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Semi-Quantitative Analysis of Standard Reference Materials (SRM) and Metallic Plates through X-ray Fluorescence using a Portable Pyro-electric X-ray Generator. SUNIL KUMAR VALAPARLA, Department of Physics, U. of Texas at El Paso, 500 W. University Ave. El Paso, TX 79968, USA., NICK DEL RIO, Department of Computer Science, U. of Texas at El Paso, 500 W. University Ave., El Paso, TX 79968, USA — We present results obtained during irradiation with a pyro-electric X-ray generator of metallic samples: 1240c aluminium alloy, 1159 electronic and magnetic alloy, and C2417 lead-base alloy. The spectra were analyzed using a CdTe and Si (Li) energy-dispersive detectors connected to a multichannel analyzer; all assembled in a portable configuration. Energy efficiency calibration of the detectors used was performed to produce quantitative results about the elemental composition of the samples. The results obtained are comparable to those reported by other methods.

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