

N175. Instant Monitoring On Hand

Science Applications International Corporation has developed the PDE-1, a high-performance monitor for worker's extremities. The monitor provides real-time information on exposure to hands, feet, or head for personnel working in radiation fields with high gradients.

The PDE-1 contains the world's smallest production Geiger-Mueller tubes in sensors measuring less than 10 mm in diameter and 26 mm long. This allows dose monitoring as the work is being done.

Until now, thermoluminescent dosimeter (TLD) rings have been used for this. Unlike TLDs which must go to a processing center for reading after the job, the PDE-1 can notify workers immediately when their dose limit has been reached.

Taken from "Instant Monitoring on Hand," Robert Gunn Benson, Nuclear Engineering International, pp. 56-57, May 1992.