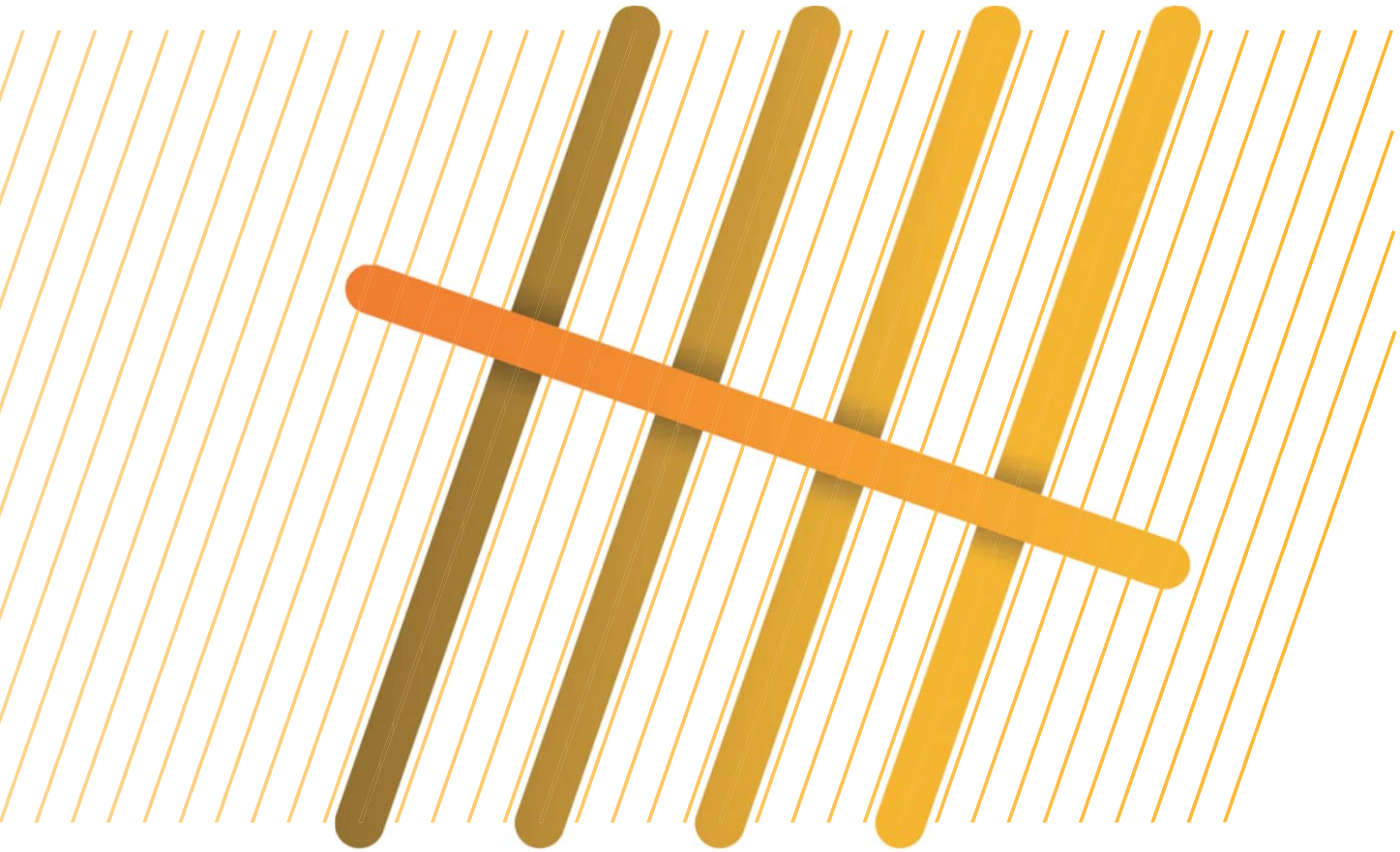

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BOOK OF ABSTRACTS

ANALYSIS OF THERMOLUMINESCENCE KINETIC PARAMETERS OF APATITE WITH CGCD METHOD

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In this study, thermoluminescence (TL) kinetic parameters of apatite mineral were determined using computerized glow curve deconvolution method (CGCD). The apatite samples were irradiated with beta doses of 1 and 30 Gy and then the TL glow curves of the samples were recorded from room temperature (RT) to 450^{o}C with a linear heating rate of 2^{o}Cs^{-1} by using lexsyg smart TL/OSL reader system. Nitrogen gas was allowed to flow into the reader during all readout process to avoid any spurious signals and background readouts were subtracted from the TL glow curves. In conclusion, TL kinetic parameters of these glow peaks were compared for both dose values and TL measurements show that the irradiated samples have four TL glow peaks at around 85, 125, 175 and 220^{o}C, respectively.

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