

structure (solids and liquids)

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A Powder Neutron Diffraction Investigation of the Two Rhombohedral NASICON Analogues: γ - $\text{Na}_3\text{Fe}_2(\text{PO}_4)_3$ and $\text{Li}_3\text{Fe}_2(\text{PO}_4)_3$.

— $\text{Na}_3\text{Fe}_2(\text{PO}_4)_3$ is prepared by crystallization in a flux of sodium phosphates and Fe_2O_3 . Ion exchange in a concentrated LiNO_3 solution gives $\text{Li}_3\text{Fe}_2(\text{PO}_4)_3$. The crystal data for γ - $\text{Na}_3\text{Fe}_2(\text{PO}_4)_3$ and $\text{Li}_3\text{Fe}_2(\text{PO}_4)_3$ are reported for the first time. The γ -form of $\text{Na}_3\text{Fe}_2(\text{PO}_4)_3$ crystallizes in the rhombohedral space group $R\bar{3}c$ and $\text{Li}_3\text{Fe}_2(\text{PO}_4)_3$ in the rhombohedral space group $R\bar{3}$. — (MASQUELIER, C.; WURM, C.; RODRIGUEZ-CARVAJAL, J.; GAUBICHER, J.; NAZAR, L.; Chem. Mater. 12 (2000) 2, 525-532; Lab. Phys. Solides, CNRS, Univ. Paris-Sud, F-91405 Orsay, Fr.; EN)