

Chemistry Department
Faculty of Science
Damanhour University
Damanhour, Egypt

PERSONAL DATA

Name: Gehan Shaaban Mohamed Elasala

Date of birth: August 16, 1981

Nationality: Egyptian

Marital status: Married

Address: Chemistry Department, Faculty of Science, Damanhour University, Damanhour, Egypt.

E-mail: drgehanelasala@gmail.com drgehanelasala@sci.dmu.edu.eg

EMPLOYMENT

Associate Professor of Inorganic Chemistry, Chemistry Department- Faculty of Science- Damanhour University, Egypt from 30/11/2021.

Lecturer, Chemistry Department- Faculty of Science- Damanhour University, Egypt (2015).

Assistant lecturer, Chemistry Department-Faculty of Science-Damanhour- Alexandria University, Egypt (2011).

Demonstrator, Physics & Chemistry Department-Faculty of Education- Damanhour- Alexandria University, Egypt (2003).

ACADEMIC QUALIFICATION

Ph.D. in Chemistry, Chemistry Department-Faculty of Science-Damanhour University, Egypt (2015).

M.Sc. in Chemistry, Chemistry Department-Faculty of Science- Alexandria University, Egypt (2011).

B.Sc. in Science & Education, Physics & Chemistry Department-Faculty of Education- Damanhour-Alexandria University, Egypt (2002).

TEACHING EXPERIENCES

- 1- Qualitative inorganic chemistry (Identification of acidic and basic radicals in simple salts – separation of basic mixtures).
- 2- Representative elements (The chemistry of S- and P- block elements).
- 3- Coordination chemistry and transition elements.

- 4- Volumetric analysis (preparation of standard solutions, neutralization , oxidation-reduction and precipitation titrations – complexometric reactions).
- 5- Gravimetric analysis.
- 6- Solution equilibrium.
- 7- Organometallic chemistry.
- 8- Nano chemistry and solid state.
- 9- Industrial inorganic chemistry.

LIST OF PUBLICATIONS

- 1- Solvatochromaticity and pH dependence of the electronic absorption spectra of some purines and pyrimidines and their metal complexes, Mamdouh S. Masoud, Medhat A. Shaker, Alaa E. Ali, Gehan S. Elasala, Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, (2011) 79 (3), pp 538-547.
- 2- Synthesis, computational, spectroscopic, thermal and antimicrobial activity studies on some metal urate complexes, Mamdouh S. Masoud, Alaa E. Ali, Medhat A. Shaker and Gehan S. Elasala, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, (2012) 90, pp 93-108.
- 3- Synthesis, spectral, computational and thermal analysis studies of metalloceftriaxone antibiotic, Mamdouh S. Masoud, Alaa E. Ali, Gehan S. Elasala, Journal of Molecular Structure, (2014), 1084, pp 259-273.
- 4- Synthesis, spectral, computational and thermal analysis studies of metallocefotaxime antibiotic, Mamdouh S. Masoud, Alaa E. Ali, Gehan S. Elasala, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, (2015), 149, pp 363-377.
- 5- Spectroscopic Studies and Thermal Analysis on Cefoperazone Metal Complexes, Mamdouh S Masoud, Alaa E Ali, Gehan S Elasala and Sherif A Kolkaila, Journal of Chemical and Pharmaceutical Research(2017), 9(4), pp 171-179.
- 6- Synthesis, spectroscopic, biological activity and thermal characterization of ceftazidime with transition metals, Mamdouh S Masoud, Alaa E Ali, Gehan S Elasala and Sherif A Kolkaila, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (2018), 193, pp 458–466.

- 7- Ligating, Spectral and Thermal Properties of Febuxostat Metal Complexes, Mamdouh S. Masoud, Alaa E. Ali, Gehan S. Elasala, Gomaa E. Amer : Journal of Chemical and Pharmaceutical Research (2018), 10(7): 198 -210.
- 8- Spectral and Biological Studies of Some Selected Thiouracil, Barbitol and Thiobarbituric Acid Complexes, Alaa E Ali, Doha Beltagy, Gehan S Elasala and Sherif A Kolkaila, Journal of Drug Design and Research (2018), 5(2): 1071.
- 9- Structural and thermal studies on some morpholine complexes, Mamdouh S Masoud, Alaa E Ali, Gehan S Elasala and Rehab E. Elwardany, Journal of Molecular Structure, (2019), 1175, pp 648-662.
- 10- Synthesis, Characterization, spectral, thermal analysis and Biological Activity studies of metronidazole complexes, Alaa E. Ali , Gehan S. Elasala and Riham S. Ibrahim, Journal of Molecular Structure, (2019), 1176, pp 673-684.
- 11- Synthesis, Characterization, Biological Activity and Thermal Studies of Trimethoprim Metal Complexes, Mamdouh S. Masoud, Alaa E. Ali, Gehan S. Elasala, Gomaa E. Amer, Journal of Drug Design and Research (2019), 6(1): 1074.
- 12- Spectral, thermal studies and biological activity of pyrazinamide complexes, Alaa E. Ali, Gehan S. Elasala, Essam A. Mohamed, Sherif A. Kolkaila, Heliyon 5 (2019) e02912.
- 13- Physicochemical Studies of Some Biologically Active Metal Complexes of Cefazolin Antibiotics, Mamdouh S Masoud, Alaa E Ali, Gehan S. Elasala, Seham F Sakr, and Sherif A Kolkaila, Journal of Chemical and Pharmaceutical Research (2020), 12(9): 42-52.
- 14- Synthesis and Characterization of Biologically Active Metal Complexes for Tenoxicam, Mamdouh S Masoud, Alaa E Ali, Gehan S Elasala, Seham F Sakr, and Sherif A Kolkaila, Journal of Chemical and Pharmaceutical Research (2020), 12(9): 29-41.
- 15- Structural and Thermal Analysis of Some Imipramine Complexes, Alaa E. Ali, Gehan S. Elasala, Essam A. Mohamed, Sherif A. Kolkaila, Journal of Materials Today: Proceeding (2021), 45, pp. 3692–3698.
- 16- Synthesis, Biological Activity and Thermal Characterization of Sulfadimidine with Transition Metals, Alaa E. Ali, Gehan S. Elasala, Mohsen M. T. El-Tahawy, Asmaa R. Sheha, Chemistry Research Journal (2021), 6(2):194-206.
- 17- Ligating Properties of Sulfaquinoxaline with some Transition Metal Ions, Alaa E. Ali, Gehan S. Elasala, Y. Sh. Mahrous, Marwa H. Eldeeb, Chemistry Research Journal (2021), 6(2):169-182.

- 18- Synthesis, characterization, spectral, thermal analysis and biological activity studies of some montelukast sodium complexes, Ali AE, Elasala GS, Ibrahim RS and Kolkaila AS, Journal of Chemical Research Advances (2021), 2(1): 26-41.
- 19- Synthesis and Characterization of Mixed-Ligand Complexes Containing Isonid and Ethanolamine, Alaa E. Ali, Gehan S. Elasala, Yasser Ramadan, Chemistry Research Journal (2021), 6(3):132-138.
- 20- Synthesis, Spectral, Characterization of Azithromycin with Transition Metals and a Molecular Approach for Azithromycin with Zinc for COVID-19, Sherif A. Kolkaila, Alaa E. Ali, Gehan S. Elasala, International Journal of Current Research and Review (2021), 13(23): 53-59.
- 21- Synthesis, Thermal Analysis and Characterization of Doxycycline Metal Complexes, Alaa E. Ali, Gehan S. Elasala, Rana M. Atta, Sherif A. Kolkaila, Chemistry Research Journal, (2022), 7(2):90-99.
- 22- Synthesis , Spectral, Characterization, Thermal Analysis, Conducting Properties and Biological A ctivity of Some Cefovecin Metal Complexes, Alaa E. Ali, Gehan S. Elasala, Tahra Abdelsabour, Chemistry Research Journal (2022), 7(6):1-23.
- 23- Synthesis and Physicochemical Studies for Novel Bioactive Metal Complexes of Macrolide Antibiotic Tylosin, Alaa E. Ali, Gehan S. Elasala, Yasser S. Mahrous, Mohamed H. Sharaf, Ismael M. Elkamhawy, Materials Sciences and Applications (2022), 13: 532-557.
- 24- Synthesis and Biological Activity and Thermal Analysis of Sulfaquinoxaline Mixed Metal Complexes, Alaa E Ali, Gehan S Elasala, Marwa H Eldeeb and Sherif A kolkaila, J Chem & its Appli, (2023), 2(1): 1-9.
- 25- Synthesis, Physicochemical Studies and Powder X-Ray Diffraction Analyses for New Niclosamide Metal Complexes with Significant Bioactive Behavior, Ismael M. Elkamhawy, Alaa E. Ali, Gehan S. Elasala, Mohamed H. Sharaf and Yasser Sh. Mahrous, ChemistrySelect (2023), 8(e202203210) : 1-20.
- 26- Spectroscopic study of solvent effects on the electronic absorption spectra of morpholine and its complexes, Mamdouh Saad Masoud, Alaa Eldin Ali, Gehan Shaaban Elasala and Rehab Elsaid Elwardany, European Journal of Chemistry (2023), 14 (1) : 53-64.

- 27- Spectroscopic Studies, Thermal Analysis and Molecular Docking of Amikacin Metal Complexes, Gehan S. Elasala, Soad S. Fyala and Alaa E. Ali, *Chemistry Research Journal*, (2023), 8(2): 32-41.
- 28- Photodegradation of antibacterial cefotaxime using Mn doped ZnO nanosphere, Aya M. Al-Gariaa, G.S. Elasala, Eman H. Ismail, Mostafa M.H. Khalil, Islam M. El-Sewify, *Inorganic Chemistry Communications* 158 (2023) 111434.
- 29- Validated Spectrophotometric Methods for Determination of Selegiline HCl as an Irreversible Inhibitor of Monoamine Oxidase in Pure Form and Pharmaceutical Formulations, Alaa E. Ali, Alaa S. Amin, Ayman A. Gouda, Ragab Y. Sharaf, Alaa M. Elkhatab, Gehan S. Elasala, *TWIST*, (2024), 19(1) : 176-186.
- 30- Synthesis, Spectroscopic Studies, Thermal Analysis and Molecular Docking of Chloramphenicol Metal Complexes as Anti-Prostate Cancer, Essam A. Mohamed, Alaa E. Ali, Sherif A. Kolkaila, Soad S. Fyala, Gehan S. Elasala, *TWIST*, (2024), 19(1) : 400-408.
- 31- Physicochemical Characterization, Thermal Analysis, Biological Studies and Molecular Docking Studies of Cefoperazone Complexes as Anti-Breast Cancer, Essam A. Mohamed, Alaa E. Ali, Sherif A. Kolkaila, Mamoud H. Emara, Gehan S. Elasala, *TWIST*, (2024), 19(1) : 470-480.
- 32- Validated Spectrophotometric Methods for Determination of Rasagiline Mesylate in Pure and Dosage Forms Utilizing Charge Transfer Complexation Reaction, Alaa E. Ali, Ayman A. Gouda, Ragab Y. Sharaf, Basant S. Emam, Gehan S. Elasala, *TWIST*, (2024), 19(2) : 1-8.
- 33- Recent advances in the structure elucidation of d^{10} transition metal complexes based on 16-membered ring macrolide drug, Ismael M. Elkamhawy, Alaa E. Ali, Gehan S. Elasala, *Indian Journal of Chemistry*, (2024), 63: 347-357.
- 34- Synthesis, Spectral, Thermal, Conductivity, Antimicrobial Studies and Molecular Docking of Some Cefpodoxime Complexes of Some Transition Elements, Alaa E. Ali, Tahra Abdelsabour, Gehan S. Elasala, *Austin Chem Eng*, (2024), 11(1): id1108.
- 35- Synthesis, Characterization, Biological Activity of Sulfaquinoxaline metal Complexes and Molecular Docking Study as Anti-Colorectal Cancer, Sherif A. Kolkaila, Alaa E. Ali, Elsayed M. Elmanooch and Gehan S. Elasala, *Chemistry Research Journal*, (2024), 9(3):202-209.
- 36- Synthesis, Physico - Chemical, Thermal, Biological and Molecular Docking Studies of Some Sulfasalazine Metal Complexes. Zn (II), Cd (II), Hg (II), Cu-Ni,

- and Cu-Zn, Riham S. Ibrahim, Alaa E. Ali, Sherif A. Kolkaila and Gehan S. Elasala, Chemistry Research Journal, (2024), 9(3):143-170.
- 37- Synthesis, molecular docking as anti-prostate cancer, and biological evaluation of ceftazidime transition metal complexes, Gehan S. Elasala, Alaa E. Ali, Wahed A. Gad, Sherif A. Kolkaila, Chemistry Research Journal, (2024), 9(3):190-201.
 - 38- Synthesis, Spectroscopic Characterization, and Biological Applications of Sulfamethoxazole Metal Complexes: Bioinorganic and Molecular Docking Studies, Gehan S. Elasala, Sherif A. Kolkaila, Alaa E. Ali, Ismail A. Ismail and Rana M. Atta, Journal of China University of Mining and Technology, (2025), 30(1) : 1-11.
 - 39- Synthesis, Molecular Docking as Anti-Breast Cancer, And Biological Evaluation of Doxorubicin Metal Complexes, Alaa E. Ali, Sherif A. Kolkaila, Aya G. Mousa and Gehan S. Elasala, Chemistry Research Journal, (2025), 10(4):230-242.
 - 40- Synthesis, Biological activity, Thermal analysis and Molecular Docking of sulfaguanidine Mixed Metal Complexes, Gehan S. Elasala, Alaa E. Ali, Norhan F. Abdel Bary, Sherif A. kolkaila, Chemistry Research Journal, (2025), 10(5):95-110.
 - 41- Development and validation of charge transfer based spectrophotometric method for the quantification of bromocriptine mesylate in pharmaceutical formulations, Alaa E. Ali, Ayman A. Gouda, Basant S. Emam, Gehan S. Elasala, Mohamed A. Afify, Chem Rev Lett 8 (2025) 764-772.
 - 42- Synthesis, Spectroscopic Characterization, Antioxidant Activity, and Molecular Docking Studies of Novel Ceftiofur-Based Metal Complexes, Gehan S. Elasala, Alaa E. Ali, Rana M. Atta, Marwa H. Eldeeb, Y.Sh. Mahrous, JOTCSA. (2026), 1871438, 1-26.
 - 43- Coordination-driven structural evolution of flumequine with transition metals, molecular docking and its biological implications, Gehan S. Elasala, Alaa E. Ali, Y. Sh. Mahrouse, Marwa H. Eldeeb, Rana M. Atta, Next Materials 12 (2026) 102149.
 - 44- Utilizing Ion-Pair Complexation for Quantitative Determination of Bromocriptine in its Pure form and Pharmaceutical Formulations, Alaa E. Ali, Ayman A. Gouda, Gehan S. Elasala, Mohamed A. Ahmed, Alaa M. Elkhatab, Basant S. Emam, Research J. Pharm. and Tech. 19(4): April 2026.
 - 45- Synthesis, Biological Activity, Thermal Analysis and Molecular Docking of Mebendazole Metal Complexes, Gehan S. Elasala, Alaa E. Ali, Essam A.

Mohamed, Norhan M. Aboelkhair, Sherif A. kolkaila, *Chemistry Research Journal*, (2026), 11(3):28-39

- 46- Synthesis, Biological activity, Thermal analysis and Molecular Docking of zincon Metal Complexes, Gehan S. Elasala, Alaa E. Ali, Essam A. Mohamed, Mina S. Beder, Sherif A. kolkaila, *Chemistry Research Journal*, (2026), 11(3):92-102.
- 47- Biochemical studies on some novel metal complexes of tenoxicam and molecular docking study as potential anti-prostate cancer agents, Gehan S. Elasala, Alaa E. Ali, Essam A. Mohamed, Hassan S. AboElnaga, Sherif A. Kolkaila, *Chem Rev Lett* 9 (2026) 814-821.

CONFERENCES

- 1- Seventh International Scientific Conference, Al-Azhar University (ISCAZ 2010), Environment, Development, and Nanotechnology, 22 – 24 March 2010, Cairo, Egypt.
- 2- The 14th Arab International Conference on Materials Science- Materials for Biomedical Applications, 1-3 December (2013), Alexandria, Egypt.
- 3- The 15th Arab International Conference on Materials Science- Materials for Water Applications, 2-4 December (2014), Alexandria, Egypt.
- 4- First PUA International conference on “Advances in Pharmaceutical Sciences” (1st PUA- ICAPS, 27-29 October (2015) Faculty of Pharmacy and Drug Manufacturing, Pharos University in Alexandria, Egypt.
- 5- Fifth students’ Researches & Innovation Conference (SRC-EFS) 7th – 8th May 2016 Projects & Scientific Creation Office, Faculty of Science, Alexandria University.
- 6- The 16th Arab International Conference on Materials Science- Materials and society, 3-5 December (2016), Alexandria, Egypt.
- 7- 1st scientific conference of water and energy, 2 March (2017) Damanhour, Behera.
- 8- The 18th Arab International Conference on Materials Science- “Materials Science and Scientific Instruments: Towards Building research Capacity in the Arab World” 22-23 December (2018), Alexandria, Egypt.

9- The Second Student Conference - Damanhour University "Innovation and Entrepreneurship" under the slogan (Towards a creative and innovative generation) - 18-December-2019

أنشطة داخل الكلية:

- 1- القيام بالتدريس للفرق الدراسية المختلفة لكليتي العلوم و التربية.
- 2- الاشتراك في عضوية الكنترولات ولجان الرصد لجميع الفرق الدراسية المختلفة داخل الكلية.
- 3- الاشتراك في الجودة وحضور دورات عن التخطيط الاستراتيجي والمشاركة المجتمعية وتنمية البيئة.
- 4- المشاركة في عملية الإرشاد الأكاديمي للطلاب.
- 5- المشاركة في اللجنة الثقافية.
- 6- المشاركة في العديد من الدورات.
- 7- عضو في الجمعية العربية لعلوم المواد.
- 8- الاشراف علي طلاب البحث والمقال لمرحلة البكالوريوس.