Portuguese Society for Radiation Protection (SPPCR)

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OBJECTIVES

• Developing the scientific knowledge and practical means for human and environmental protection against the radiations detriment

HISTORY

• Founded at 11 of March of 1993
• Founded by Dr. João José Fausto Quintela de Brito, who preside it until 2013
• Affiliated to the International Radiation Protection Association (IRPA) since 1995
• At 03 May of 2004 the Code of Ethics for the Members SPPCR
Members

- Medical: 48%
- Research: 18%
- Academic: 14%
- Other: 10%
- Industrial: 8%
- Nuclear: 2%
Activities

The SPPCR publishes an Official Journal “RADIOPROTEÇÃO” since 1997

- The journal is the official organ of the SPPCR
- It’s available on line for the members

Organization of

- Congresses, workshops on Radiation Protection
- Training courses
- First Portuguese Congress on Radiation Protection
- First Congress on Radiation Protection of Portuguese Speaking Countries
The SPPCR has regularly organized scientific meetings in its area of activity, with special emphasis on the Radiation Protection Congresses of Portuguese-Speaking Countries, in collaboration With the Brazilian Society of Radiological Protection (SBPR).
International Radiation Protection Association (IRPA)

• At a meeting in London in Feb 1964 a sub-committee of the Health Physics Society drafted what were called "Articles of Agreement for the formation of an International Health Physics or Radiation Protection Society“

• The first IRPA Congress was held in Rome from 5-10 September 1966. The Congress covered a very wide range of topics and set the scope for all subsequent Congresses in offering the opportunity for papers to be presented on essentially any aspect of radiation protection
IRPA Topical Areas

- Certification and Qualification
- Culture
- Ethics
- Education and Training
- Lens of the Eye
- Public Understanding
- Stakeholder Engagement
Some ideias on fields for further research
• European Platforms

EURADOS
  • EUROPEAN RADIATION DOSIMETRY GROUP

RENEB
  • NETWORK FOR EMERGENCY PREPAREDNESS AND SCIENTIFIC RESEARCH

ALLIANCE
  • EUROPEAN RADIOECOLOGY ALLIANCE

MELODI
  • MULTIDISCIPLINARY EUROPEAN LOW DOSE INITIATIVE

NERIS
  • EUROPEAN PLATFORM ON PREPAREDNESS FOR NUCLEAR AND RADIOLOGICAL EMERGENCY RESPONSE AND RECOVERY
Harmonization in dosimetry

- Matching designs of the legal requirements of the different techniques for Dosimetry (TLD, OSL dosimeters, electronic, etc)
- Reissue the project "IAEA supported treatment planning system audit" (inter-institutional Dosimetric comparison in European radiotherapy centres)
- Inter-institutional project to compare the activity gauges Nuclear medicine centres

Environmental Dosimetry

- Need to compare values obtained under different conditions (height to the soil, altitude, geology, etc)
- Development of tools and, where appropriate, correction factors

Internal Dosimetry

- Biological dosimetry vs Internal Dosimetry for cases of accidental internal exposure
- Optimization of biokinetic models
Dosimetry in radiotherapy, radiology and nuclear medicine

- Improve dose estimation in patients and technicians
- Development of a national system for automatic patient dose monitoring
  - In procedures of Radiology and Nuclear Medicine
- Definition of national diagnostic reference levels
  - Cover the procedures of Radiology (CT, mammography, fluoroscopy, pediatrics, others) and Nuclear Medicine

Computational Dosimetry

- Development of new detectors (cheaper, lighter, for specific functions ...)

Retrospective Dosimetry

- Rapid methods of biological dosimetry imagining a scenario of several hundred potentially exposed people
• Internal Exposure
  • The development of faster and more reliable techniques for in-vivo and bio-assay monitoring, improved operational control to optimize internal exposures

• External Exposure
  • There are more than 60,000 workers exposed to ionizing radiations of various origins in Europe, excluding flight crew
  • Optimization of the measurement taking into account the different origins of the exhibition

• Natural Exposure
  • Concrete circumstances of exposure to NORM and the need for monitoring recommendations, either in the definition of strategy and methods
  • There is little information in the national databases on the number of workers exposed and the levels of exposure of workers, and that dose estimates are generally based on conservative scenarios
Challenges

• Creation of a integrated national strategic agenda
• Promote Journals on these matters
• Creation of Working Groups in these matters
• Support for the implementation of Directive 2013/59 / EURATOM (Basic Safety Standard)
Thank you very much for your attention

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