Evaluation of Individual Dosimetry in Mixed Neutron and Photon Radiation Fields

From 2001-11-01 to 2005-10-31

Project details

<table>
<thead>
<tr>
<th>Total cost:</th>
<th>Topic(s):</th>
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<tr>
<td>EUR 1 175 258</td>
<td>2.1.2.-4.2. - Monitoring and assessment of occupational exposure</td>
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<tr>
<th>EU contribution:</th>
<th>Funding scheme:</th>
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<tr>
<td>EUR 743 047</td>
<td>CSC - Cost-sharing contracts</td>
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<th>Coordinated in:</th>
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<td>Germany</td>
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Objective

Radiation protection dosimetry in mixed neutron/photon fields - to which 60000 workers in the EU and Switzerland are monitored - is still far less established than that for photon radiation alone. This project will lead to the necessary improvement by evaluating the performance of routine and, in particular, novel personal dosemeters for mixed radiation and by giving guidelines for deriving sufficiently accurate values of personal dose equivalent from the readings of monitors and dosemeters. These objectives will be achieved by spectrometric and dosimetric investigations in representative work-places in nuclear industry. In particular, new spectrometry methods will provide the energy and angle distribution of the neutron influence from which the relevant dosimetric quantities will be calculated. The results will be a comprehensive set of spectrometric and dosimetric data for the work-places, an analysis of the performance of the dosemeters, including the assessment of possible improvements due to electronic dosemeters, and guidelines, which enable radiation protection officers to judge the suitability of available dosimetric equipment.

Related information

Documents and Publications

Evaluation of Individual Dosimetry in Mixed Neutron and Photon Radiation Fields (EVIDOS), Summary of final report

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