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Education

PhD of Pharmaceutical Sciences, Pharmaceutical Organic Chemistry: Faculty of Pharmacy, Suez Canal University, Ismailia, Egypt.

Date of graduation: June 2017

- Thesis title: "***Design, Synthesis and Biological Evaluation of Novel Heterocyclics as Potential Anticancer Therapeutics***". The research work comprises a survey covering the chemistry and the biological activities of compounds containing the thiophene and thienotriazine ring systems.
- Supervisors: Dr. Mohamed M. Said, Dr. Hossam Elshehawy, Dr. Yasmine M. Abdel Aziz

Master of Pharmaceutical Sciences, Pharmaceutical Organic Chemistry: Faculty of Pharmacy, Suez Canal University, Ismailia, Egypt.

- Date of graduation: June 2014

- Thesis title: "*Synthesis and Biological Importance of Some Nitrogenous Heterocyclic Compounds*". The research work comprises a survey covering the chemistry and the biological activities of compounds containing the benzimidazole ring system, with particular reference to beta lactam derivatives.
- Supervisors: Dr. Mohamed M. Said, Dr. Nagat Ghareb

Pre-Master Courses, 2009

- Special courses: Excellence in Organic Synthesis (Retro synthesis) (25 hr), Named Organic Reactions (25 hr), Separation & Identification Of Organic Compounds (Chromatography) (25 hr), Drug Design & Pharmacological Activity (25 hr), and very good in Structure Elucidation (Spectroscopy) (25 hr).
- General courses: very good in English Language & Literature Review (25 hr), excellent in Computer Sciences (50 hr), and Excellence in Biostatistics (25 hr).

Bachelor of Pharmaceutical Sciences: with overall grade (Excellent with Honor), Faculty of Pharmacy, Suez Canal University, Ismailia, Egypt.

- Date of graduation: June 2008.
- The 3rd on pharmacy graduate students.
- Courses: Excellence in Pharmacology, Toxicology, Biochemistry, Microbiology, Immunology, Pharmacognosy, Pharmaceutics, Industrial Pharmacy, Physical, Organic, and Inorganic Chemistry, Analytical chemistry, and Pharmaceutical Chemistry.

Secondary Education: El-Zohor Secondary School, Ismailia, Egypt.

- Class of 2003
- Final Grade : 97.7 %

Work Experience

- **2024- to present:** Associate professor of Medicinal Chemistry, Faculty of Pharmacy, Al-Ayen University, Dhi-Qar, Iraq.

*Teaching undergraduate students, the following courses: Medicinal chemistry I, Medicinal chemistry VI, general organic chemistry, aliphatic organic chemistry, aromatic organic chemistry, stereochemistry.

- **2023- to 2024:** Associate professor of Pharmaceutical Organic Chemistry, Faculty of Pharmacy, Suez Canal University, Ismailia, Egypt.
 - *Teaching undergraduate students, the following courses: general organic chemistry, aliphatic organic chemistry, aromatic organic chemistry, heterocyclic chemistry, stereochemistry, spectroscopy and carbohydrates.
 - *Teaching postgraduate students, the following courses: organic reaction mechanisms, named organic reactions and enzyme kinetics.
 - *Supervisor for master and PhD students.
- **2017- to 2023:** lecturer, Pharmaceutical Organic Chemistry Department, Faculty of Pharmacy, Suez Canal University, Ismailia, Egypt.
 - *Teaching undergraduate students, the following courses: general organic chemistry, aliphatic organic chemistry, aromatic organic chemistry, heterocyclic chemistry, stereochemistry, spectroscopy and carbohydrates.
 - *Teaching postgraduate students, the following courses: organic reaction mechanisms, named organic reactions and enzyme kinetics.
 - *Supervisor for master and PhD students.
- **2022-2023:** lecturer, Pharmaceutical Organic Chemistry Department, Faculty of Pharmacy, Galala university, Egypt.
 - *Teaching undergraduate students, the following courses: general organic chemistry, aliphatic organic chemistry, aromatic organic chemistry, heterocyclic chemistry, stereochemistry, spectroscopy and carbohydrates.
- **2019-2021:** lecturer, Pharmaceutical Organic Chemistry Department, Faculty of Pharmacy, Sinai university, Ismailia, Egypt.
 - *Teaching undergraduate students, the following courses: general organic chemistry, aliphatic organic chemistry, aromatic organic chemistry, heterocyclic chemistry, stereochemistry, spectroscopy and carbohydrates.
- **2014- 2017:** Assistant lecturer, Pharmaceutical Organic Chemistry Department, Faculty of Pharmacy, Suez Canal University, Ismailia, Egypt.
 - *Teaching undergraduate student's practical sessions and laboratory techniques.
 - *Supervising undergraduate student in different activities and presentations skills.
- **2008-2014:** Demonstrator, Pharmaceutical Organic Chemistry Department, Faculty of Pharmacy, Suez Canal University, Ismailia, Egypt.
 - *Teaching undergraduate student's practical sessions and laboratory techniques.

*Supervising undergraduate student in different activities and presentations skills.

Training and Workshops

- July 1- 19, 2007. **Clinical practice for pharmacists (clinical pharmacy)**, Cairo university, Egypt.
- January 16-26, 2011. **Vocational Education Preparing Programs For University Teachers: Effective Teaching, The Use of Technology In Teaching, Microteaching** (72 hr). Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- September 19-20, 2011. **Methods of Scientific Research** (24 hr). Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- January 12-15, 2011. **Occupation behaviors** (16 hr). Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- February 7-9, 2011. **The administration of the research team.** (16 hr). Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- October 16-17, 2012. **The Digital Library workshop** (Portal- Wiley Blackwell- Science Direct- Springer- ISI- Academic one file- EBSCO Parquets- Med line plus full text ASC), Ismailia.
- October 13, 2015. **Teaching and Learning strategies** (5 hr). Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- March 2, 2016. **The Basics of Writing Scientific Research and International Publication in Journals with High Impact Factor.** (5hrs). Technology innovation and commercialization office (TICO), Academy of Scientific Research and Technology, Ministry of Higher Education, Egypt.
- May 10, 2016. **Responsible Conduct of Research (How to Avoid Plagiarism, Falsification and Fabrication)** (5 hr). Technology innovation and commercialization office (TICO), Academy of Scientific Research and Technology, Ministry of Higher Education, Egypt.

- January, 2017. **International Scientific Publishing workshop**. Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- February, 2017. **The Conferences Management workshop**. Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- February, 2017. **The Student Assessment workshop**. Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- March, 2017. **The Time and Meetings management's workshop**. Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- October 2021. **Endnote workshop**. (5hr). Technology innovation and commercialization office (TICO), Academy of Scientific Research and Technology, Ministry of Higher Education, Egypt.
- 26-27 Mars 2022. **Responsible behaviour**. (8 hr) Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- 30-31 Mars 2022. **Course specification**. (8 hr) Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- 23-24 April 2022. **Credit hours**. (8 hr) Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- 5-6 Mars 2023. **Mobile application**. (8 hr) Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.
- 11-12 June 2023. **Strategical planning in higher educational authorities**. (8 hr) Faculty and Leadership Development Project (FLDP), University Projects Management Unit (UPMU), Suez Canal University, Ministry of Higher Education, Egypt.

Skills

- Computer skills: Having certificate of international computer driving license (ICDL) version 4, proficiency in Microsoft office (Word, Excel, power point)
- Highly motivated team player with excellent problem-solving skills.
- Good communicator, motivator and team player.
- Work well under pressure.
- Dedicated and organized.
- Driving license: Valid until 2029

RESEARCH

- Research Interests
 - Design and synthesis of novel organic compounds.
 - Structure elucidation of organic compounds.
 - Biological evaluation of the novel synthesized compounds as potential therapeutics.
- Publications/Citations Data
 - Type of Publication: original articles in International Refereed Journals
 - Number of Publications: 14
- H index: 5
- Number of citations: 90
- <https://eg.linkedin.com/in/ranza-elrayess-8721481a6>
- <https://scholar.google.com/citations?user=0h0u4IoAAAAJ&hl=en>
- <https://orcid.org/0000-0002-2690-0192>

Languages

- Native Language: Arabic
- Other Languages: English (Very Good), IELTS overall 6.5 and TOEFL Local, 543.

Activities

- Reviewer in International Journal of Bioorganic Chemistry (IJBC) ISSN Print: 2578-9384; ISSN Online: 2578-9392 <https://www.sciencepg.com/j/ijbc> from November 2, 2022 to November 2, 2024.
- Reviewer in Royal Chemical Society.
- Academic Board Member for Global Open Share Publishing

- An active member of the implementation team of Continuous Improvement and Qualifying for Accreditation Project (CIQAP), Faculty of Pharmacy, Suez Canal University, Ismailia- Egypt
- Participate in the medical convoys.
- A member of Natural Toxins Society.
- A member in quality assurance unit in faculty of pharmacy, Suez Canal University. (2009 till now)
- Head of management standard in quality assurance unit in faculty of pharmacy, Suez Canal University. (2017 till now)
- Director of training unit in faculty of pharmacy, Suez Canal University.(2017-2024)
- A member in quality assurance unit in faculty of pharmacy, Sinai University.(2019-2021)

Conferences

- Attend with a Poster presentation in the **5th International Conference on Natural Toxins** , 17-19 December 2012, Cairo-Egypt.
- Attend the **Fisrt Young Researcher Conference**, November 2014, Ismailia, Egypt.
- Attend the **seocnd Young Researcher Conference**, October 2014, Ismailia, Egypt.
- Attend with a Poster presentation in the **3rd Young Researcher Conference**, May 2016, Ismailia, Egypt.
- Attend with a Poster presentation in in the **4th Youth research conference** held in Suez Canal University, Ismailia, Egypt in the period from 29-30 April 2017.
- Attend the **second clinical pharmacy Conference**, November 2018, Ismailia, Egypt.
- Attend the 3rd Pharmacy International Conference universitas Muhammadiyah Purwokerto (PIC-UMP) and 4th Postgraduate seminar on Pharmaceutical Sciences (PSPS) as plenary session speaker. Indonesia (on line), in the period from 7-8 August 2021.
- Attend work shop: instruments used in nanomaterials characterization Held online in 2022-03-06 during the activities of the conference Sustainable **Development in Sinai (Reality and Expectations)**.
- Attend the work shop: Data Analysis for International Publication held online in 2022-03-07 during the activities of **the SCU 9 YOUNG RESEARCHERS CONFERENCE: Climate Change: Opportunities and Challenges**.

- Attend work shop: Effective EKB Searching Skills - Part 3 held online in 2022-03-10 during the activities of **the SCU 9 YOUNG RESEARCHERS CONFERENCE: Climate Change: Opportunities and Challenges.**
- Attend (online) with a Poster presentation in the **1st International Conference on Pharmaceutical and Biomedical Research (PBMR)**, 20-21 March 2022, Sinai, Egypt.
- Attend the fifth conference of TICO: the role of leading businesses and technology in solving climate problems and decrease carbon emissions from industry. 26-27th Feb. 2023, Ismailia, Egypt.
- Attend the **10th Young Researcher Conference**, March 6-7th 2023, Ismailia, Egypt.
- Attend the **8th International Conference of the Egyptian society for Environmental Science (ESES)'' Scientific Research and Sustainable Development''**, 2024, February 24th Ismailia, Egypt.
- Attend the **6th Annual Conference for Student Research and Creativity '' Artificial Intelligence: Future Prospects for Achieving the Sustainable Development Goals''**. 2024, May 7th Ismailia, Egypt.
- Attend the **2nd Conference of the Medical Physiology Department, Faculty of Medicine Suez Canal University '' Transitional Physiology from Research To Practice**. 2024, May 30-31 Ismailia, Egypt.

Publications and presentation

1- Ranza Elrayess, Ranwa Elrayess, Khaled Hussien, Nagat Ghareb. Development of Some Benzimidazole Derivatives as Potential CDK2 Inhibitors: Synthesis, Molecular Docking and Anti-Proliferative Investigations. Russian journal of organic chemistry (accepted August 2024-inpress)

2- Nagat Ghareb, Khaled M. Darwish, Mohamed S. Nafie, Ranwa Elrayess, Noha M. Abourobe, Shaimaa A. Fattah, Reem M. Hazem, Eman T. Mehanna, **Ranza Elrayess**. Development, Biological Evaluation, and Molecular Modelling of Some Benzene-sulfonamide Derivatives as Protein Tyrosine Phosphatase-1B Inhibitors for Managing Diabetes Mellitus and Associated Metabolic Disorders. RSC Medicinal Chemistry 2024. <https://doi.org/10.1039/D4MD00594E>.

3-Asmaa SA Yassen, Sherief M Abdel-Wahab, Khaled M Darwish, Mohamed S Nafie, Reda FA Abdelhameed, Gharieb S El-Sayyad, Ahmed I El-Batal, Khadiga M Attia, Hosam A

Elshihawy, **Ranza Elrayess**. Novel curcumin-based analogues as potential VEGFR2 inhibitors with promising metallic loading nanoparticles: synthesis, biological evaluation, and molecular modelling investigation. RSC Medicinal Chemistry 2024. <https://doi.org/10.1039/D4MD00574K>

4- Sherief M. Abdel-Wahaba, Asmaa S. A. Yassen, **Ranza A. Elrayess**, Khadiga M. Attia, Hosam A. Elshihawy. 4,5,6,7-Tetrahydrobenzo[b]thiophene-Based Derivatives as Anticancer Agents: An overview. Records of Pharmaceutical and Biomedical Sciences 2023; 7 (1), 173-180. 10.21608/rpbs.2023.241059.1246

5- Sherief M. Abdel-Wahaba, **Ranza A. Elrayess**, Asmaa S. A. Yassen, Khadiga M. Attia, Hosam A. Elshihawy. Curcumin Mimics: An Overview. Records of Pharmaceutical and Biomedical Sciences 2023; 7 (1), 189-196. 10.21608/RPBS.2023.246345.1251

6-Salma M. Khirallah, Heba M. M. Ramadan, Ibrahim M. El-Deen, **Ranza A. El rayess**, Design, Synthesis, and Antiproliferative Activities of 1,3-Disubstituted 2-Thioxoimidazolidin-4-one Derivatives against HepG2 and MCF-7 Cells. ChemistrySelect **2023**; (8) e202301098. doi.org/10.1002/slct.202301098

7-Ranza A. Elrayess, Ranwa Elrayess, Nagat Ghareb. Synthesis, Molecular Docking, and Anti-inflammatory Activities of Some Novel Benzimidazole Derivatives as Potential Cyclooxygenase-2 Inhibitors. Egyptian journal of chemistry **2023**. 10.21608/EJCHEM.2023.218909.8165

8-Hasnaa Abdelfatah, **Ranza Elrayess**, Mohamed M.Said, Hosam A. Elshihawy. Naphthalene: An Overview. Records of Pharmaceutical and Biomedical Sciences 2023; 7 (1), 145-153. 10.21608/rpbs.2023.212630.1228.

9-Ranza Elrayess, Mohamed S. Elgawish, Mohamed S. Nafie, Nagat Ghareb, Asmaa S. A. Yassen. 2-Phenylquinazolin-4(3H)-one scaffold as newly designed, synthesized VEGFR-2 allosteric inhibitors with potent cytotoxicity through apoptosis. Archiv der Pharmazie 2023.<https://doi.org/10.1002/ardp.202200654>.

10-N Ghareb, AM Atta, **RA Elrayess**. Synthesis and Molecular docking Investigations of Ring-Fused Benzimidazoles as Novel Acetylcholinesterase Inhibitors. Records of Pharmaceutical and Biomedical Sciences 7 (1), 115-124. 10.21608/RPBS.2023.200519.1217

11-R Elrayess, KM Darwish, MS Nafie, GS El-Sayyed, MM Said, ASA Yassen. Quinoline–hydrazone hybrids as dual mutant EGFR inhibitors with promising metallic nanoparticle

loading: rationalized design, synthesis, biological investigation and computational studies New Journal of Chemistry 46 (38), 18207-18232. doi: 10.1039/D2NJ02962F

12-Ranza A. Elrayess, Yasmine M Abdel Aziz, Mohamed Saleh Elgawish, Marwa Elewa, Asmaa SA Yassen, Sameh S Elhady, Hosam A Elshihawy, Mohamed M Said. Synthesis, Discovery of Potent Dual EGFR/HER2 Inhibitors Based on Thiophene Scaffold Targeting H1299 Lung Cancer Cell Line. Pharmaceuticals 2021; 14(1): 9. doi: 10.3390/ph14010009

13-Ranza A. Elrayess, Mohamed Saleh Elgawish, Marwa Elewa, Mohamed S. Nafie, Sameh S. Elhady, Asmaa S. A. Yassen. Synthesis, 3DQSAR and molecular modeling studies of triazole bearing compounds as a promising scaffold for cyclooxygenase-2 inhibition. Pharmaceuticals 2020; 13(11): 370. doi: 10.3390/ph13110370

14-Ranza A. Elrayess, Yasmine M. Abdel Aziz, Mohamed S. Elgawish, Marwa Elewa, Hosam A. Elshihawy, Mohamed M. Said. (dec.2019). PHARMACOPHORE MODELING, 3D-QSAR, SYNTHESIS AND ANTI-LUNG CANCER EVALUATION OF NOVEL THIENO(2,3-d)(1,2,3)TRIAZINE TARGETING EGFR. Arch Pharm Chem life sci. 2020; 353(2). doi: 10.3390/ph14010009

15-Ranza A. Elrayess, Hosam A. Elshihawy, Yasmine M. Abdel Aziz, Mohamed M. Said (2017). DESIGN, SYNTHESIS AND ANTICANCER ACTIVITY OF SOME NOVEL HETEROCYCLIC COMPOUNDS. 4th Youth research conference held in April 2017.

16-Ranza A. Elrayess, Hosam A. Elshihawy, Yasmine M. Abdel Aziz, Mohamed M. Said (2016). DESIGN, SYNTHESIS AND BIOLOGICAL EVALUATION OF NOVEL HETEROCYCLICS AS POTENTIAL ANTICANCER THERAPEUTICS. 3rd Youth research conference held in May 2016.

17-Elrayess R A, Ghareb G. , Azab MM and Said MM (2013) Synthesis and Antimicrobial Activities of Some Novel Benzimidazole and Benzotriazole Derivatives containing β -Lactam Moiety. Life Science Journal; 10(3): 1784-1793.

18-Ranza A. Elrayess, Nagat A. Ghareb, Marwa M. Azab, Mohamed M. Said (2012), Synthesis and Antimicrobial Activities of Some Novel Benzimidazole and Benzotriazole Derivatives containing β -lactam Moiety under Ultrasonic Conditions. 5th International Conference on Natural Toxins, 17-19 December, Cairo-Egypt.

Personal information:

Full name: Ranza Ahmed Abdo Hassan Elrayess

Full address: Egypt /Ismailia

Nationality: Egyptian.

Language spoken: Arabic and English.

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ranza.hassan@su.edu.eg