

**EOSFORITA, $(\text{Mn,Fe})^{2+}\text{Al}(\text{OH})_2(\text{H}_2\text{O})(\text{PO}_4)$ DE LA MINA RANQUEL,
PROVINCIA DE SAN LUIS, ARGENTINA**

Julia Oyarzábal¹, Miguel A. Galliski², Sebastián Cadile¹, María Belén Roquet¹

¹ Cátedra de Mineralogía, Proyecto 349001 CyT UNSL, San Luis, Argentina;
joyar@unsl.edu.ar,

sebac@unsl.edu.ar, maber@unsl.edu.ar

² CONICET, IANIGLA, Mendoza, Argentina; galliski@lab.cricyt.edu.ar

Abstract

Eosphorite, a Mn (II), Fe(II) and Al basic hydrated phosphate has been found in Ranquel beryllium-bearing pegmatite, San Luis province, Argentina. This mineral occurs as prismatic and divergent subidiomorphic crystals flattened along [b], the dominant forms are {100}, {110} and {010}, with the following physical properties: reddish brown color, vitreous luster in fresh surface and a Mohs hardness of 5-6. Optically the mineral is biaxial negative with $\alpha=1.640$, $\beta=1.664$, $\gamma=1.668$, $\delta=0.028$ and $2V_a=45^\circ$ (calculated by Mertie's method); the elongation sign is positive, the optical orientation is X= b, Y= a and $Z^c=1.2^\circ$; the absorption is Z>X=Y with Z= grayish yellow and X-Y= pale yellow. The chemical composition, based on EDAX analyses gives P, Al, Mn and Fe; the Mn/Fe>1 ratio indicates that this mineral is the Mn rich member in the eosphorite-childrenite series.