पेटेंट कार्यालय
शासकीय जर्नल

OFFICIAL JOURNAL
OF
THE PATENT OFFICE

निर्गमन सं. 40/2024	शुक्रवार	दिनांक: 04/10/2024
ISSUE NO. 40/2024	FRIDAY	DATE: 04/10/2024

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/09/2024

(21) Application No.202411068937 A
(43) Publication Date : 04/10/2024

(54) Title of the invention : A METHOD FOR SYNTHESIZING A NOVEL PYRAZOLE DERIVATIVE WITH SKELETAL MUSCLE RELAXANT AND ANTIANXIETY PROPERTIES

(51) International classification	:A61P0043000000, A61P0001000000, F23Q0007000000, A61K0048000000, A61P0009100000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)IFTM University, Moradabad
Address of Applicant :IFTM University, Lodhipur Rajput, Moradabad, 244102 ---------- ----------
2)Anshul Sharma
3)Dr. Shweta Verma
4)Dr. Alankar Shrivastav
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)IFTM University, Moradabad
Address of Applicant :IFTM University, Lodhipur Rajput, Moradabad, 244102 ---------- ----------
2)Anshul Sharma
Address of Applicant :Pharmacy Academy, IFTM University, Lodhipur Rajput, Moradabad, 244102 ---------- ----------
3)Dr. Shweta Verma
Address of Applicant :Pharmacy Academy, IFTM University, Lodhipur Rajput, Moradabad, 244102 ---------- ----------
4)Dr. Alankar Shrivastav
Address of Applicant :Pharmacy Academy, IFTM University, Lodhipur Rajput, Moradabad, 244102 ---------- ----------

(57) Abstract :
ABSTRACT The present invention relates to a method for synthesizing a novel pyrazole derivative with skeletal muscle relaxant and antianxiety properties. The novel pyrazole derivative (E)-3-methyl-1-phenyl-5-((E)-(2,3,5-trimethoxybenzylidene) hydrazono)-4,5-dihydro-1H-pyrazole, using a three-step reaction pathway. The synthesis begins with the reaction of ethyl acetoacetate and phenyl hydrazine, followed by treatment with hydrazine hydrate, and finally reacting with 3,4,5-trimethoxybenzaldehyde. The compound is characterized by its melting point, TLC, Rf value, mass spectrometry, and 1H-NMR spectral analysis. Pharmacological evaluation demonstrates the compound's significant antianxiety and skeletal muscle relaxant activities, comparable to the standard drug Diazepam. These findings highlight the potential of pyrazole derivatives as templates for developing more potent therapeutic agents for central nervous system disorders. The study contributes to medicinal chemistry by suggesting that further optimization of pyrazole-based compounds could lead to the discovery of new drugs with enhanced efficacy.

No. of Pages : 19 No. of Claims : 9