



Abdelhamid Ahmed El-Sayed Soliman

Date of birth: 18 Mar 1998 | **Nationality:** Egyptian | **Gender:** Male | **Phone number:** (+20) 1019809816 (Home) | **Email address:** abdelhameed-ahmed@aun.edu.eg | **Website:** <https://www.aun.edu.eg/science/abdelhamid-ahmed-elsayed-soliman> | **LinkedIn:** <https://www.linkedin.com/in/abdelhameed-ahmed-5ba038203/> |

WhatsApp Messenger: <https://wsend.co/201154021171> |

Address: Libraries Street, Markaz El-Fath, Assiut Governorate, 71516, Assiut, Egypt (Work)

EDUCATION AND TRAINING

1 SEP 2017 – 12 JUL 2021

BSC IN CHEMISTRY Faculty of Science, Assiut University, (Assiut) Egypt

Website <https://www.aun.edu.eg/science/ar/home-2> | **Field of study** Chemistry (completed in English Language) |

Final grade Excellent with honor, CGPA 3.85\4.00 (First class student)

TEACHING AND OTHER EDUCATION EXPERIENCE

4 DEC 2022 – CURRENT

Full-time teaching Assistant

1. To demonstrate use of practical equipment, experiments, and techniques that form an element of an undergraduate course of study.
2. To oversee students carrying out such experiments, exercises, etc., and offer assistance as appropriate.
3. Responsible for the day-to-day operation of the laboratory.
4. To be aware of any health and safety implications of procedures and take action to maintain a safe environment.

Link <https://www.aun.edu.eg/science/abdelhamid-ahmed-elsayed-soliman>

WORK EXPERIENCE

15 MAR 2023 – CURRENT Assiut, Egypt

RESEARCH ASSISTANT CHEMISTRY DEPARTMENT, FACULTY OF SCIENCE, ASSIUT UNIVERSITY

Project Title: Synthesis and applications of some new isoquinoline derivatives

Supervisor Name: Prof. Etify Bakhite.

Research Experiences:

1. Synthesize new organic compounds and study their properties.
2. Characterization of compounds using NMR, IR, MS, and x-ray single crystal to confirm their structure and purity.
3. Molecular modeling with Density-functional theory (DFT)

Website <https://www.aun.edu.eg/main/>

26 AUG 2024 – 25 DEC 2024 Singapore, Singapore

RESEARCH OFFICER INSTITUTE OF MATERIAL RESEARCH AND ENGINEERING (IMRE), A*STAR

Project Title: Synthesis of nanocrystals and their energy applications

Supervisor Name: Ice Tee Si Yin

Research Experiences:

1. Synthesis of nanomaterials for different energy applications involving HER, OER, and thermoelectric materials.
2. Using different characterization techniques (SEM, EDX, TEM, and XRD) to confirm the structure, elemental composition, and surface morphology of prepared nanomaterials.

3. Study of thermal and electrochemical properties of prepared nanomaterials (LSV, CV, EIS, multimeter, and TGA).

PUBLICATIONS

2025

Theoretical and experimental investigation on newly synthesized pyrazolopyridine derivatives: Insight into the compound activity, NLO response, and molecular dynamics

El Bakri, Y., Mohamed, S.K., Karthikeyan, S., Bakhite, E.A., Ahsin, A., Abuelhassan, S., Marae, I.S., **Soliman, A.A.**, Khamies, E., Qahtan, M.Q. and Abuelizz, H.A., 2025. Theoretical and experimental investigation on newly synthesized pyrazolopyridine derivatives: Insight into the compound activity, NLO response, and molecular dynamics. *Journal of Molecular Structure*, 1321, p.140139.

URL: <https://www.sciencedirect.com/science/article/pii/S0022286024026486>

2025

A highly substituted isoquinolinethione: Synthesis, crystal structure, DFT analysis and molecular docking studies against a series of the SARS-CoV-2 proteins

El Bakri Y, Safin DA, Mohamed SK, Marae IS, Bakhite EA, Khamies E, **Soliman AA**, Abuelhassan S, Abuelizz HA, Al-Salahi R, Mague JT. A highly substituted isoquinolinethione: Synthesis, crystal structure, DFT analysis and molecular docking studies against a series of the SARS-CoV-2 proteins. *Journal of Molecular Structure*. 2025 Jan 27:141527.

URL: <https://www.sciencedirect.com/science/article/pii/S0022286025002169>

2024

Synthesis, Crystal Structure, Hirshfeld Surface Analysis, and Computational Approach of a New Pyrazolo[3,4-g]isoquinoline Derivative as Potent against Leucine-Rich Repeat Kinase 2 (LRRK2)

Bakhite, Etify A., Shaaban Kamel Mohamed, Chin-Hung Lai, Karthikeyan Subramani, Islam S. Marae, Suzan Abuelhassan, **Abdelhamid AE Soliman** et al. "Synthesis, Crystal Structure, Hirshfeld Surface Analysis, and Computational Approach of a New Pyrazolo [3, 4-g] isoquinoline Derivative as Potent against Leucine-Rich Repeat Kinase 2 (LRRK2)." *ACS Omega* (2024).

URL: <https://pubs.acs.org/doi/full/10.1021/acsomega.4c03208>

2024

Synthesis, single crystal investigations, and quantum computational investigation of a new 1,1'-(3,5-dihydroxy-3-methyl-2'-nitro-1,2,3,4-tetrahydro-[1,1'-biphenyl]-2,6-diyl)bis(ethan-1-one) as a potent inhibitor for Cytochrome P450 3A4

Mohamed, Shaaban K., Chin-Hung Lai, Subramani Karthikeyan, **Abdelhamid AE Soliman**, Shaban M. Radwan, Islam S. Marae, Remon M. Zaki et al. "Synthesis, single crystal investigations, and quantum computational investigation of a new 1, 1'-(3, 5-dihydroxy-3-methyl-2'-nitro-1, 2, 3, 4-tetrahydro-[1, 1'-biphenyl]-2, 6-diyl) bis (ethan-1-one) as a potent inhibitor for Cytochrome P450 3A4." *Journal of Molecular Structure* (2024): 138895.

URL: <https://www.sciencedirect.com/science/article/pii/S0022286024014133>

SKILLS

Research and analytical skills | Literature Reviewing | Material Characterization (XRD, SEM, XPS, EDS, TGA, UV-Vis, FTIR) | Skilled in Schlenk techniques, Glovebox working and NMR investigation | Gaussian DFT calculation | data processing and analysis software: Origin (advanced) | MS Office; CHEMDRAW; MESTRENOVA | LinkedIn | Good listener and communicator

LANGUAGE SKILLS

Mother tongue(s): **ARABIC**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	B2	B2	B2

HONOURS AND AWARDS

Singapore International Pre-Graduate Award (SIPGA) – IMRE, A*STAR

Assiut University Distinction Award – Faculty of Sciencen Assiut University

First class student

CONFERENCES AND SEMINARS

Assiut, Egypt

X-ray Diffraction Method, Applications, and Results Refinement

Assiut, Egypt

Drugs Preformulation Development and computational chemistry research

RECOMMENDATIONS

Prof. Etify Bakhite Professor of Chemistry, Department of Chemistry, Faculty of Science, Assiut University.

Email etafy@aun.edu.eg | **Phone** (+20) 1006670292

Link <https://scholar.google.com.eg/citations?user=sqq7RbUAAAAJ&hl=en>

Dr. Hani N. Abdelhamid Associate professor of materials chemistry, Al Imam Mohammad Ibn Saud Islamic University (IMSIU)

Email hany.abdelhamid@aun.edu.eg | **Phone** (+20) 1029952642

Link https://scholar.google.com/citations?user=y_Fr2cYAAAAJ&hl=en