

FLUORESCENCE STANDARDS AND THEIR USE

ABSTRACT

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The invention concerns fluorescence standards, and in particular fluorescence standards for calibrating optical detectors. According to the invention, a fluorescent mineral or mixtures of minerals are employed for use as
10 a fluorescence standard. The fluorescent mineral can be a naturally occurring mineral or a synthetically produced mineral. Preferred fluorescent minerals for use as fluorescence standards are corundum, fluorite, turquoise, amber, zircon, zoisite, iolite or cordierite, spinel, topaz, calcium fluorite, sphalerite or zincblende, calcite or calcspar, apatite, scheelite or calcium tungstate, willemite,
15 feldspars, sodalite, a uranium mineral, a mineral containing Al^{3+} , and in particular ruby and sapphire.