UNIVERSITÀ DEGLI STUDI DI MILANO

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO **ID CODE 6087**

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, Università degli Studi di Milano**

Scientist- in – charge: Prof. **Alessandro Caselli**

[Name and surname]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	**BOUCHERABINE**
Name	**Djihed**

PRESENT OCCUPATION

Appointment	Structure
Ph. D student	**Ferhat Abbas University of Sétif-1/ Algeria**

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	/	/	/
Specialization	/	/	/
PhD	**Electrochemical Engineering**	**Ferhat Abbas University of Sétif-1/ Algeria**	**I will graduate in December 2023**
Master	**Physical Chemistry**	**Ferhat Abbas University of Sétif-1/ Algeria**	**2017**
Degree of medical specialization	/	/	/
Degree of European specialization	/	/	/
Other	/	/	/

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City
/	/	/

FOREIGN LANGUAGES

Languages	level of knowledge
English, French	Advanced
Arabic	Native
Italian	I'm in process of learning

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2023	Department of Chemical Sciences-University of Naples Federico II/ Italy under the supervision of Professor Francesco Ruffo ''Synthesis of pyridinimine Schiff base ligands containing electron-withdrawing groups and the corresponding pyridinamine obtained upon their reduction. The ligands willbe applied in the synthesis of iron complexes to be used in Lewis acid catalysis for conversion of biomass''.
2022	Department of Chemical Sciences-University of Naples Federico II/ Italy under the supervision of Professor Francesco Ruffo ''Synthesis of transition metal complexes from Schiff base ligands. The synthesis complexes will be used in Lewis acid catalysis for conversion of biomass''.
2021	IEA-Training /Academy-experts/ Séminaire-formation docking moléculaire (Programme DM.CT_D212 Setif/ Algeria
2021	The Third Spectroscopy Winter School SWS-3/ National Research Institute of Astronomy and Geophysics, NRIAG, Cairo- Egypt)

TRAINING OR RESEARCH ACTIVITY

description of activity

In my Ph.D Studies entitled: Application of transition metal complexes in homogeneous catalysis.

My main fields of interest are the following:

Synthesis of new transition metal complexes

Spectroscopy (IR, UV-Vis, NMR, DRX, microanalysis, mass spectrometry, Gas Chromatography (GC)…

Electrochemistry,

Catalysis and Electroctalysis

DFT and TD-DFT calculation

Docking molecular

Biological activities

I have attended courses, some of which are related to:

Spectroscopy techniques (IR, NMR, X-ray diffraction .....)

Computational chemistry: DFT and TD-DFT by a Gaussain09

In the time spended in department of Chemical Sciences-University of Naples Federico II/ Italy under the supervision of Professor Francesco Ruffo, we focused on the synthesis of iron complexes from Schiff base ligands, the characterization and identification carried out on different spectral methods as:

1H and 13C NMR

IR spectroscopy

The synthesized complexes applied Lewis acid catalysis for conversion of biomass.

Another part of the work is the characterization of some metal transition complexes by 2D NMR and X-ray diffraction

PROJECT ACTIVITY

Year	Project
2022	**development of new olefin oxidation precursors obtained by thermal cracking in oil refining (In ALGERIA)**
/	**/**

PATENTS

Patent
Research interests ▫ **Synthesis of Schiff base ligands and complexes** ▫ **NMR , DRX Characterization** ▫ **Electrochemical** ▫ **Catalyse** ▫ **Electrocatalyse**
Computer skills ▫ **Microsoft Office** ▫ **Origin** ▫ **ChemDraw Ultra** ▫ **NMR Notebook, MestreNova NMR** ▫ **Ortep3** ▫ **Pov-Ray** ▫ **Mercury** ▫ **PublCIF** ▫ **Gaussian** ▫ **Docking**

▫ Gaussian, Gauss View 6.0

CONGRESSES AND SEMINARS

Date	Title	Place
2023	Crystal structure, DFT Calculations, Cyclic Voltammetry and Catalytic Activity of a Copper Schiff Base Complex	The Second International Workshop on Chemical Engineering-dedicated to Catalysis (IWCE2023), 9-10th December 2023, Setif, ALGERIA.
2023	Synthèse chimique et propriétés spectroscopiques de complexes de métaux de transition non symétriques. Approche biomimétique.	PhD. Students' Day" 2023 (JD'2023) 14 mai 2023 Setif, ALGERIA
2022	Selective Catalytic Oxidation of Olefines Substrat Using Unsymmetrical Tetradentate Schiff-Base Complexes of Oxovanadium (IV)	Second International Workshop On Environmental Engineering (IWEE'22) 3, 4 December 2022, Setif, ALGERIA
2022	Synthesis, characterization and catalytic performance of mononuclear copper (II): oxidation of cyclohexene	1er Congrès International Chimie Analytique, Electrochimie et Techniques de Séparation, 15, 16 Octobre 2022, Tlemcen, ALGERIA
2022	Synthesis, Spectroscopic Studies, electrochemistry and catalytic activity of Oxovanadium (IV) and Iron (III) Schiff base complexes.	Fourth International Symposium on Materials, Electrochemistry and Environment - CIMEE22, LEBANON
2022	Synthesis and intensive characterization for novel VO(IV) and Cu(II)-diazomethine Schiff base complexes; Bromination of phenol red using H2O2, DFT computational studies	1st International Conference on Innovative Academic Studies, September 10 - 13, 2022, KONYA, TURKEY
2022	Study of a novel azomethine iron complex: catalytic activity in the oxidation of olefins	Cinquième Colloque Maghrébin sur la Chimie Hétérocyclique CMCH 5-2022, 13-15 Juillet 2022 à la FSM, Meknès, MAROC
2022	Synthesis, Characterization, Electrochemistry and catalytic performance of Oxovanadium Tetradentate Schiff base complex.	La deuxième édition de la Conférence Internationale sur les Sciences et Génie des Matériaux et leurs Impacts sur l'Environnement (ICMSE-21) 03 - 04 Juillet 2022 Sidi Bel Abbes (ALGERIE)
2022	Mononuclear oxovanadium complex with tetradentate Schiff ligand: synthesis, structure and catalytic bromine dynamics of phenol red.	The first International Seminar on Materials Synthesis and Environmental Monitoring ISMSEM2022 07-09 Feb 2022 Ouargla (Algeria)
2022	Application des complexes de métaux de transition dans la catalyse homogène.	PhD. Students' Day" 2023 (JD'2022) 11 mai 2022 Sétif/ ALGERIA

2021	Oxovanadium (IV) Schiff Base Complex from Unsymmetrical Tetradentate Schiff Base Ligand as Catalysts for Oxidation of Cyclohexene	2nd International 9 th International Symposium on Applied Engineering and Sciences (SAES2021) 5th-8th December 2021 | MALAYSIA
2021	A novel tetradentate transition metal diazomethine complexes: Synthesis, Characterization and Density Functional Theory approches.	International conference IC-SEAM'21; Ouargla, April 21-22, 2021. ALGERIA
2021	Electrochemical behavior of a novel tetradentate diazomethine Oxovanadium complex. Bromo-peroxidation Studies;	The 1st National Virtual Conference on Chemical Process and Environmental Engineering (nvccpee 2021) 15-16 Décembre 2021 Biskra/ALGERIA
2021	A novel tetradentate transition metal diazomethine complexes: Synthesis, Characterization and Density Functional Theory approches.	2ème Séminaire National des Sciences d'Interfaces Chimie-Biologie Samedi 20 février 2021 à Univ Souk-Ahras, ALGERIA.
2020	Synthesis and Computational Study of New Unsymmetrical Tetradentate Schiff Base Ligand.	The Second International Conference on Molecular Modeling and Spectroscopy 23- 24 September 2020, EGYPTE.
2020	Structural investigation of new unsymmetrical organic materials; synthesis, spectral characterization, electrochemical, catalytic oxidation and computational simulation.	The Third International Symposium on Materials, Electrochemistry and Environment (CIMEE 2020) 17 - 19 September 2020, LEBANON.
2020	Complexes de métaux de transition diazométhines: structure, caractérisation spectroscopique, calcul théorique et investigation électrochimique.	13 èmes Journées internationales de Chimie Théorique et Computationnelle JCTC'13 |02-03Février 2020 Biskra. ALGERIA.
2019	Electrochemical, structural and electronic properties of a novel tetradentate diazomethine oxovanadium material: à theoretical study.	First international Workshop on Environmental Engineering (IWEE 2019) 16-17 November 2019 Poster Presentation Setif. ALGERIA
2019	X-ray structure, Spectroscopic and electrochemical properties of a symetric diazomethine iron Complex.	Conférence Nationale sur la Chimie des Matériaux Boumerdes, 03 Juillet 2019, ALGERIA.
2019	Recent developments in unsymmetrical tetradentate oxovanadium Schiff base (SB) complexes: Synthesis, Spectroscopy, Electrochemistry and Theoretical Investigations,	Les 1 ères Journées d'Etude sur la Chimie et ses Applications (JECA-1-2019) Batna, 27 Novembre 2019. ALGERIA.
2019	Elaboration of novel unsymmetrical oxovanadium Schiff base (SB) complex: electrochemical investigation and DFT calculation,	1er Séminaire National sur la Chimie Analytique, Matériaux et Substances Naturelles (CAMSN 2019), 17 décembre 2019 à l'Université Blida1.ALGERIA.

PUBLICATIONS

Books
Oxovanadium and copper complexes of new unsymmetrically tetradentate ligands: X- ray structure, theoretical and NLO properties, catalytic oxidation and bromoperoxidase activities. **Djihed Boucherabine**, Moufida Merzougui, Douniazed Hannachi, Massimo Melchiorre, Gabriella Pinto, Kamel Ouari **Journal of Molecular Structure 1291 (2023) 136053** **https://doi.org/10.1016/j.molstruc.2023.136053**
[title, place, publishing house, year …]
[title, place, publishing house, year …]

Articles in reviews
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Congress proceedings
X- Ray Structure, NLO properties, Catalytic Performance of New Unsymmetrically Schiff base Complexes **THE SECOND INTERNATIONAL WORKSHOP ON CHEMICAL ENGINEERING- IWCE'23 - December 09, 10 th 2023 Sétif – Algeria**
Structural investigation of the catalytic activity of Copper and Oxovanadium Schiff base Complexes **2ème Séminaire National en Génie des Procédés** **13 -14 Décembre 2023 Ouargla– Algeria**
[title, structure, place, year]

OTHER INFORMATION

I am currently in the final stages of completing my Ph.D. and expect to graduate in December 2023. I am awaiting a decision from the Chemistry Department of Process Engineering at the University of Setif-1 in Algeria to confirm the date.
KEY WORDS: Schiff Base, Complex, X-Ray, NMR, Characterization, DFT, Molecular Docking, Materials

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: **Algeria in 04.12.2023**

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