



# Contents

Editorial	3
<i>IOMP ExCOM Reports:</i>	
President's Message	6
IOMP Past President and IUPESM President's Report	8
Secretary General's Report	10
Treasurer's Report	12
Science Committee's Report	13
Education and Training Committee's Report	15
Awards & Honours Committee's Report	19
IDMP 2022 AWARDEES	20
Professional Relation Committee's Report	22
Publication Committee's Report	24
History Sub-Committee's Report	26
Medical Physics World Board (MPWB) Committee's Report	28
Medical Physics International (MPI) Journal and History Special Issues: The First Decade, 2012 - 2022	30
<i>IDMP 2022 Reports:</i>	
IDMP Celebration Reports	33
IOMP Webinar on IDMP 2022	35
Report from ALFIM	36
Report from the Bangladesh Medical Physics Association (BMPA)	37
Report from the Brazilian Medical Physics Association (ABFM)	38
Report from the Colombian Association of Medical Physics (ACOFIMED)	39
Report from the Indonesian Association of Physicists in Medicine (IAPM)	43
Report from the Iraqi Medical Physics Society (IMPS)	46
Report from the Korean Society of Medical Physics (KSMP)	51
Report from the Malaysian Association of Medical Physics (MAMP)	53
Report from the Medical Physics Leadership and Mentoring Group	56
Report from MEFOMP	57
Report from the Pakistan Organization of Medical Physicists (POMP)	60
Report from the Thai Medical Physicists Society (TMPS)	64
Report from the University of São Paulo, Brazil	67
<i>International /Regional Medical Physics Activities:</i>	
IAEA Occupational Radiation Protection 2022 Report	69
MEFOMP Workshop: Brachytherapy Planning and Quality Assurance	72
The First Regional Conference of the Federation of African Medical Physics Organizations (FAMPO) Report	76
Engineering & Physical Sciences in Medicine Conference (EPSM) 2022 Report	80
22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report	85
ICMP 2023 Poster	99
<i>Invited Articles:</i>	
Impact of Proton Therapy Technology In Latin America - Advances of the Argentine Proton Therapy Center	100
The Case for Developing AI in Healthcare: Let's make that magic happen	104
Calendar of Events (January - June 2023)	110

# Editorial

## Chai Hong Yeong, PhD

Editor of IOMP e-Medical Physics World (eMPW)



### CHAI HONG YEONG

Editor of IOMP eMPW  
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*"I take this opportunity to thank all the ExCOM leaders, committee members and excellent authors who have submitted various reports and interesting articles to accomplish this issue of eMPW"*

It gives us great pleasure to deliver the December 2022 issue of eMPW. I am truly honor to chair the Medical Physics World Board (MPWB) of the IOMP for the new term (2022-2025) and consequently being the Editor of eMPW. This is both an exciting and yet daunting task of maintaining the high standards of our previous Editor and MPWB Chair, Prof Magdalena Stoeva. We are truly grateful to Prof Stoeva who has graciously agreed to stay on as the co-Editor for this and the next forthcoming issue of eMPW to ensure continuity of the progress that eMPW has achieved.

One of the main objectives of the eMPW has been to provide formal updates on both recent and upcoming activities of the IOMP and its NMOs, as well as to provide an avenue to celebrate the achievements of our members and in so doing inspire members of the IOMP to further contribute to the development of medical physics worldwide. I take this opportunity to thank all the ExCOM leaders, committee members and excellent authors who have submitted various reports and interesting articles to accomplish this issue of eMPW.

Consistent with the editorial policy previously set, this December issue of eMPW is full of beautiful photos, posters and articles that report the activities done in the past six months, with special focus on the celebration of the IDMP 2022. We thank all the NMOs for submitting their inspiring reports.

We are also thankful to the IAEA Occupational Radiation Protection committee who submitted the report of the International Conference on Occupational Radiation Protection that was successfully held on 5-9 September 2022 in Geneva, Switzerland.

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#### **eMPW Sub-Committee (Dec 2022 issue):**

Chai Hong Yeong, Magdalena Stoeva, Afua A. Yorke, Habib Ashoor, Joerg Lehmann, Leyla Moghaddasi, Nabil Abdelqader Abdullah Iqeillan, Rosana Pirchio

# Editorial

## Chai Hong Yeong, PhD

Editor of IOMP e-Medical Physics World (eMPW)

November 2022 continued to be an eventful month. We are thrilled to see the first successful regional conference of FAMPO successfully held on 10-12 November 2022 in Marrakech, Morocco. This is yet another important milestone of medical physics development in the Africa region. We thank and congratulate FAMPO for this great achievement. We would also like to congratulate MEFOMP for the very successful workshop on Brachytherapy Planning and Quality Assurance held on 7-9 November 2022 in Kuwait; ACPSEM for the physical conference (after three years of virtual meetings) on Engineering & Physical Sciences in Medicine (EPSM) on 13-16 November 2022 in Adelaide, Australia; and AFOMP for the recently concluded 22nd Asia-Oceania Congress of Medical Physics (AOCMP) held on 10-12 December 2022 in Taiwan.

Let me take this opportunity to express my sincere gratitude to Rosana Prichio, who is also incidentally a committee member of the IOMP MPWB, to share her wonderful experience of an interview with Dr Gustavo Santa Cruz at the National Atomic Energy Commission of Argentina (CNEA) about the impact of proton therapy in Latin America. I am also thankful to Dami'an M. Fondevila, a medical physicist and data scientist for sharing his insights about developing artificial intelligence (AI) in healthcare.

Last but not least, I would like to take this opportunity to wish every one of you a very happy and successful year ahead!



### Editorial Board

Chai Hong Yeong, Editor  
Magdalena. Stoeva, co-Editor and IOMP SG  
Ibrahim Duhaini, Calendar Editor, IOMP Treasurer  
John Damilakis, IOMP President  
Eva Bezak, IOMP Vice President  
Madan Rehani, IOMP Past President  
Francis Hasford, IOMP PC Chair  
Simone K. Renha, IOMP PRC Chair  
Kwan Hoong Ng, IOMP AHC Chair  
Slavik Tabakov, MPI co-Editor  
Perry Sprawls, MPI co-Editor



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# President's Message

## John Damilakis, PhD

President of IOMP



### JOHN DAMILAKIS

President, IOMP

john.damilakis@med.uoc.gr

*"We would like to hear from you and, thus, please do not hesitate to share your ideas on this matter"*

I am proud and honored to have become IOMP's President for the term 2022-2025 and determined to keep the organization growing strongly thereby meeting your expectations. The new Executive Committee (ExCom) includes a number of previous members together with new Chairs and I'm happy that we have representatives from all continents, Africa, Asia, South and North America, Australia, the Middle East, and Europe. It is also important that the new ExCom has now a large percentage of women. This team will continue to support the development of our profession globally.

The eMPW is a great communication vehicle to provide information about plans and recent activities. I take this opportunity to maintain regular contact with you through this medium twice a year by providing important news and updates.

We provide advanced education through the 'IOMP School'. The main activity so far was the organization of webinars. We continue organizing webinars. There is high demand for developing continuing education courses in medical physics due to the rapid development of medical techniques based on ionizing and non-ionizing radiation. I hope that the COVID pandemic will be soon over in all countries of the world. We are planning to organize other types of events, for example, a Workshop Series for cutting-edge topics. We would like to hear from you and, thus, please do not hesitate to share your ideas on this matter.

Moreover, the School needs an operation manual to describe in detail the processes that the School uses to provide its services. During the last IOMP School Board meeting (October 17, 2022) a draft version was presented and discussed. This version includes the organizational structure of the School (Board composition, Board role and responsibilities) and operating procedures (type of events, event organization procedure, accreditation of events, etc.). The final version will be shared soon for discussion at the IOMP School Board level and ExCom approval.

# President's Message

## John Damilakis, PhD

### President of IOMP

The 25th International Conference on Medical Physics (ICMP) will be held from 6th to 9th of December 2023 in Mumbai, India. ICMP provides a unique opportunity for all participants to exchange ideas and share their knowledge and experience. You are all invited to participate in this event, present your latest scientific work, meet colleagues from all over the world and enjoy beautiful Mumbai.

National Member Organizations and Regional Organizations celebrated the International Day of Medical Physics (IDMP) enthusiastically in all continents by organizing activities and explaining the role of Medical Physicists to the public in relation to this year's theme "*Medical Physics for Sustainable Healthcare*". A webinar was organized on the 7th of November and the IDMP awards were announced. I encourage you to send reports of your celebrations for uploading on IDMP website.

The IOMP and AAPM have an agreement for 100 complimentary electronic subscriptions to the Medical Physics journal. Invitations were distributed to all countries, and the names of 100 medical physicists were selected for a free subscription. Winners are encouraged to use this generous offer effectively.

To be a valued organization, and able to achieve our strategic goals, we should improve internal organization. Internal documents are currently being created to describe procedures that facilitate day-to-day work. Moreover, there were several suggestions for additions and modifications of the IOMP bylaws e.g., add information about the Women subcommittee and the MPI journal. This will increase transparency and accessibility. ExCom has already endorsed some by-laws amendments and they will be sent to Council for approval soon.

This is only a partial list of recent activities. Please have a look at the reports of Officers and Chairs published in this MPW issue to get more information.

I wish you all a very happy New Year 2023!



# IOMP Past President and IUPESM President's Report

**Madan Rehani, PhD**

Past President of IOMP and President of IUPESM



## MADAN REHANI

President, IUPESM  
Past President, IOMP  
madan.rehani@gmail.com

*"The joint conference became the "World Congress for Medical Physics and Biomedical Engineering" and was first held under this name in 1982 in Hamburg, Germany"*

For those who may not be familiar with the system in place for IOMP and IUPESM (International Union of Physical and Engineering Sciences in Medicine), the IUPESM is an overarching body that encompasses the international organizations of two subjects, medical physics and biomedical engineering. While IOMP represents medical physicists, IFMBE (International Federation of Biomedical Engineering) represents biomedical engineers.

IOMP was founded in 1963, and IFMBE a few years before in 1959. In subsequent years, some other international organizations appeared with objectives similar to those of the IOMP and IFMBE. There was considerable overlap between the activities of the two organizations in some countries, and there was only one common society for engineers and physicists. But in many countries, the two groups formed entirely separate associations.

After some years of exploration of collaboration, IOMP and IFMBE held their major international conferences together for the first time in 1976. The agreement was reached in principle that an umbrella organization should be formed and that the IOMP and IFMBE should hold joint conferences, although each association would retain its autonomy. The two meetings were still separated but held in immediate succession in Ottawa, Canada, and the leaders of the associations met officially to exchange views on a closer relationship.

In 1979, the conferences were completely merged and held in Jerusalem as the "Combined Meeting of the XII. International Conference on Medical and Biological Engineering and V. International Conference on Medical Physics", a very special event that triggered the foundation of the long-discussed umbrella organization for the IOMP and IFMBE: the IUPESM in 1980. The joint conference became the "World Congress for Medical Physics and Biomedical Engineering" and was first held under this name in 1982 in Hamburg, Germany. Since then, the World Congress has been organized every three years.



# IOMP Past President and IUPESM President's Report

**Madan Rehani, PhD**

Past President of IOMP and President of IUPESM

In recent decades, we have witnessed the opposite trend in many areas with specializations emerging. For example, internal medicine has led to many specialties like cardiology, endocrinology, nephrology, gastroenterology, and in recent years to, critical care medicine, and emergency medicine, just to name a few. In medical physics (MP) as well as in biomedical engineering (BME), many sub-specialties have emerged, and there are separate conferences for these specialties. In addition, regional organizations and regional conferences are being held in MP and BME. Since most people are specialized or even super specialized, there is less chance of individuals participating in sessions other than his/her own specialized area. These changing scenarios and situations demand a closer look at where we are going. As a result, IUPESM is setting up several task groups to evaluate current trends and develop guidance for future developments. If you have the interest and skill to contribute and make a difference, please get in touch with me or the Secretary-General ([sg.iupesm@gmail.com](mailto:sg.iupesm@gmail.com)).

To get to know IUPESM, please visit <https://iupesm.org>.

IOMP Statues and Bylaws provide for continuity to avoid reinventing the wheel. The President, after completing the term of Presidentship, remains a member of ExCom for the next three years as an immediate past-President, while the current President is at the helm of affairs. I am thus available for advice and guidance to IOMP ExCom and any responsibility that the new team and the President deems appropriate. It has been a pleasure being a member of ExCom of IOMP since 2009, when I took over as Secretary-General. IOMP is on strong footing with continuous addition of new activities during each term and has a great future.



# Secretary General's Report

**Magdalena Stoeva, PhD**

Secretary General of IOMP



**MAGDALENA STOEVA**

Secretary General, IOMP  
sg.iomp@gmail.com

*"We, the medical physicists are a relatively small professional society, but highly qualified and extremely motivated"*

Dear Colleagues and Friends,

This is my first message to you in my capacity of IOMP Secretary General. Therefore I would like to start my message by thanking everyone for your support and making my commitment to serve the IOMP and its members in the best possible way to take it to new heights.

After successfully chairing the Medical Physics World Board (MPWB) for two consecutive terms, I am delighted to see four of the members of my team being elected as members of the IOMP Executive Committee - Dr. Duhaini - Treasurer; Dr Hasford - Chair of IOMP Publications Committee; Dr Yeong - Chair of the MPWB; and myself - the Secretary General.

According to the IOMP Bylaws, the Secretary General is responsible for the general administration and for the secretariat of the IOMP. But as per the IOMP's tradition and best practices, I see my role beyond these formal activities. I would embrace the role of a Secretary General with a mission to extend IOMP's outreach, to facilitate the development of the profession, to contribute to the global collaboration at every aspect of medical physics and healthcare.

As the world and our profession are slowly recovering from the global pandemic, we are facing numerous challenges associated with the new normal – getting back to the life as we knew it, and at the same time keeping all the technological solutions and benefits developed during the pandemics. And these will turn into a key factor for professional growth and organizational outreach.



International Organization for Medical Physics

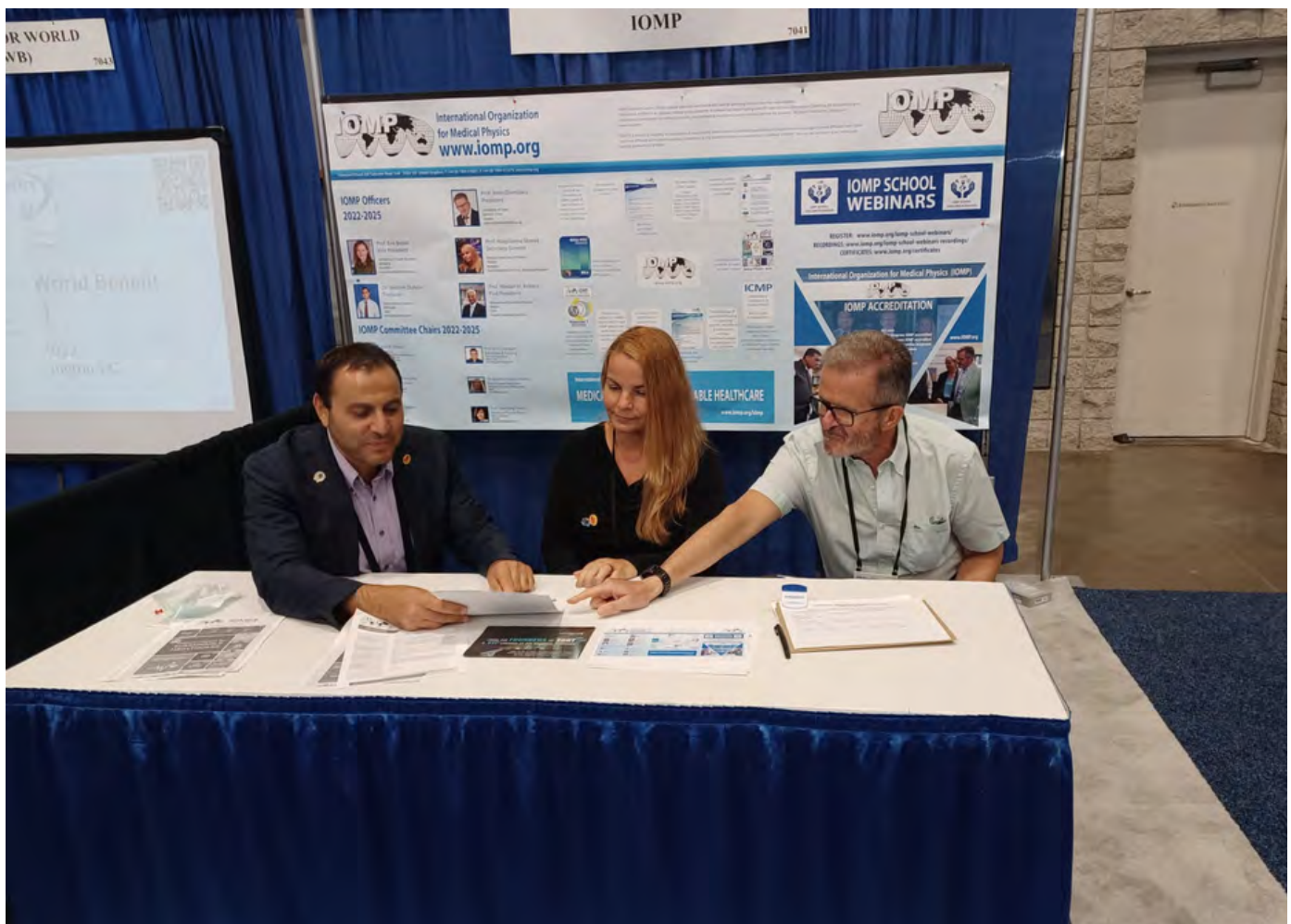
# Secretary General's Report

## Magdalena Stoeva, PhD

### Secretary General of IOMP

Serving as the Secretary General during the past six months, I have been involved in the administrative support and coordination of numerous activities led by the IOMP ExCom, Regional Organizations and National Member organizations – the IDMP, the upcoming update of the IOMP's Statutes and Bylaws, acceptance of new National Member Organizations, special activities directed to our colleagues from the Low- and Middle-Income Countries, IOMP School and Webinars, collaboration with IOMP's partner organizations including but not limited to WHO, IAEA, IFMBE, IUPESM. More exciting projects and activities are on the way focusing on the long-term development and the sustainability of our profession.

We, the medical physicists are a relatively small professional society, but highly qualified and extremely motivated. We often work on a background, but have key contributions to clinics, academia, science and society and we should all proudly embrace the challenge to call ourselves Medical Physicists!



*IOMP's outreach at 2022 AAPM Annual Meeting, Washington DC, 10 - 14 July 2022*

# Treasurer's Report

Ibrahim Duhaini, PhD

Treasurer of IOMP



**IBRAHIM DUHAINI**

Treasurer, IOMP  
duhaini@yahoo.com

*"I'm delighted to present to you the activities of the Treasurer committee in the past six months"*

### (A) Finance Subcommittee members (2022-2025):

- Ibrahim Duhaini, Chair
- Shigekazu Fukuda, Asia
- Sanchez Palmer, Africa
- Ana Maria Marques da Silva, Latin America
- John Damilakis, President (Ex-Officio)
- Eva Bezak, Vice President (Ex-Officio)

### (B) During the last six months, the following activities have been executed:

1. Reviewing and approving ExCom expense claims, invoices, bills and other incidentals. (For more details see the final Accountant Financial Report)
2. Sending membership fees letters to all NMOs.
3. Following up and processing transactions of the IOMP Company Account.
4. Performing other related duties with the ExCom members, IOMP Accountant and Administration Office.

### (C) Preparing the 2023 Budget (example below)

Starting Balance as of Jan. 1, 2023	\$23,000.00
Total Income	\$110,000.00
Total Expenses	\$113,130.00
NET Income - Expenses	-\$3,130.00
Projected End Balance as of December 31, 2023	\$22,480.00
<b>Anticipated INCOME</b>	
Subscription from National Organizations	\$78,000.00
Subscription from Corporate Members	\$8,000.00
Medical Physics World Income and cost avoidance	\$1,000.00
Interest income	\$1,200.00
World Congress/ICMP/ Other related events	\$16,000.00
KuAFAP Support Funding	\$14,000.00
Education activities	\$2,000.00
Accreditation Activities	\$2,000.00
Other Income (Royalties and Fundraising)	\$1,800.00
<b>Total Anticipated INCOME</b>	<b>\$116,000.00</b>
<b>Expected Expenses: Medical Physics World &amp; Software</b>	
Design	\$200.00
Printing	\$100.00
Postage	\$100.00
Other including software	\$2,000.00
<b>Total Expected Expenses: Medical Physics World &amp; Software</b>	<b>\$2,400.00</b>
<b>Expected Expenses: Committees (non-travel)</b>	
Education and Training	
Science	
Professional Relations	
Awards and Honor	
Publication	
Rules	
Nominating	
Sub-Committees	
All Committees and Sub-Committees	\$19,000.00
<b>Total Expected Expenses: Committees (non-travel)</b>	<b>\$19,000.00</b>

<b>Expected Expenses: Travel Costs</b>	
ExCom members & experts	\$15,000.00
Supporting staff	\$2,000.00
Awardees or invited Committee Members	\$4,500.00
Other	\$200.00
<b>Total Expected Expenses: Travel Costs</b>	<b>\$21,700.00</b>
<b>Expected Expenses: Subscription to IUPESM</b>	
Article Dues	\$11,500.00
Other Incidentals	\$0.00
<b>Total Expenses: Subscription to IUPESM</b>	<b>\$11,500.00</b>
<b>Expected Expenses: ICMP/ World Congress/ Other Events</b>	
World Congress/ICMP	\$10,000.00
ICMP	\$4,000.00
Other Events	\$1,000.00
<b>Total Expected Expenses: ICMP/ World Congress/ ICMP/ Other Events</b>	<b>\$15,000.00</b>
<b>Expected Expenses: Support Costs</b>	
Bank	\$1,000.00
Webmaster/Website	\$4,000.00
Accountant Fees	\$1,500.00
Legal Fees	\$1,500.00
Bank Charges	\$2,000.00
Online activities expenses and fees (inc. Newsletter & website)	\$11,000.00
Administration	\$1,000.00
Other	\$1,000.00
<b>Total Expected Expenses: Support Costs</b>	<b>\$24,000.00</b>
<b>Expected Expenses: Marketing</b>	
Advertisement	\$1,000.00
Booth Participation Costs	\$2,000.00
Travel Costs	\$200.00
Other	\$1,000.00
<b>Total Expected Expenses: Marketing</b>	<b>\$4,200.00</b>
<b>Contract Management and Publications Admin.</b>	
Contingency	\$1,000.00
Other	\$1,000.00
<b>Total Contract Management and Publications Admin.</b>	<b>\$2,000.00</b>
<b>Total Expected Expenses</b>	<b>\$113,130.00</b>

# Science Committee's Report

## M. Mahesh, PhD

Chair of IOMP Science Committee



### M. MAHESH

IOMP Science Committee  
Chair

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*"The SC regularly reviews applications to the IOMP for sponsorship or support of educational and professional development conferences."*

As the new chair of the science committee at IOMP, it gives great pleasure to write this brief report. As most of you know, the World Congress on Medical Physics which was postponed a year due to COVID was held successfully in Singapore during the month July. Our term as the new officers of the IOMP ExCOM started soon after the World Congress. I like to thank Dr Geoff Ibbott, previous chair of this committee for all his services.

The IOMP Science Committee (SC) 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 ICRP, the WHO, and the IAEA, and participating in various forums for the generation of scientific information in medical physics.

All efforts were taken to include members from all different regions of the globe, and they are:

- M. Mahesh, USA – Chair
- Csilla Pesznyak, Hungary
- Ioannis Sechopoulos, The Netherlands
- Izabella Barreto, USA
- Kitiwat Khamwan, Thailand
- Luis Agulles Pedros, Columbia
- Magdalena Bazalova-Carter, Canada
- Mary Joan, India
- Niko Papanikolaou, USA
- Rabih Hammoud, Qatar
- Renalto Dimestein, Brazil
- Robert Jeraj, USA
- Zoe Brady, Australia

The SC regularly reviews applications to the IOMP for sponsorship or support of educational and professional development conferences. Before recommending support or endorsement of a conference, the committee considers the quality of the program and proposed speakers, and the potential benefit to be derived by the intended audience.

# Science Committee's Report

**M. Mahesh, PhD**

Chair of IOMP Science Committee

In the last few months, the committee has reviewed and endorsed the following:

1. 4th Summer School in Medical Physics 2022: Radiobiology and Radiobiological Modeling for Radiotherapy held in Heidelberg, Germany in September 2022.
2. The 125th scientific meeting of the Japanese Society of Medical Physics (JSMP 125) to be held in April 13-16, 2023.

The SC reviewed and endorsed the IAEA document titled – “*Comprehensive audits of radiotherapy practices: a tool for quality improvement, 2nd edition.*”

The committee is discussing about hosting a scientific workshop during the upcoming ICMP meeting in India. On behalf of IOMP, the SC chair submitted a proposal for organizing a session at the 2023 annual meeting of AAPM. On behalf of IOMP, the SC is organizing a joint webinar with AAPM in July 2023. Details will be reported in the next issue.

The Chair is immensely grateful to the members of the Science Committee for their responsiveness and thoughtful reviews of the applications and documents received by the committee.



**4th SUMMER SCHOOL IN MEDICAL PHYSICS**  
**RADIOBIOLOGY AND RADIOBIOLOGICAL MODELLING FOR RADIATION THERAPY**

**TOPICS**  
 Biological Background - Dose-volume effects - High-LET radiation - Hypoxia and the impact of Oxygen - Special Techniques - Clinical

**HYBRID EVENT WITH FREE PARTICIPATION**  
 Attendance online only or online & on-site in Heidelberg

**DATES**  
 Online Phase: September 05 – 25, 2022  
 Attendance Phase or Live-Online-Phase: September 26 – 30, 2022

**APPLY ONLINE VIA [www.dkfz.de/summer\\_school2022](http://www.dkfz.de/summer_school2022)**

**PARTNERS**

Organized by DKFZ under the auspices of the Heidelberg Institute for Radiation Oncology (HIRO)

Hosts:  
 Prof. Oliver Jäkel, PhD  
 Prof. Jürgen Debus, MD, PhD

Course Leaders:  
 Prof. Christian Karger, PhD  
 Ina Kurth, PhD

Organization and Contact:  
[symposium\\_medphys@dkfz.de](mailto:symposium_medphys@dkfz.de)

Venue:  
 Mainhaus Kolleg, Heidelberg University & Communication Center, DKFZ



**JRC2023**  
**Be a Game Changer in Medicine with Radiology**

**Date / April 13(Thu) ▶ 16(Sun), 2023**  
**Web ; April 13(Thu) ▶ May 23(Tues), 2023**  
**Venue / PACIFICO Yokohama, Japan**



**Comprehensive Audits of Radiotherapy Practices: A Tool for Quality Improvement**

Quality Assurance Team for Radiation Oncology (QUATRO)

IAEA  
 International Atomic Energy Agency

Endorsed by



# Education and Training Committee's Report

**Arun Chougule, PhD**

Chair of IOMP Education and Training Committee



**ARUN CHOUGULE**

IOMP Education & Training  
Committee Chair

arunchougule11@gmail.com

*"The members of the ETC and AB are working hard to fulfilling the aims and objectives of the ETC and contributing to the betterment of medical physics..."*

After my re-election as the Chair of the IOMP Education and Training Committee (ETC) for 2022-25 term, I took charge of the ETC on 14 June 2022 during WC2022 , Singapore. Following the procedure of appointing members for ETC and Accreditation Board (AB), the committees started functioning.

The members of the IOMP ETC for 2022-25 are:

- Prof. Arun Chougule, India – Chair
- Prof. Ana Maria Marques da Silva, Brazil
- Prof. Eva Bezak, Australia
- Prof. Franco Milano, Italy
- Prof. Hasin Anupama Azhari, Bangladesh
- Prof. Hayashi Naoki, Japan
- Dr. Jaydev Dave, USA
- Prof. Jin Xiance, China
- Prof. Loredana Marcu, Romania
- Prof. Renato Padovani, Italy
- Dr. Riad Shweikan, Syria
- Dr. Stephen Inkoom, Ghana
- Dr. Supriyanto Ardjo Pawiro, Indonesia
- Dr. V. Subramani, India

The members of the IOMP AB for 2022-25 are:

- Prof. Arun Chougule, India – Chair
- Prof. Golam Abu Zakaria – Vice Chair
- Prof. Rodolfo Alfonso, Cuba
- Dr. Huda Al Naami, Qatar
- Dr. Christoph Trauernicht, S. Africa
- Prof. Shinji Kawamura, Japan
- Dr. S.D Sharma, India
- Prof. Laura Padilla, USA

# Education and Training Committee's Report

**Arun Chougule, PhD**

Chair of IOMP Education and Training Committee

## Plans from Chair ETC, IOMP 2022- 2025

The ETC is entrusted with developing programs related to education and training of medical physics, promoting internationally sponsored education and training programs, considering applications from national and regional organisations for IOMP endorsement and funding, harmonizing and standardizing medical physics education program, accreditation of educational, residency and CPD programs.

The members of the ETC and AB are working hard to fulfilling the aims and objectives of the ETC and contributing to the betterment of medical physics in IOMP member countries. Some of the activities that have been accomplished in the past six months include:

1. The information on Medical Physics Education (MPE) programs conducted in all the regions of IOMP is compiled and available on the IOMP website, however the information needs to be reviewed and updated by each member country.
2. The AB has completed a few accreditations and reaccreditations of MPE and CPD courses, and the efforts are expanding and getting popularized.
3. Initiated accreditation of medical physics residency programs.
4. Published articles/reports on education, training and accreditation process.
5. Plan and execute IOMP accreditation during regional or NMO meetings to popularize IOMP accreditation program.
6. Review applications received from conference/course organizers for IOMP endorsement and/or funding, and submit reports to IOMP ExCOM.
7. Helped to disseminate useful information, publications and announcements of IOMP activities to its member countries.
8. Actively participated in programs on IDMP, IMPW.
9. Working closely with ICMP2023 and WC2025 organizers for sessions on Education and Training of Medical Physics
10. Encouraged IDMP, IMPW celebrations
11. Encouraging institutes/universities and the medical physics educators for supporting the accreditation program of IOMP. Delivered invited talks on various platforms on benefits of IOMP accreditation of education program, CPD programs and residency programs.
12. Explore possibility of having talks on the safe use of ionizing radiation during medical specialty conferences.
13. Work with ROs and NMOs for harmonization of MPE curriculum and training.
14. Actively participating in IOMP School activities.
15. Completing tasks assigned by the IOMP ExCOM.



# Education and Training Committee's Report

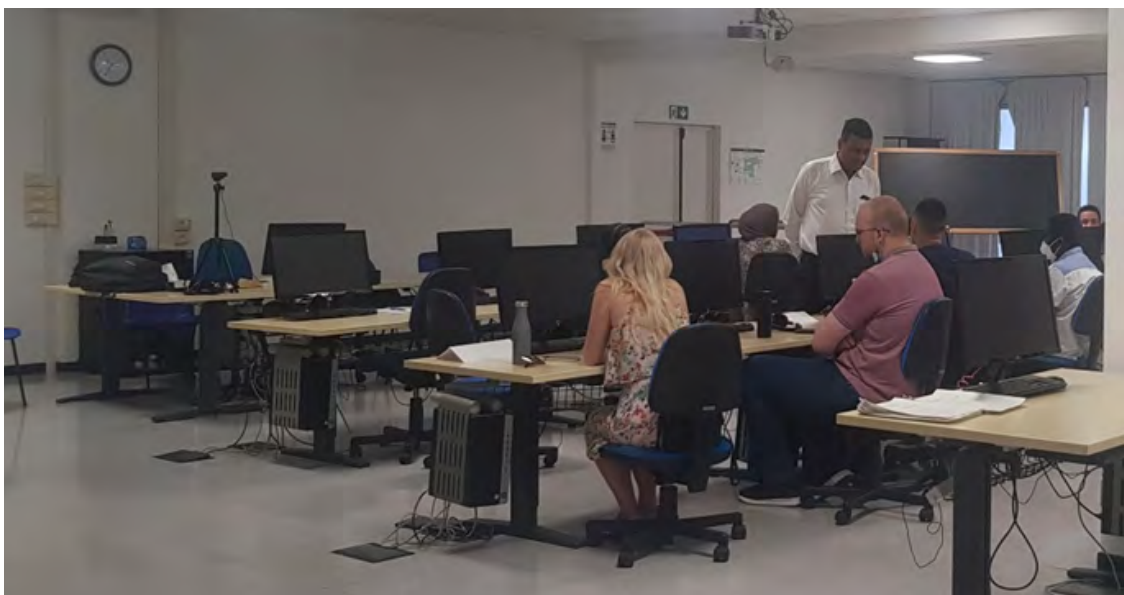
## Arun Chougule, PhD

### Chair of IOMP Education and Training Committee

The AB has completed a long pending site visit to ICTP, Trieste University from 18 – 22 July 2022 for reaccreditation of the Master of Advanced Studies in Medical Physics [MMP] course. Though the application was submitted in 2020, due to the COVID pandemic and travel restrictions the site visit was delayed. The accreditation team visited ICTP, Trieste University and hospitals to assess the facilities, curriculum execution, and had close interactions with the faculty and students. On the recommendation of the AB, IOMP has reaccredited the MMP course of ICTP, Trieste University for a 5-year period, w.e.f. 1 August 2022 - 31 July 2027.



*Program discussion with Prof. L Bertocchi and Prof Renato Longo*



*Interaction with first year students at the Info Lab*

# Education and Training Committee's Report

**Arun Chougule, PhD**

Chair of IOMP Education and Training Committee

Further, the AB has evaluated two applications for CPD course accreditation, namely:

1. SCMPCR E-learning Program (ELP-06): Virtual “SCMPCR E-learning Program: Clinical Medical Physics in Modern Radiotherapy, 1 – 22 July 2022 and awarded 32 CPD points. The program was successfully conducted and attended by participants from 8 countries.
2. Online Teaching Course “Particle Therapy”, 17 October 2022 – 25 November 2022, German Cancer Research Centre (DKFZ) and awarded 52 CPD points. The program was conducted successfully and attended by participants from 15 countries who have all passed the assessment after the course.

Recently, the AB received a CPD accreditation application from SCMPCR Hands-on Workshop (HW-06): Modern Quality Assurance in Modern Radiotherapy, 15th–18th February 2023 and the evaluation is currently in progress.

Additionally, the AB has received applications from three South Korean institutes (Catholic University, Seoul; Yonsei University, Wonju; KAIST, Daejeon) for reaccreditation of their medical physics education programmes. The accreditation team has visited the institutes from 5–8 December 2022 for onsite assessment. A detailed report has been submitted to IOMP ExCOM with recommendation to reaccredit the programmes for another 5-year period, w.e.f. 1 January 2023 to 31 December 2027.

On December 10, 2022, the AB has received an application from the Fundación Médica de Río Negro y Neuquén, Río Negro, Argentina for the accreditation of residency programs in radiation oncology medical physicists [ROMP] and Diagnostic Radiology Medical Physicist [DRMP]. The AB has constituted the assessors team and the application is currently under review by the team.

Detailed information regarding AB activities, relevant manuals/forms and the accredited programs so far are available at <https://www.iomp.org/accreditation/>. I request all of you to kindly take advantage of the IOMP accreditation facility to get your medical physics education programs, residency programs, CPD/CME courses/conferences/workshops/ training accredited.

Further, as IOMP ETC Chair, I have initiated a process to update information regarding medical physics education programs conducted in different regions of IOMP [AFOMP, ALFIM, EFOMP, FAMPO, MEFOMP, SEAFOMP, USA, Canada]. The information is available on IOMP website: <https://www.iomp.org/education-training-resources/>. I humbly request all of you to notify me if there is any update/edits on the information.

# Awards & Honours Committee's Report

## Kwan Hoong Ng, PhD

Chair of IOMP Awards & Honours Committee

## Jeannie HD Wong, PhD

Secretary of IOMP Awards & Honours Committee



**KWAN HOONG NG**

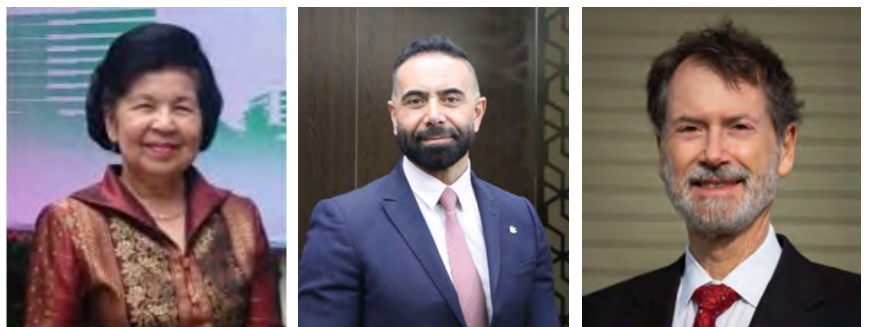
IOMP Awards & Honours  
Committee Chair  
kwanhoong.ng@gmail.com

*"The IOMP congratulates the three recipients of the 2022 IDMP Award - Anchali Krisanachinda (Thailand, SEAFOMP), Rabih Hammoud (Qatar, MEFOMP) and Geoffrey S. Ibbott (USA)"*

## THE INTERNATIONAL DAY OF MEDICAL PHYSICS (IDMP) AWARD 2022

In line with the theme of this year, "Medical Physics for Sustainable Healthcare", the IOMP presents the three well-deserving recipients of the IOMP-IDMP award. The IOMP congratulates the three recipients of the 2022 IDMP Award - Anchali Krisanachinda (Thailand, SEAFOMP), Rabih Hammoud (Qatar, MEFOMP) and Geoffrey S. Ibbott (USA). All three of them had made immense contributions to the development of the medical physics profession, both within their respective countries and internationally. Following are the biographies of the three awardees.

## IDMP 2022 AWARD



# CONGRATULATIONS

# IDMP 2022 AWARDEES

## Anchali Krisanachinda



anchali.kris@gmail.com

Anchali Krisanachinda, B.Sc. Hons (Physics) Chulalongkorn University, M.Sc. (Radiation Physics) University of London, Ph.D. (Medical Radiation Physics) Finch University of Health Sciences, Chicago Medical School, Illinois, USA. Department of Radiology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand.

Dr Anchali pioneered the graduate program in Medical Physics at Mahidol University, Thailand. She proposed Chulalongkorn University a graduate program in medical imaging to establish a diagnostic radiology medical physics. She also started the competency program in clinical training of medical physics in radiation oncology, diagnostics radiology and nuclear medicine in Thailand. Clinically Qualified Medical Physicists were available from this clinical training using IAEA e-Learning AMPLE for Thailand, Malaysia, Myanmar, Vietnam, Lao PDR, sharing clinical supervisors and facilities. She proposed a doctoral program in medical physics to create medical physicists working in the university hospital and established more medical physics education and clinical training centres in all parts of the country.

## Rabih Hammoud



Rhammoud2@hamad.qa

Rabih Hammoud, PhD., DABR Chief Medical Physicist, National Center for Cancer Care & Research – Hamad Medical Corporation, Qatar, Assistant Professor of Medical Physics Research in Radiation Oncology – WCM-Q

Dr. Rabih Hammoud holds a position as Chief Medical Physicist at the National Center for Cancer Care & Research, Hamad Medical Corporation and an Assistant Professor of Medical Physics Research in Radiation Oncology at Weill Cornell Medicine, Qatar. He is an American Board Certified Medical Physicist since 2004. He obtained his Master of Sciences in Medical Physics from Wayne State University in US and completed his PhD at Universite De Bretagne Occidentale, in France in the same field. He is an active member of several Medical Physics Societies locally and internationally such as ASTRO, AAPM & ESTRO and an elected treasurer of Middle East Federation of Medical Physicists (MEFOMP). He has been invited as Faculty & Speaker of various activities of the medical and scientific societies as well as within HMC. He has published numerous papers, abstracts & book chapter. Further, he is actively involved in IAEA activities as a participant to regional workshops and scientific meetings and an auditor for QUATRO expert mission. He hosted more than one IAEA Radiotherapy course. In addition, Dr. Hammoud is an examiner for the International Medical Physics Certification Board (IMPCB).

# IDMP 2022 AWARDEES

## Geoffrey S. Ibbott



ibbott@me.com

Geoffrey S. Ibbott, PhD, FAAPM, FACR, FASTRO, FIOMP, FIUPSM, Professor and Chair Emeritus, UTMDAnderson Cancer Center, Houston, Texas, USA.

Dr. Ibbott received an MS in medical physics from the University of Colorado and a PhD in radiation biology from Colorado State University. After positions at the University of Colorado Health Sciences Center, the Yale-New Haven Hospital, and the University of Kentucky, he was recruited to the University of Texas MD Anderson Cancer Center where he was Director of the Radiological Physics Center from 2001 to 2010, then Chair of the Department of Radiation Physics from 2010 to 2017. Since retirement in 2018, he serves as a consultant to MD Anderson Cancer Center at Cooper University, where he is transferring his research interests in advanced image-guided radiation therapy and three-dimensional dosimetry. He also is Associate Executive Director at the American Board of Radiology with responsibilities for Medical Physics. This position serves as the interface between the medical physics community and the ABR and supports the Medical Physics Trustees.



Medical Physics for  
**SUSTAINABLE  
HEALTHCARE**

# Professional Relation Committee's Report

## Simone K Renha, PhD

Chair of IOMP Professional Relation Committee



**SIMONE K RENHA**

IOMP Professional Relation  
Committee Chair

simonekodlulovich@gmail.com

*"I am glad to present our outstanding members who represent all regions and ensure the gender balance"*

During the World Congress on Medical Physics and Biomedical Engineering in Singapore, on June 12 - 17, 2022, the officers and Chairs elected from 2022 to 2025 assumed their new positions. As the new chair of the Professional Relations Committee (PRC), I am glad to present our outstanding members who represent all regions and ensure the gender balance:



Simone K Renha  
(Brazil)



Ishmael Parsai  
(USA)



Stephanie Parker  
(USA)



Cecilia Haddad  
(Brazil)



Huda AlNaemi  
(Qatar)



Jacob Van Dyk  
(Canada)



Nathaly Barbosa  
(Colombia)



Taofeeq Ige  
(Nigeria)



Sotiris Economides  
(Greece)



Tomas Kron  
(Australia)



Michelle Wells  
(USA)



Vijitha Ramanathan  
(Sri Lanka)



Alexandre Bacelar  
(Brazil)



Freddy Haryanto  
(Indonesia)



Weigang Hu  
(China)

The main activities we have carried out so far were:

a. Bylaws - as a priority, we reviewed the terms of reference of our committee and provided some suggestions to improve, making it clearer and more transparent.

b. AAPM and IOMP cooperation in equipment and library donations: considering recent changes in the AAPM process, the committee is evaluating how this important partnership can be more efficient and productive. A description of the roles of both parties will be presented soon.

# Professional Relation Committee's Report

## Simone K Renha, PhD

### Chair of IOMP Professional Relation Committee

c. Applications of new National Member Organizations (NMO): The Palestinian Association for Medical Physics application was carefully evaluated and approved.

c. Support for new NMO: The PRC committee is sharing information for medical physicists who would like to establish a new medical physics society and who wish to fulfill the IOMP criteria to become a new National Member Organization.

e. Action plan: According to our Terms of Reference, we aim to accomplish our duties with ethics, quality, and efficiency to promote medical physics worldwide.

Some proposals that are under discussion for the PRC Action Plan include:

a. To achieve a higher number of medical physicists, one action will be: To insert various activities and programs of the committee on the IOMP webpage, keeping updated and providing information of interest to medical physicists. Such as job opportunities, courses, clinical training, projects, webinars, articles on preparing for interviews, career advice, and establishing a portal for industry or hospitals to place advertisements for job openings and more.

b. Establish a schedule of meetings with National Member Organizations (NMO) and Regional Organizations (RO) to get information on the primary necessities, identify countries that need support to establish a medical physics society, to strengthen the relationship with this organization with PRC.

c. To join efforts with international organizations to promote the medical physics profession, seeking out medical physics recognition.

d. To give technical support to NMO and RO in preparation for the certification process.

d. To strengthen the collaboration with IOMP committees in developing programs that bring new technologies to students, trainees, and medical physicists.

f. To search for partnerships with companies to be able to provide financial support for students to participate in courses, congresses, and workshops.

On this occasion, the committee wishes to invite all medical physicists to work with us to strengthen medical physics worldwide in order to improve medical practices every day for the benefit of patients. We wish you all happy holidays and a very fruitful 2023.

# Publication Committee's Report

## Francis Hasford, PhD

Chair of IOMP Publication Committee



**FRANCIS HASFORD**

IOMP Publication Committee  
Chair

haspee@yahoo.co.uk

*"the Committee has performed key activities which include initiating steps for appointment of new Editors-in-Chief (EiCs) of the Medical Physics International (MPI) journal..."*

The IOMP Publications Committee (PC) is mandated to improve medical physics worldwide by providing or supporting appropriate publications or knowledge generated as a result of research, education and professional programs; managing the operation of Medical Physics World; overseeing publication agreements with publishers of the official IOMP journals; making nominations of editorial board members and other such appointments as necessary to the IOMP Executive Committee; identifying the need for international scientific, research and professional publications; assisting Regional and National Organizations of medical physics to prepare proposals for publication of new materials to extend the international medical physics knowledge base.

The current Committee membership is made up of:

Francis Hasford (Chair)	Jamie Trapp
Hassan Kharita (Vice Chair)	Jong Min Park
Marina Sala (Secretary)	Ambika Sahai Pradhan
Lorenzo Brualla	Chai Hong Yeong
Mohamed Metwaly	John Boone
Michael Lee	Katia Parodi
Gustavo Daniel Sanchez	Michael David Mills
Hafiz Mohd Zin	Ishmael Parsai
Bamidele Awojoyogbe	Simone Renha
John Damlakis	Nobuyuki Kanematsu
Eva Bezak	Iuliana Toma-Dasu
Magdalena Stoeva	Slavik Tabakov
Kang-Ping Lin	Perry Sprawls

During the reporting year, the Committee has performed key activities which include initiating steps for appointment of new Editors-in-Chief (EiCs) of the Medical Physics International (MPI) journal; selection of candidates for a free subscription of the American Association of Physicists in Medicine (AAPM) Medical Physics journal; and diversifying relations with publishers.



# Publication Committee's Report

## Francis Hasford, PhD

Chair of IOMP Publication Committee

### 1. Editorial Board Members of Journal Medical Physics International (MPI)

As the second term of the MPI Founding Co-Editors-in-Chief (S. Tabakov and P. Sprawls) expires in December 2022, a new team had to be appointed to take over this very successful IOMP Journal. The PC initiated a proposal for review of the IOMP Bylaws to include the appointment of MPI Board membership and drafted the manual to guide the appointment of candidates. Following approval of the manual and the Bylaws review process, call for applications for new Co-Editors-in-Chief positions was announced by the PC. Process for selection of qualified candidates is ongoing. Two successful candidates for the position will be selected after interview(s) by a panel chaired by the IOMP President. The successful candidate(s) will receive approval by the Executive Committee (ExCom).

### 2. Free subscription of AAPM Medical Physics journal

The IOMP-AAPM collaboration offers one-year free online subscription to the AAPM's Medical Physics journal. This promotes accessibility of publications to medical physicists from low and middle-income countries (LMICs) where access to such research publications is a challenge. Call for applications was made by the PC and around 300 applications received. 100 of them have been selected to receive free subscription in 2023 according to developed selection criteria (LMICs, geographical, access during the previous years, ability to utilize based on previous access, the beneficiary of the subscription i.e., individual, library).

### 3. Diversifying relations with publishers for IOMP Book Series

The PC is diversifying relations with publishers for the IOMP Book series in medical physics and biomedical engineering. The PC is currently reviewing proposals from at least three publishers. Review is planned to be finalized in Q1/2023 for selection of the best offer for the book series.

## History Sub-committee (HSC)

The HSC is a subcommittee of the PC. It is chaired by Slavik Tabakov and has the mandate of recognizing IOMP members who have made major contribution(s) to the organization; acknowledging the contributions of ExCom, Committee Chairs, Editors of MPW and Curator of International Library Program; digitally archiving photographs from the past and present WCs, ICMPs, ISEPs, workshops, endorsed or sponsored courses; interview prominent current and past members; and to digitally archive interviews. The HSC has a number of activities planned for IOMP's 60th anniversary in 2023.

The Chair of PC is grateful to members of the Committee for their support, receptiveness and diligent reviews of tasks assigned to it.

# History Sub-Committee's Report

## Slavik Tabakov, PhD

Chair of IOMP History Sub-Committee, IOMP Past President



SLAVIK TABAKOV

IOMP History Sub-Committee  
Chair

slavik.tabakov@emerald2.co.uk

*"...the individuals who have contributed to the activities of IOMP during these 60 years are about 2000 from all over the world."*

At the end of its term 2018-2022, the Chair and Secretary of the History Sub-Committee in this period published a Comprehensive "History of IOMP" Special Issue of the MPI Journal (SI-7 – available free from: <http://www.mpijournal.org/pdf/2022-SI-07/MPI-2022-SI-07.pdf>).

The issue includes the original IOMP history papers published in 2013-2014 (by Azam Niroomand-Rad, Colin Orton, Peter Smith, Slavik Tabakov), describing the first 50 years of the Organisation (1963-2013). Additionally, a paper from S Tabakov and KY Cheung describes the main moments of the following 10 years, thus the MPI SI-7 presents the History of the Organisation IOMP in its first 60 years.

The MPI SI-7 includes also all History Tables with all colleagues who have contributed to the activities of the IOMP – grouped by Members of Committees and Sub-Committees in each 3-years period of IOMP, plus all Awardees and Congresses/Conferences Organisers. The overall number of names listed in the tables is over 2300. Considering that some names are listed as members/contributors to several committees/activities, the individuals who have contributed to the activities of IOMP during these 60 years are about 2000 from all over the world.

The overall volume of this Special Issue on IOMP History is 260 pages. The Issue acknowledges the voluntary contribution of all these colleagues to the global development of medical physics.

The History Sub-Committee (HSC) in the new term of office (2022-2025) includes the following colleagues:

1. Slavik Tabakov, UK – Chair
2. Azam Niroomand-Rad, USA
3. Geoffrey Ibbott, USA
4. KY Cheung, Hong Kong
5. Perry Sprawls, USA
6. John Damilakis, Greece (Ex-Officio)
7. Eva Bezak, Australia (Ex-Officio)
8. Francis Hasford, Ghana (Ex-Officio)

# History Sub-Committee's Report

## Slavik Tabakov, PhD

Chair of IOMP History Sub-Committee, IOMP Past President

The HSC activities will include keeping the record of the history of the Organisation and recognising all colleagues who have contributed to IOMP. This includes adding new information to the History Tables on the IOMP Website, and importantly - preparing an MPI History Issue in June 2023, to celebrate the 60th anniversary of the IOMP next year.

The activities of the MPI Journal associated with the project “History of Medical Physics” will continue on the pages of the MPI History Edition – the continuation of the MPI History Issues. The Editors of these History issues (S Tabakov, P Sprawls and G Ibbott) have already published the 8th History issue in September 2022. It covers:

Historical Evolution of Physics Classroom Learning and Teaching;  
A Brief History of Fractionation in External-Beam Radiotherapy;  
Medical Physics for the Use of Students and Practitioners of Medicine;  
Monument to the X-Ray and Radium Martyrs of All Nations.

As indicated above a new History Edition is being prepared for 2023.

HSC expresses its gratitude and appreciation to all colleagues who contributed to the Committee and to the collection and preservation the history of the profession.

# Medical Physics World Board (MPWB) Committee's Report

## Chai Hong Yeong, PhD

Chair of IOMP Medical Physics World Board (MPWB)



### CHAI HONG YEONG

IOMP MPWB Committee  
Chair

yeongchaihong@gmail.com

*"I am honored to introduce the committee members of the IOMP Medical Physics World Board (MPWB) for the new term (2022-2025):"*

I am honored to introduce the committee members of the IOMP Medical Physics World Board (MPWB) for the new term (2022-2025):

1. Chai Hong Yeong, Malaysia – Chair
2. Afua Yorke, Argentina
3. Cheryl Lian, Singapore
4. Habib Ashoor, Bahrain
5. Ismail Zergoug, Algeria
6. Joerg Lehmann, Australia
7. Milton Estuardo Ixquiac Cabrera, Guatemala
8. Niki Fitousi, Belgium
9. Rosana Pirchio, Argentina
10. Safayet Zaman, Bangladesh

The Committee is charged:

(a) To contribute to the advancement of medical physics worldwide by providing a bulletin to all members covering IOMP activities and matters of interest to medical physicists;

(b) To disseminate information, promote communication and provide news of use for all countries but especially in developing countries;

(c) To seek out information of use to IOMP members from the Officers, Committee Chairs, World Congress Presidents, Regional meeting Organizers and other representatives of IOMP functions and communicate such information to the worldwide membership;

(d) To assist the IOMP Officers to improve communications by suggesting publication alternatives and preparing proposals for improved methods of achieving MPW goals;

(e) To seek advertising support for eMPW to achieve self-funding of the bulletin.

# Medical Physics World Board (MPWB) Committee's Report

## Chai Hong Yeong, PhD

Chair of IOMP Medical Physics World Board (MPWB)

Other than the eMPW bulletin, which is published semi-annually, the MPWB is also responsible to provide timely and consistent update on medical physics information via IOMP Newsletter which is distributed bi-monthly to all the members. From June to December 2022, the committee has released 3 issues of IOMP Newsletter (Aug, Oct and Dec, respectively).

In this digital era, website is an important medium to disseminate information instantly to a broad audience worldwide. Therefore, a **Web-subcommittee** led by the Chair of the MPWB is designated to run and maintain the functionality and quality of the IOMP website. The committee for the new term (2022-2025) consists of members from various regions:

1. Chai Hong Yeong, Malaysia – Chair
2. Cinthia Kotzian Pereira Benavides, Brazil
3. Eleftherios Tzanis, Greece
4. Leyla Moghaddasi, Australia
5. Li Kuo Tan, Malaysia
6. Mark Pokoo-Aikins, Ghana
7. Nabil Iqeilan, Qatar
8. Santiago Girola, Argentina
9. Yiwen Xu, Canada

The Web-subcommittee is also committed to connect IOMP with medical physicists and other professions worldwide using social media platforms, such as Facebook, Twitter, LinkedIn and YouTube. These platforms are used to disseminate relevant and appropriate information that can benefit the professional development of medical physics.

International Organization for Medical Physics



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



# Medical Physics International (MPI) Journal and History Special Issues: The First Decade, 2012 - 2022

## Slavik Tabakov and Perry Sprawls

MPI Founding, Co-Editor-in-Chief



**SLAVIK TABAKOV**

slavik.tabakov@emerald2.co.uk



**PERRY SPRAWLS**

sprawls@emory.edu

The successful 2nd term of the Founding Co-Editors in Chief (Slavik Tabakov and Perry Sprawls) of the IOMP Journal Medical Physics International (MPI) concludes in 2022. The Journal was approved by the IOMP ExCom in July 2012 and the first issue was published in June 2013. The MPI journal focuses on e-learning, educational methods and resources, reviews of innovations and the development of the medical physics profession and organizations around the world. – thus, becoming the beacon for sharing of expertise and experience on these topics in supporting the global development of medical physics. The MPI does not publish peer-reviewed research reports that is provided by the various other medical physics journals. The MPI Journal publishes biannually as an online open resource, free for all colleagues.

During this decade (2012-2022), under the lead of the current Co-Editors in Chief, the Journal has published 28 online issues with over 5000 pages. The types of these publications are as follows:

- From its first to the current volume 10, MPI published 331 original articles, covering about 1600 pages. In addition to these articles, MPI published various documents and guides from organizations (as IAEA), large international activities and MSc abstracts of the ICTP-University of Trieste international MSc programme with students from Low-and-Middle Income (LMI) countries. These publications are about 400 pages. The overall volume of the papers, published in MPI is about 2000 pages.

- The MPI Journal also published the abstracts of all International Medical Physics Conferences after 2013, plus some other international Conferences in the field. These publications include about 2100 pages of abstracts.

# Medical Physics International (MPI) Journal and History Special Issues: The First Decade, 2012 - 2022

**Slavik Tabakov and Perry Sprawls**

MPI Founding, Co-Editor-in-Chief

- In 2018 the MPI began the additional publications of Special Issues dedicated to the History of Medical Physics (now MPI History Edition). This series is edited by S Tabakov, P Sprawls and G Ibbott. As of this time, eight editions devoted to history have been published with about 960 pages.

A detailed overview of the MPI Journal so far was published during June 2022: <http://www.mpijournal.org/pdf/2022-01/MPI-2022-01-p007.pdf>

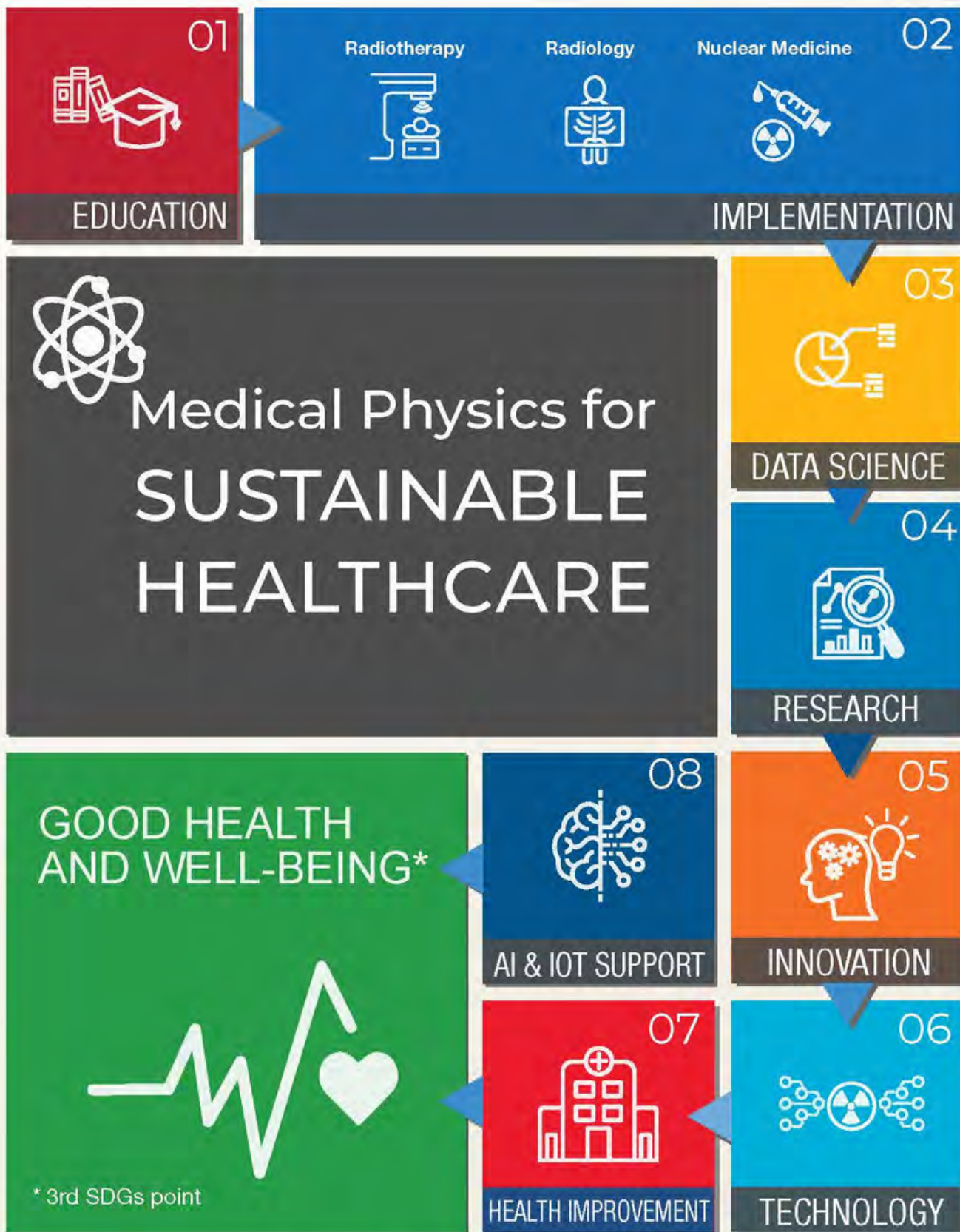


The MPI Journal has become one of the most read publications in the profession with thousands of readers each month. As an example - during the period from 20-Dec-2020 to 20-Jan-2021 MPI had c.9,100 visits to its web site (c.40% from Asia; c.26% from North America, c.25% from Europe, c.5% from South America and Oceania; c.4% from Africa).

As the MPI Founding Co-Editors in Chiefs, we express our gratitude to the colleagues serving the Editorial Board (especially to the Technical Editor M Stoeva) and to all colleagues and authors who contributed to the IOMP Journal Medical Physics International during these 10 years and made the Journal a true vehicle for the global development of medical physics, especially in Low-and-Middle-Income countries



November 7th, 2022





# IDMP Celebration Reports

## Ibrahim Duhaini, PhD

### IDMP 2022 Coordinator

Medical physicists worldwide have celebrated IDMP 2022 on 7th November 2022, on the 155th birthday of Madam Marie Skłodowska-Curie. Following are the activities shared by different regional organizations and NMOs. We thank all the organizers and members who made this special day a memorable one.

Starting from the message by the IDMP Coordinator, Dr Ibrahim Duhaini:

Dear Medical Physics Colleagues across the Globe,

It is my pleasure to announce to you the theme of this year to mark the celebrations of the International Day of Medical Physics (IDMP 2022):

“Medical Physics for Sustainable Healthcare”

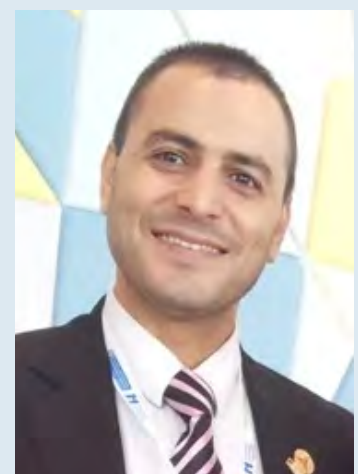
Providing high quality healthcare services requires at least three important pillars:

1. Advanced Technology in the field of Healthcare.
2. Qualified Personnel with adequate education and training in healthcare and technology.
3. Intellectual System that links the above two pillars to provide a complete Pathway of Sustainable Healthcare Services.

We strongly believe that Medical Physicists across the globe furnished with these three pillars play an important and crucial role in offering a sustainable HealthCare service to humanity. The proof is evident since the discovery of X-Ray in 1895 where Radiation was and still an essential entity in the diagnosis and therapy of many diseases. This system of healthcare services was sustained and developed during more than a century of advanced technologies and competent medical physicists. IOMP as well as many relevant organizations in Medical Physics fields, work together to achieve such noble cause and urge all its members to do so.

I wish all my colleagues around the World a Happy Medical Physics Day. Enjoy the celebrations of this day and make sure as a Medical Physicist to keep on going!

Ibrahim Duhaini, PhD, FIOMP, DIMPCB  
IOMP Treasurer  
IDMP Coordinator



# IDMP Celebration Reports

**Ibrahim Duhaini, PhD**

IDMP 2022 Coordinator

Messages from the Presidents of various regional organizations can be viewed at <https://www.iomp.org/idmp-2022/>.



# IDMP Celebration Reports

## IOMP Webinar on IDMP 2022

IOMP organized a webinar on 7th November 2022 from 12.00 – 13.00 GMT. The speakers included Presidents from all the regional organizations. The flyer of the webinar is shown below, and the recording of the webinar can be found at <https://www.iomp.org/iomp-school-webinars-recordings/>.

**IOMP SCHOOL WEBINARS**

## IOMP WEBINAR ON IDMP 2022

**1 CME/CPD credit point**

EFOMP AFOMP ALFIM MEFOMP SEAFOMP FAMP COMP

**7 November 2022 | 12 – 1 pm GMT**

**Register here**

Chairman: **John Damilakis**, IOMP President  
Co-Chairman: **Ibrahim Duhaini**, IDMP Coordinator

**Invited Speakers:**

- Paddy Gilligan, EFOMP President
- Arun Chougule, AFOMP President
- Patricia Mora, ALFIM President
- Chai Hong Yeong, SEAFOMP President
- Christoph Trauernicht, FAMP President
- Meshari AlNuaimi, MEFOMP President
- J. Daniel Bourland, AAPM President
- Boyd McCurdy, COMP President

**Topics:** EDUCATION, IMPLEMENTATION, DATA SCIENCE, RESEARCH, GOOD HEALTH AND WELL-BEING\*, AI & IOT SUPPORT, INNOVATION, HEALTH IMPROVEMENT, TECHNOLOGY

**Medical Physics for SUSTAINABLE HEALTHCARE**

# IDMP Celebration Reports

## Report from ALFIM

The Medical Physics Division of the Mexican Physics Society (DFM-SMF) organized a virtual round table (in Spanish) with title (poster and video attached) “Medical Physics and Sustainable Development”. This round table took place online using the REMO platform on November 7 at 18:00 h (GMT-6).

We had the following topics and speakers:

- **“Socioecosystem Sustainability”** (30 minutes)

Dr. Jose Manuel Maass Moreno

Ecosystem and Sustainability Research Institute (IIES), UNAM, Morelia Campus, Mexico.

- **“Reuse and Responsible Disposal of Image Equipment”** (10 minutes)

M. in C. Maricarmen Franco Cabrera

Monterrey Institute of Technology and Higher Studies, Monterrey, Mexico.

- **“Management of radioactive waste of medical origin”** (10 minutes)

Dr. David Lizcano Cabrera

Radioactive waste department, National Institute of Nuclear Research, Estado de México, Mexico

- **“Early detection of breast cancer and its impact on the health and well-being of the population”** (10 minutes)

M. in C. César Gustavo Ruíz Trejo

Instituto de Física, UNAM, Mexico

The link to the recorded round table is available here:

[https://drive.google.com/file/d/1UG4ZHrE1RGv58JAKmj326BOnG3u01d0q/view?usp=share\\_link](https://drive.google.com/file/d/1UG4ZHrE1RGv58JAKmj326BOnG3u01d0q/view?usp=share_link)

In addition, DFM-SMF made announcements to the Medical Physics community of activities performed by the Latin-American Association of Medical Physics (ALFIM) (poster attached), the Mexican Society of Physicists in Medicine, poster attached, and the Webinar organized by the International Organization on Medical Physics.

Prepared by,

Board DFM-SMF

Dr. Olga Ávila

Dr. Héctor Morales-Bárceñas

M. Sc. César Ruiz-Trejo

ALFIM celebra el **Día Internacional de la Física Médica**, 07 noviembre 2022, con la Jornada Virtual *“La Física Médica por una atención de salud sostenible”* por nuestro canal de [YouTube](#):

<https://youtube.com/channel/UCpIMAsuQDn8PbT0FT6EShu>

**Programa de charlas**

- Las competencias del FM en Radioterapia, Medicina Nuclear y Radiología
- Selección de Trabajos científicos de excelencia presentados en el Congreso-ALFIM en Fortaleza, 2022
- Historia y realidad de la FM en países latinoamericanos

*Los invitamos a participar y a escuchar las charlas de prestigiosos expertos de la región y jóvenes físicos médicos que muestran sus aportes en el área*

ALFIM  
Física Médica Afim | Afim\_org | ALFIM\_FisMed

# IDMP Celebration Reports

## Report from the Bangladesh Medical Physics Association (BMPA)

The Bangladesh Medical Physics Association (BMPA) has celebrated IDMP 2022 at National Institute of Nuclear Medicine and Allied Sciences (NIMAS) Auditorium on 24 November 2022. The details of the Seminar program and photographs are shown below.

IDMP-2022 Program Details:

**Presentation 1: Quality Assurance of Radiotherapy Dosimetry and Diagnostic Radiology: Bangladesh Perspective**

Speaker: Dr. Md. Shakilur Rahman, Director, NSSSD, BAEC and GS, BMPA

**Presentation 2: A Review of Modern Proton Therapy – Physical and Clinical Impact**

Speaker: Dr. Md. Rafiqul Islam, Director, INMP, AERE, BAEC

Chief Guest: Prof. Dr. Shamim Momtaz Ferdousi Begum

Director, National Institute of Nuclear Medicine & Allied Sciences (NINMAS), Shahbag, Dhaka

Chairperson: Prof. Dr. M. Aminul Islam

Former Vice-Chancellor, Shahjalal University of Science and Technology

President, BMPA



**IDMP-2022**

**celebration of International Day of Medical Physics**

Date: Thursday, November 24, 2022  
Time: 10 AM Bangladesh Time

Venue: Auditorium, National Institute of Nuclear Medicine & Allied Sciences, Shahbag, Dhaka

Title of Presentation  
**Quality Assurance of Radiotherapy Dosimetry and Diagnostic Radiology: Bangladesh Perspective**

**Speaker**  
Dr. Md. Shakilur Rahman  
General Secretary  
Bangladesh Medical Physics Association (BMPA)  
and Director, NSSSD  
Bangladesh Atomic Energy Commission

**Chief Guest**  
Prof. Dr. Shamim Momtaz Ferdousi Begum  
Director  
National Institute of Nuclear Medicine & Allied Sciences, Shahbag, Dhaka

**Chairperson**  
Prof. Dr. M. Aminul Islam  
President  
Bangladesh Medical Physics Association  
and Former Vice-Chancellor  
Shahjalal University of Science and Technology

"Happy International Day of Medical Physics. It's a Medical Physics world. We recognize your effort."

 **Bangladesh Medical Physics Association**  
Contact Email: icpmbmpa2022@gmail.com



# IDMP Celebration Reports

## Report from the Brazilian Medical Physics Association (ABFM)

The Brazilian Medical Physics Association (ABFM) promoted an educational symposium to celebrate IDMP 2022. There were lectures by web in radiotherapy, diagnostic, nuclear medicine and education: <https://www.youtube.com/watch?v=Q9Emj30ffs4>

The education event was free for medical physicists.

**Modelo 2 Novembro 7**  
Dia Internacional da Física Médica  
Dia para a conscientização sobre o papel fundamental que os Físicos Médicos desempenham para o benefício dos pacientes.  
Sou Físico Médico para a melhoria da saúde!

**Modelo 1 Novembro 7**  
Dia Internacional da Física Médica  
Dia para a conscientização sobre o papel fundamental que os Físicos Médicos desempenham para o benefício dos pacientes.  
Sou Físico Médico para a melhoria da saúde!

**Novembro 7**  
Dia Internacional da Física Médica  
Física Médica para a melhoria da saúde!  
Dia para a conscientização sobre o papel fundamental que os Físicos Médicos desempenham para o benefício dos pacientes.

**Speakers:**

- Thamires Reina (Sala de Ensino)
- Rosa Cunha (Sala de Radioterapia)
- Renato Bocamino Doró (Sala de Radiodiagnóstico)
- Cintia de Almeida Ribeiro (Sala de Medicina Nuclear)
- Dr. Gustavo do Vale Gomes (Sala de Medicina Nuclear)
- João Henrique Martins Castelo (Sala de Radioterapia)
- Dra. Mirta Bárbara Torres Berdeguez (Sala de Medicina Nuclear)
- Prof. Dr. Márcio Bottaro (Sala de Radiodiagnóstico)
- Cássio Vilela Komatsu (Sala de Ensino)
- Tiago Jornada (Sala de Radiodiagnóstico)
- Karen Pieri (Sala de Radioterapia)
- Jackson Argenta (Sala de Radioterapia)
- Fernanda Pellegrini (Sala de Radiodiagnóstico)
- Fábio Bruning (Sala de Radioterapia)
- Profa. Dra. Renata F. Leoni (Sala de Ensino)
- Profa. Dra. Márcia Carvalho da Silva (Sala de Radiodiagnóstico)
- Angel Martinez (Sala de Radioterapia)
- Dr. Crystian Saravia (Sala de Radioterapia)
- Diego Cunha (Sala de Radioterapia)
- Dr. Minsong Cao (Sala de Radioterapia)
- Marcel Zago Botelho (Sala de Radiodiagnóstico)
- MSc. Lucas Augusto Radicchi (Sala de Radioterapia)
- Renata Camargo (Sala de Radiodiagnóstico)
- Daniel Molena Seraphim (Sala de Ensino)

# IDMP Celebration Reports

## Report from the Colombian Association of Medical Physics (ACOFIMED)



Bogota, November 11th, 2022.

IOMP

Subject: IDMP Colombian report

Within the framework of the International Day of Medical Physics 2022 IDMP2022, we carried out the academic event "VI Conference on Medical Physics: radiological protection of the patient in medical images" in person at the Hotel Dann Carton in the city of Medellín.

VI JORNADA DE FÍSICA MÉDICA  
PROTECCIÓN RADIOLÓGICA DEL PACIENTE  
EN IMÁGENES MÉDICAS

Hotel Dann Carlton Medellín, 4 y 5 de Noviembre de 2022

Patrocinadores

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Sievert 10 años

Con el apoyo de

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Sistema Colombiano de Control de Calidad

# IDMP Celebration Reports

## Report from the Colombian Association of Medical Physics (ACOFIMED)



VI JORNADA DE FÍSICA MÉDICA  
PROTECCIÓN RADIOLÓGICA DEL PACIENTE  
EN IMÁGENES MÉDICAS

 Nicolas Larragueta	 Adlin López	 Héctor Galván	 Tim Wood
 Christian Trujillo	 Jenia Vassileva	 Javier Rodriguez	 Ana Dolcet Llerena
 Patricia Rico	 Diego Montufar	 Laura Quintero	 Andrea Abril
 Lady Garcia	 Johana Velasco	 Camilo Carlderón	 Harley Orjuela
 Jairo Poveda	 Nathalia Nuñez	 Marcela Ramirez	 Nataly Castellanos

And that of more than 75 attendees, 9 sponsors and 22 commercial representatives.



# IDMP Celebration Reports

## Report from the Colombian Association of Medical Physics (ACOFIMED)

### VI JORNADA DE FÍSICA MÉDICA PROTECCIÓN RADIOLÓGICA DEL PACIENTE EN IMÁGENES MÉDICAS



Hotel Dann Carlton Medellín, 4 y 5 de Noviembre de 2022



# IDMP Celebration Reports

## Report from the Colombian Association of Medical Physics (ACOFIMED)



Best regards from Colombia,

More info: [www.acofimed.com](http://www.acofimed.com)

### JUNTA DIRECTIVA

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Radiology  
leader

**AMILCAR  
ESTRADA**  
Radiation  
protection  
leader

# IDMP Celebration Reports

## Report from the Indonesian Association of Physicists in Medicine (IAPM)



### ALIANSI FISIKAWAN MEDIK INDONESIA

*Indonesian Association of Physicists in Medicine*

Depok, November 15 2022

Number : 234/DPP-AFISMI/XI/2022

About : Indonesian Association of Physicists in Medicine for IDMP 2022 Activities

In celebrating the 2022 International Day of Medical Physics, the Indonesian Association of Physicists in Medicine or Aliansi Fisikawan Medik Indonesia (IAPM/AFISMI) held a casual talk show themed "Confirming the Existence of Medical Physicists through Research and Competence Towards Sustainable Health Services" which was held on Sunday, 6 November 2022 (Invitation in Fig.1). The Talk Show started at 08.00 -11.00 with over 400 participants in attendance, both AFISMI members and the public. It was live streamed through YouTube and the recording can be accessed in the following link: <https://www.youtube.com/watch?v=pNOT6h8vQCI>.

Free  
ISKP

IDMPI 35<sup>th</sup> DMP

**Bincang Santai**  
Penegakan Eksistensi Fisikawan Medik  
Melalui Riset dan Kompetensi  
Menuju Pelayanan Kesehatan Berkelanjutan

Praktis Akademik

**Sesi 1**  
Serba-Serbi Riset dan Publikasi Ilmiah  
untuk Fisikawan Medik  
Dr. Pandji Triadyaksa (Fakultas FSA UNDIP)  
Harwendya Disha, S.S. (Dept. Radiology MRCCC Siloam)  
Rina Taurissa, M.Sc. (Dept. Nuclear Medicine MRCCC Siloam)  
Juswita N. D. Simanjuntak, M.Si. (Radiologi RS USU)

**Sesi 2**  
Sharing Session dari dan untuk  
Fisikawan Medik Klinis:  
Pengalaman dalam Audit Dosis  
Sanggam Ramaniaran, M.Si. (Radioterapi RSUP dr. Karstedt)  
Rita Hariyani, S.Si. (Radiologi RS UI)  
Korbutik, M.Si. (Kardioklinik Nuklir RSUP dr. Karstedt)

AFISMI OFFICIAL  
Meeting ID : 693 856 1124  
Passcode : idmp2022

Minggu,  
6 November 2022  
07.30 WIB

Narahubung  
Andrian Dede Handika  
(WA 0811-7177-649)

Figure 1. Invitation to join the IDMP 2022 event for members and the public. Joining members are given 1 CPD point.

# IDMP Celebration Reports

## Report from the Indonesian Association of Physicists in Medicine (IAPM)



### ALIANSI FISIKAWAN MEDIK INDONESIA

*Indonesian Association of Physicists in Medicine*

The activity was opened by remarks from President of IAPM/AFISMI, Dr. Supriyanto Ardjo Pawiro, who conveyed the importance of the existence of Medical Physicists in healthcare facilities through research and competence. The 1st talk show session themed "Scientific Research and Publication for Medical Physicists 101" was hosted by Dr. Lukmanda Evan Lubis as IAPM/AFISMI's Head of Research and Scientific Publication Division. The session hosts Dr. Pandji Triadyaksa (Diponegoro University), Rina Taurisia, M.Sc. (Medical Physicist and Spv in Dept. Nuclear Medicine MRCCC Siloam Hospitals Semanggi), Josepa N. D. Simanjuntak, M.Sc. (Diagnostic and Interventional Radiology Medical Physicist at North Sumatera University Hospital) and Hanendya Disha Randy Raharja, B.Sc. (Medical Physicist in Diagnostic and Interventional Radiology Department of MRCCC Siloam Hospitals Semanggi).

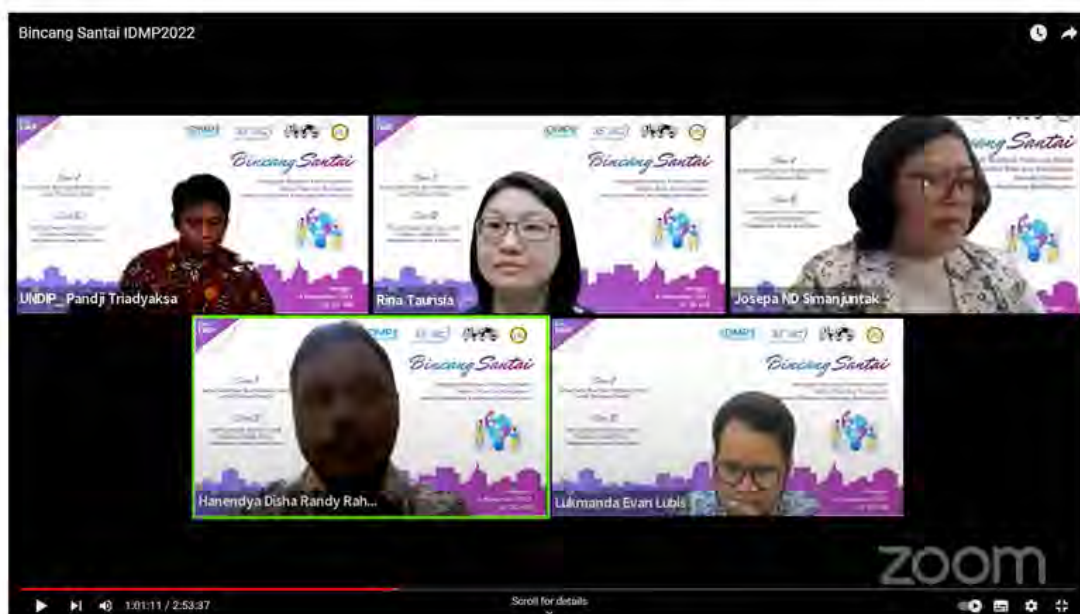


Figure 2. The first talk show session on scientific writing for medical physicists.

The lively discussion (Fig.2) shares experiences and challenges of research and scientific publication from the perspective of academics, hospital management, and clinical medical physics practitioners. It is hoped that clinical practitioners and academics will be able to collaborate to produce research and scientific publications that are accredited and reputable and useful for colleagues and patients.

The 2<sup>nd</sup> talk show session themed "Sharing Session from and for Clinical Medical Physicists: Dose Audit Experience" was hosted by Dea Ryangga, M.Sc. as Head of Continuing Professional Development Division of IAPM/AFISMI. The session hosts the following guest speakers; Sanggam Ramantisan, M.Sc. (Medical Physicist in Radiotherapy Department at dr. Kariadi Regional General Hospital), Kartutik, M.Sc. (Medical

# IDMP Celebration Reports

## Report from the Indonesian Association of Physicists in Medicine (IAPM)



### ALIANSI FISIKAWAN MEDIK INDONESIA

*Indonesian Association of Physicists in Medicine*

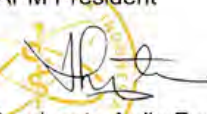
Physicist in Nuclear Medicine Department at dr. Kariadi Regional General Hospital) and Ika Hariyati, B.Sc. (Medical Physicist in Diagnostic and Interventional Radiology at Universitas Indonesia Hospital).



Figure 3. The second session on sharing experiences about dose audit.

The relaxed chat in session 2 (Fig.3) points out the urgency and purpose of dose audits in each field: Radiotherapy, Nuclear Medicine, and Diagnostic and Interventional Radiology. Casually, the guests explained the stages in the dose audit process to achieve patient safety goals.

Medical Physicists as Health Professional and Health Workers should continue to carry out scientific activities, namely by reading, writing and publication according to the KMK 322 2020 Medical Physicist professional standards on Supporting Clinical Skills to emphasize the role and existence of Medical Physicists in Health Facilities. By reading a lot we obtain information, by writing we actualize ideas and thoughts and by publishing we spread ideas for the benefit of humanity. It is only by keep existing that medical physicists can take part in ensuring the sustainability of health services.

IAPM President  
  
 Supriyanto Ardjo Pawiro, Ph.D  
 NA: 13890

# IDMP Celebration Reports

## Report from the Iraqi Medical Physics Society (IMPS)

Iraqi Medical Physics Society (IMPS)



الجمعية العراقية للفيزياء الطبية

From\ Iraqi Medical Physics Society (IMPS)

**International Day of Medical Physics (IDMP) Celebration 2022**

**Reporter name: Nabaa Alazawy**

The Iraqi medical physics society (IMPS) presented by Dr. Mustafa Al-Musawi (The president of IMPS) in corporation with Al-Warith Cancer institution presented by Dr. Sattar Jabbar (The Head of the Authority of Health and Medical Education) and Dr. Haider Hamza Al-Abedi (CEO) organized the international day of medical physics celebration in Al-Zahraa University for women, Kabbala, Iraq. The sponsors of this celebration were mostly (90%) Al-Warith cancer institution and the self-funding of Dr. Mustafa Al-Musawi (10%). The celebration contains two parts:

- The first part of the ceremony contains a speech by the president of the Iraqi medical physics society (IMPS), Dr. Mustafa Al-Musawi, followed by the speech of the president of Al-Zahraa university, Dr. Zainab Al-Sultani on behalf of the Authority of the Al-Warith Cancer institution and Health and Medical Education belongs to the Immam Hussain Holy Shrine. Then Dr. Taki Al-Musawi was the first professor of medical physics in Iraq. The previous speech focuses on the importance of medical physicists in modern treatment techniques.
- In the same part, three opening lectures were presented:
  1. Consultant medical physicist dr. Azin Alireza Band from Iran speaks about the role of the gamma index in patient dose verification in the IMRT technique.
  2. Consultant medical physicist Dr. Hussam regab from Egypt presented a lecture about the recent radiation therapy techniques that have emerged in Iraq, especially in the Al-Warith cancer institution.
  3. Dr. Mohammed Anwar, an expert in nuclear medicine, speaks about the cyclotron and the modern type with higher capacity that builds in Karbala, Iraq, this year, also in Warith cancer institution.
- After the lectures, the IMPS honored the lectures, speakers, and guests from other Iraqi states who are members of IMPS that

# IDMP Celebration Reports

## Report from the Iraqi Medical Physics Society (IMPS)

Iraqi Medical Physics Society (IMPS)



الجمعية العراقية للفيزياء الطبية

corporate to improve the medical physics field, as shown in the pictures below.

- The second part involved the recent research in the medical physics field presented by the members of IMPS, as shown in the brochure below:
- At the end of the ceremony, the committees are honored by the president of IMPS
- Many medical physicists around Iraq attends the celebration, such as Baghdad, Irbil, Karbala, Nasiriyah, Najaf, Babylon, Basrah, and Mosel.
- Global television channels cover the ceremony as in the link below:

[https://youtu.be/nqyQo0\\_NYOk](https://youtu.be/nqyQo0_NYOk)

- The celebration official video link: [https://youtu.be/uQC\\_Zt3ANCo](https://youtu.be/uQC_Zt3ANCo)  
And <https://fb.watch/gS6-UDAZEj/>
- The hospitality for coffee break and lunch was organized with five stars company.



Ass. Prof. Dr. Mustafa Al-Musawi

17/11/2022

# IDMP Celebration Reports

## Report from the Iraqi Medical Physics Society (IMPS)



IMPS president Dr. Mustafa Al-Musawi



Dr. Nashwan Karkhi (Dean Assistant of Hawler Medical College)





# IDMP Celebration Reports

## Report from the Iraqi Medical Physics Society (IMPS)



# IDMP Celebration Reports

## Report from the Iraqi Medical Physics Society (IMPS)



# IDMP Celebration Reports

## Report from the Korean Society of Medical Physics (KSMP)

On 7th November 2022, the Korean Society of Medical Physics (KSMP) celebrated the International Day of Medical Physics (IDMP) themed “Medical physics for sustainable healthcare” by organizing webinar and seminar. The event started with a welcome address from Dr. Se Byeong Lee (President of KSMP) and a congratulatory message from Dr. Arun Chougule (President of AFOMP).



Speakers of the day were Prof. Kyo Chul Shin (Dankook University Hospital) and Prof. Chul Kee Min (SoonChunHyang University Hospital Cheonan), with presentations on the topics “Current status and future of the Korean Board of Medical Physics” and “Operation of specialized education in Korean Medical Physics and cooperation with KMPCB”, respectively. After that, there was a panel discussion and ceremony for four KBMP qualifications this year, adding the meaning of IDMP.

# IDMP Celebration Reports

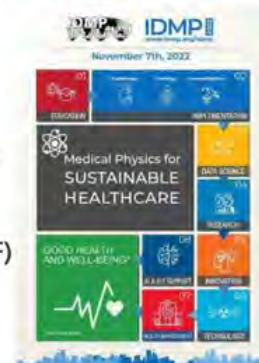
## Report from the Korean Society of Medical Physics (KSMP)



### Celebratory Symposium of IDMP 2022 in Korea

#### *"Medical Physics for Sustainable Healthcare"*

- **Date and time** Nov. 7, 2022, 17:00-20:00 KST
- **Organizer** Korean Society of Medical Physics(KSMP)
- **Sponsor** IOMP, AFOMP
- **Venue** Hi Youth Hostel, Seoul Korea(Oval room, B1F)



Program		
17:00-17:10	Welcome address & Congratulatory message	Dr. Se Byeong Lee (President of KSMP) Dr. Arun Chougule (President of AFOMP)
17:10-17:25	Current status and future of Korea Medical Physics Professional Certificate (KBMP)	Professor Kyo Chul Shin (Dankook University Hospital)
17:25-17:40	Operation of specialized education in Korean Medical Physics and cooperation with KMPCB	Professor Chul Kee Min (Cheonan Soonchunhyang University Hospital)
17:40-17:50	Discussion	
17:50-18:00	Korean Board of Medical Physics Certification Ceremony	
18:00-20:00	Dinner reception	



# IDMP Celebration Reports

## Report from the Malaysian Association of Medical Physics (MAMP)

Multiple hospitals and universities in Malaysia have celebrated IDMP 2022 through various activities. Some of the event posters are shown below:



MAMP translated the IDMP2022 Poster in Malay Language

# IDMP Celebration Reports

## Report from the Malaysian Association of Medical Physics (MAMP)





### INTERNATIONAL MEDICAL PHYSICS DAY 2022 "MEDICAL PHYSICS FOR SUSTAINABLE HEALTHCARE"

**ORGANISER :** MEDICAL PHYSICS UNIT HPUPM IN COLLABORATION WITH RADIOLOGY DEPARTMENT, SERDANG HOSPITAL

**DATE :** 8 NOVEMBER 2022 (Tuesday)

**TIME :** 8.00am - 4.00pm

**VENUE :** EDU FOYER, LEVEL 1, HPUPM

**PROGRAMMES :**

- Introduction of Medical Physics Unit by Prof Madya Dr Noramaliza
- Talk "Medical Physicist in Ministry of Health" by Puan Tuan Solawati binti Tuan Muda (Medical Physicist in IKN)
- Montage video from IOMP President
- Radiological Protection Booth & Physics tools corner
- DEMO for radiation survey meter, lead gown, radiation detector, ultrasound
- DEMO emergency preparedness radioactive
- Activity: Quizzes (Early birds will get exclusive souvenirs)

**"ALL ARE WELCOME TO JOIN US!"**

For Any Enquiries Contact: 03-97699553 Or Email: [atikaamylia@upm.edu.my](mailto:atikaamylia@upm.edu.my)

Cooperation Between:



RADIOLOGY DEPARTMENT,  
SERDANG HOSPITAL



MALAYSIAN ASSOCIATION  
OF MEDICAL PHYSICS (MAMP)



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<https://www.upm.edu.my>



Celebration of IDMP2022 by University Putra Malaysia based in the central part of Malaysia

# IDMP Celebration Reports

## Report from the Malaysian Association of Medical Physics (MAMP)



Celebration of IDMP2022 by the University of Science Malaysia based in Northern part of Malaysia



The 12th International Seminar on Medical Physics was held on 17 – 18 December 2022 in the Northern part of Malaysia. There was a special session on the IDMP 2022 celebration during the seminar. The video montage can be viewed here: <https://youtu.be/rud4cAbfCdO>

# IDMP Celebration Reports

## Report from the Medical Physics Leadership and Mentoring Group

The Medical Physics Leadership and Mentoring Group has produced a video for the celebration of IDMP 2022. The video can be viewed on YouTube (<https://www.youtube.com/watch?v=tbDjMyTxvIE&t=1s>)





# IDMP Celebration Reports

## Report from MEFOMP

### MEFOMP Country Members Celebrated the International Medical Physics Day 2022

Country members of the Middle East Federation of Organizations of Medical Physics celebrated the International Day of Medical Physics 2022 in their respective countries, with this year's theme "**Medical Physics for Sustainable Healthcare**" with focus on education, research and innovation as some of the essential fields for good health and well-being.



*Photo 1: Iraqi Medical Physics Society IDMP Celebration 2022*

The Iraqi Medical Physics Society (IMPS) organized the celebration at Al- Zahraa University for Women, Karbala, Iraq. The celebration emphasized the importance of medical physicists in modern treatment techniques. Lectures were also held during the celebration with topics: Patient Dose Verification in IMRT technique (gamma factor) delivered by Dr. Azin Alireza Band, Consultant Medical Physicist; Recent Radiotherapy Techniques in Iraq delivered by Dr. Hussam Regab; and The Cyclotron in Medical Physics delivered by Dr. Mohamad Anwar, an expert in nuclear medicine. Several medical physicists from all over Iraq attended this celebration.

# IDMP Celebration Reports

## Report from MEFOMP



*Photo 2: IDMP celebration at Sultanate of Oman*

At the Sultanate of Oman, the Medical Physics Unit at the Sultan Qaboos Center for Cancer Treatment and Research celebrated the IDMP 2022 with presentation on the role and responsibilities of medical physicists. The key aim was to build a greater awareness of the value of Medical Physicists contribution to radiology department in providing safe care for patients and workers in the field of radiology.



*Photo 3: Qatar Medical Physics Society (QaMPS)*

# IDMP Celebration Reports

## Report from MEFOMP

Meanwhile, the Qatar Medical Physics Society (QaMPS) celebration was preceded by a meeting of the QaMPS members. Dr Huda al Naemi, presented the achievements of the year, including numerous number of training activities and the publication of 19 papers by medical physicists in HMC.

Dr. Huda announced the winner of IOMP IDMP-2022 award for the region which was given to a QaMPS member, Dr. Rabih Hammoud (MEFOMP Treasurer). She also announced the winner of MEFOMP Young Scientist Award 2022 which was also given to a QaMPS Member, Dr. Hadi Fayad.

For its local annual awards, QaMPS announced this year winner of the Physicist of the Year Award 2022 which was Mr. Osman Taha; and Scientific Publication Award 2022 which was given to Dr. Tarraf Torfeh. An Appreciation Certificate was given to Mr. Sultan Ahmed in recognition of his long services and appreciation of his contribution to Nuclear Medicine and Medical Physics in Qatar.

Medical Physics country organizations in the middle east celebrated the IDMP with with emphasis on the importance of medical physics in healthcare and in line to this year's theme.

# IDMP Celebration Reports

## Report from the Pakistan Organization of Medical Physicists (POMP)

### 5<sup>th</sup> Annual National Conference Celebration

[Dated: Nov 19th, 2022]

**Collaboration POMP:**

(Pakistan Organization of Medical Physicist)

**Organized By:**

(Department Of Radiotherapy – Dr. Ziauddin Hospital, Karachi)

### Background History:

Since 2013, 7th of November has been internationally celebrated as international day of medical physics (IDMP) in the recognition of Marie Sklodowska- Curie's contribution in the field of radioactivity, who was born on this day 1867 in Poland. Pakistan Organization of Medical Physicists (POMP) was founded in 2012 to promote medical physics community in Pakistan as well as internationally. POMP believes to interact and gather the community of Pakistan's medical physicists (MPs), professionals and students under one umbrella, with this platform aiming to deliver the professional guidelines and important aspect of MPs as associated part of healthcare workforce professional's state by the international labor organization (ILO), classify internationally standard of occupation (ISCO).

This year's theme of the IDMP set by International Organization of Medical Physics (IOMP) is "Medical Physics for Sustainable Healthcare". This annual conference is 5th in a row. The thematic areas of the conference were radiation oncology, nuclear medicine, radiology and medical physics sustainable health care. This year, Dr. Ziauddin Hospital, Karachi hosted this event at their institute for the second time.

### Insights Highlights:

Reference to the 5th annual national conference on international day celebration of medical physics (IDMP) on dated Nov 19th, 2022, organized by department of Radiotherapy, Dr. Ziauddin Hospital in collaboration with Pakistan organization of medical physicists (POMP). As to highlights the internationally significant sights of medical physics profession in the subject of "Medical Physics for Sustainable Healthcare", various hospitals professional members, medical physics faculty members of universities, especially the students of physics, Ph.Ds., radiation oncologists, technologists from all over the Pakistan participated in this conference and also presented their research works. This event was recognized by IOMP this year by the combined effort of all medical physicists of Pakistan.

On the day of conference invited professional guest share their remarkable talks to highlights the importance of medical physics and their life time professional experiences as motivation for professionals and students.

# IDMP Celebration Reports

## Report from the Pakistan Organization of Medical Physicists (POMP)

The POMP's scientific committee plays a significant role in this conference. Abstracts received from all over the Pakistan were selected by members of the scientific committee for oral presentation and poster competition. This committee also evaluated the poster presentation competition and oral presentation as well.

Every year we present life time achievement awards to honor the services of scientists who have served in promoting the field of medical physics in Pakistan. This year, Mr. Asdar ul Haq, Chief Scientist, Pakistan Atomic Energy Cancer hospital, KIRAN was presented this award.

Chief Guest: Mr. Muhammad Rahman , Member (Executive), one of the two full time members of the Pakistan Nuclear Regulatory Authority (PNRA) and has the overall responsibility of the Executive Wing. The technical directorates including Directorate of Nuclear Safety (NSD), Directorate of Physical Protection and Nuclear Security (PPSD), Directorate of Radiation Safety (RSD) and Directorate of Transport and Waste Safety (WSD) are working under his supervision.

Many other activities related to medical physics and awards were arranged in this event such as; PNRA exhibited their equipment, career counseling booth in which experts counseled and advised students about the future aspects and opportunities, poster presentation competition.

Live question answer session with Faiz M. Khan, Ph.D., Professor Emeritus, University of Minnesota Medical School Minneapolis, Minnesota via zoom link. It was a very interactive session because all the participants got the chance to interact with Faiz M. Khan.

Members of organizing team: Dr. Jawaid A. Mallick ( Head Cancer Hospital), Mr. Asghar Hussain (Principal Medical Physicist) and their team from Dr. Ziauddin Hospital  
Dr. Almas Farhan from CPE department  
Mr. Syed Mishkat Ali Jafri from PNRA

### **Sponsors:**

ALARA enterprises safety comes first  
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# IDMP Celebration Reports

## Report from the Pakistan Organization of Medical Physicists (POMP)



Chief Guest: Mr. Muhammad Rahman , Member (Executive)



Dr. Almas Farhan, director CPE, Ziauddin University, Dr. Mansoor Naqvi and Mr, Asghar Husaain, Pr. Medical Phycists, Dr, Ziauddin Cancer Hospital were welcoming the Chief guest



Chief host: Mr. Ammad Hussain, Chief Executive, Dr. Ziauddin Hospital



Life time achievement award ceremony



Live session with Faiz M. Khan, Ph.D., Professor Emeritus, University of Minnesota Medical School Minneapolis, Minnesota via zoom link.

# IDMP Celebration Reports

## Report from the Pakistan Organization of Medical Physicists (POMP)



Top: Ms. Noreen Marwat, Pr. Medical Physicists, AECH-NORI, Islamabad  
 Bottom left: Dr. Intikhan Ulfat, Professor, University of Karachi.  
 Bottom right: Dr. Sohail Sabir, Pr. Scientists Pakistan Nuclear Regulatory Authority



Prize given to best oral presenters, poster presenters and question asked from audience



Top: PNRA stall with equipment  
 Bottom: ALARA enterprises safety comes first stall



Top: Poster presentation session  
 Bottom: Group photograph with scientific committee

# IDMP Celebration Reports

## Report from the Thai Medical Physicists Society (TMPS)



### Celebration of International Day of Medical Physics 2022 in Thailand

By

Anchali Krisanachinda, Sivalee Suriyapee, Taweap Sanghangthum, Kitiwat Khamwan

Thai Medical Physicist Society (TMPS)

Bangkok, Thailand

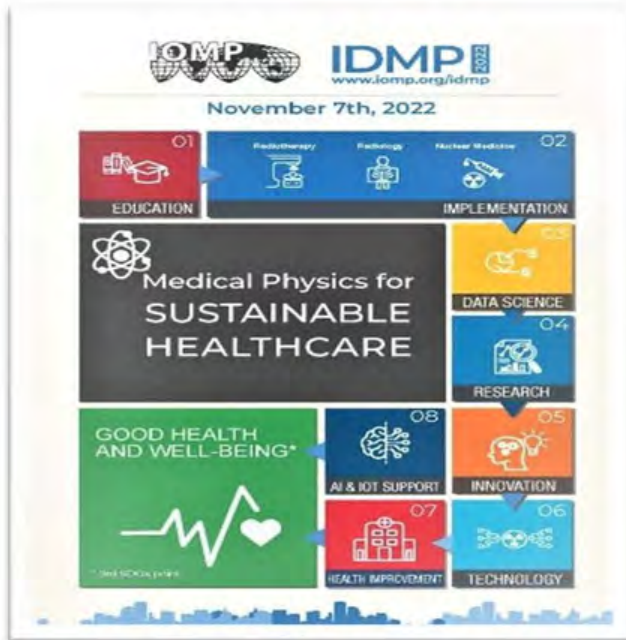
On November 7, 2022, Thai Medical Physicist Society celebrates IDMP 2022 at the 12<sup>th</sup> floor Bhumisiri Building, Room Number 1208, Faculty of Medicine, Chulalongkorn University and King Chulalongkorn Memorial Hospital. The celebration started at 08.30 until 12.30 hr. There are 50 participated on site and 20 participated online. The celebration of IDMP Awards 2022 – Dr.Anchali Krisanachinda, was organized. The program and photos are as followings:

08.30	Registration
09.00	Report the objective of the IDMP2022 celebration by Dr.Anchali Krisanachinda, TMPS President
09.05	Opening by Dean, Faculty of Medicine and Director of KCMH
09.15	Video on “Role and Responsibility of Medical Physicists in Radiation Medicine”
09.30	Vision of Radiologist on the Role of Medical Physicist by Dr.Jarturon Tantivatana, President, Radiological Society of Thailand
09.45	Medical Physics License in Thailand by Dr.Arkorn Praditsuwan, Ministry of Public Health
10.15	COFFEE BREAK
10.30	Introduction of Six Medical Physics Education Programs in Thailand Dr.Puangpen Tungboonduangjit, Ramathibodi Hospital, Mahidol University Mr.Pitchayut Nakkrasae, Siriraj Hospital, Mahidol University Dr.Wannapa Nobnob, Chiang Mai University Dr.Taweap Sanghangthum, Chulalongkorn University Dr.Sumalee Yabsantia, Naresuan University Dr.Thodsaporn Fuangrod, Chulabhorn Royal College
12.30	Closing by TMPS President



# IDMP Celebration Reports

## Report from the Thai Medical Physicists Society (TMPS)



# IDMP Celebration Reports

## Report from the Thai Medical Physicists Society (TMPS)



# IDMP Celebration Reports

## Report from the University of São Paulo, Brazil

An interview with Associate Professor Paulo R. Costa from the University of São Paulo for the celebration of IDMP2022: <https://www.youtube.com/watch?v=i5bliuMhQoQ>.



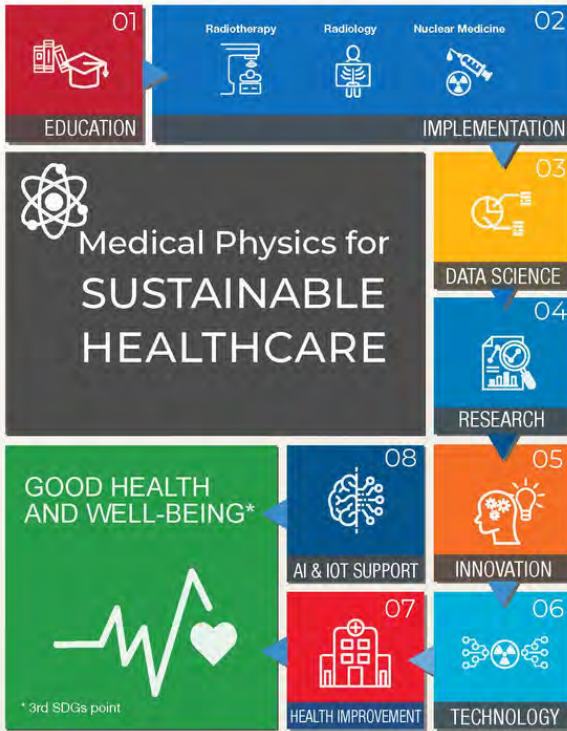
A winning video from the medical physics students during a video contest organised by the University of São Paulo in the celebration of IDMP2022: <https://www.youtube.com/watch?v=8LOHE9Ld-I>





**IDMP** 2022  
www.iomp.org/idmp

November 7th, 2022



English



**IDMP** 2022  
www.iomp.org/idmp

اليوم العالمي للفيزياء الطبية ٧ نوفمبر ٢٠٢٢



Arabic



**IDMP** 2022  
www.iomp.org/idmp

7 November 2022



Malay



**IDMP** 2022  
www.iomp.org/idmp

Dia Internacional da Física Médica  
7 de novembro de 2022



Portuguese

# IAEA Occupational Radiation Protection 2022 Report

## Christy Mae Betos

Radiation Protection Services Section, DOST – Philippine Nuclear Research Institute, Philippines

## Kristine Marie Dean

Radiation Protection Services Section, DOST – Philippine Nuclear Research Institute, Philippines

## Kwan Hoong Ng

Department of Biomedical Imaging, Faculty of Medicine, Universiti Malaya, Kuala Lumpur, Malaysia

The International Conference on Occupational Radiation Protection: Protecting Workers Against Exposure to Ionizing Radiation, was held in Geneva, Switzerland, from 5th to 9th September 2022. It was hosted by the Government of Switzerland and organized by the International Atomic Energy Agency (IAEA), co-sponsored by the International Labour Organization (ILO).

The conference offered an opportunity for international radiation protection experts, representatives of regulatory bodies, workers and employers involved in the use of radiation sources and operations handling radioactive material, students, and observers to learn and share information on the current status of international occupational radiation protection. Over 700 participants (280 attended in person) from 105 member states, and 17 international organizations and associations attended the event. The participants actively discussed the challenges and progress in the management, implementation, and development of occupational radiation protection policies, standards and activities.

The opening sessions highlighted the activities of international organizations namely IAEA, ILO, European Commission (EC), World Health Organization (WHO), the Nuclear Energy Agency of the Organization for Economic Co-operation and Development (OECD/NEA), the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), International Commission on Radiological Protection (ICRP), and International Radiation Protection Association (IRPA) regarding occupational radiation protection. Continuous review and implementation of the IAEA Basic Safety Standards, ILO Convention No. 115, UNSCEAR's occupational exposure latest reports and evaluations, monitoring of scientific and technological developments, initiation of ICRP documents for review and revision of the System of Radiological Protection, knowledge management, practical applications, and international cooperations were discussed.

A series of topical sessions and round table discussions covered selected areas on occupational radiation protection. Invited presentations, summary of contributed papers, identified recommendations, and plenary discussions with the audience focused on:

- Review of standards and recommendations of occupational radiation exposure at the international, regional, and national levels including experiences and feedback from their implementation

# IAEA Occupational Radiation Protection 2022 Report

- Monitoring and dose assessment of occupational radiation exposures including operational quantities for exposure and emerging dosimetry technologies
- Radiation effects, risks surrounding occupational health and safety of worker's, and worker's health surveillance
- Health risk management approaches and considerations
- Occupational exposure levels and national dose registries including suggestions on implementation on a regional level
- Occupational radiation protection in industrial, research, and education facilities
- Occupational radiation protection in nuclear power plants and nuclear fuel cycle facilities including updates on the maintenance of the Fukushima Daiichi Nuclear Power Station
- Occupational radiation protection in workplaces involving naturally occurring radioactive material (NORM), radon, and cosmic rays with emphasis on experience exchange for establishment of regulatory requirements and/or improvement of regulation and management
- Occupational radiation protection in medicine, occupational exposure control, and training of healthcare professionals
- Optimization of radiation protection, information systems (e.g. ISOMIR), and roles, opportunities and challenges of existing networks (such as ORPNET, ALARA networks)
- Technical service providers in occupational radiation protection including strategies on capacity building and involvement of stakeholders
- Education and training in occupational radiation protection
- Safety culture and organizational safety practices in occupational radiation protection
- Regional challenges in implementing occupational radiation protection
- Role, challenges, and contributions of young professionals in radiation protection

Poster sessions for each topic were held to promote discussion and networking among participants.

The closing session with the theme *“Strengthening of radiation protection of workers: Twenty years of progress and way forward”* concluded with highlight all key issues and recommendations. The main takeaways from the conference were the importance of regulatory framework for improving regulatory control over occupational exposure; accurate and reliable occupational radiation dose assessment; quality education and training to improve safety culture; use of new operational quantities and emerging dosimetry system technologies; involvement of stakeholders, employers, workers' trade unions, and international organizations in promoting accessibility to occupational health and safety services, risks involving exposure from planned and existing exposure situations surrounding natural sources of radiation (such as NORM, radon, and cosmic rays); systematic, graded, and holistic approach to radiation protection systems; impacts of networks, databases, systems in improving the radiation protection systems; scientific evidence backing up the risks involved in occupational exposure and possible effects; processes and new technologies involved in optimization of radiation protection; regional challenges in implementing occupational radiation protection and proposed solutions; and ways to revitalize the radiation protection field by encouraging engagement with young professionals through mentorship programs and inclusion in organizations and activities.

# IAEA Occupational Radiation Protection 2022 Report

Overall, the conference was timely in exchanging information and experience as well as identifying global priority actions and situations on radiation protection of workers to address future needs. Continuous effort and support are key aspects in strengthening the radiation protection community and developing continuous competence in occupational radiation protection.



Photo credit:  
IAEA and the Federal  
office of Public health,  
Switzerland

IAEA Director General giving his welcome opening address.



Group photo of participants taken after the opening ceremony

# MEFOMP Workshop: Brachytherapy Planning and Quality Assurance

## Nabil Abdelqader Abdullah Iqeillan

Medical Physics Section, Hamad Medical Corporation  
NIqeillan@hamad.qa

The Middle East Federation of Organizations of Medical Physics (MEFOMP) in cooperation with the International Atomic Energy Agency (IAEA) organized a workshop on 7 to 9 November 2022 in Kuwait. The workshop focused on improving treatment planning and delivery knowledge with High Dose Rate Brachytherapy (HDR) and to further strengthening the current HDR brachytherapy practice for gynaecological and prostate brachytherapy.

This workshop provided up to-date knowledge in topics of patient selection, implementation of planning technique, requirement for establishing a safe and high quality Brachytherapy program and development in the field.

The workshop main objectives are:

- Understanding the clinical rationale for HDR brachytherapy for gynecological and prostate brachytherapy
- Learning about radiobiology of Brachytherapy treatment
- Understanding the basics of Image guided Brachytherapy including commission and QA
- Learning about Commissioning and QA of treatment planning system
- Knowing applicator choice for various sites
- Made aware of treatment planning for interstitial and intracavitary Brachytherapy
- Introduction of the treatment delivery of interstitial and intracavitary Brachytherapy
- Learning the Quality assurance needed in Brachytherapy
- Learning radiation protection aspects in Brachytherapy procedures
- Demonstration of Brachytherapy procedures for different sites

The conference organizing committee was honored to invite experts and pioneers in the field to deliver lectures and participate in the live discussions and MCQs. More than 100 participants registered for the workshop. We would like to thank Kuwait Foundation for the Advancement of Sciences (KFAS), ATC and Sultan united for sponsoring this event.

All the recordings of the conference presentations are available on MEFOMP Academy website: <https://mefomp.academy>



# MEFOMP Workshop: Brachytherapy Planning and Quality Assurance



Kuwait Cancer Control Center (KCCC)  
in conjunction with Middle East Federation of Medical  
Physics (MEFOMP) welcome delegates to:

## MEFOMP Conference on Brachytherapy Planning and Quality Assurance

**7 to 9 November 2022**

**Venue: Hilton Garden Inn  
The Avenues Mall**

Sponsored by:



# MEFOMP Workshop: Brachytherapy Planning and Quality Assurance

Middle East Federation of Medical Physics Conference:  
 "Brachytherapy Planning and QA"  
 7-9 November 2022

## Monday 7<sup>th</sup> November 2022

Time	Presentation	Speaker
9:00-9:30	Opening Remarks	Dr. Meshari Al-Nuaimi
<b>Moderator: Dr.Sheaka Alobaidli, Dr.Mohammed Alaswad</b>		
9:30-9:50	Introduction to BT: the past, the present, and the future	Prof. Frank-Andre Siebert
10:00-10:20	Clinical indications for BT	Dr. Yaser Hasan
10:30-10:50	Physics and Radiobiology of BT	Dr.Saad Aldeleijan
11:00-11:30	Coffee Break	
<b>Moderator: Dr.Hanan Aldousari, Dr. Habib Ashoor</b>		
11:30-11:50	Brachytherapy in Kuwait	Dr. Ola Zoueil
12:00-12:20	Concepts of Intracavitary vs. Interstitial BT	Dr.Aishah AlQaderi
12:30-2:00	Lunch Break	
<b>Moderator: Dr.Sheaka Alobaidli</b>		
2:00-3:00	Brachytherapy product solutions	Varian
3:00-3:30	General Discussion	

## Tuesday 8<sup>th</sup> November 2022

Time	Presentation	Speaker
<b>Moderator: Dr.Ola Zoueil</b>		
9:00-9:20	Image guided BT	Dr.Saad Aldeleijan
9:30-9:50	Commissioning of a BT program	Prof. Frank-Andre Siebert
10:00-10:20	Quality assurance in BT	Dr.Saad Aldeleijan
10:30-10:50	Imaging QA, CT, MR, Ultrasound...	Dr.Sheaka Alobaidli
11:00-11:30	Coffee Break	
<b>Moderator: Dr.Mohammed Alaswad, Dr. Habib Ashoor</b>		
11:30-11:50	Prostate BT	Prof. Frank-Andre Siebert
12:00-12:20	Planning Prostate BT	Prof. Frank-Andre Siebert
12:30-2:00	lunch	
<b>Moderator: Dr.Mohamed Sherif</b>		
2:00-3:00	Dosimetry equipment	PTW
3:00-3:30	Motion Management	VisionRT
8:00 PM	Gala Dinner	

## Wednesday 9<sup>th</sup> November 2022

Time	Presentation	Speaker
<b>Moderator: Dr. Habib Ashoor, Dr.Mohammed Alaswad</b>		
9:00-9:20	GYN BT	Dr.Saad Aldeleijan
9:30-9:50	Planning GYN BT	Dr.Saad Aldeleijan
10:00-11:00	Demo BT Planning System	Varian
11:00-11:30	Coffee Break	
<b>Moderator: Nashwa Nazmy</b>		
11:30-11:50	Dose Prescription, clinical regimen and plan evaluation in BT	Dr.Yaser Hasan
12:00-12:20	Radiation Protection/Safety	Dr.Ola Zoueil
12:30-2:00	Lunch	
<b>Moderator: Dr.Ola Zoueil</b>		
2:00-3:00	Brachytherapy product solutions	Elekta
3:00-3:30	Demo BT Planning System	Elekta
3:30-4:00	Workshop evaluation	
4:30 -5:30	Visit to Radiation oncology department at KCCC	

# MEFOMP Workshop: Brachytherapy Planning and Quality Assurance



# The First Regional Conference of the Federation of African Medical Physics Organizations (FAMPO) Report

## Christoph Trauernicht

President of FAMPO  
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## Francis Hasford

Vice President of FAMPO  
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The first conference of the Federation of African Medical Physics Organizations (FAMPO) was held in Marrakech, Morocco, from 10 – 12 November 2022. The conference was hosted by the Moroccan Association for Medical Physics, with substantial local support.

The objective of the conference was to provide a platform for the exchange and sharing of scientific ideas and experiences in all aspects of the profession – hence the broad theme of the conference “From Imaging to Treatment” was chosen to be as inclusive as possible. The conference was meant to happen in 2019 already, but virtual conference options were rejected in favour of a first meeting that would be in-person.



# The First Regional Conference of the Federation of African Medical Physics Organizations (FAMPO) Report

The opening ceremony was attended by the presidents of Mohammed V and Cadi Ayyad Universities in Morocco, who signed a memorandum of understanding at that time. In addition, the Director of the National Graduate School of Arts and Crafts, the Director of the National Centre for Energy Sciences and Nuclear Techniques, and selected members of FAMPO ExCom, led by the president, were also present. The local team, under the chairmanship of Lakbir El Hamidi, as well as the co-chair, Asma Chaik, worked hard to make the conference a success.

The conference consisted of a combination of plenary sessions, teaching lectures, oral and poster presentations, as well as vendor workshops. The venue – Complexe Administratif et Culturel, Mohammed VI – was spectacular, showcasing exquisite architecture and fine mosaic patterns.



*The conference venue*

# The First Regional Conference of the Federation of African Medical Physics Organizations (FAMPO) Report

The conference attendance was excellent, with more than 200 participants at the conference, plus invited speakers and sponsors. The International Atomic Energy Agency has invested quite heavily in medical physics in Africa and supported this conference as well. The American Association of Physicists in Medicine had representatives from the Global Representatives Subcommittee and the Global Medical Physics Education and Training Committee who attended the conference, and Medical Physics for World Benefit also had a speaker at the conference.



*Group photo*



*The IOMP, who supported the conference from even before the pandemic, was very glad that the conference was finally re-instated.*

# The First Regional Conference of the Federation of African Medical Physics Organizations (FAMPO) Report

One of the challenges of hosting a regional conference in Africa is that many participants must leave Africa, in order to get back into Africa to attend. Flight routes are not back to pre-Covid levels yet. With this in mind, it was extremely encouraging to see the number of Moroccan participants who came from all over the country to participate in the meeting; especially students and young professionals took advantage of this opportunity. It was the aim of the Moroccan association to use this conference as a springboard for the profession, and by all accounts this could very well be the case.

Invited speakers gave fantastic talks on topics ranging from machine learning in nuclear medicine to the importance of audits for innovative radiotherapy techniques, from hypofractionated treatments and stereotactic radiotherapy to 50 years of the IAEA postal dose audit results, from quantification challenges in PET/CT to diagnostic reference levels, or from new horizons in multimodality imaging technology to a novel model for medical physics education. Collaboration avenues were explored and discussed, professional networks were built and expanded. This was very motivating!

While many lessons were learned from an organizational perspective, it is fair to say that the conference was well-received and enjoyed. Perhaps in future an additional day or more parallel sessions are required for more African research to be presented.

The Moroccan gastronomy was relished, and the sights and sounds of Morocco were savoured. We thank the local organizers for hosting a successful conference!



Until the next FAMPO conference!



Participants engaged with vendors, who made many new contacts.

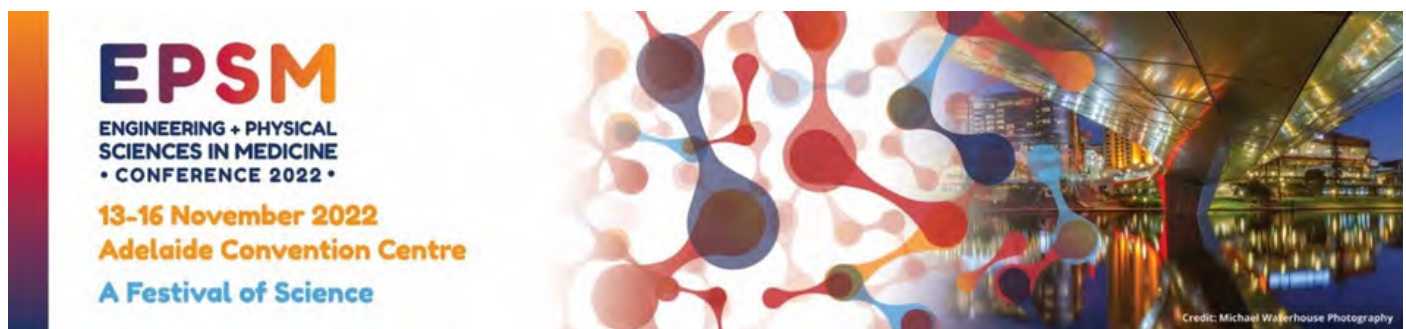
# Engineering & Physical Sciences in Medicine Conference (EPSM) 2022 Report

## Stéphanie Corde

Radiation Oncology Department, Prince ofWales Hospital, Randwick;  
Centre for Medical Radiation Physics, University ofWollongong;  
Illawara Health and Medical Research Institute, University of Wollongong, NSW, Australia

## Marcus Doebrich

Physical Sciences, Peter MacCallum Cancer Centre, Melbourne, VIC, Australia



After three years of virtual meetings, the Engineering & Physical Sciences in Medicine Conference (EPSM) was successfully held in-person in Tarntanya / Adelaide, Australia, from November 13 to 16 2022. Hosted by the Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM), this annual event gives us an opportunity to come together as a community and allow us to share and celebrate the passion for science that unites us all. Convened on the traditional country of the Kurna people, Tarntanya / Adelaide is the capital of South Australia, which is also known as The Festival State. Based on this, the theme of this year's conference was "A Festival of Science", which reflected our vision to provide a space that supports scientific interaction in a cheerful, peaceful, inclusive, and entertaining environment while at the same time providing a forum for world class researchers.

The festivities began on Sunday 13 November with a full-day pre-conference hands-on workshop on using Artificial Intelligence with clinical data, followed by a Welcome Reception.

The conference officially started the next day with a Welcome to Country ceremony from Jack Kanya Buckskin, a fluent speaker of the Kurna language, followed by Welcome remarks from Prof Eva Bezak (AFOMP Vice-President) and Dr Kym Rykers (ACPSEM President). The EPSM 2022 Co-Convenors, A/Prof Stéphanie Corde and Dr Marcus Doebrich, had the privilege to welcome the delegates on behalf of the EPSM 2022 Organising Committee before the first plenary lecture started.



# Engineering & Physical Sciences in Medicine Conference (EPSM) 2022 Report



*Welcome to Country by Jack Kanya Buckskin*

*"The Organising Committee identified two key commitments for EPSM 2022: Sustainability and Diversity, Equity and Inclusion (DEI)"*



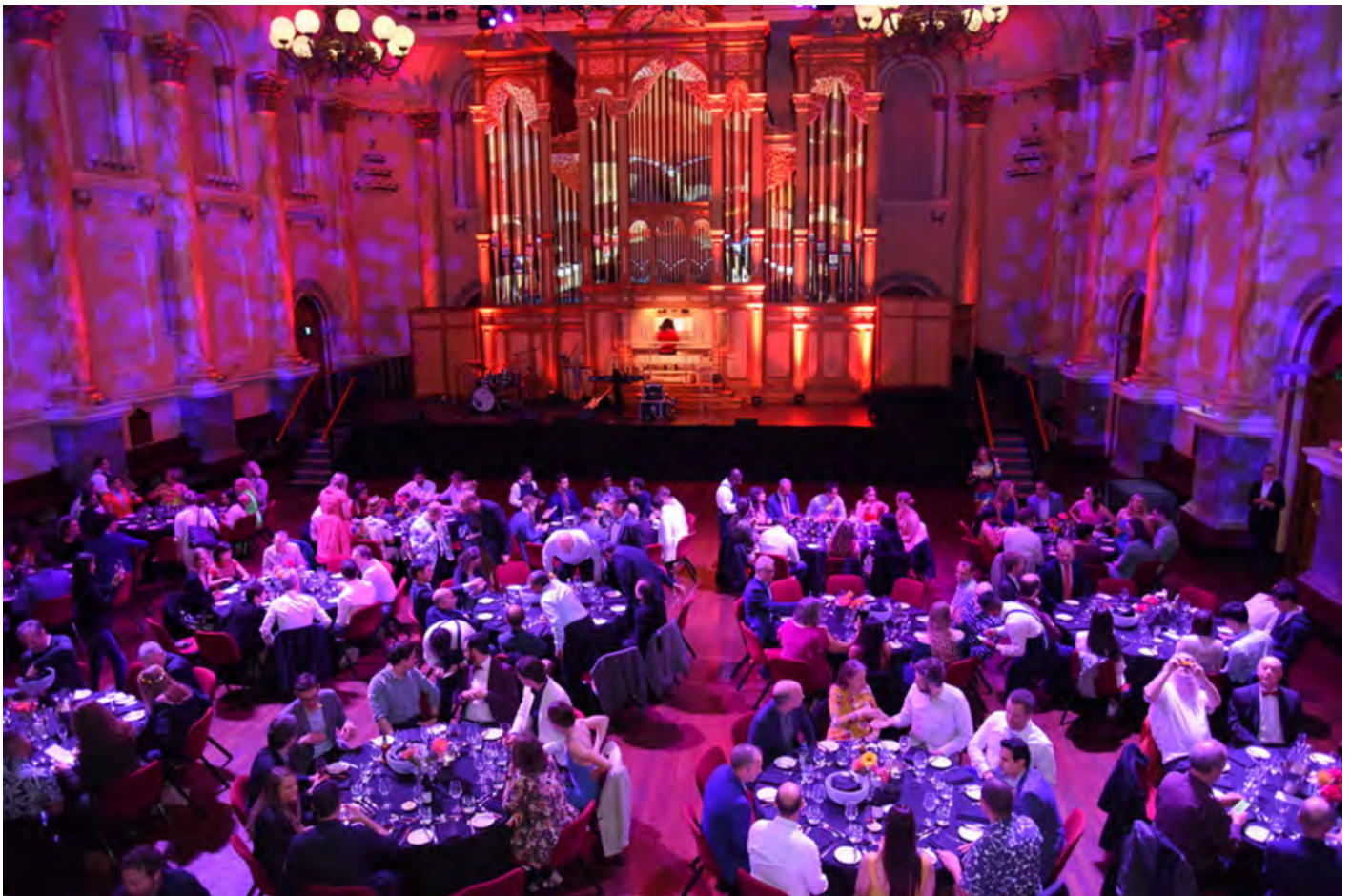
We were particularly honoured and grateful that A/Prof Magdalena Bazalova-Carter (University of Victoria, Canada), Prof Ernesta Meintjes (University of Cape Town, South Africa), Prof Marcel Van Herk (University of Manchester, United Kingdom), and Prof Zéna Wimana (Jules Bordet Institute, Belgium) accepted our invitation to join us in Adelaide as international keynote speakers. Their contributions to the EPSM conference were simply invaluable, not only due to the quality of their scientific contributions but also because of their active engagement during all aspects of the conference.

The Organising Committee identified two key commitments for EPSM 2022: **Sustainability and Diversity, Equity and Inclusion (DEI)**. Beyond the slogans, we organised this conference with both in mind and took some initiatives in these directions. Our inaugural DEI session was a program highlight, with an excellent virtual presentation from Dr Julianne Pollard-Larkin (University of Texas, USA) on how medical physics could lead the way for DEI in Science, Technology, Engineering, and Math (STEM). While we were delighted that EPSM was back face-to-face, we recognised that not all members of the community could join us in person this year for reasons including, but not limited to, the location of EPSM 2022, current workforce shortages, accessibility, parenting commitments, and financial constraints. For the first time, ACPSEM offered a reduced virtual program comprised of keynote presentations and selected program sessions which were also live-streamed in real-time during the conference. The ACPSEM/AFOMP and ESTRO joint sessions were successfully run as a hybrid model and allowed guest speakers from Europe and Asia-Oceania to join us virtually. Additionally, a three-hour virtual satellite event on Radiopharmaceutical Sciences was extremely popular.

# Engineering & Physical Sciences in Medicine Conference (EPSM) 2022 Report

To complete the invited talks from 14 national speakers, 214 abstracts were blindly reviewed to build the core of the scientific program. They were all accepted, with 122 oral and 92 posters presentations offered. Abstracts will be published soon in the Physical and Engineering Sciences in Medicine (PESM) journal.

As far as the social program is concerned, the Asia-Pacific Special Interest Group (APSIG) Trivia Night on Monday was an excellent opportunity to enjoy a night out while testing our knowledge about all things music, movies, celebrities and more! Donations made to the ACPSEM Better Healthcare Technology Foundation's APSIG will help building capacity and increasing access to radiation oncology services in the Asia-Pacific region. On the final evening, the gala dinner, sponsored by Gamma Gurus, was a true Festival of Lights, music and food! The Adelaide Town Hall auditorium was decorated with a magnificent light display, and the EPSM 2022 delegates enjoyed 15 minutes of organ music upon arrival.



*The Adelaide Town Hall illuminated for the EPSM 2022 gala dinner*

# Engineering & Physical Sciences in Medicine Conference (EPSM) 2022 Report

The ACPSEM Better Healthcare Technology Foundation prizes were awarded during the gala dinner. Our heartiest congratulations go to:

- A/Prof Lois Holloway, recipient of the 2022 ACPSEM Distinguished Services Award
- Dr Alexander Santos, recipient of the 2022 Boyce Worthley Early Career Award
- Dr Elette Engels, recipient of the 2022 PhD Award
- Sandra Fisher, recipient of the 2022 Clinical Leadership Award
- Dr Damion Stinson, recipient of the 2022 Richard Bates Travel Award
- T. Young, J. Dowling, R. Rai, G. Liney, P. Greer, D. Thwaites and L. Holloway, authors of the publication “Effects of MR Imaging time reduction on substitute CT generation for prostate MRI-only treatment planning” (Phys Eng Sci Med. 2021 Sep;44(3): 799-807. DOI: 10.1007/s13246-021-01031-0), recipients of the 2022 Kenneth Clarke Journal Award.

During the closing ceremony on 16 November, the EPSM 2022 presentation prizes were awarded. Congratulations to all the winners!

Presentation Prize	Prize Recipient	Presentation Title
Best Therapy Oral	Michael VALCESKI (University of Wollongong)	Unveiling the mechanisms and efficacy of radiosensitiser-enhanced synchrotron radiation therapies in vitro
Best Imaging Oral	Chandrima SENGUPTA (ACRF ImageX Institute)	First in-human use of real-time tumour tracking for liver SBRT on a standard Elekta linear accelerator
Best Therapy Poster	Tony YOUNG (Liverpool Hospital)	Dose variation in pancreas SBRT – A planning study based on daily MR imaging
Best Imaging Poster	Anthony BAKER (Nepean Hospital)	Automated analysis of NEMA tomographic contrast and absolute quantification accuracy
Best TEAP Oral	Robert FINNEGAN (Northern Sydney Cancer Centre)	Knowledge transfer for generating open-access auto-contouring tools
Best Graduate Oral	Ashleigh HULL (University of South Australia)	In vitro characterisation of <sup>225</sup> Ac-DOTA-C595 as targeted alpha therapy for pancreatic cancer

# Engineering & Physical Sciences in Medicine Conference (EPSM) 2022 Report

Additionally, the highly coveted “QR code competition” prizes were awarded for the persons who engaged the most with all of what the EPSM 2022 conference had to offer (including the Fun Run!). Well done everyone!



*From Left to Right: Jonathan Hindmarsh, Andrew Cousins (QR code competition winners), Marcus Doebrich (EPSM2022 co-convenor), Max Hanlon (QR code competition winner), and Stéphanie Corde (EPSM2022 co-convenor)*

The Organising Committee would like to take this opportunity to thank all the guest speakers, authors, reviewers, session chairs, prize judges, exhibitors, and sponsors for making the EPSM 2022 conference a great success.

Save the date for the next EPSM in Christchurch, New Zealand, from 5-8 November 2023!

*Credit photos: Clark Rodda, Festival City Photography.*

# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

## Shen-Hao Lee

Chairman of AOCMP 2022

## Hady Yang

Secretariat, AOCMP 2022



The 22nd Asia-Oceania Congress on Medical Physics, 2022 (AOCMP 2022), which was authorized by the Asia-Oceania Federation of Organizations for Medical Physics (AFOMP) and organized by The Chinese Society of Medical Physics, Taipei (CSMPT), was successfully held in Howard Civil Service International House, Taipei from December 10 to 12, 2022 with 532 participants from 24 countries attending (Table 1).

## Education / Workshop Program

The first day of the Congress (10th December 2022, Saturday) was designated as the Education Courses. A total of 2 categories, 8 Workshops with 23 Topics (Table 2): Therapy Workshop: Adaptive radiotherapy, Motion Management, AI and IMRT/VMAT, Particle Therapy (Figure 1) and Imaging Workshop: Fluoroscopy, MRI Safety, Diagnostic Radiation Dose, Nuclear Medicine (Figure 2).

## Opening Ceremony

The Opening Ceremony was held in Convention Hall, Howard Civil Service International House, on December 11th, 2022. In the beginning, Song Kun Traditional Arts provided an extraordinary drumming performance that impressed delegates from worldwide. (Figure 3) After the wonderful show, AOCMP 2022 Congress Chairman, Prof. Shen Hao Lee, provided a welcome address. Prof. Hasin Anupama Azhari, Secretary General of AFOMP, Prof. Jeng-Fong Chiou, President of the Taiwan Society for Therapeutic Radiology and Oncology, Prof. Hong-Jen Chiou, President of the Taiwan Radiological Society, Prof. Arun Chougule, President of AFOMP and Dr. Chung-Liang Shih, Vice Minister of Ministry of Health and Welfare, were each invited to deliver a welcome address. After the inspiring welcome address delivered by each honorable guest, AOCMP 2022 was started.

# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

## Shen-Hao Lee

Chairman of AOCMP 2022

## Hady Yang

Secretariat, AOCMP 2022

## Congress Program

The second and third days of the congress (11th to 12th December 2022, Sunday & Monday) had multiple topics, which astonished the congress more. With 2 Keynote Speech, 8 Scientific Sessions, 6 Mini-Symposiums, 1 Plenary Session and the Prof. KIYONARI INAMURA Memorial AFOMP Oration with a total of 2 Keynote Speakers and 72 Invited Faculty. Collect 48 Topics on the last two days. (Table 2), namely Scientific Session: Radiation Therapy, Artificial Intelligence, Diagnosis/Nuclear Medicine, Radiobiology/Safety, Particle Therapy and Mini-Symposium: Automatic Detection and Segmentation of Brain Lesions and Its Prediction of Prognosis in Treatment, Accurate and Targeted BNCT Makes Cancer Treatment Fantastic, Women in Medical Physics Symposium, Global Medical Physics Leadership and Mentoring Group, IOMP, Medical Engineering and Physics: From Lab to Clinical Theranostics (Figure 4).

## Abstract Submission

A total of 157 abstracts were submitted to be presented in AOCMP 2022. There were 42 oral presentations and 115 E-Poster Presentations. (Table 3) 6 best oral presentation awards, 6 best e-poster presentation awards and 9 best student awards were selected from these submitted abstracts and given during the award ceremony. (Table 4)



*Opening Ceremony*

## Award Ceremony and Closing Ceremony

Prof. Arun Chougule and Prof. Hasin Anupama Azhari were invited as the AFOMP award presenter in the award ceremony. There was a total of 6 AFOMP awards given. (Table 5) After the AFOMP award, Prof. Tomas Kron, Prof. Shen-Hao Lee and Prof. Hui-Yu Tsai were invited to provide the AOCMP with the prize to the award winner. (Figure 5)

The closing ceremony came after the award ceremony. Prof. Shen-Hao Lee, Prof. Arun Chougule and Prof. Hasin Anupama Azhari provided closing remarks to conclude the success of AOCMP 2022 and pass sincere wishes to the next AOCMP congress.

# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

## Social Program

Two official social programs were included in AOCMP 2022:

### (A) Welcome Reception

The Welcome Reception was held in Garden Cafeteria in Howard Civil Service International House on Saturday evening before AOCMP 2022 officially started on Sunday, December 11th. The Congress Committee let delegates join the welcome reception for free, allowing participants to meet experts worldwide and have more chances to communicate with each other. (Figure 6)

### (B) Gala Dinner

The Gala Dinner was held in Great Skyview. The Organizing Committee invited Formosa Aboriginal Singing and Dance Troupe to bring the most traditional dance and performance during dinner time. The invited faculties and delegates were all enjoying the show and delicacy. The well-designed program became fruitful memories in every participant's mind. (Figure 7)

## Sponsorship and Exhibition

AOCMP 2022 was supported by 18 companies from different countries. There were 19 booths in the exhibition area on both the first floor and second floor. (Figure 8) The sponsors could introduce and promote their brands and products during the congress. Moreover, the refreshment also took place in the center of the exhibition area, which allowed sponsors and participants to communicate during the coffee break. In addition to the exhibition, the sponsors also produced the flyer and advertised the congress program book. With all this effort, the sponsors could take advantage of this special occasion.



# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

**Table 1: Registration**

[Breakdown of Participants by Country/Region]

No.	Country/Region	Number of Participants
1	Australia	11
2	Austria	1
3	Bangladesh	4
4	Bulgaria	1
5	Canada	1
6	China	11
7	Germany	2
8	Hong Kong	12
9	India	16
10	Iran	3
11	Italy	1
12	Japan	43
13	Malaysia	17
14	Malta	1
15	Nepal	1
16	Philippines	19
17	Singapore	5
18	South Africa	1
19	South Korea	8
20	Sri Lanka	3
21	Taiwan	353
22	Thailand	9
23	United Kingdom	1
24	United States	8
<b>Total</b>		<b>532</b>



# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

**Table 2: Invited Faculty**

Education Course	
Speaker	Presentation(s)
Dr. Aik Hao Ng	PET/CT and SPECT/CT for Radiotherapy Treatment Planning
Dr. Atsushi Fukuda	Radiation Dose in Percutaneous Coronary Intervention
Dr. Bin Yang	Real-Time Tracking in CyberKnife and Radixact
Prof. Chai Hong Yeong	Topic 1: Optimization of Equipment and Radiation Protection in Fluoroscopically-Guided Interventional Radiology
	Topic 2: Current Development in Theranostic Nuclear Medicine
Dr. Chenyang Shen	Intelligent Online Adaptive Radiotherapy Re-Planning With AI
Prof. Frances Su	Single-Room Proton Therapy Installations: The University of Utah's Implementation of Proton Therapy
Prof. Golam Abu Zakaria	Dosimetry of Small Photon Radiation Fields
Prof. Ho-Ling (Anthony) Liu	Scanning Patients With Implants
Prof. Kin Yin Cheung	Adaptive Radiotherapy- Principles and Techniques
Dr. Kitiwat Khamwan	Personalized Dosimetry Methods in Theranostics
Prof. Kosuke Matsubara	Radiation Dose Evaluation in Computed Tomography
Prof. Kwan Hoong Ng	Physics of MRI Safety
Mr. Meng-Wei Ho	Robustness in Proton Treatment Planning
Dr. Mu-Han Lin	The Future is Now - Multi-Modality Adaptive Therapy
Dr. Napapong Pongnapang	Topic 1: Radiation Risk and Patient Dose Monitoring in Fluoroscopically-guided Interventional Radiology
	Topic 2: MRI Safety Policy and Siting Considerations
Prof. Ruijie Yang	Advances and Challenges of IMRT QA With AI
Dr. Shinichiro Mori	Clinical Experiences for 4D Carbon-Ion Beam Treatment in QST Hospital
Mr. S Somanesan	Radiation Protection Aspects of Theranostics
Dr. Thunyarat Chusin	Radiation Dose in Mammography
Dr. Yunfei Hu	Characterization of an Advanced CBCT Reconstruction Algorithm for Direct Dose Calculation During Adaptive Radiotherapy
Dr. Yu-Wen Hu	Radiobiological Basis of Carbon Ion Radiotherapy

# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

Keynote Speech	
Speaker	Presentation(s)
Dr. Ehsan Samei	Keynote 1: Medical Physics Together: Why and How
Prof. Tsukasa Aso	Keynote 2: Review and Prospects of Geant4 Based Particle Therapy System Simulation on the Role and Usage in Medical Physics
Mini-Symposium	
Speaker	Presentation(s)
Dr. Aik Hao Ng	Soft skills for the future of work
Prof. Arun Chougule	Topic 1: IOMP Accreditation Program-Way Forward
	Topic 2: How Rapid Advances in Imaging are Defining the Future of Precision Radiation Oncology
Prof. Chai Hong Yeong	Embracing Social Media on IOMP Communication and Networking
Prof. Chia-Feng Lu	Topic 1: MR Radiomics in Predicting Response of Vestibular Schwannoma After Gamma Knife Radiosurgery
	Topic 2: MRI Radiomics and Machine Learning in Brain Tumors
Prof. Chih-Kuang Yeh	Ultrasound in molecular imaging and therapy
Ms. Emily Simpson-Page	A Rewarding Career Begins at the End of Your Comfort Zone: Leading as an Early Career Member of a STEM Workforce
Prof. Eva Bezak	Topic 1: What is the One Positive That You Have Learnt/Experienced as a Result of Working From Home During This Pandemic?
	Topic 2: The Findings of the IOMP Medical Physics Workforce Survey 2022
	Topic 3: Clinical Trials in Targeted Alpha Therapy
Prof. Fong-In Chou	Therapeutic Efficacy of Boric Acid-Mediated Boron Neutron Capture Therapy in Rat Osteosarcoma Model
Prof. Hiroki Tanaka	Current Status and Future Prospects of Medical Physics Research in Boron Neutron Capture Therapy
Dr. Hui-Ju Tien	What's the Challenge Between the Duty and Research for Medical Physicists in Taiwan?
Prof. I-Jan Chen	Optical Microscope for Healthcare in Digital Way
Ms. Jeevanshu Jain	Participation and Contribution of Women Professionals in Changing the Facets of Radiation Physics and Oncology

# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

Dr. Jen-Kun Chen	Determination of BPA and its Metabolites in Urine Collected from Patients Treated by Boron Neutron Capture Therapy
Dr. Jia-Cheng Lee	Introduction of Treatment Planning System of Clinical BNCT in Taiwan
Dr. Jia-Sheng Hong	Detection and Segmentation for the Arteriovenous Malformation Lesions Using YOLOv5 and U-Net++
Prof. Kwan Hoong Ng	Building Bridges Between Medical Physics and Biomedical Engineering and Crossing Them
Prof. Magdalena Stoeva	The Contribution of IOMP Webinars to the Education of Medical Physicists
Dr. MeiYu Yeh	Things to consider before pushing yourself to PhD
Prof. Ren-Shyan Liu	Noncellular Regenerative Therapy in the Treatment of Alzheimer's Disease and Osteoporosis
Ms. Ting Chuan Li, Alice	Topic 1: LEADERSHIP SELF-EFFICACY: Self-Belief, Support and Practice
	Topic 2: Adapt to a new job position and a new team
Dr. Tzu-Hsuan Huang	Detection of Vestibular Schwannoma on Tri-Parametric Magnetic Resonance Images Using Convolutional Neural Networks
Prof. Wan-Yuo Guo	A Strategy Toward Generalization of Medical Imaging AI Models
Dr. Wei-Kai Lee	Automatic Segmentation of Vestibular Schwannoma, Meningioma and Brain Metastasis on Stereotactic Magnetic Resonance Images Using Convolutional Neural Network
Dr. Yen Hwa LIN	Experiences as the Early Career Female Medical Physicist in Foreign Country
Prof. Yu-Ting Chou	Potential Biomarkers Guiding Boron Neutron Capture Therapy
<b>Plenary Session</b>	
<i>Speaker</i>	<i>Presentation(s)</i>
Prof. Arun Chougule	Medical Physics Education, Accreditation and Certification, Where AFOMP Stands?
Prof. Byungchul Cho	Training, Education, and Certification of Medical Physicist in Korea
Dr. Francis Kar-ho Lee	The Training and Development of Medical Physics Professional in Hong Kong
Dr. Md Akhtaruzzaman	Current Status of Education, Training and Professional Role of Medical Physicists in South-Asia Region
Dr. Shigekazu Fukuda	Current Status of Medical Physics in Japan
Prof. Slavik Tabakov	Medical Physics at BSc Level and Introductory Courses
Dr. Subramani Vellaiyan	Medical Physics in India: Present and Future Prospects
<b>Prof. KIYONARI INAMURA Memorial AFOMP Oration</b>	

# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

Speaker	Presentation(s)
Prof. Anchali Krisanachinda	The Role of Medical Physicists on Radiation Risk of Cancer Estimation
<b>Scientific Session</b>	
Speaker	Presentation(s)
Prof. Hidetaka Arimura	Mathematical Characterization of Cancer in Imaging Biopsy
Dr. Jing Yuan	MRI in MR-Guided Radiotherapy for Prostate Cancer
Dr. Luca Gentile	Energy and Safety Management and Use of “Dose” Tracking System in MRI
Dr. Mohammad Amin Mosleh-Shirazi	Modelling the Transport of Scintillation Photons for Optimization of Imaging Systems in Radiotherapy Guidance
Prof. Nick Hardcastle	Developments and Challenges in Implementation of Upright Patient Positioning in Modern Radiation Therapy
Dr. Ola Holmberg	An Updated SAFRON Incident Learning System for Radiotherapy
Prof. Taku Inaniwa	Mechanistic Biological Model for Charged-Particle Therapy Treatment Planning
Prof. Xiance Jin	Intelligent Treatment Decision System for Cervical Cancer Based on Ultrasound Radiomics



# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

**Table 3: Abstract Submission**

**[Breakdown of Abstract Submission by Country/Region]**

No.	Country/Presentation Type	Oral	E-poster	Total
1	Australia	4	2	6
2	Bangladesh	1	4	5
3	Canada	1		1
4	China	6	3	9
5	Hong Kong	1	5	6
6	India	2	12	14
7	Iran	1	4	5
8	Japan	6	22	28
9	Malaysia	1	6	7
10	Malta	1		1
11	Pakistan		1	1
12	Palestine	1		1
13	Philippines	2	5	7
14	Singapore	4		4
15	South Korea	1	1	2
16	Sri Lanka	1	1	2
17	Taiwan	8	48	56
18	Thailand	1	1	2
<b>Total</b>		<b>42</b>	<b>115</b>	<b>157</b>

**[Breakdown of Abstract Submission by Abstract Topic]**

No.	Abstract Topic (Action Area)/ Presentation Type	Oral	E-poster	Total
1	A. Radiotherapy	24	76	100
2	B. Diagnostic Imaging	2	13	15
3	C. Nuclear Medicine	3	2	5
4	D. Radiation Protection		11	11
5	E. Radiobiology	1	2	3
6	F. Artificial Intelligence	10	6	16
7	G. Education & Training	1	1	2
8	H. Professional Development	1		1
9	I. Other		4	4
<b>Total</b>		<b>42</b>	<b>115</b>	<b>157</b>

# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

**Table 4: AOCMP Award – Award Ceremony**

AOCMP Award	Awardee
The Best Oral Award	Dr. Ge Ren
	Ms. Thanchanok Jomsak
	Mr. Chris Boyd
	Ms. Hun Yee Tan
	Mr. Xing Di
	Ms. Tzu-Tung Liu
The Best E-Poster Award	Dr. Sodai Tanaka
	Dr. Hafiz Zin
	Mr. Eric Inocencio
	Mrs. Sheng-Fang Huang
	Mr. Tatsuya Maeda
	Dr. Madhulika Mehrotra
The Best Student Award	Mr. Veng Jean Heng
	Mr. Jun Tomihara
	Mr. Chris Boyd
	Ms. Asseel Hisham Alregib
	Ms. Ashleigh Hull
	Dr. Hai Siong Tan
	Ms. Hun Yee Tan
	Mr. Hiroshi Hamasaki
	Mr. Tatsuya Maeda
	Ms. Panpan Shan
	Ms. Yun-Hua Sui
	Mr. Chien-Hsuan Chan
	Ms. Urshella Hishaam
	Mr. Sachith Welarathna
Ms. Nurul Asykin Wahid	

# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

**Table 5: AFOMP Award – Award Ceremony**

AFOMP Award	Awardee
1. AFOMP Lifetime Achievement Award	Prof. Yimin Hu
2. AFOMP Journal best publication awards	Dr. Takafumi Nemato
3. C.V Saraswathi A.N Parameswaranmemorial AFOMP best PhD award	Dr. Tan Hun Yee
4. P.N Krishnamoorthy Memorial AFOMP Young achiever award	Ms. Yu-Fang Lin
5. Professor Sung Sil Chu AFOMP Best Student's Publication Award	Ms. Hani Hareiza Binti ABD Raziff
6. Dr. Udipi Madhvanath Memorial AFOMP Best Ph.D.award in Radiobiology	Dr. Mikaela Dell'Oro



# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report



Figure 1: Prof. Golam Abu Zakaria deliver the speech entitled “Dosimetry of Small Photon Radiation Fields” in the Therapy Workshop.



Figure 2: Prof. Chai Hong Yeong deliver the speech entitled “Current Development in Theranostic Nuclear Medicine” in the Imaging Workshop.



Figure 3: The extraordinary drumming performance has been shown on the Opening Ceremony.



Figure 4: With multiple topics and honorable invited faculty join the congress also deliver the presentation.



Figure 5: Delivering the awards to the awardees. From left to right: Prof. Arun Chougule, Prof. Shen-Hao Lee, Prof. Tomas Kron, Ms. Hun Yee Tan, Mr. Veng Jean Heng, Prof. Hui-Yu Tsai, and Prof. Hasin Anupama.





# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report



Figure 6: All delegates enjoyed the meal and have the chances to interact with experts around the world.



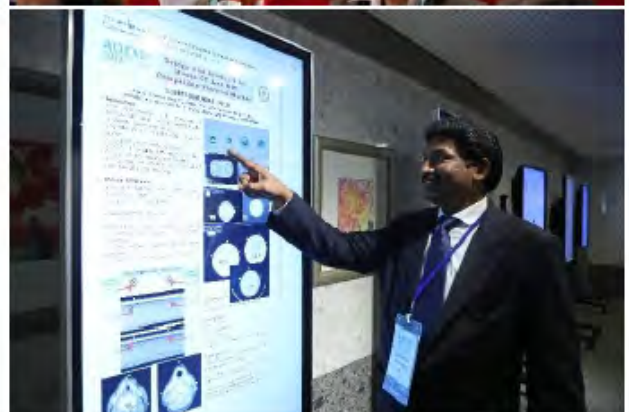
Figure 7: The cheerful atmosphere let all delegates enjoy the program and have a memorable night for the congress.



Figure 8: AOCMP 2022 provides a platform that lets all booth sponsors have the opportunity to communicate with delegates all over the world.

# 22nd Asia-Oceania Congress of Medical Physics (AOCMP 2022) Congress Report

## Congress Photos



MUMBAI, INDIA



# 25<sup>th</sup> INTERNATIONAL CONFERENCE ON MEDICAL PHYSICS

## ICMP 2023

6<sup>th</sup> – 9<sup>th</sup> DECEMBER 2023

23<sup>RD</sup> ASIA-OCEANIA CONGRESS ON MEDICAL PHYSICS (AOCMP 2023)

21<sup>ST</sup> SOUTH-EAST ASIA CONGRESS ON MEDICAL PHYSICS (SEACOMP 2023)

44<sup>TH</sup> ANNUAL CONFERENCE OF ASSOCIATION OF MEDICAL PHYSICISTS OF INDIA (AMPICON 2023)

CONTACT US -

Dr. Sunil Dutt Sharma

Mail: [icmp2023@gmail.com](mailto:icmp2023@gmail.com)



Dear Colleagues,

Greetings from Organizing Committee of ICMP 2023!

We are delighted to announce that the Association of Medical Physicists of India (AMPI) is organizing the “International Conference on Medical Physics 2023 (ICMP 2023)” during 6th to 9th December 2023 in Mumbai, India. ICMP 2023 is the 25th Conference of International Organization for Medical Physics (IOMP). Further, ICMP 2023 will also be the 44th Annual Conference of AMPI (AMPICON 2023), the 23rd Asia Oceania Congress on Medical Physics (AOCMP 2023) of Asia-Oceania Federation of Organizations for Medical Physics (AFOMP) and 2023 International South-East Asian Congress on Medical Physics (ISEACOMP 2023) of South-East Asian Federation of Organizations of Medical Physics (SEAFOMP). In fact, ICMP 2023 is jointly organized by AMPI, IOMP, AFOMP and SEAFOMP.

The scientific program of the conference will include all types of sessions and deliberations such as plenary sessions, special sessions, sessions on education & training and professional development, review talks on topics of recent interests and presentations on recent innovations in the discipline.

We welcome you all to the megapolitan city Mumbai which is the commercial capital of India. Mumbai is also known as the city that never sleeps and it is the perfect blend of culture, customs and lifestyles. Mumbai is dotted with plenty of architectural landmarks and it is the center of Indian film (Hindi Movie) and fashion industry. December is the perfect month for excursion in Mumbai and other parts of India.

All the information related to participation in the conference is being uploaded/updated at the conference website <https://www.icmp2023.org>

Please feel free to contact the conference organizing team through the email [icmp2023@gmail.com](mailto:icmp2023@gmail.com)

Sunil Dutt Sharma

President, Association of Medical Physicists of India (AMPI)

on behalf of Congress Organizing Committee and the Organizing Board

# Impact of Proton Therapy Technology In Latin America - Advances of the Argentine Proton Therapy Center

## Rosana Pirchio

MSc Medical Physics – CNEA; Committee Member of IOMP MPWB  
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Around the world there are 110 proton therapy centers providing radiotherapy treatments with charged particles for patients with malign and benign tumors. The results of this technique are very successful in increasing the life of patients for several cases as brain and central nervous system tumors, head and neck cancer, breast cancer, pediatric cancer, liver cancer, prostate cancer, lung cancer, among others.

During the last few years, a new center has begun its construction in the city of Buenos Aires-Argentina, with resources from the National Atomic Energy Commission of Argentina, CNEA, and in collaboration with the Roffo Institute - Buenos Aires University. This will be the first among Latin American countries and the national government hopes that patients from different countries could be benefited from this technology.

Dr Gustavo Santa Cruz who works at CNEA is the Scientific and Technical Director of this project and he has kindly accepted this interview.

***Rosana: Dr Cruz, it is a great meeting you.***

***Could you explain how this huge project started? Who are participating in this project? Who is the financial support and how much will it cost?***



# Impact of Proton Therapy Technology In Latin America - Advances of the Argentine Proton Therapy Center

*Dr. Cruz: Within the framework of an extensive national plan for nuclear medicine and radiotherapy initiated several years ago, and in a joint effort between the University of Buenos Aires and CNEA, in 2019 we started the construction of the “Centro Argentino de Protonterapia” (CeArP), the first proton therapy center in Latin America. The Argentine state is the one that finances the project, in the same way that it does, through CNEA, for all nuclear medicine and radiotherapy projects included in the National Nuclear Medicine Plan.*

*The main proton therapy equipment is provided by the Belgian company Ion Beam Applications (IBA), Proteus Plus model, with a 230 MeV cyclotron. The center will have two treatment rooms for proton therapy, each one equipped with a 360 degrees gantry and a third room for research and development with a fixed clinical-quality proton beam, identical to that used in the treatment rooms. In addition to the necessary treatment infrastructure, the CeArP will be equipped with state-of-the-art radiotherapy equipment, comprising a CyberKnife unit and a Versa HD LINAC, a Dual Energy CT scanner and a 1.5 T MRI scanner.*

*The total investment for the whole project is about 150 million dollars.*



**Rosana: Could you describe the cyclotron characteristics, proton production, beam energies and proton interaction with tissue?**

*Dr. Cruz: The C230 IBA isochronous cyclotron will accelerate protons up to 235 MeV, providing a maximum of 300 nA beam current, quasi-continuous. The typical cyclotron efficiency is about 55 %, it weighs approximately 220 Tons, with a diameter of 4.3 m, a conventional magnet coil of 1.7 - 2.2 T, an RF frequency of 106 MHz and a Dee voltage between 55 to 150 kV peak. An Energy Selection System will provide protons from nominal energies (230 MeV) down to 70 MeV. The Beam Transport System will lead protons to the clinical rooms and a nozzle with Pencil Beam Scanning mode will deliver the treatments.*

# Impact of Proton Therapy Technology In Latin America - Advances of the Argentine Proton Therapy Center

**Rosana:** *In relation to radiation protection, what are the additional measures that need to be taken into account to protect radiation workers in the proton centre? How many staff are supposed to be working there?*

*Dr. Cruz:* Radiation protection concepts are the same as in any other radiation therapy unit, except the fact that high energy neutrons and gamma photons are inevitably produced in all the places where protons interact with any material. Neutron activation and high energy nuclear reactions that lead to radioactive materials are some of the main differences.

*The estimation of the staff at full operation is about 120 people.*

**Rosana:** *Is cancer a common disease in Argentina? How would you select patients for proton therapy? Does this treatment work together with chemotherapy or other therapies? Are there any side effects? How many patients are you anticipating to treat per year, considering there will be 3 treatment rooms working at the same time?*

*Dr. Cruz:* As far as I know, the cancer epidemiology in Argentina is similar to that of western countries and given that the pathologies of indication are based on clinical evidence (ASTRO 2018 “Insurance coverage recommendations for proton therapy”) that information will be the basis for patient selection, besides starting with less complex cases at the beginning.

*Like any other form of radiotherapy, proton therapy is generally used in combination with other cancer treatment modalities. Side effects are similar, although since proton therapy involves the irradiation of smaller healthy tissue volume in general, they are less serious. The number of patients that can be treated, at most, in a single proton room is about 250-280 per year. Since CeArP will have two clinical rooms, the number of patients per year will be about 500.*

**Rosana:** *What software are you going to use for treatment planning? Are the ranges of tumor doses similar to conventional radiotherapy? How do you check the plan, and how is the beam collimated?*

*Dr. Cruz:* There are different companies that provide treatment planning systems for proton therapy. The treatment planning system is still under evaluation and selection processes, as well as the oncology information system and other computational tools.

*Tumor and normal tissue prescription doses are the same as in photon therapy. There are QA procedures that are performed daily for all the patients, involving daily cone-beam CT imaging, and replanning if necessary.*

*The beam mode delivery of our center will be Pencil Beam Scanning, so the beam itself is already produced in a very well-collimated configuration.*

# Impact of Proton Therapy Technology In Latin America - Advances of the Argentine Proton Therapy Center

**Rosana:** *Talking about this new technology, technicians must receive special training? And medical physics personal? Quality controls of equipment are similar to conventional radiotherapy? Do you have the equipments for carrying on quality controls? For example for dosimetry test, ionization chamber is the same and where and how must be calibrated?*

**Dr. Cruz:** *Besides special training for medical physicists, therapists, technicians, nurses, and radiation oncologists, that must be done in centers with similar configurations, everything else is very similar to conventional radiotherapy. We already have all the dosimetry systems, involving water phantoms, ionization chambers, etc. The only difference is the use of specific devices for determining, for example, depth-dose profiles to characterize Pristine and Spread-Out Bragg peaks.*

**Rosana:** *When is supposed to start working with patients? do you know about the prices and if social insurance are going to cover this treatment, because they are very expensive.*

**Dr. Cruz:** *We plan to start proton treatments by the end of 2024. We have to work together with insurance companies and social services to determine the costs of coverage. This will in turn define the costs. Proton treatment costs vary from country to country, and strongly depends on the public vs. private approaches, including mixed settings. Proton treatments are not necessarily too expensive, especially if adverse effects are considering together in a comprehensive cost-effectiveness evaluation (Lundkvist, Cancer 103:793-801, 2005).*

**Rosana:** *Finally, with are your expectations at the end of this project at the national and Latin American level?*

**Dr. Cruz:** *It will be the first time in Latin America that a state-of-the-art proton technology will be available, providing cutting-edge research and offering health services to the community. It will promote public and private initiatives to reinforce radiation therapy access and options and will encourage Latin American countries to plan the possibility of installing additional centers.*



At the end of the fruitful interview with Dr Santa Cruz we were able to learn more about the proton therapy center. Expectations regarding its usefulness to treat Latin American and research are very high. However, one must not forget the many challenges they encounter along the way, which they are solving with great efforts....until the great day arrives when it is enabled and its great work begins.

# The Case for Developing AI in Healthcare: Let's make that magic happen

**Damián M. Fondevila**

MSc Medical Physicist/Data Scientist, Vidt Centro Médico, Argentina

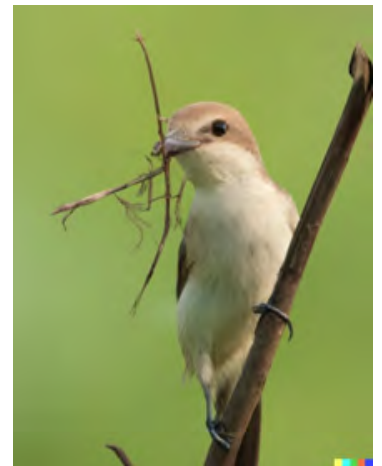
*"Any sufficiently advanced technology is indistinguishable from magic"*



When I was a teenager in the eighties cathode tube televisions with manual channel changing turn knobs were the only thing around and program zapping could only be done by arduously getting off the couch to engage the device. I remember when my brother and I enthusiastically managed to take apart the actuator of a toy radio-controlled airplane and make a contraption with an electric can opener, some rope and much scotch tape that could, when upwards thrust was activated on the control, make the dial slowly but surely turn. We could now change channels from the sofa. Awesome, almost magic! Truth be told it wasn't very practical, but the empowering feeling of that realization and the wonder it elicited stayed with me ever since.

## *There is nothing 'artificial' about Artificial Intelligence (AI):*

We tend to think of our gadgets as things apart from nature, but on a closer look, we can see that they are just the product of our instinctual drives towards novelty. Maintaining this elusive distinction can be misleading, since AI is nothing but the result of human ingenuity, creative spirit and effort. Just as a bird building its nest weaving sticks together can be thought of as a form of rudimentary technology, this 'innovation drive' is at the basis of biological evolution. As the technologist, Kevin Kelly likes to say, "technology is as great a force as nature". So, in that sense, we can say that the domain of AI is currently one of the leading edges of evolution.



## *The cost of NOT developing AI:*

In an evolutionary universe, like ours, where we know that future technology surpasses the capacities of our current standards, the rate at which technology is evolved, matters. Let's take the case of self-driving car technologies powered by AI which are being developed across the board by most major motor vehicle companies. Even though there is much debate as to whether fully autonomous vehicles can be achieved and how it is commonly accepted by experts that roads will be substantially safer with these technologies in place even with partial autonomy.



# The Case for Developing AI in Healthcare:

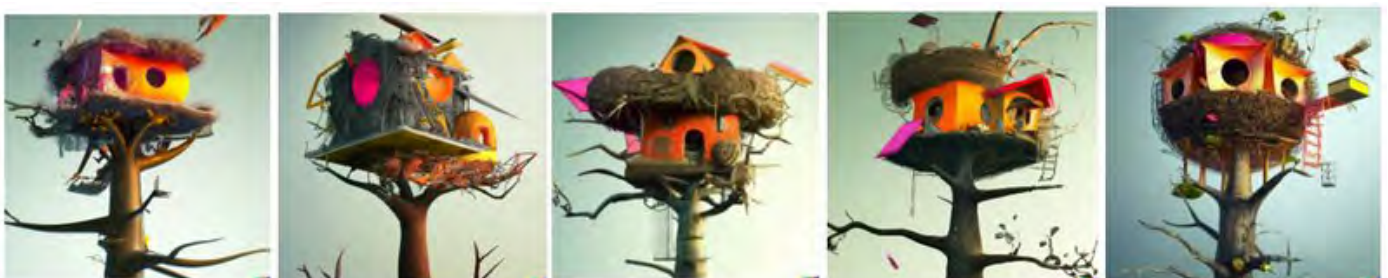
## Let's make that magic happen

According to the World Health Organization, road traffic injuries are the leading cause of death for children and young adults aged 5-29 years and approximately 1.3 million people die each year as a result of road traffic crashes. With this said, today's traffic deaths are nothing but the casualties of our lack of development of these technologies. The same case can be made for the development of AI in the field of healthcare, maybe less clear-cut but nonetheless. More precise and timely diagnosis assisted by AI tools, precise and fast organ segmentation in radiotherapy using Deep Learning algorithms that avoid the risks of human variability, and access to novel potentially life-saving drugs developed by AI, are just a few of the perks AI can bring to healthcare that current patients are missing out on until we develop and expand these techniques into a fully mature AI assisted practice.



### *No pain, no gain*

It is often naively thought that technological advancement occurs on its own, but this is not the case. It rests on the shoulders of numerous researchers, developers, entrepreneurs, organizations and enthusiasts who burden fully carry it forward. And if these actors are not there, stagnation is most likely to occur. In 1969 humanity triumphantly put a man on the moon but since then different drawbacks have made this achievement a memory of the past. We not only did not advance but have literally lost the capacities we once had for space travel. Now the prospects of becoming a space-bearing civilization are just starting to come back online with a series of newcomers after at least a decade of lag. Likewise, the development of AI has seen at least two 'winters' (the seventies and the nineties), that is periods of scarce funding, few technical breakthroughs, and a general lack of motivation around the possibilities of these technologies.



# The Case for Developing AI in Healthcare:

## Let's make that magic happen

### *Adoption is the key to progress*

In the last decade, significant breakthroughs in neural network architectures, data availability and computing power have made AI algorithms match human capabilities and/or surpass expert human performance in various tasks (like image classification/medical diagnosis, object recognition, natural language processing, competitive boardgame play, etc.) thus flooding mainstream with cheap and useful tools for a multitude of applications.

A lot of industries (like marketing or banking) have taken great advantage of these tools. Healthcare, on the contrary, has lagged significantly behind, in part due to the lack of large high-quality databases of patient data as a result of confidentiality concerns, safety regulations, and the general complexities of medical practice.

As visionary Andrew Ng has pointed out “AI is the new electricity”, meaning that AI is a general-purpose force that will ‘power’ all of our processes. But domains as disparate as agriculture, marine biology, retail selling, radiotherapy, pharmaceuticals, financial services, cardiology, fashion design, you name it... have such profoundly nuanced differences that there is no ‘one size fits all’ solution possible. This means that it will not be AI developers per se who will bring ‘a touch of a button’ solutions to all our problems. This will not happen, and there lies the main barrier to value extraction at this point in history. In order to truly unlock tangible value in every field it is the ‘practitioners’ of every domain of application that have to take these tools into their hands and figure out how to apply, adapt, and invent new use cases. It is adoption, as painstaking as it may be to pave the way through uncharted grounds, that is the key to value extraction.



### *If not us... who? If not now... when?*

Even though there are many software and machine vendors who offer AI tools in their products, it is at the level of application that these solutions are put to the test and actualized. It is when the rubber meets the road that we can truly know what works and what doesn't. Does the tool meet the particular needs of the practice or is the practice called to new ways to integrate and take advantage of this new technology? This process of co-creation (between developers and users) is the only fertile ground for fruits to grow in. And in particular, practicing Medical Physicists have a central role to play in leading the way to riches in the field of healthcare. It is at the level of the ‘advanced users’ where the evolutionary transformation can and must take place.

# The Case for Developing AI in Healthcare: Let's make that magic happen



## *AI brings automation on steroids*

In radiotherapy, most major TPS vendors offer scripting functionality in their products that allow manual tasks to be codified and run programmatically. This means that a sequence of steps can be done at the touch of a button, but unlike the use of templates (that have been around for long), with scripting virtually any sequence of steps can be run automatically. With these tools, advanced users can significantly increase efficiency. But what is the limit to what can be automated? Well... the human operator is in the loop, of course. Treatment planning is a complex process that requires multiple decisions to be taken by qualified individuals. However, in recent years different AI tools have appeared that allow human knowledge to be replicated based on learned past experience. Two examples are auto-contouring of organ structures using convolutional neural networks and Knowledge-Based Planning (KBP) techniques that learn from past treatment plans how best to optimize IMRT inverse planning. With these new tools fully automated planning is now possible. Does that mean that treatment planning has finally been cracked? No, by no means, we are just starting out to explore the limits of this practice. Certain treatment types are simpler than others and are thus amenable to automate, while others are still far ahead. There is much debate as to just how much AI can replace human expertise, but one thing is for sure, with the appropriate human oversight AI opens the door to a whole new level of efficiency in our processes.

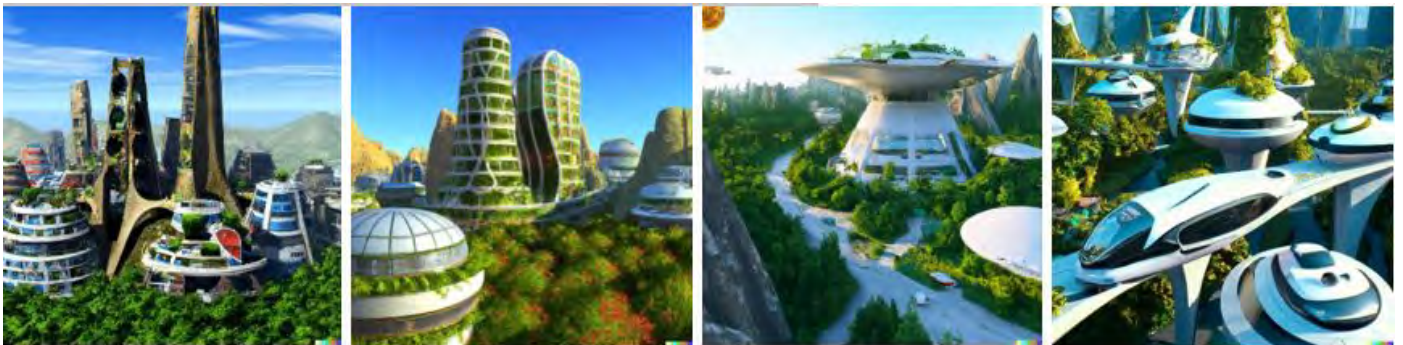
## *True interdisciplinary teamwork is more than the sum of the parts*

Looking no further, our well-established field of Medical Physics was born with the integration of physicists' know-how, tools and worldviews with medical knowledge, practice and idiosyncrasies, supported by the ingenuity of technologists. Yes, initially a hard sciences savvy radiotherapist could hand calculate the time to give a certain dose for a patient's tumor with an orthovoltage RX machine but that could only go so far.... And that is a long way from, say, experimentally measuring the output of a high-energy linac and commissioning/validating a Monte Carlo algorithm on a Treatment Planning Software (TPS). Likewise, an IT-savvy medical physicist today can well train a Knowledge-Based Planning (KBP) model with historical plans using commercially available TPS functionality or write ESAPI code for expanding the functionality of the Eclipse TPS, but again that can only go so far...

# The Case for Developing AI in Healthcare:

## Let's make that magic happen

For true automation to happen a myriad of computer codes must be developed, maintained and managed using the best practices of software development. As more and more treatment modalities are automated the different versions of these KBP models must be appropriately trained and validated, and computer codes must be organized and maintained safely. Troubleshooting methodologies, modular component design and unit testing, model life cycle management policies and practices, are just a few of the capabilities that must be in place. This will inevitably bring about new roles at the intersections of Medical Physics, IT and AI.



### ***Automation will not only make our processes cheaper but better:***

It is often thought that automation will simply make our processes cheaper, but that's only half of the equation. As we automate our processes (say treatment planning) new possibilities come into being. Suppose that creating 20 different alternative treatment plans for a given patient costs essentially the same as creating one treatment plan since the process of treatment plan creation has been automated. The likely outcome of this scenario will not be to just create one plan but to choose the best of the 20 competing plans to administer. This dynamic will inevitably result in the leveling of the standard of practice. It will be a game-changer. This has always been the case. Just think back to when 2D treatment planning was done manually and adding multiple fields could require hours to complete. With the advent of treatment planning computers, we didn't just conform to a faster same standard of care, new modalities were forced into being: 3D planning, IMRT inverse planning, and so on.

### ***Standardization is a pre-requisite but also a goal:***

The starting point for any automation endeavor is standardization. This means creating and strictly adhering to treatment protocols, practice procedures, and standardized nomenclature. This can no doubt be burdensome. But just as road building is a pre-requisite for high-speed travel, so standardization is a pre-requisite for automation.

The good news is that standardization is also a goal in itself. It makes processes more consistent, efficient, safer and arguably better. So, if not there, the quest for automation will inevitably take us through standardization, and position us in a virtuous re-enforcing cycle: standardized in, standardized out.

# The Case for Developing AI in Healthcare: Let's make that magic happen

## *The never-ending process of evolution*

There are many challenges ahead and much work to be done. So, let's get to it, and make that magic happen.



*All images were generated using 'DALL-E 2' Artificial Intelligence image generator by Open AI.*

# Calendar of Events (January - June 2023)

## Ibrahim Duhainii

Calendar Editor, IOMP Treasurer

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### The 9th MR in RT Symposium

**When:** Feb 6 – 8, 2023  
**Where:** Los Angeles, CA, USA  
**Website:**  
<https://www.uclahealth.org/departments/radonc/news-events/conferences/9th-mr-rt-symposium-february-6-8-2023>

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### 2023 RSS Scientific Meeting

**When:** Mar 23 – 25, 2023  
**Where:** Orlando, FL, USA  
**Website:**  
<https://www.rssevents.org/>

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### European Lung Cancer Congress 2023

**When:** Mar 25 – 27, 2023  
**Where:** Copenhagen, Denmark  
**Website:**  
<https://www.esmo.org/meeting-calendar/european-lung-cancer-congress-2023>

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### NCRP 2023 Annual Meeting

**When:** Mar 27 – 28, 2023  
**Where:** Bethesda, MD, USA  
**Website:**  
<https://ncrponline.org/news-events/meetings-events/>

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### 125th Annual Meeting of the Japan Society of Medical Physics

**When:** Apr 13 – 16, 2023  
**Where:** Pacifico Yokohama, Japan  
**Website:**  
<https://www.jsmp.org/conf/125/en/>

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### 55th National Conference on Radiation Control

**When:** May 8 – 11, 2023  
**Where:** Houston, TX, USA  
**Website:** <https://www.crcpd.org/>

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### ESTRO 2023

**When:** May 12 – 16, 2023  
**Where:** Vienna, Austria  
**Website:**  
<https://www.estro.org/Congresses/ESTRO-2023>

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### ISMRM & ISMRT Annual Meeting & Exhibition

**When:** Jun 3 – 8, 2023  
**Where:** Toronto, ON, Canada  
**Website:** <https://www.ismrm.org/23m/>

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### AAMD 48th Annual Meeting

**When:** Jun 4 – 8, 2023  
**Where:** New Orleans, LA, USA  
**Website:**  
<https://www.medicaldosimetry.org/meetings/aamd-48th-annual-meeting/>

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### 14th International Conference on Monte Carlo Methods and Applications

**When:** Jun 26 – 30, 2023  
**Where:** Sorbonne, 75005 Paris  
**Website:** <https://mcm2023.sciencesconf.org/>

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# SEASON'S GREETINGS

Wish you and your family a Happy New Year  
2023



International Organization  
for Medical Physics