

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 **Dipartimento di Chimica**

Scientist- in - charge: Prof. LUIGI FALCIOLA

[WAFA AIDLI]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	AIDLI
Name	WAFA

PRESENT OCCUPATION

Appointment	Structure
PhD Student	Dipartimento di Chimica, UNIVERSITA' DEGLI STUDI DI MILANO

EDUCATION AND TRAINING

Degree	Course of studies	University	Year of achievement of the degree
Bachelor Degree	Chemistry	University of Tunis El-Manar	2015
Master Degree	Analytical Chemistry	University of Tunis El-Manar	2018
PhD	Chemistry	Universita degli studi di Milan and University of Tunis El-Manar (Co-Tutella)	NA

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City
2021	International Society of Electrochemistry	
2021	Società Chimica Italiana	



FOREIGN LANGUAGES

Languages	level of knowledge
English	C1
French	C2
Italian	A2
Arabic	C2

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award	
2019-2021	Full MAECI grant for doctoral students - Ministry of foreign affairs and international cooperation, Italy Grant for foreign citizens and Italian citizens living abroad.	
2015	BSc Honor Student Graduation ceremony 2015 - University of Tunis El-Manar This prize is awarded to the final year BSc student top ranked.	

TRAINING OR RESEARCH ACTIVITY

Analytical laboratory assisting	Milan Governorate, Italy	
University of Milan-Department of Chemistry	10/05/2020 - 31/12/2021	
Assisting teaching activities of Analytical Chemistry Laboratory		
PhD Researcher	Milan Governorate, Italy	
University of Milan-ELAN research group	Nov 2018 – Sept 2023	
 Conceptualized and developed Cutting-Edge Analytical methods for the specifically focusing on creating low-cost, user-friendly on-site sensors. 	detection of pollutants,	
• Researched and developed novel Nanomaterial-modified electrodes for bimodal Electrochemical and Optical sensors that exhibited enhanced accuracy when compared to existing technologies.		
 Collaborated with interdisciplinary teams to characterize and optimize r several analytical techniques (FT-IR, TEM, UV-Visible, Fluorescence, Imp Electrochemistry). 	nanomaterials using pedance spectroscopy,	
 Performed comprehensive Analytical Validation tests including sensitivi reproducibility, linearity limits of detection and quantification, leading t predictions of pollutant levels. 	ty, selectivity, stability, to accurate and reliable	
Master Research Internship	Tunis Governorate, Tunisia	
University of Tunis El Manar	Feb 2017 - Nov 2017	
 Conducted deep bibliographic research on nanomaterials and sensors. 	gaining comprehensive	

- Conducted deep bibliographic research on nanomaterials and sensors, gaining comprehensive insights into the field's current state-of-the-art.
- Designed and structured research methodologies and experimental tasks, incorporating findings from the literature review to guide the investigation effectively.



- Synthesized and meticulously characterized organic molecules and magnetic nanoparticles, employing a diverse array of analytical techniques such as (NMR, MS, XRD, and FT-IR).
- Proficiently utilized Nova software to execute precise electrochemical tests, to ensure accurate and reliable measurements of dopamine in human blood serum, achieving a micromolar-level detection.

Bachelor Graduation Internship The Cement Factory of Bizerte

Bizerte Governorate, Tunisia Feb 2015 - May 2015

- Conducted qualitative and quantitative analyses of cement throughout various production stages, employing advanced techniques (X-ray diffraction, X-ray fluorescence, flame photometry, and gravimetric analysis).
- Skillfully sampled and meticulously prepared representative sections of raw materials, clinker, and cement, ensuring accurate and comprehensive data for the project.
- Developed comprehensive reports and presented findings to a cross-functional team.
- Gained substantial hands-on experience within a heavy industry setting, contributing to the successful execution of on-site tasks, and fostering a deep understanding of industrial operations and challenges.

PROJECT ACTIVITY

Year	Project
NA	ΝΑ

PATENTS

Patent	
ΝΑ	

CONGRESSES AND SEMINARS

Date	Title	Place
12/09/2022 -16/09/2022	73 rd International Society of Electrochemistry (ISE) Annual Meeting, Online (Oral + Poster session)	Online
14/11/2021 -23/11/2021	XXVII Congresso Nazionale della Società Chimica Italiana (Poster session)	Online
29/11/2021	Next Generation Nanoelectrochemistry Faraday Discussion (Poster session)	Online
31/08/2020 -04/09/2020	$71^{\rm st}$ Annual Meeting of the International Society of Electrochemistry , (Poster session)	Belgrade



PUBLICATIONS

Books

Sensing Interfaces: Self-cleaning materials for electroanalytical sensing (Book Chapter) Encyclopedia of Sensors and Biosensors., 2nd Edition, Elsevier (2021) DOI: 10.1016/B978-0-12-822548-6.00065-0

Articles in reviews

β-Cyclodextrin based platform for bimodal detection of o-toluidine and cholesterol: electrochemical and fluorescence sensing

Electrochimica Acta Journal, Elsevier (2023) DOI: 10.1016/j.electacta.2023.142936

Characterization and application of porous PHBV-based bacterial polymers to realize novel bio-based electroanalytical (bio)sensors

Sensors and Actuators B: Chemical Journal, Elsevier (2023) DOI: 10.1016/j.snb.2022.133178

Electrochemical and Photoelectrochemical bimodal sensor based on Copper modified g-C3N4 for Nitrate detection

ChemElectroChem Journal (1st revision submitted)

Congress proceedings

NA

OTHER INFORMATION

TECHNICAL SKILLS

- 5 years in Electroanalytical Assays Development and Validation.
- 6 years in Electrochemical characterization techniques: Cyclic Voltammetry, Electrochemical Impedance Spectroscopy, Chronoamperometry, photocurrent.
- Nanomaterial synthesis and characterization hands-on expertise.
- Chemical Analysis: Quantitative and Qualitative Analysis, Sample Preparation.
- Data Analysis: Statistical Analysis, Fitting, Data Interpretation, Calibration Curves using Nova and Zview software.
- Proficient in Lab Safety: Chemical Handling, Safety Protocols, Hazardous Waste Management.

KEY ACHEIVEMENTS

- Designed, optimized, and effectively implemented innovative Electroanalytical assays for detecting various compounds at trace levels (μM, ppm).
- Mentored and guided master's students in developing Electroanalytical methods and operating Metrohm Electrochemical workstations.
- Published three peer-reviewed papers in the field of Electroanalytical Chemistry.
- Contributed seminar assistance at significant events: I Scuola Nazionale Sensori Gargnano, Oct 2022
 WaterDay, Dec 2019





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: MILANO, 08/01/2024