

**Zeinab Mahmoud, PhD., M.Sc., B.Sc.**

**Office:** Pharmaceutical Organic Chemistry Department, Faculty of Pharmacy,  
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**ACADEMIC AFFILIATION**

Assistant professor

**2020**

(*Pharmaceutical Organic Chemistry department*)

Faculty of Pharmacy, Cairo University

**Cairo, Egypt**

PhD. in Medicinal Chemistry

**2012**

School of Pharmacy,

**St. John's, NL**

Memorial University of Newfoundland, Canada

**Thesis Topic:** *1H-Imidazo[4,5-c]quinoline derivatives as Potential Bioactive Molecules  
Synthesis and Biological Evaluation*

**Supervisor:** *Dr. Mohsen Daneshtalab* (Professor of Medicinal Chemistry,  
Associate Director of Graduate Studies and Research, School of Pharmacy,  
Memorial University of Newfoundland)

*Dr. Hu Liu* (Professor of Pharmaceutical Chemistry, School of Pharmacy,  
Memorial University of Newfoundland)

*Dr. Paris Georghiou* (Professor of Organic Chemistry Faculty of Science,  
Chemistry department, Memorial University of Newfoundland)

Master of Pharmaceutical Sciences in Organic Chemistry

**2005**

Faculty of Pharmacy, Cairo University, Egypt

**Cairo, Egypt**

**Thesis Topic:** *Synthesis of certain fused thienopyrimidines of biological interest*

**Supervisors:** *Dr. Bothaina Abdel-Fattah* (Professor of Organic Chemistry,  
Organic Chemistry Department, Faculty of Pharmacy, Cairo  
University)

*Dr. Manal M. Kandeel* (Professor of Organic Chemistry, Organic  
Chemistry Department, Faculty of Pharmacy, Cairo University)

*Dr. Maha Abdel-Hakeem* (Assistant Professor of Organic Chemistry,  
Organic Chemistry Department, Faculty of Pharmacy, Cairo University)

Bachelor of Pharmaceutical Sciences (Excellent with Honors)

**1999**

Faculty of Pharmacy, Cairo University, Egypt

**Cairo, Egypt**

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**ADDITIONAL EDUCATION AND TRAINING**

Joining my Ph.D. program in School of Pharmacy, Memorial University of Newfoundland, I achieved the progress of passing the following courses with the total cumulative average of 85.70%;

- PHAR 6102 (Heterocyclic Medicinal and Pharmaceuticals) **Winter 2007-2008**
- CHEM 6192 (Advanced Organic and Biochemistry Mass Spectroscopic Analysis)  
**Winter 2007-2008**
- PHAR 6000 (Medicinal Chemistry) **Fall 2007-2008**
- *Successfully passed PhD Comprehensive Examination* **August 2009**

General and special courses of prethesis Master examinations in Organic Chemistry, Faculty of Pharmacy, Cairo University with general grade of (GOOD)

**The academic year 1999-2000**

**WORK & PROFESSIONAL EXPERIENCES**

Member in Performance Appraisal and Quality Assurance Unit (PAQU),

Faculty of Pharmacy,

Cairo University

**October 2014 – August 2016  
Cairo, Egypt**

Vice director for Micro analytical Unit (NMR Lab.),

Faculty of Pharmacy,

Cairo University

**October 2015 – August 2016  
Cairo, Egypt**

Lecturer,

Pharmaceutical Organic Chemistry Department,

Faculty of Pharmacy,

Cairo University

**November 2012 – End of January 2020  
Cairo, Egypt**

Assistant professor,

Pharmaceutical Organic Chemistry Department,

Faculty of Pharmacy,

Cairo University

**End January of 2020 - Present  
Cairo, Egypt**

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**Courses:** Organic Chemistry for first- and second-years pharmacy students

**Specific duties:**

1. Teaching Organic Chemistry lectures for first- and second-years Pharmacy students on weekly basis.
2. Practical course coordinator for first year students/ second semester.
3. Mark assignments & quizzes and record the marks.
4. Answer the students' questions and inquiries involving all the course topics.
5. Invigilate the mid-term and final exams in addition to all in-class quizzes.
6. Invigilate other courses exams.
7. Mark and revise all the mid-term and final exams to be delivered in the assigned dates.
8. Arrange for practical Organic Chemistry exams according to (GLP) rules and regulations.

Teaching Assistant,

**September 2010-2011**

School of Pharmacy, Memorial University of Newfoundland, Canada **St. John's, NL**

**Courses:** Medicinal Chemistry (second year pharmacy students)

**Specific duties:**

- 1- Attend all the tutorials on weekly basis.
- 2- Mark assignments and quizzes, record and return the marks, in some cases within as little as 24 hours.
- 3- Answer the students' questions and inquiries involving the course topics.
- 4- Invigilate the mid-term and final exams in addition to all in-class quizzes.
- 5- Invigilate other courses exams within the permissible assigned working hours for one TA unit.
- 6- Help in revising the mid-term and final exams marking procedures to be delivered in the assigned dates.
- 7- May help in teaching the course and giving lectures according to the circumstances' needs.

Teaching Assistant,

**2008-2009**

School of Pharmacy, Memorial University of Newfoundland

**St. John's, NL**

**Courses:** different specialties (Pharmaceutics, Medicinal Chemistry, Kinetics) and levels (mainly first and second years pharmacy students).

**Specific duties:**

- 1- Attend all the tutorials on weekly basis.

- 2- Mark assignments and quizzes, record and return the marks, in some cases within as little as 24 hours.
- 3- Answer the students' questions and inquiries involving the course topics.
- 4- Invigilate the mid-term and final exams in addition to all in-class quizzes.
- 5- Invigilate other courses exams.
- 6- Help in revising the mid-term and final exams marking procedures to be delivered in the assigned dates.
- 7- May help in teaching the course and giving lectures according to the circumstances' needs.
- 8- Demonstrate and guide the laboratory, mark the notes and results.

Assistant Lecturer,  
Faculty of Pharmacy, Cairo University

**2005-2007**  
**Cairo, Egypt**

*Courses:* Organic Chemistry

*Specific duties:*

- 1- Solo teaching Organic Chemistry laboratories for first- and second-years Pharmacy students on weekly basis.
- 2- Demonstrate and guide the laboratory, mark the notes and results for the students.
- 3- Mark assignments and quizzes, record and return the marks, in some cases within as little as 24 hours.
- 4- Answer the students' questions and inquiries involving the course topics.
- 5- Invigilate the mid-term and final exams in addition to all in-class quizzes.
- 6- Invigilate other courses exams.
- 7- Help in revising the mid-term and final exams marking procedures to be delivered in the assigned dates.

Laboratory Demonstrator,  
Faculty of pharmacy, Cairo University

**1999-2004**  
**Cairo, Egypt**

*Courses:* Organic Chemistry

*Specific duties:*

- 1- Team teaching Organic Chemistry laboratories for first- and second-year pharmacy students on weekly basis.
- 2- Demonstrate and guide the laboratory, mark the notes and results for the students.
- 3- Mark assignments and quizzes, record and return the marks, in some cases within as little as 24 hours.

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- 4- Answer the students' questions and inquiries involving the course topics.
  - 5- Invigilate the mid-term and final exams in addition to all in-class quizzes.
  - 6- Invigilate other courses exams.
  - 7- Help in revising the mid-term and final exams marking procedures to be delivered in the assigned dates.

### **Research Skills**

- Running chemistry experiments ranging from normal procedures up to dangerous ones in an independent expert manner.
- Able to work and take the suitable decisions under pressure.
- Well trained and actively running, on daily basis, many spectroscopic analysis instruments e.g. *Bruker NMR 500* and *NMR 300* as a complementary procedure for my experimental findings.
- Very willing to get training on other upcoming new instruments as a continuation of my progress development and career achievements.

### **RESEARCH TRAINING AND CERTIFICATES**

- Animal Care Seminar- February 2010, Animal Care Services, MUN.
- Laboratory Safety Training-2010, Department of Health and Safety, MUN.
- WHMIS (Workplace Hazardous Materials Information System) - Laboratory Safety- 2008, Department of Health and safety, MUN.
- WHMIS (Workplace Hazardous Materials Information System) - Laboratory Safety- 2007, Department of Health and safety, MUN.

**Training courses of Faculty and Leadership Development Center (FLDC), Cairo University**

<i>Topic of the course</i>	<i>Date of attendance and completion</i>
Meeting and Managing Time	15 <sup>th</sup> – 16 <sup>th</sup> August 2015
The Credit Hour Systems	3 <sup>rd</sup> – 4 <sup>th</sup> September 2014
Managing Research Teams	5 <sup>th</sup> – 6 <sup>th</sup> March 2014
Research Ethics	29 <sup>th</sup> – 31 <sup>st</sup> January 2013
Quality Standards in Teaching	28 <sup>th</sup> – 30 <sup>th</sup> August 2012
International Publishing of Scientific Research	14 <sup>th</sup> – 16 <sup>th</sup> August 2012
Competing for Research Funds	11 <sup>th</sup> – 13 <sup>th</sup> August 2012

**Activities**

- Attending 6<sup>th</sup> International Scientific Conference, Faculty of Pharmacy, Cairo University.....**25<sup>th</sup> - 26<sup>th</sup> April 2015**
- Poster presentation in 4<sup>th</sup> International Scientific Conference, Faculty of Pharmacy, Cairo University.....**24<sup>th</sup> - 25<sup>th</sup> April 2013**
- Participating in the organization of 4<sup>th</sup> International Scientific Conference, Faculty of Pharmacy, Cairo University.....**24<sup>th</sup> - 25<sup>th</sup> April 2013**
- Passing the workshop “Internal auditing workshop according to ISO9001/2008” and IWA2 .....**17<sup>th</sup> - 19<sup>th</sup> September 2013**
- Attending the Joint Seminar on “Recent Advances in Natural Products and Biotechnology..... **31<sup>st</sup> October 2012**

**PUBLICATIONS AND MANUSCRIPTS**

Publications and Presentations			
Title	Journal name	Year	Volume /Page

Synthesis of Certain Fused Thienopyrimidines of Biological Interest	<i>Journal of the Chinese Chemical Society</i>	2006	<b>53: 403-412</b>
Imidazoquinolines as diverse and interesting building Blocks: review of synthetic methodologies	<i>Heterocycles</i>	2012	<b>85(11): 2651- 2683</b>
Synthesis and biological screening of new 4-substituted-2-(3,4,5-trimethoxyphenyl)quinazolines as potential anticancer agents	<i>Der Pharma Chemica</i>	2015	<b>7(11): 162-171</b>
Design, Synthesis, Antitumor And Antimicrobial Activity Of Novel 6,7-Dimethoxyquinazoline Derivatives	<i>Heterocycles</i>	2016	<b>92(2): 272-290</b>
Synthesis and Pharmacological Screening of New Thienopyridines for the treatment of Alzheimer's disease	<i>Der Pharma Chemica</i>	2016	<b>8(3): 1-12</b>
Design, Synthesis and Anticancer Screening of Novel Benzothienopyrno Fused System: A Step in Discovering a Promising Anticancer Motif	<i>Der Pharma Chemica</i>	2017	<b>9(13): 68-79</b>
Novel pyrazolo[3,4- <i>d</i> ]pyrimidines: design, synthesis, anticancer activity, dual EGFR/ErbB2 receptor tyrosine kinases inhibitory activity, effects on cell cycle profile and caspase-3-mediated apoptosis	<i>Journal of Enzyme Inhibition and Medicinal Chemistry</i>	2019	<b>34(1): 532-546</b>
New Cyclooctathienopyridine Derivatives in the aim of Discovering Better Anti-Alzheimer's Agents	<i>Journal of Molecular Structure</i>	2019	<b>1196: 162-168</b>
Novel pyrazolo[3,4- <i>d</i> ]pyrimidines as potential cytotoxic agents: Design, synthesis, molecular docking and CDK2 inhibition	<i>Anti-Cancer Agents in Medicinal Chemistry</i>	2019	<b>19(11): 1368- 1381</b>

#### **ORALLY PRESENTED SEMINARS AND INVITED TALK**

- *Azolyalkyl-substituted imidazo[4,5-*c*]quinolines as potential Cytotoxic Agents*, Graduate studies and Research Seminar, School of Pharmacy, Memorial University of Newfoundland, **Fall 2009**.

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- *Novel azolylalkyl-substituted imidazo[4,5-c]quinolines as potential antineoplastic agents*, Graduate studies and Research Seminar, School of Pharmacy, Memorial University of Newfoundland, **Fall 2008**.
  - *Novel Cyclic Ureidoquinolines as Potential Anticancer Agents*, Graduate studies and Research Seminar, School of Pharmacy, Memorial University of Newfoundland, **Fall 2007**.

### **COMPUTER PROFICIENCIES**

- Successfully passed the ICDL (International Computer Driving License) since 2006.

*N.B.:* ICDL is a qualification that verifies and declares a person's computer skills and makes them readily mobile within business and around the world.\*

- ICDL CORE certifies computer use skills in 7 test modules:
  1. *Concepts of Information Technology*
  2. *Using the Computer and Managing Files*
  3. *Word Processing*
  4. *Spreadsheets*
  5. *Database*
  6. *Presentation*
  7. *Information and Communications*

\*<http://www.icdl.ca>

- ChemSketch and ChemDraw software specific for drawing and representing chemical structures and equations.

### **Language Skills**

- Fluently in English and Arabic (mother tongue)
- Can read and write some French.

### **REFERENCES**

*Available upon request*