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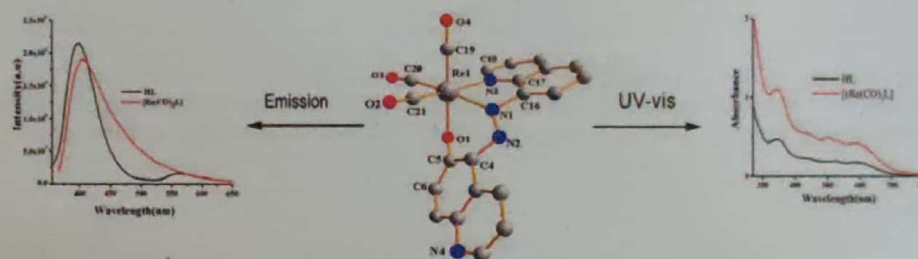
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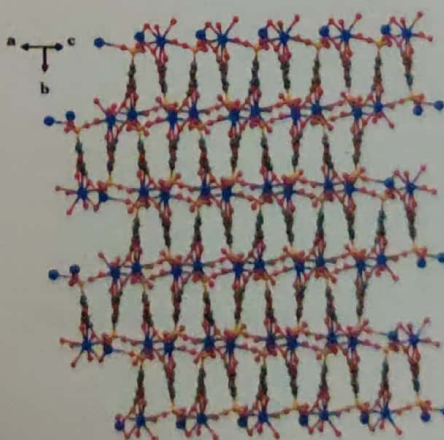
### Papers

- 621 **Luminescent rhenium(I) complex of azo ligand based on quinoline: Synthesis, characterization and computational investigations** A quinoline based mononuclear Re(I) complex having *N, N, O* coordination environment is complex is isolated and characterized by different spectroscopic measurements. Single crystal X-ray spectroscopic structure of the representative complex has been determined. The quantum yield of the complex is also calculated and the photoluminescence behavior and the electronic structure of the complex is nicely explained by DFT and TDDFT calculations.



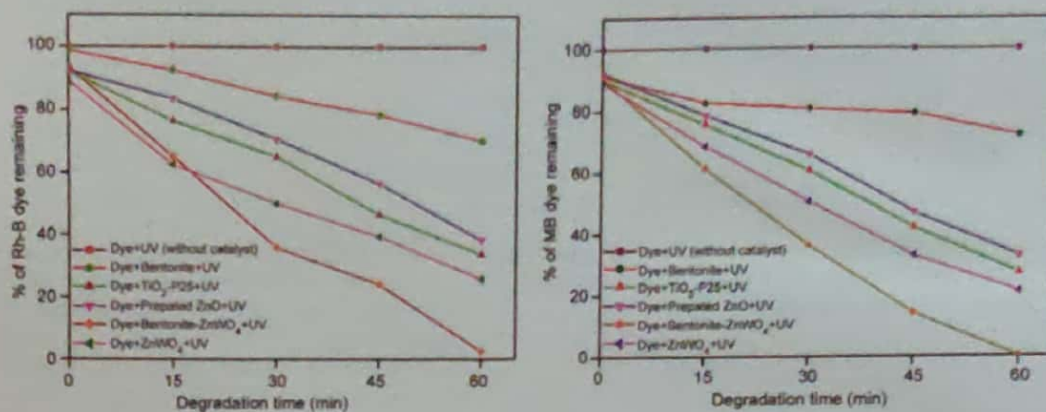
Debopam Sinha, Sankar Prasad Parua\* & Kajal Krishna Rajak\*

- 629 **Hydrothermal synthesis, crystal structures and properties of two alkaline earth metal coordination polymers with 3D pillared open framework structures based on trifunctional aromatic ligands** The two adjacent layers are bridged by  $HL^{2-}$  ligands to form a 3D pillared open framework structure. The distance between the adjacent layers is of 8.94 Å.



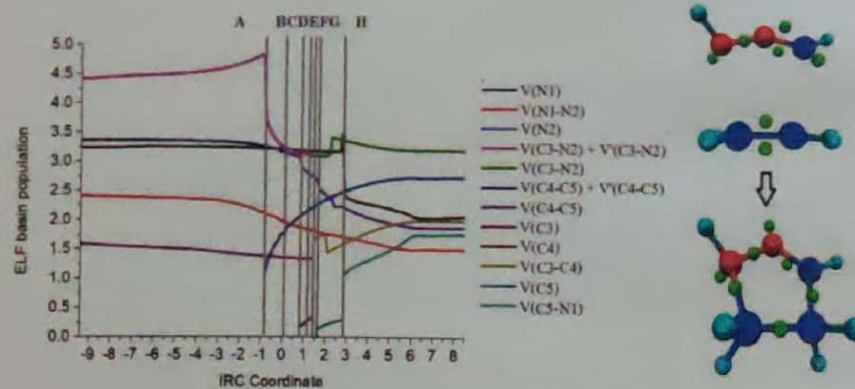
Lei Guan\*, Xin Wang & Ying Wang

- 637 **Photocatalytic activity of natural clay Bentonite supported  $ZnWO_4$**  Prepared photocatalyst Bentonite- $ZnWO_4$  is more efficient in degradation of a) Rh-B and b) MB, under the UV light than other catalyst.



G Ida, K Thirumalai, M Swaminathan\* & D Easwaramoorthy\*

- 645 **Understanding the geometry and [3+2] cycloadditions of nitrile imine in terms of molecular orbital theory** calculated along IRC pathways in different phases with the nuclear configuration for these phases.



Nivedita Acharjee

653 Guide to Authors

Authors for correspondence are indicated by (\*)