

CURRICULUM VITAE

1- PERSONAL DATA :

Last Name: El-Gogary

Initials : Tarek Ma'amon

Date of birth: 29th of March 1968.

Affiliation: Professor of physical chemistry, Chemistry Department, Faculty of Science, Jazan, University, Saudi Arabia.

Address (Work): Permanent address: Department of Chemistry, Faculty of Science, Damietta University, New Damietta city, Egypt.

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Current Address: Faculty of Science, Jazan University, P.O.Box 2097, Jazan, Saudi Arabia.

Marital status: Married.

2- QUALIFICATIONS:

B. Sc.: Chemistry Department, Faculty of Science (Domyat Al-Gideda), Mansoura University, EGYPT, 1990, with grade excellent with honor degree.

M. Sc.: Chemistry Department, Faculty of Science, Mansoura University, Mansoura, EGYPT. 1994.

Ph. D.: De Montfort University, Leicester, UK, 1998, (Channel Scheme with Mansoura University, Egypt).

Demonstrator: Chemistry Department, Faculty of Science, Domyat Al-Gideda, Mansoura University, EGYPT. 1990- 1994.

Assistant lecturer: Chemistry Department, Faculty of Science, Domyat Al-Gideda, Mansoura University, EGYPT. 1994 - 1996.

Research Student: De Montfort University, Leicester, UK.1996- 1998.

Lecturer: Chemistry Department, Faculty of Science, Domyat Al-Gideda, Mansoura University, EGYPT. 1998 – March, 2004.

Associate Professor: Chemistry Department, Faculty of Science, Domyat Al-Gideda Mansoura University, EGYPT. March, 2004- November 2009.

Full Professor: Chemistry Department, Faculty of Science, Domyat Al-Gideda, Mansour: University, EGYPT. November 2009- till now.

Scientific Collaboration (Short visits):

- Institute fuer Theoretische Chemie und Molekulare Strukturbiologie University of Vienna Rennweg 95b, A-1030 Vienna, Austria from June 2002 to Oct. 2002.

- Institute fuer Theoretische Chemie und Molekulare Strukturbiologie University of Vienna Rennweg 95b, A-1030 Vienna, Austria, from Dec. 2002 to Feb. 2003.

- Institute fuer Theoretische Chemie und Molekulare Strukturbiologie University of Vienna Rennweg 95b, A-1030 Vienna, Austria, from July 2006 to Sep. 2006.

- Institute fuer Theoretische Chemie und Molekulare Strukturbiologie University of Vienna Rennweg 95b, A-1030 Vienna, Austria, from July 2007 to Sep. 2007.

- Institute fuer Theoretische Chemie und Molekulare Strukturbiologie University of Vienna Rennweg 95b, A-1030 Vienna, Austria, from July 2009 to Sep. 2009.

- Institute fuer Theoretische Chemie und Molekulare Strukturbiologie University of Vienna Rennweg 95b, A-1030 Vienna, Austria, from July 2011 to Aug. 2011.

- Università Politecnica delle Marche, Dipartimento di Scienze dei Materiali e della Terra Via Breccie Bianche. 60131 Ancona, Italy from June 2003 to September 2003.

3- TEACHING EXPERIENCES:

Undergraduate Courses:

- a) Principles of physical chemistry: (Gases, Liquids, Solids, Solution, Thermochemistry, Electrochemistry, Chemical Equilibrium, Ionic Equilibrium and nuclear chemistry. (2 Hours)
- b) Principles of Chemical Spectroscopy. (3 Hour)
- c) Advanced Molecular Spectroscopy (2 Hour)
- d) Principles of Photochemistry (1 Hour)
- e) Molecular Structure (1 Hour)
- f) Quantum Chemistry (2 Hours)
- j) Chemical thermodynamics (2 Hours)

Postgraduate Courses:

- a) Advanced course in Molecular Structure and Chemical Spectroscopy (2 Hour).
- b) Molecular Modelling (1 hour)
- c) Group theory and its applications

4- RESEARCH EXPERIENCES:

M. Sc. Theses Supervision:

‘Spectroscopic and theoretical studies on some heterocycles’ by S. F. El-Tantawy, Faculty of Science (Domyat), Mansoura University, Egypt.

Ph. D. Theses Supervision:

1- ‘Physico-Chemical Studies for the complexes of some Organic Compounds’ by A. Hilaly, Faculty of Science (Domyat), Mansoura University, Egypt.

2- ‘Ligataional and Pharmacological Applications of some NSAID’s and their Derivatives’ by Y. Sherif, Faculty of Science (Mansoura), Mansoura University, Egypt.

Computer Skills:

DOS, WNDOWS and UNIX operating systems.

Basic and Fortran coding

Experience with using: Gaussian 09, InsightII (Discovery DS4), MOPAC, Gamess, Jaguar, Hyperchem and TSAR software.

Others:

- Member of Chemie.de.
- Member of UK-QSAR
- Member of the Scientific Professionals Syndicate (Egypt).
- Member of Environment Friends Society (Egypt)

Training Courses Attended (Original copies of certificate are available):

- ‘*Basic Health and Safety*’, The Chartered Institute of Environmental Health, Leicester, UK, December 19th 1996.
- ‘*Authoring for the Internet I*’, De Montfort University, Department of Media & IT, Leicester, UK, November 5th 1997.
- ‘*Authoring for the Internet II*’, De Montfort University, Department of Media & IT, Leicester, UK, November 5th 1997.
- ‘*Windows 95*’, De Montfort University, Department of Media & IT, Leicester, UK, November 8th 1997.

- *'Exploring the Internet'*, De Montfort University, Department of Media & IT, Leicester, UK, November 11th 1997.
- *'Introduction to Presentation Packages'*, De Montfort University, Department of Media & IT, Leicester, UK, November 12th 1997.
- *'Introduction to Spreadsheets'*, De Montfort University, Department of Media & IT, Leicester, UK, November 28th 1997.
- *'Use of UV, IR and ICP Spectroscopic techniques in Identification of Organic, Inorganic, Natural and Synthesized Compounds'*, National Research Center, Cairo, Egypt, 2-19 April 2000.
- *Summer school on Computational Quantum Chemistry, SCQC*, Milan/ Italy, July 24-28, 2000.
- *Winter School on THE STATE OF THE ART OF PROTEIN-PROTEIN INTERACTION NETWORKS. The role of the "in silico" approach. Bologna, ITALY, February 8-14, 2004.*

Conferences Attended

- 1- T. M. EL-Gogary, '*Ab-initio Molecular Geometry and Normal Co-ordinate Analysis of Tetrahydrothiophene*' Chem1 Conferenc, Faculty of Science, Cairo University, Egypt, 6-9 March 2000.
- 2- T. M. El-Gogary and M. S. Soliman, '*Ab-initio Molecular Geometry and Normal Co-ordinate Analysis of Pyrrolidine*' 220th ACS National Meeting, Washington, DC, August 20-24, 2000.
- 3- T. M. El-Gogary and M. S. Soliman, '*Normal Coordinates and Molecular Force Field of Pyrrolidine*', 7th Ibn Sina International Conference on Pure and Applied Heterocyclic Chemistry, Alexandria, Egypt, 25-28 March 2000.
- 4- Tarek Ma'amon El-Gogary¹ and Yousery E. Sherif², *Design and Synthesis of Novel Non Stroidal Anti-inflammatory Drug of High selectivity to Human Cyclooxygenase-2 on the Basis of QSAR Studies. ACS meeting, San Diago, April 2001.*
- 5- T. M. El-Gogary, A. El-Dissouky, and A. S. Hilali, "*Molecular Mechanics, Quantum mechanics, Potentiometric and conductometric Studies on the complexes of Some Transition Metals with 5-Azorhodanine Derivatives* ", 10th Conference on Current Trends in Computational Chemistry, November 1-3, 2001, Jackson, Miss.
- 6- T. M. El-Gogary, A. Z. El-Sonbaty, and A. S. Hilali, "*Molecular Mechanics, Quantum mechanics, Potentiometric and conductometric Studies on the complexes of Some Rare Earth Metals with 5-Azorhodanine Derivatives* ", Model(l)ing 2001, The Annual International Meeting of the Molecular Graphics and Modelling Society, Erlangen, Germany, Sept. 17-21, 2001.
- 7- T. M. EL-Gogary, Laurence H. Patterson, Ketan Ruparelia, Paul Teesdale-Spittle, Michael I Needham and M. S. Soliman, "*Interaction of Anthraquinone Anti-Cancer Drugs with DNA, Biomolecular Interactions*", a conference dedicated to Peter A. Kollman, The Annual International Meeting 2002 of the Molecular Graphics and Modelling Society, Wills Hall, Bristol, UK, April 3rd -5th 2002.
- 8- Eman M. EL-Gendy, Tarek M. EL-Gogary* and A. M. Summan, 'Theoretical and Experimental Studies on the photo-skin sensitizers; Imperatorin and Alloimperatorin' Published in Mansoura University conference, April 2003.

LIST OF PUBLICATIONS

- 1- T. M. El-Gogary, *Ab-initio Molecular Geometry and Normal Co-ordinate Analysis of Tetrahydrothiophene molecule*' Spectrochimica Acta part A, 57, 1405-1415, 2001.
- 2- T. M. El-Gogary* and M. S. Soliman, *Ab-initio Molecular Geometry and Normal Co-ordinate Analysis of pyrrolidine molecule*' Spectrochimica Acta part A, 57, 2647-2657, 2001.
- 3- T. M. El-Gogary*, A. A. El-Bindary and A. S. Hilali, '*Temperature and substituent effects on the dissociation constants of 5-azorhodanine derivatives. Semi-empirical quantum mechanical calculation*' Spectrochimica Acta part A, 58, 447-455, 2002.
- 4- A. Z. El-Sonbati, A. A. El-Bindary, A. El-Dissouky, T. M. El-Gogary and A. S. Hilali, "*Substituents effect on the spectral studies on ruthenium (III) complexes of 5(-4'-derivatives phenyldiazo)-3-phenyl-2-thioxo-4-thiazolidinone*" Spectrochimica Acta part A, 58, 1633-1639, 2002.
- 5- T. M. EL-Gogary*, *Spectral and Computational behavior of some Anthraquinones DNA-Affinic Agents*, Canadian Journal of Analytical Science and Spectroscopy, 48(5), 314 2003.
- 6- T. M. EL-Gogary*, '*Molecular Complexes of some Anthraquinone anti-cancer Drugs: Experimental and Computational Study*, Spectrochimica Acta part A, 59 (5) pp. 1009-1015, 2003.
- 7- T. M. EL-Gogary*, A. El-Dissouky and A. S. Hilali, '*Molecular Mechanics, Quantum Mechanics, Potentiometric and Conductometric studies on the complexes of some rare earth metals with 5-azorhodanine derivatives*' Inter. J. Quantum Chem., 91 (6), pp 685-694, 2003.
- 8- T. M. EL-Gogary* and Eman EL-Gendy '*Noncovalent Attachement of Xanthotoxine Derivatives With DNA: Hartree-Fock and Density Functional Studies on the Probes*' Spectrochimica Acta-A, 59, 2635-2644, 2003.
- 9- Malose J. Mphahlele, Ahmed M. El-Nahas and Tarek M. El-Gogary, '*Spectroscopic and quantum chemical studies on the structure of 2-arylquinoline-4(1H)-thione derivatives*', Journal of Molecular Structure, 690 (2004) 151-157.
- 10- Tarek M. El-Gogary*, Mostafa A. Diab and Shreen F. El-Tantawy, '*Spectroscopic and quantum mechanical studies of substituted anilines and their charge-transfer complexes with iodine in different solvents*', Monatshefte für Chemie, 137, (2006), 1027-1042.

- 11- Tarek M. El-Gogary*, Mostafa A. Diab and Shreen F. El-Tantawy, Spectroscopic studies of molecular interactions involving 2,6-diethylaniline and N-ethylaniline donors and iodine as an electron acceptor in different solvents, *Journal of Spectrochimica Acta A*, 66 (2007), 94-101.
- 12- Tarek M. El-Gogary* and Gottfried Koehler, 'Interaction of psoralens with DNA-Bases (I) An ab initio Quantum Chemical, Density Functional Theory and Second-Order MØller-Plesset Perturbational Study' *Journal of Molecular Structure: Theochem*, 808 (2007) 97-109.
- 13- Tarek M. El-Gogary* and Ahmed M. El-Nahas, "Origin of reverse stability of diphosphouracil tautomers compared to their analogue uracil: DFT and Ab initio study", *Journal of Molecular Structure: Theochem*, 851 (2008) 54-62.
- 14- Malose J. Mphahlele and Tarek M. El-Gogary* "Spectroscopic and quantum chemical studies on the structure of 2-iodomethyl-1-(phenylmethyl)-1,5,6,7-tetrahydroindol-4-ones prepared *via* iodine-methanol-promoted iodocyclization of 3-benzylamino-2-(2-propenyl)cyclohexenones" *journal of Chemical research APRIL* (2008) 227-231.
- 15- Tarek M. El-Gogary 'Quantum Chemical Studies on the potentially important imidates' *Journal of Molecular Structure: Theochem*, 861 (2008) 62-67.
- 16- Tarek M. El-Gogary* and Gottfried Koehler, 'Interaction of psoralens with DNA-Bases (II) An ab initio Quantum Chemical, Density Functional Theory and Second-Order MØller-Plesset Perturbational Study' *Journal of Molecular Structure: Theochem*, 589 (2009) 57-64.
- 17- Tarek M. El-Gogary, 'Interaction of Angelicin with DNA-Bases (III) An ab initio Quantum Chemical, Density Functional Theory and Second-Order MØller-Plesset Perturbational Study' *International Journal of Quantum Chemistry Vol 110(8)*, 1445–1454 (2010).
- 18- Abdullah G. Al-Sehemi and Tarek M. EL-Gogary* "Geometry and Thermodynamic Stabilities of Rhodanine Tautomers and Rotamers: Quantum Chemical Study" *Journal of Molecular Structure: Theochem*, 907 (2009) 66-73.
- 19- Tarek M. El-Gogary*, Abdel-Nasser M. A.A. Alaghaz, and Reda A. A. Ammar, "Quantum chemical calculations and experimental investigations on 2-aminobenzoic acid-cyclodiphosph(V)azane derivative and its homo-binuclear Cu(II) complex", *Journal of Molecular Structure* 1011 (2012) 50–58.
- 20- Tarek M. El-Gogary*, Abdullah G. Al-Sehemi and Abdel-Nasser M. A. Alaghaz, "Synthesis, Characterization and Quantum Chemical ab initio calculations of New Dimeric Aminocyclodiphosph(V)azane and its Co (II), Ni(II) and Cu(II) Complexes" *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 95 (2012) 414–422.

- 21- Abdullah G. Al-Sehemi, Tarek M. El-Gogary*, Karl Wolschann and Gottfried Koehler, “ quantum chemical studies on chemically-modified bases: stability of phosphocytosine conformers”. ISRN Physical Chemistry Volume 2013, Article ID 146401, 10 pages <http://dx.doi.org/10.1155/2013/146401>
- 22- Abdullah G. Al-Sehemi and Tarek M. El-Gogary*, “Inversion barrier of phosphorous-containing compounds: Quantum chemical study” to be submitted.
- 23- Mohamed A. Waly, Ibrahim I. Elhawary, Tarek M. Elgogary "Utilization of nicotinonitrile-2-thiol in the synthesis of new thiepino[2,3-b]pyridine derivative as an in vitro novel antitumor potent" **Medicinal Chemistry Research** ISSN 1054-2523 Volume 22 Number 4 Med Chem Res (2013) 22:1674-1678 DOI 10.1007/s00044-012-0161-4.
- 24- Muneerah M. Al-Mogren , Abdel-Nasser M.A. Alaghaz , Tarek M. El-Gogary*, Salwa A.H. Albohy 'Synthesis, spectroscopic, thermal and quantum chemical studies on trivalent erbium NO chelating sulfamonomethoxine-cyclophosph(V)azane complex' Journal of Molecular Structure Volume 1048, 24 September 2013, Pages 202–209.
- 25- Muneerah M. Al-Mogren, Abdel-Nasser M.A. Alaghaz, Tarek M. El-Gogary* ' Spectral and quantum chemical studies on 1,3-bis(N¹-4-amino-6-methoxypyrimidinebenzenesulfonamide-2,2,4,4-ethane-1,2-dithiol) -2,4-dichlorocyclodiphosph(V)azane and its erbium complex' Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 118 (2014) 481–487
- 26- Abdel-Nasser M.A. Alaghaz, Reda A.A. Ammar, Gottfried Koehler, Karl Peter Wolschann, Tarek M. El-Gogary*, Synthesis, spectral and quantum chemical studies on NO-chelating sulfamonomethoxine-cyclophosph(V)azane and its Er(III) complex Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 128 (2014) 724–729.
- 27- Muneerah M. Al-Mogren and Tarek M. El-Gogary*, Structure, stability, energy barrier and ionization energies of chemically modified DNA-bases: quantum chemical calculations on 37 favored and rare tautomeric forms of tetraphosphoadenine, Computational and Theoretical Chemistry 1052 (2015) 35-41.
- 28- Jamelah S. Al-Otaibi, Paul Teesdale Spittle and Tarek M. EL Gogary*, "Interaction of anthraquinone anti-cancer drugs with DNA; Experimental and computational quantum chemical study", Journal of Molecular Structure 1127 (2017) 751-760. <http://dx.doi.org/10.1016/j.molstruc.2016.08.007>.
- 29- Jamelah S. Al-Otaibi and Tarek M. EL Gogary*, " Synthesis of novel anthraquinone anti-cancer drugs: molecular structure, molecular chemical reactivity descriptors and their interactions with DNA.", Journal of Molecular Structure 1130 (2017) 799-809. DOI: <http://dx.doi.org/10.1016/j.molstruc.2016.10.098>.
- 30- Tarek M. EL Gogary, Jamelah S. Alotaibi, Paul Teesdale Spittle, Interaction of anthraquinone anti cancer drugs with DNA“ LAP LAMBERT Academic Publishing, 2016.

- 31- AG Al-Sehemi, A Irfan, M Alfaifi, AM Fouda, TM El-Gogary, DA Ibrahim "Computational study and in vitro evaluation of the anti-proliferative activity of novel naproxen derivatives", *Journal of King Saud University-Science*, 2017.
- 32- Safinaz H. El-Demerdash, Tarek M. El-Gogary, and Ahmed M. El-Nahas1, "A Thermochemistry and Kinetic Study on the Thermal Decomposition of Ethoxyquinoline and Ethoxyisoquinoline" *Int J Chem Kinet.* 2018;1–8. DOI: 10.1002/kin.21186.
- 33- Mohamed A. M. Mahmoud, Safinaz H. El-Demerdash, Tarek M.El-Gogary*, Ahmed M. El-Nahas*, "Atmospheric Oxidation of Methyl Propanoate by the OH radical". ISSN 0036-0244, *Russian Journal of Physical Chemistry A*, 2018, Vol. 92, No. 12, pp. 2475–2483.
- 34- Jamelah S. Al-Otaibi, Tarek M. EL Gogary and Diaa A. Ibrahim, Design, Design, Synthesis and Biological Evaluation of Pyrido[2,3-d] pyrimidine derivatives as potential anticancer agents' Accepted for publication in *Letters of Drug Design and Discovery* (2018), DOI : [10.2174/1570180815666180219163254](https://doi.org/10.2174/1570180815666180219163254).
- 35- Jamelah S. Al-Otaibi, Yehya M. Al Hazmi, Kamal M. Masmali, Tarek M. EL Gogary, 'Geometry and electronic properties of Vitamin C' *Turkish Comp Theo Chem (TC&TC)*, **2(1)**, (2018), 38 – 43.
- 36- Jamelah S. Al-Otaibi, Yehya M. Wasli, and Tarek M. EL Gogary 'Theoretical and Experimental Studies on anticancer drug Mitoxantrone', Accepted for publication in the *Journal of Molecular Structure* 1173 (2018) 1-11, <https://doi.org/10.1016/j.molstruc.2018.07.020>.
- 37- Jamelah S. Al-Otaibi, Tarek M. EL Gogary and Safinaz H. El-Demerdash, Umbrella Inversion and Structure of Phosphorus-Containing Compounds: A Quantum Chemical Study' Accepted for publication in the *Journal of Theoretical and Computational chemistry* (2018).

BRIEF DESCRIPTION OF RESEARCH INTERESTS

- 1) Studying the electronic behavior of drugs and other chemical Species by spectroscopic and computational (Molecular & Quantum Mechanics) tools
- 2) Exploring the electronic excited states by quantum mechanical methods.
- 3) Photochemical, photophysical and photobiological properties of potential drugs.
- 4) Studying the non-covalent interactions especially, the formation of Charge –transfer complexes using spectroscopic (UV-VIS, NMR, ESR, IR and electrical Measurements) and theoretical (Molecular Modelling) tools. This includes equilibrium constant and thermodynamic functions determination.
- 5) Investigation of Molecular Interactions
- 6) Studying Drug/DNA Interactions by spectroscopic (UV-VIS, NMR, ESR, IR) and theoretical tools
- 7) Normal Mode Analysis of medium sized organic molecules and calculation of force constants and consequently force field
- 8) Computer-aided drug design; QSAR
- 9) Docking: drugs/receptor interactions
- 10) Pharmacophore methodology

Administrative work: chemistry department coordinator, committee of: scientific research, labs and instrumentations, quality assurance, international cooperation, Academic development.