

#### TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

**ID CODE 6117** 

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at <u>Dipartimento di Chimica - Universita' Degli Studi Di Milano</u>

Scientist- in - charge: Prof. Falciola

## Ragi Adham Sayed Ahmed Hassan Elkaffas

#### **CURRICULUM VITAE**

#### PERSONAL INFORMATION

Surname	Elkaffas
Name	Ragi Adham Sayed Ahmed Hassan

## PRESENT OCCUPATION

Appointment	Structure
Research Associate	Khalifa University of Science and Technology

## **EDUCATION AND TRAINING**

Degree	Course of studies	University	year of achievement of the degree
Bachelor of Science (B.Sc.)	Chemistry	Alexandria University, Egypt	2017
Master of Science (2021 - 2023)  • Master Thesis: Synthesis of MFe <sub>2</sub> O <sub>4</sub> as (Photo)electrocatalysts for oxidation of phenol.	Applied Chemistry The aim of this project is to:  Develop a photo- electrocatalytic setup by synthesizing metal ferrite using two different methods (hydrothermal and sol-gel).  Fabricate an electrode to characterize the catalysts for their structure, chemical composition, morphological and photoelectrochemical properties.	Khalifa University	2023



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Investigate the degradation of phenol using High-performance liquid Chromatography (HPLC).		
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#### REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City
December 2021	ACS: American Chemical Society	Washington D.C., District of Columbia, US

#### **FOREIGN LANGUAGES**

Languages	level of knowledge
Arabic	(native speaker)
English	7.5 IELTS

### AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award	
2015	University Award for top graduates, Alexandria University, Egypt.	
2022	University Award for top Teaching assistants, Khalifa University, Abu Dhabi.	

#### TRAINING OR RESEARCH ACTIVITY

- -Research Associate (June 2023 Current)
- •The project runs by Arab-German Young Academy (AGYA) under the supervision of Dr. Shimaa titled as follows: A Novel Electrochemical Immunosensor for the Simultaneous Detection of Mycoplasma pneumoniae and Legionella pneumophila Antigens in Water Using Cu-MOF/Graphene Oxide Nanocomposite

Designing the truncated aptamer sequences and testing the affinity of the truncated aptamer for the biosensor-prototype o Fabrication of the electrochemical biosensor-prototype and data analysis o Testing of the aptasensor in spiked and real samples

- Research and Teaching Assistant at Khalifa University for Science and Technology (August 2021 December 2023)
- · Research in water treatment.
- Teaching assistant in courses and labs.
- Chemical warfare reserved officer at the Egyptian Army Forces (November/2017-October/2020)
- The Egyptian Pharmaceutical Company, Egyptian Armed Forces, Suez, Egypt. Conducted analysis for control of non-conforming products.
- Released or rejected every batch of drug products for distribution.
- Conducted sampling inspection and testing as per specifications of raw materials for release.
- $\bullet$  Coordinated the development of specifications and analytical procedures with Quality Assurance and R&D.



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- Organized training programs for the development of technical and administrative skills of all the soldiers to meet lab regulations on a regular basis. Practical Organic Chemistry IV " Advanced and selected topics in organic chemistry preparation"
- 7- Teaching theoretical courses such as: Polymers, Dyes, Heterocyclic Chemistry, Nuclear Chemistry, and Fundamentals of Organic Chemistry.
- 8- Supervised over 10 graduation projects of undergraduate students (2018-present).

#### PROJECT ACTIVITY

Year	Project
2023	A Novel Electrochemical Immunosensor for the Simultaneous Detection of Mycoplasma pneumoniae and Legionella pneumophila Antigens in Water Using Cu-MOF/Graphene Oxide Nanocomposite

### **CONGRESSES AND SEMINARS**

Date	Title	Place
2022	The Graduate Students Research Conference (GSRC)	Khalifa University Abudhabi

#### **PUBLICATIONS**

#### Articles in reviews

A Novel Electrochemical Immunosensor for the Simultaneous Detection of Mycoplasma pneumoniae and Legionella pneumophila Antigens in Water Using Cu-MOF/Graphene Oxide Nanocomposite.[Chemoshphere]

Review Metal-Organic Framework biosensor for emerging organic contaminants.

Synthesis of MFe<sub>2</sub>O<sub>4</sub> as (Photo)electrocatalysts for oxidation of phenol

#### OTHER INFORMATION

Laboratory Skills

High-Performance Liquid Chromatography (HPLC)

**UV/Vis Spectroscopy** 

Scanning electron microscopy (SEM)

X-ray Diffraction (XRD)

Infrared (IR)

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph



1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: Alexandria (Egypt), 01/09/2024