

OFFICIAL JOURNAL OF THE PATENT OFFICE

निर्गमन सं. 04/2023	शुक्रवार	दिनांक: 27/01/2023
ISSUE NO. 04/2023	FRIDAY	DATE: 27/01/2023

पेटेंट कार्यालय का एक प्रकाशन PUBLICATION OF THE PATENT OFFICE

The Patent Office Journal No. 04/2023 Dated 27/01/2023

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :20/01/2023

(43) Publication Date : 27/01/2023

(54) Title of the invention : SYNTHESIS OF THIADIAZOLE DERIVATIVE AND MOST SIGNIFICANT BIOLOGICAL ACTIVITY

(57) Abstract :

The present invention belongs to the field of pharmaceutical science. More, particularly the invention pertains to synthesis and antimicrobial activity of novel compound 2-(4-Methoxy-phenyl)-3-(5-pyridin-3-yl[1, 3, 4]-thiadiazol-2-yl)-thiazolidin-4-one. The novel process involved mixing of the synthesized thiadiazole and specific aromatic aldehydes (0.025 M) and is refluxed in methanol (50 mL) along with glacial acetic acid in small quantity for about 2 h. The reaction mixture is kept to cool down and after cooling transferred in ice cold water. The solid produced is removed by filtration and finally it was recrystallized with methanol. The prepared derivative is evaluated against bacterial strains i.e., Staphylococcus aureus and Bacillus subtilis (Gram +ve) and E. coli and Pseudomonas aeruginosa (Gram –ve). The zone of inhibition is compared with standard drug after 24 h of incubation at 37°C for antibacterial activity and 72 h at 25°C for antifungal activity.

No. of Pages : 14 No. of Claims : 7