



وزارة التعليم العالي

المعهد العالي للهندسة والتكنولوجيا بطنطا



Curriculum Vitae

Dr. Mohamed Ahmed Mohamed Mahmoud

Lecturer of Physical Chemistry,
Basic Sciences Department,
Tanta Higher Institute of Engineering and Technology, Tanta, Egypt.



1. PERSONAL INFORMATION

Name	Mohamed	Surname	Mahmoud
Date of birth (Day/month/year)	25/11/1966	Place of birth (Country - City)	Egypt – El-Menoufia
Nationality	Egyptian	Sex (M / F)	Male
Marital status	Married	Number of Children	Four
Occupation	Assistant Professor of Physical Chemistry from 2018 to date	Major area	Physical Chemistry
Specialization area	Physical Chemistry [Quantum Chemistry, Computational Chemistry, Nanochemistry, Material Science, New and Renewable Energy]	Permanent address	Barawy, Tala City, El-Menoufia, Egypt.

E-mail address	Drmohamed.mahmoud@thiet.edu.eg hem.mohamed94@yahoo.co.uk	Tel.	Mob. 00201063246897
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2. LANGUAGES

Languages	Level
English	I have a good level in "reading, writing and listening".

3. OCCUPATIONS

Occupations	Place (University, City, Country)	Time
Lecturer of Physical Chemistry	Basic Sciences Department, Tanta Higher Institute of Engineering and Technology, Tanta, Egypt.	2018 to date

4. SCIENTIFIC DEGREE

- Ph. D. Degree:

Physical Chemistry [Quantum Chemistry, Computational Chemistry, New and Renewable Energy],
Chemistry Department, Faculty of Science, Menoufia University, Shebin El-Kom, Egypt, 2017.

The title of Ph. D. thesis is:

**"Calculation and Analysis of the Thermal and Kinetic Parameters for the Formation and
Decomposition of Some Oxygenated Compounds as Surrogates for Fossil Fuel"**

- M. Sc. Degree:

Physical Chemistry [Quantum Chemistry, Computational Chemistry, Nanochemistry, Material Science],
Chemistry Department, Faculty of Science, Menoufia University, Shebin El-Kom, Egypt, 2013.

The title of M. Sc. thesis is:

**" Fabrication and Characterization of Novel System of Nanocrystals Embedded in
Borophosphate Glass Matrix "**

- Diploma Degree:

1- Diploma in "Business Administration", Administration Department, Faculty of Commerce, Menoufia University, Shebin El-Kom, Egypt, 2014.

2- Diploma in "Education" Methods of Science Teaching Department, Faculty of Education, Menoufia University, Shebin El-Kom, Egypt, 1992.

3- Diploma in "Applied Chemistry" Chemistry Department, Faculty of Science, Menoufia University, Shebin El-Kom, Egypt, 1989.

- B. Sc. Degree in: "Chemistry"

Chemistry Department, Faculty of Science, Menoufia University, Shebin El-Kom, Egypt 1988.

5. TEACHING EXPERIENCE

The following courses were taught to undergraduate students:

a- "**Physical Chemistry**", First Year Students, Chemical Engineering Department, Tanta Higher Institute of Engineering and Technology, Tanta, Egypt.

b- "**Thermodynamics**", First Year Students, Chemical Engineering Department, Tanta Higher Institute of Engineering and Technology, Tanta, Egypt.

c- "**Engineering Chemistry**", Zero Year Students, Chemical Engineering Department, Tanta Higher Institute of Engineering and Technology, Tanta, Egypt.

d- "**Water Treatment**", Fourth Year Students, Chemical Engineering Department, Tanta Higher Institute of Engineering and Technology, Tanta, Egypt.

e- "**Air Pollution Control**", Fourth Year Students, Chemical Engineering Department, Tanta Higher Institute of Engineering and Technology, Tanta, Egypt.

f- "**Industrial Safety and Risk Analysis**", Fourth Year Students, Chemical Engineering Department, Tanta Higher Institute of Engineering and Technology, Tanta, Egypt.

g- "**Quality of Education**", First- Fourth Year Students, Chemical Engineering Department, Tanta Higher Institute of Engineering and Technology, Tanta, Egypt.

h- "**Business Administration**", Third Year Students, Chemical Engineering Department, Tanta Higher Institute of Engineering and Technology, Tanta, Egypt.

i- "**Environmental Engineering**" Fourth Year Students, Chemical Engineering Department, Tanta Higher Institute of Engineering and Technology, Tanta, Egypt.

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8. PUBLICATIONS (last 5 years)

8. 1. Scientific Researches

- [1] S. Wageh, Ahmed M. El-Nahas, Anwer A. Higazy, **Mohamed A. M. Mahmoud**, Preparation and characterization of a novel system of CdS nanoparticles embedded in borophosphate glass matrix, *J. Alloys and Compounds* 555, 2013, 161–168.;
- [2] **Mohamed A. M. Mahmoud**, Safinaz H. El-Demerdash, Ahmed H. Mangood, and Ahmed M. El-Nahas, Modeling of Thermochemistry of Thermal Decomposition of Methyl Propionate and Ethyl Acetate Biodiesel, *International J. ASTR* 7, 2017, 2, 190–202.;
- [3] **Mohamed A. M. Mahmoud**, Safinaz H. El-Demerdash Tarek M. El-Gogary, Ahmed M. El-Nahas, Atmospheric Oxidation of Methyl Propanoate by the OH radical, *Russian J. Phys. Chem. A*, 92, 2018, 12, 2475–2483.;
- [4] **Mohamed A. M. Mahmoud**, Abolfazl Shiroudi, Mohamed A. Abdel-Rahman, Mohamed F. Shibl, Safwat Abdel-Azeim, Ahmed M. El-Nahas, Structures, Energetics, and Kinetics of H-atom Abstraction from Methyl Propionate by Molecular Oxygen: Ab Initio and DFT Investigations, *J. Computational and Theoretical Chemistry*, 1196, 2021, 113119-113128.;
- [5] Jamelah S. Al-Otaibi, Mohamed A. Abdel-Rahman, Aljawhara H. Almuqrin, Tarek M. El-Gogary, **Mohamed A. M. Mahmoud**, Ahmed M. El-Nahas, Thermo-kinetic theoretical studies on pyrolysis of dimethoxymethane as a biodiesel model, *J. Fuel*, 290, 2021, 119970-119979.;
- [6] Jamelah S. Al-Otaibi, **Mohamed A. M. Mahmoud**, Aljawhara H. Almuqrin, Tarek M. El-Gogary, Ahmed M. El-Nahas, Thermochemistry and kinetics of hydrogen abstraction from a biodiesel methyl propionate by H and CH₃ radicals, *J. Structural Chemistry*, 32(5)2021, 1857-1872.;
- [7] **Mohamed A. M. Mahmoud**, Ahmed M. El-Nahas, Biodiesel Combustion. Kinetics and Thermochemistry of H-atom Abstraction from Methyl Propionate by $\ddot{O}^{(3P)}$ and O₂H Radicals: Ab Initio Study, *Journal of Molecular Structure*, 1243, 2021, 130896-130907.;
- [8] Abdel-Rahman MA, El-Nahas AM, Simmie JM, Abdel-Azeim S, El-Demerdash SH, El-Meligy AB, **Mohamed A. M. Mahmoud**, A W1 Computational Study on the Kinetics of Initial Pyrolysis of Biodiesel Model: Methyl Propanoate, *New J. Chem.*, 45 (41)2021, 19531-19541.;
- [9] El-Meligy, Asmaa; El-Demerdash, Safinaz; Abdel-Rahman, Mohamed; **Mohamed A. M. Mahmoud**, El-Nahas, Ahmed, Structures, Energetics, and Spectra of (NH) and (OH) Tautomers of 2-(2-Hydroxyphenyl)-1-azaazulene and its Mercapto Analogue: A DFT/TDDFT Study, *J. ACS Omega* 7(16) 2022, 14222-14238.;
- [10] **Mohamed A. M. Mahmoud**, Mohamed F. Shibl, Ahmed M. El-Nahas, Pyrolytic elimination of ethylene from ethoxyquinolines and ethoxyisoquinolines: A computational study 2023, *Journal of Scientific Reports*, 2023, DOI: [10.1038/s41598-023-33272-2](https://doi.org/10.1038/s41598-023-33272-2).;

- [11] Mohamed A. Abdel-Rahman, Mohamed F. Shibl, Abolfazl Shiroudi, Ahmed M. El- Nahas, **Mohamed A. M. Mahmoud**, **Ab initio chemical kinetics of Isopropyl acetate oxidation with $\cdot\text{OH}$ radicals** 2023, *J. Green Chemistry Letters and Reviews*, under review.;

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9. CONFERENCE (last 5 years)

1. 1st International conference of **Water Treatment**, Faculty of Science, **Menoufia University, Egypt 2008.**;
2. The scientific symposium of the **Japanese-Egyptian Society** for the development of Science "**JSPS**", Tanta Higher Institute of Engineering and Technology at Tanta, Egypt, 13 October **2018.** ;
3. 13th International Conference on **Mining, Petroleum and Metallurgical Engineering "MPM13"**, Faculty of Petroleum and Mining Engineering, **Suez University, Egypt, 25-27 October 2019.**;
4. 1st International conference on **Biomedicine and Bioethics (The Contemporary International and Regional Perspectives)**, Faculty of Law, **British University, Egypt, 3-5 November 2019.**;
5. 29th International conference and exhibitions on **Electricx, Power, Solar-Tec and Firex, Ministry of Electric and Power**, Egypt International Exhibitions Center, **Egypt, 3-5 November 2019.**;
6. 7th International conference on "**The Mitigation Enabling Energy Transition in the Mediterranean region (meetMED)**", meetMED Regional Conference on "Mapping EE and RES market potential areas with higher impact on local economy and job creation" project, [Regional Center for Renewable Energy and Energy Efficiency "RCREEE"](#), **Egypt, Semiramis Intercontinental Hotel, 12 November 2019.**;
7. The scientific symposium on "**Water between Reality and Future Challenges**", **Menoufia University- Egypt, 13 November 2019.** ;
8. International conference on **Global Entrepreneurship Week 2019, American Center Cairo "ACC", U.S. American Embassy, Cairo- Egypt, 18-23 November 2019.**;
9. International conference on **Connected Worlds event on in Smart Business Track, IEEE, Tanta University, Egypt, 24, 25 November 2019.**;
10. International conference on **Engineering Materials Science "EMSC"**, ESME, Zewail City of Science and Technology, **Cairo- Egypt, 14 December 2019.**;
11. 3rd International conference on **creativity, innovation and scientific research "Digital Transformation Future Prospects"**, The **National Council** for Training and Education, the **African Economic Council** and the **Sadat Academy** for Administrative Sciences, **Cairo- Egypt, 8 February 2020.**;
12. International conference on "**Natural products, medicinal and agrochemical explorations "****Japanese-Egyptian Society** for the development of Science "**JSPS**", **Alexandria Library, Alexandria University, Egypt, 15 February 2020.**;

13. The scientific symposium on "**Digital Transformation Future Prospects**" Cisco Academy, Tanta Higher Institute of Engineering and Technology at Tanta, Egypt, 13 March 2020. ;

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10. TRAINING AND WORKSHOPS

1. 7 Courses in International Computer Driving License "**ICDL**", UONISCO, Cairo, **Egypt, 2011**.
2. 15 courses in education quality and accreditation, under title "**Reviewer of Education Quality and Accreditation**" at the National Authority for Quality Assurance and Accreditation of Education, Cairo, **Egypt, 2011-2015**.
3. 2 courses in "**Human Development**" in the art of communication and social communication - time management and work pressures, Faculty of Science, **Menoufia University- Egypt 2012**.
4. 4 Courses in **Training of Trainer "TOT" -Educational General Trainer** - Professional Academy for Teachers "**PAT**", Cairo, **Egypt, 2016-2020**.
5. Course in English Language "**APTS**", **British Council, Cairo, Egypt, 2015**.
6. Course in English Language "**TOEFEL**", **International Language Center, Cairo University- Egypt 2017**.
7. **Entrepreneurship** -Workshops at the **American Corner** at Maadi Library, the **American Center - U.S. American Embassy** in Cairo, **Egypt, 18-23 November 2019**.
8. **Entrepreneurship** –Workshops, Faculty of Engineering, **Tanta University, Egypt 2020**.
9. **Entrepreneurship** -Workshops, **E-Youth** for Consulting and Training, Cairo, **Egypt, 10 February 2020**.
10. 5 Courses in International Computer Driving License Teacher "**ICDL Teacher**", UONISCO, Cairo, **Egypt, 16 February 2020**.
11. Tanta Higher Institute of Engineering and Technology at **Tanta, Egypt, "Workshop -Teaching"**, under title "**Corse Specification**", 12 November 2020.

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11. PROFESSIONAL SOCIETIES

Besides my work in teaching:

1. I worked as "**Reviewer of Education Quality and Accreditation**" at The National Authority for Quality Assurance and Accreditation of Education, Cairo, **Egypt**, and I corporate in about 18 Accreditation Visits for many educational institutions, **2011- 2023**.
2. I worked as "**Educational General Trainer**" for teachers, at Professional Academy for Teachers "**PAT**", Cairo, **Egypt, 2016-2023**.
3. I worked as **General instructor, educated at Cisco Academy/"THIET"**, Tanta Higher Institute of Engineering and Technology, **Tanta, Egypt, 2020- 2023**.

4. Very good background in computer programs as well as utilizing some standard software.
5. Participate in the preparation and presentation of a number of television programs: Science Simplification Program - Educational Camera Program - Educational Hadith Program - Sabah Educational Program - episodes revolve around computational chemistry and new and renewable energy - drug chemistry - water treatment and technology - - Education technology - e-learning and distance education - - **Misr Educational Channel 1, Egyptian TV Maspero 2020-2023.**
6. Participate in preparing and presenting radio talks about educational technology - e-learning and distance education - **Cairo Radio - Public Program Radio - Egypt, Moment by Moment 2020-2023.**
7. Participation in various committees and activities in the department:
8. Participation in the quarterly examination committees of the Chemical Engineering Department – Tanta Higher Institute of Engineering and Technology "**THIET**", **Tanta, Egypt.**
9. Establishment and creation of the **YouTube channel "Dr. Mohamed Ahmed Mohamed Mahmoud" educational** https://www.youtube.com/channel/UCTR_s_aDqhNkxqnz686d7uUQ To serve the students of the Institute - Department of Chemical Engineering "**THIET**" and community service **2020-2023.**
10. Participation in various committees and activities at Tanta Higher Institute of Engineering and Technology "**THIET**", **Tanta, Egypt.**
11. Participation in the work of the quarterly examinations at Tanta Higher Institute of Engineering and Technology "**THIET**" (Head of Control Level One), **Tanta, Egypt.**
12. Participation in the scientific symposium of the **Japanese-Egyptian Society for the Advancement of Science "JSPS"** Tanta Higher Institute of Engineering and Technology "**THIET**" October 13, 2018.
13. Participation in **Quality Assurance** works at Tanta Higher Institute of Engineering and Technology, "**THIET**", **Tanta, Egypt.** 2018-2023.
14. Vice President of the **Quality Assurance Unit** at Tanta Higher Institute of Engineering and Technology "**THIET**", **Tanta, Egypt.** 2018-2023.
15. Participation in the establishment and establishment of the **Cisco Academy** branch for e-learning and distance training at Tanta Higher Institute of Engineering and Technology "**THIET**", **Tanta, Egypt** in March 2020.
16. Supervision of training courses: **Cisco Academy** for e-learning and distance training at Tanta Higher Institute for Engineering and Technology "**THIET**", **Tanta, Egypt.** in March 2020.
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