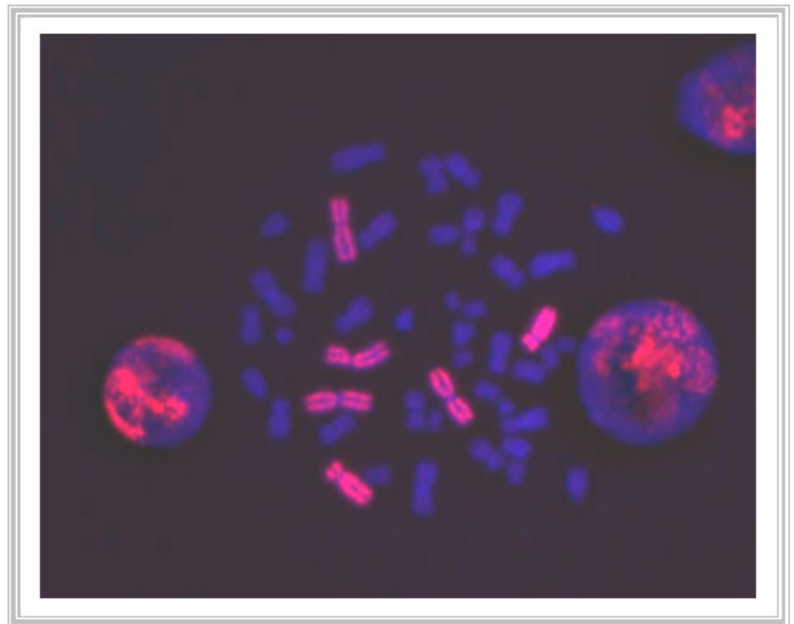


Department of Radiological Protection and Nuclear Safety



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C. Oliveira

The main activities developed are mainly oriented to comply with the national and international duties, to perform services to the community and to answer to the technical and scientific solicitations, in the radiological protection field. Participation in international and national committees as technical and scientific advisers continues to have a significant importance in the Department activities. The main activities have been developed in the following Units:

Environmental Radioactivity, that is responsible to conduct the National Radiological Environmental Programme. The main objective is the determination of the artificial and natural radionuclide concentrations in environmental compartments considered as a direct pathways of human contamination. New analytical methods are being implemented for the determination of Sr-90 in milk.

Measurement Unit comprises four laboratories: Gamma and Alpha Spectrometry, Total Alpha and Beta Counting and Ion Chromatography. In a close contact with the Environmental Radioactivity Unit, this unit carries out the National Radiological Environmental Programme.

Metrological Laboratory of Ionizing Radiation activity deals with the ionising radiation National Standards. This unit is recognized by EUROMET as the National Metrological institution for ionization radiation, and is registered in EURADOS Database of the European Irradiation Facilities.

All these three Units have participated in inter-comparison exercises.

Dose Assessment and Dose Registry activities are directed towards the assessment of doses to the Portuguese population performed by the Individual Monitoring Service. New capacities for extremity dosimeters have been implemented. This unit also, keeps the Central Dose Registry data of occupationally exposed workers. This group participate in EURADOS(WG2) and ESOREX activities.

All these four units have dedicated a large amount of efforts to the implementation or maintenance of a Quality System. These efforts are inserted in the aiming at reach of the accreditation of their activities.

Radiological Risk and Safety Assessment activities ensure an important technical support to the DGS performing Radiation Risk Assessments of radiation facilities of radiation facilities. Efforts have been made to realize this activity in agreement with the Fundamental Safety Principles recently published by IAEA. The potentialities existing on the cytogenetic area has been used on epidemiological studies applied to genotoxic effects induced in population living near uranium mines.

The Radiological Protection and Radioactive Waste Management is responsible for several services as: interim storage of radioactive waste, licence request of sealed sources, detection of radioactive substances in scrap metal, verifications of the radiological conditions and the detection of radioactive contamination on medical, research and industrial facilities. One of the most important tasks is the involvement of Group members in EU, IAEA, OECD, and national committees, projects, working groups and task forces.

The EURATOM 35th Article Verification Commission has checked the implementation of previous recommendations, concerning environment radioactivity monitoring including uranium mines sites. The Commission could appreciate the new equipments, methodologies and procedures, as well the environmental data base and the quality control programmes.

Besides all the limitations, mainly in human resources, national and EU research projects are running namely under the 6th FP programme, and therewere as also an involvement in education and training activities, the efforts developed by DPRSN to foster the research to create the conditions to improve the quality of the services

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