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High frequency ESR Study on the frustrated triangular-lattice antiferromagnets

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About two decades ago, Y. Ajiro *et al.* [1] measured X-band ESR of the frustrated Heisenberg triangular-lattice antiferromagnets, ACrO_2 ($A = \text{H, Li}$) and discussed the temperature dependence of the ESR linewidth in terms of the \mathbb{Z}_2 vortex excitation, which is a topological defect predicted for the Heisenberg triangular-lattice antiferromagnet [2]. Magnetic properties of HCrO_2 is, however, not well have been studied because of difficulty in making the sample. Recently, we synthesized powder sample of HCrO_2 and measured high frequency ESR to investigate further detail of the spin frustration effect on the ESR linewidth.

[1] Y. Ajiro *et al.*, J. Phys. Soc. Jpn., **57**, 2268 (1988).

[2] H. Kawamura and S. Miyashita, J. Phys. Soc. Jpn., **53**, 4138 (1984).