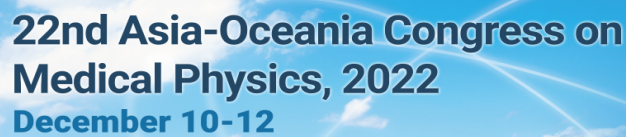




TAIPEI
TAIWAN



22nd Asia-Oceania Congress on
Medical Physics, 2022
December 10-12



*Adapt to change.
Explore together.*

AOCMP 2022 Congress Report

22nd Asia-Oceania Congress on Medical Physics, 2022 in Taipei, Taiwan on 10th-12th December 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 (CSMP), 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.

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)

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.

Social Program

Two official social programs were included in AOCMP 2022.

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)

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.

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
Total		532

Table 2: Invited Faculty

Education Course	
<i>Speaker</i>	<i>Presentation(s)</i>
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

Keynote Speech	
<i>Speaker</i>	<i>Presentation(s)</i>
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	
<i>Speaker</i>	<i>Presentation(s)</i>
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 Mode
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

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
Plenary Session	
<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

Prof. KIYONARI INAMURA Memorial AFOMP Oration	
<i>Speaker</i>	<i>Presentation(s)</i>
Prof. Anchali Krisanachinda	The Role of Medical Physicists on Radiation Risk of Cancer Estimation
Scientific Session	
<i>Speaker</i>	<i>Presentation(s)</i>
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

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

**TAIPEI
TAIWAN**

**22nd Asia-Oceania Congress on
Medical Physics, 2022
December 10-12**



*Adapt to change.
Explore together.*

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
Total		42	115	157

[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
Total		42	115	157

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	



TAIPEI
TAIWAN



22nd Asia-Oceania Congress on
Medical Physics, 2022
December 10-12



*Adapt to change.
Explore together.*

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



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.



**TAIPEI
TAIWAN**

22nd Asia-Oceania Congress on Medical Physics, 2022

December 10-12



*Adapt to change.
Explore together.*



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.

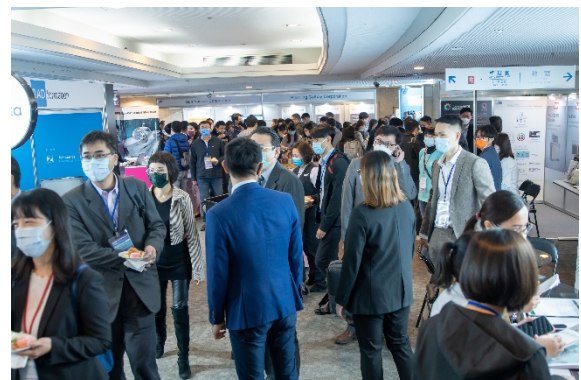


Figure 8: AOCMP 2022 provides a platform that lets all booth sponsors have the opportunity to communicate with delegates all over the world.

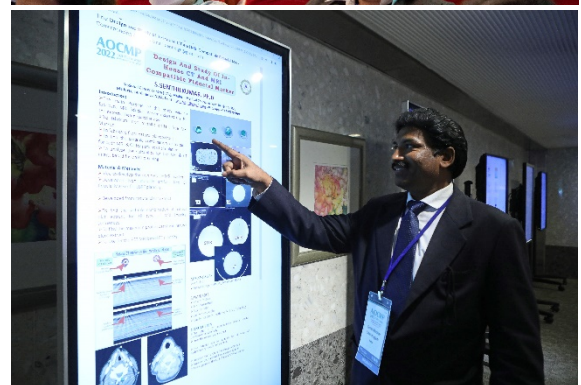
**TAIPEI
TAIWAN**

**22nd Asia-Oceania Congress on
Medical Physics, 2022**
December 10-12



*Adapt to change.
Explore together.*

Congress Photos



AOCMP 2022 Financial Report

Income			
No.	Category	NT\$	≈US\$
1	Government Supports	NT\$ 1,820,394	≈ US\$ 59,812
2	Sponsorship	NT\$ 3,209,150	≈ US\$ 105,442
3	Registration Fee	NT\$ 863,000	≈ US\$ 28,356
Total		NT\$ 5,892,544	≈US\$ 193,610

Expense			
No.	Category	NT\$	US\$
1	Venue Hire (Congress Rental Fee)	NT\$ 806,520	≈ US\$ 26,500
2	Congress Venue's Audio-Visual Equipment/Technicians (Projector, microphone, WIFI rental, Monitors)	NT\$ 52,200	≈ US\$ 1,716
3	Catering and Social Events (Daily Coffee snack, Daily lunch boxes, Welcome Reception, Gala Dinner, performance group & hosts fees)	NT\$ 752,606	≈ US\$ 24,728
4	Congress Online Platform & Virtual Meeting Equipment (Customized Platform, Video Classroom Audio/Video Integration Services & Administration Fee)	NT\$ 815,333	≈ US\$ 26,789
5	Printing & Promotion (Main visual design, Promotion video Making, Promotion flyers, Customized Congress website, program book printing & editing, Congress proceedings (Electronic Version) editing, Speakers' Certificates, Certificate of Award, Congress badges, and Congress kits)	NT\$ 1,131,102	≈ US\$ 37,165
6	Decorations/Exhibitions/Posters (Entrance Fortress Decoration, Registration Counter, Congress banner decorations, E-Poster Equipment's rental)	NT\$ 437,693	≈ US\$ 14,382

**TAIPEI
TAIWAN**

**22nd Asia-Oceania Congress on
Medical Physics, 2022
December 10-12**



*Adapt to change.
Explore together.*

No.	Category	NT\$	US\$
7	Invited Speakers' Expense (Honorarium, accommodation Fee, transportation, award prize, Administration Fee)	NT\$ 538,475	≈ US\$ 17,693
8	Secretariat Expense (Equipment Rental, Labor Costs and Congress Insurance, Congress Uniform, Photographing)	NT\$ 685,889	≈ US\$ 22,536
9	Professional Conference Organizer Fee (PCO)	NT\$ 664,272	≈ US\$ 21,826
Total		NT\$ 5,884,090	≈ US\$ 193,335

Balance		
Category	NT\$	≈ US\$
Income	NT\$ 5,892,544	≈ US\$ 193,610
Expense	NT\$ 5,884,090	≈ US\$ 193,335
Balance	NT\$ 8,454	≈ US\$ 275

At the exchange rate of *January 11, 2023.