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Abstract for an Invited Paper
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Magnetic properties of organic conductors: inelastic light scattering study.¹

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I'd like to show how quasi-two-dimensional molecular conductors can exhibit magnetic ground states predicted for the 1/2 Heisenberg antiferromagnet on a frustrated square and triangular lattices. The technique of inelastic light (Raman) scattering is particularly suitable for probing this physics. Using this technique, we follow the evolution of two-magnon spectra upon tuning the frustration of the lattice and charge properties of these materials. Additionally, we follow the charge distribution and dynamics on the molecular lattice using Raman vibrational spectroscopy. This allows us to understand the interplay of magnetic and charge degrees of freedom in a unique fashion.

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