

CURRICULUM VITAE

ADDRESS Mutah University
Faculty of Pharmacy
Department of Pharmaceutical chemistry
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PERSONAL DATA
Name: Afaf Alnadaf
Date of Birth: 16th June, 1973
Place of Birth: Irbid, Jordan
Nationality: Jordanian

EDUCATION
B. S. Pharmacy
Jordan University of science and Technology
Irbid-Jordan(1991- 1996)
MSc Pharmaceutical sciences
Jordan University
Amman-Jordan (2002- 2004)
Ph. D. Medicinal Chemistry and Drug Discovery
Jordan University
Amman-Jordan (2005- 2010)

TITLES OF THESES
Ph. D. Discovery and optimization of new β -secretase inhibitors as possible treatment for alzheimer's.

JOB HISTORY
Associate professor 31/1/2016- present
Mutah University/Jordan
Associate professor 30/08/2018-20/08/2019
Jouf university/KSA
Vice Dean 1/9//2016- 1/9/2017
Mutah University/Jordan
Associate professor 1/9/2015
Applied Science University. Amman, Jordan
Feb. '10- 31/8/2015 **Assistant Professor** at the Department of Pharmaceutical chemistry and Pharmacognosy
Applied Science University. Amman, Jordan
Sep. '12- Sep. '14 **Vice Dean of Higher Education**
Applied Science University. Amman, Jordan

- Aug. '13- Mar-'14 **Technical Consultant.** Drug Re-registration Committee.
Jordan Food and Drug Administration (JFDA).
 Ministry of Health. Amman, Jordan.
- Apr. '14- 2016 -**Technical Consultant.** Drug Registration Committee For
 Generics
Jordan Food and Drug Administration (JFDA).
 Ministry of Health. Amman, Jordan.
- **Quality control committee: Jordan Food and Drug
 Administration (JFDA).**
 Ministry of Health. Amman, Jordan.
- Oct. '97 – Jan.'02 **Pharmacist**
High way pharmacy Amman, Jordan
- Feb. '08- Feb. '10 **Lecturer**
Applied Science University. Amman, Jordan
- Sep. '96- Aug. '97 **Teaching assistant**
 Philadelphia University. Amman, Jordan.

**TEACHING
 EXPERIENCE**

- Taught the following courses for Pharmacy Students :

Postgraduate Courses

- 1) Advanced organic chemistry (MSc)
- 2) Advanced Methods in Drug Analysis and Identification(MSc)

Undergraduate Courses

- 1) Drug Design
- 2) Medicinal chemistry (1)
- 3) Medicinal chemistry (2)
- 4) Medicinal chemistry (3)
- 5) Pharmaceutical regulatory affaires
- 6) Pharmacology 1
- 7) Pharmacology 2
- 8) Pharmacology 3
- 9) Toxicology
- 10) Technichal writing
- 11) Pharmaceutical Analytical Chemistry
- 12) Pharmaceutical Instrumental analysis
- 13) Physicochemical Principles of Pharmacy
- 14) Pharmaceutical calculation compounding and dispensing
- 15) Pharmacy Regulation and Ethics
- 16) Introduction to pharmacy
- 17) Pharmaceutical marketing
- 18) Pharmaceutical Management
- 19) Research project

- 20) Demonstrator for pharmaceutical analytical chemistry laboratory
- 21) Demonstrator for instrumental analysis laboratory
- 22) Demonstrator for medicinal chemistry (2) laboratory
- 23) Demonstrator for medicinal chemistry (3) laboratory
- 24) Demonstrator for phytochemistry laboratory
- 25) Demonstrator for pharmacognosy laboratory
- 26) Demonstrator for pharmaceutical preparation laboratory
- 27) Demonstrator for General Chemistry 1

RESEARCH INTERESTS

- Drug discovery from synthetic and natural world
- Application of computer-aided molecular design techniques in areas: anti-alzheimers , anti-hypertensive , antimicrobial , anti-inflammatory and anticancer leads
- 3D-QSAR and traditional QSAR models
- Synthetic modifications for lead compounds.
- Green approaches in synthetic chemistry
- Drug analysis and polymer chemistry.
- Chemistry of Drug complexes and nanotechnology
- Pharmaceutical regulatory affair

Editorial Team: Mutah Lil -Buhuth Wad-Dirasat Natural And Applied Sciences Series
1/9/2017 -1/9/2018

SCHOLARSHIPS, HONORS AND AWARDS

2010- Best thesis Award for health sciences from **University of Jordan**

GRANTS

Title & Year		Source & Amount (U.S. \$)	
1.	Folate-Targeted β -Cyclodextrin Mesoporous Silica Nanoparticles for Enhanced Drug Efficacy in Cancer Therapy	University of Jordan/Hamdi Mango research center	6,000JD 8,500 US.\$
2	“Discovery and Synthesis of new β -secretase inhibitors which responsible of Alzheimer’s disease” 2012-2014	Applied Science Univeristy Research Council	19,950 JD 28,170 US.\$
3.	Polymaric nanoparticles to enhance oral bioavailability of the antiplatelet agent clopidogrel 2013-2015	Applied Science Univeristy Research Council	20,000 JD 28,161 US.\$
4.	Discovery of new Bruton tyrosine kinase inhibitors 2014-2016	Applied Science Univeristy Research Council	10,000 JD 14,080US.\$

MEMBERSHIP OF SCIENTIFIC AND PROFESSIONAL SOCIETIES

- 1- ACS (American Chemical Society).
- 2- The Alzheimer's Association(USA)
- 3- Jordanian Pharmacists Association

MEMBERSHIP OF UNIVERSITY COMMITTEES

09/2020-09/2021	Chair students affair and graduates committee
09/2019-/09/2021	Chair of qualification exam committee
09/2017-09/2018	
09/2019-09/2020	Chair of community service and social activities committee
09/2016-09/2017	Chair of quality assurance committee
09/2018-09/2021	Member in quality assurance committee
09/2016-09/2017	Chair of plan committee
09/2016-09/2017	Chair of examinations committee
09/2014- 09/2016	Chair of laboratory equipment and general safety committee.
09/2012-09/2014	Chair of Higher education Committee:
09/2013-2/2016	Member in business incubator at Applied Science University
09/2010-2/2016	Member in the Scientific Research Committee
09/2011-06/2012	Chair of Cultural Committee
09/2010-06/2012	Member in the Investigation Committee
09/2010-06/2011	Member in the laboratory equipment and general safety committee.

Conferences Organization:

The organizing committee and scientific committee: Third National Conference for Food and Drug Industry (26-27\5\2021

Organizing committee: second international conference college of pharmacy \Mutah University 27\2\2021

Organization for carrier day: first (2018), second (2\ 2020) and third (3\2021)pharmacy collage at Mutah Unversity

JORDAN FOOD AND DRUG ADMINISTRATION COMMITTEES

- 1- Consultant : JORDAN COMPETITVENESS PROJECT WITH JPAM
- 2- Post approval changes committee
- 3- Registration of generics committee
- 4- Quality control committee
- 5- Re-registration committee

RELEVANT SKILLS

- Instrumental skills:

- Extensive working knowledge with a variety of physicochemical techniques, such as UV-visible spectroscopy, fluorescence techniques, HPLC (High performance liquid chromatography) , ¹H NMR, ¹³C NMR (Nuclear Magnetic Resonance) and IR

- Workplace/computer skills:

- Excellent operational skills in general PC software including MS-Word, Excel, Power-Point, etc...
- Chemical and pharmaceutical databases: MEDLINE, SciFinder.
- Excellent operational skills in specialized chemistry and modeling PC software including: Rasmol, Isisdraw, ChemDraw Ultra2000, Marvin.
- Good command in Silicon Graphics (O² and Octane²) machines
- Good experience in Catalyst[®] and Cerius2 professional drug discovery suites (from Accelrys).
- DFT
- Statistical analysis
- Demonstrated quality workplace attributes and interpersonal skills such as communications, teamwork and ability to multi-task and project management

PUBLICATIONS:

1. **Al-Nadaf AH**, Awadallah A (2020) Evaluation for the level of knowledge about herbal medicine use within people and university students in Mutah region. *Pharmacia* 67(4): 397–403. <https://doi.org/10.3897/pharmacia.67.e59319>
2. Hammad K Aldal'in, Ghassab Al-Mazaideh, **Afaf H. Al-Nadaf** , Fuad Al-Rimawi, Akef T. Afaneh, Ali Marashdeh, Salih Abu-Lafi, Fadi Alakhras, Haya Ayyal-Salman, Rasheed MAQ Jamhour. Phytochemical Constituents of *Securigera securidaca* Seed Extract Using GS-MS and HPLC. *Trop J Nat Prod Res*, September 2020; 4(9):540-544
3. **Afaf H. Al-Nadaf**. Effect of Lipase Inhibitor (Orlistat) On Gliclazide and Metformin in Response to High-Fat Meal in Rat's Gastrointestinal Tract. *International Journal of Pharmacology*. Accepted Jun 11, 2020. *Int. J. Pharmacol.*, 16 (5): 416-421, 2020
4. H. K. Aldal'in, F. Wedian , G.M Al-Mazaideh , H. Ayyal Salman , F. AL-Rimawi, F. Alakhras , S. Abu Lafi, **Afaf .H. AL-Nadaf**. Comparative Analysis of Phytochemical Composition of Ethanolic Extract of Jordanian *Silvia Officinalis*. *Pakistan Journal of Biological Sciences Pak. J. Biol. Sci.*, 23 (8): 989-994, 2020
5. **Afaf H. Al-Nadaf,** Lina A. Dahabiyeh, Sanaa Bardaweel, Nouf N. Mahmoud,

Sajidah Jawarneh Functionalized mesoporous silica nanoparticles by lactose and hydrophilic polymer as a hepatocellular carcinoma drug delivery system. *Journal of Drug Delivery Science and Technology* 56 (2020) 101504

6. **Afaf H. Al-Nadaf**, "Propafenone As β -Secretase Inhibitor: Revealed by Docking Simulation and In Vitro Assay. Oral Presenter for 4th International Conference on Pharmacy and Pharmaceutical Sciences in December 13-14, 2019 at Bangkok, Thailand.
7. **Afaf H. Al-Nadaf** ; Hamza M. Bastoni and Duaa F. Hamdan, Microwave-assisted efficient extraction of phenolics from *Juglans regia* L.: pellicle; kernel unripe fruits; and leaves in different solvents. *International Journal of Green Pharmacy* , Jul-Sep 2018 , 12 (3) : 182.
8. **Afaf H. Al-Nadaf** ; Nesrin J. Seder and Walid Abu Rayyan: Wound healing; Antimicrobial and Anti-oxidant activity for Jordanian *Juglans Regia* L. Unripe Fruits *JIPBS*, Vol 5 (3), 26-34, 2018
9. **Afaf H. Al-Nadaf**; Sajeda A. Salah and Mutasem O. Taha, Discovery of New Gyrase β Inhibitors Via Structure Based Modeling, *Computational Biology and Chemistry*, Computational Biology and Chemistry 74 (2018) 263–272
10. Samar H. Thiab, Imad I. Hamdan , Dina El-Sabawi, **Afaf H. Al-Nadaf**. Effect of loratadine on the dissolution and bioavailability of gliclazide from its hydroxypropyl- β -cyclodextrin complex. *Journal of Inclusion Phenomena and Macrocyclic Chemistry*. First online: 10 May 2016
11. **Afaf H. Al-Nadaf**, Mutasem O. Taha, Identification of Small Molecule Memapsin Inhibitors via Computation-based Virtual Screening, *Advances in Pharmacology and Pharmacy* 3(3): 53-63, 2016
12. **Afaf Hasan Al-Nadaf**, Mutasem Omar Taha and Hammad Khalifeh Aldal'in, Haloperidol inhibits memapsin 2: Innovation by docking simulation and In vitro assay, *Pak. J. Pharm. Sci.*, Vol.28, No.1, January 2015, pp.139-146
13. Mutasem O. Taha, Mahmoud A. Al-Sha'er, Mohammad A. Khanfar, Afaf H. **Al-Nadaf**, Discovery of nanomolar phosphoinositide 3-kinase gamma (PI3K γ) inhibitors using ligand-based modeling and virtual screening followed by in vitro analysis, *European Journal of Medicinal Chemistry* , 84 (2014) 454-465
14. Jumana D. Al-Shawabkeh , **Afaf H. Al-Nadaf** , Lina A. Dahabiyeh and Mutasem O. Taha Design, Synthesis and structure–Activity relationship of new HSL inhibitors guided by pharmacophore models , *Med Chem Res*, 23(1):127-145, 2013
15. **Afaf Al-Nadaf** ; Mutasem O. Taha., Ligand-based pharmacophore exploration and QSAR analysis of transition state analogues followed by in silico screening guide the discovery of new sub-micromolar β -secretase inhibitors. *Med Chem Res*, 22(4):1979-1997, 2013.
16. Hammad K.H. Aldal, **Afaf Hasan Al-Nadaf** and Abdul-Wahab R. Hamad. Study the Effect of Photoperiod Duration on Dynamic Carbohydrates Composition and

Enzymes Activity in Soybean Leaves. *Pakistan Journal of Nutrition* , 11 (12): 1166-1176, 2012.

17. **Afaf H. Al-Nadaf** and Mutasem O. Taha Discovery of New renin Inhibitory Leads via Sequential Pharmacophore Modeling, QSAR Analysis, *In Silico* Screening and *In Vitro* Evaluation. *Journal of Molecular Graphics and Modelling*. (2011) 29: 843-864.
18. Mohammad Mohammad K; Almasri Ihab M; Tawaha Khaled; Issa Ala; **Al-Nadaf Afaf**; Hudaib Mohammad; Alkhatib Hatim S; Abu-Gharbieh Eman; Bustanji Yasser Antioxidant, antihyperuricemic and xanthine oxidase inhibitory activities of Hyoscyamus reticulatus., *Pharmaceutical biology*, December 2010, Vol. 48, No. 12 : Pages 1376-1383.
19. **Al-Nadaf H. A.**, Abu Sheikha G.and Taha M. O.Elaborate ligand-based pharmacophore exploration and QSAR analysis guide the synthesis of novel pyridinium-based potent β -secretase inhibitory leads, *Bioorg. Med. Chem.* 9:3088-3115, 2010.

PRESENTATIONS and Workshops:

1. **Workshop** : Quality Assessment of pharmaceuticals: 8-9/August/2015, JFDA
2. **Workshop** : Finished Pharmaceutical Product Specifications. Students workshop: Applied Science University: Collage of pharmacy , 3/2015
3. **Workshop** : Laboratory Safety: Management Guide. Teachers Assistant: Applied Science University, Collage of pharmacy 2/2015
4. **Oral Presentation**: In Silico Screening Culminate the Discovery of Low Micromoler β -Secretase Inhibitors. Oral Presentation at "5th International Conference on Drug Discovery and Therapy" UAE, Dubai, 18-20/3/2013
5. **Lecture** : Quality Assurance in Computer-Aided Drug Design. Lecture at *Jordan Atomic energy commission*, workshop during 11-7-2012
6. **Poster**: Ligand-Based Pharmacophore Exploration and QSAR Analysis of Transition State Analogues followed by In Silico Screening Guide the Discovery of New Potent β -Secretase Inhibitors.Poster at *16th Annual Green Chemistry & Engineering Conference Washington DC USA*, 18-20/6/2012
7. **Oral presentation**: AAAS 2017 Workshop Participation Three Circles of Aemat;
"The American Association for the Advancement of Science Annual meeting"
Boston 2017 "Feb 16-20, 2017
8. **Afaf H. Al-Nadaf**, "Propafenone As β -Secretase Inhibitor: Revealed by Docking Simulation and In Vitro Assay. Oral Presenter for 4th International Conference on Pharmacy and Pharmaceutical Sciences in December 13-14, 2019 at Bangkok, Thailand.

9. **Speaker: Arab Science Week:** ثلاث دوائر للعالمات: النمو والاستدامة من خلال الإرشاد والتناصح 15 to 23 August 2020/ Online
10. **Speaker:** 4th International Symposium of Education and Values, (4th International Education and Values Symposium) which was held online on 24-26 December, participated with a paper titled “THE IMPACT OF SMART-PEN TECHNOLOGY ON PHARMACEUTICAL CHEMISTRY COURSE EDUCATION VIA DISTANCE LEARNING: A PILOT STUDY”
- 11.
12. **Speaker:** First International conference “Women in academia”, 20-21\1\2021 . Amman Jordan

Attended Workshops; Seminars and Conferences:

1. **Seminar** by Sena Establishment for Laboratory Equipment Trading: “FT-IR & NIR Applications in Pharmaceutical, Veterinary, Food and Feed Industries”
And **Workshop** for Samples Analysis by:
 - a. NIR Instrument: Model MPA
 - b. FT-IR Instrument: Model Alpha
 - c. February 28, 2012
2. **Workshop** by Jordan Pharmaceutical Association: “Evidence Based Medicine and its application on combined oral Contraceptive” 18/9/2012
3. **Workshop** by Jordan Pharmaceutical Association: Evidence Based Medicine and its application on combined oral Contraceptive part 2, 16-10-2012
4. **Workshop** by Hamdi Mango Center for Scientific Research/ The University of Jordan: “Computer-Aided Drug Design Workshop” 12/3/2013
5. **Workshop** by Jordan Food and Drug Administration: “Assessment of Pharmaceutical Technical File” , 21-22/12/2013
6. **International Conference on:** Ethics of Medical Research and Enhancing The Role of Young Researchers. 29-30/4/2014, Amman, Jordan
7. **Participant in: Three Circles of Alemat project.** 1/2015 to 8/2015
8. **Attendance:** 14th SESAME Users' Meeting 3 - 4 December 2016, Amman, Jordan
9. **Training:** Keeping students engaged: Building strong student/teacher connections in a remote learning environment. 25/09/41 hijri/May 18, 2020 (**online**)

10. **Training:** Staying connected with remote learning through Microsoft Teams and Office 365. 25/09/41 hijri/May 18, 2020 (**online**).

11. **Attendance:** The 1st“International e-Conference on Chemicals & Materials for Emergent technologies (CheMET-2020)” held between 15-17 Nov 2020, jointly organized by Center for Advanced Materials, Qatar University, Qatar, Emergent (**online**)

12. **Training:** Certified Microsoft Innovative Educator. Completed 12/1/2020(**online**)

13. **Training:** Staying connected with remote learning through Microsoft Teams and Office 365. Completed: 12/8/2020 (**online**)

14. **Attendance IVPN-AR”** Pharmancy Automation & Informatics: Innovating Patient Care” January 2, 2021. Saudi commission for Health specialties. (online)

15. **Training:** 12-Days International Workshop on "Supporting Chemistry Research with modern DFT (Density Functional Theory): Software, Techniques, and Applications" Organized by Department of Chemistry, Smt. S.S. Patel Nootan Science & Commerce College, Visnagar, Dist.-Mehsana, Gujarat-384315 (India) (nonline)

16. **Attendance** the Arab Forum of Science Media and Communication. 21-24 Feb 2021 (online)

MASTER STUDENT SUPERVISION:

- 1- **Nisreen Seder:** Microwave-assisted Extraction of Phenolic Compounds from Jordanian Juglans Regia L. Unripe Fruits and evaluation of pharmacological activity; A Comparison with Soxhlet (defended 1/2016)

- 2- **Sajedah Salah:** Discovery of new Gyrase B inhibitors via structure_Based modeling (defended 1/2016)

- 3- **Samar Thiab (Co-SUPERVISION):** “Study of potential interaction between selected pharmaceutical agents in tablets prepared with cyclodextrin” (defended 12/2013)

- 4- **Eman Ead (Co-SUPERVISION):** “Development and evaluation of a new docking scoring function based on the number and quality of ligand – receptor contacts: Evaluation against PKC Theta” (defended 11/2014)