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Current position

Associate Professor – Department of Pharmaceutical Chemistry, *Faculty of pharmacy, Cairo University, Egypt.*

Supervisor of the molecular modeling laboratory, *Faculty of pharmacy, Cairo University, Egypt.*

Education

Doctor of philosophy degree in pharmaceutical sciences (Medicinal Chemistry) *Faculty of pharmacy, Cairo University, Cairo, Egypt* 2019
Design, Synthesis and Anticancer Activity Evaluation of New Heterocyclic Derivatives as PARP inhibitors”

Master’s degree in pharmaceutical sciences (Medicinal Chemistry) *Faculty of pharmacy, Cairo University, Cairo, Egypt* 2015
“Design, Synthesis and Biological Evaluation of Novel Quinazoline Derivatives and Acyclic Analogues as Antineoplastic Agents”

Premaster courses (Medicinal Chemistry) 2008
Faculty of pharmacy, Cairo University, Cairo, Egypt

Bachelor’s degree of pharmaceutical sciences 2006
Faculty of pharmacy, Cairo University, Cairo, Egypt
“Excellent with honor”

Academic career

Associate Professor at the Pharmaceutical Chemistry Department, 3/2025
Faculty of pharmacy, Cairo University, Egypt.

Lecturer at the Pharmaceutical Chemistry Department, *Faculty of pharmacy, Cairo University, Egypt.* 2019-2024

Assistant lecturer at the Pharmaceutical Chemistry Department, *Faculty of pharmacy, Cairo University, Egypt.* 2015-2019

Instructor in the Pharmaceutical Chemistry department, Faculty of pharmacy, Cairo University, Egypt. 2007-2015

- Demonstration of various chemical quality control protocols.
- Demonstration of various analytical chemistry approaches.
- Demonstration of various molecular structure identification procedures.
- Demonstration of various synthetic chemistry procedures.

Publications

- Khaled A. Elsayad, **Ghada F. Elmasry**, Sally T. Mahmoud, Fadi M. Awadallah, Simone Giovannuzzi, Claudiu T. Supuran, Development of novel amino-benzenesulfonamide derivatives and their analogues as carbonic anhydrase inhibitors: Design, synthesis, anticancer activity assessment, and pharmacokinetic studies using UPLC-MS/MS, *Bioorganic Chemistry*, 159 (2025) 108335. <https://doi.org/10.1016/j.bioorg.2025.108335>
- Menna M.A. Abd El-Mageed, Manal A. Fattah Ezzat, Shaimaa A. Moussa, Hatem A. Abdel-Aziz, **Ghada F. Elmasry**, Rational design, synthesis and computational studies of multi-targeted anti-Alzheimer's agents integrating coumarin scaffold, *Bioorganic Chemistry*, 154 (2025) 108024. <https://doi.org/10.1016/j.bioorg.2024.108024>
- Mahmoud H. Gailan, Maha S. Hussein, **Ghada F. Elmasry**, Synthesis, ADME Profiling, Antibacterial Screening and Molecular Docking of Some New Tetrazole-Heterocycle Hybrids, *ChemistrySelect*, 9 (2024), e202401118 (1-13). <https://doi.org/10.1002/slct.202401118>
- Ola Alaa Hamed, Nehad Abou-Elmagd El-Sayed, Walaa R. Mahmoud, **Ghada F. Elmasry**, Molecular docking approach for the design and synthesis of new pyrazolopyrimidine analogs of roscovitine as potential CDK2 inhibitors endowed with pronounced anticancer activity, *Bioorganic Chemistry*, 147 (2024), 107413. <https://doi.org/10.1016/j.bioorg.2024.107413>
- Khaled A. Elsayad, **Ghada F. Elmasry**, Sally T. Mahmoud, and Fadi M. Awadallah, Sulfonamides as anticancer agents: A brief review on sulfonamide derivatives as inhibitors of various proteins overexpressed in cancer, *Bioorg. Chem.* 147 (2024) 107409. <https://doi.org/10.1016/j.bioorg.2024.107409>
- Shaimaa O. Ali, Heba R. Ghaiad, **Ghada F. Elmasry**, and Noha A. Mehana, Sinapic Acid Mitigates Pentylentetrazol-induced Acute Seizures By Modulating the NLRP3 Inflammasome and Regulating Calcium/calcineurin Signaling: In Vivo and In Silico Approaches, *Inflammation* (2024). <https://doi.org/10.1007/s10753-024-02019-0>
- Rana M. Ibrahim, Passent M. Abdel-Baki, **Ghada F. Elmasry**, Ahmed Rasheedy, Nariman E. Mahdy, Combinative Effects of Akarkara Root-Derived Metabolites on Anti-inflammatory and Anti-Alzheimer Key Enzymes: Integrating Bioassay-Guided Fractionation, GC-MS Analysis, and *in silico* studies, *BMC Complementary Medicine and Therapies*, 23 (2023) 413. <https://doi.org/10.1186/s12906-023-04210-6>
- **Ghada F. Elmasry**, Chapter 2.4-Cyclin dependent kinase 2, in *Metalloenzymes*, C.T. Supuran and W.A. Donald, Editors. 2024, Academic Press. p. 51-62. <https://doi.org/10.1016/B978-0-12-823974-2.00030-9>

- **Ghada F. Elmasry**, Roaa A. Ali, Dina S. El-kady, Samir M. El-Moghazy, Gamal A. Elmegeed, Mohamed A. Tantawy, Microwave-Assisted Synthesis of Novel Steroidal Heterocyclic Analogues as Potent Inhibitors of RANKL-Induced Osteoclastogenesis, *Drug Dev. Res.* 84 (2023) 1522-1536. <https://doi.org/10.1002/ddr.22104>
- Manal A.F. Ezzat, **Ghada F. Elmasry**, Menna M.A.A. El-Mageed, Marwa A. Fouad, Hatem A. Abdel-Aziz, Safaa I. Elewa, Design, synthesis, and biological evaluation of furan-bearing pyrazolo[3,4-b]pyridines as novel inhibitors of CDK2 and P53–MDM2 protein–protein interaction, *Drug Dev. Res.* 84 (2023) 1183-1203. <https://doi:10.1002/ddr.22079>
- Rana M. Ibrahim, **Ghada F. Elmasry**, Rana H. Refaey, and Riham A. El-Shiekh, *Lepidium meyenii* (Maca) Roots: UPLC-HRMS, Molecular Docking, and Molecular Dynamics, *ACS Omega*, 7 (2022) 17339-17357. <https://doi:10.1021/acsomega.2c01342>
- Eman R. Mohammed and **Ghada F. Elmasry**, Development of newly synthesised quinazolinone-based CDK2 inhibitors with potent efficacy against melanoma, *Journal of Enzyme Inhibition and Medicinal Chemistry*, 37 (2022) 686-700. <https://doi:10.1080/14756366.2022.2036985>
- **Ghada F. Elmasry**, Enayat E. Aly, Fadi M. Awadallah, and Samir M. El-Moghazy, Design and synthesis of novel PARP-1 inhibitors based on pyridopyridazinone scaffold, *Bioorganic Chemistry*, 87 (2019) 655-666. <https://doi:10.1016/j.bioorg.2019.03.068>
- Nehad A. El Sayed, Amal A. Eissa, **Ghada F. Elmasry**, Mohamed M. Abdullah, and Reem K. Arafa, Discovery of novel quinazolinones and their acyclic analogues as multi-kinase inhibitors: design, synthesis, SAR analysis and biological evaluation, *RSC Advances*, 6 (2016) 111767-111786. <https://10.1039/C6RA19137A>

Thesis supervision

- Approved from 2020 till now: 2 Master theses.
- Theses under supervision: 6 Master theses and 5 PhD theses.
- One Master thesis won Ellebedy grant.
- One PhD thesis won STDF support grant for postgraduate students (PGSG).

Teaching Experience

Postgraduate teaching experience

- Participation in teaching of pharmaceutical Chemistry Theoretical Special Courses for Master students Faculty of Pharmacy, Cairo University: Drug design (I), Code: 2801, 2019/2020, 2020/2021, 2021/2022, 2022/2023, 2023/2024, 2024/2025.
- Supervising Master and PhD theses for researchers from Faculty staff members and external researchers.

Undergraduate teaching experience

- Teaching Pharmaceutical Chemistry (curriculum 803) for Fifth year students, Faculty of Pharmacy, Cairo University, 2019/2020, 2020/2021, 2021/2022, 2022/2023, 2023/2024 and 2024/2025.

- Teaching of Pharmaceutical Chemistry (curriculum 802) for Fourth year students, Faculty of Pharmacy, Cairo University, 2019/2020.
- Teaching of Medicinal Chemistry 2 (curriculum PC 711), for Pharm D Program, Faculty of Pharmacy, Cairo University, fall and spring 2022/2023, fall and spring 2023/2024 and fall and spring 2024/2025.
- Teaching of Medicinal Chemistry 2 (curriculum PC 610), for Clinical Pharmacy Program, Faculty of Pharmacy, Cairo University, spring 2020/2021 and spring 2023/2024.
- Teaching of Medicinal Chemistry 2 (curriculum PCC 809), for Clinical Pharm D Program, Faculty of Pharmacy, Cairo University, spring 2023/2024 and summer 2024/2025.
- Staff member in the supervision team on Information Technology (IT) course offered for first level Pharm D general and clinical students, fall 2022/2023.
- Oral examiner in Pharmaceutical Chemistry undergraduate oral exams in Faculty of Pharmacy in Cairo University, Mistr University for Science and Technology (MUST) and. Ahram Canadian University.
- Preparing & revising course specifications and reports for respective pharmaceutical chemistry courses, Faculty of Pharmacy, Cairo University.
- Co-author in practical and theoretical booklets.
- Supervising the summer training of undergraduate students, Faculty of Pharmacy, Cairo University.
- Member of Pharm D Control, academic year 2019/2020, 2020/2021, 2021/2022, 2022/2023, 2023/2024 and 2024/2025.
- Academic Advisor for first year students, Clinical Pharmacy Program, 2021/2022 and first level Pharm D students 2021/2022, second level Pharm D students 2022/2023, third level Pharm D students 2023/2024 and fourth level Pharm D students 2024/2025.

Awards

- Excellence awards throughout the college years 2003 (5th) and 2006 (13th).
- Best Ph.D. thesis in Pharmaceutical Chemistry from Faculty of Pharmacy Cairo University for the year 2019.
- Certificate of appreciation for the active featured organization of the Pharmaceutical Chemistry department's scientific conference held on 14th. October 2019.
- Cairo University award for publishing researche in international scientific journals for the year 2019 that added positively in improving university rank in international ranking of universities.

Conferences and workshops

- Poster presentation in the “17th Scientific Congress of The Association of Colleges of Pharmacy in The Arab World” (1st International Conference of Faculty of Pharmacy Ain Shams University-New Trends in Drug Discovery, Development and Pharmacy Practice) 2014.
- Participation in “Structure-Based, Ligand-Based Drug Design” a workshop at Professional Development Program – Misr International University.
- Attending “*In Vitro* Enzyme Inhibition Assays: Guidelines and Practical Tips” a workshop at Performance Appraisal and Quality Assurance Unit PAQU-Faculty of Pharmacy-Cairo University.
- Attending “Course Specification and Blue-Print Writing” a workshop at Performance Appraisal and Quality Assurance Unit PAQU-Faculty of Pharmacy-Cairo University.
- Attending “Computers in Chemistry” a workshop at Performance Appraisal and Quality Assurance Unit PAQU-Faculty of Pharmacy-Cairo University.
- H index, Impact factor and Citation, 16th December 2020, Performance Appraisal and Quality Assurance, Faculty of Pharmacy, Cairo University.
- Attending “The International Conference of the Faculty of Pharmacy, MSA University-“(Pharmacists in Frontlines: New Challenges and Innovative Solutions) December 2020.
- Attending the workshop: Introduction to Structure-Based Drug Design, the International Conference of the Faculty of Pharmacy, MSA University-12th-13th December 2020.
- Advanced tips in Microsoft Word editing: making article and thesis writing easier, 21st December 2020, Performance Appraisal and Quality Assurance, Faculty of Pharmacy, Cairo University.
- Promotion by the law 13 for the Cairo University staff members, 5th January 2021, Performance Appraisal and Quality Assurance, Faculty of Pharmacy, Cairo University.
- Academic supervision and Credit Hours System, 28th February 2021, Performance Appraisal and Quality Assurance, Faculty of Pharmacy, Cairo University.
- Awareness of the Egyptian knowledge bank, 4 March 2021, Performance Appraisal and Quality Assurance Unit, Faculty of Pharmacy, Cairo University.
- ELSEVIER-NRC guide course for reviewers: Introduction to peer review and general aspects, 17th March 2021, National Research Center, Cairo, Egypt.
- Hybrid Education, 18th March 2021, Performance Appraisal and Quality Assurance, Faculty of Pharmacy, Cairo University.

- ELSEVIER-NRC guide course for reviewers: Initial handling of a manuscript and essential ethical aspects, 22nd March 2021, National Research Center, Cairo, Egypt.
- Attending “The 2nd International Conference on Science and Sustainable Development, National research Centre- Egypt, October 2021.
- Attending “Badr University in Cairo 1st Conference of Pharmaceutical Sciences” held online on 6th November 2021.
- Participation in the workshop “Molecular Dynamics: Basics to publications” that was held in the British University of Egypt (BUE)-February 2022.
- Publish your research Open Access with Springer nature with fees covered by STDF in collaboration with EKB Egypt, 16th February 2022.
- Writing Successful Research Proposal: Tips and Tricks 22nd February 2022, Faculty of Pharmacy, Cairo University.
- Initiatives to enhance and spread awareness of the distinguished institution award criteria, 28th July 2022, Performance Appraisal and Quality Assurance Unit, Faculty of Pharmacy, Cairo University.
- A specialized course in Quality work, PAQUPHARM, Cairo university 31-10-2022.
- Participation in the workshop “Progress of Heterocycles in Medicinal Chemistry Program” that was held in the National Research Centre-March 2023.
- Attending the webinar “Biobanking as a platform for Biomedical Research” organized by the Professional Master of Immunology & Regenerative Medicine Program in collaboration with the International Agency for Research on Cancer, held on 30th April 2023
- Participation in the workshop “Drug Design and Discovery Software” affiliated to the 2nd International conference of Pharmaceutical & Therapeutic Science PTC 2023, Faculty of Pharmacy, Menoufia University, held on 9th May 2023 (online).
- Attending “The 11th International Scientific Conference of the Faculty of Pharmacy, Cairo University” held on 15th-16th May 2023.
- Participation in the workshop “Towards Accreditation in Testing Labs: Requirements, Benefits and Challenges” affiliated to the 11th International Scientific Conference of the Faculty of Pharmacy, Cairo University, held on 15th-16th May 2023.
- Participation in the workshop “Molecular Dynamics in Drug Discovery” affiliated to the 11th International Scientific Conference of the Faculty of Pharmacy, Cairo University, held on 15th-16th May 2023.

- Participation in the Second International Conference of Pharmaceutical Sciences, College of Pharmaceutical Sciences & Drug Manufacturing, MUST University as a poster presenter on July 11th-12th, 2023, Egypt.
- Attending “German Science Day 2023” event of the DAAD Regional Office Cairo lighthouse project Clusters of Scientific Innovation in the Middle East abbreviated “COSIMENA” at Sofitel Hotel on July 20th, 2023.
- Evaluation of usefulness of few generative AI tools in scientific publications, 27th July 2023 (a webinar).
- Unveiling Insights: Harnessing Generative AI Tools for Literature Search, Review, and Summarization, 27th July 2023 (a webinar).
- Attending the workshop “Applications of artificial intelligence and molecular dynamics in drug discovery”, organized by experiments and advanced pharmaceutical research unit (EAPRU), Faculty Pharmacy AinShams University, held on 30th July 2023.
- Attending the 6th. Computer-Aided Drug Design workshop organized by the department of Pharmaceutical Chemistry, Faculty of Pharmacy, Kafrelsheikh University held on 22-10-2023.
- Writing proposals for funding research: applying for grants, seeking industrial collaboration, held on 20th May 2024, Faculty of Pharmacy, Cairo University (DMU).
- Attending “German – Egyptian Research Matchmaking Day” event of the DAAD Regional Office at Cairo Marriott Hotel, Zamalek on 17th September 2024 and participation in the workshop under the title: “*Strategies in fragment-based drug discovery in cancer and infection: recent successes, challenges, and future directions*”.
- Attending the webinar “Reaxys for innovation in pharmacy research” at EKB on 16th October 2024.
- Attending the BGICC-Breast Gynecological & Immunological International Cancer Conference held on 23rd January 2025 at Heliopolis Hotel.
- Attending “The 12th International Scientific Conference of the Faculty of Pharmacy, Cairo University-Innovations in Pharmacy Profession and Advancing Research” held on 6th-7th May 2025.
- Presenting (as instructor) the workshop “Molecular Docking Employing AutoDock Vina: A Fundamental Tool in Computer-Aided Drug Discovery”, hosted by Continuous Pharmacy Education Centre, Faculty of Pharmacy, Cairo University

Soft skill courses

- Ethical considerations for animal use in research and education.
- Statistical analysis of bio-experiments.
- Arabic and English editing in scientific research.
- Crisis management.
- Conference organization.
- Research skills.
- Meeting and managing time.
- Effective presentation skills.
- University code of ethics.

- International publishing and scientific research.
- Exams and students' evaluation system.
- Use of technology in teaching.
- Stress management.
- Critical thinking.
- Interactive electronic courses.
- Essentials of integrated education.

Reviewer of International Publications

- Bioorganic Chemistry
- ChemistrySelect
- Molecular Biology reports
- Phosphorus, Sulfur, and Silicon and the Related Elements
- Archives of Pharmacal research
- International Journal of Biological Macromolecules
- Scientific Reports
- Journal of Medicinal Chemistry
- Molecular Diversity
- RSC Medicinal Chemistry
- Chemistry and Biodiversity

University and Department Activities

- Member of the Committee for Scientific Instruments and Laboratories 2020-2022.
- Participation in organizing the annual scientific conference of the Pharmaceutical Chemistry Department 2020.
- Chairperson of the Chemicals' Inspection Committee 2020-2021.
- Chairperson of the Main Warehouse Inspection Committee 2021-2022.
- Coordinator of the Pharmaceutical Chemistry department for postgraduate studies 2022-2024.
- Member of the Libraries Committee – Faculty of Pharmacy, Cairo University 2024.
- Member of the Technical office – Faculty of Pharmacy, Cairo University 2024-2025.

Languages

- English: Excellent.
- Arabic: Native.