

## **Spin triangles as building blocks of a new multiferroic**

Multiferroics, materials in which both magnetic dipole moments and electric dipoles are simultaneously ordered, are attracting interest of a growing number of physicists and material scientists because of their fascinating properties and potential applications in electronics.

The great majority of multiferroics identified or synthesized to date rely on the Dzyaloshinskii-Moriya interaction--the asymmetric part of exchange interaction that arises from spin-orbit coupling--or a structural change involving atomic displacements. However, a totally new mechanism for multiferroicity, involving spin triangles, have been proposed in the last decade by Bulaevskii and collaborators and by Kamiya and Batista. I will describe a first realization of this mechanism, in an organic molecular crystal, and explain underlying physics -- geometric frustration.