الجمهورية الجزائرية الديمقراطية الشعبية
وزارة التعليم العالي والبحث العلمي
جامعة قسنطينة 1 – الإخوة منتوري
كليـــــــــة العلوم الدقيقة
PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH
Constantine 1 University – Frères Mentouri
Faculty of Exact Sciences

ANNONCE DE SOUTENANCE DE THESE

Madame **DELLOUCHE Aziza**

Soutiendra sa thèse de Doctorat en Sciences en Chimie

Spécialité : « Chimie des matériaux ».

Intitulée : «Synthèse et caractérisation de quelques bases de Schiff et étude de leur activité biologique».

D a t e : le Dimanche le 29 septembre 2024 à 17 H00.

L i e u : A la salle de conférences sise au Campus Chaab Erssas - Université Constantine 1 Frères Mentouri.

Devant le jury :

	Nom et prénoms	Grade	Etablissement d'appartenance
Président	BOUDAREN Chaouki	Professeur	Université Constantine 1 Frères Mentouri
Directrice de thèse	MOUSSER Henia	Professeure	Ecole Nationale Supérieure Assia Djebbar -
Examinateurs	CHEROUANA Aouatef	Professeure	Université Constantine 1 Frères Mentouri
	BOURAIOU Abdelmalek	Professeur	Université Constantine 1 Frères Mentouri
	BOULCINA Raouf	Professeur	Université Hadj Lakhdar - Batna -
	BENALI CHERIF Rym	M.C.A	Université Abbes Laghour – Khenchela -

A b s t r a c t :

This project aims to synthesize and characterize novel symmetrical azine Schiff bases using the corresponding aldehyde and hydrazine hydrate as precursors. All synthesized compounds are rigorously characterized using spectroscopic techniques such as infrared (IR) and UV- visible spectroscopy, as well as X-ray diffraction (XRD) to determine their crystalline structure. In a second phase of the study, an attempt is made to evaluate the biological and inhibitory properties of acetylcholinesterase activities for the four synthesized azines. This evaluation seeks to understand the potential of these compounds as therapeutic agents against neurodegenerative diseases such as Alzheimer's disease. Finally, a computational approach is employed, utilizing Density Functional Theory (DFT), to investigate in detail the electronic and structural properties of the azines (AZ1, AZ2, AZ3, and AZ4). This theoretical analysis aims to correlate experimental observations with calculated molecular properties, providing an in-depth insight into the underlying mechanisms. The results obtained so far appear promising, suggesting that these azines may have significant interest in the development of new drugs. However, for a comprehensive understanding of their potential, further research is needed. These findings thus stimulate the need for further investigations to explore the potential applications of these compounds.