

Full Curriculum Vitae

Name: Ahmed Jasim Mohammed Al-Karawi

Position: Professor of Inorganic Chemistry at Mustansiriyah University, College of Science, Department of Chemistry, P.O Box 46010, Baghdad, Iraq.

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Date of Birth: 13th August 1977

Academic Qualification :

2019	Postdoc., University of Kiel/ Germany (Synthesis of some coordination compounds with unique properties).
2016	Postdoc., University of Jena/ Germany (Synthesis, structure and magnetic properties of clusters containing a {Cu ₃ (μ ₃ -OH)} core).
2013	Postdoc. , Kansas state university/ USA (Synthesis of molybdenum and tungsten oxide based nanoclusters with unique properties).
2011 – 2013	Postdoc., University of Bielefeld/ Germany (Synthesis of molybdenum and tungsten oxide based nanoclusters with unique properties).
2007	PhD in Inorganic Chemistry - University of Baghdad. The experimental part has been carried out at Newcastle University/ School of Natural Science / UK.
2003	M.Sc. in Polymer Chemistry - University of Baghdad
2000	B.Sc. in Chemistry Sciences – University of Baghdad

Experiences:

● Teaching:

Postgraduate students	Characterization of photoluminescent liquid crystalline materials (mesogenes and metallomesogens)
Postgraduate students	Nanocluster compounds
Postgraduate students	Advanced Inorganic Chemistry
Undergraduate students	Principles of Coordination Chemistry
Undergraduate students	Basic Inorganic chemistry

● Research Interests

Material Science	Synthesis and characterization of photoluminescent liquid crystalline materials (mesogenes and metallomesogens).
Coordination Chemistry	Synthesis of new trinuclear copper(II) complexes based on Cu(II)-catalyzed click reaction.
Coordination Chemistry	Designing of new organic and organic-inorganic hybrid compounds.
Coordination Chemistry	Synthesis of new monosaccharide derivatives ligands and their transition metal complexes.
Polyoxometalates	Synthesis of polyoxometalates based nanoclusters with unique properties.
Biopolymers	Controlled release of drugs from hydrogel matrices based on polymeric materials.
Analytical Chemistry	Designing of new membranes as adsorbents for purification of water.

● Awards:

2019	Deutscher Akademischer Austauschdienst fellow/ Germany
2016	Deutscher Akademischer Austauschdienst fellow/ Germany
2013	ISFP/CRDF fellow/ US
2012	Deutscher Akademischer Austauschdienst fellow/ Germany
2011	Matsumae International Foundation/ Japan

● Selected Publications

1. I.H.R. Tomi, A.J.M. Al-Karawi, A.-A.B. OmarAli, D.T.A. Al- Heetimi, Liquid crystal behaviour of Ag(I) complexes based on a series of mesogenic 1,3,4-thiadiazole ligands, *Molecular Crystals and Liquid Crystals*, (2021) (Accepted). doi.org/10.1080/15421406.2020.1860624
2. A.J.M. Al-Karawi, A.-A.B. OmarAli, N. Dege, S. Kansız, Formation of a new Cu II–triazole ester complex from 1, 2-cyclohexanedione-bis (p-bromobenzohydrazone) compound as a consequence of copper (II)-catalyzed click reaction, *Chemical Papers*, (2021) 1-14.
3. A.J.M. Al-Karawi, A.-A.B. OmarAli, S. Mangelsen, N. Dege, S. Kansız, P. Breuninger, C. Baydere, O.B. OmarAli, An unprecedented formation of new copper (II) complexes as bioactive materials based on copper-catalyzed click reaction, *Polyhedron*, 198 (2021) 115084.
4. A.J.M. Al-Karawi, A.-A.B. OmarAli, A.A. Awad, G. Doungmo, H. Terraschke, Liquid crystal and photoluminescent properties of a series of symmetrical 1, 2-bis (4-alkoxybenzylidene) hydrazines bearing long-tails of hydrocarbon chain, *Liquid Crystals*, (2020) 1-11.
5. A.-A. OmarAli, A.J.M. Al-Karawi, A.A. Awad, N. Dege, S. Kansız, E. Agar, Z.A. Hussein, I.R. Mohammed, Two new zinc (II) and mercury (II) complexes based on N, N'-(cyclohexane-1, 2-diylidene) bis (4-fluorobenzoylhydrazide): synthesis, crystal structures and antibacterial activities, *Acta Crystallographica Section C: Structural Chemistry*, 76 (2020) 476–482.
6. A.-A.B. OmarAli, A.J.M. Al-Karawi, N. Dege, S. Kansız, H.A.D. Ithawi, Synthesis and X-ray crystal structures of two different zinc (II) complexes of N, N'-cyclohexane-1, 2-diylidene-bis (4-fluorobenzoylhydrazide) based on zinc salt effect, *Journal of Molecular Structure*, 1217 (2020) 128387.
7. A.A. Awad, A.-A. Bariz OmarAli, A.J.M. Al-Karawi, Z.H.J. Al-Qaisi, S.G. Majeed, Mesomorphism behaviour and photoluminescent properties of new asymmetrical 1, 2-di (4-alkoxybenzylidene) hydrazines, *Journal of Chemical Research*, 43 (2019) 67-77.
8. S.R. Khudhaiera, A.A. Awadb, D.T. Al-Heetimi, A.J.M. Al-Karawib, E.M. Al-Kinanib, A.-A.B. OmarAlib, Z.H.J. Al-Qaisib, Q.Z. Khalafd, Synthesis of chitosan–iron keplerate composite as an adsorbent for removal of toxic ions from water, *Desal. Wat. Treat*, 157 (2019) 165-176.
9. A.J.M. Al-Karawi, A.F.H. Kased, A.A. Awad, A.-A.B. OmarAli, Z.H.J. Al-Qaisi, Designing of some photo-luminescent materials based on a new mesogenic asymmetrical azine series, *Journal of Molecular Structure*, 1168 (2018) 92-105.
10. A.J.M. Al-Karawi, A.J. Hammood, A.A. Awad, A.-A.B. OmarAli, S.R. Khudhaier, D.T. Al-Heetimi, S.G. Majeed, Synthesis and mesomorphism behaviour of chalcones and pyrazoles type compounds as photo-luminescent materials, *Liquid Crystals*, 45 (2018) 1603-1619.
11. A.J.M. Al-Karawi, From mesogens to metallomesogens. Synthesis, characterisation, liquid crystal and luminescent properties, *Liquid Crystals*, 44 (2017) 2285-2300.
12. A.J. Hammood, A.F.H. Kased, A.J.M. Al-Karawi, S.R. Raseen, I.H.R. Tomi, A.-A.B. Omar Ali, Efficient and practical method for the synthesis of hydrophobic azines as liquid crystalline materials, *Molecular Crystals and Liquid Crystals*, 648 (2017) 114-129.
13. A. Al-Karawi, Comprehensive comparison between the reaction of N, N'-cyclohexane-1, 2-diylidene-bis (4-methoxybenzoylhydrazide) with mercury (II) and copper (II) ions. Synthesis,

structure, and kinetics of complex formation, *Russian Journal of Coordination Chemistry*, 43 (2017) 113-126.

14. A.J.M. Al-Karawi, E. Maatta, J. Desper, L. Maurmann, R.A. Henderson, A. Buchholz, W. Plass, Synthesis, structure, magnetic properties and kinetics of formation of a cluster containing a {Cu₃(μ -3-OH)} core supported by a triazole-based ligand, *Journal of Coordination Chemistry*, 69 (2016) 458-474.
15. A.J.M. Al-Karawi, Z.H.J. Al-Qaisi, A.H.J. Al-Qaisi, F.H.A. Al-Jeboori, Investigation of poly (methyl acrylate) grafted chitosan as a polymeric drug carrier, *Polymer Bulletin*, 71 (2014) 1575-1590.
16. A. Müller, S. Garai, C. Schäffer, A. Merca, H. Bögge, A.J.M. Al-Karawi, T.K. Prasad, Water Repellency in Hydrophobic Nanocapsules—Molecular View on Dewetting, *Chemistry—A European Journal*, 20 (2014) 6659-6664. (Cover picture and Cover profile).
17. K. Kuepper, M. Neumann, A.J.M. Al-Karawi, A. Ghosh, S. Walleck, T. Glaser, P. Gouzerh, A. Müller, Immediate formation/precipitation of icosahedrally structured iron–molybdenum mixed oxides from solutions upon mixing simple iron (III) and molybdate salts, *Journal of Cluster Science*, 25 (2014) 301-311.
18. A.M. Todea, A.J.M. Al-Karawi, T. Glaser, S. Walleck, L.-M. Chamoreau, R. Thouvenot, P. Gouzerh, A. Müller, Encapsulation of Keggin-type anions in reduced molybdenum–iron-type Keplerates as a general phenomenon, *Inorganica Chimica Acta*, 389 (2012) 107-111.
19. A. Müller, A. Merca, A.J.M. Al-Karawi, S. Garai, H. Bögge, G. Hou, L. Wu, E.T. Haupt, D. Rehder, F. Haso, Chemical Adaptability: The Integration of Different Kinds of Matter into Giant Molecular Metal Oxides, *Chemistry—A European Journal*, 18 (2012) 16310-16318.
20. A.J.M. Al-Karawi, Z.H.J. Al-Qaisi, H.I. Abdullah, A.M.A. Al-Mokaram, D.T.A. Al-Heetimi, Synthesis, characterization of acrylamide grafted chitosan and its use in removal of copper (II) ions from water, *Carbohydrate Polymers*, 83 (2011) 495-500.
21. A.J.M. Al-Karawi, A.H.R. Al-Daraji, Preparation and using of acrylamide grafted starch as polymer drug carrier, *Carbohydrate Polymers*, 79 (2010) 769-774.
22. A.J.M. Al-Karawi, W. Clegg, R.W. Harrington, R.A. Henderson, Synthetic, structural and kinetic studies on the binding of cyclohexane-1, 2-bis (4-methyl-3-thiosemicarbazone) to divalent metal ions (Co, Ni, Cu, Zn or Cd), *Dalton Transactions*, (2009) 564-570.
23. A.J.M. Al-Karawi, Synthesis and characterization of a new N₂S₂ Schiff base ligand and its complexes with nickel (II), copper (II) and cadmium (II) including the kinetics of complex formation, *Transition metal chemistry*, 34 (2009) 891-897.
24. A.J. Abdul-Ghani, M.J. Al-Jeboori, A.J.M. Al-Karawi, Synthesis and spectral studies of new N₂S₂ and N₂O₂ Mannich base ligands and their metal complexes, *Journal of Coordination Chemistry*, 62 (2009) 2736-2744.
25. M.J. Al-Jeboori, A.J. Abdul-Ghani, A.J. Al-Karawi, Synthesis and structural studies of new Mannich base ligands and their metal complexes, *Transition metal chemistry*, 33 (2008) 925-930.