

Sulpha Drugs based Heterochelates: Synthesis, Spectroscopic, Thermal and In-vitro Biological Studies

Sulpha Drugs based Heterochelates

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Abstract

In the current study, dapsons and different 4-Acyl pyrazolone derivatives were used to synthesize various Cu(II) and Ni(II) based heterochelates. Elemental analysis, ¹H NMR, IR, and mass spectroscopy were utilized to check the structure of the tetra dentate DPL1 to DPL5 ligands, and FAB mass spectroscopy as well as temperature investigations (TGA/DTG and DSC) were utilized to approve the structure of the Cu(II) and Ni(II) heterochelates. All the synthesized compounds were examined for their *in-vitro* biological study against two Gram +ve (*Bacillus cereus*, *Bacillus megaterium*) and two Gram-ve (*Escherichia coli*, *Enterobacter aerogenes*) microorganisms as well as their MIC against two Gram +ve (*Bacillus subtilis*, *Staphylococcus aureus*) and two Gram-ve (*Escherichia coli*, *Serratia marcescens*) microorganisms. The outcomes demonstrated the tremendous promise and importance of novel bis-pyrazolone heterochelates based on dapsons for further study.

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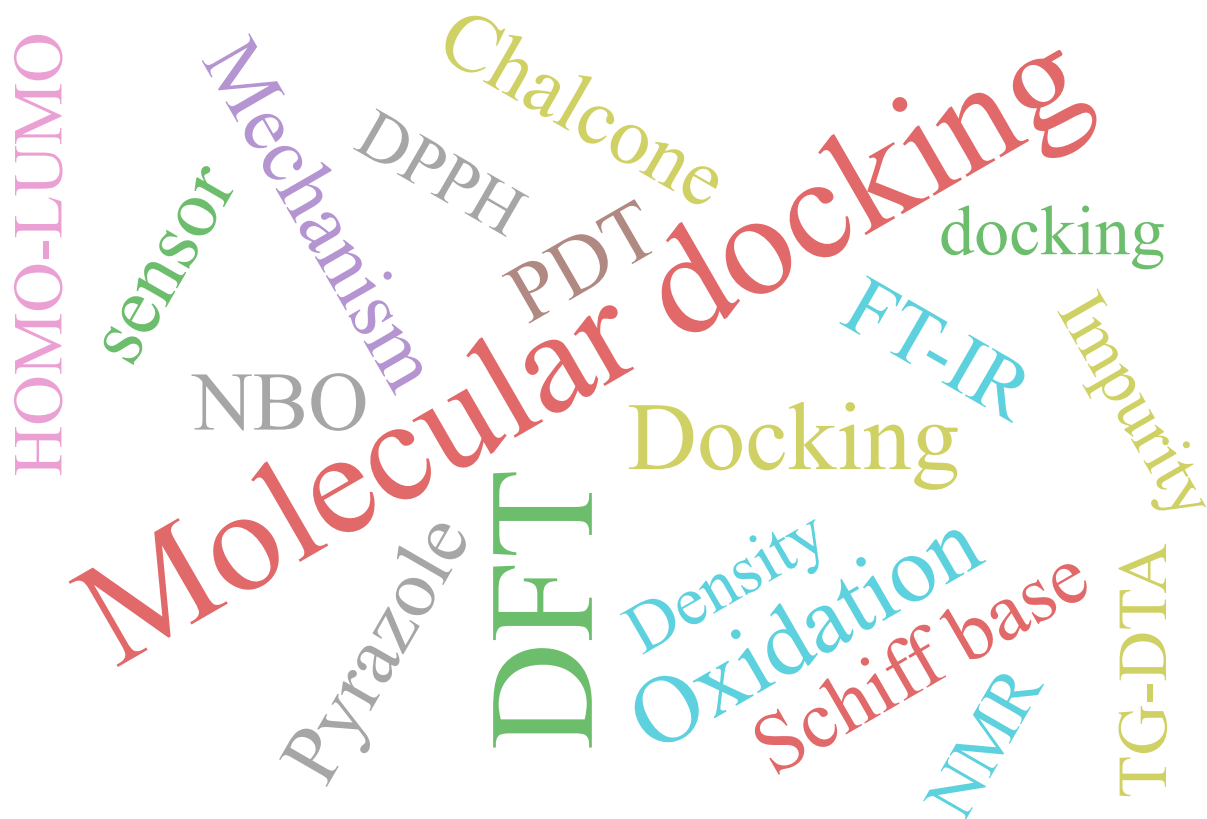
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