

**Report of**  
**International Conference on Radiation in Health Care**  
**On the occasion of**  
**International Medical Physics Week**

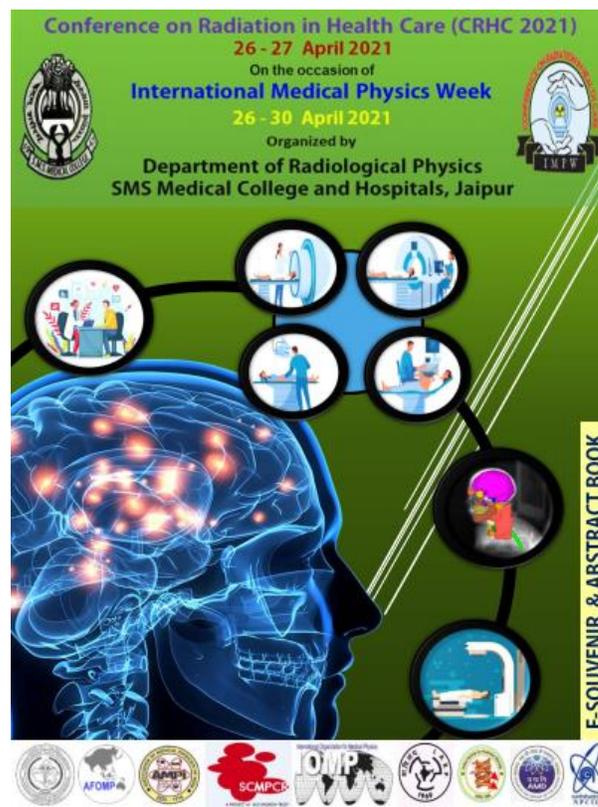
The department of Radiological Physics, SMS Medical College and Hospitals, Jaipur hosted two days international Conference on Radiation in Health Care CRHC 2021 virtually on 26<sup>th</sup> and 27<sup>th</sup> April 2021 on the occasion of the International Medical Physics Week (IMPW) celebrated from 26<sup>th</sup> to 30<sup>th</sup> April 2021.



Contribution of Medical Physics in healthcare is multi-dimensional and it has improved the healthcare tremendously. The recent advancements in Medical Physics may it be in Radio diagnosis, Radiotherapy, Nuclear Medicine and various fields specially using ionizing radiation has made monumental sprints. To bring over it and recognize the contribution of Medical Physics to healthcare, International Organization for Medical Physics (IOMP) has started to celebrate 7<sup>th</sup> November, the birthday of Madam Marie Curie as International Day of Medical Physics (IDMP) since 2013. However, it was thought that a week devoted to the contributions of medical physicists to healthcare to be celebrated as International Medical Physics Week. For the first time, it was celebrated from 11<sup>th</sup> -15<sup>th</sup> May 2020, where various academic and teaching institutes showcased the contributions of medical physicists to healthcare globally.

IMPW was launched with the purpose to motivate organization of activities in a defined week that result in the promotion of the subject of medical physics globally, increasing the visibility of the profession and outreach to fellow professionals and general public. The theme of this year's celebrations was 'Communicating the Role of Medical Physicists to the Public'. The Department of Radiological Physics, SMS Medical College and Hospitals, Jaipur, India celebrated IMPW with a two days international scientific programme Conference on Radiation in Health Care. The rapidly evolving applications of physics in medicine and the current pandemic all over the world demands new set of skills as well as outlooks to meet the challenges efficiently and successfully. This virtual conference offered a forum for sharing invaluable experiences for improving the practice of Medical Physics and an opportunity to listen to a number of great people holding and practicing high ideas in life as well as profession.

The scientific programme included talks and teaching sessions by eminent speakers in the field of medical physics. On 26<sup>th</sup> April 2021, the first day of the conference, the scientific programme started with ‘Saraswati Vandana’ a prayer to the goddess of knowledge as per the Indian tradition. An introduction to the purpose and objectives of CRHC 2021, IMPW celebrations and a congenial welcome to all speakers and participants were proposed by the Organizing Secretary Dr Mary Joan. A prerecorded video message on the IMPW celebration from the President IOMP, Prof Madan Rehani and a live message from the President AFOMP, Prof Arun Chougule were conveyed. An e-Souvenir and Abstract Book of the conference was released thereafter. Greetings and best wishes for CRHC 2021 from Prof James Goh, President IUPESM, Prof Madan Rehani President IOMP, Prof Raja Babu Panwar, Hon Vice Chancellor RUHS, Jaipur, Prof Sudhir Bhandari, Principal and Controller SMS Medical College and Hospitals Jaipur, messages from Prof Arun Chougule, President AFOMP and the Organizing Chairman, Dr Mary Joan, Organizing Secretary and abstracts of all the invited talks, special lectures and addresses, poster and oral presentations, endorsements and advertisements from knowledge and trade partners, a brief narration about the Pink City, Jaipur comprised the e-Souvenir.



A keynote address by Shri N K Pushpakar, Site Director, NPCIL Rawatbhata Rajasthan Site, Kota



followed the inaugural session. He has described about various applications of ionizing radiation in healthcare, regulatory stature, contributions of Rawatbhata site to the production and supply of different radioactive sources and other services provided by the NPCIL. Prof Arun Chougule wrapped the session by further elaborating on the other services supported by the NPCIL like CBRN emergency preparedness and

response, contribution in the power requirement of the country and other services under the corporate social responsibilities.

There were four more scientific sessions on the first day. Advancements in the use of radiation in health care, Advanced therapeutic radiological procedures, Radiation protection and dosimetry in radiotherapy, radiology and nuclear medicine were the next three sessions where Prof Madan Rehani, USA, Prof G A Zakaria, Germany, Prof Carmel Caruana, Malta, Prof S D Sharma, Mumbai, Mr Karan Bhateja PTW, Dr Chai Hong Yeong, Malaysia, Dr Dayananda Sharma, Chennai, Dr K Ganapathy, Chennai, Dr A K Shukla, Lucknow, Dr Pankaj Tandon, Mumbai, Dr J K Bhagat, Jaipur, Dr Subhash Kheruka, Lucknow, Dr Xiance Jin, China deliberated on topics varying from medical physics professional roles, challenges, dosimetry, radiation protection, artificial intelligence, diagnostic radiology, nuclear medicine and radiotherapy including proton therapy.



A best poster session was conducted thereafter to encourage and promote the young and early career medical physicists and scientists. 12 young investigators from Srinagar (a northern most state capital city) to Thiruvananthapuram (a southernmost state capital city) and the neighboring country Bangladesh presented their research work. Shiram A Rajurkar from Mumbai and Gokul Raj from Bikaner won the first and second best poster awards respectively.

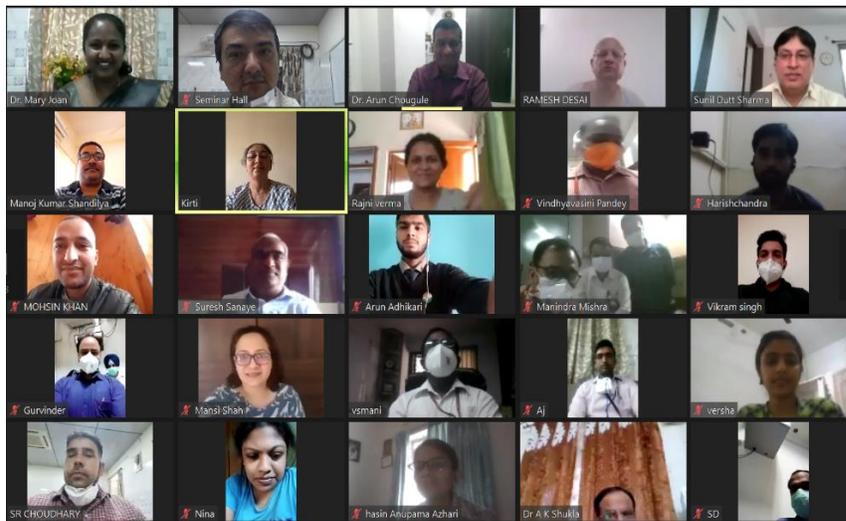
A ‘Saraswati Vandana’ to evoke the presence of the Goddess of knowledge marked the beginning of the second day scientific programme also followed by a recapitulation of first day programme by Prof Arun Chougule, Organizing Chairman.



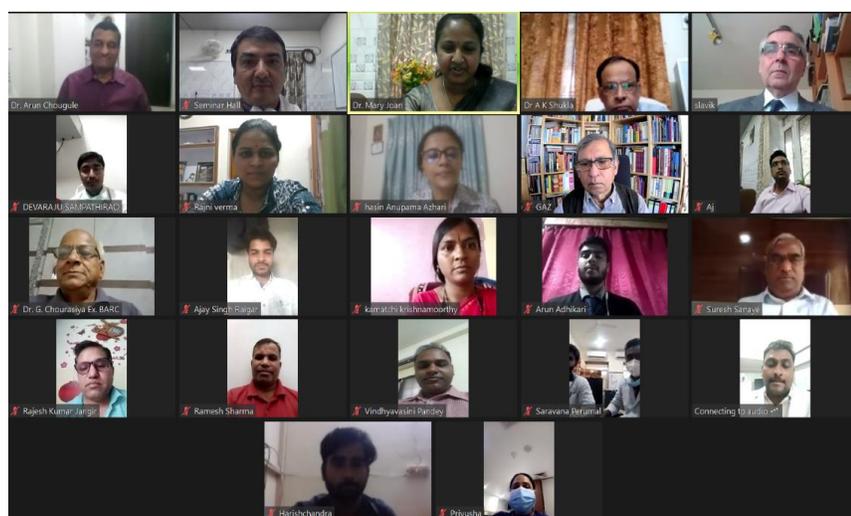
A special highlight of the second day scientific programme was ‘meet the expert’ session. Dr S Murali from BARC Mumbai spoke about ‘Radiation Safety, Surveillance, Prevention, Preparedness and Response to Exigency’ with emphasis on Radiation Technology / Nuclear Medicine usage’. Following meet the expert lecture was a plenary talk by Prof Madan Rehani on the theme of the conference which is also the theme of the IMPW this year. Dr MK Sandilya of the Atomic Mineral Directorate, Jaipur gave a special address on ‘Management of Radiological emergencies in public domain and Role of Emergency Response Centers’. A very interesting and

enlightening discussion followed, and many queries regarding regulatory and professional affairs were answered by AERB representatives present during the discussions, Prof SD Sharma, President, AMPI and Prof Arun Chougule, President AFOMP and the organizing chairman.

The next session Medical Physics in Health Care introduced by Prof Chougule and Prof Hasin Anupama Azhari, Bangladesh and Dr V Subramani, New Delhi elaborated on the varying multidimensional roles of medical physicists in the multidisciplinary radiological specialties in the healthcare system. This session was also marked by a very active and informative discussion following the talks. Not only the speakers but also the other experts present took part actively in answering the queries from the delegates.



A very thrilling best oral paper session where 12 delegates presented their research work followed. The question and answer session following the presentation was also enticing and invigorating. The delegates were opportune enough to listen to the enlightening explanations provided by the expert faculty present during the discussion. Sarin B from Thiruvananthapuram and Dr VP Pandey from Bhopal won the first and second best oral awards respectively.



The last scientific session discussed the current issues and way forward. The impact of Covid-19 on medical physics practices in Africa was presented by Prof Christoph Trauernicht, S Africa who is also the recently elected President of the Federation of African Medical Physics Organizations (FAMPO). Nurturing a global initiative in medical physics leadership and mentoring by Dr Aik Hao Ng, Malaysia was

also very encouraging especially to young and early career medical physicists. Main achievements of the International Union for Physical and Engineering Sciences in Medicine (IUPESM) for the profession – a summary of 40 years progress was presented in a nutshell by Prof. Slavik Tabakov, Vice-President



As discussed and disseminated in the CRHC 2021, the first two days of the IMPW celebrations, a single day IDMP celebrations or a week long IMPW celebrations might not completely serve the purpose of uplifting the professional status of medical physicists in healthcare. We should equip and improve ourselves to meet the challenges efficiently. There are great times ahead of us; Country needs our service. Each one of us is needed - in our country, community and university - to ensure decisive, visible and measurable actions are taken for the medical physics profession. As we celebrated the IMPW 2021 by holding this international Conference on Radiation in Health Care, CRHC 2021, the spirit of this conference will make each and every one of us to be a leader not only within our own spheres of influence but also in the associated multidisciplinary specialties and commit to take pragmatic action to accelerate professional and personal development. Wishing everyone a fruitful IMPW 2021!



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