



Murad A. Aldamen

Professor of Inorganic Chemistry

Professional Interests

X-Ray Crystallography, Crystal Engineering, Magnetism: Inorganic Magnetic clusters and Inorganic molecule-based magnets, Magneto-structural properties, Models in Molecular Magnetism, Theoretical Inorganic Chemistry, Clusters, MOFs, Luminescent Materials, Polyoxometalates Chemistry

Education

2004-2008 PhD in Inorganic Chemistry / University of Valencia/Spain

Thesis title: Theoretical Study of Polyoxometalates with Interest in Molecular Magnetism
(Cum Laude)

2004-2006 DEA (Diploma de Estudios Avanzados)/University of Valencia/Spain

2002-2004 MSc in Chemistry / University of Jordan/Jordan

Thesis Title: Building Synthons in the Structures of 2-Amino-4,6-Dimethylpyridine and 3,5-Dibromo-2-Amino-4,6-Dimethylpyridine with Halides and Metal Halides

1998-2002 BSc in Chemistry /University of Jerash/Jordan

Academic Ranks

Full Prof. in Inorganic chemistry The University of Jordan
9/2017

Associated Prof. in Inorganic chemistry The University of Jordan
9/2013

Assistant Prof. in Inorganic chemistry The University of Jordan
9/2009

Scientific achievements

TWAS Young Affiliates 2016-2020

IUPAC committee (Inorganic Division) 2022-2023

TWAS Regional Awards in Development of Scientific Educational Material 2019

Academic Positions

2020- Head of Chemistry Department in Taibah University / Alula
2018-2020 Vice dean of quality and development in faculty of science and arts at alula.

2012-2013 Assistant to the dean of quality (Faculty of Science / The University of Jordan)

2014-2015 Assistant to the dean of quality (Faculty of Science / The University of Jordan)



The University of Jordan, School of Science, 11942, Amman, Jordan.



00962775680341



maldamen@ju.edu.jo, aldamen@gmail.com



<http://eacademic.ju.edu.jo/maldamen/default.aspx>



Research

ResearcherID: C-7393-2011

ORCID: <https://orcid.org/0000-0002-1582->

RG: https://www.researchgate.net/profile/Murad_AIDamen/

GS: <https://scholar.google.com/citations?user=Nn7PZaIAAAAJ&hl=en>

Official website: <http://eacademic.ju.edu.jo/maldamen>

Personal website: sites.google.com/site/chemistryataldamen2811

Scientific organization memberships

Jordan Chemical Society 2008-

Spanish Royal Society of Chemistry 2004-2008, 2015-2016

American Chemical Society (ACS) 2020-

Publications (ISI and Scopus; Last five years only)

Research indicators

	Google scholar	Scopus/ISI
h-index	15	13
Citation	1893	1645
No. Publications	75	59
RG Score=	37.4	

- 2021 *Exploring the Role of Intramolecular Interactions in the Suppression of Quantum Tunneling of the Magnetization in a 3d-4f Single-Molecule Magnet* **Inorganic Chemistry**, **IF = 5.16.**
- 2021 *Cationic dye adsorption and separation at discrete molecular level: first example of an iron cluster with rapid and selective adsorption of methylene blue from aqueous system* **New Journal of Chemistry**; **IF = 3.29**
- 2020 *A two dimensional Co (II) metal-organic framework with bey topology for excellent dye adsorption and separation: Exploring kinetics and mechanism of adsorption.* **Inorganic Chimica Acta**; **IF = 2.05**
- 2020 *Synthesis, crystal structure, DFT calculations, molecular docking study and Hirshfeld surface analysis of alkoxido-bridged dinuclear iron (III) complex.* **Research on Chemical Intermediates**; **IF = 2.04**
- 2020 *Heterometallic (3d-4f) Coordination Clusters with Unique Topology: Self-Assembly Synthesis, Structural Features, and Magnetic Properties.* **Crystal Growth & Design**; **IF = 4.15**
- 2020 *Understanding the Formation of 5-(Diethylammoniothio)-1, 3-dimethylbarbituric Acid: Crystal Structure and DFT Studies* **Journal of Chemical Crystallography**; **IF = 0.57**
- 2020 *Structural and DFT Study of 1-(3-Amino-1,4-dioxo-1,4-*



- dihydronaphthalen-2-yl)-3,4-dichloro-1H-pyrrole-2,5-dione: Hypothesis for the Ring Closure; **Heterocyclic; IF = 0.67**
- 2020 *Crystal Structure and Magnetic Properties of a New Wells-Dawson $[\beta\text{-P}_2\text{CoW}_{17}\text{O}_{62}]^{10-}$ Polyoxoanion.* **Journal of Structural Chemistry; IF = 0.75**
- 2020 *Design, Synthesis and Characterization of Novel Isoxazole Tagged Indole Hybrid Compounds* **Open Chemistry; IF = 1.22**
- 2020 *Synthesis, Characterization and Biological Evaluation of Metal Adamantyl 2-Pyridylhydrazone Complexes* **Molecules; IF = 3.27**
- 2020 *Exploring solvent dependent catecholase activity in transition metal complexes: an experimental and theoretical approach* **New Journal of Chemistry; IF = 3.29**
- 2019 *Release Kinetics of Nicotine Loaded onto Mesoporous Silicate Materials for Use in Nicotine Replacement Therapy* **Current Drug Design; IF = 2.41**
- 2019 *A paddle wheel dinuclear Copper (II) carboxylate: Crystal structure, thermokinetic and magnetic properties.* **Journal of Molecular Structure; IF = 2.10**
- 2019 *The role of hydrogen bonding in $\pi\cdots\pi$ stacking interactions in Ni(II) complex derived from triethanolamine: synthesis, crystal structure, antimicrobial, and DFT studies.* **Research on Chemical Intermediates; IF = 2.10**
- 2019 *The crystal structure of 3-(1H-benzo[d]imidazol-2-yl)-7-chloro-1-cyclopropyl-6-fluoro-1,4-dihydroquinolin—dimethylsulfoxide (1/1), $\text{C}_{21}\text{H}_{19}\text{ClFN}_3\text{O}_2\text{S}$.* **Zeitschrift für Kristallographie-New Crystal Structures; IF = 0.30**
- 2018 *Effect of ligand substitution on the SMM properties of three isostructural families of double-cubane Mn_4Ln_2 coordination clusters.* **Dalton Transactions; IF = 0.30**
- 2018 *Supertetrahedral T2 clusters in 3d-4f $\{\text{Fe}_4\text{Ln}_6\}$: Synthesis, crystal structure, magnetic and photoluminescent properties.* **Inorg. Chim. Acta; IF = 2.002**
- 2018 *Synthesis, Characterization, Crystal Structure, and DFT Study of a New Square Planar Cu(II) Complex Containing Bulky Adamantane Ligand.* **Molecules; IF = 2.861**
- 2018 *Structure-Based Design: Synthesis, X-ray Crystallography, and Biological Evaluation of N-Substituted-4-Hydroxy-2-Quinolone-3-Carboxamides as Potential Cytotoxicity.* **Anti-Cancer Agents in Medicinal Chemistry; IF=2.598**
- 2018 *Synthesis, Characterization, Crystal Structure and Fluorescence of Nanosized Samarium Schiff-base Complex.* **Journal of Structural Chemistry; IF=0.581**
- 2018 *Synthesis, Structures and Magnetic Properties of New Lattice System of Heterometallic Decanuclear Ce_6Mn_4 Aggregate.* **Journal of Structural Chemistry; IF=0.581**
- 2017 *Hydrothermal Synthesis, Crystal Structure and Photoluminescent Properties of*



- Li[$\text{UO}_2(\text{CH}_3\text{COO})_3$] $_3$ [$\text{Co}(\text{H}_2\text{O})_6$]. *Crystallography Reports*; **IF=0.563**
- 2017 $\text{Na}_{14}[\text{HPO}_4]_3\text{PW}_6\text{O}_{22}\text{Co}_2\text{Na}_2(\text{H}_2\text{O})_2^{18-}$: A new, carbon-free, polyoxometalate (POM) catalyst for oxidation of water. *J. Clust. Sci.*; **IF=1.715**
- 2017 The Crystal Structure of Reduced Ethyl 3-((2-Hydroxybenzyl)amino)benzoate, a Schiff Base, *Z. Kristallogr. NCS*; **IF=0.252**
- 2017 Ring opening of cyclobutane in 1,3-dimethyl-5-methylenebarbituric acid dimer by various nucleophiles, *Zeitschrift für Naturforschung* **IF=0.757**
- 2017 1D cerium (III) coordination polymer with pivalate bridges: Synthesis, structure and magnetic properties, *Journal of Molecular Structure* **IF=2.011.**
- 2017 An Azide-Bridged Copper(II) 1D-Chain with Ferromagnetic Interactions: Synthesis, structure and magnetic studies, *Transition Metal Chemistry*. **IF=1.261.**
- 2017 Stabilization of Meldrum's Acid Dimer and 1,3-Dimethylbarbituric Acid Trimer- A Theoretical Study, *Jordan Journal of Chemistry*; **SCOPOUS.**
- 2017 Alkoxo- and carboxylato-bridged hexanuclear copper(II) complex: Synthesis, structure and magnetic properties, *Inorganic Chemistry Communications*, **IF=1.810.**
- 2017 Synthesis, characterization, X-ray structure, computational studies, and bioassay of novel compounds combining thiophene and benzimidazole or 1,2,4-triazole moieties, *Chemistry Central Journal*, **IF=2.284.**
- 2017 3D oxalato-bridged lanthanide (III) MOFs with magnetocaloric, magnetic and photoluminescence properties, *Dalton Transactions*, **IF=4.029.**
- 2017 Synthesis and characterization of a mixed-valent Mn11-La2 aggregate with benzoate, *Monatshefte für Chemie-Chemical Monthly*. **IF=1.285**

Teaching Experience

2002-2003 **The University of Jordan**: Teaching Assistant

2008-2016 **The University of Jordan (2008-2016 sabbatical leave)**:

General and Inorganic chemistry courses, Research methods in chemistry, Crystallography and X-Ray Diffraction (Master).

2016- **The University of Tabuk**: Inorganic chemistry courses

2017- **Taibah University**: General Chemistry and Inorganic chemistry courses, Safety and Instrumentations course

Conferences

2017 1st International Conference of TWAS Young Affiliates Network, Rio de Janeiro, Brasil (Oral Presentation)

2017 Chemistry and Biological Sciences conference in Al al-Bayt University (PhD student participation)

2016 Sustainability in Food and Water: An Arab Viewpoint (TWAS-ARO) (Participant)



2012 11th Jordanian conference on Chemistry, Mafrag, Jordan (Poster participation)

2011 7th SESAME JORDANIAN WORKSHOP, Amman, Jordan (Speaker)

2010 EuAsC2S-11, Dead sea, Jordan, (Poster)

2010 60th Meeting of Nobel Laureates in Lindau, COMSTECH (Organization of Islamic Conference Standing Committee on Scientific and Technological Cooperation) fellowship

2007 COST meeting D37-DeciQ, Toulouse, France (Oral Presentation)

2005 International Symposium on Nano-structures and Physicochemical Properties of Polyoxometalates, Superclusters and Related Colloid Particles, Lyon, France.

2004 VII Escuela Nacional De Materiales Moleculares, Boí Taull, Spain (Oral Participation)

Training Workshops

As a trainee

- • 1st Molcas workshop by Lund University / Valencia, Spain (20-23/4/2006)
- • Gaussian workshop by Gaussia, Inc., SGI and CEsCA / Barcelona, Spain (20 hr, 6-9/6/2006)
- • 9th intensive European program "Physics and Chemistry of Multifunctional Materials by Genova University and Joseph Fourier Polytechnic University / (Genova, Italy) 35 hr lectures + Practical
- • Training course (Single X-ray Diffraction) by Agilent company / Oxford, England 28/11-2/12/2011

As a trainer

Training more than 300 teachers from KSA to use e-learning tools

