Ahmed Fekri
Assistant Professor of Organic Chemistry
Department of Chemistry, Mansoura University
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EDUCATION

School of Chemistry, Cardiff University, UK

- Ph.D. Candidate, Keith Smith Research lab**,** (2007 -2011)
- Research in regiocontrolled lithiation reactions of various pyridine derivatives, complexsubstituted pyridines and substituted Isoindolines.
- **Thesis**: New synthetic reactions involving the use of solids.

Department of Chemistry, Mansoura University, Egypt

- M. Sc. Mohammed Abbas Research Lab, (2001-2004)
- **Thesis**: Synthesis and chemical reactions of some new thiazolidin–5–one derivatives ofpharmaceutical interest

Department of Chemistry, Mansoura University, Egypt

- B.Sc. Degree in Chemistry "Honors"**,** (1995-1999)

RESEARCH INTERESTS

- **Synthesis and Evaluation of Drug Mimics:**
  - Focus on the synthesis of structurally modified mimics of commercially available drugs.
  - Utilization of modeling and docking techniques.

  Conducting Structure-Activity Relationship (SAR) studies to understand and improve drug efficacy and safety.
- **Development of Biologically Active Heterocyclic Compounds:**
  - Synthesis of diverse heterocyclic compounds with potential biological activities.
  - Comprehensive biological evaluation of these compounds to identify and optimize their therapeutic potential.

ACADEMIC POSITIONS

- Assistant Professor of Organic Chemistry, (September 2019-Current)
  Mansoura University, Egypt.
- Lecturer of General Chemistry, (November 2018-February 2019)
  British University in Egypt BUE, Egypt.
- Lecturer/ Associate professor of Organic Chemistry, (2011-2019)
  Mansoura University, Egypt

- Assistant Lecturer of Organic Chemistry, (2008-2011)
  School of Chemistry, Cardiff University, UK.
- Assistant lecturer of Organic Chemistry, (2004-2007)
  Mansoura University, Egypt
- Teaching assistant of Organic Chemistry, (1999-2004)
  Mansoura University, Egypt.

ACADEMIC ACTIVITIES

1- Director of Director of Grants, projects and International Cooperation at Mansoura University (15-10-2014 to present) http://tico.mans.edu.eg/index.php/gico-office/contact-gico
2- Project Management Unit Coordinator, Ministry of Higher Education (28-2-2022 to present)
3- Committee member, Mansoura University and the Egyptian Observatory for Science, Technology, and Innovation (1-4-2014 to present)
4- Mansoura University's First Funding Institutional Admin (30-5-2024)
5- Coordinator of the Innovators Support Fund (12-7-2023 for one year)
6- Manager of ICTP Program, Mansoura University (30/7/2018 to present
7- Associate Editor, Egyptian Journal of Basic and Applied Sciences (EJBAS) (1-7-2014 to present)
8- Associate Editor, Committee for the Prevention of Literary Plagiarism at Mansoura University (29-1-2015 to present) http://ees.elsevier.com/ejbas/default.asp

TEACHING EXPERIENCE

Teaching both undergraduate and graduate level courses for faculty of science, chemical engineering and pre-medical students, which includes:

- Principles of General Chemistry- BUE
- Principles of Organic Chemistry
- Organic Synthesis
- Pharmaceutical Chemistry
- Bioethics and safety
- Chemotherapy and Environmental Chemistry
- Physical Organic Chemistry
- Stereochemistry Chemistry
- Green Chemistry

TRAINING EXPERIENCE

- How to design interface programs in education and scientific research
- Combating corruption and introducing it
- Basics of digital transformation
- Proposal Writing Course (FLDP)

- Conference Preparation Course
- Research Ethics
- Applying for Grants
- A Comprehensive Approach to Biosafety, GLP, and Lab Ethics

PAPER REVIEWING EXPERIENCE

- Reviewer in Journal of Molecular Structure.
- Reviewer in Journal of Nanostructure in Chemistry
- Reviewer in Journal of Nanostructure in Chemistry
- Reviewer in Research on Chemical Intermediates
- Reviewer in Journal of Organometallic Chemistry
- Reviewer in Journal of Heterocyclic Chemistry
- Reviewer in Heteroatom Chemistry
- Reviewer in Egyptian Journal of Basic and Applied Sciences
- Reviewer in Journal of Heterocyclic Chemistry

AWARDS

- An award for attending the "Intellectual Property Rights, Technology Transfer and Cooperation and India-Africa Development Partnership" in National Research Development Corporation, India, Delhi, funded by Ministry of External Affairs, Government of India, 2017.
- Ph.D. Scholarship awarded by the Egyptian Government to Cardiff University, UK, (2007-2011)
- Visiting Researchers Scholarship, from the Egyptian Government to McGill University, Canada for six months, (April-October 2016).

WORKSHOPS

1. Competitive Research Proposal Writing, DKA, Mansoura University, 2018.
2. Alumni and Employment Forum, Mansoura University, 2017.
3. Intellectual Property Rights, Technology Transfer and Cooperation and India-Africa Development Partnership, National Research Development Corporation, India, Delhi, 2017.
4. Modern Approach in Publishing Ethics, EGB & ASRT, March 2016.
5. Globalization of Science: Recent Trends in Chemistry, Alexander von Humboldt, Ismailia, 2014.
6. Using Technology in Teaching, FLDP &UDC, Mansoura University, 2012.
7. Training for using the database for faculty members, staff and librarians, Mansoura University, 2012.
8. 2nd Youth Researchers Forum, Mansoura University, 2012.
9. Science and Technology Development Fund, Mansoura University, 2012.
10. Introduction of TEMPUS, Mansoura University, 2012.
11. Scientific Research Ethics, FLDP &UDC, Mansoura University, 2011

CONFERENCES

(1) Solvent free transformations of organic and pharmaceutical materials
Ahmed F., Tomslave F.
The 3rd Crystal Engineering and Emerging Materials Conference of Ontario and Quebec, Windsor, Ontario, Canada, May (2016).
(2) "Humboldt-Kolleg", Waste-Free and Facile Solid-State Preparation of Schiff base Complexes
Fekri A., Zaky R.
Globalization of Science: Recent Trends in Chemistry, the AvH Conference, Egyptian Society of AvH-Fellows Ismailia, Egypt, October (2014).
(3) Lithiation of simple aromatics and heterocycles
Smith K., El-Hiti G., Fekri A.
Cardiff Spring Conference, Cardiff University, UK, 6th May (2010).
(3) Directed lithiation of substituted benzylamines
Smith K., El-Hiti G., Fekri A.
(4) RSC Organic Division South &West Regional Meeting
6th January, University of Bath, UK, 2010
(5) RSC Regional Organic Meeting,
21th January, University of Southampton, UK. (2009).
(6) 12th International Conference on Chemistry and Its Role in Development, Microwave assisted rapid synthesis, spectroscopic characterization, and biological significance of 1,4-Dihydropyridines metal complexes
Sharm El-Sheikh, Egypt, March 2015.
(7) 11th International Conference on Chemistry and Its Role in Development
Sharm El-Sheikh, Egypt, March 2013.
(8) 8th International Conference on Chemistry and Its Role in Development, Sharm El-Sheikh, Egypt, April 2005.
(9) 7th International Conference on Chemistry and Its Role in Development
Sharm El-Sheikh, Egypt, April 2003.
(10) 6th Conference on Chemistry and Its Role in Development
Gamssa, Egypt, 2001
(11) 4th International Conference of Biological and Environmental Science, Physicochemical studies and biological evaluation on (E)-2-(2,4-dichlorophenoxy)-N`-(2-hydroxybenzylidene) acetohydrazide complexes
Hurghada, Egypt, March 2014.

COMMUNITY SERVICES

- Member of the American Geophysical Union
- Member of the Scientific Professions Syndicate
- Member in Mans university committee for “Academic- Industry Bridge” for solving industrial problems using academic and research solutions

LIST OF PUBLICATIONS

1. Mostafa A.R.; Badawy S.A.; Abdel-Latif E.; Fekri A.; Fadda A.A.; Elmorsy M.R. Amplifying performance through co- sensitization of Acrylamide/2-Pyridone dyes in DSSCs, Journal of Photochemistry and Photobiology A: Chemistry 2024, DOI: 10.1016/j.jphotochem.2024.115478

2. Taha I.; Keshk E.M.; Khalil A.-G.M.; Youssef M.M.; Fekri A., Physicochemical Studies of Benzocaine Bearing Heterocycles as Potential Antioxidant Agents, Polycyclic Aromatic Compounds, 2023, 43 (8),7052-7072.

3. Fekri, A.; Keshk, E. M.; Khalil, A.-G. M.; Taha, I., Synthesis of novel antioxidant and antitumor 5- aminopyrazole derivatives, 2D/3D QSAR, and molecular docking. Molecular Diversity 2022, 26 (2), 781-800.

4. Taha, I.; Keshk, E. M.; Khalil, A.-G. M.; Fekri, A., Synthesis, characterization, antibacterial evaluation, 2D-QSAR modeling and molecular docking studies for benzocaine derivatives. Molecular Diversity 2021.

5. El-Missiry, M. A.; Fekri, A.; Kesar, L. A.; Othman, A. I., Polyphenols are potential nutritional adjuvants fortargeting COVID-19. Phytother Res 2021, 35 (6), 2879-2889.

6. Abdel-Latif, E.; Khatab, T. K.; Fekri, A.; Khalifa, M. E., Synthesis of New Binary Thiazole-Based Heterocycles and Their Molecular Docking Study as COVID-19 Main Protease (M(pro)) Inhibitors. Russ JGen Chem 2021, 91 (9), 1767-1773.

7. Hammouda, M. M.; Metwally, H. M.; Fekri, A.; Van der Eycken, J., Synthesis and Molecular ModelingStudies on Novel C2 Alkylated Benzoazonine Scaffold and Corresponding 2-Pyrazoline Derivatives as Acetylcholinestrase Enzyme Inhibitors. Polycyclic Aromatic Compounds 2021, 1-18.

8. Taha, I.; Keshk, E. M.; Khalil, A.-G. M.; Fekri, A., Benzocaine as a precursor of promising derivatives:synthesis, reactions, and biological activity. Chemical Papers 2021, 75 (12), 6181-6215.

9. Bayoumy, N. M.; Fekri, A.; Tawfik, E. H.; Fadda, A. A., Synthesis, Characterization and AntimicrobialEvaluation of Some New Heterocycles Incorporating Phenothiazine Moiety. Polycyclic Aromatic Compounds 2021, 1-10.

10. Abdel Bary E.M.; Fekri A.; Soliman Y.A.; Harmal A.N., Manufacturing of superabsorbent membranes ofPVA and rice husk fibres reinforced with nanosilica for agricultural and horticultural applications, International Journal of Environmental Studies, 2019, 76, 1, 150-167

11. Fadda, A. A.; Abdel-Latif, E.; Fekri, A.; Mostafa, A. R., Synthesis and Docking Studies of Some 1,2,3- Benzotriazine-4-one Derivatives as Potential Anticancer Agents. Journal of Heterocyclic Chemistry 2019, 56(3), 804-814.

12. Bary E.M.A.; Fekri A.; Soliman Y.A.; Harmal A.N., Characterisation and swelling–deswelling properties ofsuperabsorbent membranes made of PVA and cellulose nanocrystals, International Journal of Environmental Studies, 2019, 76(1), 118-135

13. Zaky, R.; Fekri, A., Ball milling: a green mechanochemical approach for synthesis of Ni (II), Co (II) and Cu (II) complexes. *Applied Organometallic Chemistry* **2019,** *33* (4), e4786.

14. Bary E.M.A.; Fekri A.; Soliman Y.A.; Harmal A.N., Characterisation and swelling–deswelling propertiesof superabsorbent membranes made of PVA and cellulose nanocrystals, International Journal of Environmental Studies, 2019, 76(1), 118-135.

15. Abdel Bary E.M.; Fekri A.; Soliman Y.A.; Harmal A.N. Aging of membranes prepared from PVA and cellulose nanocrystals by use of thermal compression, International Journal of Environmental Studies, 2018, 75 (6), 950-964

16. Abdel Bary E.M.; Fekri A.; Soliman Y.A.; Harmal A.N., Chemical and biology aging of novel green membranes made of PVA and wood flour fibers reinforced with nanosilica manufactured by compression molding process, International Journal of Polymer Analysis and Characterization, 2018, 23(2), 156-169.

17. Zaky R.; Fekri A., Solvent-free mechanochemical synthesis of Zn(II), Cd(II), and Cu(II) complexes with 1-(4- methoxyphenyl)-4-(2-(1-(pyridin-2-yl)ethylidene)hydrazinyl)-1H-pyrrole-3-carbonitrile, Green Processing and Synthesis, 2018, 7(6), 515-523

18. Abdel Bary E.M.; Soliman Y.A.; Fekri A.; Harmal A.N., Aging of novel membranes made of PVA and cellulose nanocrystals extracted from Egyptian rice husk manufactured by compression moulding process, International Journal of Environmental Studies, 2018, 75 (5), 750-762

19. Fadda A.A.; Fekri A.; Bayoumy N.M., Eco-friendly synthesis, characterization, and drug-likeness properties of new uracils and their biological evaluation. Green Processing and Synthesis 2018, 7

20. Zaky, R.; Fekri, A.; Abou El-Reash, Y. G.; Youssef, H. M.; Kareem, A. Y., Bivalent transition metal complexes of3-(2-(4-(dimethylamino)benzylidene)hydrazinyl)-3-oxo-N-(thiazol-2-yl)propanamide: Structural, spectral, DFT, ion- flotation and biological studies. Egyptian Journal of Basic and Applied Sciences 2016, 3 (3), 272-286.

21. Zaky R.; Fekri A., Solid state ball milling as a green approach to prepare Cu(II) complexes: Structural, spectral, DFT, and DNA studies, New Journal of Chemistry, 2017, 41(11), 4555-4563

22. Abdel Bary E.M.; Fekri A.; Soliman Y.A.; Harmal A.N., Novel superabsorbent membranes made of PVA and Ziziphus spina-christi cellulose for agricultural and horticultural applications, New Journal of Chemistry, 2017, 41(18), 9688-9700

23. Elattar, K. M.; Fekri, A.; Bayoumy, N. M.; Fadda, A. A., Sulfones in heterocyclic synthesis: advances in the chemistry of phenyl sulfonylacetophenone. Research on Chemical Intermediates 2017, 43 (7), 4227-4264.

24. Fekri, A.; Keshk, E. M., Utility involving thioacetoacetanilides as precursors for synthesis of new thiazole, thiadiazole and thiophene derivatives with antimicrobial activity. Journal of Sulfur Chemistry 2016, 37 (2), 148-161.

25. Fekri, A.; Zaky, R., Solvent-free synthesis and computational studies of transition metal complexes of the aceto- and thioaceto-acetanilide derivatives. Journal of Organometallic Chemistry 2016, 818, 15-27.

26. Fadda, A. A.; Fekri, A.; Bayoumy, N. M., Synthesis, antimicrobial evaluation and molecular modeling of some novel phenothiazine derivatives. RSC Advances 2015, 5 (98), 80844-80852.

27. Zaky, R.; Fekri, A., Structural, spectral and DFT studies of N-ethyl-2-(4-(phenylamino)-4-thioxobutan-2-ylidene)hydrazinecarbothioamide complexes synthesized by ball milling. Journal of Molecular Structure 2015, 1079, 203-213

28. Fekri, A.; Zaky, R., Facile solid state ball milling as a green strategy to prepare 2-(2,4-dichlorophenoxy)-N- (2- hydroxybenzylidene)acetohydrazide complexes. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 2014, 132, 846-853.

29. Smith K.; El-Hiti G.A.; Alshammari M.B.; Fekri A., Control of site of lithiation of 3-(Aminomethyl)pyridine derivatives, Synthesis (Germany), 2013, 45(24), 3426-3434

30. Smith K.; El-Hiti G.A.; Fekri A.; Alshammari M.B., Side-chain lithiation of 2- and 4-substituted pyridines: Synthesis of more complex substituted pyridines, Heterocycles, 2012, 86(1), 391-410

31. Smith, K.; El-Hiti, G.; Hegazy, A.; Fekri, A., ChemInform Abstract: A Simple and Convenient High Yielding Synthesis of Substituted Isoindolines. Heterocycles 2010, 80, 941-956.

32. Smith K.; El-Hiti G.A.; Hegazy A.S.; Fekri A.; Kariuki B.M., Variation in sites of lithiation of substituted n- benzylpivalamides and N'-benzyl-N,N-dimethylureas: Application in synthesis, Arkivoc, 2009, 14, 266-300

33. Metwally, M. A.; Etman, H. A.; Keshk, E. M.; Fekry, A., Thiazolidin-5-Ones: Synthesis and Reactions. Phosphorus, Sulfur, and Silicon and the Related Elements 2006, 181 (5), 1039-1058.

34. Metwally, M. A.; Keshk, E. M.; Fekry, A.; Etman, H. A., Synthesis of some new thiazolidin-5-one derivatives of pharmaceutical interest. Phosphorus, Sulfur, and Silicon and the Related Elements 2004, 179 (10), 2067-2079.

35. Metwally M.A.; Keshk E.M.; Fekry A.; Etman H.A., Synthesis and reactions of 2-cyano-2-(5-oxo-3-phenyl-thiazolidin-2- ylidene) -acetamides, Journal of Chemical Research, 2004, 9, 602-604