# Hind M. Ismaeel

Lecturer of Organic Chemistry Department of Chemistry, Faculty of Women for Arts, Science and Education Ain Shams University, Heliopolis, Cairo, Egypt, 11757 Phone: +201274775608 | Email: hind.ismaeel@women.asu.edu.eg LinkedIn: <u>Hind Ismaeel | LinkedIn</u>

# **PROFESSIONAL SUMMARY**

As an experienced Organic Chemist and Academic, I bring a robust background in synthetic chemistry, medicinal chemistry, and organic compound development. My journey began with a Ph.D. from Ain Shams University, followed by postdoctoral training in synthetic approaches and transition metal catalysis. I have a proven track record in multi-step organic synthesis, peptide synthesis, and biological evaluation of novel compounds for antimicrobial and anticancer activities. I have extensive experience in teaching, mentoring, and research supervision at the university level. I am fluent in English and Arabic and can effectively communicate and collaborate with colleagues and students. My expertise extends to scientific software and laboratory techniques, including microwave-assisted synthesis, peptide synthesis, and analytical characterizations.

# **EDUCATION**

# Ph.D. in Organic Chemistry

Ain Shams University, Cairo, Egypt | 2007–2011

• Thesis: Synthesis, Reactions, and Biological Activity of New Isatin Derivatives

# M.Sc. in Organic Chemistry

Ain Shams University, Cairo, Egypt | 2003–2007

• Thesis: Studies on Novel Oxindole Derivatives of Expected Biological Activity

#### **B.Sc. in Chemistry**

Ain Shams University, Cairo, Egypt | 2003

# **PROFESSIONAL EXPERIENCE**

#### Postdoctoral Researcher

Vrije Universiteit Brussel (VUB), Brussels, Belgium | February 2015-September 2015

- Focused on developing transition metal-catalyzed synthetic approaches for novel peptidomimetic compounds.
- Gained advanced training in peptide synthesis techniques.

### **Postdoctoral Fellow**

Vilnius University, Vilnius, Lithuania | September 2012–February 2013

- Developed a novel synthesis approach for fluorescent triarylpyrrolopyrimidines using palladium, nickel, and copper-catalyzed cross-coupling reactions.
- Investigated C-C bond formation via C-H bond activation.

# Ph.D. Researcher

Ain Shams University, Cairo, Egypt | 2007–2011

• Investigated the synthesis and biological evaluation of isatin derivatives for antimicrobial and anticancer activity.

#### **Research Assistant**

National Centre for Research (NCR Egypt) | September 2003–December 2003

• Gained experience in instrumental and spectroscopic analysis.

# **EMPLOYMENT HISTORY**

#### Lecturer of Organic Chemistry

Ain Shams University, Cairo, Egypt | 2012-present

- Responsible for teaching undergraduate organic chemistry and medicinal chemistry courses.
- Prepare and present lectures, develop course materials, administer exams, and supervise teaching assistants and laboratory sessions.

#### Teaching Assistant, and then Lecturer Assistant

Ain Shams University, Cairo, Egypt | 2004–2012

• Taught practical organic chemistry to undergraduate students and assisted in lab sessions.

#### CERTIFICATIONS

- **Professional Certified Trainer (TOT)**, The School of Continuing Education, The American University in Cairo.
- Clinical Nutrition and Obesity Management Diploma, The School of Continuing Education, The American University in Cairo.
- Mental Health Specialist Diploma, Ain Shams University.

# **TECHNICAL SKILLS**

- **Synthesis Techniques**: Multi-step organic synthesis of small molecules, especially heterocyclic compounds and metal-based catalyzed reactions, microwave-assisted synthesis (CEM, Biotage microwave synthesizers), ultrasonic-assisted synthesis, solid-phase peptide synthesis, light-sensitive reactions, and maintaining an inert atmosphere.
- Analytical Methods: GC-MS, LC-MS, <sup>1</sup>H-NMR, <sup>13</sup>C-NMR, IR, UV/Vis
- **Software**: SciFinder, Reaxys, ChemDraw, UCSF Chimera, E-Notebook, Microsoft Office (Word, Excel, PowerPoint, Outlook), video script, Microsoft Teams, and ZOOM (conference coordinator skills).
- Computer-Aided Drug Design: UCSF Chimera, ChemDraw.
- **Database and Scientific Information**: SciFinder, Reaxys, E-Notebook (Electronic laboratory notebook).

# PUBLICATIONS

- 1. Synthesis, Anti-Proliferative Activity, DFT, and Docking Studies of Some Novel Chloroquinoline-Based Heterocycles, *Polycyclic Aromatic Compounds* (2023).
- 2. Synthesis of New Schiff Bases Bearing 1,2,4-Triazole, Thiazolidine and Chloroazetidine Moieties and Their Pharmacological Evaluation, *Journal of Enzyme Inhibition and Medicinal Chemistry*, 32, 119 (2017).
- 3. Synthesis and In Vitro Biological Evaluation of New Heterocycles Based on the Indole Moiety, *Journal of Enzyme Inhibition and Medicinal Chemistry*, 30, 140 (2014).
- 4. Antiproliferative Effects of Metal Complexes of New Isatin Hydrazones Against HCT116, MCF7, and HELA Tumor Cell Lines, *Journal of Enzyme Inhibition and Medicinal Chemistry*, 27, 330 (2012).
- Synthesis, Characterization and In Vitro Antimicrobial Evaluation of New Compounds Incorporating Oxindole Nucleus, *Journal of Enzyme Inhibition and Medicinal Chemistry*, 27, 599 (2012).

# **ABSTRACTS AND PRESENTATIONS**

Highly Site-Selective Synthesis of 2,4,7-Triarylpyrrolo[2,3-d]pyrimidines by Cross-Coupling Reactions, *Kauno Technologijos Universitetas*, 2013.

# LANGUAGES

- Arabic: Native
- English: Fluent

# REFERENCES

Available upon request

All documents are available upon request