STUDIES FOR IMPROVEMENTS ON FLUX MEASUREMENTS METHODOLOGY

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Thermal flux measurement when simulating nuclear expositions is ensured by Gardon type gages.

The optical behavior of the absorbing coating which is set up on the exposed face of the detector is of great significance to its sensitivity characteristics.

If the coating absorptivity has a sure effect upon the sensitivity global value, some other characteristics - particularly spectral and spatial ones

- are of a real importance and could explain differences between measured outcomes when modifying spectrum or flux geometry. Owing to the good accuracy of its thermal expositions, the Odeillo solar furnace is in current use for thermal gages calibrations.

Since the sensitivity derating of these detectors rapidly occurs after a few expositions to the TRS-LOX, calibrating after a refurbishing is a frequent process; so it has been looked after a method allowing to make it at user's quarters with the help of a local reference.

With the purpose of establishing a using methodology for an imaging furnace working as this secondary reference, it is necessary to study the effects of the absorbing coat parameters higher mentioned. Some absorbing paints usable for detectors coating have been tested with this design.