

Hiba M. Zalloum

Objectives

- To enhance my knowledge and to achieve new skills in chemistry
- Developing my interpersonal skills, expanding my network of professional contacts, and increasing my employment opportunities

Personal Information

- Date & Place of Birth: June 6, 1981, AlKuwait
- Gender: Female
- Marital Status: Single
- Nationality: Jordanian

Education

- B.Sc. in **Chemistry** from Petra University, Amman Jordan, June 2003. GPA 3.89 out of 4.00 (Top of class)
- M.Sc. in **Chemistry**, The University of Jordan, Amman Jordan, January 2006. GPA 3.50 out of 4.00 with "*Prof. M. Mubarak*" as a thesis supervisor on a project entitled:

"Chelation and Isothermal Behavior of Copper(II) Ions With Chitosan-Derived Schiff-Base "

Training

- Full time summer course training in the organic chemistry & general chemistry laboratories in Petra University
- Technology Transfer and IP Training from Feb 2010 till Dec 2010 funded from the SRTD (EU- funded project to support science and Technology in Al Hasan Science City).

Research Interests

- Molecular modeling studies towards the discovery and design of new biologically active compounds employing novel studies focused on pharmacophore modeling, 3D-QSAR and traditional QSAR models, docking studies and *in-silico* screening. These efforts include development of novel molecular modeling strategies of enhanced success rates.
- Synthesis of new chelating polymers or modification natural polymers that may have applications in the removal of heavy metal ions from the aquatic environment that could be very effective in removing heavy metal ions from aqueous solutions.

Professional Experience

- **Researcher** at Hamdi Mango Center for Scientific Research, The University of Jordan from Feb 2010 till now.
- **Part time lecturer** at the Chemistry Department, The University of Jordan. For one semester from Sept 2009 to Jan 2010.
- **Research Assistant**, Dept. of Pharmaceutical Sciences, Drug Design and Discovery Unit, Faculty of Pharmacy, University of Jordan from Oct. 2004 to July 2009 with "*Prof Mutasem Taha*" Where I worked on Molecular Modeling & Drug Discovery researches. I've participated in many different researches containing different modeling techniques including: "*Pharmacophore Modeling, QSAR-analysis, Receptor Surface Analysis (RSA), CoMFA, Docking & Scoring*"
- **Teaching Assistant** in Analytical and General Chemistry laboratories, Chemistry Department, The University of Jordan for 3 consecutive semesters during my M.Sc. studies.

Publications

- "Discovery of New Human epidermal growth factor receptor-2 (HER2) Inhibitors via Ligand-Based Pharmacophore Modeling for Potential Use in Cancer Disease". **Hiba Zalloum**, Rabab Tayyem, Yasser Bustanji, Basha'er Abu- Irmaileh, Mohammad Mohammadd, Talal Abu Rjai, Mohammad S. Mubarak. (Submitted May 2014)
- "*Chitosan and Chitosan Derivatives as Chelating Agents*" Book Chapter 1, by **Hiba M. Zalloum**, Mohammad S. Mubarak, in the book "Natural Polymers, Biopolymers, Biomaterials, and Their Composites, Blends, and IPNs", 2013. By Apple Academic Press, Inc.
- "Ligand-based designing, *in silico* screening, and biological evaluation of new potent fructose-1,6-bisphosphatase inhibitors". Rabab F. Tayyem, **Hiba M. Zalloum**, M. Raafat Elmaghrabi, AL-Motassem Yousef, and Mohammad S. Mubarak. *Eur. J. Med. Chem.* 56 (2012), 70-95.
- "*Antioxidant Polymers: Metal Chelating Agents*" Book Chapter 4, by **Hiba M. Zalloum**, Mohammad S. Mubarak, Pages: 87–114, 2012, in the book "*Antioxidant Polymers: Synthesis, Properties, and Applications*" Published Online: 7 JUN 2012. By Scrivener Publishing LLC.
- "*The effect of crosslinking on the adsorption behavior of Copper (II) onto poly (2-hydroxy-4-acryloyloxybenzophenone)*". **Hiba M. Zalloum**, Bassam El-Eswed, Ruba M. Zalloum, and Mohammad S. Mubarak. *Journal of Applied Polymer Science*, (2012), 126: 1008–1015.
- "*Discovery of New Anti Fungal Leads via Pharmacophore Modeling and QSAR Analysis of Fungal N-Myristoyl Transferase Inhibitors followed by In Silico Screening*". Mutasem O. Taha*, Tariq Al-Haraznah, Reema Abu Khalaf, Amjad M. Qandil, **Hiba Zalloum**, Amal G. Al-Bakri, Ghassan Abu Sheikha. *Chemical Biology & Drug Design*, (2011), 78: 391-407.
- "*Pharmacophore and QSAR Modeling of Estrogen Receptor B Ligands and Subsequent Validation and In Silico Search for New Hits*" Mutasem O. Taha,* Mai Tarairah, **Hiba Zalloum**, Ghassan Abu-Sheikha. *Journal of Molecular Graphics and Modelling*, **2010**, 28 (5), 383-400.

- "Homology modeling of MCH1 receptor and validation by Docking/Scoring and Protein-Aligned CoMFA". Areej Abu-Hammad, Waleed A. Zalloum, **Hiba Zalloum**, Ghassan Abu-Sheikha, Mutasem O. Taha. *Eur. J. Med. Chem.* 2009, 44, 2583–2596.
- "Copper Adsorption on Chitosan-Derived Schiff Base", **Hiba Zalloum**, Zakaria Al-Qodah and Mohammad S. Mubarak. *Journal of Macromolecular Science, Part A: Pure and Applied Chemistry* (2009) **46**, 1–12.
- "Development of predictive in silico model for cyclosporine- and aureobasidin-based P-glycoprotein inhibitors employing receptor surface analysis" **Hiba M. Zalloum**, Mutasem O. Taha., *Journal of Molecular Graphics and Modelling*, **2008**, 27 (4), 439-451
- "Combining Ligand-Based Pharmacophore Modeling, Quantitative Structure-Activity Relationship Analysis and in Silico Screening for the Discovery of New Potent Hormone Sensitive Lipase Inhibitors", Mutasem O. Taha, Lina A. Dahabiyeh, Yasser Bustanji, **Hiba Zalloum**, and Suhair Saleh. *J. Med. Chem.* **2008**, 51, 6478–6494.
- "Pharmacophore Modeling, QSAR Analysis and In Silico Screening Reveal Potent GSK-3 β Inhibitory Activities for Cimetidine, Hydroxychloroquine and Gemifloxacin", Mutasem O. Taha, Yasser Bustanji, Mohamed A.S. Al-Ghussein, Mohammad Mohammad, **Hiba Zalloum**, Ihab M. Al-Masri and Naji Atallah. *J. Med. Chem.* **2008**, 51, 2062–2077.
- "Discovery of New Mur-F Inhibitors via Pharmacophore Modeling and QSAR Analysis followed by in-silico screening.", Mutasem O. Taha, Naji Atallah, Amal G.Al-Bakri, Catherine Paradis-Bleau, **Hiba Zalloum**, Khaled S. Younis and Roger C. Levesquec. (2008) 16(3), 1218-1235, *J. Bioorg Med. Chem.*

Funded Research Projects

“Discovery of New HER2 Inhibitors via Ligand-Based Pharmacophore Modeling and Hit Optimization for Potential Use in Cancer Disease”, **2012**. **Hiba Zalloum**, Mohammad S. Mubarak, Rabab Tayyem, Tala Abu Rjai, Mohammad Kahlil, and Yasser Al Bustanji; Project funded by Deanship of scientific research, The University of Jordan, **20,600** JD.

"Synthesis, Characterization and Anti-Cancer Activity of Novel Amidrazone Derivatives". 2014 **Hiba Zalloum**, Mohammad S. Mubarak and Meqdad Al-Habashneh; Project funded by Hamdi Mango Center for Scientific Research, The University of Jordan, **5,000** JD

Honors and Awards

An-Najah Research Award, (2009) from An-Najah University-Palestine. On the research “Combining Ligand-Based Pharmacophore Modeling, QSAR Analysis and In -Silico Screening for the Discovery of New Potent Hormone Sensitive Lipase Inhibitors” by Mutasem O. Taha*, Lina A. Dahabiyeh, Yasser Bustanji, **Hiba Zalloum**, Suheer Saleh

Computer Skills

- Visual Basic 6 programming (I didn't practice it from few years)
- Well-developed computer skills in Windows based programs:
MS Office, Microsoft desktop applications (Excellent)
- Good knowledge in some Chemistry software (modeling software like Catalyst, Cerius2, Discovery Studio, Marvin, ...etc) & professional with others.
- Flexible to others if needed

References

- **Prof. Dr. Mohammad S. Mubarak**
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- **Dr. Rabab Tayyem**
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- **Prof. Dr. Yasser Al Bustanji**
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- **Prof. Dr. Talal Abu Rjai**
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Languages

Arabic: Native language

English: Very good in written and spoken

Hobbies

Reading, internet browsing, cooking, sewing and embroidering

Google Scholar

<http://scholar.google.com/citations?user=ggqOgfoAAAAJ&hl=en>

Research Gate

https://www.researchgate.net/profile/Hiba_Zalloum