Medical Physics in Macedonia

Sonja Petkovska Medical physics specialist in Radiotherapy

Profession - Medical Physicist

Medical Physics profession as an organized profession is relatively young and less familiar than the other healthcare professions. Especially in the small developing countries where the number of medical physicists is negligible, it is very difficult to organize them and include Medical Physics as a profession in the National Labour Organization (NLO) classification of professions.

Even though, there is a certain number of highly qualified professionals in medical physics in Macedonia whose work is in direct correlation with some educational, medical and governmental institutions committed towards medical physics issues.

Where do we work

- Radiation Safety Directorate
- Health Protection Institute as a part of Ministry of health
- Nuclear Medicine
- Radiotherapy
- Diagnostic Radiology
- General Hospital
- Acreditated company for ambiental dosimetry

Education

undergraduate

Faculty of Natural Sciences and Mathematics, Institute of Physics

- Applied Physics
 - 4 years

Graduated engineer of physics

- Medical Physics (this study program was created according to the Bologna Declaration)
 - 4 years

Graduated engineer of physics – Medical Physics

Education

postgraduate

 Faculty of Natural Sciences and Mathematics, Institute of Physics postgraduate studies for Medical Physics

Master of Physical Sciences - Medical Physics

Faculty of Medicine, Specialization for Medical Nuclear Physics (physics in radiotherapy or nuclear medicine) for the physicists who are already employed in clinical work or radiation protection provided in 6 semesters + final exam for specialisation

Specialist of Medical Nuclear Physics

• Faculty of Electrical Engineering and Information technologies some branches in Postgraduate studies at FEIT where the topics from medical physics are involved in the study program

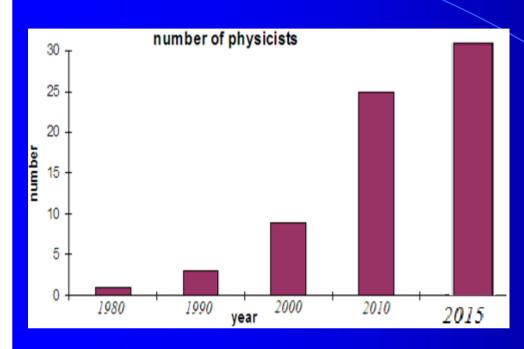
- Measurement and Quality Control;
- Bioinformatics;
 - Electronics in medical devices

Education

Additional Education

- Training courses and fellowships, organized and sponsored by IAEA.
- On-site trainings

Status of Medical Physics



Despite of the fact that in the last period, the number of physicist in healthcare was rapidly increasing, we can not be satisfied with the number of employees and their status nowdays.

The number of physicists in Medicine 1980-2010

12 Specialists of Medical Nuclear Physics.

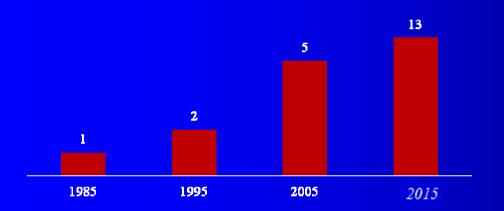
3 with PhD degree in medical physics

3 have MSc degree in medical physics

couple Master &PhD studies are in process.

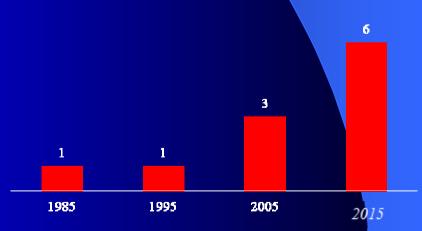
Status of Medical Physics in Radiotherapy

Physicists in Radiotherapy



Specialists in medical physics

The number of physicists in Radiotherapy 1980-2010



Workshop on PET Developments and Applications

Ohrid, Sept 6-9, 2015

Status of Medical Physics

Macedonia
2 million citizens

Sweden 10 million citizens

Number of physicists	Section of hospital physics	Number of physicists
6 - 13	Radiotherapy	96 (19)
3 5	Nuclear medicine	57 (12)
5	x-ray diagnostics and radiation protection	65 (13)
0	MRI	29 (6)
14 23	Total	247 (50)

