EXPERIENCE WITH A FIVE ELEMENT NEUTRON DOSEMETER

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ABSTRACT

The Health Physics Department of the Netherlands Energy Research Foundation ECN operates a dosimetry service specialized in beta and neutron radiation. The Department serves over 100 clients with a total of 2000 radiation workers. Recently all film badges were replaced with TLD's.

In the poster the experience with this new fully automated system will be reported, with emphasis on the neutron dosemeter results. This dosemeter consists of a four element albedo system, complemented with a polycarbonate track-etch detector. This combination is expected to yield reliable dose-equivalents for neutron energies from thermal to fast, also in mixed fields.