

2012 MEDICAL PHYSICS AND BIOMEDICAL ENGINEERING WORLD CONGRESS May 26-31, Beijing Certification of Clinical Medical Physicists

## Certification Process for Clinical Medical Physicists

An International Collaborative Effort

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International Medical Physics Certification Board

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## International Labor Organization (ILO)

- International Classification of Occupations (ISCO)
- Medical Physicists not recognized until 2010
- Not yet as a professional in a **medical field**
- Many Countries do not include Medical Physics in the Job Classification Systems

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2111 - Physicists and astronomers  
Examples of the occupations classified here:

- Astronomer
- Medical Physicist
- Nuclear Physicist
- Physicist

<http://www.ilo.org/public/english/bureau/stat/isco/isco08/index.htm>  
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**IOMP Executive Committee approved the Task Group on International Medical Physics Certification in 2009 under the PRC Professional Relations Committee**

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## IOMP Feedback

- IOMP supports in principle
- Improves quality of MP and benefits patients
- Needs time and careful planning
- Should avoid legal liabilities
- Be consistent with IOMP policies
- ETC will accredit E or T programs
- Explore current credentialing models of MP in different parts of the world

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**A certified medical physicist is recognized by AFOMP as a qualified clinical medical physicist**

**AFOMP POLICY STATEMENT NO 1 The role, responsibilities and status of the clinical medical physicist in AFOMP**  
Australasian Physical & Engineering Sciences in Medicine Volume 32 Number 4, 2009

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**IOIMP Policy Statement No. 1**  
Role and Responsibilities of MP

**IOIMP Policy Statement No. 2**  
Requirements for Education and Training of MP

[www.iomp.org](http://www.iomp.org)  
Approved by Council WC2012

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**IAEA INT/6/054**

**Strengthening Medical Physics in Radiation Medicine**

WG2- Clinical Requirements, educational Materials, Accreditation & Certification

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**United States**

- RSNA began certifying MP since 1936
- ABR took over since 1949
- ABMP began operation since 1987
- Focused on MRI & Health Physics since 2001 by agreement with ABR

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**Change in ABR Requirements**

- Graduated from CAMPEP accredited program – 2012
- CAMPEP Residency Program - 2014

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**May 23<sup>rd</sup>, 2010**

**International Medical Physics Certification Board was established**

Website: [www.IMPCB.org](http://www.IMPCB.org)

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**CHARTER MEMBER ORGANIZATIONS**

KSMP	HKAMP
LAMP	FMOFM
ACMP	IMPS
CSMPT	ABFM
NAMP	ACPSEM
CSMP	

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## Constituting Panel Draft

Presented in ICMP 2011 in Brazil

- Certification Process
- Objectives
- Examination format
- Eligibility
- Re-examination

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## On October 24, 2011, the final text of the Guidelines was approved by IMPCB and published in the WC2012 Proceedings

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## Certification Process

Certification should be by examination, conducted by a country-specific, geographically regional or other designated Medical Physics Certification Board

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## Examination Format

It is recommended that the certification examination consist of three parts: Candidates will pass both Part I and Part II before taking Part III

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## Guidelines

- Part I is designed to test the competence of the candidate in fundamental aspects of medical physics (General Medical Physics).
- Part II is designed to determine the competence of the candidate in a specialty area of medical physics,
- Part III is designed to determine the candidate's knowledge and fitness to practice clinical medical physics in a designated specialty

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## Eligibility

Education – Masters or Doctorate in physics, medical physics or an equivalent degree in an appropriate physical or engineering science discipline.  
Professional Training – 2 years

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### Part III

- Oral Examination
- Medical Physics Specialty
- Prerequisites – successfully passed Parts I and II

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### Continuing Professional Development

To maintain an IMPCB certificate, a certified medical physicist must satisfy the continuing education requirements periodically

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### Years to Certification

The IMPCB model will normally take **6 years**, based on the examination schedules of August for Part I and Part II, and May for Part III

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### Question on Universal Recognition

**EU Subsidiarity Principle**

A central authority should perform only those tasks that cannot be performed by the local authorities

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### Current Models in Different Countries

- Voluntary model – recognized by hospitals and institutions only
- Registry / Certification established by professionals and seeking directive in force
- Registry / Certification with government directives in force

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### Ongoing Jobs

- Governing Document
- Non Profit Organization status
- Bylaws
- Election

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## By-Laws

3.1 Classification of Members  
Membership shall consist of medical physics organizations of the following classes:

- 3.1.1 Charter Member;
- 3.1.2 Regular Member;
- 3.1.3 Supporting Member;
- 3.1.4 Observing Member; and
- 3.1.5 Associate Member (Corporate Affiliate).

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## 4.1 Officers

The Board shall have the following officers:

- 4.1.1 President;
- 4.1.2 Chief Executive Officer (the CEO);
- 4.1.3 Secretary General;
- 4.1.4 Registrar – who shall chair the Registry and Records Committee;
- 4.1.5 Chief Examiner – who shall chair the Accreditation Committee; and
- 4.1.6 Treasurer.

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## Board of Directors (BOD)

Membership shall consist of all six Officers, three At-Large members, and the IOMP Liaison

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## Terms of BOD

- All terms shall be for three years, on a staggered basis, except the CEO
- The term of the CEO shall be determined by the BOD, with a maximum of nine years

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## 6.1 Accreditation Committee (AC)

The Chair of AC shall be the Chief Examiner. The committee shall have at least three members including the Chair. They shall serve staggered three-year terms. To fill a vacant position, the Chair shall propose to the Board who shall make the appointment. The AC shall:

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- 6.1.1 Be responsible for all matters related to applications to the Board for accreditation of regional / national medical physics certification programs;
- 6.1.2 make recommendations to the Board to approve or disapprove each application;
- 6.1.3 assist the Treasurer to determine the fee paid by each medical physicist certified by the accredited program who applies for an IMPCB certificate;
- 6.1.4 provide the Registrar the full name and certification number for each IMPCB certificate issued; and
- 6.1.5 organize the examination process when the Board resolves to conduct examinations to test the competence of candidates.

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## 6.2 Registry and Records Committee (RRC)

The Chair of RRC shall be the Chief Registrar. The committee shall have three members in addition to the Chair. They shall serve staggered three-year terms. To fill a vacant position, the Chair shall propose to the Board which shall make the appointment. The RRC shall be responsible, in addition to other assignment, for keeping the official record related to:

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## RRC (continue)

- 6.2.1 Historical records of IMPCB;
- 6.2.2 applications for accreditation;
- 6.2.3 all IMPCB accredited certification programs; and
- 6.2.4 all IMPCB certificates issued.

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## Other Committees

- 6.3 Rules Committee (RC)
- 6.4 Nomination and Election Committee (NEC)
- 6.5 Finance Committee (FC)
- 6.6 Other Committees and Sub-Committees

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## 7. Discipline

A Member Organization may be disciplined for violation of the Board's By-Laws or Code of Ethics, or for any conduct detrimental to the reputation and best interest of the Board. Complaints alleging such ethical or other misconduct may be made by any Regular Member Organization or any individual

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## By-Laws Committee

Sean Geoghegan, PhD, Chairman  
Voting Member,  
Siyong Kim, PhD  
Voting Member,  
Maria-Ester Brandan, PhD  
Voting Member, [www.IMPCB.ORG](http://www.IMPCB.ORG)  
Raymond K. Wu, PhD  
Non-Voting Member

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## Tasks to Follow

- **Accredit National Programs**
- **Assist Countries in Need**
- **Issue Certificates**
- **Conduct International Board Examinations**

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## Goals in Future

- International Recognition
- Impact in Clinical Service
- Cross Country Partial Acceptance
- Recognition by Hospitals
- Universal Acceptance

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## Universal Acceptance

- Medical Physics Skill sets Required for Local Clinical Practice
- Language
- Cultural Differences
- Liability and Legal Process

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## Summary

Certification is one of the ways to improve the quality of medical physics

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## To Improve MP Quality

- Physics Course Work
- Graduate School Course Work
- Medical Physics Course Work
- On-the-job Training
- Continuing Professional Development

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## Core Elements

- Acceptance of the Guidelines
- Adoption of the By-Laws
- Protection of Integrity and Standards
- Achieving Financial Stability

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## Thank You

[www.IMPCB.org](http://www.IMPCB.org)  
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