

**Raed A. Al-Qawasmeh, Ph.D**  
**Professor of Organic Chemistry**

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**Google Scholar link:**

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**RESEARCH GATE**

[https://www.researchgate.net/profile/Raed\\_Al-qawasmeh/publications?editMode=1&sorting=recentlyAdded](https://www.researchgate.net/profile/Raed_Al-qawasmeh/publications?editMode=1&sorting=recentlyAdded)

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**ACADEMIC and RESEARCH EXPERIENCES**

01/2019- **Professor.** in organic chemistry, Department of Chemistry. Sharjah University-sharjah/UAE.

09/19-08/21 Chairman-Department of Chemistry. Sharjah University-Sharjah/UAE

5/14-12/2018	<b>Professor.</b> in organic chemistry, Department of Chemistry. The University of Jordan.
5/10-5/2014	<b>Associate Prof.</b> in organic chemistry, Department of Chemistry. The University of Jordan.
09/05-5/2010	<b>Assistant Prof.</b> in organic chemistry, Department of Chemistry. The University of Jordan.
01/01-12/04	<b>Research Scientist (Project leader):</b> Organic Medicinal Chemistry. Lorus Therapeutics Inc., 2 Meridian Road, Toronto M9W 4Z7 (Now under the Name Aptose Biosciences).
04/99-04/00	<b>Postdoctoral Researcher</b> , Department of Chemistry, State University of New York at Stony Brook.
04/93-04/94	<b>Research assistant</b> at Department of Chemistry /University of Jordan.

## **EDUCATION**

- **Post Doctoral Researcher, State University of New York** at stony Brook, 2000, mentor **Prof. Scott Sieburth**, *Design and synthesis of novel silanediol inhibitors for matrix metalloproteases (MMP)*.
- **Ph.D., University of Tübingen** (Germany), 1999. Thesis adviser: **Prof. Dr. Dr. h.c. Wolfgang Voelter**. Thesis title: *Anhydropentoses as "Chirons" for Regio- and Stereoselective Annulation of Aza-, Oxa, and Thiacyclic Systems on Carbohydrate Scaffolds and Novel Neutral Proteinase Inhibitors*.
- **M. Sc. in chemistry, University of Jordan**, 1994. Thesis advisor: **Prof. Musa Abu Zarga and Prof. Salim Sabri**. Thesis title: *Chemical Constituents of Flora of Jordan (VII): Constituents of Artemisia arborescens and Alhagi maurorum*.

## **GRADUATE STUDIES**

Throughout my work at the university of Jordan I was involved in the Graduate program in both supervision and examination committees.

### **Supervision of graduate student:**

- 1- **Mr. Anas J. Rasras: (Master student)** thesis title “ Synthesis and Atimicrobial Studies of some new Cholic Acid Derivatives”
- 2- **Miss Rabab Albashti: (Master student)** thesis title ” Synthesis and Properties of 9-Aryl-4-fluoro-6-oxo-6,9-dihydro-[1,2,5]thiadiazolo[3,4-h]quinoline-7-carboxylic acid and ester”.
- 3- **Mr. Basel Bani Hudail: (Master student)** thesis title: “ Microwave assisted synthesis of some new imidazolyl quinoline compounds”
- 4- **Mr. Kumait Al-Jabary: (Master student)** thesis title ” Reactions of aminosubstituted naphthoquinone with some isothiocyanates: An investigational study”
- 5- **Miss Nada Ayoub Andel-Sayed: (Master student)** thesis title “ Chemical Constituents of Guiera Senegalensis From Sudan”
- 6- **Miss Alla Shahwan: (Master student)** thesis title" Synthesis and Acetylcholinesterase Inhibition of Adamantane derivatives"
- 7- **Mr. Muhanad Odeh: (Master student)** thesis title " Synthesis and antimicrobial activities studies of new 2,3-diaryl-1,3-thiazolidin-4-one derivatives"
- 8- **Mr. Rami Al-Razim:** thesis title " Microwave assisted synthesis of new adamantane containing compounds "
- 9- **Miss Areej Jaber : (Master student)** thesis title " Synthesis and structural properties of the complexes of adamantane-carbohydrazide containing ligand and some metals from late first raw series " "
- 10- **Mr. Luay Al-Nazer: (Master student)** thesis title " Design and synthesis of Isoxazole Tagged Indole Hybrid compounds " .
- 11- **Mr. Ahmad Hetini: (Master student)** thesis title " Design and synthesis of triazole Tagged Indole Hybrid compounds " .
- 12- **Miss. Zainab Ahmad:** thesis title " Synthesis and charactarization of new aminothiazole-coumarin hybrid compounds "

**13- Miss. Haneen Mahmoud: (Master student)** thesis title " Synthesis of some new pyrrolo[1,2-a]benzimidazol-1-one derivatives"

**14- Miss Noura AlFaqeih: (Master student)** thesis title" Design and Synthesis of Aminoacetylenic Indole hybrid Compounds"

**15- Miss Sarah DauletKara: (Master student)** thesis title" Click Chemistry: Toward New Triazole\ Isoxazole-Indole Hybrid Compounds"

**16- Miss Sediqa Saber: (Ph.D Student)"** Design and Synthesis of New Triazole/Isoxazole Nitroimidazole Hybrid Systems *via Click Chemistry* as a Potential Biologically Active Motifs"

#### **Participation in Examination Committees:**

**1- Maram Al-Dweik:** Thesis title: "Synthesis and Properties of some new (Substituted) Imidazo[4,5-h]quinoline-7-carboxylic Acids and Esters" **Master thesis**

**2- Dediqa Saber:** thesis title:" Reaction of (4-Benzothiazol-2-yl-piperazin-1-yl)-acetic Acid Hydrazide with Sulfonylchloride" **Master thesis**

**3- Eyad Younes:** thesis title:"Synthesis of Heterocyclic Compounds by Intramolecular Cyclization of Nitrile Imines" **Master thesis**

**4- Sanaa Al-Kaabnah:** thesis title:"reaction of dichloromaleimide with some sugar thiols: an investigational study" **Master thesis**

**5- Eveen Al-Shalabi:** thesis title:" Chemical constituents of flora of Jordan-part (XXIII). Chemical constituents of *Hypericum triquetrifolium turra* and *teucrium polium L*" **Ph.D. thesis**

**6- Adel AlGazawi:** thesis title:" Screening of biological effects of selected natural and modified natural compounds from *Creatagus aronia* and *fumaria desiflora*" **Ph.D. thesis**

**7- Belal Kana'an:** thesis title:" Isolation and identification of the biotransformation products of spironolactone, betamethasone acetate and marubinn by different fungi" **Ph.D. thesis**

**8- Mohammed Al-Barham:**" Isolation and identification of the Chemical constituents of achillea santolina and aristolochia maurorum" **Ph.D. thesis**

## **Funded PROJECTS**

Projects that I am working on at the University of Jordan.

- 1- "Synthesis and Biological Activity of Nitroimidazole Derivatives as Potential Anti-tumor and Anti-bacterial Agents" (**135,000 JD**)
- 2- "Synthesis and Modification of the Bioactive Chiral-Quinolone Scaffolds" This Project was funded from the Deanship of Scientific Research (**15,000 JD**)
- 3- "Synthesis and Bioassay of Some New Dibenzo[*b,f*][1,4]oxazepine and – thioxazepine Derivatives, Congeners of Loxapine and Quetiapine Antipsychotic Drugs" This Project was funded from the Deanship of Scientific Research (**9950 JD**)
- 4- "Development of a Compliance Monitoring Tool for Diabetes Management based on Hemoglobin A<sub>1c</sub>" In collaboration with MonoJO a biotechnology company. This project is partially funded from the Higher Council of Science and technology (**50,000 JD**)
- 5- Synthesis and development of some new Tacrine analoge as cholinesterase inhibitors (**10,000 JD**)
- 6- Each master student was funded for his master work with (**1500 JD**) and the Ph. D (**3000 JD**)

## **ACADEMIC and COMMUNITY COMMITTEES**

- Vice president of the **Jordanian Chemical Society**.
- Member of the department committee for **graduate studies**.
- Member of the department committee for **scientific research**
- **Co-Founder of Ghabati:** a nonprofit organization aimed to build a green Jordan, to help lower the pollution. The mission is to plant 1000000 trees in selected area to form the core for future public forests.

- Member of the committee for organization of **scientific lectures for public**.
- **Chair organizing committee** for the 1<sup>st</sup> International Conference on Natural Products and Drug Discovery.
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- Member of the organizing committee for the 14<sup>th</sup> Jordanian Chemical Conference.
- Member of the Faculty committee for appointments and promotions.
- Faculty representative at the University of Jordan board council.
- Member of the department committee for syllabus developments.
- Member of the committee of development and accreditation for the Faculty of science.
- Member of the scientific committee for the University Model School (The school related to the University with classes from grade one to the highest grade before the university studies).
- Department representative at the faculty of science council board.
- Member of the faculty of science committee for student behavior and judgments.
- Member of the organization committee for the 11<sup>th</sup> Eurasia conference
- Member of the committee for the 10<sup>th</sup> Jordanian Chemical Society conference.

## **Publications**

### **Patents and patents applications**

10. **AI-Qawasmeh, R.; Young, H. A.; Huesca, M.; Lee, Y.** "2,4,5-Trisubstituted imidazoles and their use as anti-microbial agents" **US 8,394,815 B2 / 2013**
9. **AI-Qawasmeh, R. A.; Zahra, J.; El-Abadelah, M.**" Thiadiazolo[3,4-*h*]quinoline-7-carboxylic acids, salts and esters, processes for their preparation and their use as antiviral, antibiotic and antitumor agents" National Patent Application **(2013)** Jordan

8. Huesca, M.; Young, A.; Lee, Y.; Khine, A.; Wright, J.; Lock, L.; **AL-Qawasmeh, R.** "2-Indolyl imidazo [4,5-D] Phenanthroline derivatives and their use in the treatment of cancer" **US 8148392 B2 (2012)**
7. **Al-Qawasmeh, R.**; Young, H. A.; Huesca, M.; Lee, Y. "2,4,5-Trisubstituted imidazoles and their use as anti-microbial agents" **US 7884120 B2/ (2011)**
6. **Raed Al-Qawasmeh**, "2, 4, 5 - Trisubstituted Imidazoles And Their Use As Anti-Microbial Agents" **United States Patent Application, 2007/0105929**
5. Huesca; Mario, **Al-Qawasmeh; Raed**, Young; Aiping H, Lee; Yoon" Aryl imidazoles and their use as anti-cancer agents" **United States Patent Application, 2007/0123553**
4. Huesca; M.; **Al-Qawasmeh, R.**; Young, A. H.; Lee, Y." Aryl imidazoles and their use as anti-cancer agents" **United States Patent Application, 2008/0262015.**
3. Huesca, M.; Young, A.; Lee, Y.; Khine, A.; Wright, J.; Lock, L. **Al-Qawasmeh, R.** "2-INDOLYL IMIDAZO[4,5-D]PHENANTHROLINE DERIVATIVES AND THEIR USE IN THE TREATMENT OF CANCER" **WO/2006/126177.**
2. Mario Huesca, **Raed A. Al-Qawasmeh**, Aiping Young and Yoon Lee "ARYL IMIDAZOLES AND THEIR USE AS ANTI-CANCER AGENTS" **WO/2005/047266.**
1. Mario Huesca, **Raed A. Al-Qawasmeh**, Aiping Young and Yoon Lee "2,4,5-TRISUBSTITUTED IMIDAZOLES AND THEIR USE AS ANTI-MICROBIAL AGENTS" **WO/2004/016086.**

#### Refereed International Journal

71. SadeekahO W Saber, **Raed A Al-Qawasmeh**, Luay Abu-Qatouseh, Amneh Shtaiwi, Monther A Khanfar, Yaseen A Al-Soud "*Novel hybrid motifs of 4-nitroimidazole-piperazinyl tagged 1,2,3-triazoles: Synthesis, crystal structure, anticancer evaluations, and molecular docking study*" **Heliyon**, 9, **2023**, e19327
70. Mudassir Jamil, Muhammad Nadeem Akhtar, Muhammad Imran, Ayesha Javaid, Hafiza Komal Zafar, Manzar Sohail, Murad A AlDamen, Magdalena

- Fitta, Monther A Khanfar, **Raed A Al-Qawasmeh** “Photocatalytic degradation of methylene blue dye and electrocatalytic water oxidation over copper (II) complex with mixed ligands” **J. Photochem. Photobio. A**, **2023**, 115095.
69. Areej Majed Jaber, Mohammed M Al-Mahadeen, **Raed A Al-Qawasmeh**, Mutasem O. Taha” Synthesis, anticancer evaluation and docking studies of novel adamantanyl-1, 3, 4-oxadiazol hybrid compounds as Aurora-A kinase inhibitors” **Medicinal Chemistry Research**, **2023**
68. Gourishetty Srikanth, Anil Ravi, Anusha Sebastian, Jobi Joseph, Monther A Khanfar, Mohammed I El-Gamal, **Raed A Al-Qawasmeh**, Ihsan A Shehadi, Scott McN. Sieburth, Imad A Abu-Yousef, Amin F Majdalawieh, Taleb H Al-Tel, “Diastereoselective Synthesis of Camptothecin-like Scaffolds: Construction of a New Class of Pseudo-natural Products” **Eur. J. Org. Chem.** **26** (13), **2023**, e202300080.
67. Anas J Rasras, **Raed A Al-Qawasmeh**, Mohamed El-Naggar, Ihsan Shehadi, Mahmoud M Elaasser, Yaseen A Al-Soud” Design, synthesis and antimicrobial assessments of aminoacetylenic-piperazine nitroimidazole hybrid compounds” **Zeitschrift für Naturforschung C**, **78** (3-4), **2023**, 113-121.
66. Gourishetty Srikanth, Anil Ravi, Anusha Sebastian, Jobi Joseph, Monther A Khanfar, Mohammed I El-Gamal, **Raed A Al-Qawasmeh**, Imad A Abu-Yousef, Amin F Majdalawieh, Taleb H Al-Tel. “Stereodivergent Transformation of Azepino [3, 4, 5-cd] indoles En Route to Nature-Inspired Scaffolds”, **Eur. J. org. Chem.**, **26** (9), **2023**, e202201354
65. Kamrul Hasan, Reshma G Joseph, Shashikant P Patole, **Raed A Al-Qawasmeh**, “Development of magnetic Fe<sub>3</sub>O<sub>4</sub>-chitosan immobilized Cu (II) Schiff base catalyst: An efficient and reusable catalyst for microwave assisted one-pot synthesis of propargylamines via A3 coupling” **Catal. Comm**, **174**, **2023**, 106588

64. Anil Ravi, Gourishetty Srikanth, Monther A Khanfar, **Raed A Al-Qawasmeh**, Mohammed I El-Gamal, Taleb H Al-Tel, "Blue Light-Driven [4+ 2]-Cycloaddition: Diastereoselective Synthesis of Chromeno [4, 3-*b*] quinoline and Chromeno [4, 3-*b*][1, 8] naphthyridine Scaffolds" *J. Org. Chem.* 87 (24), **2022**, 16722-16735
63. AJ Rasras, M El-Naggar, NA Safwat, **RA Al-Qawasmeh.**, Cholyl 1, 3, 4-oxadiazole hybrid compounds: design, synthesis and antimicrobial assessment *Beilstein Journal of Organic Chemistry* 18 (1), **2022**, 631-638
62. Yaseen A. Al-Soud , Sadeekah O. W. Saber, Amneh Shtaiwi, Sondos O. Alsawakhneh, Kafa' A. S. Alhelal, Qusay F. A. Salman, Luay Abu-Qatouseh, Monther A. Khanfar and **Raed A. Al-Qawasmeh.**, Nitroimidazoles Part 10. Synthesis, crystal structure, molecular docking, and anticancer evaluation of 4-nitroimidazole derivatives combined with piperazine moiety. *Zeitschrift für Naturforschung C*, 78 (3-4) (2023), 93-103
61. **Raed A Al-Qawasmeh**, Sadeekah OW Saber, Yaseen A Al-Soud, Monther A Khanfar. The crystal structure of 1-(N 1-benzyl-2-methyl-4-nitro-imidazol-5-yl)-4-(prop-2-yn-1-yl) piperazine,  $C_{18}H_{21}N_5O_2$ . *New Crystal structure* 237(2), **2022**, 207-209
60. Rasras, A. J.; Shehadi, I. A.; Younes, E. A.; Jaradat, D. s. M. M.; **AlQawasmeh, R. A.**, An efficient synthesis of furan-3(2H)-imine scaffold from alkynes. *Royal Society Open Science* 8 (11), **2021**, 211145.
59. Kamrul Hasan; Ihsan A. Shehadi; Karimatu A. Bagudu; Osama M. Elmabrouk, Neil; Abdelaziz Elgamouz; Shashikant P. Patole; **Raed A Al-Qawasmeh**" *Magnetic*

*silica surface functionalized palladium catalyst: A modular approach for C-C cross-coupling reactions in water”* **Applied Surface Science**, 571, **2022**, 151369.

58. Yaseen A Al-Soud, H Ala'a, Luay Abu-Qatouseh, Amneh Shtaiwi, Alhelal Kafa'AS, Hossam H Al-Suod, Sondos O Alsawakhneh, **Raed A Al-Qawasmeh** “*Nitroimidazoles Part 9. Synthesis, molecular docking, and anticancer evaluations of piperazine-tagged imidazole derivatives*” **Zeitschrift für Naturforschung B** , 76 (5), **2021**, 293-302
57. Ihsan A. Shehadi; Fatima-Azzahra Delmani; Areej M.; Jaber, Hana Hammad; Murad A.AlDamen; **Raed A Al-Qawasmeh**; Monther A.Khanfar, **Molecules**, 25(11), **2020**, 2530.
56. Bader A Salameh, Kayed A Abu-Safieh, Eman H Al-Hushki, Wamidh H Talib, Israa A Al- ataby, **Raed A Al-Qawasmeh** “*New maleimide 1,2,3-triazole hybrids: design, synthesis, anticancer, and antimicrobial activities*” **Monatshefte für Chemie-Chemical Monthly** 151 (10), **2020**, 1609-1619
55. **Raed A Al-Qawasmeh**, Nura A Hussein, Ihsan Shehadi, Monther A Khanfar, Bader A Salameh” Design and Synthesis of Aminoacetylenic Indole and Carbazole Hybrid Compounds” **ChemistrySelect** , 5 (22), **2020**, 6834-6839
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54. **Raed A. Al-Qawasmeh**, Louy A. Al-Nazer, Sarah A. Dawlat-Kari, Luay Abu-Qatouseh, Salim S. Sabri, Murad A. AlDamen, Mutasem Sinnokrot” Design, Synthesis and Characterization of Novel Isoxazole Tagged Indole Hybrid Compounds” **Open Chem.** 18, **2020**, 138.
53. **Raed A. Al-Qawasmeh**, Yaseen A. Al-Soud, Kafa' A. S. Alhelal, Monther A. Khanfar” Crystal structure of 3-(1-benzyl-2-ethyl-4-nitro-1Himidazol-5-ylthio)-propanoic acid, C15H17N3O4S” **Z. Kristallogr. NCS**,235(3), **2020**,751-753.

52. MA AlDamen, MO Sinnokrot, SB Atta, **RA Al Qawasmeh**, CJ Gómez-García "Crystal structure and magnetic properties of a new Wells-Dawson [bP 2 CoW 17 O 62] 10-polyoxoanion" **J. Struc. Chem.** **2020**, 61,(4), 589-595.
51. Fatema Hersi, Hany A. Omar, **Raed A. Al-Qawasmeh**, Zainab Ahmad, Areej M. Jaber, Dana M. Zaher, Taleb H. Al-Tel "Design and synthesis of new energy restriction mimetic agents: Potent anti-tumor activities of hybrid motifs of aminothiazoles and coumarins" **Scientific Reports**, 10, **2020**, 2393
50. Bader A. Salameh, , Haneen Mahmoud and Munther Khanfar **Raed A. Al-qawasmeh** "Benzimidazole derivatives via Regioselective substitution of dichloro pyrrolobenzimidazole" **J. Heterocycl. Chem.** 56(5), **2019**, 1530-1541
49. Anas J. Rasras, Mutasem Sinnokrot, Murad A. AlDamen, Monther A. Khanfar, **Raed A. Al-Qawasmeh** "The crystal structure of 3-(1*H*-benzo[*d*]imidazol-2-yl)-7-chloro-1-cyclopropyl-6-fluoro-1,4-dihydroquinolin-dimethylsulfoxide (1/1), C<sub>21</sub>H<sub>19</sub>CIFN<sub>3</sub>O<sub>2</sub>S" **Z. Kristallogr. NCS**, 234(4), **2019**, 645-647.
48. Vunnam Srinivasulu, Paul Schilf, Saleh Ibrahim, Monther A Khanfar, Scott McN Sieburth, Hany Omar, Anusha Sebastian, **Raed A AlQawasmeh**, Matthew John O'Connor, Taleb H Al-Tel' Multidirectional desymmetrization of pluripotent building block en route to diastereoselective synthesis of complex nature-inspired scaffolds '**Nature communications**', 9(1), **2018**, 4989
47. Monther A. Khanfar , Areej M. Jaber, Murad A. AlDamen **Raed A. Al-Qawasmeh** "Synthesis, Characterization, Crystal Structure, and DFT Study of a New Square Planar Cu(II) Complex Containing Bulky Adamantane Ligand" **Molecule**, 23(3), **2018**, 701
46. Hamadeh Tarazi, Raed Abu Odeh, **Raed Al-Qawasmeh**, Imad Abu Yousef, Wolfgang Voelter, Taleb H Al-Tel "Design, synthesis and SAR analysis of potent BACE1 inhibitors: Possible lead drug candidates for Alzheimer's disease" **European Journal of medicinal Chemistry** (125), **(2017)**, 1213-1224..

45. **Al-Qawasmeh R. A.**; Huthail B. B.; Sinnokrot M. O.; Semreen M. H.; Odeh R. A; Abu-Zarga M. H.; Tarazi H.; Yousef I. A.; Al-Tel T. H." Design, Synthesis and Qualitative Structure Activity Relationship Evaluations of Quinoline-Based Bisarylimidazoles as Antibacterial Motifs" **Medicinal Chemistry** (2016), 12(6), 563-573.
45. Zahra J. A.; **Al-Qawasmeh R. A.**; El-Abadelah M. M.; Abadleh M. M.; Zani F.; Incerti M.; Vicini P.; Voelter, W." Heterocycles [h]-fused to 4-oxoquinoline-3-carboxylic acid. Part XI: Synthesis and antibacterial activity of 4-fluoro-6-oxoimidazo[4,5-h]quinoline-7-carboxylic acids" **Zeitschrift fuer Naturforschung, B:** (2016), 71(1), 37-44.
44. Amal Al-Aboudi, **Raed A Al-Qawasmeh**, Alaa Shahwan, Uzma Mahmood, Asaad Khalid and Zaheer Ul-Haq " *In-silico* identification of the binding mode of synthesized adamantyl derivatives inside cholinesterase enzymes" **Acta Pharmacol Sin** (2015), 36(7), 879-886
43. **Al-Qawasmeh, R. A.**; Abadleh, M.M.; Zahra, J. A.; El-Abadelah, M. M.; Albashti, R.; Zani, F.; Incerti, M.; Vicini, P. "Design synthesis and antibacterial activity studies of new thiadiazoloquinolone compounds" **Journal of Enzyme Inhibition and Medicinal Chemistry** (2014), 29(6): 777-85.
42. **Al-Qawasmeh, R. A.**; Salameh, B. A.; AlRazim, R.; AlDamen, M. A.; Voelter, W. "Microwave Assisted Synthesis of New Adamantyltriazine Derivatives" **letters in Organic Chemistry**, (2014), 11, 513-518.
41. Salameh, B. A.; Abu-Safieh, K. A.; Al-Kaabnah, S. R. A.; **Al-Qawasmeh, R. A.** "Synthesis and characterization of new N-phenylmaleimide thioglycosides" **Research on Chemical Intermediates**, (2014) 40, 3001-3009.
40. Semreen, M. H.; El-Awady, R.; Abu-Odeh, R.; Saber-Ayad, M.; **Al-Qawasmeh, R. A.**; Chouaib, S.; Voelter, W.; Al-Tel, T. H. "Tandem multicomponent reactions toward the design and synthesis of novel antibacterial and cytotoxic motifs". **Current Medicinal Chemistry** (2013), 20(11), 1445-1459.
39. **Al-Qawasmeh, R. A.**; Khanfar, M. A.; Semreen M.; Abu Odeh, R.; Al-Tel, T. H." Design and Synthesis of new Hybrid Triazine-Indole derivatives as potential Antimicrobial Agents Against Hospital resistant Strains" **Heterocycles**, 87(11), 2013, 2385-2394

38. Salameh, B. A.; **Al-Qawasmeh, R. A.**, Al-Jabari, K., Voelter, W. " *Synthesis of Some New Carbohydrate-Containing Thiouriedonaphthoquinones*" **Research on Chemical Intermediates**, (2015), 41(5), 2929-2937.
37. **Al-Qawasmeh, R. A.** " *Ethyl 7-chloro-1-cyclopropyl-6-fluoro-8-nitro-4-oxo-1,4-dihydroquinoline-3-carboxylate*" **Acta Crystallographica, Section E**. (68(8), 2012), o2533.
36. **Al-Qawasmeh, R. A.**; Khanfar, M. A.; Abu Zarga, M. H.; Al Damen, M. A. " *2-(4-Methylphenyl)quinoline-4-carboxylic acid*" **Acta Crystallographica, Section E**: 68(10), (2012), o2892.
35. Taleb H.Al-Tel, Mohammad H. Semreen, **Raed A.Al-Qawasmeh**, Marco F. Schmidt, Raafat El-Awadi, Mustafa Ardah,; Rania Zaarour, Shashidhar N. Rao, Omar El-Agnaf, "Design, Synthesis, and Qualitative Structure-Activity Evaluations of Novel  $\beta$ -Secretase Inhibitors as Potential Alzheimer's Drug Leads" **Journal of Medicinal Chemistry**, 54 (2011) 8373-8385.
34. Tel, Taleb H.; **Al-Qawasmeh, Raed A.**; Zaarzour, Rania "Design, synthesis and in vitro antimicrobial evaluation of novel Imidazo[1,2-a]pyridine and imidazo[2,1-b][1,3]benzothiazole motifs" **European Journal of medicinal Chemistry** (46), (2011), 1874-1881.
33. **Raed A. Al-Qawasmeh**, Mario Huesca, Venkata Nedunuri ,Robert Peralta, Jim Wright, Yoon Lee, Aiping Young " Potent Antimicrobial Activity of 3-(4, 5-Diaryl-1H-imidazol-2-yl)-1H-indole Derivatives Against Methicillin-Resistant *Staphylococcus aureus*" **Bioorganic and Medicinal Chemistry Letters**, 20 (2010) 3518-3520.
32. Dolashka-Angelova, Pavlina; Abdel-Jalil, Raid J.; **Al-Qawasmeh, Raed A.**; Stambolieva, Nicolina; Voelter, Wolfgang "Synthesis and inhibition of a series of pyranose derivatives towards a Zn-metallo-proteinase from *Saccharomonospora canescens*" **Carbohydrate Research** 345(16), (2010), 2343-23475
31. Tel, Taleb H.; **Al-Qawasmeh, Raed A.**; Voelter, Wolfgang"Rapid Assimibly of Polyfunctional structures Using a one –Pot Five and six-Components sequential Groebke—Blackburn/Ugi/Passerini Process" **European Journal of Organic Chemistry** 29, (2010), 5586-5593.
30. Taleb H. Al-Tel; **Raed A. Al-Qawasmeh**, "Post Groebke-Blackburn

multicomponent protocol: Synthesis of new polyfunctional imidazo[1,2-a]pyridine and imidazo[1,2-a]pyrimidine derivatives as potential antimicrobial agents" **European Journal of Medicinal Chemistry** (2010), 45(12), 5848-585

29. Anas J. M. Rasras, Taleb H. Al-Tel, Amal F. Al-Aboudi, **Raed A. Al-Qawasmeh**. "Synthesis and antimicrobial activity of cholic acid hydrazone analogues" **European Journal of Medicinal Chemistry**, 45 (2010) 2307-2313.
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- 14) **Raed A. Al-Qawasmeh**, American Association for Cancer research, Dead Sea Jordan ,March **2008**.
- 13) **Raed A. Al-Qawasmeh**, Middle East and North Africa Cancer research Conference, Amman-Jordan, September **2007**.

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- 11) Lisa Lock, Mario Husca, **Raed A. Al-Qawasmeh**, Stephane Viau, Eduardo Camisa, Valery Mykalo, Yoon Lee, Aiping Young " Molecular mechanism of growth inhibition induced by novel triaryl imidazole compounds In human cancer cell lines, **IBC's 9th Annual World Congress Drug Discovery Technology®** 2004 to be held in Boston USA, from August 8-13, 2004 .
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## Professional Awards and fellowship

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