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Ferromagnetic resonance (FMR) of a room temperature organic based mixed valent Vanadium Hexacyanochromate magnet $\text{K}_{1.54}\text{V}_{0.77}^{\text{II}}\text{V}_{0.08}^{\text{III}}[\text{Cr}^{\text{III}}(\text{CN})_6](\text{SO}_4)_{0.16}\cdot 3.1\text{H}_2\text{O}$.¹ N.P. RAJU, J.W. YOO, Dept. of Physics, The Ohio State University, AMBER C. MCCONNELL, WILLIAM W. SHUM, KENDRIC J. NELSON, Dept. of Chemistry, University of Utah, JOEL S. MILLER, Dept. of Chemistry, A.J. EPSTEIN, Depts. of Physics and Chemistry, The Ohio State University — Recently, organic materials both magnetic and non-magnetic have been receiving significant attention for their potential applicability in spintronics devices such as spin-valves, memory devices, spin-transistors etc. Here we report magnetic and X-band FMR studies of an organic based mixed valent Vanadium Hexacyanochromate magnet $\text{K}_{1.54}\text{V}_{0.77}^{\text{II}}\text{V}_{0.08}^{\text{III}}[\text{Cr}^{\text{III}}(\text{CN})_6](\text{SO}_4)_{0.16}\cdot 3.1\text{H}_2\text{O}$ with an ordering temperature well above room temperature ($>340\text{K}$). Temperature dependencies of FMR parameters including intensity, linewidth, resonance field will be discussed in terms of the coexistence of long-range magnetic ordering and spin-glass-like behavior in this material. [1] Øyvind Hatlevik et. al. Adv. Mater. **11**, 914 (1999).

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