

# **The System of Personal Monitoring and the Evaluation of Occupational Exposure to External Ionizing Radiation in Cuba**

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## **Abstract**

Personal monitoring of workers is recommended or required by the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. In our country the personal monitoring of external exposure to ionizing radiation is carried out by External Dosimetry Laboratory (LDE) of the Center for Radiation Protection and Hygiene (CPHR). We have implemented an individual monitoring service based on thermoluminescence dosimetry system. The service includes whole body and extremity dosimeters. We have two systems; one is base on a manual Toledo TLD reader and the other on an automatic RADOS TLD system. This service is recognized by the National Regulatory Authority in the field of radiation protection and safety. We have implemented a quality assurance (QA) programme designed according to the recommendations of the ISO/IEC 17025 standards. The papers deals with the presentation of these QA programme which includes administrative data and information, technical checking of the equipment, acceptance tests of new dosimeters and equipment, issuing and processing of the dosimeters, dose evaluation, record keeping and reporting, traceability, handling of complaints, internal reviews and external audits. The papers also describe the results of occupational exposure for the different practices during 2006-2007 period.

***KEYWORDS: thermoluminescence, occupational exposure***

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