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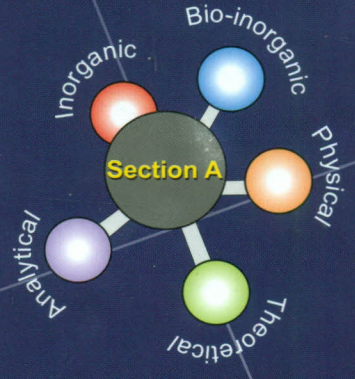

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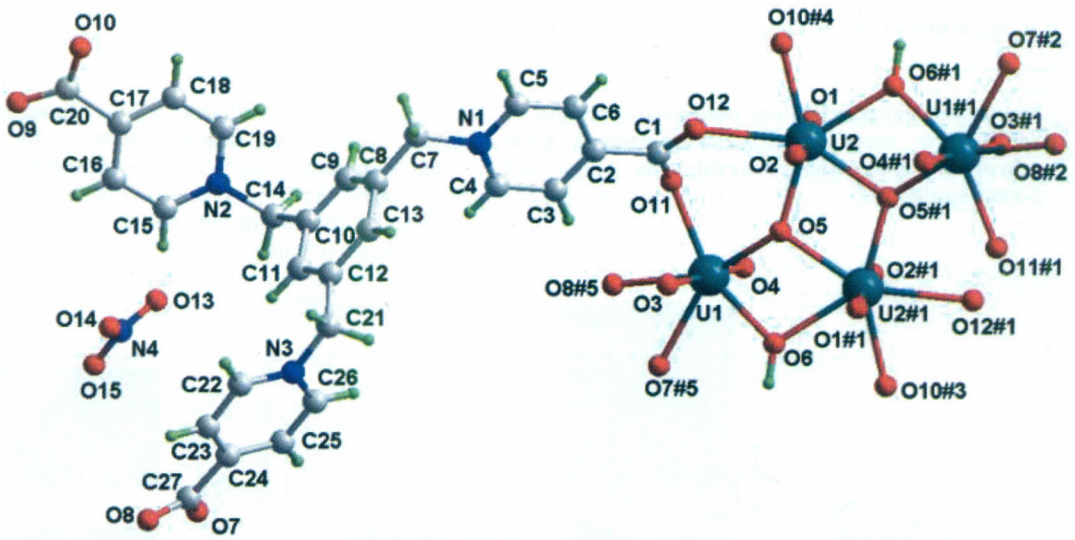
CONTENTS

Papers

1409 **Synthesis, crystal structure, luminescent, and photocatalytic properties of a uranyl(VI)-organic framework based on tripodal flexible zwitterionic ligand**

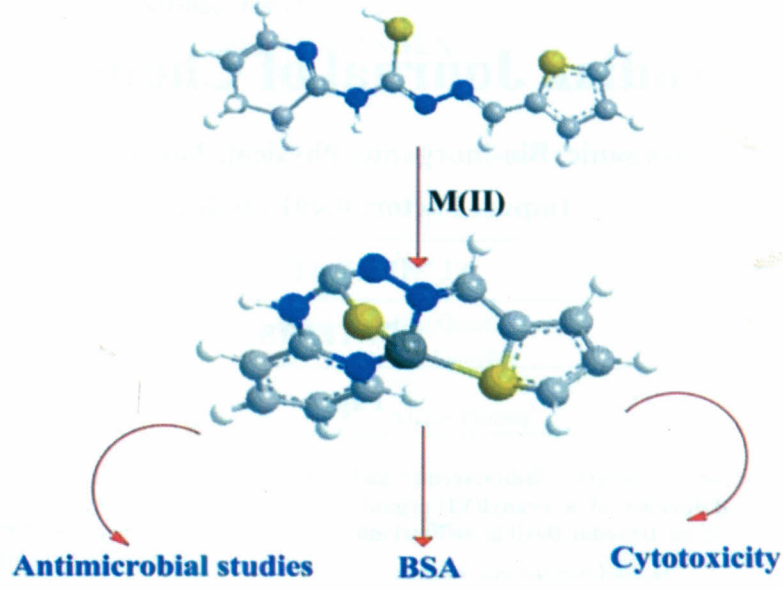
A uranyl(VI)-organic framework based tripodal flexible zwitterionic ligand is synthesized and shown good photocatalytic activity in the degradation of MB under visible light irradiation using an LED lamp (λ> 420 nm).



Yuning Meng, Fei Niu, Xiaolin Zhang, Donghui Liu, Qiaofa Lan & Youming Yang*

1416 **Microwave synthesis, characterization and biological activities of transition metal complexes with novel SNSN donor Schiff base ligand**

A novel Schiff base *(E)-N*-(pyridine-2-yl)thiophen-2-ylmethylene)hydrazine carbothioamide and its complexes have been synthesized. The complexes show enhanced antibacterial activity than the ligand against various bacterial strains. The BSA binding activity of the complexes shows that the affinity for binding was greater towards the copper complex.



P R Sagunthala Devi, S Theodore David*, C Joel, R Biju Bennie & S Daniel Abraham

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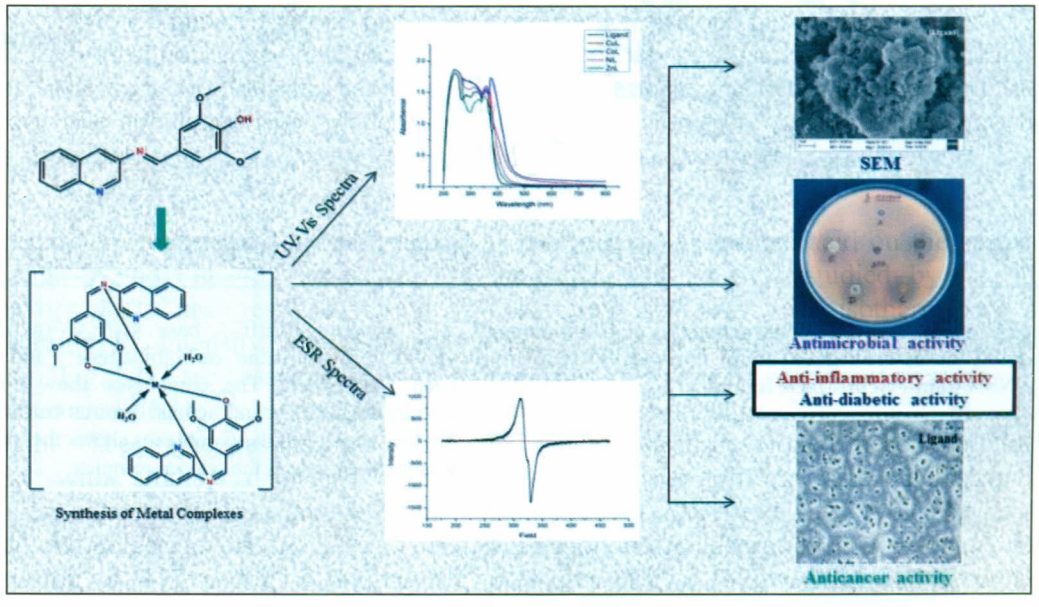
1427 **Synthesis, characterization, biological activities of Schiff base metal(II) complexes derived from 4-hydroxy-3,5-dimethoxybenzaldehyde and 3-aminoquinoline**

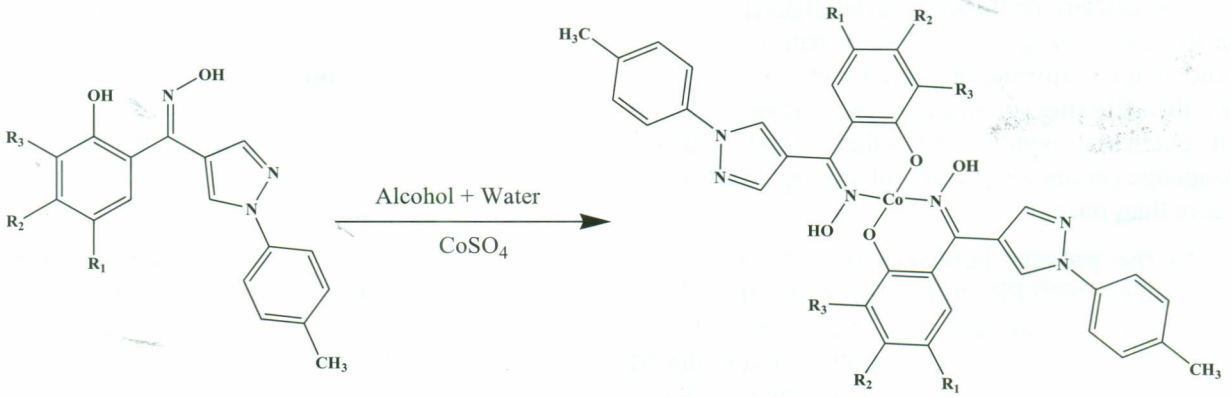
A new Schiff base ligand (E)-2,6-dimethoxy-4-((quinolin-3-ylimino)methyl)phenol and its Cu(II), Co(II), Ni(II) and Zn(II) metal complexes have been synthesized and characterized. Interestingly, Cu(II) complex shows better anticancer activity than the free Schiff base ligand. The *in vitro* anti-inflammatory and anti-diabetic activities of the ligand and Cu(II) complex are studied. The Cu(II) complex show higher inhibition activity than that of the free ligand.



Somasundaram Karthik, Thulasimani Gomathi & Subramaniam Vedanayaki*

1437 **Novel Co(II) metal complexes of N, O donor salicyloylpyrazoleoxime Schiff bases: synthesis, spectroscopic studies and antimicrobial evaluation**

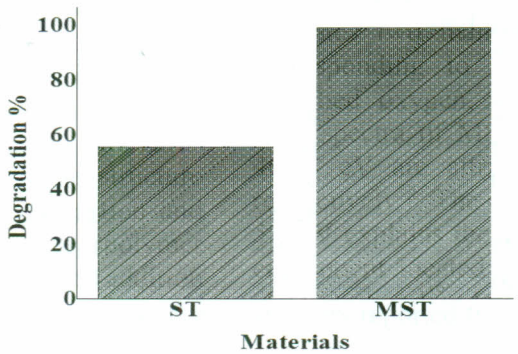
Five novel Co(II) chelate complexes of Salicyloylpyrazoleoximes were synthesized and characterized by various methods. The synthesized complexes are square planer, stable, non-hygroscopic, non-electrolytic and amorphous in nature. Most of the ligands and Co(II) complexes possess moderate antimicrobial activity against test bacteria.



N T Dhokale* & A V Nagawade

1443 **P123 assisted sol-gel combustion synthesis of mesoporous strontium titanate nanomaterials for photocatalytic degradation of methylene blue**

Synthesis of strontium titanate (ST) nanomaterial by a facile sol-gel combustion route is reported. Mesoporous strontium titanium (MST) oxide is obtained by using pluronic P123 and superior photocatalytic activity of MST over ST is observed.



Juliya Acha Parambil, Abdul Mujeeb V M & Sreenivasan Koliyat Parayil*

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