Abstract Submitted for the MAR05 Meeting of The American Physical Society

Optical Storage of a dielectric ternary crystal doped with Europium RICARDO RODRIGUEZ-MIJANGOS, Universidad de Sonora, RAUL PEREZ-SALAS, Universidad de Sonora, GUSTAVO VAZQUEZ-POLO, Universidad Nacional Autonoma de Mexico — In this work we study the thermoluminescent properties of KCl(0.5):KBr(0.25)RbBr(0.25) with 0.01% of Europium under "beta" radiation exposure. The glow curve shows lights emission for two temperature region. Around 140 and 332 Celsius degrees, wich increases with the time of exposure in both regions. Light emission of the second regionincreases linerly with the time. In each region there is a very small fading, showing that this crystal has high capacity to store optical energy as well as a possible dosimetry application.

Ricardo Rodriguez-Mijangos Universidad de Sonora

Date submitted: 28 Dec 2004 Electronic form version 1.4