

## ALUMINIUM PROTECTION IN THE NUCLEAR AGE

Aluminium is a vital component in the “Dosimeter” used to detect personal radiation exposure. It is a small device worn on the body. Among the many types in use, the optically stimulated luminescence (OSL) dosimeter is one of the latest designs. More sensitive than other types, it uses an Aluminium oxide strip detector to record beta and gamma radiation.

The analysis involves exposure of the strip to specific frequencies of laser light, which cause the Aluminium oxide to become luminescent in proportion to the amount of radiation energy deposited in it. A report of exposure results is generated based on the measured luminescence. Another advantage of the OSL Dosimeter is results can be read up to a year after exposure. OSL Dosimeters are worn on the torso or a finger.

