

CURRICULUM VITAE (C.V)

PERSONAL DATA:

Full name: Prof. *Mansour Hussein Almatarneh*
Date of birth: February 1st -1972
Place of birth: Aiy
Citizenship: Jordanian
Marital Status: Married



- ❖ **Professor of Physical Chemistry (Computational Chemistry)**
- ❖ **Consultant to the President for Educational Technology, Quality, and International Relations - Al Al-Bayt University**
- ❖ **Consultant for Quality, Accreditation, and Ranking of Higher Education Institutions and Programs.**
- ❖ **Official ABET Program Evaluator (PEV)**
- ❖ **Official CSC Evaluator (Canadian Society for Chemistry)**

Affiliation and official address:

School of Science
University of Jordan
Amman 11942
Jordan
Tel: (962) 65355000 – 22022
Cel: (962) 790182748

Adjunct Professor
Department of Chemistry
Memorial University A1B
3X7 St. John's, NL Canada
Tel.: (709) 864-6118
Cell: (709) 764-2012

E-mails:

m.almatarneh@ju.edu.jo / mansour@mun.ca / almatarneh@yahoo.com

EDUCATION (*degrees, universities, dates*)

2007 Ph.D in Physical Chemistry / Theoretical and Computational Chemistry, Memorial University, Canada.
Thesis title: *Computational Study of the Deamination Reaction of Cytosine*. Under the supervision of Prof. Raymond Poirier.

- 2000 M.Sc in Chemistry, Mu'tah University, Jordan.
1994 BSc. in Chemistry, Mu'tah University, Jordan.
1990 High School Certificate, Jordan.

CAREER/EMPLOYMENT (dates, positions and employers)

- 2022–Present. **Consultant to the President** for Educational Technology, Quality, and Intern. Relations, Al Al-Bayt University, Mafraq, **Jordan**. [Feb 2022 – Present].
- 2021–Present. **Professor**, Department of Chemistry, **University of Jordan**, Amman, **Jordan** [Feb 2021 – Present].
- 2017–Present. **Adjunct Professor**, Department of Chemistry, **Memorial University**, St. John's, NL, **Canada** [Jan 2017 – Present].
- 2018– 2020 **Dean's Assistant for Quality Assurance and Development**, School of Science, **University of Jordan** [Sep. 2018 – Sep.2020].
- 2020– 2020 **Vice Dean for Academic Affairs**, School of Science, **University of Jordan** [Aug. 2020 – Sep.2020]
- 2018–2018 **Visiting Professor**, Department of Chemistry, **McGill University**, Montreal, QC, Canada. [Jan. 2018 – May 2018].
- 2017–Present. **Associate Professor**, Department of Chemistry, **University of Jordan**, Amman, **Jordan** [Feb 2017 – Present].
- 2014–2017 **Assistant Professor**, Department of Chemistry, **University of Jordan**, Amman, **Jordan** [Feb 2014 – Feb 2017].
- 2015–2015 **Visiting Assistant Professor**, Department of Biochemistry, **Tabuk University**, Tabuk, **Saudi Arabia**. [Aug. 2015 – Dec. 2015].
- 2013–2014 **Assistant Professor**, General Studies Department, **Jubail University College**, Jubail, **Saudi Arabia** [Feb 2013 – Jan 2014].
- 2011–2012 **Visiting Assistant Professor**, Department of Chemistry, **Memorial University- Grenfell Campus**, Corner Brook, Newfoundland, **Canada**.
- 2010–2011 **Lecturer**, Department of Physical Sciences, **Thompson Rivers University**, Kamloops, British Columbia, Canada.
- 2009–2015 **Visiting Scientist**, Prof. Raymond Poirier, Department of Chemistry, **Memorial University**, St. John's, NL, **Canada**. [June 1 – Sept 1 /2010, June 3 – Aug 19/2009, Aug 1-31/2013, June 9 – Sep 1 /2014, June 8/2015 – Aug 31 /2015, Jan.5 – Sept 15 /2016].
- 2008–2010 **Assistant Professor**, Department of Chemistry, **Al-Hussein Bin Talal University**, Ma'an, **Jordan** [Sep 2008 – Aug 2010 and Summer 2011].

- 2007–2008 **Post-Doctoral Fellow, Department of Biochemistry**, Memorial University. Research: Molecular dynamics (MD) simulations of protein associated with psoriasis. Dr. Valerie Booth's lab, Canada Research Chair in Proteomics.
- 2003–2007 **Teaching Assistant (T.A.)**, Chemistry Department, Memorial University, St. John's, NL, **Canada**.
- 2001–2003 **Chemistry Teacher** in High School, Ministry of Education, Riyadh, **Saudi Arabia**.
- 1997–1998 **Teaching Assistant (T.A.)**, Chemistry Department, Mu'tah University, Karak, Jordan.
- 1994–2001 **Chemistry Teacher** in high School, Ministry of Education, Jordan.

QUALITY ASSURANCE AND ACCREDITATION

- ◆ **ABET Program Evaluator** (PEV for ABET).
- ◆ **Official CSC Chemistry Program Evaluator** (Canadian Society for Chemistry, CSC)
- ◆ Expert in International Accreditation and in Evaluating of Universities and their Programs.
- ◆ Expert in International Accreditation and in Evaluating of Schools.
- ◆ Evaluator/Examiner at Arab Organization for Quality Assurance in Education (AROQA).
- ◆ Evaluator/Examiner at The Jordanian Accreditation and Quality Assurance Commission for Higher Education Institutions.
- ◆ Expert in ABET Accreditation Criteria and ANSAC-ABET Accreditation Requirements.
- ◆ Knowledge of the National Commission for Academic Accreditation and Assessment (NCAAA) in Saudi Arabia.
- ◆ Expert in CSC Accreditation Requirements for Chemistry Program (Canada).
- ◆ Expert in ACS Accreditation Requirements for Chemistry Program (USA).
- ◆ Expert in RSC Accreditation Requirements for Chemistry Program (UK).
- ◆ Knowledge of the World University ranking such as: QS World University Ranking, QS-Stars, World University Ranking-Times Higher Education (THE), Shanghai University Ranking and Academic Ranking of World Universities (ARWU).
- ◆ Knowledge of Using Bloom's Taxonomy in Writing Effective Learning Outcomes for Scientific Programs to meet the Accreditation criteria.
- ◆ Knowledge of the Quality Management system.
- ◆ Expert in Advanced E-Learning.
- ◆ Attended several Workshops/Training/Symposiums on Quality Assurance and Accreditation Process.

Honors, Awards, Fellowships

2017	Staff mobility for Teaching, ERASMUS+ , University of Patras, Department of Chemistry (May 1-9, 2017), Rio Patras, Greece .
2016	ACS Global Chemists' Code of Ethics-Science & Technology Leadership Institute . Covers: Chemists' Code of Ethics, Chemical Safety and Security, and on Scientific Writing and Publishing. Melbourne, Australia , July 18-22,2017.
2016	Certificate of Appreciation from the American Chemical Society (ACS) Publications (2016)
2007-2008	Post-Doctoral Fellowship , funded by NewLab Clinical Research, Memorial University, Department of Biochemistry , St. John's, Newfoundland, Canada.
2003-2007	School of Graduate Studies Fellowship (Ph.D), Memorial University of Newfoundland, Canada.
2004	Student award for my poster in 87 th CSC conference, London (Ontario), Canada
1997-1998	Teaching Assistant Scholarship , Mu'tah University, Chemistry Department, Jordan.
1991-1994	Undergraduate Fellowship , Ministry of Higher Education, Jordan.

MEMBERSHIP OF PROFESSIONAL SOCIETIES

- **Elect-Chair of American Chemical Society - Jordan Chapter**
- **Executive Member of Accreditation Committee** - Canadian Society for Chemistry (CSC)
- Member of American Chemical Society (ACS)
- Member of American Industrial Hygiene Association (AIHA)
- Member of Canadian Society for Chemistry (CSC)
- Member of International Union of Pure and Applied Chemistry (IUPAC)
- Member of Jordanian Chemical Society, (JCC)
- Member of Jordan Society for Scientific Research (JSSR)
- Member of Let's Talk Science, A non-profit organization, Volunteer work

Teaching Activities:

Courses Taught at:

- **Memorial University (MUN) and Thompson Rivers University (TRU) – Canada (in Bold fonts)**
 - **University of Jordan (JU) and Al-Hussein Bin Talal University (HU) - Jordan**
 - **Jubail University College (JUC), Tabuk University (TU) - Saudi Arabia**
 1. General Chemistry I (SCI-154) (**CHEM1200**), (CHEM 101)
 2. General Chemistry II (**CHEM1001**), (CHEM 102), (**CHEM1050**)
 3. Introductory Chemistry (CHEM099), (**CHEM1010**)
 4. General Chemistry for Health Science (CHEM 105)
 5. General Chemistry Lab. I (CHEM 103), (**CHEM1050**), (CHEM 109)
 6. General Chemistry Lab. II (CHEM 104), (**CHEM1051**)
 7. Introductory Chemistry Lab. I (**CHEM1010**)

8. Introductory Chemistry Lab. II (**CHEM1011**)
9. Fundamentals of Chemistry (CHEM 1510)
10. Principles of Chemistry (CHEM 1520)
11. Physical Science (SCI-054)
12. Introductory Inorganic Chemistry (**CHEM2210**)
13. Atmospheric Chemistry (**ENVS 3261**)
14. Atmospheric Environmental Chemistry (**CHEM 302**)
15. Biochemistry (BIOC-200)
16. Protein and Amino Acids (BIOC-301)
17. Biotechnology (BIOC-408)
18. Senior Science Seminar (**SC4000**)
19. Principles of Physical Chemistry (**CHEM 306**)
20. Physical Chemistry I (CHEM 341), (CHEM 241)
21. Physical Chemistry II (CHEM 342), (CHEM 341)
22. Physical Chemistry III (CHEM 441)
23. Physical Chemistry Lab. (CHEM 342)
24. Physical Chemistry Lab. I (CHEM 345)
25. Physical Chemistry Lab. II (CHEM 346)
26. Mathematics for Chemistry Students (CHEM 206)
27. Special Topics in Physical Chemistry (Quantum Chemistry) (CHEM 443)
28. Software Packages in Chemistry (CHEM 361)

Graduate Courses:

29. Quantum Chemistry (CHEM 741) – **Master**
30. Research Methods in Chemistry (CHEM 791) – **Master**
31. Application in Quantum Chemistry (CHEM 941) – **Ph.D**

Development of Courses

- Mathematics for Chemistry Students
- Modelling and Simulation Experiments for Physical Chemistry Lab.
- Software Packages in Chemistry
- Application in Quantum Chemistry – Ph.D. Course

Specialization:

Main Field:

Physical Chemistry // Computational and Theoretical Chemistry // Biochemistry // Kinetics and Thermodynamics

Previous research (Master Program):

- Measurement of thermodynamic functions and acid dissociation constants (K_a) of benzoic acid and its derivatives, in water-organic solvent mixtures, ranged in temperature from 5-50 C°, using a conductimetric method.
- Preparation of a polyurethane polymer by reacting Azo compounds (such as: p-nitro azo phenol) with Methylene diphenyl 4, 4'-diisocyanate (MDI).

Current research interest:

- Computational study of the reaction mechanisms and factors that influence selectivity in chemical reactions, such as:
 - Decomposition reaction of formamidine (in the gas phase and in solution), ethylamine, propylamine, and acetamide.
 - Deamination reaction of cytosine, guanine, adenine, glutamine, asparagine, melamine, ammeline, ammelide, and glutamic acid.
 - Alkylation reaction in DNA: Methyl or ethyl groups will transfer to reactive sites on the bases and to phosphates in the DNA backbone.
- Studying different mutagens, the substances that cause DNA mutations.
- DNA repair mechanisms by ab initio and MD calculations.
- Geometry Optimization: Transition state optimization
- Investigations for systems related to **DNA damage and repair systems**.
- Study the effect of different catalysts on the deamination reaction of cytosine and other nucleic acid bases.
- Study the effect of solvent model (PCM and SMD) on the reaction mechanisms.
- **Molecular dynamics (MD) simulations:**
 - MD simulations of protein associated with psoriasis disease.
 - MD simulations of protein folding.
 - Ligand-protein and protein-protein interactions.
- **Homology Modelling of Protein Structure.**
- **Environmental Chemistry:**
 - Mechanistic study of the Ozonolysis reactions of: Phenanthrene, monoterpenes (sabinene, pinene,), and methyl butanol.
 - Study the reaction mechanisms of Criegee intermediate with methane.
 - Secondary Ozonide Dissociation Reactions.
- **Renewable Energy:**
 - Investigate the mechanisms of the Pyrolysis of Brown Grease. The conversion of brown grease using pyrolysis reactions represents a very promising option to produce renewable fuels and chemicals.
- **Education Research:**
 - The Effective Use of Instant Messaging as a Supportive Strategy in Teaching
 - Using Messenger in Learning Process.
 - Using Clickers in Teaching.
 - Advanced E-Learning.
 - Academic Intrinsic Motivation and Academic Achievement.

PUBLICATIONS

https://scholar.google.com/citations?hl=en&user=8N_Pe6IAAAAJ&view_op=list_works&sortby=pubdate

Citations: 488 // h-index: 13 // i10-index: 18

2022

1. Mansour H. Almatarneh, Ghada G. Kayed. Sanaa S. Al Abbad, Zainab H. A. Alsunaidi, Mohammed S. Al-Sheraideh, Yuming Zhao. Mechanistic Study on DNA Mutation of the Cytosine Methylation Reaction at C5 Position.
Arabian Journal of Chemistry. Under Revision. 2022. (ELSEVIER Journal) [Q1]
2. Mansour H. H. Almatarneh; Ahmad M. Alqaisi; Enas K. Ibrahim; Ghada G. Kayed; Joshua W. Hollett. Molecular Dynamics Simulations of HLA-CW4- β 2M-KIR2DL1 Protein Complex with Peptide QYDDAVYKL.
Submitted. 2022.
3. Mansour H. Almatarneh, Ahmad M. Alqaisi, Amani N. Al-Shanti, Abd Al-Aziz A. Abu-Saleh. Repurposing of Relatively Large Drugs for the Receptor Binding Domain of SARS-CoV-2 Spike Protein.
Submitted. 2022.
4. Mansour H Almatarneh, Ghada G Kayed, Mohammednoor Altarawneh, Yuming Zhao, Amita Verma. Computational Insights in DNA Methylation: Catalytic and Mechanistic Elucidations for Forming 3-Methyl Cytosine. <https://doi.org/10.1155/2022/2673396>
Journal of Chemistry. 2022, Volume 2022, Article ID 2673396,1-11. (Hindawi) [Q2]
5. Mansour Almatarneh, Ahmad Alqaisia, Amani Al-Shantia, AA Abu-Saleh. Repurposing of Relatively Large Drugs for the Receptor Binding Domain of SARS-CoV-2 Spike Protein.
Authorea Preprints. 31 Mar 2022. DOI: [10.22541/au.164873477.70935035/v1](https://doi.org/10.22541/au.164873477.70935035/v1)
6. Altarawneh, Mohammednoor; **Almatarneh, Mansour**; Bogdan Z. Dlugogorski. On the Fate of Perfluorinated Carboxylic Acids at High Temperatures.
Chemosphere. 2022, 286(2), 131685, 1-15. <https://doi.org/10.1016/j.chemosphere.2021.131685>
(ELSEVIER) [Q1]

2021

7. Altarawneh, Ibrahim; Rawadieh, Saleh; Batiha, Mohammad; **Almatarneh, Mansour**; Altarawneh, Mohammednoor. Updated Yields of Nitrogenated species in Flames of Ammonia/Benzene via Introducing an Aniline sub-Mechanism.
Combustion and Flame. 2021, 228, 433-442. (ELSEVIER Journal) [Q1]
8. **Mansour H. Almatarneh**, Ghada G. Kayed, Mohammednoor Altarawneh, Yuming Zhao. “Unprecedented Insights in DNA Methylation: Catalytic and Mechanistic Elucidations”.
Journal of Chemistry. 2021, Under revision. (Hindawi) [Q2]
9. Mansour H Almatarneh, Ahmad M Alqaisi, Enas K Ibrahim, Ghada G Kayed, Joshua W Hollett. Molecular Dynamics Simulations of HLA-CW4-B2M-KIR2DL1 Protein and Homology Modeling of a Complex Associated with Psoriasis Disease (HLA-CW6-B 2M-KIR2DS1).
BioRxiv, 2021. DOI: <https://doi.org/10.1101/2021.12.20.473468>

10. Almatarneh, M. H., Kayed , G. G., Altarawneh, M., Zhao, Y., and Verma, A. Computational Insights in DNA Methylation: Catalytic and Mechanistic Elucidations. *ChemRxiv*, 2021. DOI: [10.26434/chemrxiv-2021-gfqr1](https://doi.org/10.26434/chemrxiv-2021-gfqr1).
11. Rima H. Al Omari, **Mansour H. Almatarneh**, Asmaa Y. Alnajajrah, Mohammed Sh. Al-Sheraideh, Sanaa S. AlAbbad, Zainab H. A. Alsunaidi. Thermal Degradation and Bimolecular Decomposition of 2-Ethoxyethanol in Binary Ethanol and Isobutanol Solvent Mixtures: Computational Mechanistic Study. *ACS OMEGA*, 6(20), 13365-13374, 2021. (ACS) [Q1]
12. Raisul Awal Mahmood, Adhip Rahman, Imrul Shahriar, Md Sajjadur Rahman, Md. Jahid Hasan, Archana Mishra, **Mansour H. Almatarneh**, and Mohammad A. Halim. DFT-based Vibrational Circular Dichroism of Halogenated Chiral Pesticides. *Computational and Theoretical Chemistry*. 2021, Under revision. (ELSEVIER) [Q2]
13. **Mansour H. Almatarneh**, Shefa' F. Alrebei, Ghassab M. Al-Mazaideh, Ali Marashdeh, Akef T. Afaneh. A computational study of dissociation reaction of chlorine nitrate. *Journal of Chemistry*. 2021, Submitted. (Hindawi) [Q1]
14. **Mansour H. Almatarneh**, Ahmad Al-Qaisi, Amani Al-Shatti, Abdelaziz Abu Saleh. Computer-Aided Drug Design for Accelerating the Discovery of SARS-CoV-2 Therapeutics. *Journal of Physical Chemistry B*. 2021, To be submitted. (ACS) [Q1]
15. **Mansour H. Almatarneh**, Enas K. Ibrahim, Ahmad M. Alqaisi, Joshua W. Hollett. "Molecular Dynamics Simulation of HLA-CW4- B2M-KIR2DL1 Protein and Homology Modeling of a Complex Associated with Psoriasis Disease (HLA-CW6-B2M-KIR2DS1)" *Computational and Theoretical Chemistry*. 2021, To be submitted. (ELSEVIER) [Q2]

2020

16. **Mansour H. Almatarneh**, Asmaa Alnajajrah, Mohammednoor Altarawneh, Mohammad A. Halim, Yuming Zhao. Computational Mechanistic Study of the Unimolecular Dissociation of Ethyl Hydroperoxide and its Bimolecular Reactions with Atmospheric Species. *Scientific Reports* 2020, 10, 15025. (Nature) [Q1]
<https://doi.org/10.1038/s41598-020-71881-3>
17. **Mansour H. Almatarneh**, Reema Al Omari, Reema A. Omeir, Ahmad Al-Khawaldeh; Ali Marashdeh, Akef Afaneh, Mutasem Sinnokrot, Alaa Al Akhras. A Computational Study of Bimolecular Decomposition Reactions of Propylamine. *Scientific Reports*, 10(1), 11698(1-12). (Nature) [Q1]
18. Monther S Zreid, Zahra A Tabasi, Xiaoyu Ma, Tao Wang, Mansour H Almatarneh, Yuming Zhao. Highly Twisted Aryl-Anthraquinodimethanes: Synthesis, Characterization, and Fluorescence Sensing of TNT. *European Journal of Organic Chemistry*, 2020, 2020(26), 4031-4041. (European Chem. Soc.) [Q1]
19. Al Khalyfeh, Khaled; Afaneh, Akef; Marashdeh, Ali; **Almatarneh, Mansour**; Al-Mazaideh, Ghassab ; Mizyed, Shehadeh ; Ashram, Muhammad.

Thiacrown Ethers Engaged C60 Through Charge Transfer: Experimental and Theoretical Study.

ACS OMEGA 2020, 5(39), 25049-25058. <https://doi.org/10.1021/acsomega.0c01877> (ACS) [Q1]

20. Kamal Sweidan*, **Mansour H. Almatarneh***, Murad AlDamen, Cacilia Maichle-Mössmer, Reema A. Omeir, Manfred Steimann, Monther Khanfar. Synthesis, Crystal Structure, and Computational Study of 5-(Diethylammoniothio)-1,3-Dimethylbarbituric Acid.

Journal of Chemical Crystallography, 2020, 1-10. (Springer) [Q3]

<https://doi.org/10.1007/s10870-020-00846-1>

21. Mansour H. Almatarneh, Imarat Y. Alnemrat, Reema A. Omeir, Lawrence M. Pratt, “Mechanistic Investigation of the Pyrolysis of Brown Grease”.

Journal of Chemistry, 2020. (Hindawi) [Q2]

22. **Mansour H. Almatarneh**, Reema A. Omeir, Saddam ALDemour, Ismael A. Elayan, Shahidul Islam, Raymond A. Poirier, “Hydrolytic Deamination Mechanisms of Guanosine Monophosphate: A Computational Study”.

Computational and Theoretical Chemistry. 2020, 1175, 112732. (ELSEVIER) [Q2]

23. **Mansou. H. Almatarneh**; Shifaa Alrebei; Mohammednoor Altarawneh; Yuming Zhao. Secondary Ozonide Dissociation Reactions: A computational Study”.

Atmosphere. 2020, 11(1), 100. (MDPI) [Q2]

24. Elayan, I.A; **Almatarneh, M. H.**; Hollett, J.W. The Bimolecular Catalytic Transformation of Methyl Vinyl Ketone Oxide: A DFT Study.

Chemical Physics, 2020, 530(2020), 110649. (ELSEVIER) [Q2]

25. Hussein A Miran, Mohammednoor Altarawneh, Zainab N Jaf, M Mahbubur Rahman, **Mansour H Almatarneh**, Zhong-Tao Jiang. " Influence of the Variation in the Hubbard Parameter (U) on Activation Energies of CeO₂-Catalysed Reactions".

Canadian Journal of Physics, 2020, 98(4), 385-389. (NRC Research Press) [Q3]

<https://doi.org/10.1139/cjp-2019-0065>

26. Mustafa Q. Heilat, **Mansour H. Almatarneh**. The Effectiveness Use of Messenger as a Supportive Strategy in Teaching for Developing Academic Intrinsic Motivation and Academic Achievement.

DIRASAT: EDUCATIONAL SCIENCES, 2020, 47(1), 306-326. (UJ)

2019

27. Rawadieh, Saleh; Altarawneh, Ibrahim ; Batiha, Mohammad ; Al-Makhadmeh, Leema; **Almatarneh, Mansour**; Altarawneh, Mohammednoor.

Reaction of Hydroperoxy (HO₂) Radicals with Primary C1-5 Alcohols: A Profound Effect on Ignition Delay Times.

Journal of Energy & Fuels, 2019, 33(11), 11781-11794. (ACS) [Q1]

28. Nassim Zeinali, Ibukun Oluwoye, Mohammednoor Altarawneh, **Mansour Almatarneh**, Bogdan Z. Dlugogorski, “Probing the Reactivity of Singlet Oxygen with Cyclic Monoterpenes”.

ACS OMEGA 4,14040-14048, 2019. (ACS) [Q1]

29. **M. H. Almatarneh**, I. A. Elayan, Ma. Al-Sulaibi, A. Khawaldeh, Sedeeqa O. Saber, M. Al-Qaralleh, M. Altarawneh. "The Unimolecular Decomposition Reactions of Propylamine and Protonated Propylamine".
ACS OMEGA, 2019, 4(2), 3306–3313. (ACS) [Q1]
DOI: 10.1021/acsomega.8b02792
30. **M. H. Almatarneh**; I. A. Elayan; M. Altarawneh; J. W. Hollett, A computational study of the ozonolysis of sabinene".
Theoretical Chemistry Accounts, 138, 30(1-14), 2019. (Springer) [Q2]
<https://doi.org/10.1007/s00214-019-2420-7>
31. Ismael A Elayan, **Mansour H Almatarneh**, Joshua W Hollett, "Reactivity of the *anti*-Criegee intermediate of β -pinene with prevalent atmospheric species".
Structural Chemistry, 2019, 30(4), 1353-1364. (Springer) [Q2]
<https://doi.org/10.1007/s11224-019-1288-4>
32. Ibrahim A Saraireh, Mohammednoor Altarawneh, Jibril Alhawarin, **Mansour H Almatarneh**, "A Thermochemical Parameters and Theoretical Study of the Chlorinated Compounds of Thiophene".
Heteroatom Chemistry, 2019. (Hindawi) [Q3]
<https://doi.org/10.1155/2019/7680264>
33. **Mansour H. Almatarneh**, Ismael A. Elayan, Abd Al-Aziz A. Abu-Saleh, Mohammednoor Altarawneh, Parisa A. Aryia, The Gas-Phase Ozonolysis Reaction of MethylButenol: A Mechanistic Study,
International Journal of Quantum Chemistry, 2019. (Wiley) [Q1]
e25888. <https://doi.org/10.1002/qua.25888>
34. Al-Mazaideha, Ghassab; Ashram, Muhammad; Khalyfehd, Khaled Al; **Almatarneh, Mansour**. Corrosion and Electrochemical Studies on the Stability of New Thiocrown Ethers Derived from Quinoline.
Jordan Journal of Chemistry. 2019, 14(3), 89-96.

2018

35. Ibrahim A. Saraireh, Mohammednoor Altarawneh, **Mansour H. Almatarneh**. Thermochemical parameters of chlorinated compounds of pyridine.
Computational and Theoretical Chemistry, 2018, 1146, 21-26. (ELSEVIER) [Q2]
<https://doi.org/10.1016/j.comptc.2018.11.007>
36. Zainab N Jaf, Mohammednoor Altarawneh, Hussein A Miran, **Mansour H Almatarneh**, Zhong-Tao Jiang, Bogdan Z Dlugogorski. Catalytic Hydrogenation of *p*-Chloronitrobenzene to *p*-Chloroaniline Mediated by γ -Mo₂N.
ACS Omega, 2018, 3(10), 14380-14391. (ACS) [Q1]
10.1021/acsomega.8b01936
37. Abd Al-Aziz Abu-Saleh, **Mansour H. Almatarneh***, Raymond A. Poirier, Bimolecular Reactions of Carbenes: Proton Transfer Mechanism.
Chemical Physics Letter, 2018, 698, 36-40. (ELSEVIER) [Q2]

38. **Mansour H. Almatarneh**, Ismael A. Elayan, Mohammednoor Altarawneh, and Joshua W. Hollett, Hydration and Secondary Ozonide of the Criegee Intermediate of Sabinene. *ACS-OMEGA*, 2018, 3 (2), 2417-2427. DOI: 10.1021/acsomega.7b02002 (ACS) [Q1]
39. Muna T. Tayyem; Mohammad B. Zughul; **Mansour H. Almatarneh**, Molecular Dynamics Simulation of N-octyl-N-Quaternized Chitosan Derivatives as a Drug Carrier. *Journal of Theoretical and Computational Chemistry*, 2018, 17(4), 1850025. (World Scientific) [Q3] <https://doi.org/10.1142/S0219633618500256>
40. **Mansour H. Almatarneh**, Ismael A. Elayan¹, Raymond A. Poirier, Mohammednoor Altarawneh. The Ozonolysis of Cyclic Monoterpenes: A Computational Review. *Canadian Journal of Chemistry*, 2018, 96(3), 281-292. <https://doi.org/10.1139/cjc-2017-0587>. (NRC Research Press) [Q3]

2017

41. **Mansour H. Almatarneh**, Ehab Al-Shamaileh, Zahraa M. Ahmad, Abd Al-Aziz A. Abu-Saleh, Ismael A. Elayan, Computational Study of the Ozonolysis of Phenanthrene. *Acta Physica Polonica A* 2017, 132(3),1149-1156. (Polish Academy of Science) [Q3]
42. Hussein Ali Jan Miran, Mohammednoor Altarawneh, Zhong-Tao Jiang, Hans C. Oskierski, **Mansour H. Almatarneh**, Bogdan Z Dlugogorski. Decomposition of Selected Chlorinated Volatile Organic Compounds by Ceria (CeO₂). *Catalysis Science & Technology*, 2017, 7, 3902-3919. DOI: 10.1039/c7cy01096f. (RSC) [Q1]
43. **Mansour H. Almatarneh**, Abd Al-Aziz A. Abu-Saleh, Ismael A. Elayan. Mechanistic and Spectral Investigation on The Deamination of Ammeline and Ammelide. *Computational and Theoretical Chemistry*, 2017, 1117, 92-99. <https://doi.org/10.1016/j.comptc.2017.08.006> (ELSEVIER) [Q2]
44. **Mansour H. Almatarneh**, Abd Al-Aziz A. Abu-Saleh, Kabir M. Uddin; Raymond A. Poirier, Peter L. Warburton. Mechanistic Study of the Deamination Reaction of Melamine: A Computational Study, *International Journal of Quantum Chemistry*, 2017, 117(3), 180-189. <https://doi.org/10.1002/qua.25308> (Wiley) [Q1]

2016

45. Al-Tayyem, Muna; **Almatarneh, M. H.** A DFT computational study of the antioxidant activities exhibited by 3-aryl-4- hydroxycoumarin derivatives. *Journal of Chemistry and Applied Biochemistry*, 2016, 3(1), 119. (Open Science)
46. Ehab Alshamaileh, Mazen Al-Sulaibi, Ahmad Al-Khawaldeh, **Mansour H. Almatarneh**, Dina El-Sabawi, Aiman Al-Rawajfeh, Current status of nanotechnology in Jordan. *World Journal of Science, Technology and Sustainable Development*, 2016, 13(2), 66-81. (Emerald Group)
47. Taher S. Ababneh, Taghreed M. A. Jazzazi, Tareq M. A. AlShboul, Hamdan S. Al- Ebaisat, **Mansour H. Almatarneh**, Albara I. Alrawashdeh. Synthesis, Characterization and Theoretical Study of New Schiff Bases Derived from 1,8Diaminonaphthalene and Their Ni(II) Complexes,. *American Chemical Science Journal*, 2016, 12, 1-9. (SCIENCEDOMAIN)

48. **Mansour H. Almatarneh**, lina Barhoumi, Ban Al-Tayyem, Abd Al-Aziz A. Abu-Saleh, Marwa M. AL-A'qarbeh, Faten Abuorabi, Ehab AlShamaileh, Mohammednoor Altarawneh, Ali Marashdeh. Computational Study for the Second-Stage Cracking of the Pyrolysis of Ethylamine: Decomposition of Methanimine, Ethenamine, and Ethanamine.
Computational and Theoretical Chemistry, 2016, 1075, 9-17. (ELSEVIER) [Q2]

49. Altarawneh, M.; **Almatarneh, M.H.**; Marashdeh, A. Decomposition of Ethylamine through Bimolecular Reactions.
Combustion and Flame, 2016, 163, 532–539. (ELSEVIER Journal) [Q1]

2014

50. Halim, M.A.; **Almatarneh, M.H.**; Poirier, R.A., A Mechanistic Study of the Deamidation Reaction of Glutamine: A Computational Approach.
Journal of Physical Chemistry B, 2014, 118(9), 2316–2330. (ACS Journal) [Q1]

51. **Almatarneh, M.H.**; Altarawneh, M.; Poirier, A.; Saraireh, High level ab initio, DFT, and RRKM calculations for the Unimolecular Decomposition Reaction of Ethylamine, A.
Journal of Computational Science, 2014, 5, 568-575. (ELSEVIER Journal) [Q1]

2013

52. Alrawashdeh, A.; **Almatarneh, M. H.**; Poirier, R.A. Computational Study on the Deamination Reaction of Adenine with $\text{OH}^-/n\text{H}_2\text{O}$ ($n=0, 1, 2, 3$) and $3\text{H}_2\text{O}$.
Canadian Journal of Chemistry, 2013, 91(7), 518-526. (NRC Research Press) [Q3]

2011

53. Altarawneh, M.; Al-Muhtaseb, A.H.; **Almatarneh, M. H.**; Assaf, N. W.; Altarawneh, K. K., Theoretical Investigation into Competing Unimolecular Reactions Encountered in the Pyrolysis of Acetamide,
Journal of Physical Chemistry A, 2011, 115 (48), 14092–14099. (ACS Journal). [Q1]

54. Al-Muhtaseb, A.H.; Altarawneh, M.; **Almatarneh, M. H.**; Poirier, Raymond A. Theoretical Study on the Unimolecular Decomposition of Theophenol.
Journal of Computational Chemistry, 2011, 32(12), 2708-2715. <https://doi.org/10.1002/jcc.21852> (Wiley Journal) [Q1]

55. Uddin, K.M.; **Almatarneh, M.H.**; Shaw, D.M.; Poirier, R.A. Mechanistic Study of the Deamination Reaction of Guanine: A Computational Study.
Journal of Physical Chemistry A, 2011, 115, 2065-2076. (ACS Journal) [Q1]

56. Eid Abd Al-Razaq; Nabeel Buttrus; Wedad Al-Kattan; Abdel Aziz Jbarah; **Mansour Almatarneh**, Reactions of Pd^{2+} and Pt^{2+} with Pyrrolidinedithio Carbamate and Cystine Ligands: Synthesis and DFT Calculation,
Journal of Sulfur Chemistry, 32 (2), 1-11, 2011. (Taylor and Frances) [Q2]

2005-2008

57. **Almatarneh, M.H.**; Flinn, C.G.; Poirier, R.A. Mechanisms for the Deamination Reaction of Cytosine with $\text{H}_2\text{O}/\text{OH}^-$ and $2\text{H}_2\text{O}/\text{OH}^-$: A Computational Study.
Journal of Chemical Information and Modeling, 48, 831-843, 2008. (ACS Journal) [Q1]

58. Almatarneh, M.H., Computational Study of the Deamination Reaction of Cytosine. *Ph.D. Dissertation*, Memorial University, St. John's, Newfoundland, Canada, 2007. (MUN)
59. Almatarneh, M.H.; Flinn, C.G.; Poirier, R.A.; Sokalski, W.A. Computational Study of the Deamination Reaction of Cytosine with H₂O and OH⁻. *Journal of Physical Chemistry A*, 110 (26), 8227-8234, 2006. (ACS Journal) [Q1]
60. Almatarneh, M.H.; Flinn, C.G.; Poirier, R.A., Ab initio Study of the Decomposition of Formamidine. *Canadian Journal of Chemistry* 2005, 83, 2082-2090. (NRC Research Press) [Q3]
<https://doi.org/10.1139/v05-233>

SUPERVISION:

Current Graduate Students:

1. Reem Raed Habash. **Master** student, Department of Chemistry, **Al-Balqa Applied University**. Computational Design of Organo-Chalcogen Fluorescence Sensors. Supervisor: Dr. Akef Afaneh, Co-Supervisor: Prof. Mansour Almatarneh.
2. Monther Zraid, **Ph.D** student, Department of Chemistry, **Memorial University, Canada**. Sep. 2018 - Present. *Computer Modeling and Simulations of Biological Systems*.
3. Mahmoud Al-Qaraleh, **Ph.D** student, Department of Chemistry, **University of Jordan**, Jan. 2019 - Present. *A Computational Study on the Catalytic Effect of the Deamination Reaction of Cytidine Monophosphate*.

Previous Graduate Students / University of Jordan:

1. Abdelaziz Abu Saleh, **Ph.D** student, Department of Chemistry, **Memorial University, Canada**. Jan. 2017 - 2021.
2. Ghada Kayed, **Master** student, Department of Chemistry, **University of Jordan**, Sep. 2020 - 2021. *A computational mechanistic study of DNA cytosine mutation methylation reaction*.
3. Enas Ibraheem, **Master** student, Department of Chemistry, **University of Jordan**, Jan. 2019 – Dec. 22nd, 2020. *Molecular Dynamics Simulation and Homology Modeling of Protein HLA-Cw4-β2m-KIR2DL1*.
4. Maysa'a Abed Alfattah, **Master** student, Department of Chemistry, **University of Jordan**, Sep. 2019 – Dec. 9th, 2020. *Thermochemical Parameters of Chlorinated Compounds of Pyrimidine*.
5. Asmaa Al-Najajreh, **Master** student, Department of Chemistry, **University of Jordan**. "Computational Mechanistic Study of Reaction of Crigee Intermediate with Methane". June. 2017 – Dec. 16th, 2018.
6. Shifaa Fawzi Alrebei, **Master** student, Department of Chemistry, **University of Jordan**. "Secondary Ozonide Dissociation Reactions: A computational Study". June. 2017 – Nov. 18th, 2018.

7. Ismail Elian, **Master** student, Department of Chemistry, **University of Jordan**. "*Computational Study of the Ozonolysis of Sabinene Reaction Mechanisms*". Sep. 2015 - Dec. 2016.
8. Zahraa Matar Ahmad, **Master** student, Department of Chemistry. **University of Jordan**. "*A Quantum Mechanical Investigation of the Ozonolysis of Phenanthrene*", Jan. 2015 – Dec. 8th, 2016.
9. Abdelaziz Abu Saleh, **Master** student, Department of Chemistry, **University of Jordan**. "*A Computational Study of the Deamination Reaction of Melamine*". Sep. 2014 - Dec. 22th 2015.

B.Sc. (Honour Theses) / TRU and MUN – Canada (Co-Supervisor):

10. Elizabeth M. Andrucson, "*Review of Lantibiotics Research and Development of Computer Program for Lantibiotic Analysis*". Chemistry Department, Thompson Rivers University, Winter 2011.
11. Elizabeth M. Andrucson, "*LC/MS of Potentially Anticarcinogenic Flavonoids*". Chemistry Department, Thompson Rivers University, Winter 2011.
12. Jonathan Grandy (student #200813764) in Environmental Chemistry. Two semester research projects on the "*Investigation of metal interactions from aqueous solution by chitin and chitosan like materials by use of FTIR spectroscopy*". Memorial University - Grenfell Campus, Sept. 05 2011 to April 02 2012.

Theses Examining Committees

1. Mohammad Eshtayeh, Master Thesis, Department of Physics, University of Jordan. *The rovibrational ab initio spectrum of OH Radical in $X^2\pi$ State*. December 29^h, 2021 (Main Advisor: Dr. Wisam Hilal).
2. Qabas AL-Khateeb, Master Thesis, Department of Chemistry, University of Jordan. *Td-DFT calculations of vertical electronic excitation energies for BODIPY and non- BODIPY based dye-sensitized solar cells: a benchmark study*. August 12^h, 2021 (Main Advisor: Dr. Wisam Hilal).
3. Renad Daragmeh, Master Thesis, Department of Chemistry, Al- Balqa' Applied University, May 13th, 2019 (Main Advisor: Dr. Ali Marshdeh, Dr. Akef Afaneh).
4. Mohammad Al-Rbehat, Ph.D Thesis, Department of Chemistry, University of Jordan, Nov. 26th, 2017 (Main Advisor: Prof. Ehab Al Shamaileh).

5. Nora Ibraheem, Master Thesis, Department of Chemistry, University of Jordan. Sep. 28th, 2017
(Main Advisor: Prof. Imad Hamadne).
6. Khlood Zaiter, Master Thesis, Department of Chemistry, University of Jordan, Dec. 18th, 2014
(Main Advisor: Dr. Ehab Al Shamaileh).
7. Ismail Elian, Master student, Department of Chemistry. "Computational Study of the Ozonolysis of Sabinene Reaction Mechanisms". Dec. 21th, 2016.
8. Zahraa Matar Ahmad, Master student, Department of Chemistry. "A Quantum Mechanical Investigation of the Ozonolysis of Phenanthrene", Oct. 2016.
9. Abdelaziz Abu Saleh, Master student, Department of Chemistry, "A Computational Study of the Deamination Reaction of Melamine". Dec. 2015.

RESEARCH FUNDING

- University of Jordan, Research Fund. 2019/2021 (~20,000\$)
- University of Jordan, Travel Fund to Antalya, Turkey 2016 (~705\$)
- University of Jordan, Travel Fund to Pune, India 2015 (~705\$)
- University of Jordan, Research Fund. 2015/2017 (~20,400\$)
- University of Jordan, Support for my Master Student. 2015/2016 (~2,115\$)
- University of Jordan, Support for my Master Student. 2015/2016 (~1340\$)
- Memorial University - Grenfell Campus, Travel Fund 2012 (1,200\$)
- Memorial University, St. John's, Research Funds. 2010 (5,000\$)
- Post-Doctoral Fellow, Funded by NewLab Life Sciences Inc. 2007/2008 (35,000\$)

Member of the Editorial Board for the Following Journals:

- a. *Canadian Chemical Transactions*
- b. *Journal of Chemistry & Applied Biochemistry*
- c. **Guest Editor for Special Issue** in Journal of Chemistry: (2015) "Application of Theoretical Chemistry in Combustion Reactions, Atmospheric and Environmental Chemistry" [<http://www.hindawi.com/journals/jchem/si/970643/cfp/>]
- d. Reviewer for Special issue of the 3rd International Conference on Computational and Experimental Science and Engineering (ICCESEN 2016) that was held in Turkey.

PAPER PEER REVIEWED

- 1) *Nature Communications*
- 2) *Journal of Physical Chemistry (JPC)*
- 3) *ACS OMEGA*

- 4) *Canadian Journal of Chemistry (CJC)*
- 5) *Canadian Chemical Transactions (CCT)*
- 6) *Journal of Molecular Modeling (JMM)*
- 7) *Medicinal Chemistry Communications (RSC)*
- 8) *Computational Chemistry (CC)*
- 9) *Journal of Chemistry & Applied Biochemistry (JCAB)*
- 10) *Journal of Chemistry*
- 11) *Journal of Computational Chemistry (JCC)*
- 12) *Jordan Journal of Chemistry (JJC)*
- 13) *Journal of Molecular Graphics and Modelling*
- 14) *ICCESEN 2016*
- 15) *Current Organic Synthesis*
- 16) *Arab Journal of Basic and Applied Sciences*
- 17) *Datta In Brief (DIB)*
- 18) *RSC- Molecular Omics*
- 19) *Organic & Biomolecular Chemistry*
- 20) *CT&F-Ciencia, Tecnología y Futuro*

ORGANIZED/SPEAKERS - WORKSHOPS AND COURSES

1. “How to Qualify for ABET Accreditation”. The Association of Arab Universities, Amman, Jordan. October 10th, 2021.
2. “How to be prepared to ABET Virtual Site-Visit”. The Association of Arab Universities, Amman, Jordan. October 10th, 2021.
3. “Chemical Safety and Security”. Al-Ahliyya Amman University, Jordan. Jan. 17th, 2021.
4. “Using Bloom’s Taxonomy to Write Effective Learning Objective’s”. University of Jordan. Jan 24th, 2019.
5. “The benefit of Accreditation by ANSAC-ABET (Applied and Natural Science Accreditation Commission”. University of Jordan. Feb. 3rd, 2019.
6. “Effective Use of PowerPoint for Teaching and Research” University of Jordan. 2015, 2017, 2018.
7. “Delivery a PPP: Tips and techniques”. University of Jordan. 2015, 2017, 2018.
8. Workshop on Chemical Safety and Security, and on Scientific Writing and Publishing. Chemistry Department, University of Jordan (For Undergraduate Students). Amman, Jordan, Nov. 16th, 2017.
9. Workshop on Chemical Safety and Security, and on Scientific Writing and Publishing. Chemistry Department, University of Jordan (For Graduate Students). Amman, Jordan, Nov. 21st, 2017.
10. Workshop on Global Chemists’ Code of Ethics, Chemical Safety and Security, and on Scientific Writing and Publishing. Jordanian Chemical Society, Amman, Jordan, Nov. 21st, 2017.

ORGANIZED/MEMBER OF COMMITTEE OF CONFERENCES

1. Member of the Advisory Committee for “The **2nd International Conference on Integrated Natural Disaster Management (ICINDM-2022)**”, Dead Sea, Jordan, July (13-15), 2022.
2. Member of the Organizing Committee for the 1st International Conference on Natural Products and Drug Discovery, Amman. **Jordan**, September 8-10, **2015**.
3. Member of the Organizing Committee for 14th Annual Chemistry Colloquium Contest, Chemistry department, Memorial University, St. John’s, **Canada**, February 8, **2007**.
4. Member of the Organizing Committee for the Jordanian Chemical Conference (JCS), Mu’tah University, Karak, **Jordan**, **1997**.

CONFERENCES

1. **Almatarneh, M. H.**; Flinn, C. G.; Poirier, R. A., Ab initio study of the decomposition reaction of formamidine in the gas phase, 87th Canadian Chemistry Conference and Exhibition organized by the Canadian Society for Chemistry (CSC), London/Ontario, **Canada**, May 29 - June 1, **2004**, **Poster**.
2. **Almatarneh, M. H.**; Flinn, C. G.; Poirier, R. A., Ab initio study of the decomposition reaction of Formamidine in the gas phase and in solution, Symposium on Molecular Informatics, Modeling and Simulation, Memorial University, St. John’s, **Canada**, June 23- 26, **2004**, **Poster and Oral presentation**.
3. Summer School on Computation, Simulation, and Theory in Chemistry, Chemical Biology, and Materials Chemistry, June 11-18, **2005**, Park City, Utah state, **USA**.
4. **Almatarneh, M. H.**; Flinn, C. G.; Poirier, R. A.; Sokalski, W. A., Computational study of the deamination reaction of Cytosine with H₂O, Atlantic Theoretical Chemistry Symposium (ATCS), Mount Allison University, Sackville, New Brunswick, **Canada**, August 12-14, **2005**, **Oral presentation**.
5. **Almatarneh, M. H.**; Flinn, C. G.; Poirier, R. A.; Sokalski, W. A., Computational study of the deamination reaction of Cytosine with H₂O and OH⁻, 89th Canadian Chemistry-Conference and Exhibition organized by the Canadian Society for Chemistry (CSC), presented in Halifax, **Canada**, May 27- June 1, **2006**, **Oral presentation**.
6. **Almatarneh, M. H.**; Flinn, C. G.; Poirier, R. A., Mechanisms for the deamination reaction of Cytosine with OH⁻/(H₂O)_n (n=1,2), 14th Annual Chemistry Colloquium Contest, Chemistry department, Memorial University, St. John’s, **Canada**, February 8, **2007**, **Oral presentation**.
7. **Almatarneh, M. H.**; Flinn, C. G.; Poirier, R. A., Mechanisms for the deamination reaction of Cytosine with H₂O/OH⁻ and 2H₂O/OH⁻: A Computational study, 90th Canadian Chemistry Conference and Exhibition organized by the Canadian Society for Chemistry (CSC), presented in Winnipeg, **Canada**, May 26 – May 31, **2007**, **Oral presentation**.
8. **Almatarneh, M. H.**; Flinn, C. G.; Poirier, R. A., Mechanisms for the deamination reaction of Cytosine with H₂O/OH⁻ and 2H₂O/ OH⁻ : A Computational study, Atlantic Theoretical Chemistry Symposium (ATCS), Memorial University, presented in St. John’s, Newfoundland, **Canada**, August 2-4, **2007**, **Oral presentation**.
9. **Almatarneh, M. H.**; Flinn, C. G.; Poirier, R. A., Mechanisms for the deamination reaction of Cytosine with H₂O/OH⁻ and 2H₂O/OH⁻: A Computational study, 16th Canadian Symposium on Theoretical Chemistry (CSTC), Memorial University, presented in St. John’s, Newfoundland, **Canada**, August 4-9, **2007**, **Poster**.

10. **Almatarneh, M. H.**, 91th Canadian Chemistry Conference and Exhibition organized by the Canadian Society for Chemistry (CSC), Edmonton-Alberta, **Canada**, May 24 – May 28, **2008**.
11. **Almatarneh, M. H.**; Booth, V. “Molecular Dynamics Simulations of the HLA-Cw6- β 2m-KIR2DS1 Complex Associated with the Psoriasis Disease”, The Seventh Canadian Computational Chemistry Conference (CCCC7), Dalhousie University, Halifax, Nova Scotia, **Canada**, July 20 – 24, **2009**, **Poster**.
12. **Almatarneh, M. H.** “Molecular Dynamics Simulations of the HLA-Cw3- β 2m-KIR2DL2 Complex”, 10th Jordanian conference on Chemistry (JCC-10), Jordan University of Science and Technology, Irbid, **Jordan**, May 13, **2010**, **Oral presentation**.
13. Nelson Chemistry Education Workshop: "IYC2011: Chemistry - Our Life, our Future". Nelson Education Ltd. February 22-23, 2011, Toronto, **Canada**. **Invited Participant**.
14. **Almatarneh, M. H.**; Booth, V. “Molecular Dynamics Simulations of Protein Associated with the Psoriasis Disease”, Frontiers in Biomolecular Simulation - Modeling Processes on a Large Scale, in January 21 – 25, **2012**. Physikzentrum, Bad Honnef, **Germany**. **Poster/Oral Presentation**.
15. **Almatarneh, M. H.**, 14th Jordanian conference on Chemistry (JCC), Al al-Bayet University, Mafrq, **Jordan**, April 8th, 2015. “Computational Study of the Deamination Reaction of Nucleic Bases in DNA”. **Oral presentation**.
16. **Almatarneh, M. H.**, “Computational Study of the Deamination Reaction of Nucleic bases in DNA”. 99th Canadian Chemistry Conference and Exhibition organized by the Canadian Society for Chemistry (CSC), Halifax, **Canada**, June 4-9, **2016**. **Oral presentation**.
17. **Mansour H. Almatarneh**, Zahraa M. Ahmad and Ehab M. Al-Shamaileh. “A Computational Study of the Ozonolysis of Phenanthrene”. 3rd International Conference on Computational and Experimental Science and Engineering (ICCESEN 2016). Antalya, **Turkey**. Oct. 19-24, 2016. **Oral presentation**.
18. **Almatarneh, M. H.**, “Computational Study of the Criegee Intermediate through Ozonolysis Reactions”. 100th Canadian Chemistry Conference and Exhibition organized by the Canadian Society for Chemistry (CSC), Toronto, **Canada**, May 28 - June 1, **2017**. **Oral presentation**.
19. **Almatarneh, M. H.**, “The Effective Use of Instant Messaging as a Supportive Strategy in Teaching”. 100th Canadian Chemistry Conference and Exhibition organized by the Canadian Society for Chemistry (CSC), Toronto, **Canada**, May 28 - June 1, **2017**. **Poster**.
20. **Almatarneh, M. H.**, Ismail A. Elian, Zahraa M. Ahmad. “Computational Study of the Criegee Intermediate through Ozonolysis Reaction”. 254th ACS National Meeting & Exposition, Aug. 20-24, 2017, Washington, DC, **USA**. **Oral Presentation**.
21. **Almatarneh, M. H.**, World Science Forum, King Hussein Bin Talal Convention Centre, Nov.7-11, 2017, Dead Sea, **Jordan**. **Participant**
22. **Almatarneh, M. H.**, “Computational Study of the Criegee Intermediate through Ozonolysis Reaction of sabinene”. 256th ACS National Meeting & Exposition, Aug. 19-23, 2018, Boston, MA, **USA**. To be Attended. **Oral Presentation**.
23. **Almatarneh, M. H.** ACS Global Chemists’ Code of Ethics-Science & Technology Leadership Institute. Covers: Chemists’ Code of Ethics, Chemical Safety and Security, and on Scientific Writing and Publishing. **Melbourne, Australia**, July 18-22, 2017. **Participant**
24. **Almatarneh, M.H.**; Teaching and Learning Connection - Transformative Learning: Crossroads of Curriculum, Instruction and Technology, Memorial University, St. John’s, **Canada**, April 26-27, **2018**. **Participant**

25. **Mansour H. Almatarneh.** “Computational Study of the Criegee Intermediate through Ozonolysis Reaction”. 5th International Conference on Computational and Experimental Science and Engineering (ICCESEN 2018). Oct. 12-16, 2018, Kemer-Antalya, **Turkey**. **Oral presentation.**
26. **Almatarneh, M. H.** “ABET-Symposium”. Accreditation Board for Engineering & Technology Dallas, TX, **USA**, April 10-13, **2019**.
27. **Almatarneh, M. H.** “Computational Study of the Spontaneous DNA Mutations”. 2nd International Conference Sustainable Science and Technology, ICSuSaT. July 3-05, 2019. Istanbul, **Turkey**. **Oral presentation**
28. **Almatarneh, M. H.;** Ismail A. Elian “Mechanistic Study of the Criegee Intermediate through Ozonolysis Reactions”. 102th Canadian Chemistry Conference and Exhibition organized by the Canadian Society for Chemistry (CSC), Quebec, June 3-7, **2019**, **Canada**. **Oral presentation**
29. **Almatarneh, M. H.;** Ismail A. Elian. “Computational Study of the Ozonolysis Reaction through Criegee Mechanism and Dissociation of Secondary Ozonide”. (ICCESEN-2019). Kemer-Antalya, **Turkey**. Oct. 23-27, 2019. **Oral presentation.**
30. **Almatarneh, M. H.** “Computational Study of the Spontaneous DNA Mutations”. **Virtual** - 3rd International Conference Sustainable Science and Technology (ICSuSaT). Sep. 25-26, 2020, **Turkey**. **Oral presentation through Zoom.**
31. **Almatarneh, M. H.** 4th Conference on Multiscale Modelling of Condensed Phase and Biological Systems (Virtual). CCPBioSim & CCP5. March 29-31, 2021. Auditing. **United Kingdom (UK)**.
32. **Almatarneh, M. H.,** Asmaa Alnajajreh. “Computational Mechanistic Study of Criegee Intermediate Reaction with Methane”. ACS Spring 2021 National Meeting & Exposition, April 5-16, 2021. Virtual, **USA**. **Oral Presentation.**
33. **Mansour H. Almatarneh,** Ismael A. ELAYAN. “Computational Study of the Ozonolysis Reaction through Criegee Mechanism”. Invited Communication. WATOC 2020 –the 12th Triennial Congress of the World Association of Theoretical and Computational Chemists. July 3-8, 2022, Vancouver, **Canada**. **Oral presentation**

INVITED SPEAKER

- 1) **Mansour H. Almatarneh.** “Computational Study of the Ozonolysis Reaction through Criegee Mechanism”. Invited Communication. WATOC 2020 –the 12th Triennial Congress of the World Association of Theoretical and Computational Chemists. July 3-8, 2022, Vancouver, **Canada**.
- 2) “Chemical Safety and Security”. Al-Ahliyya Amman University, Jordan. Jan. 17th, 2021.
- 3) **Almatarneh, M. H.;** Ismail A. Elian. “Computational Study of the Ozonolysis Reaction through Criegee Mechanism and Dissociation of Secondary Ozonide”. (ICCESEN-2019). Kemer-Antalya, **Turkey**. Oct. 23-27, 2019. **Oral presentation.**
- 4) “Computational Study of the Spontaneous DNA Mutations”. 2nd International Conference Sustainable Science and Technology, ICSuSaT. July 305, 2019. Istanbul, **Turkey**. **Oral presentation**
- 5) “**Computational Study of the Criegee Intermediate through Ozonolysis Reaction**”. April 26th, 2018, McGill University, Montreal, QC, Canada.
- 6) University of Patras, Department of Chemistry, Rio Patras, Greece.” **Thermodynamics Vs. Kinetics Controls**”. May 2017.
- 7) University of Patras, Department of Chemistry, Rio Patras, Greece.” **Effective Use of PowerPoint for Teaching and Research**”. May 2017.

- 8) University of Patras, Department of Chemistry, Rio Patras, Greece.” *Computational Study of the Deamination, Decomposition, and Ozonolysis Reactions*”. May 2017.
- 9) Tabuk University, Faculty of Science, Tabuk, Saudi Arabia” **Using Bloom’s Taxonomy to Write Effective Learning Objectives**”. Dec. 16th, 2015.
- 10) Tabuk University, Faculty of Science, Tabuk, Saudi Arabia,” **Effective Use of PowerPoint for Teaching and Research**”. Nov. 11th, 2015.
- 11) Jordan University, Chemistry Department, Jordan.” *Effective Use of PowerPoint for Teaching and Research*”. Dec 9th, 2014.
- 12) Memorial University-Grenfell Campus, Department of Chemistry, Canada. “*Computational Study of the Deamination Reaction Mechanisms of Nucleic Acid Bases*”. April 11th, 2012.
- 13) Thompson Rivers University, Department of Chemistry, Canada. “*Computational Study of the Deamination Reaction of Cytosine*”. April 5th, 2011.
- 14) Al-Hussein Bin Talal University, Chemistry Department, Jordan.” *Computational Study of the Reaction Mechanisms of DNA Damage Systems and Molecular Dynamics Simulations of Protein Folding*”. May 12th, 2009.
- 15) Jordan University, Chemistry Department, Jordan.” *Computational Study of the Reaction Mechanisms of DNA Damage Systems*”. April 4th, 2009.

UNIVERSITY SERVICE WORK

More than 30 National and International Committees.

SERVICE CONTRIBUTIONS TO SCIENTIFIC COMMUNITY/ COMMUNITY OUTREACH

1. Science Fair Judge in the **Intel-ISEF** (Intel International Science and Engineering Fair) since 2015, Amman, Jordan.
2. I was a judge/examiner for the 6th Annual Undergraduate Innovation and Research Conference, Thompson Rivers University, Kamloops, British Columbia, Canada, April 1st, 2011.
3. All day science fair judge, Amalgamated Academy, Bay Roberts, Newfoundland, Jan 2005. Let’s Talk Science Program.
4. Science Fair Judge, MacDonald Jr. High School, St. John’s, Newfoundland, grade 7-9, March 8th 2006. Let’s Talk Science Program.
5. Chemistry/Physics Demonstrations. Leary’s Brook Junior High, St. John’s, Newfoundland, grade 9, ~50 students, Dec 2006. Let’s Talk Science Program.
6. Chemistry/Physics Demonstrations. Leary’s Brook Junior High, St. John’s, Newfoundland, grade 8, ~60 students, Feb 2008. Let’s Talk Science Program.

COMPUTATION AND RELATED SKILLS

- ◆ Operating Systems: UNIX/LINUX, Windows, Macintosh (Mac OS 10.x).
- ◆ Experience in high-performance computing (HPC) environment.
- ◆ Corel WordPerfect and Microsoft Office (word processing, spreadsheet, presentation).
- ◆ Molecular Viewers (LabView) / Visualization Software:
GaussView, Jmol, Molden, VMD, Molmol, Swiss-PdbViewer (SPDBV),..... and many others.
- ◆ Chemical Drawing Programs: ChemWindow, and ChemDraw, ChemCraft.
- ◆ Data Analysis: SigmaPlot, Origion
- ◆ Programming Language: FORTRAN 95.
- ◆ ChemRate, KissTheIP, MESMER
- ◆ Scripting Language: Python
- ◆ Quantum Computation Packages: Gaussian and MUNgauss
- ◆ Molecular Dynamic Simulations: Gromacs and NAMD

PERSONAL INTERESTS

- | | | |
|------------------|------------|----------------------|
| • Playing Soccer | • Running | • Outdoor Activities |
| • Tennis | • Swimming | • Volunteering |
| • Basketball | • Camping | • Traveling |
| • Volleyball | • Hiking | • Reading |

REFERENCES

Available upon request