*. **2001**, *516(1 2)*, 50–58.
36. Al-Gharabli, S. I.; Ebraheem, K. A. K.; and Mubarak, M. S., " Synthesis and Chelation Properties of a New Copper Selective Mannich Polymer Containing a 2,4-Dihydroxybenzaldoxime Group", *J. Saudi Chem. Soc.*, **2001**, *5(3)*, 399–406.
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