# ELECTRONIC MEDICAL PHYSICS WORLD - A RESOURCE FOR GLOBAL EDUCATION

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Abstract— The International Organization for Medical Physics (IOMP) represents nearly 20,000 medical physicists worldwide and 82 adhering national member organizations. The mission of IOMP is to advance medical physics practice worldwide. The following article presents the official Bulletin of the IOMP – electronic Medical Physics World (eMPW).

Initially started as an IOMP Bulletin, eMPW turned recently into an educational and scientific resource of global value not only for Medical Physicists, but also Medical Doctors, Radiology Technicians and related specialties. It went a major renovation very recently, the new format of is already distributed in a number of international conferences around the world.

The interdisciplinary area of Medical Physics develops in parallel with other major medical and technological specialties. Providing a good level of communication and disseminating the most recent advances in Medical Physics is one of the major tasks conducted by eMPW. The main contributions of eMPW are in the areas of education, training, scientific and professional activities, expanding the links with the related professions. eMPW is targeting a wider popularity by providing scientific and educational content meant not only for Medical Physicists, but also Medical Doctors and Radiology Technicians.

Keywords— eMPW, renovation, IOMP, education, medical physics

#### **INTRODUCTION**

The International Organization for Medical Physics (IOMP) was formed in January 1963 initially with four (4) affiliated national member organizations [1]. The Organization currently has a membership of 82 national members representing nearly 20,000 medical physicists worldwide. The Organization is affiliated to IUPESM, IUPAP and ICSU and is officially connected to IFMBE. According to the Statutes of the Organization its aims are to

organize international co-operation in medical physics and to promote communication between the various branches of medical physics and allied subjects, to contribute to the advancement of medical physics in all its aspects and finally to advise on the formation of National Committees for Medical Physics in those countries which lack such organization. Very recently, IOMP introduced its first official journal, Medical Physics International (MPI). Apart of these journals, IOMP publishes, twice yearly, a bulletin that is sent to every medical physicist via the National Organizations. This is the Medical Physics World (MPW) which was founded in 1984 as the official bulletin of IOMP. Recently MPW was upgraded to electronic Medical Physics World (eMPW) [2]. Throughout the years, MPW and eMPW have both played a significant the role as one of the main informational resources for IOMP, reaching medical physicists around the world and providing them with the latest updates at organizational and scientific level.

## MATERIALS AND METHODS

eMPW initially started as an IOMP Bulletin. As the years went by, eMPW turned into an educational and scientific resource of global value not only for Medical Physicists, but also Medical Doctors, Radiology Technicians and related specialties. Taking into account that the interdisciplinary area of Medical Physics develops in parallel with other major medical and technological specialties, the need to provide a good level of communication and disseminating the most recent advances in Medical Physics is apparent. Therefore, this is one of the major tasks conducted by eMPW. The main contributions of eMPW are in the areas of education, training, scientific and professional activities, expanding the links with the related professions. eMPW is targeting a wider population by providing scientific and educational content meant not only for Medical Physicists, but also Medical Doctors and Radiology Technicians

Throughout its almost 30 years of existence, MPW and later eMPW has been chaired by some of the leading professionals in the field of Medical Physics & Engineering., mostly from the United States of America (USA). The first editor was Dr Lawrence Lanzl in 1984, succeeded by Dr Colin Orton in 1986, Dr Richard Maughan in 1988, Dr Bhudatt Pasllwall and Dr Azam Niroomand-Rad in 1994, Dr Ishmael Parsai in 2000 and Dr Donald Frey in 2009. In the World Conference of Medical Physics in Beijing in May 2012 a new editor was elected for the eMPW and currently the editorial board consists of the following distinguished scientists around the world: Virginia Tsapaki, Greece as the Chair Editor, Magdalena Stoeva, Bulgaria who is the Associate Editor. Dr Ibrahim Duhaini, Qatar, who also serves as the Calendar Editor of the bulletin, Dr KY Cheung, Korea, Dr Slavik Tabakov, UK, Dr Madan Rehan, Austria, Dr Anchali Krisanachinda, Thailand, Dr Tae Suk Suh, China and finally Dr A.W.K Kyere, Ghana. For the first time ever in MPW history a non USA editor leads the IOMP bulletin. One of the first decisions of the new board was to completely redesign the layout of the eMPW in order to become more appealing and modern.

# RESULTS

The editorial team is very proud to present the brand new version of the eMPW. Figure 1 shows the front page of the July issue with a picture of the opening ceremony of the World Congress on Medical Physics and Biomedical Engineering 2012, Beijing, China. Although being primarily an electronic publication for dissemination through IOMP website, it is intended to be partially printed and distributed in important conferences around the world including the European Congress of Radiology (ECR) and other radiological and medical conferences. It must be noted that the July 2012 issue is already not only presented but also distributed in 4 large conferences around the world in less than 6 months. These conferences are: 1) the annual meeting of American Association of Medical Physicists (AAMP) in Charlotte, USA, 2) the European Conference on Medical Physics in Sofia, Bulgaria, 3) the Balkan conference of radiologists and 4) the Asia-Oceania Congress of Medical Physics in Chiang Mai, Thailand. The links to IOMP webpage having the new issues are sent to all IOMP member countries. It is also sent to various international bodies such as the World Health Organization (WHO), International Atomic Energy Agency (IAEA), etc.

The December 2012 issue is already in the website and sent to all IOMP members. Figure 2 shows the front page of this bulletin. It must be noted that the world puzzle contains images of medical physicists at work both in developed and in developing countries, scientists at medical physics conferences, as well as the logos not only of the regional organizations but also of the collaborating organizations with IOMP. The editorial board would like to thank all the people who kindly permitted the use of these images and strongly encourages medical physicists, radiation protection workers, biomedical engineers and other relevant scientists around the world to send their images in order to be placed in one of the future issues of EMPW.

The specific issue is going to be printed and distributed in the European Conference of Radiology in March 2013, which is held every year in Vienna, Austria. This conference is one of the largest medical meetings in Europe and the second-largest radiological meeting in the world. The attendees of the conference span all areas of the radiology arena such as radiology professionals, radiographers, industry representatives, and press reporters for both the medical and consumer press. For the first time ever, IOMP will have a dedicated booth in ECR, where a lot of information together with the latest issue of eMPW will be circulated. Some of the IOMP officers as well as members of the IOMP committees who were planning to attend the ECR conference kindly offered their help to man the IOMP booth in order to explain to the visitors of the booth, the mission and objectives of IOMP.

For the near future, the editorial board has the intension to print and distribute the July 2013 issue in the 20th International Conference on Medical Physics and Biomedical engineering (ICMP) which is going to be held in Brighton, UK from 1st - 4th September 2013. The conference is hosted, on behalf of the IOMP, by the Institute of Physics and Engineering in Medicine and will celebrate the 50th Anniversary of the foundation of the International Organization for Medical Physics (IOMP) [3]. This issue will focus on the initiatives taken by national member organizations as well as regional organizations to celebrate the International Day of Medical Physics (IDMP) [4]. This is one of the initiatives taken by IOMP to raise the profile of the Medical Physics profession to the public. This will be an annual event aiming to draw the attention of the global community but also to generate sufficient momentum to ensure its continuity in the future. November 7, the birthday of Marie Sklodowska-Curie has been named by IOMP as the International Day of Medical Physics. A special Task Group has been set up by IOMP in planning and coordinating a series of professional, educational and scientific activities to mark this meaningful day in 2013. The intension is to bring together as many medical physicists as possible from all over the world to participate in this exercise. The editorial board of eMPW intends to publish all these individual events.

As far as content is concerned, the year 2012 issues contain reports of the IOMP officers and chairs of the various IOMP committees, reports from regional organizations, policy statements of the IOMP as well as scientific papers. The 20113 July issue preparation has already started with a significant contribution from Africa focusing on "Medical Physics and the Challenges in Africa". The editorial board strongly encourages reports from member organizations on educational, professional or scientific issues with special emphasis in developing countries.

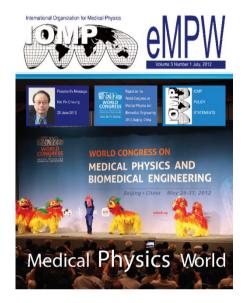


Figure 1. The front page of the new eMPW.

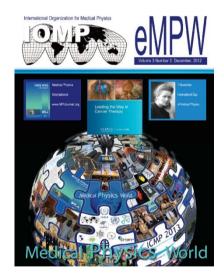


Figure 2. The front page of the eMPW December issue.

Deadlines for submission of material relating to scientific, research, educational or professional subjects are April 1 and October 1 for publication of July and December, respectively. The feedback of readers is always greatly appreciated. Comments or suggestions can be sent to the editor for consideration (virginia@otenet.gr), as the editorial board believes that they would facilitate to the improved communication between IOMP and its members.

## **CONCLUSIONS**

Quoting the mission of IOMP": "advance medical physics practice worldwide by disseminating scientific and technical information, fostering the educational and professional development of medical physicists, and promoting the highest quality medical services for patients", the eMPW team will work so that the eMPW becomes the IOMP tool for accomplishing this mission.

## ACKNOWLEDGMENT

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