

Template for a Staff Curriculum Vitae

Contact Details Name: Prof. Dr. Amal Mahmoud Mamdouh Abd El-Hamid Youssef Title: Professor and Head of Pharmaceutical Chemistry Department Department: Pharmaceutical Chemistry e-mail: ayoussef65@yahoo.com amal.youssef@alexu.edu.eg Mobile phone number: 01129722722		
Biography	Academic Qualifications: PhD: Medicinal Chemistry, Virginia Commonwealth University, Richmond, Virginia, USA, 2001. Master: Pharmaceutical Chemistry, Alexandria University, Alexandria, Egypt, 1993. B.SC: Pharmaceutical Sciences (Distinction Honor), Alexandria University, Alexandria, Egypt, 1987. Career History and Professional Experience: Career History: Current position Professor and Head of Pharmaceutical Chemistry Department, Faculty of Pharmacy, Alexandria University, Egypt. Professor (2012-2019) College of Pharmacy, Al Ain University of Science and Technology, Al Ain, United Arab	



Emirates.

Associate Professor (2007-2012)
Department of Pharmaceutical Chemistry,
Alexandria University, Alexandria, Egypt.

Assistant Professor (2001-2007)
Department of Pharmaceutical Chemistry,
Alexandria University, Alexandria, Egypt.

Tutor (1997-2001)
Department of Medicinal Chemistry, and
Institute for Structural Biology and Drug
Discovery, Virginia Commonwealth
University, VA, USA.

Assistant Lecturer (1993-1996)
Department of Pharmaceutical Chemistry,
Alexandria University, Alexandria, Egypt.

Demonstrator (1987-1992)
Department of Pharmaceutical Chemistry,
Alexandria University, Alexandria, Egypt.

Professional Experience:

A medicinal chemist and a teacher with drug formulation experience. A strong experience in computer-aided drug design and molecular modeling. An excellent knowledge in X-ray crystallographic analyses. An extensive knowledge of structure-based drug design and quantitative structure activity relationship studies (QSAR). Experience in designing and conducting multistep syntheses of biologically active organic compounds for the development of new and improved drugs. An extensive knowledge of modern chromatographic, spectroscopic and analytical techniques including HPLC, NMR, IR, UV-vis, and MS. A considerable experience in drug formulations and biological assays.



<p>Research Interest</p>	<p>Doctor of Philosophy in Medicinal Chemistry, with a concentration in Computer-Aided Drug Design and Molecular Modeling. Synthesis and characterization of heterocyclic compounds of biological significance in the fields of anticancer, antiviral, antimicrobial, antiangiogenesis, anti-inflammatory and neuroprotective activities. Structure based drug design including X-ray crystallography, molecular modeling and synthetic medicinal chemistry.</p>
<p>Publications</p>	<p>Atatreh, N., <i>Youssef, A. M.</i>, Ghattas, M. A, Al Sorkhy, M., Alrawashdeh, S., Al-Harbi, K. B., El-Ashmawy, I. M., Almundarij, T. I., Abdelghani, A. A., Abd-El-Aziz, A. S. Anti-inflammatory drug approach: Synthesis and biological evaluation of novel pyrazolo[3,4-d]pyrimidine compounds. <i>Bioorg. Chem.</i> 2019, 86, 393-400.</p> <p>Malki, A., Elbayaa, R. Y., Ali, O. A., Sultan A., <i>Youssef, A.M.</i> Novel quinuclidinone derivatives induced apoptosis in human breast cancer via targeting p53. <i>Bioorg. Chem.</i> 2017, 72, 57-63.</p> <p>Malki, A., Elbayaa, R. Y., Ashour, H. M. A., Loffredo, C. A., <i>Youssef, A.M.</i> Novel thiosemicarbazides induced apoptosis in human MCF-7 breast cancer cells via JNK signaling. <i>J. Enzyme Inhib Med. Chem.</i> 2015, 30, 786-795.</p> <p>Elzahhara, P. A., Soliman, R., El-Hawash, S. A., Ragab, H. M., <i>Youssef A. M.</i>, Wahab A. E. Design, Synthesis and Antimicrobial Evaluation of Methyl Pyridyl-2,4-Dioxobutanoates and Some New Derived Ring Systems. 2015, <i>Med. Chem.</i> 2015, 11, 407-414.</p> <p>El-Hawash, S.A., Soliman, R., <i>Youssef, A. M.</i>, Ragab, H. M., Elzahhara, P. A., El-Ashmawey,</p>



I. M., Wahab, A. E., Shaat, I. A., Design, Synthesis and Biological Screening of Some Pyridinylpyrazole and Pyridinylisoxazole Derivatives as Potential Anti-inflammatory, Analgesic, Antipyretic and Antimicrobial Agents. *Med. Chem.* 2014, 10, 318-338.

Masoud, G. N., Youssef, A. M., Abdel Khalek M. M., AbdelWahab, A. E. , Labouta, I. M. and Hazzaa, A. A. B. Design, Synthesis, and Biological Evaluation of New 4-Thiazolidinone Derivatives Substituted with Benzimidazole Ring as Potential Chemotherapeutic Agents. *Med. Chem. Res.* 2013, 22,707-725.

Rida, S. M., Youssef, A. M., Badr, M. H.Malki, A., Sherif, Z. A. and Sultan, A. S. Design, Synthesis and Evaluation of Novel Benzimidazoles, Benzothiazoles and BenzofuransIncorporating Pyrazole Moiety as Antiangiogenic Agents. *Arzneimittelforschung* 2012, 62, 63–74.

Youssef, A. M.,Malki, A.,Badr, M. H.Elbayaa, R. Y. and Sultan, A. S. Synthesis and Anticancer Activity of Novel Benzimidazole and Benzothiazole Derivatives against HepG2 Liver Cancer Cells. *Med. Chem.* 2012, 8, 151-162.

Hashioka, S. McLarnon, J. G., Ryu, J. K., Youssef, A. M., Abd-El-Aziz, A. S., Neeland E. G., Klegeris, A. Pyrazole Compound 2-MBAPA as a Novel Inhibitor of Microglial Activation and Neurotoxicity *in vitro* and *in vivo*. *J. Alzheimer's Dis.* 2011, 27, 531–541.

Malki, A., Youssef, A. Antidiabetic Drug Metformin Induces Apoptosis in Human MCF Breast Cancer via Targeting ERK Signaling. *Oncol. Res.* 2011, 19, 275–285.



Youssef, A. M., Neeland, G. E., Villanueva, E. B., White, M.S., El-Ashmawy, I. M., Patrick, B., Klegeris, A., Abd-El-Aziz, A. S. Synthesis and Biological Evaluation of Novel Pyrazole Compounds. *Bioorg. Med. Chem.* 2010, 18, 5685-5696.

Youssef, A. M., White, M.S., Villanueva, E. B., El-Ashmawy, I. M., Klegeris, A. Synthesis and Evaluation of Novel Pyrazolyl-2,4-thiazolidiniones as Anti-inflammatory and Neuroprotective Agents. *Bioorg. Med. Chem.* 2010, 18, 2019-2028.

Rida, S. M., Saudi, M. N. S., Youssef, A. M., Halim, M. A. Synthesis and Biological Evaluation of the Pyrazole Class of Cyclooxygenase-2-Inhibitors. *Lett. Org. Chem.* 2009, 6, 282-288.

Saudi, M. N. S., Youssef, A. M., Badr, M. H., Elbayaa, R. Y., El-azzouni, M. Z., Mossallam, S. F., Baddour, N. M. and Eissa, M. M. Synthesis of Substituted Pyrimidinedione Derivatives as Potential Schistosomicidal Agents. *Lett. Drug Des. Discov.* 2009, 6, 268-277.

Youssef, A. M., Noaman, E. Synthesis and Evaluation of Some Novel Benzothiazole Derivatives as Potential Anticancer and Antimicrobial Agents. *Arzneimittel-Forschung (Drug Research)* 2007, 57, 547-553.

Youssef, A. M., Saudi, M. N. S., Omar, H. M. G., Baraka, A. M. Synthesis and Biological Evaluation of Some Monopyrazolyl and Dihydrobipyrazolyl Derivatives as Anti-inflammatory-Antimicrobial Agents. *Alex. J. Pharm. Sci.* 2007, 21, 103-111.

Saudi, M. N. S., Youssef, A. M., Shaat, I. A.



Synthesis and Biological Evaluation of Some Tacrine Analogues: Novel Acetylcholinesterase Inhibitors for Treatment of Alzheimer's Disease. *Alex. J. Pharm. Sci.* 2007, 21, 1-7.

Omar, A.-M. M. E., Ahmed, I. C., El-Sayed, O. A., *Youssef, A. M.*, Hassan, D. A., El-Ashmawy, I. Novel Benzothiazole-2-Carbamates As Potential Anthelmintic Agents. *Alex. J. Pharm. Sci.* 2007, 21, 75-87.

Saudi, M. N. S., *Youssef, A. M.*, Badr, M. H., Elbayaa, R. Y. Synthesis and Evaluation of New Phenylazopyrazoles and Pyrazolinophenylhydrazones as Potential Antimicrobial Agents. *Alex. J. Pharm. Sci.* 2007, 21, 159-164.

Youssef, A. M., Czezowski, C., Mohamed, H. M., Ata, A., Abd-El-Aziz, A. S. Synthesis and Biological Evaluation of Benzothiazole Derivatives of Pyrimidines Acrylonitriles, and Coumarins. *Heterocycles*, 2006, 68, 347-355.

Rida, S. M., Shafik, R. M., Ashour, F. A., *Youssef, A. M.* Synthesis of 2-(pyrimidin-2-yl-amino)-1H-Benzimidazoles and Tricyclic Benzimidazolo Bridge Head Nitrogen Compounds as Potential Antibacterial, Antifungal and Antiviral Agents. *Alex. J. Pharm. Sci.*, 2003, 17, 125-129.

Youssef, A. M., Safo, M. K., Danso-Danquah, R., Joshi, G. S., Kister, J., Marden, M., Abraham, D. J. Synthesis and X-ray studies of Chiral Allosteric Modifiers of Hemoglobin. *J. Med. Chem.*, 2002, 45, 1184-1195.

Abraham, D. J., Joshi, G. S., Hoffman, S. J., Grella, M., Danso-Danquah, R., *Youssef, A. M.*, Safo, M. K., Kulkarni, S. A., New Chiral



	<p>Allosteric Effectors of Hemoglobin. US Patent No. 6,486,342, 2002.</p>
<p>Conferences & workshops</p>	<p><i>Youssef, A. M., Malki, A.</i> Synthesis and Anticancer Activity of Novel Quinuclidinone Derivatives against Breast Cancer Cells Presented at DUPHAT 2013, Dubai, UAE, March 10-12, 2013.</p> <p><i>Youssef, A. M., Malki, A., Badr, M. H., Elbayaa, R. Y., Sultan, A. S.</i> Synthesis and Anticancer Activity of Novel Benzimidazole and Benzothiazole Derivatives against HepG2 Liver Cancer Cells. Presented at 3rd EPS Global International Forum of Regional and Targeted Cancer Therapies (RTCT) Shanghai, China, October 28-30, 2011.</p> <p><i>Youssef, A. M., White, M.S., Villanueva, E.B., El-Ashmawy I. M., Klegeris, A.</i> Neuroprotective and Anti-inflammatory Properties of Novel Pyrazolyl-2,4-thiazolidinediones. Presented at The XVIII WFN World Congress on Parkinson's Disease and Related Disorders Miami Beach, Florida, December 13-16, 2009.</p> <p><i>Abd-El-Aziz A. S., Youssef A. M., Neeland E., Villanueva, E.B., White, M.S., Klegeris A.</i> Neuroprotective and Anti-inflammatory Properties of Novel Pyrazolo[3,4-d]pyrimidines. Presented at 3rd Annual Canadian Neuroscience Association Meeting, Vancouver, British Columbia, Canada, May 24-27, 2009</p> <p><i>Abd-El-Aziz A. S., Youssef A. M., Neeland E., Klegeris A.</i> Synthesis and Biological Evaluation of Novel Pyrazole and Pyrazolo[3,4-d]pyrimidines as Anti-inflammatory Agents. Presented at Ehrlich II, 2nd World Conference on Magic Bullets,</p>



Nurnberg, Germany, October 3-5, 2008.

Saudi, M. N. S., *Youssef, A. M.*, Badr, M. H., Elbayaa, R., El-azzouni, M. Z., Massallam, S. F., Baddour, N. M., Eissa, M. M. Synthesis of Substituted Pyrimidinedione Derivatives as Potential Schistosomicidal Agents. Presented at 2nd EuChemS Chemistry Congress Chemistry: The Global Science, Torino, Italy, September 16-20, 2008.

Youssef, A. M., Badr, M. H., Elbayaa, R. Y. Synthesis and Antitumor Activity of 2-Substituted Benzimidazoles. Presented at the 68th International Congress of FIP, Basel, Switzerland, August 29-4 September, 2008.

Rida, S. M., *Youssef, A. M.*, Badr, M. H. Synthesis and Evaluation of Novel 1,3,4-Trisubstituted Pyrazole Derivatives as Antiangiogenic Agents. Presented at the 6th Pharmaceutical Sciences Conference, Assiut, Egypt, March 12&13, 2008.

Youssef, A. M., Saudi, M. N. S. Synthesis and Biological Evaluation of Some Monopyrazolyl and Dihydrobipyrazolyl Derivatives as Anti-inflammatory-Antimicrobial Agents. Presented at the 10th Ibn Sina International Conference on Pure and Applied Heterocyclic Chemistry, Luxor, Egypt, February 17-20, 2007.

Omar, A.-M. M. E., Ahmed, I. C., El-Sayed, O. A., *Youssef, A. M.*, Hassan, D. A., El-Ashmawy, I. Synthesis and Evaluation of New Benzothiazole and Benzothiazole-2-Carbamate Derivatives As Potential Anthelmintic Agents. Presented at the 30th International Conference of Pharmaceutical Sciences, Cairo, Egypt, December 19-21, 2006.



Youssef, A. M. Synthesis of Some Novel Benzothiazole Derivatives of Potential Therapeutic Interest. Presented at Al-Azhar 4th International Conference for Pharmaceutical and Biological Sciences, Cairo, Egypt, February 13-15, 2006.

Rida, S. M., Saudi, M. N. S., *Youssef, A. M.* Synthesis and Biological Evaluation of Some Pyrazole Derivatives. Presented at Al-Azhar 4th International Conference for Pharmaceutical and Biological Sciences, Cairo, Egypt, February 13-15, 2006.

Youssef, A. M., Czezowski, C., Mohamed, H. M., Ata, A., Abd-El-Aziz, A. S. Coumarins and Pyrimidines incorporating Benzo[d]thiazole. Presented at the 88th Canadian Chemistry Conference Abstracts, Saskatoon, Saskatchewan, Canada, 28 May-1 June, 2005.

Youssef, A. M., Saudi, M. N. S. Synthesis and Biological Evaluation of Some Tacrine Analogues. Novel Acetylcholinesterase Inhibitors for the Treatment of Alzheimer's Disease. Presented at the 9th Ibn Sina International Conference on Pure and Applied Heterocyclic Chemistry, Sharm El-Sheikh, Egypt, December 11-14, 2004.

Youssef, A. M., Safo, M. K., Danso-Danquah, R., Joshi, G. S., Abraham, D. J. Synthesis and X-ray Studies of Chiral Allosteric Modifiers of Hemoglobin. Presented at the 3rd Annual School of Pharmacy Research Day, Virginia Commonwealth University, Richmond, Virginia, USA, 2000.

Youssef, A. M., Safo, M. K., Danso-Danquah, R., Joshi, G. S., Kister, J., Marden, M., Abraham, D. J. Synthesis and Computer-



Aided Drug Design of Chiral Allosteric Modifiers of Hemoglobin. Presented at the 17th Annual Symposium for Daniel T. Watts and Forbes, Medical College of Virginia, Richmond, Virginia, USA, October 12-13, 2000.

Youssef, A. M., Safo, M. K., Abraham, D. J. Structure/Function of Allosteric Effectors of Hemoglobin. Presented at the 26th National Medicinal Chemistry Symposium, Virginia Commonwealth University, Richmond, Virginia, USA, June 14-18, 1998.

Youssef, A. M., Rida, S. M. Shafik, R. M., Ashour, F. A. Synthesis of 2-(pyrimidin-2-yl-amino)-1H-Benzimidazoles and Tricyclic Benzimidazolo Bridge Head Nitrogen Compounds as Potential Antibacterial, Antifungal and Antiviral Agents. Presented at the First International Middle-East Conference in Pharmaceutical Sciences, Jordan University of Sciences and Technology, Irbid-Jordan, May 3-5, 1993.

Youssef, A. M., Rida, S. M. Shafik, R. M., Ashour, F. A. Synthesis of Phenylaminomethyl Benzimidazole Derivatives as Potential Antibacterial, Antineoplastic, and Antiviral Agents. Presented at the First International Middle-East Conference in Pharmaceutical Sciences, Jordan University of Sciences and Technology, Irbid-Jordan, May 3-5, 1993.

"Workshop on Taking your Experiential Education Program to the Next Level" Al Ain University of Science and Technology Abu Dhabi, United Arab Emirates, 3-5 March, 2019.

The Third Regional Faculty Development



Workshop on “Best Practices for Planning and evaluation of Experiential Education” held at AAU Abu Dhabi campus, United Arab Emirates, March 4-5, 2018.

The Second Regional Faculty Development Workshop on “Best Practices for Planning Educational Assessment and Curriculum Mapping” held at AAU Abu Dhabi campus, United Arab Emirates, March 5 - 6, 2017.

Workshop entitled “ACHC pharmacy accreditation process and standards” held at AAU, United Arab Emirates on 23 February 2017.

Workshop for professional continuous development entitled “Design, Develop and Measuring Learning Outcomes based on CAA and align with the Qualifications Framework for the Emirates (QFEmirates)”, Al Ain, United Arab Emirates on 17/11/2016.

"Workshop on Curricular Design and Delivery" Al Ain University of Science and Technology Abu Dhabi, United Arab Emirates, 13-14 March, 2016.

"Molecular Docking, Virtual Screening and Biologics Discovery" College of Pharmacy, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 6-7 March, 2016.

"Lecture on Curricular Updates for Pharmacy Education" College of Pharmacy, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 20 December, 2015.

"Quality and Accreditation the Present and Prospective" The First International Conference of the Quality Assurance and Accreditation center, Cairo University, 15



	<p>April, 2008.</p> <p>"Towards the Development of Education System in the Arab World" The fifth Arabic Conference about the systematization of teaching and learning, League of Arab States, 16-17 April, 2005.</p> <p>Seminar and Workshop Series on "The Scientific Uses of Informatics" February 21-24, 2005 Faculty of Pharmacy, University of Alexandria offered by the Development and Application of Advanced Instrumental Analysis and Drug Quality Control Curriculum (DAQC) Project.</p> <p>BioVision Alexandria 2004 "The New life Sciences from Promises to practice" Bibliotheca Alexandrina, 3-6 April 2004.</p>
<p>Professional and Scientific Activities</p> <p>(optional)</p>	<p>1. Master/PhD theses supervision</p> <p>Master thesis of Nourhan Emad Hamdy under supervision. Title: Design, Synthesis and Biological Evaluation of Novel Quinoxaline Derivatives.</p> <p>Master thesis of Sherine Mahmoud Sameh (2014). Title: Isolation, Characterization of Phenazines and Study its Possible Biotechnological Applications.</p> <p>Master thesis of Shimaa Ahmed Hassan (2013). Title: Modification of the Signaling System during Apoptosis in Hepatocellular Carcinoma by Anticancer Derivatives.</p> <p>Master thesis of Perihan Ahmed Saad (2012). Title: Design, Synthesis and Biological Screening of Some New derivatives of Pyridine Compounds.</p> <p>Master thesis of Amira Saeid Abd Elmotty (2012). Title: The Signal Transducers and</p>



Activator of Transcription (STAT) and Hepatocellular Carcinoma, HCC.

Master thesis of Noura Mohamed Hussein (2012). Title: Role of RAS Signaling Pathway Modulation in Hepatocellular Carcinoma, HCC.

Master thesis of Georgina Nabil Metry (2011). Title: Synthesis and Biological Evaluation of Some New Heterocyclic Compounds with Potential Antiviral Activity.

Master thesis of Dina Ali Hassan (2006). Title: Studies in the field of intestinal worm treatment by chemical methods: Synthesis of novel anthelmintic compounds belonging to heterocyclic benzothiazole ring.

2. Visiting Professors to foreign universities

Visiting Professor, University of British Columbia (Okanagan), British Columbia, Canada, 2008, 2009.

Visiting Professor, University of Winnipeg, Winnipeg, Manitoba, Canada, 2005.

Postdoctoral with Prof. Donald Abraham (editor for the 6th edition of Burger's Medicinal Chemistry), Virginia Commonwealth University, 2001.

3. Teaching activities

Teaching the theoretical and practical courses of Pharmaceutical Chemistry for the 3rd and 4th year undergraduate students, Faculty of Pharmacy, Alexandria University.

Teaching the theoretical and practical courses of Medicinal Chemistry and Drug Design for undergraduate students (clinical program), Faculty of Pharmacy, Alexandria



	<p>University.</p> <p>Teaching the theoretical courses of computer-aided drug design and molecular modeling, structure based drug design and QSAR for Pharmaceutical Chemistry graduate students, Faculty of Pharmacy, Alexandria University.</p> <p>Teaching the theoretical and practical courses of Medicinal Chemistry, Organic Chemistry for undergraduate students, Al Ain University of Science and Technology Al Ain, United Arab Emirates.</p> <p>4. Others</p> <p>Member of blended learning committee, Faculty of Pharmacy, University of Alexandria, Egypt, 2020.</p> <p>Participation in the college preparation for self-study submitted to Commission for Academic Accreditation (CAA) for renewal of accreditation of BSc. Pharm. Program, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 2013-2019.</p> <p>Participation in the college preparation for Accreditation Council for Pharmacy Education (ACPE) certification, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 2013-2019.</p> <p>Member of research, postgraduate, scientific conferences and workshops committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 2012-2019.</p> <p>Member of professional development committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates,</p>
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	<p>2018, 2019.</p> <p>Member of quality assurance committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 2013, 2014, 2019.</p> <p>Member of curriculum committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 2015, 2016.</p> <p>Head of transfer committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 2013, 2014.</p> <p>Member of library and reading resources committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 2012-2014.</p> <p>Member of university seminars and conferences committee, Al Ain University of Science and Technology, Al Ain, United Arab Emirates, 2013.</p> <p>Member of continuous improvement and quality assurance for accreditation project (CIQAP), Faculty of Pharmacy, University of Alexandria, Egypt, 2006-2012.</p> <p>Member of Quality Assurance Unit (QAU), Faculty of Pharmacy, University of Alexandria, Egypt, 2006-2012.</p> <p>Member of cultural committee, Department of pharmaceutical chemistry, Faculty of Pharmacy, University of Alexandria, Egypt, 2008-2012.</p> <p>Member in the committee for following up cleaning of the internal environment, Faculty of Pharmacy, University of Alexandria, Egypt, 2010, 2011.</p> <p>Member in the committee for participating</p>
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	<p>in the project of a university without smoking, Faculty of Pharmacy, University of Alexandria, Egypt, 2010, 2011.</p> <p>Member of committee of instruments, Faculty of Pharmacy, University of Alexandria, Egypt, 2009.</p> <p>Cultural committee consultant for the student union 2008 and 2009, Faculty of Pharmacy, University of Alexandria, Egypt.</p>
Awards	<p>Scientific Encouragement Prize of Alexandria University 2010.</p> <p>Egyptian Scholarship in Pharmaceutical Sciences 1996.</p> <p>Biography Enlisted in: <i>The Marquis Who's Who in the World</i>. named a 2019 Lifetime Achievement Award recipient.</p> <p>Ideal Student 1985, and 1987.</p>