

ICMP 2011

Science and Technology for Health for All

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**INTERNATIONAL
CONFERENCE ON
MEDICAL PHYSICS**



The Need for International Certification of Medical Physicists

Fridtjof Nüsslin

Technische Universität München



International Organization for Medical Physics



Mission

To advance medical physics practice worldwide by disseminating scientific and technical information, fostering the **educational and professional** development of medical physics and promoting the **highest quality medical services for patients.**

Medical Physicist as Health Professional

Classification of 'Medical Physicist' by ILO International Standard Classification of Occupations, 2008 (ISCO-08).

2111 Physicists and astronomers

Physicists and astronomers conduct research, improve or develop concepts, theories and operational methods concerning matter, space, time, energy, forces and fields and the interrelationship between these physical phenomena.

They apply scientific knowledge relating to physics and astronomy in industrial, **medical**, military or other fields.

Specific note under group 2111 stating “.....**medical physicists** are considered to be an integral part of the health work force alongside those occupations classified in sub-major group 22, **Health professionals**.....”

State Recognition

- Due to the importance of health care health professions are mostly subject to State Regulations (doctors, nurses, etc)
- Equivalent regulations shall be applied to the Medical Physicists
- Harmonization of qualification of the Medical Physicist through a National Certification scheme
- Uniform application of agreed professional and legal standards (WHO,IAEA,ILO,IOMP etc)

Medical Physicist as Health Professional IOMP Policy Statement 1, 2010

Medical physicists are professionals with education and specialist training in the concepts and techniques of applying physics in medicine. Medical Physicists work in clinical, academic or research institutions.

Medical physicists working in clinical environment are health professionals, with education and specialist training in the concepts and techniques of applying physics in medicine, competent to practice independently in one or more of the subfields (specialties) of medical physics.

Education & Training of Medical Physicists

“Medical physicists shall demonstrate competency in their discipline by obtaining the appropriate educational qualification and clinical competency training in one or more sub-fields of medical physics.”

IOMP Policy Statement No. 2- Basic Requirements for Education and Training of Medical Physicists

Education Requirements

- University degree or equivalent majoring in physics or an appropriate engineering science subject
- Phase 1:
 - BSc in physics or equivalent in physics/engineering
- Phase 2:
 - Postgraduate program at a master's degree level in medical physics or equivalent degree in physics / engineering science subject
- Availability of appropriate syllabi (AAPM, IOMP)

Professional Training Requirement

- Clinical competency training program (formal residency or clinical training program) under supervision of a certified / licenced Medical Physicist in that field.
- Minimum duration not less than 2 years full time equivalent.
- Not less than 1 year for each additional subfield
- Appropriate syllabi (e.g. IAEA)

Professional Certification

- Certification by a national or international body
- State registration / licensing
- Medical Physics organizations or health competent authorities to establish their national certification system
- Alternatively, certification by an external body
- Audit of the national certification system
- Professional competency maintenance scheme by a mandatory CPD scheme (national or external)

Conclusion

- Definition of the Medical Physicist as a Health Professional by the ILO
- Recognition of the Medical Physicist by the National Health Authorities
- Education & Training according to International Standards (IOMP)
- Certification by National or International Boards