**Professor Mona A. Mahran. 2020**

**CONTACT INFORMATION**

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**EDUCATION**

**Ph.D.** Medicinal Chemistry Department, School of Pharmacy, University of Pittsburg, Pittsburg, PA. USA. 1990

**Thesis:** The design, Synthesis and Biochemical Evaluation of Potential Antisickling Agents and Allosteric Modifiers of Hemoglobin.

**M.Sc.,** Pharmaceutical Chemistry Department, Faculty of Pharmacy, Alexandria University, Alexandria - Egypt. 1983.

**Thesis:** Design and synthesis of some phenolic and Quinanoid compounds of expected therapeutic activity.

**B.Sc.,** Pharmaceutical Sciences, Faculty of Pharmacy, Alexandria University, Alexandria - Egypt. (Honor graduate) 1978.

**POSITINS HELD**

1. Chairman of Pharm. Chem. Dept., Faculty of Pharmacy, Alexandria University. August 2015 – July 2016.
2. Professor, Med. Chem. Dept., Faculty of Pharmacy, Alexandria University, 2007.
3. Visitor Prof. 2009- 2011: King Abdul Aziz University, Jeddah, Saudi Arabia.
4. Visitor Prof. Feb.- Mar., 2008: Beirut Arab University.
5. Visitor Prof. Oct.- Dec.,2007: Beirut Arab University.
6. Visitor Prof. 1995- 2000: King Saud University, Riyadh, Saudi Arabia.
7. Amideast fellow-ship 1984-1990: for PhD in USA.

**Project**

1. **Project title:** Design, Synthesis and Biological Evaluation of Some Potential Antisickling Agents.

**Principal investigator**: Prof. Mona A. Mahran.

**Project no**.: 10-Bio1253-03.

**Admitted to:** National Science, Technology and Innovation Plan; King Abdul-Aziz University, Faculty of Pharmacy, Medicinal Chemistry Department.

**Date of admission**: 2010 for 24 months.

**Total budget**: One Million and three hundreds and eighty one thousands SR.

**Achievement**

1. **Establishment** of the **Drug design and simulation Laboratory**, 2016.

Department of pharmaceutical chemistry. Faculty of Pharmacy, Alexandria university.

**It seats** forty undergraduate students to learn drug design courses.

and specific terminal for graduate students' research.

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List of Publication

**US Patents**

1. **Allosteric hemoglabin modifiers**

**Abraham D.J., Mehana A.A., RandadR.S.and Mahran M.A..US. Patent 5/049/695 (1991).**

1. **Allosteric hemogloben modifiers useful for decreasing oxygen affinity and preserving oxygen carrying capability of stored blood.**

**Abraham D.J., Mahran M.A., Mehana A.A. and Randad R.S. US. Patent 5/122/539 (1992).**

1. **Using allosteric hemoglobin modifiers to decrease oxygen affinity in blood.**

**Abraham D.J., Mahran M.A., Mehana A.A. and Randad R.S.US. Patent 5/290/803 (1994).**

1. **Allosteric hemoglobin modifiers to decrease oxygen affinity in blood.**

**Donald J. Abraham.; Mona Mahran; Ahmed Mehanna.; Ramnarayan Randad, Gajanan S. Joshi; Jayashree Panikker. . US. Patent 5/432/191 (1995).**

**Research paper**

1. Synthesis of 2-(2-substituted aminothiazol-4-yl)hydroquinone and p-benzoquinone derivatives as antibacterial agents.

Chaaban I., Mohsen A.O., Ashour F.A. and **Mahran M.A.Sci. Pharm**. Vol. 51, pp. 51-58 (1984).

1. Synthesis of substituted 2-acetylhydroquinone and 2-acetyl benzoquinone derivatives for an expected antibacterial activity.

Chaaban I., Mohsen A.O. Ashour F.A. and **Mahran M.A**. Sci. Pharm. Vol. 52, pp. 59-65 (1984)

1. Allosteric modifiers of hemoglobin:1. Design, synthesis, testing and structure-allosteric activity relationship of novel Hemoglobin oxygen affinity decreasing agents.

Randad R.S., **Mahran M.A.**, Mehana A.S., and Abraham D.J. J. Med. Chem. Vol. 34(2) pp. 752-757 (1991).

1. Synthesis, antibacterial and antifungal activity of some new 1,3,4-oxadiazoles and 2-substituted amino-1,3,4-oxadiazole derivatives containing benzimidazole moiety.

Ashour F.A., EL-Hawash S.A., **Mahran M.A.,**Yousry A.H. and Hamada F.A. Bull. Pharm. Sci., Assiut University Vol. 17(1) pp. 17-25 (1994).

1. Synthesis of some Novel Perhydrotriazepine-3,6-diones of potential antifungal activity. **Mona A. Mahran**, Ola A. EL-Sayed, Hesham T.Y. Fahmy and Fawzia A. Ashour. Alex. J. Pharm. Sci., Vol. 10(2) pp. 133-135 (1996).
2. Methyl p-chlorobenzoate, a product of competitive solvolysis of indomethacin in hydromethanolic alkaline medium (pH 10.2)

Hanan Benjamin, Fatma A. Ismail, **Mona A. Mahran**, Ghaly M. Ghaly and Nawal M. Khalafallah.Alex. J. Pharm. Sci., Vol. 10(3) pp. 165-168 (1996).

1. Hydrazinolysis of some substituted ethylglycinate : New finding

**Mahran M.A.** Alex. J. Pharm. Sci., Vol. 10(3) pp. 179-181 (1996)

1. Synthesis and biological evaluation of certain new cyclopenteno [b] thiophen derivatives as local anesthetic and antiarrhythonic agents.

Abdul-Rahman M. Al-Obaid, Hussein I. EL-Subbagh, Othman A. Al-Shabanah and **Mona A. Mahran**. Die Pharmazie Vol. 53(1) pp. 24-28 (1998).

1. Heterocyclic systems containing pyrimidine nucleus as potential antimicrobial and antitumor agents.

**Mona A. Mahram**, Magda A. El-Sherbeny, Abdoul-Rhman M. A. El-Obaid and Farid A. Badria. Alex. J. Pharm. Sci. Vol. 12(1) pp. 39- 44.

1. Synthesis and biological evaluation of some pyrano, pyrazolo and pyridine derivatives as potential antitumor agents.

**Mona A. Mahran** and Farid A. Badria. Alex. J. Pharm. Sci. Vol. 14(2) pp. 87-91 (2000).

1. Molecular shape analysis for quantitative drug design.

**Mona A. Mahran**, Hussein, I. EL-Subbagh and Abdul-Rahman M. Al-Obaid. Saudi Pharmaceutical Journal, Vol. 7(4) pp. 159-171 (1999).

1. Cyclodextrins in chemical reactions.

**Mona A. Mahran**. J. Saudi Chemical Society. Vol. 3(2) pp. 177-198 (1999).

1. Quantitative structure-activity relationship of phenoxy and benzyloxy acid derivatives as antisickling agents.

**Mona A. Mahran**..BollettinoChimicoFarmaceutico. Vol. 139(2) pp. 73-80 (2000).

1. Synthesis and biological evaluation of certain α-β-unsaturated ketones and their corresponding fused pyridines as antiviral and cytotoxic agents.

Hussein I. EL-Subbagh, Suhair M. Abu-Zaid, **Mona A. Mahran**, Farid A. Badria and Abdul-Rahman M. Al-Obaid. J. Med. Chem. Vol. 43 pp. 2915-2921 (2000).

1. Antitumor screening of new pyran, pyrazol and pyridine derivatives.

**Mona A. Mahran**. Alex. J. Pharm. Sci. Vol. 15(2) pp. 149-151 (2001).

1. Synthesis and in vitro Evaluation of New Benzothiazole Derivatives as Schistosomamicidal Agents.

**Mona A. Mahran**, Samia William, FatemRamzy and Amira M. Senbel.

Molecules, Vol. 12 pp. 622-633(2007).

1. Synthesis of some new benzothiazole derivatives as potential antimicrobial and antiparasitic agents.

**Mona A. Mahran**, Suzanne M.F. El-Nassry, Sonia R. Allam and Lobna A. El-Zawawy. Die Pharmazie. Vol. 58 pp. 527-530 (2003).

1. Adamantane Derivatives Part III : Synthesis of some aminoadamantane derivatives as novel antitumor agents.

M.A. El-Sherbeny, K.M. Youssef and **M.A. Mahran**. Sci. Pharm. Vol. 71 pp. 195-209 (2003).

1. Synthesis and biological evaluation of novel naphthoquinone derivatives as potential anticancer and antimicrobial agents.

Nargues S. Habib and **Mona A. Mahran**. Bull.Chim. Farmac. Vol. 143 pp. 299-307 (2004).

1. Synthesis of some new antimicrobial thiadiazolyl and oxadiazolylquinoline derivatives.

O.H. Rizk, **M.A. Mahran**, S.M. EL-Khawass, S.A. Shams EL-Dine and EL-Sebai A. Ibrahim. Med. Chem. Res., Vol. 14 pp. 260- 273 (2005).

1. 2-Substituted 4-(oxadiazolyl and thiazolyl)quinolines as potential antimicrobial agents. EL-Sebai A. Ibrahim, S.A. Shams EL-Dine, S.M. EL-Khawass, **M.A. Mahran** and O.H. Rizk. Bull. Fac. Pharm. Cairo Univ., Vol. 43(3) pp. 265-273 (2005).
2. Hydroquinones, Benzoquinones and Quinol dimethylethers Substituted at the 2-Position by a Heterocyclic Ring: Synthesis and Evaluation for Potential Antimicrobial Activity.

Ibrahim Chaaban, El-Sayeda EL-Khawass, **Mona Mahran,** Ola EL-Sayed, Hassan EL-Saidi and Hassan Aboul-Enen. Alex. J. Pharm. Sci., Vol. 20 pp. 107-114 (2006).

1. Synthesis of 2-Hydrazinobenzothiazole Derivatives of Potential Biological Activity.

**Mona A. Mahran**, Hamida Abdel-Hamid, EL-Sayed H. EL-Ashry. Alex. J. Pharm. Sci., Vol.21(1) pp.7-12 (2007).

1. Design, synthesis and evaluation of anticancer activity of novel substituted benzoquinones and hydroquinones.

Ibrahim Chaaban, El-Sayeda EL-Khawass, **Mona Mahran**, Ola EL-Sayed, Hassan EL-Saidi and Hassan Aboul-Enen. Med. Chem. Res., Vol.15 (2007).

1. Synthesis and Biological Evaluation of Novel Benzoquinones as Potential Antimicrobial Agents.

Ibrahim Chaaban, El Sayeda M. El Khawass, **Mona A. Mahran**, Heba A. Abd El Razik, Nehad S. El Salamouni, Abeer E. Abdel Wahab, Med. Chem. Res. 2013, 22 (2), 841-851.

1. Synthesis and Biological Evaluation of Novel Hydroquinone dimethyl ethers as Potential Anticancer and Antimicrobial Agents.

Ibrahim Chaaban, El Sayeda M. El Khawass, **Mona A. Mahran**, Heba A. Abd El Razik, Nehad S. El Salamouni, Abeer E. Abdel Wahab,  Med. Chem. Res. 2013, 22 (8), 3760-3778.

1. Unexpected Products from the Reaction of Different Compounds with Hydrazine Hydrate or Aryl Thiosemicarbazides,

Ibrahim Chaaban, El Sayeda M. El Khawass, **Mona A. Mahran**, Heba A. Abd El Razik, Nehad S. El Salamouni, Journal of Saudi Chemical Society (2016) 20, 547–552

1. Identification of a Novel Class of Covalent Modifiers of Hemoglobin as Potential AntisicklingAgents.

Abdelsatter A. Omar,**Mona A. Mahran**,Mohini N. Ghatge,Nadia Chowdhury,Fayda H. A.

Bamane,Moustafa E. El-Araby,OsheizaAbdulmalik,Martin K. Safo. Org. Biomol. Chem.,2015,

13, 6353–6370.

1. Aryloxyalkanoic Acids as Non-Covalent Modifiers ofthe Allosteric Properties of Hemoglobin.

Abdelsattar M. Omar , **Mona A. Mahran** , Mohini S. Ghatge , Faida H. A. Bamane,

Mostafa H. Ahmed , Moustafa E. El-Araby , OsheizaAbdulmalik and Martin K. Safo.Molecules

2016, 21, 1057.

1. Design, synthesis and docking study of pyridine and thieno[2,3-b] pyridine

derivatives as anticancer PIM-1 kinase inhibitors

MarwaEhab, Mostafa M. El-Miligy, SalwaFahmy, **Mona A. Mahran**, Ali Hazzaa

Bioorganic Chemistry 2018, 80, 674.

1. Structure-based design of some isonicotinic acid hydrazide analogues as

potential antitubercular agents

Amal Atta, Salwa Fahmy, Ola Rizk, Dharmarajan Sriram, **Mona A. Mahran**, Ibrahim M. Labouta.

Bioorganic Chemistry 2018, 80, 721. |

1. 100 years of sickle cell disease researches: etiology, pathophesiology and rational drug design. (part 1).

**Mona A. Mahran**, Mohamed T. Ismail and Elwy H. Abdelkader.

Beni-Suef University Journal of basic and applied science, 2019,8, 22.

1. Design, synthesis, biological evaluation and in silico studies of certain arylsulfonyl hydrazones conjugated with 1,3-diaryl pyrazoles as potent metallo-β-lactamase inhibitors

Marwa M. Shaaban, Hanan M. Ragab, Kenichi Akaji, Ross P. McGeary,Alaa-Eldin A. Bekhit, Waleed

M. Hussein, Julia L. Kurz, Bassma H. Elwakil,Salma A. Bekhit, Tamer M. Ibrahim, **Mona A. Mahran,**

Adnan A. Bekhit.

Bioorganic Chemistry [Vol 105](https://www.sciencedirect.com/journal/bioorganic-chemistry/vol/105/suppl/C), December 2020, 104386.

1. New Tetrahydropyrimidine-1,2,3-Triazole Clubbed Compounds: Antitubercular Activity and Thymidine Monophosphate Kinase (TMPKmt) Inhibition

Mai S. El-Shoukrofy, Amal Atta , Salwa Fahmy, Dharmarajan Sriram , **Mona A. Mahran** , Ibrahim M. Labouta.

Bioorganic Chemistry, February 2023. [131](https://www.sciencedirect.com/journal/bioorganic-chemistry/vol/131/suppl/C), 106312.

1. Discovery of new pyridine-quinoline hybrids as competitive and non-competitive PIM-1 kinase inhibitors with apoptosis induction and caspase 3/7 activation capabilities. Mostafa M. M. El-Miligy, Marwa E. Abdelaziz, Salwa M. Fahmy, Tamer M. Ibrahim, Marwa M. Abu-Serie**, Mona A. Mahran** & Aly A. Hazzaa.

Journal of enzyme inhibition and medicinal chemistry, 2023, VOL. 38, NO. 1, 2152810 102152810https://doi.org/10.1080/14756366.2022.2152810