

Abstract Submitted  
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**Integration of a fluorometer and a spectrophotometer to measured luminescence of material doped with rare earth** ALDO S. RAMIREZ-DUVERGER, RAUL GARCIA-LLAMAS, RAUL ACEVES, T.M. PETERS, Universidad de Sonora — The design and construction of a Luminescence-meter optimized to carry out luminescence measurements from material doped with rare earth is presented. This apparatus can work in two modes: In RT mode, it measures the specular reflection or transmission of thick or thin films. In L mode, it measures the luminescence of samples. In both modes it can vary the angle of incidence of the light. Measurements of spectra of reflection and transmission of the microscope slice to test the RT mode were done. The luminescence of KCl thick films doped with Europium for various thicknesses of the samples (2.4 mm to 0.7 mm) are obtained. To prove the sensitivity of the equipment thin film of KCl of about 1 micrometer were grown; the luminescence signal of the later sample barely exceeded the noise.

Aldo S. Ramirez-Duverger  
Universidad de Sonora

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