International Organization for Medical Physics

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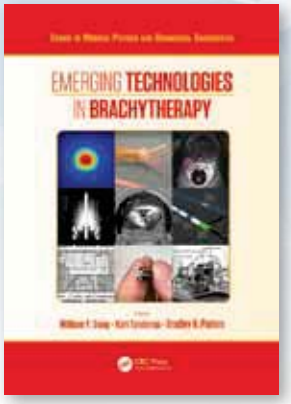

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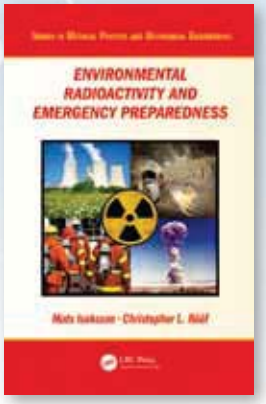
March 2017 • 978-1-4987-3652-7



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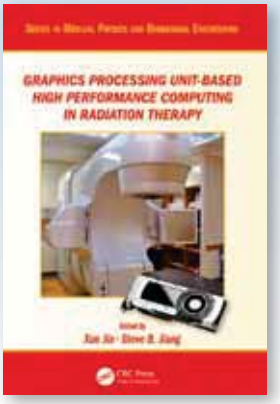
December 2016 • 978-1-4822-4464-9



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"*Graphics Processing Unit-Based High Performance Computing in Radiation Therapy* provides comprehensive and timely information on state-of-the-art GPU techniques and is certainly a must-have book for medical physicists, engineers, and students engaged in research and development involving high performance computing." – *Lei Xing, Jacob Haimson Professor of Medical Physics, Stanford University*

October 2015 • 978-1-4822-4478-6

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"The breadth of topics is considerable and the consortium has made significant progress towards satisfying their goal of a global resource. The editors and translators have certainly put much effort into collecting and disseminating information and the global community can be grateful." – *Joseph Driewer, PhD, University of Nebraska Medical Center, Omaha, USA*

December 2012 • 978-1-4398-4652-0

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Medical Physics World

Table of Contents

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IOMP
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2016 - a Year Full of Activities and Achievements

President's Address

Slavik Tabakov, PhD, FIPEM, FHEA, FIOMP, Hon. Prof., IOMP President

Dear Colleagues,

We are now completing a year full of activities and achievements in the international development of medical physics. The International Day of Medical Physics (IDMP) in 2016 was dedicated to Education and Training and, naturally, there were many events worldwide related to this fundamental part of the profession. First of all IOMP initiated a new activity "IOMP School", associated with the International Conference on Medical Physics, ICMP2016 in Bangkok. This activity quickly gained popularity and 42 educational mini-symposia were linked to the ICMP2016. This presented an excellent opportunity to many students and colleagues to receive more information on some of the hot topics in the profession. One of the IOMP School activities was a Workshop "Building Professional Capacity in Developing Countries" (co-sponsored by IOMP and IUPAP), where we discussed the harmonious development of the profession and shared good practices in low-and-middle-income (LMI) countries.

The very successful ICMP2016 was the first such Conference in the South-East Asian Region. It included more than 600 delegates and exhibitors from 41 countries, and prepared the way for future similar Conferences with associated IOMP Schools. I would like to thank the ICMP2016 host – the Thai Medical Physics Society and all colleagues who worked for the Organisation of this large Conference in Bangkok, in particular its President Prof Anchali Krisanachinda, the Presidents of AFOMP and SEAFOMP (Prof. Tae Suk Suh and Dr James Lee), the Scientific Committee Co-Chairs Prof Geoff Ibbott, Dr Howell Round and Prof Arun Chougule, and all colleagues who contributed to the success of the ICMP2016 in Bangkok. The Book of Abstracts of the ICMP2016 was published as a Supplement to the MPI Journal, ▸

IOMP NMOs

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Chile
Colombia
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Cyprus
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Sweden
Switzerland
Tanzania
Thailand
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Turkey
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Ukraine
United Arab Emairates
United Kingdom
USA
Venezuela
Vietnam

and I want to thank Prof. Magdalena Stoeva for the design of the book.

Another important step during 2016 was the first IOMP accreditation of an MSc course (the MSc in Medical Physics of the ICTP and the University of Trieste). This MSc course is uniquely dedicated to education and training of young colleagues from LMI countries. Alongside the ICTP College on Medical Physics and Radiotherapy School, this activity aims exactly at Capacity building in these countries. In the past 20 years more than 1000 young specialists from LMI countries have benefited from the ICTP-supported activities, many of whom have further established national courses in medical physics. In this connection I want to thank the founders of the ICTP College Prof. L Bertocchi and Dr Anna Benini, the Directors of the ICTP MSc courses Dr R Padovani and Dr R Longo, the Chair of the IOMP Education and Training Committee Prof. J Damilakis and all lecturers and trainers, associated with these ICTP activities. I want to specially thank the IAEA and the Italian Association of Medical Physics for their strong support of the ICTP activities.

During 2016 IOMP also introduced new Awards: the IDMP Award and the John Mallard Award (named after John Mallard, OBE, FIPEM – first Secretary General of IOMP and one of the first scientists who worked on the invention and application of MRI and PET in Clinical practice).

I want to congratulate the colleagues who received the inaugural IDMP Award: Mr Julio Pinuela, Dr Sandra Guzman, Prof Tomas Kron, Prof Arun Chougule, Dr Ibrahim Duhaini, Dr Abdalla N. Al-Haj, Prof Anchali Krisanachinda, Prof Kwan Ng. I also want to congratulate Prof Paul Marsden for receiving the inaugural John Mallard Award for his pioneering work in the development of the PET/MR. Congratulations also to Dr Francis Hasford for receiving the 2016 IUPAP Young Scientist Award, as well as to the new Fellows of IOMP – Prof. John Damilakis, Prof. Tomas Kron, Prof. Tae Suk Suh and Dr Virginia Tsapaki. I am using this opportunity to specially thank the members of the IOMP Awards and Honours Committee and its Chair Dr Simone Kudlulovich-Renha for their hard work for the establishment of the IOMP Awards.

Finally I would like to express my gratitude for the hard and dedicated work over the year to all members of IOMP ExCom, to all members of the IOMP Committees, to all leads of the IOMP Regional Organisations and the members of their Committees.

I am using this opportunity to wish to all colleagues a Happy New Year, lots of health and success in the further development of our profession!

IOMP ExCom

www.IOMP.org

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From the Desk of the IOMP Secretary General

Virginia Tsapaki, PhD, IOMP Secretary General

This was a busy year for the Secretary General of IOMP. Five e ballots were initiated for the IOMP Council to decide on the application of new members. After successful voting procedures throughout the year, the Kuwait Association of Medical Physics, the Association of Medical Physicists of the Republic of Moldova, the Romanian College of Medical Physicists and the Myanmar Medical Physicists Association have become National Member Organizations and the Bangladesh Medical Physics Society (BMPS) an Affiliate Member of IOMP. The official national member organization is Bangladesh Medical Physics Association (BMPA). We hope on an active participation in IOMP activities of all new members and we are looking forward to a fruitful and close collaboration.

A big number of applications for various scientific events and/or conferences around the globe have been processed during the whole year. The request from national or regional organizations was either for endorsement or/and for financial support. IOMP is proud to announce that all decisions for endorsement are positive so far confirming the high quality of forms submitted. Such scientific events were held in India, Indonesia, Bagladesh, Morocco, Mexico and Bulgaria. Also, the 7th Latin American Congress on Medical Physics held together with the 13th Argentine Congress on Medical Physics this September in Argentina was also endorsed and held with great success. There are 2 big conferences already endorsed by IOMP for 2017 and we wish to organizers a big success. These are the 17th Asia Oceania Conference of Medical Physics [AOCMP2017] in conjunction with 38th Annual conference of association of Medical physicists of India [AMPICON2017], which is going to be held at Jaipur, India in November 2017 and the International Conference on Physics in Medicine and Clinical Neuro Electrophysiology at University of Dhaka, Bangladesh in March 2017. If you wish to have your scientific event, workshop or conference endorsed or sponsored by IOMP visit the following link: http://www.iomp.org/?q=node/101 .

The IOMP Secretary General participated in an IAEA Consultancy meeting on Radiation protection in dental uses of ionizing radiation, in February at the headquarters of IAEA in Vienna. The team of invited experts included representatives of the World Dental Federation (FDI), the International Association of Dento-Maxillofacial Radiology (IADMFR) and the Alliance for Radiation Safety in Pediatric Imaging (the Image Gently Alliance). The main conclusions of the meeting were that there is a need to improve the education and maintain the competence of dentists regarding the safe use of X rays in dental practice (photo 1). The meeting for further actions will be held in February headquarters in February 2017.

As IOMP is continuously trying to update all NMOs information you are kindly asked to update your information at the following link: https://docs.google.com/forms/d/e/1FAIpQLSc6aOY5O5vNxq08yD9ynfJE_k6dHY51nO2Xs2XZdPnIaBAszg/viewform?c=0&w=1

IOMP WOMEN Subcommittee

Virginia Tsapaki,Chair (Greece), Simone Kodlulovich, Secretary (Brazil), Stoeva Magdalena (Bulgaria), Jamila Al Suwaidi, Calendar, Teh Lin (USA), Nicole Ranger (USA), Anchali Krisanachinda (Thailand), Rebecca Nakatudde (Uganda), Efi Koutsouveli (Greece), Pola Platoni (Greece), Guadelope Martin Martin (Spain), Francesca McGowan (UK), Hasin Anupama Azhari (Bangladesh)

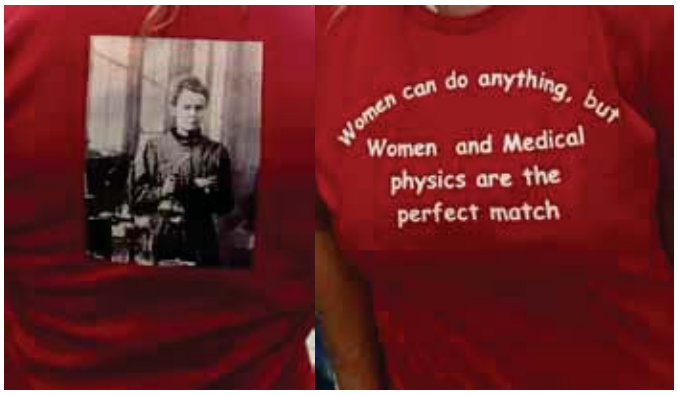
"Women account for only 28 % of researchers across the world, with the gap deepening at the higher levels of decision-making. Women have less access to funding, to networks, to senior positions, which puts them at a further disadvantage in high-impact science publishing". All these are reported at the latest UNESCO Science Report. It seems that despite the immense steps for women so far, there are still socio-economic factors that limit the effective participation of women in higher education and professional levels. Seeing the latest figures in the international literature, the field of medical physics, one of the forefronts of current physics research and application, is still a male-dominated field in many regions of the world.

For these reasons, IOMP is taking action in order to increase women participation in the field of Medical Physics. Rather recently, the "IOMP Women Subcommittee" (IOMP-W) was established (http://www.iomp.org/IOMP-W/) in order to deal with all matters relating to the role of women in medical physics scientific, educational and practical aspects. The committee was small when created, but slowly developed to a large and hard working team as shown at the map. We hope that it becomes even bigger in the near future.

In order to address the challenges faced by women in the field of Medical Physics, the IOMP-Women Subcommittee organized 2 women symposiums at the latest International Conference of Medical Physics held in Bangkok 9-12 December (https://icmp2016.org/workshops): a) Women in medical physics: education and profession and b) Participation of women in medical physics scientific events. The workshops were well-attended (pictures 1-2). Apart from many women, there were men in the audience who had interesting suggestions and even showed interest in joining us to promote our goals. During the workshops discussions, a number of actions were decided for the year 2017. Stay tuned at our webpage to found out more. An important action was to produce a limited number of t-shirts with a logo: "Women can do anything, but women and medical physicists are a perfect match" that many women wore during the sessions. These shirts were also distributed during the conference (pictures 3 and 4).

Magdalena Stoeva, the editor of IOMP electronic Newsletter (eMPW), kindly suggested a special issue on Women Medical Physicists that inspire all women around the world. It will be out on 8th March 2017(International Women's Day). It will be distributed at various international conferences during 2017. Check at IOMP or IOMP-W webpages for more info early next year.

Finally note that next years' International Day of Medical Physics is devoted to women!! Therefore all women medical physicists are asked to join us in actions to celebrate this important day and promote women in our field.



IOMP-W Subcommittee and members of the ICMP 2016

What Have We Done For You Lately?

A brief report from the IOMP Education and Training Committee

John Damilakis, PhD, Chair IOMP Education and Training Committee

This is a brief overview of the main things ETC (Education and Training Committee) has been doing for IOMP membership over the past 18 months.

1. Recent Activities

Accreditation Board

The IOMP Accreditation Board (http://www.iomp.org/?q=node/51) has been created to evaluate and accredit Medical Physics education and training events. IOMP Accreditation Board operates under the guidance of the IOMP Education and Training Committee, which in turn reports to the IOMP Executive Committee. The IOMP Accreditation Board will accredit medical physics degree programs and education and training events including residencies, conferences, seminars, workshops, CPD courses and other education and training events. Initially its work will be limited to accreditation of postgraduate degree courses. An important part of the accreditation process is the site visit to verify the written information provided by the applicant and assess parameters that cannot be described adequately in written form (for example, assess labs and other key facilities, meet faculty members, students and administrative officials, review dissertations etc). Applicants must meet certain standards to be accredited. For IOMP Accreditation Board standards see:

1. IAEA Publication, Training Course Series No. 56 (Endorsed by the IOMP) http://wwwpub.iaea.org/MTCD/Publications/PDF/IAEA-TCS-56_web.pdf
2. IOMP Policy Statement No. 2 'Basic requirements for education and training of medical physicists'

The draft 'Terms of Reference' document of the IOMP Accreditation Board was discussed during the last IOMP Executive Committee meeting in Bangkok. The final document will be submitted to IOMP Executive Committee for approval in the beginning of 2017.

International Day of Medical Physics

It is well known that to raise awareness of our profession, the IOMP decided to celebrate annually the International Day of Medical Physics (IDMP) on November 7, an important date in the history of medical physics. On that day in 1867, Marie Curie, known for her pioneering research on radioactivity, was born in Poland. At the end of 2012, the Education and Training Committee (ETC) undertook the responsibility to develop a strategy to promote the IDMP and support relevant activities of national member organizations. The inaugural event (IDMP 2013) was successful and the amount of attention gained was remarkable. Our campaigns for IDMP 2014, 2015 and 2016 were very successful and IDMP has become an established event. You can find information about IDMP activities at http://www.iomp.org/idmp/. We have started organizing IDMP 2017. The 2017 theme will be 'Medical Physics: Providing a holistic approach to female patients and female staff safety in radiation Medicine'.

Endorsement and Sponsorship of Events

ETC has sponsored and/or endorsed several scientific events worldwide. Specifically, the ETC has sponsored the 14th Mexican Symposium on Medical Physics (Mexico City, March 18-21 2016) organized by the Medical Physics Division of the Mexican Physics Society and the Physics Institute of the National Autonomous University of Mexico, the 3rd International Conference on Medical Physics in Radiation Oncology & Imaging organized by the Bangladesh Medical Physics Society, the 17th Asia Oceania Conference of Medical Physics in conjunction with the 38th Annual Conference of Association of Medical Physicists of India (organizers: AFOMP and AMPI) and the XIIth National Medical Physics and Biomedical Engineering Conference organized by the Bulgarian Society of Biomedical Physics and Engineering.

Education Provision

During the last years, the ETC offered several courses in connection with conferences and represented IOMP in many scientific meetings. A new educational activity, the 'IOMP School' has been accepted for inclusion in the scientific program of the 'International Conference of Medical ▸

Physics' (ICMP, 9-12 December, 2016, Bangkok, Thailand). Two ETC proposals for IOMP Schools (IOMP School 1: MDCT physics, dosimetry and radiation protection, IOMP School 2: Dose tracking and quality assurance) were included in the scientific program of ICMP. Moreover, a session on 'European initiatives on Medical Radiation Protection' was organized in cooperation with the IOMP Secretary General Dr. V. Tsapaki.

2. Plans for the near future

Education and Training Platform

The ETC plans for the creation of an education and training center/platform were discussed during the recent IOMP Executive Committee meeting in Bangkok. The ETC is planning to create an education center with reference books, software, guidelines, legislation and other documents related to Medical Physics. These resources will be available online through the IOMP website.

IOMP School – World Congress 2018

The 'IOMP Schools' were very well attended by the ICMP 2016 participants. The next 'World Congress on Medical Physics and Biomedical Engineering' will be held from June 3-8, 2018 in Prague. ETC is planning to submit proposals for IOMP Schools to be included in the scientific program of this important meeting.

Acknowledgment

I would like to publicly thank every member of the ETC for his/her commitment and support.

Report of Science Committee

Geoffrey S. Ibbott, PhD, Science Committee Chair

The IOMP Science Committee is responsible for disseminating current information to medical physicists; assisting in the planning and conduct of regional meetings on medical physics; contributing to and reviewing scientific documents prepared by organizations such as the International Commission on Radiation Units and Measurements, the International Commission on Radiological Protection, the World Health Organization, and the National Council on Radiation Protection and Measurements; and participating in various forums for the generation of scientific information in medical physics.

The Committee membership for 2016 was approved by the IOMP ExCom and is shown below, with each member's country and regional organization.
Geoffrey Ibbott , Chair, USA
Facundo Ballester, Spain/EFOMP
Sha Chang, USA
Lawrence Dauer, USA
XiaoWu Deng, China
Benedick Fraass, USA
George Kagadis, Greece/EFOMP
Reinhard Loose, Germany/EFOMP
Malcolm McEwen, Canada
Hossein Mozdarani, Iran/MEFOMP
Wilbroad E. Muhogora, Tanzania/FAMPO
Hugo Palmans, United Kingdom
Mark Rivard, USA
Maria Elisa Rostelato, Brazil/ALFIM
Ferid Shannoun, Austria
Vellaiyan Subramani, India
Yoshiharu Yonekura, Japan

The Science Committee has reviewed and commented on the proposed program for the WC 2018 in Prague. We also reviewed and commented on an application for support of a conference sponsored by the Bangladesh Medical Physics Society, and an educational program in Indonesia sponsored by IOMP and ISEP. We reviewed, commented and approved funds for the AFROBIO MEDIC Conference in Abuja, and the ALFIM/SAFIM Latin American Congress in Cordoba.
In addition, we reviewed and submitted votes on applications from several national organizations wishing to affiliate with IOMP. These include the Bangladesh Medical Physics Society; the Kuwait Association of Medical Physicists; and the Association of Physicists in Medicine of the Republic of Moldova.
In particular, the Science Committee played a key role in the review and organization of abstracts for the December 2016 ICMP meeting in Bangkok. This was somewhat of a new experience for the committee and we learned from the process. The end result was successful, in that all abstracts were reviewed, some feedback was provided, and the abstracts were sorted into a well-organized program that will appeal to the attendees.
The Science Committee continues to participate in the activities of the World Health Organization (WHO) through the "Consultation to Define Priority Medical Devices for Cancer Management – Targeting Low and Middle Income Settings". This effort is based in part on the IAEA Publication "Setting up a Radiotherapy Programme: Clinical, Medical Physics, Radiation Protection and Safety Aspects" and other reports, and has as its goal to identify the essential medical equipment for radiation therapy treatment of the six cancers that the WHO has prioritized in LMI countries: cervical, breast, lung, prostate, colorectal and leukemia.
Several members of the Science Committee have formed an informal subcommittee to contribute to the Expert Group on Medical Exposures; a project of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR). The subcommittee is identifying publications that describe issues regarding access to radiation therapy throughout the world, and aspects of quality of radiation therapy, with particular interest in the dose delivered to organs at risk. This is part of a larger project to evaluate radiation therapy worldwide.
In 2017, the Science Committee will consider issues regarding emergency response. Preparing guidance on several other issues is contemplated also.
It is an honor to serve as chair of the Science Committee, and I am looking forward to the activities of the committee over the next years.

Report from Awards and Honours Committee

Simone Kodlulovich Renha, PhD, Chair of Awards & Honours Committee

Over the years, IOMP has dedicated all efforts to provide to medical physicists the due recognition for their work which results in benefits in the service delivered to healthcare by Medical Physics. Therefore, the Awards and Honours Committee had in this last 18 months the great pleasure to create two new important awards: John Mallard Award and IDMP award.

The name of the first new award was given as a merited tribute to John Rowland Mallard, professor of medical physics at the University of Aberdeen from 1965 to 1992. Among the many important contributions of Dr. Mallard and his group to the advancement of medical physics are the development of radionuclide imaging, magnetic resonance imaging (MRI) and positron emission tomography (PET) imaging. He was also a founder Secretary General of the International Organisation for Medical Physics and later its President. He has received many honours and prizes during his career and in 1992 he was made an Officer of the Order of the British Empire in the Queen's Birthday Honours List. The award will honour a medical physicist who has developed an innovation of high scientific quality and who has successfully applied this innovation in clinical practice or who has led a team developing this innovation. The Award will be given triennially at the IOMP International Conferences on Medical Physics. In this year the first John Mallard Award was presented at the 22nd ICMP in Bangkok, Thailand. The winner was Prof. Paul Marsden, one of the main inventor of PET-MR imaging system.

Opening ceremony of ICMP 2016. John Mallard Award for Dr Paul Marden

The second new award was proposed considering the successful worldwide celebration of the International Day of medical Physics. This award was create to give recognition to medical physicist of each region who has made a significant contribution to promoting Medical Physics, including development of scientific work, improvements in patient care and/or contributions for education & training in medical physics. The IDMP award will be given on the occasion of the celebration of International Day of Medical Physics (IDMP) to one Medical Physicist from each IOMP Regional Organization. In this year, the recipients of the IDMP Award are:

Mr Julio Pinuela
ALFIM

Prof. Tomas Kron
AFOMP

Dr Ibrahim Duhaini
MEFOMP

Prof. Anchali Krisanachinda
SEAFOM

Dr Sandra Guzman
ALFIM

Prof. Arun Chougule
AFOMP

Dr. Abdalla N. Al-Haj
MEFOMP

Prof. Kwan Ng
SEAFOM

All criteria and requirements for these awards are presented in IOMP webpage (http://www.iomp.org).

In 2016, the committee also received many nominations for the IUPAP Young Scientist Award. The winner was Dr. Francis Hasford, a Senior Research Scientist with the Radiological and Medical Sciences Research Institute of Ghana Atomic Energy Commission and also serves as Lecturer and Head of the Medical Physics Department of the School of Nuclear and Allied Sciences, University of Ghana.
His PhD thesis was titled "Ultrasound and PET-CT Image Fusion for Prostate Brachytherapy Image Guidance". Outcome of his study has been presented at national and international conferences and was adjudged best poster presentation the Maiden University of Ghana Doctoral Conference.

During the closing ceremony of ICMP 2016, our committee had also the pleasure to give the awards for "the best presentation award", in the categories oral and poster. In this year, all presentations were evaluated by the chair and co-chair of the sessions. They did an excellent work evaluating all the presentations according to a score sheet established by A&H committee. At end, we decided to give the award not only for the first winner but for each category; we gave the award for the top three according to the score obtained in the evaluation of the candidates. The winners are:

Oral presentations
Larissa C. G. Oliveira - Best Oral Presentation Gold Award of IOMP
Takahiro Nakamoto - Best Oral Presentation Silver Award of IOMP
Munira Mohd Rejab - Best Oral Presentation Bronze Award of IOMP

e- Poster presentations
Manthos Koutalonis - Best e-Poster Gold Award of IOMP
Nunung Nuraeni - Best e-Poster Gold Award of IOMP
Shota Kimura - Best e-Poster Silver Award of IOMP

Awards for the best presentation oral and e-poster

Finally, the committee had the pleasure to announce the elected Fellows of IOMP (FIOMP):

John Damilakis

Prof. Tomas Kron

Prof. Tae Suk Suh

Dr Virginia Tsapaki

Now, we would like to invite you all to visit the page and to participate sending your nominations according to the awards announcements.
For next year, this committee wants to innovate even more. Many plans are in development. Look forward to the news coming in 2017! All suggestions are welcome!
In this opportunity, I would like to thank all the members of the Awards and Honours Committee for the important contributions and constant support.

IOMP Regional Coordination Board (RCB), December 2016

Slavik Tabakov, Chair RCB, President IOMP

The IOMP Regional Coordination Board (RCB) entered successfully its second year. A face-to-face RCB meeting was held at the ICMP2016, Bangkok. The Board discussed the collaboration between IOMP Regional Organisations (Federations) during the year. Special attention was given to joint activities such as the ALFIM and AAPM collaboration for the organisation of the Latin American Congress in Argentina and the AFOMP and SEAFOMP collaboration for the organisation of the ICMP2016. The joint sessions EFOMP-MEFOMP at the first European Congress of Medical Physics (Athens, September 2016) and AFOMP-SEAFOMP-MEFOMP at the current International Conference on Medical Physics (Bangkok, December 2016) were also highlighted. The AFOMP Vice-President invited the participants to the next Asian Congress of Medical Physics (Jaipur, India, November 2017), while the IPEM Past-President invited the participants to the next IPEM Conference in UK.

The IOMP President expressed special gratitude to all Regional Organisations for their support and active participation in the first IOMP School activity at ICMP2016. It was also noted that the exchange of information between the IOMP Newsletter and the Newsletters of the large societies and the Regional Organisations has been very useful for the support of the harmonious global development of medical physics. In this connection the double growth of medical physicists in the past 20 years was discussed as a good background for the future expansion of the profession. The AAPM President-Elect underlined the opportunity for free use of the AAPM Virtual Library by the colleagues from Low-and-Middle-Income countries. The IOMP President informed about the global use of the free e-learning materials Emerald, Emit and e-Encyclopaedia Emitel. He also informed about the possibility for IAEA to organise a Training Centre in Africa. All leads expressed readiness to support the activity with expertise.

RCB also discussed the success of the recently celebrated International Day of Medical Physics (IDMP), dedicated to Medical Physics Education. Activities were planned for the next IDMP, dedicated to women. All leads of Regional Organisations and large Societies expressed their satisfaction of the role of IDMP for the visibility of the profession.

The IOMP President thanked the ICMP2016 host – the Thai Medical Physics Society and its lead Prof Anchali Krisanachinda for the very well organised Conference in Bangkok. He also thanked all members of RCB and informed that from this year IOMP will present Plaques of Appreciation to all immediate past Presidents of Regional Organisations. The first ceremony of presenting these plaques took place during the Presidential Dinner of ICMP2016. Plaques of Appreciation were presented by IOMP President to A Peralta (Past-President SEAFOMP), Yimin Hu (Past-President AFOMP), I Duhaini (Past-President MEFOMP), S Renha (Past-President ALFIM), and also at other meetings to A Ibn Seddik (President FAMPO) and P Sharp (Past-President EFOMP).

IOMP Regional Coordination Bard meeting at ICMP2016

IOMP IUPAP Workshop "Building Professional Capacity in Developing Countries"

Slavik Tabakov, President IOMP

The third jointly sponsored IOMP-IUPAP Workshop, dedicated to professional growth in developing countries, took place at the International Conference on Medical Physics, ICMP2016, Bangkok.

The Workshop was Co-organised by S Tabakov, A Krisanachinda, Y Pipman, V Tsapaki, SD Charma, and KY Cheung. The Workshop also invited presentation from the International Atomic Energy Agency (IAEA). The Workshop discussed the global growth of medical physics in the past 20 years. It highlighted the need of more medical physicists specifically in the regions of South-East Asia, Africa and Latin America. It was decided to concentrate on positive examples for building professional capacities. The reports stressed the need of inter-professional collaboration and support for building medical physics educational courses. The new IOMP activities related to International Accreditation of MSc courses and International Certification of medical physicists were also underlined. Examples were given from Thailand, Indonesia, Nepal, Nigeria, Brazil, Cuba, Bulgaria, Philippines, India and South Africa.

The need of including research elements, together with practical training, was discussed as specific need for building professional capacities in developing countries. Special thanks were expressed to the ICTP College on Medical Physics and related MSc programme for their support for the development of medical physics in these countries. The IOMP Library programme and the AAPM Virtual library initiative were also praised. The IAEA report showed some of the latest international projects in this field. The role of professional organisations, such as IOMP and IUPAP, was underlined and gratitude was expressed to the Organisations for the financial support of the Workshop.

During the Workshop the UK IPEM President announced the re-accreditation of an MSc programme from Malaysia, thus recognising and supporting the quality of this education. Also during the Workshop was announced that the 2016 IUPAP Young Scientist Medal has been presented for the first time to a colleague from Africa – Dr Francis Hasford from the Ghana Society of Medical Physics (the medal was presented at an earlier meeting in IAEA related to medical physics in Africa).

In parallel with the Workshop a session "Women in Medical Physics" was held to plan activities for the coming International Day of Medical Physics in November 2017, celebrating the 150th birthday of Marie Sklodowska-Curie and dedicated to women.

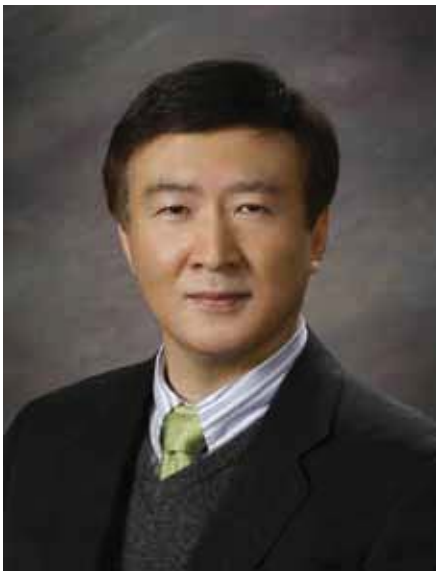
The IOMP President invited all participants to submit their presentations to the IOMP Journal Medical Physics International, and later to an e-book on the subject. The Workshop attracted approximately 80 participants from 21 countries. All participants expressed their appreciation for these IOMP-IUPAP activities dedicated to developing countries, which have now become a regular feature at International Congresses and Conferences of IOMP.

▲ *Some of the participants at the IOMP-IUPAP Workshop*

◀ *Presenting of IUPAP medal to F Hasford at an African project meeting in IAEA*

Report from the Publication Committee

Tae Suk Suh, PhD, Chair Publication committee



IOMP PC has collaborated with EFOMP. Paolo Russo, Editor-in-chief of "Physica Medica" organized Focus Issue of the Asia-Oceania Congress on Medical Physics (AOCMP 2015) in Physica Medica (EJMP). The Focus Issue of AOCMP 2015 was published in November issue of Physica Medica this year. A few month ago, the European Journal of Medical Physics (EJMP, asked IOMP to consider "Physica Medica", an official journal of EFOMP as an official Journal of IOMP. IOMP PC prepared a document for the MOU between IOMP and EJMP, referring to the past two agreements ("Medical Physics" and "JACMP"), which will be soon approved by IOMP.

Tae Suk Suh, IOMP PC chair will continue to work jointly with Yakov Pipman (IOMP PRC chair) for accessing journals by HINARI libraries, which are mainly supported by WHO and widely used for developing countries. IOMP PRC and PC will negotiate with WHO about the special discounted deal on on-line access to HINARI for the physicist in developing counties and subsequently inform physicists in developing countries about its usage, and encourage editors in national or regional journal of medical physics to join HINARI. In order to provide medical physicists with easy access to medical physics related journals, IOMP PC will try to ask editors of medical physics journals and presses for their cooperation.

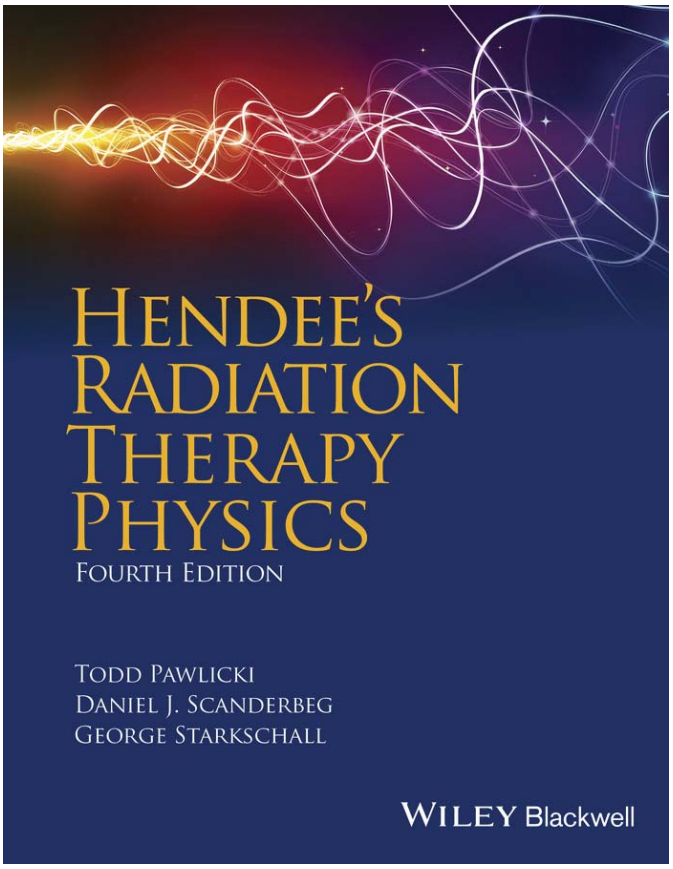
The future plan of PC is to establish the short and long term based action plans. IOMP PC finally organized three task groups (TGs) for the future work: 1) New book ideas and on-line access, 2) Medical physics history book, and 3) Utilization of IOMP facilities (IOMP website, eMPW, MPI). Paolo Russo, Slavik Tavakov and Magdalena Stoeva were elected as leaders of TG 1,2 and 3 respectively. The status of the information and publication matters regarding the medical physics in developing countries has gradually improved. However, it's still difficult to utilize or access the publication materials in developing countries.

A well-prepared strategy and a strong action plan are crucial for the IOMP PC to move forward. First, IOMP PC will continue to discuss the new book idea, and search for potential editors. IOMP PC will support to publish a special volume that overviews medical physics history in commemoration of IOMP's 50th anniversary proposed by Slavik Tavakov, President of IOMP. Second, our committee will establish collaboration framework among regional organizations and allow them to share published magazines in the region through on-line access. Lastly, our committee will increase the use of existing IOMP website and MPI journals thus encouraging the use of e-platform resources.

BOOK REVIEW: "HENDEE'S RADIATION THERAPY PHYSICS"

Magdalena Stoeva

Chair IOMP Medical Physics World Board



The newly published fourth edition of Hendee's Radiation Therapy Physics (Authors: Todd Pawlicki, Daniel J. Scanderbeg, George Starkschall) provides an updated overview, analysis and practical guidance of the various aspects of the radiation therapy physics. Published ten years after the publication of the third edition, this book reviews all newly introduced modalities and approaches in Radiation therapy - intensity-modulated radiation therapy (IMRT), image-guided radiation therapy (IGRT), digital imaging, CT simulation, proton therapy, radiation therapy informatics. An important part of the book is the focus on the professional approaches in radiation protection, patient safety, quality assurance, quality improvement and even training for residents.

The book is written by experts in the field – all three authors are well known professionals working in the field of Radiation Physics and Radiation Medicine.

Throughout this book the reader finds scientific, educational and practical information from the very basics of radiation physics to the latest achievements in the field of Radiation Therapy. Each chapter is well structured, giving a good balance between the theoretical and practical aspects. The appendix is dedicated to solving practical problems and provides professional advice, as well as self-tests.

The book has over 352 pages, separated in 20 Chapters:

1 Atomic Structure and Radioactive Decay
2 Interactions of X Rays and Gamma Rays
3 Interactions of Particulate Radiation with Matter
4 Machines for Producing Radiation
5 Measurement of Ionizing Radiation
6 Calibration of Megavoltage Beams of X Rays and Electrons
7 Central-axis Point Dose Calculations
8 External Beam Dose Calculations
9 External Beam Treatment Planning and Delivery
10 The Basics of Medical Imaging
11 Diagnostic Imaging and Applications to Radiation Therapy
12 Tumor Targeting: Image-guided and Adaptive Radiation Therapy
13 Computer Systems
14 Radiation Oncology Informatics
15 Physics of Proton Radiation Therapy
16 Sources for Implant Therapy and Dose Calculation
17 Brachytherapy Treatment Planning
18 Radiation Protection
19 Quality Assurance
20 Patient Safety and Quality Improvement

The book also includes the prefaces to the previous editions and appendices and extended index.

This book is both an excellent reference which will be useful in all medical physics departments and at the same time a perfect guidance material for professionals in related specialties. It continues very well the line set by Prof. William Hendee (past IOMP ExCom member).

The Content and Structure of the book are excellent. These are really necessary for a book with such coverage and volume. Thefourth edition of Hendee's Radiation Therapy Physics is yet another fundamental book that will be very useful reference for various specialists for many years ahead.

The 22nd International Conference on Medical Physi

Anchali Krisanachinda, President ICMP2016
Slavik Tabakov, IOMP President and Co-President ICMP2016
Tae Suk Suh, AFOMP President and Co-President ICMP2016
James Lee, SEAFOMP President

The 22nd International Conference of the International Organisation for Medical Physics (IOMP) took part in Bangkok, Thailand from 9 to 12 December 2016 (ICMP2016). The success of the Conference was facilitated by the close collaboration of IOMP with its Regional Organisations – the Asia-Oceania Federation of Organisations for Medical Physics (AFOMP) and the South-East Asian Federation of Organisations for Medical Physics (SEAFOMP). ICMP2016 attracted 584 delegates and exhibitors and was supported by a 56 strong team of the host organisation – the Thai Medical Physicists Society.

Naturally most of the participants at the ICMP2016 were from Asia, but it also attracted delegates from other continents, thus having participants from 42 countries. The largest delegations were from Thailand, Japan and South Korea. ICMP2016 included 367 Oral presentations and e-Posters, most of these being in the fields of Radiation Therapy, Medical Imaging and Radiation Safety. All abstracts of these were published as an e-Book of Abstracts, supplement to the IOMP Journal Medical Physics International (vol. 4, No.2), which is available as a free e-publication from http://www.mpijournal.org/MPI-v04i02.aspx

Many companies had Exhibition stands at ICMP2016, thus allowing the participants to see the latest developments in the medical-physics-related industry. The sponsors and exhibitors at ICMP2016 (as per their boot number) were: ThaiGL, Global Medical Solution, Biomedia, Nuclear System, IBA, Mobius, JF, Qfix, Sun Nuclear, Raysearch, Scandidos, OSL / Nagase, Sumitomo, Vision RT, TINT, HDX, Carestream, IBA Dosimetry system, Bayer, RTI, Inmed Solution, Medical Solution, BJH, Tour Thai, CU, IOMP, IPEM, Hitachi, PTW, Elekta, Dispomed /

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Civco, Siemens, Varian, Accuray. We express sincere gratitude to all sponsors and exhibitors!

It is a long way since the first International Conference was organised by IOMP in Harrogate, UK, in 1963, the year of its establishment, when the approximate number of medical physicists globally was around 6,000. At the current ICMP2016 it was reported that the number of medical physicists globally has now reached 24,000 (double the number compared with 1995) and our goal is to further double this number in the next 20 years.

The increase of the number of medical physicists is directly related to the education and training in medical physics and IOMP with its Regional Organisations has made sound steps in this direction. One of these steps is the establishment of the "IOMP School" – a sequence of educational mini-Symposia, which was inaugurated at ICMP2016. The support for this activity from the leaders of the profession was overwhelming. Thus ICMP2016 included 42 mini-Symposia, covering various topics of importance for the profession (please see the Book with Abstracts at MPI Journal vol.4 No.2, p.532-574). We want to thank all colleagues who contributed to the IOMP School mini-Symposia.

To accommodate this large number of mini-Symposia, ICMP2016 included a novel organisation of the Programme: having all mornings associated with the mini-Symposia and all afternoons for scientific presentations and poster sessions. This re-organisation of the programme was accepted very well by all participants. It was discussed some of the mini-Symposia to be presented again at the next IOMP-School, associated with the World Congress in Prague (June 2018), thus giving the opportunity to more colleagues and students from other continents to benefit from them.

Another novel activity during ICMP2016 was the inauguration of two new IOMP Awards – the IOMP John Mallard Award and the IDMP Award (please see the special material on the subject by the IOMP Award and Honours Committee). We sincerely congratulate all Awardees!

Finally we want to specially thank all Organisers and ICMP2016 Committee members, as well as all colleagues who contributed and participated at the ICMP2016. The truly international friendly spirit at the Conference in Bangkok was one of the main pivots of the success of ICMP2016.

The UK's Science for Patient Benefit campaign is going global

Sean Edmunds

External Relations Manager

Institute of Physics and Engineering in Medicine

WHAT started out as a simple idea to invigorate the UK's medical physics and engineering profession and gain them the recognition they deserve amongst their hospital peers has grown into a campaign which is slowly spreading across the world.

'Science for Patient Benefit' was something Professor David Brettle, the President of the UK's Institute of Physics and Engineering in Medicine (IPEM), thought would resonate with both staff and patients alike.

As Head of Medical Physics and Engineering at Leeds Teaching Hospitals NHS Trust – Europe's largest teaching hospital – Professor Brettle said it was almost as though medical physicists and engineers were an invisible army of workers.

"Before the 'Science for Patient Benefit' campaign began, I would walk around a hospital and have no idea who the medical physicists and engineers were. I thought we needed something to rally round, almost a flag to follow, and that was really where the idea for the campaign came from," said Professor Brettle.

The germ of Professor Brettle's idea – conceived at the beginning of his Presidency in September 2015 - slowly became a reality over several months as IPEM strived to ensure all aspects of its members' areas of work were incorporated into a vibrant, eye-catching campaign with one simple message – that without physics and engineering there would be no modern healthcare.

IPEM's Trainee Network and the Institute's Communications Committee came up with designs for a poster. An illustrator was brought on board to produce simple yet effective artwork to demonstrate the crucial role medical physics and clinical engineering play in delivering a safe, effective and modern healthcare service to patients.

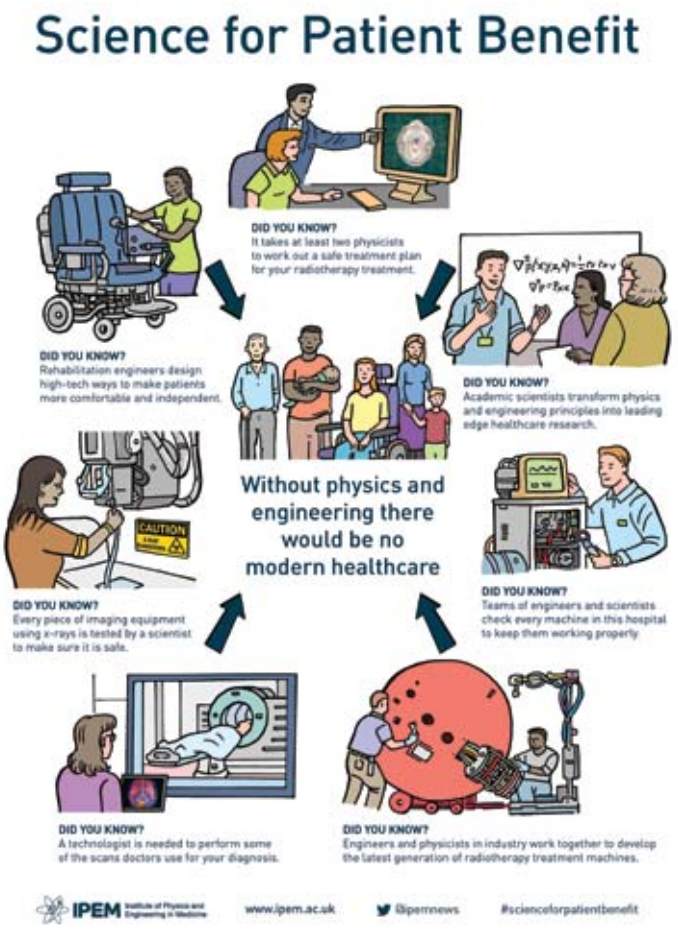
Backing for the campaign was also given by both the Chief Scientific Officer for NHS England, Professor Sue Hill, and the President of the Academy for Healthcare Science, Dr Brendan Cooper.

Professor Hill said: "The Science for Patient Benefit campaign highlights the amazing contribution scientists, medical physicists, engineers and technologists make to patient care daily through the diagnostic, therapeutic, rehabilitative and innovative services they provide. This inspiring initiative will demonstrate their critical role in delivering a modern healthcare service."

And Dr Cooper added: "I am delighted to support this excellent initiative from IPEM, which highlights the essential role of the healthcare scientist as a vital part of the healthcare team. British healthcare is the envy of the world because we have a heritage of high quality scientists supporting all aspects of clinical work – diagnosis, treatment and monitoring. Behind every good doctor and nurse there is a great scientific team - and medical physicists, engineers and technologists are the epitome of this teamwork."

Finally, in June 2016, the campaign was ready to launch, with the Science for Patient Benefit posters, pens bearing the campaign name, lanyards for hospital staff, and pop-up banners for use at open days and events, being produced.

The campaign was launched at Professor Brettle's hospital and at the same time IPEM members across the UK were asked to get involved by requesting the campaign pack of posters, pens and lanyards to spread the message far and wide to patients and hospital staff to let them know what a crucial role physics and engineering play in delivering modern healthcare.



The actual launch itself demonstrated why the campaign was sorely needed. While patients and members of the public took an interest in the Science for Patient Benefit stand at the hospital, it was the staff themselves who were the most intrigued to realise they had colleagues working alongside them carrying out this vital role.

IPEM members right across the UK, from Aberdeen in the north of Scotland to Exeter in south west England, Londonderry in Northern Ireland to Swansea in Wales, responded well to the call to get involved in the campaign. Initially some 70 members came forward, volunteering to be the Science for Patient Benefit 'champion' at their hospital to promote the campaign, and today members still continue to get in touch to request the campaign materials.

A social media campaign spread the message further, with lots of activity on Twitter, and a special campaign webpage set up on the IPEM website has been visited by more than 1,000 people since its launch.

"I visited a hospital recently and suddenly I could spot all the medical physicists and engineers because they were all proudly wearing the Science for Patient Benefit lanyard," said Professor Brettle.

It was at the first European Congress of Medical Physics (ECMP) held in Athens in September that the campaign began to spread overseas. Delegates at the Congress snapped up the limited number of campaign posters which were on the IPEM stand and Professor Brettle talked about the campaign during his address to the European Federation of Organisations for Medical Physics (EFOMP) Council at the ECMP, where it was hailed as a 'brilliant idea'.

To build on the momentum following the ECMP, Professor Brettle wrote to Professor John Damilakis, the President of EFOMP, and Professor Slavik Tabakov, the President of the International Organization for Medical Physics (IOMP), to seek their support to help spread the campaign internationally.

Their response to support the campaign was a resounding 'Yes!' EFOMP wrote to its National Member Organisations across Europe to let them know they could request the poster artwork from IPEM to translate into their own language. So far, the posters are beginning to appear in Belgium, Croatia, Greece and Malta.

The campaign has gone even further afield than the UK and Europe. An IPEM member in South Africa, based at the medical radiation department of iThemba Labs in Cape Town, requested the poster. To help celebrate the International Day of Medical Physics, delegates attending the Conference on Radiation in Healthcare in Jaipur, India, carried the Science for Patient Benefit posters in a rally through the streets of the city after the organisers contacted IPEM requesting the artwork. Campaign posters, and other IPEM posters, were printed locally and used in the rally.

The poster might even feature in the popular BBC Television hospital drama 'Casualty'. Discussions have been held with the programme and it might be used in the background on the set in a future series where it would be seen by millions of people.

It is hard to believe that in just six months, Science for Patient Benefit has gone from being launched in a hospital in Leeds in the UK to now being recognised around the world – and bringing recognition to the crucial role medical physics and engineering play in delivering modern healthcare.

*The artwork produced for the Science for Patient Benefit campaign is available to all European and international medical physics and engineering organisations free of charge. If you would like to request this, please contact communications@ipem.ac.uk.

Delegates who attended the Conference on Radiation in Healthcare (CRHC 2K16), who celebrated the International Day of Medical Physics with a rally through the streets of Jaipur, India, carrying the Science for Patient Benefit posters.

The 58th Annual Meeting of American Association of Physicists in Medicine (AAPM) – 2016, Washington, DC

Chandra P. Joshi, PhD, DRP, DABMP, FCCPM

Cancer Centre of Southeastern Ontario, Kingston General Hospital and

Departments of Oncology and Physics, Queen's University, Kingston, Ontario, Canada

The 58th annual meeting and exhibition of American Association of Physicists in Medicine (AAPM) – July 31- August 4, 2016 was held at Washington, DC. The 2016 AAPM attracted about 4,000 delegates to one of the world's largest program of scientific, educational and professional presentations, and of technical exhibits of interest to the medical physics community. The meeting covered wide ranging topics pertaining to radiation therapy, diagnostics, nuclear medicine, and other emerging associated areas. The theme of the 2016 AAPM annual meeting was "Communicating our Value. Improving our Future." The 2016 AAPM President, Mr. Bruce H. Curran drew attention towards medical physicists losing their place as key players on the diagnosis and treatment teams; and similar decline in the academic, research and technology development areas. Mr. Curran called upon medical physicists to reverse these trends in order to survive and thrive. The 2016 AAPM President, Mr. Curran echoed his message with 2015 AAPM President, Dr. John Boone's call to medical physics community – "I invite you — indeed I challenge you — to take advantage of the outstanding opportunities offered at this summer's meeting to reinvigorate your professional, (clinical, and scientific) excellence."

One of the exciting new additions to the 2016 AAPM meeting included General ePoster presentations which included a select group of high-scoring posters on a specific theme, identified by the Program Directors as being of special interest to attendees of the scientific program. The ePoster presentations promoted lively discussions and scientific exchanges between presenters and delegates. Another addition to this year's meeting was the Presidential Debate featuring a vibrant debate between a panel of past presidents about issues facing the administrative, professional, educational, and scientific aspects of physics in medicine. Other important additions included a four hour HAZMAT Training for Medical Physicists, a joint scientific symposium with the World Molecular Imaging Society on Metabolic Imaging of Cancer, and a Joint scientific symposium with ESTRO on Advances in Experimental Medical Physics.

The main highlights of the 2016 AAPM meeting included sessions: President's Symposium - Inspiring Leadership, Preclinical Science - Therapy SNAP Oral, Joint Imaging – Radiomics, Scientific Symposium on Grand Challenges in Medical Imaging and Radiomics, Therapy Scientific Symposium on Connecting Radiation Physics with Computational Biology, The Zagzebski/Carson Distinguished Lecture on Medical Ultrasound: Image Guided Ultrasound Therapy, and a Professional Symposium on The Pursuit of Radiation Oncology Performance Excellence.

In a special plenary session on National Cancer Institute (NCI) supported research activities, Dr. Douglas Lowy, MD, acting director of NCI provided insights into the Cancer Moonshot and other initiatives to accelerate cancer research and make more therapies available to patients. Dr. Lowy informed attendees about cancer research in the critical areas identified by the Blue Ribbon Panel report; a part of the Cancer Moonshot initiative under the leadership of the Vice-President of the USA. Dr. Lowy informed delegates about the ten transformative approaches poised for accelerating cancer research, and said "The bold but feasible cross-cutting initiatives in this report will improve outcomes for patients with cancer, prevent cancer, and increase our understanding of cancer". The AAPM president Mr. Curran underscored the vital role Medical Physicists play in the diagnosis and treatment of cancer through the development of novel imaging techniques, advancement of innovative therapy approaches, and by ensuring the clinical use of imaging and radiation therapy are safe and effective.

Important newsworthy research studies presented at the meeting included a stream of presentations on a new method of extracting big data from Positron Emission Tomography (PET) which can provide additional information to quantify lung tumors caused by a genetic mutation. Using big data radiomics – extracting comprehensive information from PET images – researchers evaluated the associations between radiomic features of tumors and epidermal growth factor receptor (EGFR) and K-RAS mutations in about 350 non-small cell lung cancer (NSCLC) patients. The mutations were confirmed by molecular testing based on biopsies of tumor tissues; the standard of care for mutation identification. Researchers found that radiomic features describing different aspects of the tumor, such as its shape and textures, appear to be associated with EGFR mutations. Their results suggest that different metabolic imaging patterns (or imaging phenotypes) that are quantified by radiomic features may be caused by EGFR mutations. Researchers surmise that this information could help guide the most effective therapy for NSCLC lung cancer patients. "Our long-term goal would be to use PET or another imaging technique to develop non-invasive imaging biomarkers that complement molecular tests," said Hugo Aerts, Ph.D., director of the Computational Imaging and Bioinformatics Laboratory at Dana Farber Cancer Institute, Brigham and Women's Hospital and Harvard Medical School in Boston.

Another highlight of the meeting was preliminary research findings on an emerging technology to assess bone health at the microscopic level, which may guide development of preventive therapies for osteoarthritis patients. Osteoarthritis often occurs after a joint is injured, leading to progressive damage of the cartilage that lines and cushions the joint thereby causing pain and stiffness. A promising imaging technology that measures bone health at the microscopic level could help physicians detect osteoarthritis in its early stages and guide the development of new therapies. In this technology, a special cone beam computed tomography (CBCT) system using complementary metal-oxide semiconductor (CMOS) detectors provides several advantages over standard methods: the device is portable and could be used in doctors' offices, patients could be imaged standing (instead of lying down), and the radiation dose is lower than standard computed tomography (CT). The CMOS detector provides very high spatial resolution, allowing detection of finer details than in standard CT and therefore greatly enhances the ability to assess trabecular bone. This imaging system also could help with early identification of osteoporosis, which causes bones to become weak and brittle and break more easily. "The technology we are developing allows us to see very fine detail in the mesh-like microstructure of bone – known as trabecular bone – which currently can't be assessed in patients. This could help us detect bone diseases in their initial stages and help with development of new preventive therapies." said Wojciech B. Zbijewski, Ph.D., a medical physicist and instructor in the department of biomedical engineering at Johns Hopkins University, Baltimore.

Other important research topics presented at the meeting include:

- A team of scientists from the State University of New York, Buffalo used 3D printing to precisely model a human heart and simulate human coronary arteries to study Fractional Flow Reserve (FFR). The researcher's 3D printed arteries from two patients who had significant blockages and connected those models to a pump. The FFR study measures a drop in pressure from coronary blockages and is used as an indicator whether a patient will benefit from aggressive treatment.
- A team of investigators from Memorial Sloan Kettering Cancer Center, NY have created a mathematical model that predicts a tumor's response during radiation therapy. The model combines standard positron emission tomography (FDG-PET) imaging with PET that hones in on cells lacking oxygen (FMISO). The model can predict hypoxia distribution in cancerous tumors.
- A team of researchers from University of Texas Health Sciences Center, San Antonio presented their work on development of a DNA dosimeter to measure radiation dose received during radiation therapy. The new DNA dosimeter directly measures DNA double-strand breaks (DSBs). Researchers labeled DNA strands with fluorescein, which allows the strands to be visualized, and attached to magnetic beads to manipulate them. The amount of DNA that detaches from these beads after irradiation is a direct measurement for DNA DSBs.

Over 100 vendors and organizations with an interest in medical physics or related equipment, products, and services including the International Organization of Medical Physics (IOMP) participated in this year's technical exhibition. Vendors and exhibitors at the 2016 AAPM showcased their products and advancements in emerging technologies such as in MR Guided radiation therapy, MR Simulator, big data radiomics applications, treatment planning systems, brachytherapy image guidance and applicators, quality assurance devices, workflow software and radiation oncology information systems. Interactions between vendors and end users at the meeting are generally very informative and mutually educational. These interactions are of invaluable aid in decision making on technology acquisition and implementation at treatment facilities.

At annual meetings, the AAPM honours prominent medical physicists with distinguished contributions to different arenas of the medical physics profession with prestigious awards. The William D. Coolidge Award is AAPM's highest honor; it is presented to a member who has exhibited a distinguished career in medical physics, and who has exerted a significant impact on the practice of medical physics. Prof. Paul M. DeLuca is the recipient of the 2016 AAPM William D. Coolidge Medal. Dr. DeLuca is the Provost Emeritus and Emeritus Professor of Medical Physics at the University of Wisconsin School of Medicine and Public Health. During his career, Prof. DeLuca's research interests focused on fast neutron dosimetry including the production of intense sources of fast neutrons, determination of elemental neutron kerma coefficients, and applications of microdosimetry to radiation dosimetry. During this period, Prof. Luca developed one of the world's most intense sources of 15 MeV neutrons — the Wisconsin Gas Target Neutron Source. DeLuca is a recognized expert in high energy particle radiation effects on humans. The 2016 AAPM Marvin M.D. Williams Professional Achievement Award was conferred on Keith J. Strauss, recognizing his eminent career in medical physics with an emphasis on clinical medical physics. The 2016 Edith H. Quimby Lifetime Achievement Awards recipients for notable careers based on their outstanding achievements were conferred on Wendell Lutz, Robert Pizzutiello and Michael Yester. This year's John Laughlin Young Scientist Award was presented to Arman Rahmim of Johns Hopkins University, recognizing outstanding scientific achievement in medical physics for a young scientist. The AAPM honours its distinguished members with the Fellow of AAPM (FAAPM) awards. At the 2016 AAPM, 29 medical physicists received the FAAPM awards for their distinguished contributions in research, education, and leadership in the medical physics community. Apart from the usual professional, academic and educational interactions and technology demonstrations, the 2016 AAPM annual meeting provided tremendous opportunities for social interactions – meeting friends, former classmates, colleagues and students, The Night Out at The Newseum, great sightseeing and culinary experiences in the backdrop of Washington, DC. The 59th Annual AAPM Meeting & Exhibition is scheduled on July 30 - Aug 3, 2017 in Denver, Colorado.

Commemorating 40 Years of Association of Medical Physicists of India (AMPI)

Prof. Arun Chougule, Senior Professor & Head Radiological Physics

President of AMPI & Vice President S.M.S. Medical College & Hospitals, Jaipur, INDIA

The efforts, devotion, hard work and vision of medical physics teachers and scientists of the Directorate of Radiation Protection [DRP], BARC resulted in the formation of the Association of Medical Physicists of India in 1976. Founder members and office bearers of AMPI have lead the foundation of AMPI on a very sound and strong base.

AMPI was formed with the broad objectives of promoting the application of physics to medical and biological sciences; encouraging the research and development and education in the field of medical physics; providing a forum for persons engaged or interested in the field of medical physics; disseminating world-wide information in this field to all members of the association; and participating actively in IOMP's programs in medical physics. Since its inception AMPI has been providing a platform for discussion, deliberation and exchange of scientific knowledge in the field of medical physics in India.

AIMS AND OBJECTIVES OF AMPI

- To promote the application of PHYSICS to Medical and Biological Sciences
- To encourage Research and Development and Education in the field of MEDICAL PHYSICS
- To provide forum for persons engaged or interested in the field of MEDICAL PHYSICS
- To disseminate world-wide information in this field to all members of the ASSOCIATION and to participate actively in IOMP's programs on MEDICAL PHYSICS

During the years AMPI has diversified and enhanced its perspectives. The Medical Physics bulletin started immediately after its inception and upgraded to a journal [Journal of Medical Physics, JMP] in 1993. Now it is an indexed and widely circulated journal; and became the mouthpiece of AMPI.

AMPI also provides a scientific forum in terms of annual conferences in addition to workshops and scientific training programmes. Until end of 2015, 37 annual conferences of AMPI have been organized and successfully conducted in various parts of the vast country.

AMPI Trust was formed to take care of the financial aspects. Duly elected Board of Trustees control the AMPI Trust. Powers and function of the Board of Trustees are defined in the Bombay Public Trust Act. The trust fund consists of all donations except those made for specific activities of the Association; all subscriptions paid by members (both individuals and institutions) on non-recurring basis; admission fees of members of all classes; and up to twenty five percent of the net income after the end of each financial year which is transferred to the trust fund. Today with efforts, commitment & dedication of earlier office bearers, we have reasonably good funds with AMPI trust to sustain the organizational activities. AMPI trust & AMPI is registered with Charity Commission of Mumbai and have its own well documented constitution.

Web page of AMPI

CHAIRS OF AMPI

AMPI Office beares (2015-2018) – 20th elected body in 40th year of AMPI

President: Prof. Arun Chougule

Vice President: Mr. Balasubramanian

Secretary: Dr. Vellaiyan Subramani

Treasurer: Dr. Sai Varadharajan

To encourage regional level activities and promote more active participation of medical physicists spread over the country, regional and state chapters were formed and they are AP& Telangana Chapter, Eastern Chapter , Karnataka chapter , Northern chapter , Tamil Nadu & Pondicherry chapter and Western chapters of AMPI are very well functioning and organizing scientific activities routinely.

AMPI Trust

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- Duly elected Board of Trustees control the AMPI Trust. Powers and function of the Board of Trustees are defined in the Bombay Public Trust Act.
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- Today with efforts, commitment & dedication of earlier office bearers, we have reasonably good funds with AMPI trust to sustain the organizational activities.
- AMPI trust & AMPI is registered with Charity Commission of Mumbai and have its own well documented constitution.

To recognize and appreciate the contribution of medical physicists, AMPI started the oration award in the name of Dr. Ramaiah Naidu, the Father of Medical Physics in India from the year 1992. Since then this oration is awarded to imminent medical physicists during the annual conference of AMPI and as of now twenty four Dr. Ramaiah Naidu orations are delivered. Dr. Ramaiah Naidu, a pioneering Indian Nuclear Physicist & Medical Scientist was appointed in Tata Memorial Hospital in 1938 to set up and operate a radon plant for cancer treatment. He was trained under double Nobel Laureate Marie Curie and Gioacchino Failla, a pioneer in both biophysics and radiobiology. During 1929 to 1934 he worked with Dr. Marie Curie and then he moved to England to work under the English experimental physicist Prof. P. M. S. Patrick Blackett, in London University. From 1936, Dr. Ramaiah Naidu spent two years at the New York's Sloan Kettering Memorial Hospital, now known as Memorial Sloan–Kettering Cancer Center under Dr. G. Failla where he installed radium extraction unit for radon production. Dr. Naidu was instrumental in establishing the foundations of Medical Physics in India. Later on in 1962, the Bhabha Atomic Research Centre started the formal training programme of Medical Physics with the help of the World Health Organization; Diploma in Radiological & Hospital Physics attached to Mumbai University and is very well recognized training programme all over the world. Over the years AMPI has widen its scope and started AMPI best paper award to encourage young medical physicists for research and publish the work. AMPI has started the meritorious medical physicist award which is given to an Indian medical physicist who is doing commendable job with the limited resources in a cancer hospital located in a rural area in addition to AMPI. Dr. M.S. Agarwal young investigator award was instituted in 2005 to encourage young medical physicist who is doing commendable research and development work. To encourage participation of young medical physicists AMPI provides travel grants to participate in annual conference and present the work. Further AMPI has provision and allocated funds for short term training programme of medical physicist at higher center, small research project funding and assistance for attending conference abroad.

ORATION AWARD OF AMPI

Father of MEdical Physics in India

Every year AMPI confers Dr. Ramaiah Naidu Oration award at the Annual Conference. To recognizes the contribution of eminent physicists in the field of medical physics since 1992.

24 awards till 2015, 12 from India & 12 outside India

2016 Awarded to Dr. Madan Rehani, IOMP Vice President

To take care of education and to maintain professional standards, the academic wing of AMPI, the College of Medical Physicists of India was formed in 2009. CMPI certifies medical physicists by way of conducting examinations routinely. In addition, the college also formulates the policy of accreditation of education and training centers in the country.

JOURNAL OF AMPI

"JOURNAL OF MEDICAL PHYSICS" is the official journal of Association of Medical Physicists of India (AMPI). The association has been bringing out a quarterly publication since 1976. Till the end of 1993, it was known as Medical Physics Bulletin, which later converted to journal.

The main objective of the Journal is to serve

as a vehicle of communication to highlight all aspects of the practice of medical physics.

JOURNAL OF MEDICAL PHYSICS –

JMP publishes articles broadly concerned with the application of experimental or theoretical physics to human health care. Contributions in the categories of editorial, state-of-the-art review article, original research article, letter to the editor, report on conference, book review and abstract of PhD thesis of AMPI member. All papers are peer reviewed.

Now it is an indexed and widely circulated journal and became the mouthpiece of AMPI. Pub med

Board of Editors

It constitutes internationally known medical physicists from both developing and developed countries. Authors are invited to send their manuscripts to the Resident Editor.

Current editorial board:

Editor-in-Chief: Dr. A. S. Pradhan

Associate Editors: Dr. S. D. Sharma

Dr. T. Ganesh

36 MORE EMINENT MEMBERS

Over the years AMPI has widen its scope and started

- AMPI best paper award to encourage young medical physicists for research and publish the work.
- AMPI has started the meritorious medical Physicists award which is given to an Indian Medical Physicists who is doing commendable job with the limited resources in a cancer hospital located in a rural area.
- AMPI Dr. M.S. Agarwal young investigator award to encourage young medical physicist who is doing commendable research and development work

To encourage participation of young medical physicists AMPI provides travel grants to participate in annual conference and present the work. Further AMPI has provision and allocated funds for short term training programme of medical physicist at higher center, small research project funding and assistance for attending conference abroad

Presently, AMPI is associated with International Organization of Medical Physics [IOMP], Asia Oceania Federation of Organizations for Medical Physics [AFOMP] and also an affiliate of Indian National Science Academy [INSA]. AMPI celebrates the international day of medical physics on the 7th November every year since 2013 when IOMP declared 7th November as the international day of medical physics, the birthday of Madam Marie Curie. We are proud of our members for their achievements at national and international levels. Dr. U. Madhvanath, founding member of AMPI, was elected IOMP Vice President for 1988- 91 and President IOMP for 1991-94, first Indian to rise to the position. AMPI is lucky to have its member Dr. M.M. Rehani as Vice President IOMP [2015- 18] and President elect IOMP for 2018- 21, another AMPI member Prof. Arun Chougule is elected AFOMP Vice President for 2015- 18 and President elect of AFOMP for 2018- 21, first AMPI member to achieve the position in AFOMP.

In addition to scientific activities, AMPI takes care of professional and service related issues of medical physicists in the country. As an organization of medical physicists, AMPI gives representation on behalf of the medical physicists to the government and other agencies for the actualisation of their rights and justified demands.

When we look into 40 years long history of AMPI, I have to appreciate the vision and efforts of the pioneering medical physicists of the country, which culminated into the achievement of notable milestones. I am proud that we have grown as a strong association over the last forty years. However, we have yet to go long way to achieve the interaction with state and central government agencies; the establishment of medical physics educational policy; council of medical physicists, specific task groups, the professional standard and career progression; the academic positions at medical colleges and MCI recognition; the scholarship and funding for higher education like PhD; students and society involvement in association and so on. Some issues are beyond the scope and control of AMPI, as of now. Some issues require time, patience & pursuance to resolve them. However, AMPI has done its level best to push forward the issues of the medical physics community. There are many goals yet to be fulfilled and achieved. For any professional organisation, active participation of its members is essential. I am sure, united we are, we will achieve our goal.

Websites:

www.ampi.org.in, www.cmpi.org.in


Dr. Ramalah Naidu

Association of Medical Physicists of India

Annual Conference Of Bangladesh Society of Radiation Oncologists & Bangladesh Medical Physics Society ACBSROBMPS-2016

Abu Kausar Joint Secretary Bangladesh Medical Physics Society (BMPS)

The Bangladesh Medical Physics Society (BMPS) is a non-profit, non-trade organization primarily engaged in professional, educational and research activities throughout Bangladesh in the field of medical physics including biomedical engineering, especially the application of physics in medical sciences. It represents the interests of Medical Physicists outward and creates education and training possibilities for the scientific rising generation.

For developing the medical physics status nationally and internationally, BMPS performing the several activities since 2009. Actively we are holding EC meeting, quarterly meeting, awareness program in different institutions, monthly report submission, discussion among the members, organizing international conference every three years and many others activities to promote our society. Last month BMPS arranged a annual conference in Dhaka which I mentioned as a short report here. On 24-25 September 2016, Bangladesh Society of Radiation Oncologists & Bangladesh Medical Physics Society was organized the Annual Conference of Bangladesh Society of Radiation Oncologists & Bangladesh Medical Physics Society (ACBSROBMPS-2016). The co-organizers who contributed to successful our program are the Department of Medical Physics and Biomedical Engineering (MPBME), Gono Bishwabidyalay; Institute of Nuclear Medical Physics Project (INMP), Bangladesh Atomic Energy Commission (BAEC); Institute of Nuclear Medicine and Allied Sciences (INMAS), Dhaka Medical College Campus; Department of Radiotherapy, Dhaka Medical College Hospital and Bangladesh Society of Radiology and Imaging (BSRI). The Conference was divided into two parts. On the first day it comprises Inaugural Ceremony, vendor presentation, two scientific parallel sessions, poster session and AGM of BMPS. On the second day, there was a training program entitled on 'Training on TPS & QC of Imaging by Foreign Experts'. Two German experts both Oncologists and Medical Physicists were conducted the TPS training program. Besides that, QC of imaging training was held in Padma Diagnostic Centre, Dhaka which also guided by the

Inaugural Ceremony

Scientific Session

Best Poster Awards Winner (from right 1st, 2nd and 3rd)

German experts. Inaugural Ceremony The conference was inaugurated by the Chief guest Dr. Gowher Rizvi, International Affairs Adviser to the Honourable Prime Minister, Government of the People's Republic of Bangladesh. Prof. Dr. M. Iqbal Arslan, Dean, Faculty of Basic Science and Para clinical Science and Syndicate Member, Bangabandhu Sheikh Mujib Medical University (BSMMU) and Dr. Gauranga Chandra Mohanta, Project Director, Higher Education Quality Enhancement Project (HEQEP), UGC was present as a special guest. Dr. med Martina Treiber, Head of the Radiooncology department, caritas clinic, Saarbruecken, Germany.

Prof. Dr. Golam Abu Zakaria, Chairmen and Chief Medical Physicist, Department of Medical Radiation Physics, Gummersbach Hospital, Oberberg clinic teaching hospital, University of Cologne, Germany as a keynote speaker and Prof. Dr. M A Hai as a patron were present in that ceremony.

Scientific Session The scientific sessions were divided into vendor presentations, scientific session-I, scientific session-II (parallel session-I), scientific session-II (parallel session-II), and poster session. In vendor presentation, Varian, IBA and Team Best presented their paper about different features of their products. In scientific sessions, more than 25 papers were presented both in oncology, medical physics, nuclear medicine, diagnostic imaging and physics by different presenters. At the end of scientific session was scientific poster session and 16 posters were presented there. Specially, the young scientists were participated this session. In this session, judges selected three best scientific posters among total sixteen posters for the awards. The first, second and third poster awards are sponsored by Varian Medical System, Bangladesh Medical Physics Society (BMPS) and Bangladesh Society of Radiation Oncologists (BSRO) respectively.

First Award: Design and construction of Linear Variable Differential Transformer (LVDT); Fazlul Haque Rana; Dept. of Medical Physics & Biomedical Engineering (MPBME), Gono University. Second Award: Deep Inspiration Breath Hold Techniques with Homemade LPT system for left breast cancer comparison between 3DCRT and IMRT; Mokhlesur Rahman; M.Sc. Student, MPBME, Gono University. Third Award: Deep Inspiration Breath Hold Techniques with Homemade LPT system for left breast cancer using 3DCRT; Md. Hafizur Rahman; MPBME; Gono University.

Annual General Meeting of BMPS All categoris of BMPS members were present in the AGM-2016. The President, joint secretary, treasurer have discussed the activities and related issues of the last one year. The honorary member and founder member have expressed the future activities and their implementation in AGM. Some new proposal from EC are unanimously accepted by general members.

Training on TPS and QC of Imaging Training program on TPS conducted by

Annual General Meeting, BMPS

Training on TPS

Training on QC of Imaging

three groups from Bangladesh. In each group one radiation oncologist (RO) and one medical physicist (MP) from Bangladesh discussed our planning process, goals for different types of carcinoma (breast, cervical, prostaste and laryngeal carcinoma). German experts Dr Martina Treiber, RO and Ms Renate Walter, MP discussed all casses individually with the participants as well as with the planner. It was very interactive learning session between oncologists and medical physicists. Still now there no established QC protocol in Bangladesh for imaging. On the basis of this, BMPS emphasize in the conference the training on 'Quality Control of Imaging training on Radiography, Fluoroscopy, Mammography and Computed Tomography (CT) which is conducted by two German experts: Mr Daniel Boedeker and Prof Dr G A Zakaria in Padma Diagnostic Center. This is the first time in Bangladesh BMPS has started training program on this issue and consequently will take necessary steps to establish QC protocols in hospitals through cooperation with the Bangladesh Atomic Energy Commission (BAEC) and Bangladesh Atomic Energy Regulatory Authority (BAERA) and Bangladesh Society of Radiology and Imaging (BSRI).

Closing Ceremony

Report of IDMP 2016 Celebration at SMS Medical College & Hospital, Jaipur

Prof. Arun Chougule, Senior Professor & Head Radiological Physics

President of AMPI & Vice President S.M.S. Medical College & Hospitals, Jaipur, INDIA

The Department of Radiological Physics, SMS Medical College & Hospitals, Jaipur, India in conjunction with the Association of Medical Physicists of India (AMPI) celebrated the International Day of Medical physics (IDMP) 2016 on the theme, "Education in Medical Physics: the Key to Success" at SMS Hospital Auditorium, Jaipur. A two day "Conference on Radiation in Healthcare (CRHC2K16)" and a public awareness rally were organized to commemorate the birthday of great physicists and Nobel laureates Madame Marie Curie and Bharat Ratna Sir. C. V. Raman. The scientific programme included several lectures on the role of radiation in medicine by eminent speakers across our country. The key highlights and brief description of IDMP celebration and the "Conference on Radiation in Healthcare" are as follows.

The programme started with the video message from Dr. Slavic Tabakov, President of International Organization of Medical Physicists (IOMP) to address the importance of IDMP celebration.

The inaugural function started with enchanting Saraswati Vandana (Goddess of Knowledge & Education) as per the Indian tradition. The Honorable Minister of Health & Medical Education, Govt. of Rajasthan Mr. Rajendra Singh Rathore inaugurated the conference. In his address to the gathering, he explained that Medical Physics Education is important in Medical profession, "as there are about 4 billion radiological procedures per year and more than 6 million patients with cancer treated by radiotherapy". He concluded that, "without medical physics modern diagnosis and therapy could not function and so quality education in Medical Physics is a must". Dr. Arun Chougule, Organizing Chairman, CRHC 2K16, during his introductory address, explained about this year IDMP theme and the revolutions in medicine with Education in Medical Physics. Dr. U. S. Agarwal, Principal& Controller, SMS Medical College & Hospital, Jaipur, during his presidential address, explained the use of radiation in medicine and the role of Medical Physicists in medicine. He concluded his address with a remark that, "Education in Medical Physics is the key to good research in medicine". Dr. S. S. Agarwal, President, Indian Medical Association was the 'Guest of Honour'. The Medical Superintendent, SMS Hospitals, Directors of various healthcare education institutions in and around Jaipur, Head of the departments and faculties of other departments of SMS Medical College and Hospitals, staff and students attended the inaugural function.

The IDMP logo 2016 was released in the inaugural function. November 7th, the birthday of Madam Marie Curie who conducted pioneering research on Radioactivity is being celebrated as the International Day of Medical Physics for the past three years by the International Organization for Medical Physics. This is indeed a special day for Indian Physicists as it is the birthday of the renowned Indian physicist and Nobel laureate Bharat Ratna Sir C. V. Raman.

The department of Radiological Physics is the proud host of the 17th Asia Oceania Congress of Medical Physics (AOCMP) and 38th Annual Conference of Association of Medical Physicists of India (AMPICON) at SMS Medical College and Hospitals, Jaipur from 4th to 7th November 2017. This is the first time this international conference is being held in India and that too in Jaipur. It is a great achievement and honor. Delegates from across the world are expected to participate in this mega event of AOCMP-AMPICON 2017. The IDMP celebrations of next year will also be conducted during this conference. The website www.aocmp-ampicon2017 is already launched and online registrations have started. It was our great privilege that the Hon. Minister of Health and Medical Education, Govt. of Rajasthan to release the AOCMP-AMPICON 2017 poster for the public.

A medical radiation poster designing competition was organized with the object of improving awareness among students about the applications of radiation in healthcare and the 1st and 2nd prize winners were awarded with cash prize and certificate of appreciation by the Honorable Minister of Health & Medical Education, Govt. of Rajasthan,

Mr. Rajendra Singh Rathore.

About 250 delegates from across the country working in the field of Radiation Oncology, Radiology, and Nuclear Medicine including Medical Physicists, Radiation Oncologists, Radiologists, Nuclear Medicine Physicians, Radiation Technologists, Students and several non-medical Radiation Professionals who are dealing with radiation attended the inaugural ceremony.

Honorable Minister of Health & Medical Education, Govt. of Rajasthan Mr. Rajendra Singh Rathore flagged off the public awareness rally soon after the inaugural ceremony. The rally went to a historical monument of Jaipur, the Albert hall, where visitors from India and abroad frequent. It is the oldest museum of the state and functions as the State museum of Rajasthan opened as public museum in 1887. It is named after King Edward VII (Albert Edward), during whose visit to the city as the Prince of Wales, its foundation stone was laid on 6 February 1876. This was a great opportunity to reach out to common public raising awareness about the role of Medical Physics in Healthcare as well as the role of Medical Physicists in Hospitals.

Students carried multiple banners, posters and placards which illustrates the applications of physics in different aspects of modern healthcare. The contributions of Madam Marie Curie to the field of Physics as well as health care and its non-fading significance even today were well remembered and appreciated. The interest and enthusiasm the common public exhibited to know the purpose and details of the rally deserves special mention. More than 400 students actively participated in the rally.

The inaugural function, public awareness rally and all associated activities during the IDMP celebration were well covered by both the printed and the electronic media. The major and most popular newspapers and TV channels reported this event and the Minister of Health himself wrote about the significance of the role of Medical Physicists in cancer and health care in his blog.

The scientific programme consisted 6 sessions, where eminent faculty in respective fields deliberated on the use of radiation in healthcare. There were 20 invited lectures on various topics of Medical Physics, Radiation Safety, Radiotherapy, Nuclear Medicine and Radio diagnosis. The IDMP best paper award session included 9 oral presentations from young researchers in the fields of Medical Physics, Radiotherapy and Basic Sciences. The 1st, 2nd and third prize winners were awarded with cash prize and certificate of appreciation.

In the pleasant evening of the first day, a cultural event also was organized where staff and students performed depicting the colorful cultural heritage of Rajasthan. It was highly appreciated by all delegates. The conference was definitely a good platform for the all-round development of students. We could wholeheartedly say that the purpose of IDMP celebration initiated by International Organization of Medical Physics (IOMP) is fulfilled in all aspects including awareness about the role and importance of medical physics professionals among fellow medical and nonmedical professionals, students community and general public by the activities organized by the Department of Radiological Physics, SMS Medical College and Hospitals, Jaipur, India. Let the life and work of Madame Curie, Sir. C. V. Raman and Prof. W. C. Roentgen enlighten and inspire us to achieve greater heights.


17th AOCMP & 38th AMPICON
4-7 Nov 2017; Jaipur, India
www.aocmp-ampicon2017.org

Middle East Federation of Organizations of Medical Physics

Ibrahim Duhaini, Past President of MEFOMP

A. Radiation Protection Officers Training Course

The Qatar Medical Physics Society in collaboration with MEFOMP, organized a training course for Radiation Protection Officers in Doha, Qatar from 27 – 29 of August 2016. This course was attended by more than 30 Medical Physicists and Radiation Safety officers and was delivered by experts from Qatar, KSA, Lebanon, Jordan, Syria, UAE, and Kuwait. After the course a General MEFOMP Meeting took place discussing various issues related to enhancing Medical Physics in the Middle East Region and to initiate collaborations with other regional organizations.

B. MEFOMP Participation in ECMP 2016

As agreed in the last EFOMP- MEFOMP Meeting that was held in Doha, Qatar during the IDMP 2015 Celebration in November 8 between the ExCom of MEFOMP and Dr. John Damalikis and Dr. Virginia Tsapaki representing EFOMP, a joint symposium was held between the two regional organizations during the ECPM 2016 in Athens, Greece where many attendees from Europe and the Middle East actively participated.

During that conference, a General Meeting among the two organizations took place and the following items were discussed:

1. Memorandum of Agreement between the two Federations
2. Training and Education Cooperation
3. Joint Celebration for International Medical Physics Day

C. IDMP 2016 Celebrations in some MEFOMP Countries

1. IRAQ by Dr. Nabaa Najji

The Iraqi Medical Physics Society (IMPS) celebrated the IDMP in the Mustansiriya Medical College in Baghdad. IMPS members and Medical Physics students attended a one day symposium with presentations about:

a. the Physics Principals and Applications of Gamma Knife

b. Understanding PET/CT Techniques.

c. How to Write a Research Project in Medical Physics

2. KSA by Dr. Abdallah Al Hajj

The Saudi Medical Physics Society (SMPS) organized a symposium at King Fahad Specialist Hospital in Dammam.

The Program included:

a. Lectures covering the theme" Education in Medical Physics, the Key to Success"

b. Medical Physics Profession

c. Valuable Drawing of Prizes for Attendees

d. Lunch Gathering

3. Kuwait by Dr. Meshari Al Nuaimi

Kuwait Association of Medical Physic (KAMP) in coordination with the Middle East Federation of Organizations of Medical Physicist (MEFOMP) has celebrated the International Day of Medical Physics for the first time in Kuwait by organizing a celebratory event held on November 7, 2016 at Kuwait Cancer Control Center in Shwiekh, Kuwait.

The Program included the Following:

1. Opening Address
2. "IDMP 2016 remarks"
3. Medical physics quiz questions
4. Radiation Safety Refresher Training
8. Buffet Reception and Gathering

More than 50 healthcare professionals including medical physicists, nurses, radiographers, oncologists, radiologists, nuclear medicine specialists, technicians and radiation

safety officers attended a event held on 7 November to celebrate the International Medical Physics day for the first time in Kuwait. Part of the celebration also included Medical Physics Quiz questions and radiation safety refresher presentations and practical session on how to use survey meters and deal with radiation accidents in the medical field. The celebration was followed by cutting of cake with new KAMP logo and a group photo with the Director of Kuwait Cancer Control Center

4. Lebanon by Ibrahim Duhaini

The Lebanese Association of Medical Physicists (LAMP) in coordination with the Middle East Federations of Organizations of Medical Physicist (MEFOMP) has celebrated the International Day of Medical Physics by organizing a Symposium on Wednesday November 9, 2016 at Clemenceau Medical Center (CMC) in Beirut, Lebanon.

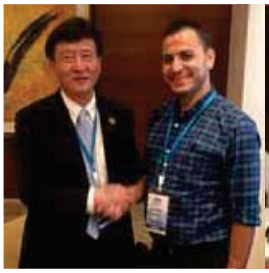
The Program included the Following:

1. Radiation Oncology Updates
2. What is Radiation Therapy?
3. Radiation Biology Principles
4. New Technologies in Radiation Treatment
5. Radiation Safety in Medicine,
6. Who are the Medical Physicists?
7. Buffet Reception and Gathering

This event was attended by more than 70 participants (Medical Physicists, Radiation Oncologists, Radiotherapy Technologist, Radiology Technicians, Nurses, Administrative staff, and other hospital staff) from the following hospitals and Universities in Lebanon.

5. OMAN

Nuclear Medicine Department in Royal Hospital conducted a symposium on 9/November/2016 to celebrate Fourth International Day of Medical Physics. The symposium includes two presentations about achievements of nuclear medicine department in Royal Hospital within 25 years ago and highlights the improvement of medical physics service in the department. The second lecture focus on radiation safety aspects in nuclear medicine, PET/CT and cyclotron. The lectures are followed by an exhibition that includes many sections like PET/CT, Cyclotron, General Nuclear Medicine, Decontamination Procedures and Civil defense section which



highlight the rule of civil defense regarding response in case of radiological accident in the country.

The audience are from different sectors like staff from radiotherapy and radiology departments and non-radiation worker in Royal Hospital, medical physics student from Sultan Qaboos University, Radiology residents, staff from Ministry of Environment and Climate affairs, staff from radiation protection department in Ministry of Health.

6. QATAR by Dr. Huda Al-Naemi

Hamad Medical Corporation in coordination with the Middle East Federation of Organizations of Medical Physicist (MEFOMP) and Qatar Medical Physics Society (QMPS) has again this year celebrated the International Day of Medical Physics by organizing a celebratory event held on November 7, 2016 at Bayt Al Dhiyafah, Hamad Bin Khalifa Medical City in Doha, Qatar.

The Program included the Following:

1. Opening Address
2. "In the memory of Marie Curie"
3. Qatar Physics Society
4. Education and Training in Medical Physics (ICTP)
5. Ethical Issues in Medical Physics,
6. Physics Fun Activity
7. Awards and Closing
8. Buffet Reception and Gathering

More than 100 healthcare professionals including medical physicists, biomedical engineers, radiographers, oncologists, radiologists, nuclear medicine specialists, technicians and radiation safety officers attended a celebratory event held on 7 November to highlight the day and honor some outstanding medical physicists with HMC's "Medical Physicist of the Year Award" in recognition of their contribution to the science of radiation. This year the award went to Mr. Rabih Hammoud, Chief Oncology Physicist from Radiation Oncology. This award was followed by two more awards International Organization Of Medical Physics (IOMP) award for International Day Of Medical Physics (IDMP 2015) which went to Mr. Ibrahim Duhaini Past President MEFOMP and International Organization Of Medical Physics(IOMP) award for International Day Of Medical Physics (IDMP 2016) which was well received by Dr. Abdulla Al Haj Chief Health Physicist, King Faisal Specialist Hospital & Research Centre Riyadh, Saudi Arabia and current president of MEFOMP.

Part of the celebration also included the launching of new MEFOM website (www.mefomp.com) with new logo. This was followed by cutting of cake with new MEFOMP logo and lunch celebration.

7. UAE

Celebration of International Physics Day at Tawam Hospital in collaboration with Emirates Medical Physics Society (EMPS)

a. Invite Students from the UAE University and Applied Technology High Schools

b. Presentation about Medical Physics-Awareness posters

c. Tour in the department

d. For Hospital Staff: Send Awareness Email in Radiation Protection

D. MEFOMP Participation in ICMP 2016

A joint mini-symposium between AFOMP and MEFOMP was done during ICMP 2016 in Bangkok, Thailand. This was agreed on during a meeting between the two federations occurred at the WC2015 in Toronto, Canada 2015.

The Title was: Medical physics training and education collaboration among both regional organizations

Speakers: Howell Round, Ibrahim Duhaini, Huda Al-Naemi and Laila Al-Balooshi

Chair/co-chair: Tae Suk ,Huda Al-Naemi

After that, meeting between the two Federations took place and concluded to have increased the collaboration and to have a Memorandum of Agreement so that MEFOMP would be under the umbrella of AFOMP keeping its regional autonomy.

It is worth mentioning that during this conference, MEFOMP received Three Awards:

a. IDMP 2015 Award to Ibrahim Duhaini, Past President of MEFOMP

b. IDMP 2016 to Dr. Abdallah Al Hajj, President of MEFOMP

c. IOMP Presidential Award to Ibrahim Duhaini for serving two terms as MEFOMP President

CALENDAR OF EVENTS - Ibrahim Duhaini, Calendar Editor

- Int'l Symposium on Stereotactic Body Radiation Therapy and Stereotactic Radiosurgery - Florida
When: Feb 24 – 26, 2017
Where: Lake Buena Vista, FL (USA)
www.ccfcme.org/SBRT17

- European Congress of Radiology - Vienna
When: Mar 1 – 5, 2017
Where: Vienna, Austria
www.myesr.org

- ICTP School of Medical Physics for Radiation Therapy: "Dosimetry and Treatment Planning for Basic and Advanced Applications
When: Mar 27 – Apr 7, 2017
Where: Trieste, Italy
http://indico.ictp.it/event/7955/

- The 113th Scientific Meeting of the Japan Society of Medical Physics (JSMP).
When: April 13 to 16, 2017
Where: Yokohama City, Japan
http://www.jsmp.org/conf/113_en/

- ABS Annual Meeting - Boston
When: Apr 20 – 22, 2017
Where: Boston, MA, USA
http://americanbrachytherapy.org/meetings/index.cfm#future

- International Society for Magnetic Resonance in Medicine ISMRM Annual Meeting
When: Apr 22 – 28, 2017
Where: Honolulu, HI, USA
www.ismrm.org

- ConRad 2017 Global Conference on Radiation Topics: Preparedness, Response, Protection, and Research
When: 8-11 May 2017
Where: Munich, Germany
www.radiation-medicine.de

- 5th Int'l MRI in Radiotherapy Symposium - Sydney
When: Jun 20 – 23, 2017
Where: Sydney NSW 2000, Australia
www.mrinrt2017.com

- EMBEC 2017 & NBC 2017: The joint conference of the European Medical and Biological Engineering Conference & The Nordic-Baltic Conference on Biomedical Engineering
When: June 11 – June 15, 2017
Where: Tampere, Finland
www.embec2017.org

- European Training and Education for Medical Physics Experts Network (EUTEMPE-RX)
When: Throughout the Year 2017
Where: Europe
www.EUTEMPE-net.eu

- International Conference on Advances in Radiation Oncology (ICARO2)
When: 20–23 June 2017
Where: Vienna, Austria
www-pub.iaea.org/iaeameetings/50815/ICARO-2

- 4th International Conference on Medical Physics and Biophysics"
When: June 29-30, 2017
Where: London, UK.
medicalphysics2017.blogspot.com

- 6th Annual Conference of Bangladesh Medical Physics Society (ACBMPS)
When: 25-26 July 2017
Where: Dhaka , Bangladesh
Website: www.bmps-bd.org
(organized by: Bangladesh Medical Physics Society, BMPS)

- 17th Asia Oceania Congress of Medical Physics (AOCMP) & the 38th Annual Conference of Association of Medical Physicists of India (AMPICON)
When: 4 - 7 November, 2017
Where: JAIPUR, INDIA
www.aocmp-ampicon2017.org

- 9th International Conference on Isotopes & Expo.
When: 12 – 16 November 2017
Where: Doha - Qatar
www.9ici.org