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## **【130】 Murunskite –a bridge between cuprates and pnictides**

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Exploration of novel materials in search for unconventional superconductivity can lead not only to the synthesis of compounds with important technological applications but also contributes to understanding the mechanism of this phenomenon. One such compound is murunskite ( $K_2FeCu_3S_4$ ), a material isostructural to iron-based superconductors. I will discuss our synthesis efforts and characterization of this material through measurements of the structural, electronic and magnetic properties. Our study indicates that murunskite is a Mott insulator with sulfur orbitals partially open and electronically active, similar to oxygen orbitals in cuprates. Furthermore, the conduction band is cuprate-like while the valence band is pnictide-like, positioning murunskite as an interpolation compound.

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