

MEFOMP Activities 2019

Dr. Huda Al Naemi, President of MEFOMP, was appointed into the faculty of the Weill Cornell Medical College as an Asst. Professor of Medical Biophysics Research in Radiology.

Dr. Hannan Al Dousari was elected to manage a new committee titled “The Women's Committee for Medical Physics” which was formed by the Middle East Organization of Medical Physics (MEFOMP).

Dr. Jameelah Al Suwaidi was appointed as the new President of Emirates Medical Physics Society (EMPS).

Workshop on Radiation Protection for Physicians



On 16 February 2019, QaMPS organized workshop on Radiation Protection for physicians at WWRC Seminar Room WG 3000, Hamad Bin Khalifa Medical City, in collaboration with HAMAD Medical Corporation (HMC) and Konstantopoulio Hospital, Greece Athens. This workshop aimed at updating the knowledge of physicians working in clinical imaging, those using fluoroscopy machines in their procedures. The course included many fruitful lectures some of these lectures are, Dose management systems and their help in radiation dose optimization, Special practices (pregnant patients, pediatric patients) optimization; as well as Staff Radiation Protection.

Dr. Virginia Tsapaki was the invited speakers from Greece and Dr. Huda Al-Naemi, Dr. Hassan Kharita, Dr Antar Aly and Dr Shady Al-Khazam from HMC side.

Almost 22 participants, Radiologists and Radiology staff, have attended the workshops. The workshop topics were very interactive and concentrated on the common challenges in radiation technology.

2019 Radiation in Medicine and Workshops, February 2019, Riyadh, KSA.

The Kuwait Society of Nuclear Medicine held its Annual Conference of Nuclear Medicine on the 24th to 26th March 2019, at the Jumeirah Messilah Hotel, Kuwait.

Training Course on Radiation Protection for Radiographers and Technologists



On 25 February 2019, QaMPS in collaboration with Occupational Health and Safety (OHS) department of Hamad Medical Corporation (HMC) organized Workshop on Radiation Protection for Radiographers and technologists at Bayt Al Dhiyafah Hamad Bin Khalifa Medical City. The goal of this workshop was radiation protection for the staff and radiation workers and included information about; Basic Rules, Protective Equipment, Personal monitoring, Workplace monitoring, Radiation Exposure of Pregnant Workers and Optimization of Protection in Computed Tomography.

Some of the topics discussed in the workshop were Dose management systems and their help in radiation dose optimization, Special practices (pregnant patients, pediatric patients) optimization; as well as Staff Radiation Protection.

Dr. Afkar Al Farsi, was the invited speakers from Muscat, Sultanate of Oman. Almost 60 participants, Radiologists, work in Radiology, were attending the workshops.

The Secretariat of the International Atomic Energy Agency (IAEA) recently presented its compliments to the IAEA Member States for the recently conducted Technical Meeting on Radiation Exposure of Patients from Recurrent Radiological Imaging Procedures. The event was held on the 4th to 6th March 2019, at the IAEA Headquarters in Vienna, Austria. MEFOMP members from Jordan, Qatar and United Arab Emirates attended the meeting, together with a group of professionals from different countries.

Kuwait Annual Nuclear Medicine Conference was done on 24th to 26th March 2019 in Kuwait

1st Breast Imaging Workshop

As part of Qatar National Research Fund (QNRF), QaMPS & Hamad Medical Corporation (HMC) organized workshop on Breast Imaging in collaboration with Harvard University, USA in Bayt Al Dhiyafah Hamad Bin Khalifa Medical City on 3rd March 2019. The workshop topics were very interactive and concentrated on the common challenges in Breast Imaging. This workshop included Basics of Breast Cancer Screening, BI-RADS reporting standards for Mammography and Ultrasound, Basics of Evaluating Mammography Image Quality and Tomosynthesis Imaging.

Dr. Narayan Anand was the international speakers from USA. His visit also included many meetings with the QNRF project team members (Qatar side) for discussing the project outcomes, as well as meeting with Dr Amal Obaidly breast imaging physicians.

Almost 20 participants, Radiologists, technologists, were attending the workshops. The workshop topics were very interactive and concentrated on the common challenges in radiation technology.

Radiation Protection Training Courses



Radiation Protection Training Course for Nurses



Refresher Course on Radiation Protection



Safe Working with Medical Lasers and Photography Units

Qatar Medical Physics Society (QaMPS) in collaboration with Hamad Medical Corporation (HMC) has recently conducted a series of training workshops from 09th to 10th March 2019 held at Hamad Bin Khalifa Medical City.

On 09th March 2019, workshop on Radiation Protection for Nurses was held. The aim of the workshop was to ensure that nurses working in areas with ionizing radiation are aware of the techniques in minimizing occupational radiation exposure. About 65 nurses from several healthcare facilities within Qatar participated in the workshop.

Subsequently, Radiation Protection for Laser Safety was conducted on 10th March 2019, which was attended by around 40 healthcare practitioners specifically working in areas involving laser. A refresher course on Radiation Protection was also conducted on the same day, which was attended by 26 radiation safety practitioners from different healthcare organization within Qatar.

International Conference on Bio and Medical Physics was held on 20th to 21st June 2019, Dubai, UAE

2019 AAPM / ISEP Workshop on Advances in Radiotherapy and Diagnostic Physics on 21st to 24th April 2019 Kempinski Hotel, Amman, Jordan

The Middle East Federation of Medical Physics (MEFOMP) held its Annual Executive Council Meeting in Doha, Qatar on 05th May 2019.

The IAEA, in collaboration with the Lebanese Atomic Energy Commission (LAEC), conducted The Regional Train-the-Trainers Course for Radiation Protection Officers (RPOs) of Medical and Industrial Facilities from 25th to 29th March 2019 in Beirut, Lebanon.

Workshop on Optimization of Radiation in Interventional Radiology & Cardiology



QaMPS in collaboration with Hamad Medical Corporation (HMC) initiated a new research project with Konstantopoulou Hospital, Greece Athens, the project title is "Establishment of clinical Diagnostic reference levels for Qatar". A workshop titled "Workshop on Optimization of Radiation in Interventional Radiology & Cardiology" was organized in collaboration with Konstantopoulou Hospital, Greece Athens. The goal of this workshop was to develop and apply technological solutions for patient exposure records, harmonize the dose data formats provided by imaging

equipment, increase utilization of electronic health records and updating knowledge and skills about radiation dose optimization in interventional procedures and practical training.

Dr Virginia Tsapaki, the general secretary of International Organization of Medical Physics (IOMP) and the project Principal Investigator (PI) from Greece side was the invited speaker from Greece side and DR. Huda Al-Naemi, Dr. Hassan Kharita, from HMC side.

Almost 68 participants, Radiologists, work in Radiology, were attending the workshops.

The International Scientific Exchange Program (ISEP) of the American Association of Physicists in Medicine (AAPM) in collaboration with the International Organization of Medical Physics (IOMP) recently conducted the 2019 AAPM / ISEP Workshop held on 21st to 24th April 2019. The workshop was hosted by the King Abdullah University Hospital (KAUH) in Jordan at Kempinski Hotel, Amman, Jordan.

The Jordanian Association for Physicists in Medicine (JAPM) has conducted a training workshops on 08th June 2019 which was held at Royal Hospital, Amman Jordan.

By intensifying the implementation of the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary guidance documents, countries are strengthening radiation safety and nuclear security not only domestically, but also internationally. This was the conclusion of a meeting where over 190 technical and legal experts from 103 countries (including the following MEFOMP countries: Bahrain, Iraq, Jordan, Lebanon, Oman, Qatar, Syria and Yemen) and three non-governmental organizations gathered.

The 24th International Conference on Medical Physics (ICMP) was concluded on 11th September 2019, which was held in Santiago, Chile from 8th to 11th September 2019. The MEFOMP (Middle East Federation Organizations of Medical Physicists) team lead by Dr. Huda Al Naemi (President) and Dr. Hassan Kharita (Secretary General) participated in the conference.

MEFOMP President, Dr. Huda Al Naemi won the prestigious 2019 Healthcare Gold Medal Award from Institute of Physics and Engineering in Medicine (IPEM).

2nd workshop on Radiation Protection in Nuclear Medicine



On 4th of May 2019, QaMPS in collaboration with Hamad Medical Corporation (HMC) organized 2nd workshop on Radiation Protection in Nuclear Medicine held at Bayt Al Dhiyafah, Hamad Bin Khalifa Medical City. The goal of this workshop was train nuclear medicine staff on the conditions and requirements of radiation protection in accordance with the nature of the work and the expected risks.

The workshop included many interactive lectures provided by HMC speakers, Mr. Mahmoud Tarbiah, Dr Hadi Fayad and Mr. Osman Taha.

Some of these lectures are;

- Scope of Radiation safety in nuclear medicine
- Exposures types and emergency in nuclear medicine
- Practical training on Radiation Protection

- Dose calculation and optimization

Almost 25 participants, radiologists, technologists, nurses and other specialties working in nuclear medicine were attending the workshops.

In collaboration MEFOMP, Oman Medical Physics Society and the Royal Hospital hosted the 1st MEFOMP workshop on “Medical Physics in Diagnostic Radiology”. It was held on 28th to 29th September 2019 at National Heart Centre Auditorium, Royal Hospital.

The Planning Section of Radiation Oncology Department, National Oncology Center, Muscat, participated in the 1st Arabian Radiotherapy Plan Competition 2019. The competition was organized by King Fahad Specialist Hospital – Dammam. Sponsored by the Saudi Oncology Society (SOS) and the Saudi Assembly for Radiation Oncology (SARO).

Members from eight (8) MEFOMP member countries made a point to participate in the Workshop on Enhancing Regional Capabilities and Cooperation among States Parties in Radiological and Nuclear Emergency Preparedness and Response (ARASIA), Seoul, Korea.

Radiation Protection Training Course for Technicians



QaMPS in collaboration with Hamad Medical Corporation (HMC) organized Radiation Protection Training Course for Technicians held on 22 June 2019 in Bayt Al Dhiyafa, HBKMC, Doha.

Using of the diagnostic radiology services is common in most of the hospitals and medical centers in Qatar. The risk factor in working with radioactive sources (especially x-ray) is one of the most important factors that limit the spread of this technology (despite its importance). Therefore, HMC observed urgent need to train staff on the conditions and requirements of radiation protection in accordance with the nature of the work and the expected risks

The radiation workers (including technologists and radiographers, etc.) dealing potentially with ionizing radiation, needs regular training courses about radiation protection. It's mandatory to take radiation protection courses every two years for renew their license. Radiation courses are also mandatory for new staff. This course acquired a total of 4.5 CPD hours approved from QCHP and help the staff in their license renewal process.

Dr. Renato Padovani was the invited speakers from Italy and the workshop was attended by 105 participants.

At the end of this activity the participants were benefitted with the following:

- Good radiation protection knowledge.
- Know how to reduce external radiation exposure
- Be aware of the radiation patient safety.
- Have resources to the Self-development in the field of radiation safety.
- Know how to Comply with the international standards in radiation protection.

Workshop on Optimization and Dose Management issues in CT

In addition to that QaMPS in collaboration with Hamad Medical Corporation (HMC) organized Workshop on Optimization and Dose Management issues in CT, Bayt Al Dhiyafah Hamad Bin Khalifa Medical City on 13 July 2019. Almost 40 participants, CT Radiologists, CT technologists, have attended this workshop. The workshop topics were very interactive and concentrated on the common challenges in CT, Best practices in protocols and radiation, Practical session: Scanner hands-on activity for some CT protocols and etc.

Workshop on Radiation Protection for Physicians



On 22 June 2019 QaMPS in collaboration with Hamad Medical Corporation (HMC) organized Workshop on Radiation Protection for Physicians. Dr. Virginia Tsapaki, IAEA expert was the invited speakers from Greece and the workshop was attended by 63 participants.

Ionizing radiation is being used in most of the hospitals outside imaging departments in HMC, because of the risks related to these technologies, medical personnel are required to demonstrate proficiency in their proper use. Recognizing an urgent need to train physicians on the conditions and requirements of radiation protection in accordance with the nature of the work and the expected risks this workshop was organized.

This workshop was awarded 5.25 CPD points from QCHP and It's mandatory to take radiation protection courses every two years for staff to renew their license. Radiation courses are also recommended for the new staff.

After successfully attending the workshop we expect enhancement in the radiation protection knowledge and skills for the radiation workers which will lead to:

- Optimize the patient safety (radiation dose reduction)
- Improve the occupational radiation safety for medical staff.
- The primary objective is to minimize radiation exposure to their body and reduce the radiation levels in the work environment.

Workshop on Medical physics in diagnostic radiology



As part of International Medical physics Certification board (IMPCB) exam, QaMPS in collaboration with Hamad Medical Corporation (HMC) organized workshop on Medical physics in diagnostic radiology in association with Yale University, USA at Bayt Al Dhiyafah Hamad Bin Khalifa Medical City on 29-30 September 2019. The workshop topics were very important for whom registered on part I and Part II exams. This workshop included Basics of physics and some physics concepts, MRI imaging, CT, Mammography and Ultrasound as well as mathematical concepts.

Dr Adel Mustafa, Associate Professor of Clinical Radiology and Biomedical Imaging

Yale University School of Medicine, USA. Almost 13 participants, medical physicist, were attending the workshops.

National Workshop on Medical Management of Nuclear or Radiological Emergencies



Dr. Huda Al Naemi, president of QaMPS, in collaboration with the Major Incident Planning Department, recently arranged a five-day workshop titled 'National Workshop on Medical Management of Nuclear or Radiological Emergencies'. The event, which was held at the ITQAN Clinical Simulation and Innovation Center from 6 to 10 October, aimed to create a local team from medical staff who are prepared to act in case of a radiological or nuclear incident.

Two international speakers, Dr. Jason E. Davis, PHD, CHP, Health Physicists from the USA and Dr. Eduardo Herrera Reyes, International Expert in Medical Response to Radiation from Chili delivered informative presentations as part of the event. Both speakers have vast experience in the area of emergency preparedness for radiological incidents and they regularly share their experience during international workshops organized by various organizations around the world.

Staff from the Radiation Safety Section of the OHS Department participated in the workshop by leading practical sessions which focused on the importance of education tools. Different radiation measurement devices and decontamination kits were demonstrated with the goal of making the audience aware of how these tools and instruments might be used in emergency situations. The workshop consisted of scientific lectures and exercises.

Dr. Walid O. Abou Galala, Executive Director of the Major Incident Planning Department took great effort in arranging the workshop by communicating with key staff in each HMC hospital as part of an effort to build HMC's team of train the trainers. The workshop was attended by 40 participants from different hospitals, departments, and specialties.

For the first time in the middle East, HMC host the IMPCB 3 parts exams in Doha for 45 candidates



For the first time Hamad Medical Corporation (HMC) hosted the international Medical Physics Certification Board exams. This is great opportunity for 15 Medical Physicists in HMC to be certified as qualified medical physicists in various specialties in line with one of the HMC goals. Prior to these exams, a two-day medical physics workshop was conducted as continuous professional education for medical staff. Dr Huda Al Naemi, the Executive Director for the Occupational Health and Safety and the President of the Middle East Federation for the Organization of Medical Physics (MEFOMP) in collaboration with Dr Abdullatif Al-Khal Chief of Medical Education Department in HMC have worked together for long time to organize this international event in Qatar.

The examination is conducted by a team of seven IMPCB examining faculty selected by the Board Examination Committee. 45 candidates from different countries like Mexico, Brazil, Georgia, Pakistan, Afghanistan, Jordan, Lebanon and Iraq etc around the world participated in this examination which is the highest number of candidates comparing to other exams conducted previously. This is considered as International recognition for Qatar and HMC as a hub for medical physics certification.

The mission of the International Medical Physics Certification Board (IMPCB) is to support the practice of medical physics through a certification program to achieve the goal of improving the quality of patient care in diagnostic and therapeutic medicine. The IMPCB conducts a three-part Board Examination in several medical physics imaging and therapy sub-specialties worldwide, with emphasis on parts of the world that lack certification programs. Over the past two years examinations have been held in Mexico, Bangladesh, Italy (several times), Czech Republic, Austria and Chile.

QaMPS organize workshop in Radiation Protection in Medical Field



Qatar Society for Medical Physicists (QaMPS) in cooperation with Hamad Medical Corporation (HMC) organized a workshop for Medical Radiation workers under the title of "Radiation Protection in Medical Field".

Dr. Huda Al Naemi, President of QaMPS and Executive Director of OHS Department opened the workshop and welcomed the speakers Dr. Hassan Kharita-Assistant Executive Director Radiation Safety, HMC, Dr. Zakiya Al Rahbi-Head of Quality Assurance, Planning and Radiation Protection, National Oncology Center, The Royal Hospital, Muscat, Sultanate of Oman, Dr. Ibtesam Nasser Al-Maskari-Superintendent and Chief Medical Physicist, Department of Radiology Molecular Imaging, Medical Physics Unit, College of Medicine and Health Sciences, Sultan Qaboos University, Sultanate of Oman and Dr. S. Adam Stratz-Office of Weapons of Mass Destruction Terrorism, Bureau of International Security and Nonproliferation, U.S. Department of State.

Dr. Huda delivered a presentation on emergency preparedness for radiation incidents while Dr. Adam presented the nuclear security system. In the afternoon, a practical session was organized with the whole team of Medical Physicist who played a role to scan and decontaminate the casualties in case of radiological incidents, 15 Physicists were wearing the full protective equipment or suit to demonstrate the real scenario for the audience. 120 medical staff from HMC have attended the workshop and they cooperate and interact with the drill in positive way.

The feedback of the workshop was very good, and the audience was very satisfied with this education session.

The Medical Physics Unit at Jaber Al-Ahmad Center for Molecular Imaging held a training course approved by the Radiation Protection Department at the Ministry of Health in Kuwait entitled "Radiation Protection for Radiation and Nuclear Medicine Workers."

The 6th International Conference on Radiation Medicine, KSA

MEFOMP Celebrations of the International Day of Medical Physics, November 2019.

IAEA National Training Course on Occupational Radiation Protection in Kuwait



Kuwait Society for Medical Physicists (KAMP) in collaboration with Ministry of Public Health in Kuwait and International Atomic Energy Agency (IAEA) organized a National Training Course on Occupational Radiation Protection from 10-14 November 2019 at Jaber Al Ahmad Al Sabah Hospital in Kuwait.

Dr. Abdalla Al Hajj, MEFOMP past president and two experts from IAEA joined the course and the agenda of the course covering basic principles of Radiation Protection, Biological Radiation effects, Radiation and Pregnancy, Occupational Exposure, Personnel Monitoring, Radiation Monitoring Instrumentation and a lot of topics under the title of Radiation Protection were discussed. The educational material of the course was IAEA materials and it was well delivered by the experts.

Dr. Meshari Al Nuami, President of Kuwait Society of Medical Physics (KAMP) and Dr. Hanan Al Dausari, Vice President of society were the chief organizers of the workshop which was closed by

organizing a panel discussion on the role and responsibilities of the Medical Physicists. This panel discussion took place parallel with the KAMPS of the IDMP.