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Title:	Bioinspired Vanadium Complex and their Reactivity
Authors:	Chauhan, Utkarsh
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Abstract:	A vanadium (V) complex $[V(L^1)(O)_2][Et_3NH]$ with a O_2N ligand, obtained by the condensation of 3,5-di-ter-butyl 2-hydroxy benzaldehyde and benzhydrazide, was synthesized. The characterization of the complex was done using various spectroscopic techniques such as 1H NMR, FT-IR, UV-Vis and the structure was resolved using X-ray diffraction technique. The O_4N environment provided by the ligand and vanadium centre strongly resembles the vanadium center in the vanadium bromoperoxidase enzyme. The catalytic ability of the complex on organic substrates such as salicylaldehyde and phenol were also studied and it shows the oxidative bromination of said organic substrates in presence of H_2O_2 .
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