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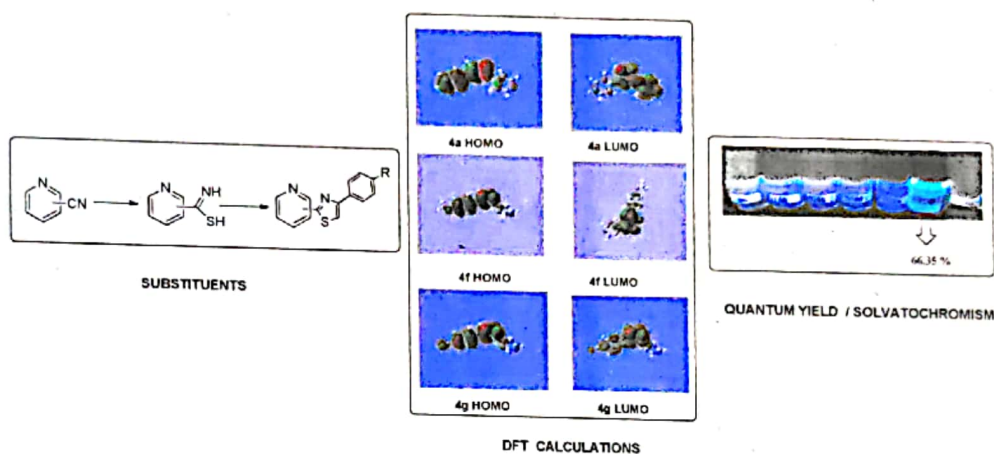
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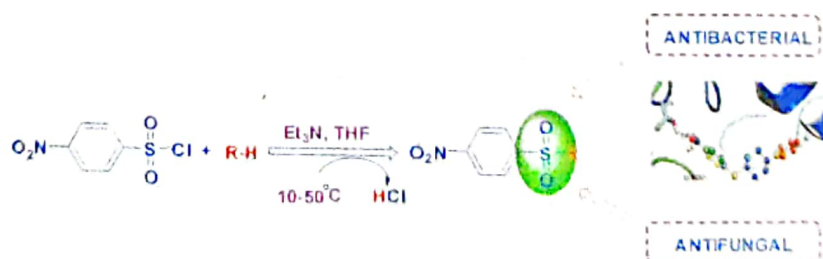
- 1361 Synthesis, characterization and photophysical properties of novel thiazole substituted pyridine derivatives



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- 1375 Synthesis, spectral characterization and bioactivity evaluation of sulfonamide derivatives of *p*-nitrobenzene sulfonylchloride

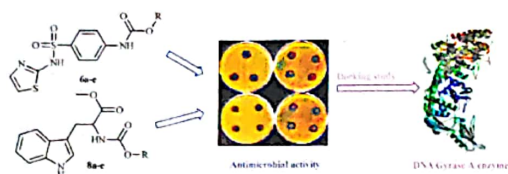


D B Janaki Ramudu, C H Subramanyam, S K Nayab Rasool, P Seenivasa Murthy, M Nagalakshmi Devamma, C H Venkataramana, W Rajendra, Chamarthi Naga Raju & Ponne Venkata Chalapathi*

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1384 Carbamates of sulfathiazole and methyl tryptophan: Synthesis, antimicrobial activity and docking studies against DNA gyrase A

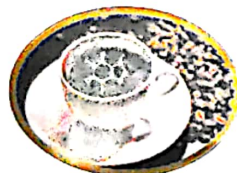
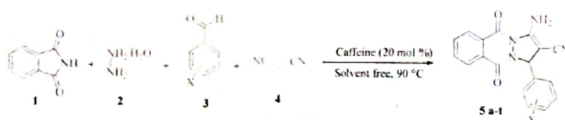
The increasing cases of bacterial resistance are fueling the research on innovative antimicrobial agents. This is of great interest from the clinical point of view as well as urgent requirement. Herein, a series of new carbamate derivatives of sulfathiazole **6a-e** and methyl tryptophan **8a-e** have been synthesized. Antimicrobial activity results of the title compounds reveal that **6a**, **6b**, **6e** and **8a** show promising antibacterial activity (MIC 2.88-8.14 µg/ml) against various bacterial and fungal pathogens, in particular *E. coli* inhibition. The docking on DNA gyrase A enzyme showed better binding energies for a few compounds with the enzyme which may be useful for antibacterial activity.



Pushpa Kumar Kammu, Subbarao Devineni, Venkataramaiah Chintla, Rajendra Wudayagiri, Jayakumar Kennali, Venkataramana Reddy Doddipalli & Nagaraju Chamarthi*

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1398 Caffeine: A green, natural and biodegradable catalyst for convenient and expedient eco-safe synthesis of 1*H*-pyrazolo [1,2-*b*] phthalazine-5,10-dione derivatives under solvent-free conditions



Farzaneh Mohamadpour

Young Researchers and Elite Club, Shiraz Branch, Islamic Azad University, Shiraz, Iran

1407 One-pot two-step facile synthesis of new 6,7-dihydro-1*H*-pyrazolo [3,4-*b*] pyridine-5- carbonitrile hybrids as antimicrobial agents

A new series of novel 1-benzos[4,4-*b*]pyridin-6-yl-methyl-3-methyl-6-oxo-7,8-dihydro-1*H*-pyrazolo [3,4-*b*] pyridine-5-carbonitrile have been synthesized from a common intermediate, in good yields. These compounds have been screened for their antibacterial and antifungal activity against different pathogenic strains of bacteria and fungi. The minimum inhibitory concentration (MIC) and minimum fungicidal concentration (MFC) have been determined for the test compounds as well as for reference standards. Compounds **3a**, **3b**, **3c**, **3d**, **3e** have shown good antibacterial activity where as compounds **3b**, **3e**, **3g**, **3i**, **3j** have displayed better antifungal activity.

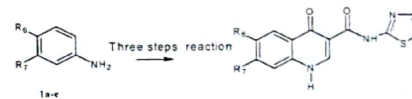


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Notes

1413 Synthesis and antibacterial studies on some new thiazole moiety based quinolone derivatives



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