



Contribution ID: 445

Type: **Poster**

Spin Reorientation and Rare-earth ordering in Rare-earth Orthoferrites and Orthochromites

Monday 20 March 2023 16:00 (2 hours)

Temperature-induced spin reorientation in orthoferrites (RFeO_3) and orthochromites (RCrO_3) has recently attracted a lot of attention because of its various potential applications. Spin reorientation in these oxides can be utilized to design functional devices like magnetic switches, magnetic read/write heads, etc.

This work presents the results of spin reorientation and rare-earth ordering in rare-earth orthoferrites and orthochromites. The magnetic structure of different orthoferrites and orthochromites has been analyzed using neutron diffraction measurements. Role of $\text{Fe}(\text{Cr})\text{-Fe}(\text{Cr})$, $\text{R-Fe}(\text{Cr})$, and R-R exchange interactions is identified to understand the complex magnetic structures.

Author: MALIK, Vivek (Indian Institute of Technology Roorkee)

Presenter: MALIK, Vivek (Indian Institute of Technology Roorkee)

Session Classification: Poster Session MONDAY

Track Classification: Magnetism, Superconductivity, Topological Systems, Magnetic Thin Films and other electronic phenomena