Curriculum Vitae

Professor Hadi Mohammad Ali Abood.

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Al-Khark, Baghdad Iraq.
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1. *Qualifications:*

1) ***PhD** in Inorganic chemistry*: ***(1985)***
Title of Thesis " Some Reactions and Solubilities in Molten Nitrates and Sulphates".
Supervisor: Dr. David H. Kerridge
Chemistry Department, University of Southampton, Southampton, SO9 5NH, UK.

2) ***BSc.*** ***Chemistry*** ***(1977)***
Chemistry Dept., College of Science, The University of Basra, Iraq.

2. Professional Appointment:

1) **Vic President for scientific affairs, Al-Nahrain University.**
13-11-2019—23-12-2019
2) **Dean of the College of Science, Al-Nahrain University.**
Jan. 2014- Jul. 2018
3) **President of the committee of Deans of College of Science /MoHE/Iraq. Mar. 2014-Jul. 2018**
4) **President of the Higher Education Certificate evaluation committee /MoHE/Iraq. Feb.2016-Jan. 2017.**
5) **Head of Chemistry Department, College of Science, Al-Nahrain University. Feb.2013-Jan.2014**
6) **Lecturer. Chemistry dept. Al-Nahrain University.**
Dec.2005-Dec 2019
7) **Head of chemistry dept. Al-Nahrain University.**
Dec.2006- Feb.2007
8) **Chemistry Dept. Assistance for postgraduate studies Al-Nahrain University. Oct. 2006 - Jan.2008**

9) **Senior IT manager. Ministry of science and technology. IT Institute. Apr.2003- Nov. 2005**

10) **Head of IT dept. Al-Quds Company, The Ministry of Military Industry. Oct.2002 –Apr. 2003**

11) **Head of Chemistry Research Department. Al-Milad Company, The Ministry of Military Industry. 1991 - 2002**

12) **Researcher, Research Center, The Ministry of Military Industry. 1988-1991**

3. Publications:

1) **Desulfurization of Dibenzothiophene from Model Oil by Aluminum Ammonium Sulfate/Urea (Alum) Ionic Liquid Analogue, Noor Emad Faseh, Hadi M. A. Abood, Al-Nahrain Journal of Science ANJS, Vol.23 (2), June, 2020, pp. 8 – 17.**

2) **Effect of Some Aluminum Salts - Amine Ionic Liquids on Several Serum Human Parameters and Bacterial Growth of Klebsiella pneumoniae and Staphylococcus aureus, Bassam B. Hasan, H. M. A. Abood, Nadira Mohamed, Journal of Al-Nahrain University, Vol.21 (1), March, 2018, pp.14-22**

3) **Cyclovoltammetry, ATR-IR of AlCl3/Amide and Thioamide DES and the Morphology of Deposited Aluminum at Variable Potential and Temperature, Hind S. Sedeeq, Hadi M. A. Abood, Journal of Global Pharma Technology, 2019, Vol. 11, Issue 05 (Suppl.) pp720-730.**

4) **Magnesium and Aluminum Oxides Formation Via Conversion Coating of Magnesium Metal in AlCl3/Urea Room Temperature Ionic Liquid HMA Abood, Alwan R.H., Journal of Al-Nahrain University, vol 20 (4),December 2017,pp 20-26**

5) **Electrodeposition of Antimony from Hydrated Ammonium Aluminum Sulfate-Urea Room Temperature Ionic Liquid HMA Abood, AU Ahmed, Journal of Al-Nahrain University, vol 20 (4),December 2017, pp7-12.**

6) **Investigation of the new room temperature ionic liquids of $Al(NO_3)_2.9H_2O$ with urea $CO(NH_2)_2$. Nidhal M. Hassan, Hadi M. A. Abood, Mahasin F. Alias, Baghdad Science Journal,vol.13 September (3) 2016 p489-497.**

7) **Morphology of Electrodeposited Aluminium Metal from Aluminium Chloride-Urea Room Temperature Ionic Liquid (RTIL) at Variable Parameters**, ***International Journal of Science and Research (IJSR), Volume 4 Issue 9, Sept 2015, pp753-760.***

8) **Study The Electronic Transition Behavior of Divalent Transition Metal Cations Co (II), Ni (II) and Cu (II) in Aluminum Nitrate/Urea Room Temperature Ionic Liquid , Nidhal M. Hassan, Hadi M. A. Abood, Mahasin F. Alias,** ***International Journal of Science and Research (IJSR), Volume 4 Issue 7, July 2015,pp1955-1961.***

9) **DSC and TGA Measurements of Room Temperature Ionic Liquids (RTILs) Containing Ammonium Alum or Aluminum Nitrate with Amide Compounds. Hadi M. A. Abood1 and Huda S. Abid**, ***Journal of Al-Nahrain University , Vol.71 (4), June, 2015, pp.56-68 .***

10) **FTIR study of carbon dioxide interaction with some room temperature ionic liquids, Hadi M.A. Abood and Evon Akram**, ***Journal of Al-Nahrain University, Vol.71 (4), December, 2014, pp.76-85.***

11) **Investigation of Lewis Acid-Base Reaction of Acidic Species Present in Aluminum Chloride-Urea Ionic Liquid [$AlCl_2$.nUrea]$^+$,Hadi M. A. Abood* and Marwa H. Fadhil,** ***Journal of Al-Nahrain University ,Vol.17 (1), March, 2014, pp.71-75 .***

12) **The Electronic Transition Behavior Cr (III), Fe (III), Fe (II) and Ni (II), Transition Metal Cations In Ammonium Alum-Urea Room Temperature Ionic Liquid, Zena N. Al-Qudsi and Hadi M. A. Abood ,** ***Journal of Al-Nahrain University, Vol.16 (3), September, 2013, pp.46-55.***

13) **Do all ionic liquids need organic cations? Characterization of [$AlCl_2$nAmide]$^+$ $AlCl_4^-$ and comparison with imidazolium based systems, Hadi M. A. Abood, Andrew P. Abbott, Andrew D. Ballantyne and Karl S. Ryder,** ***Chem. Commun .,2011,47,3523–3525.***

14) **Double layer , diluent and anode effects upon the electrodeposition of aluminum from chloroaluminate based ionic liquids., Andrew P. Abbott , Fulian Qiu , Hadi M.A. Abood , M. Rostom Ali and Karl S. Ryder.,** ***Phys. Chem. Chem. Phys., 2010;12(8):1862-72.***

15) **Preparation and DSC of phase stabilized ammonium nitrate crystallized from its aqueous solution containing potassium fluoride. Hadi M. A. Abood," *Journal of Al-Nahrain University, vol.11 (2), August, 2008, pp.57-61.***

16) **Study the Electrochemical System of Thermal Battery type-417, A. A. Drea, F. H. Hussein and HMA Abood, *National Journal of Chemistry, 25, 79-101, 2007,* Babylon University, Iraq.**

17) **Composition Determination of the Electrochemical System for Thermal Battery T-417, , A. A. Drea, F. H. Hussein and HMA Abood, *National Journal of Chemistry,24,488-510,2006*.Babylon University, Iraq.**

18) **Preparation and characterization of magnesium thermal battery. A. A. Drea, and HMA Abood, *National Journal of Chemistry, 13, 15-25, 2004*, Babylon University, Iraq.**

19) **Thermal stability and solubility of alkaline earth nitrates and chromates in nitrate melts. HMA Abood and DH Kerridge. *Thermochimica acta, 215,183-188,* Elsevier Science, *1993.***

20) **The reaction of potassium iodide in nitrate eutectics. HMA Abood and DH Kerridge. *Thermochimica acta, 198,297-302*, Elsevier Science, *1992*.**

21) **Thermogravimetric studies of the catalytic activity of molten sulphate solutions and vanadium and niobium. HMA Abood and DH Kerridge. *Thermochimica acta, 185, 35-49*, Elsevier Science, *1991*.**

22) **Molten salt chemistry. From academic study to industrial application.** Kerridge, D. H.; Shakir, W. A.; Zellipour, A.; Abood, H. M. A.. Chem. Dep., Univ. Southampton, Southampton, UK. ***Yoyuen Oyobi Koon Kagaku (1991), 34(2), 151-72***

4. Patent:

1) **New Ionic Liquids, Andrew P. Abbott and Hadi M.A. Abood. US Patent no.) International publication number: *WO***

2011/064556 **(03.06.2011 Gazette 2011/22),** ***US patent US6573405B1*****,** ***European Patent EP2504468B1***

2) **Protective Conversion Coating of Pure Magnesium Metal From Hydrate Ammonium Alum/Urea And Hydrate Aluminum Nitrate/Urea Ionic Liquids. Hadi M A Abood and Rasha Hussein Alwan.** ***Central Organization for Standardization and Quality Control (COSQC) , patent no. 5652 (31/01/2019).Iraq.***
3) **Biological Effect of aluminum nitrate-acetamide and aluminum ammonium sulfate-urea Ionic Liquids, H. M. A. Abood , Bassam B. Hasan, Nadira Mohamed** ***Central Organization for Standardization and Quality Control (COSQC) , patent no. 5585 (11/02/2018). Iraq.***
4) **Preparation and study Room Temperature ionic liquid forming by calcium chloride dihydrate with Acetamide, H. M. A. Abood, Bassam B. Hasan, Nadira Mohamed,** ***Central Organization for Standardization and Quality Control (COSQC) , patent no.5345 (23/04/2018). Iraq.***
5) **New ionic liquids prepared from Alum and Amides, Hadi M A Abood,** ***Central Organization for Standardization and Quality Control (COSQC) , patent no.3915 (01/04/2014). Iraq.***

5. Titles:

1) **Professor** **2014**
2) **Assistance Professor** **2008**
3) **Chief Researcher** **2004.**
4) **Chief Chemists.** **1991.**
5) **Researcher** **1988**
6) **Lecturer.** **1986.**

6. Fellowship:

1) ***Visiting Research Fellow*****, Chemistry Department, University of Leicester, UK.** **Aug. -Sept.,2010**
2) ***Honorary Visiting Fellow*****, Chemistry Dept., University of Leicester, UK.** **Sept. 2008-Sept.2009**

7. Awards:

1) **Al-Nahrain university, best MSc supervising.2018.**
2) **Ministry of Higher Education in Iraq, patents awards,2015.**
3) **Ministry of Higher Education in Iraq. Third National Prize winner of Chemistry. 2011.**

4) **Ministry of Higher Education, Iraq, PhD studentship grant, 1979.**

8. Conferences attended:

1) **6th Annual Conference for Postgraduate Student Research, College of Science, Al-Nahrain University, Baghdad, Iraq, *Participant,* Dec 2019.**
2) **5th Annual Conference for Postgraduate Student Research, College of Science, Al-Nahrain University, Baghdad, Iraq, *Participant*, Dec 2018.**
3) **1st International Conference, College of Science, Al-Nahrain University, Baghdad, Iraq, Organizer and participant, Nov.2017.**
4) **4th Annual Conference for Postgraduate Student Research, College of Science, Al-Nahrain University, Baghdad, Iraq, *Participant and Organizer*, Dec 2017.**
5) ***3rd Annual Conference for Postgraduate Student Researches, College of Science, Al-Nahrain University, Baghdad, Iraq, Participant and Organizer, Dec 2016.***
6) **2nd Annual Conference for Postgraduate Student Researches, College of Science , Al-Nahrain University, Baghdad, Iraq, *Participant and Organizer*, Dec 2015.**
7) **1st Annual Conference for Postgraduate Student Researches, College of Science ,Al-Nahrain University , Baghdad, Iraq *Participant and Organizer*, Dec 2014.**

8) **EUCHEM 2012, 4th Conference on Molten Salts and Ionic Liquids, Celtic Manor Resort, Wales, UK. *Two posters,* August 2012.**
9) **Molten salt Discussion Group, X-mas meeting, *participant,* London 2008.**
10) **The Second National Conference of Chemistry, Babylon. Iraq, *Member of organizing Committee,*2001.**

9. *Teaching At :*

1) **Chemistry Department, College of science, Al-Nahrain University, 2005-2020.**

2) **Chemistry Department, Al-Rashid College, University of Technology, MSc Postgraduate Courses, 2003-2004.**
3) **Chemistry Department, College of Science, University of Babylon, MSc and PhD Postgraduate courses, 1999-2002.**
4) **Applied Science Dept., Technical College, MoD , 1997-2002.**
5) **Chemistry Department, Education College, University of Basra, Undergraduate Courses, 1986-1988**

10. Taught Chemistry Subjects:

POSTGRADUTE:

1) **Ionic Liquids.**
2) **Molten Salts Chemistry.**
3) **Organometallic Compounds.**
4) **Stability of Inorganic Compounds.**
5) **Reaction mechanism and Reactivity of transition metal complexes.**
6) **Advance Electronic Spectroscopy of Transition metals.**

UNDERGRADUTE:

7) **Structure and Bond Theories of Transition metal complexes.**
8) **Electronic Spectroscopy of Transition metals.**
9) **The chemistry of B-Block elements.**
10) **The Chemistry of 3rd Transition metals.**
11) **Introduction Chemistry.**

11. Supervising Postgraduate Projects:

1) **Desulfurization of Iraqi oil products by ionic liquids, Noor Emad Faseh, Feb. 2020. MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

2) **Deposition of Aluminium from Aluminium salts Room Temperature Ionic Liquids, Hind Suhieb Sideeq, Jul 2019, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

3) **Some Aluminum Salts–Amine Ionic Liquids, Preparation and Biological Activities, Bassam Baqer Hasan,2018, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

4) **Indium, Tin and Antimony electrodeposition from ionic liquids on copper substrate, Azal Usama Ahmed, June 2017, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

5) **Metallic Protective Coating of Magnesium Metal in Ionic Liquids, Rasha Hussein Alwan, March 2017, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq**

6) **Morphology Study of Aluminum Deposition from Room Temperature Ionic Liquids [ILRT], Noor Laith Dawood, Jan. 2016, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

7) **Complexation, Electronic and Polagraphic Investigation of Some Transition Metals In Ionic Liquids, Nidhal Mohammad Hassan, Sept. 2015, PhD Dissertation, Chemistry Department, College of Science for Women, University of Baghdad, Iraq.**

8) **Investigation of Thermal Properties for some Ionic Liquids containing Urea and Acetamide. Huda Salam Abid, 2015, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

9) **Investigation of CO_2 Gas capturing by Room Temperature ionic liquids, Evon Akram Abd-Aljabar, Jun 2014, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

10) **Spectroscopic Investigation for some Transition Metal Salts in Ionic Liquids, Marwa Hameed Fadhil, May 2013 MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

11) **Electronic Spectroscopy of some transition Metal Ion compounds in New Ionic Liquid, Zena Natheer Ragab November 2012, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

12) **Electrochemical studies of Room Temperature Ionic Liquid of Choline chloride/ Tartaric Acid, Noor Jassim Al-Zaidy, September 2008, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

13) **Coordination of some transition metal ion complexes in Choline Chloride/Tartaric acid room temperature ionic liquid.**

Farah Awad Ahmed, September 2008, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.

14) **Solubility and Coordination study of some transition metal oxides in new choline chloride/ tartaric acid ionic liquid. Farah Anwar Hassan, July 2008, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**
15) **Investigation of the D.C. electrical conductivities of PVC and PMMA composites with some ionic liquids at variable temperature. Rasha Mohamed Ali, July 2008, chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

16) **Preparation and characterization of Molten Salts (Ionic Liquids based on sulfonate compounds., Ahad Diwan Sajet Al-Fatlawy., May 2008, , MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**

17) **Ultraviolet visible Investigation of some Transition Metal compounds in Room Temperature Ionic Liquids molten salts, Mariam Ali Saeed, May 2008, MSc Thesis, Chemistry dept., University of Al-Nahrain, Baghdad, Iraq.**
18) **The effect of temperature on ethyl centralite as stabilizer used in nitrogen compounds., Abdul Razzaq Bader, March 2004, MSc Thesis, Applied Science Dept., Al-Rasheed College of Engineering and Science, University of Technology, Baghdad, Iraq.**
19) **The characterization of thermal battery, A. A. Drea, 2001, MSc Thesis, Chemistry Dept., College of Science, Babylon University.**

12. *Committee and confereces Activites:*

1) **Supervising *6 research conferences* held by the College of Science/Al-Nahrain University. from 2014 -2018.**
2) **Member of delegate to Erbil Conference on the *Development of Higher Education in Iraq.* Jan. 2008**
3) ***Member Of CIO committee*. Ministry of science and technology. Iraq. 2004-2005.**
4) **Member of the *National committee for Rain Enhancement*, a national Project in Iraq. 1999-2003**
5) **Supervising *Al-Nahrain Journal of Science (ANJS)*. 2014-2018**

13. *Training Courses*

1) **Project Management. 2005.**
2) **General IT course. 2003.**

3) **Leadership and Manager Management 2002.**
4) **Computer skill: MS Windows, Microsoft Office, Excel, Power Point and Programming in FORTRAN and in Basic.**
5) **Arabic and English Languages Reading and writing.**

14. Industrial Experience at the Edible oil and powder detergent production including:- 1986-1987

1) **Chemical Process Control and monitoring the Sulfonation of alkyl benzene plant by sulfur trioxide**
2) **Process management of Powder detergent production plant.**
3) **Process management of Saponification and soap production.**
4) **Chemical plant process control of burning sulfur for sulfuric acid production with V_2O_5 contact catalyst.**

15. *Unpublished Work:* -

1) **Design and production of a spray coating machine for the production of coated and moisture prevented ammonium nitrate.**
2) **Production of coated ammonium nitrates.**
3) **Artificial Rain Enhancement by spraying of urea/ammonium nitrate mixture from spray system installed on fixed wing and helicopter air plans. Iraqi national project.**