

MEDICAL PHYSICS GAZETTE

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An affiliate of International Organisation for Medical Physics

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Editorial

Medical Physics & Biomedical Engineering

The final decade of 19th century witnessed three epoch-making discoveries of x-ray by Wilhelm Roentgen in Germany in 1895, radioactivity by Henri Becquerel in France in 1896 and the electron by J.J. Thompson in England in 1897. These discoveries, along with other technological developments, affected the health sectors in a positive way. Scientists, physicists and engineers contributed to the medical field in terms of equipment and services based upon scientific and engineering applications. International Organisation for Medical Physics (IOMP) was founded in 1963 and International Federation for Medical and Biological Engineering (IFMBE) was founded in 1959. At present IOMP may have memberships of about 30,000 medical physicists spread over 90 countries (national members) and IFMBE represent about 1,20,000 members all over the world. Due to significant overlap between the activities of IOMP and IFMBE, the two organisations held a combined conference of 12th international conference on medical and biological engineering and 5th international conference on medical physics at Jerusalem in 1979 which led to the establishment of an umbrella organisation of the International Union for Physical and Engineering Sciences in Medicine (IUPESM) in 1980. IUPESM holds a triennial world congress for medical physics and biomedical engineering and this time it is scheduled to be held at Adelaide, Australia during 29th Sept - 4th Oct 2025. IUPESM is an international non-governmental organisation with headquarter at Ottawa, Canada. Very recently IUPESM conducted a survey of medical physics professionals and biomedical engineers regarding the status of medical physics and biomedical engineering seeking information about other staff in the department (like, researchers, data scientists, computer personnel etc.), number of patients served, research grants, publications, spin-out companies, public engagements, QA and others tests carried out etc. The survey asked about the likely benefits of the combined medical physics and biomedical engineering department as well. In India, the National Commission for Allied and Healthcare Professions (NCAHP) has started working to regulate those healthcare professions which don't fall under the ambit of any commission. There are a few professions which provide clinical services to the patients, staff and the equipment used in diagnosis and treatment of ailments but are not regulated by any commission previously. These professions are essential to carry out researches in basic and applied science, imparting training to the users of the equipment, upkeep of equipment and improving the techniques and technology. All these areas are crucial for the patients' safety, treatment outcome and the future vision in these arenas. Medical Physicist (with International Standard Classification of Occupations ISCO code 2111) and Biomedical Engineer (with ISCO code 2149) have been put in different group of 8 and 9 respectively by NCAHP at present. Medical physics professionals are very few in numbers in any hospital or medical college (or institute) and hence the subject has lesser visibility. Similar conditions exist for biomedical engineering. There are many sub-disciplines of biomedical engineering which are gaining ground in a medical institute. These could be the sub-specialty of biomaterials, biomechanics, medical informatics and magnetic resonance in medicine. Incorporating all such professions to develop a combined department of Medical Physics and Biomedical Engineering would be a realistic and futuristic endeavour for the betterment of the profession. However, incorporation of these subjects in already cramped syllabus of medical physics and imparting the meaningful training in these allied areas may pose a challenge. However, medical physicists need only an introductory training and education in allied areas of biomedical engineering and same is true for biomedical engineers who just need an introductory teaching of medical physics. As the many medical devices are based upon the principles of physics and some do use non-ionising radiation like laser, ultraviolet (UV), infrared, radiofrequency etc. the reach and impact of such a combined department (and discipline) with teaching programme (like M.Sc., B.Tech., M.Tech. and Ph.D.) may have a much wider impact on our profession and professional status.

Pratik Kumar

From the Desk of the President, AMPI



Esteemed readers of MPG,

I am honored to address you in this first issue of 2024 of MPG, the much sought after newsletter of the Indian medical physics community. By the time this issue of MPG reaches your hands the new EC and office bearers of AMPI for the period 2024-27 would have assumed office. I take this opportunity to thank and assure you all that the new team of elected representatives of AMPI will build on the good work done by the outgoing team in a systematic and consistent manner for the betterment of medical physics profession.

We, at the AMPI office, are cognizant of the challenges being faced by the medical physics professionals in the present environment and are confident of converting the challenges into opportunities with the support of all stakeholders. Raising the quality and standard of the medical physics practice remains the first priority of AMPI, especially with the introduction of more and more advanced and complex medical technologies in the clinics. AI has started showing its disruptive power in all technology driven domains including healthcare. We need to learn to not only adapt but also harness it for finding safer and better solutions for patient care. I see increasing role for medical physicists in this area as they have the necessary basic skills. But more is needed in terms of skill up-gradation to brace for the challenge. It is encouraging to note that the early signs of interest and involvement of our colleagues in AI and ML applications are visible. Sooner than later more and more medical physicists are expected to get involved in collaboration with clinical colleagues to exploit the tremendous power of the new technology. We are in the process of preparing a road-map to meet the expectations of all stake-holders, especially the younger medical physics colleagues. In-puts and feed-backs are welcome. Together we can.

I thank Prof Pratik Kumar and his team for painstakingly striving to bring out this important newsletter of AMPI. The MPG is emerging as a platform for highlighting the contemporary issues related to medical physicists in India and also for sharing their professional achievements and concerns.

With best wishes and warmest regards,

Manoj K Semwal, PhD

I put my heart and my soul into my work, and have lost my mind in the process.

Vincent Van Gogh

From the Desk of the Secretary, AMPI



Dear Esteemed Members,

I extend warm greetings to each one of you. I express profound gratitude to both the general members and the executive committee of AMPI for their trust in me by electing me as the Secretary of AMPI for the term spanning from 2024 to 2027. It is with great pleasure and a sense of duty that I take on this role. Serving as the Secretary of AMPI entails a significant responsibility and a commitment to the advancement of medical physics in India. With your unwavering support and cooperation, I pledge to exert my utmost effort to fulfill the responsibilities entrusted to me and to ensure that professional activities and concerns are addressed to your satisfaction.

AMPI, as a professional body, remains steadfast in its dedication to the ongoing professional development amidst the challenges of our time. The executive committee of AMPI is actively engaged in deliberations and decision-making on various critical aspects concerning the professional advancement of medical physicists. These include engagements with regulatory bodies such as the National Medical Commission (NMC), the National Commission of Allied Health Professions (NCAHP), as well as matters pertaining to universities and the University Grants Commission (UGC), among others.

On behalf of AMPI EC 2024-27, I assure you that we are committed to advancing professional development in close collaboration with all parallel wings of AMPI, including CMPI, trustees, and all AMPI chapters. Together, we will strive to elevate the standards of our profession and foster a cohesive and supportive community within the field of medical physics. We actively seek input from our members to ensure that our representation to the relevant authorities is comprehensive and effective. On behalf of AMPI, I extend a warm invitation to all of you to join us at AMPICON 2024 in Hyderabad and AMPICON 2025 in Guwahati.

Once again, I express my heartfelt thanks for your trust and support.

Warm regards,

Dr. Anuj K. Tyagi

Far and away the best prize that life has to offer is the chance to work hard at work worth doing.

Theodore Roosevelt

**A CONTINUING MEDICAL EDUCATION PROGRAM
ON THE OCCASION OF INTERNATIONAL
DAY OF MEDICAL PHYSICS & INTERNATIONAL DAY
OF RADIOLOGY**

**Dr Mary Joan
Associate Professor,
Department of Radiation Oncology,
Christian Medical College and Hospital,
Ludhiana, Punjab-141008**

On 8th November 2023, a Continuing Medical Education (CME) Program on the theme 'Standing on the Shoulders of Giants' was organized by the Departments of Radiation Oncology and Radio Diagnosis Christian Medical College & Hospital, Ludhiana to commemorate the International Day of Medical Physics (IDMP) and the International Day of Radiology (IDoR) 2023. This CME was accredited with 3 credit hours by the Punjab Medical Council. The CME was held in the Guy & Constable Auditorium, Christian Medical College and Hospital, Ludhiana. 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 7th November, the birthday of Madam Marie Curie as International Day of Medical Physics (IDMP) since 2013. The main purpose of IDMP celebrations include motivating the organization of activities 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. Since the 7th day of November 2013, the very first International Day of Medical Physics, where various academic and teaching institutes showcased the contributions of medical physicists to healthcare globally and continues to be celebrated annually thereafter. Discovery of X-rays on 8 November 1895 by German physicist Prof Wilhelm Roentgen has revolutionized the medical diagnosis and treatment. The anniversary of this discovery is celebrated around the world as IDoR in recognition of the remarkable contributions made by radiological imaging and radiological treatment to health care, and the role of radiation professionals in providing quality care to patients. Christian Medical College and Hospital Ludhiana has been always in the forefront to avail the best diagnostic and treatment facilities to treat patients since 1894. The teaching and training program for radiotherapy technologists in CMC Ludhiana dates to early 1960's and the MD Radiation Oncology program at the institute completed 30 years. The departments of Radiation Oncology and Radio Diagnosis collectively decided to commemorate the IDMP and IDoR 2023 and more than 260 healthcare professionals and trainees attended the CME. The CME started with the inaugural ceremony which was graced by Dr William Bhatti, Director, CMC and Hospital, Ludhiana, Dr Jeyaraj Pandian, Principal Christian Medical College Ludhiana, Dr Allen Joseph, Medical Superintendent, CMC Hospital and Dr MK Mahajan Chief Guest and key note speaker. The inaugural program started with a prayer by Rev. Fr. Alex Peter and invocation song by the radiotherapy choir. Dr Pamela Jeyaraj, Prof and Head Department of Radiation Oncology and the Organizing Chairperson of the CME formally

welcomed all the guests and delegates. Dr Harish Gambhir spoke about IDMP and IDoR and threw light on the objectives of the CME highlighting the contributions of Madame Marie Curie and Prof W C Roentgen. Dr. William Bhatti emphasized the importance of remembering the pioneers and their contributions and stated that we learn and grow in the process. Dr. Jeyaraj Pandian highlighted the importance of scientific acumen and shared insights to define and design research goals for dealing with the disease burden of the country. He also appreciated the efforts of the Department of Radiation Oncology for organizing this CME. Dr. Allen Joseph spoke on the need of keeping everyone updated with advanced treatment options and developing necessary skills and conveyed the IDMP and IDoR greetings. Prof Dr MK Mahajan a pioneer of Radiation Oncology in the region and giant in view of his services took the audience through the journey of development of Radiology and Radiation Oncology at CMCH Ludhiana. The inaugural ceremony ended with Dr. Mary Joan, Associate Professor and RSO and the Organizing Secretary of the CME extending a vote of thanks to the entire invited faculty, delegates and the team of support persons. The theme of this year's IDMP celebrations was 'Standing on the Shoulders of Giants' and it inspires us to continue our collective commitment to improving patient care, advancing medical technology, and enhancing the overall well-being of our communities. THE IDMP day is dedicated to raising awareness about the role of medical physicists in healthcare and their contributions to the well-being of patients. Medical physicists play a crucial role in areas such as radiation therapy, diagnostic imaging, and nuclear medicine, ensuring the safe and effective use of medical technology. The International Day of Medical Physics serves to highlight the importance of their work in improving the diagnosis and treatment of diseases and promoting the well-being of individuals worldwide. The rapidly evolving applications of physics in medicine demands new set of skills as well as outlooks to meet the challenges efficiently and successfully. This CME offered a forum for radiation professionals of various healthcare streams to come together and share invaluable experiences for improving the practice of applications of radiation in medicine. The scientific program included a key note talk by veteran radiation oncologist and former Professor and Head of Department of Radiation Oncology, CMC Ludhiana on the theme 'Standing on the Shoulders of Giants'. He has emphasized not only the contributions of giant scientists and clinical medical physicists to the field of radiation oncology, but also reiterated the importance of the role of medical physicists in routine clinical activities of radiation oncology, academic and research work. The session was moderated by Dr Harish Gambhir, Sono-Radiologist, CMCH Ludhiana and Dr Gurpreet Kaur Thiara, Transfusion Medicine Head, CMCH Ludhiana. Following the keynote address, Dr Rajeshwar Sahonta, Associate Professor of Neurology and Interventional Neurology spoke about the 'Recent Advances in Neuro-Interventions, moderated by Dr Pamela Jeyaraj, Radiation Oncologist and Dr Amit Batra, Interventional Radiologist. CMCH Ludhiana has a dedicated gamma blood irradiator facility for blood and blood components and Dr Gurpreet Kaur Thiara, Head, Transfusion Medicine talked about 'irradiation of cellular blood components: transfusion medicine perspective' moderated by Dr Harpreet Singh, Head Radiation Oncology, Mohan Dai Oswal Cancer Hospital, Ludhiana and Dr Roma Issac, Head, Pathology, CMCL Ludhiana. Indications and contra indications for blood

irradiation, when to use the irradiated blood, The talk was followed by short quiz for the participants on blood irradiation. A promotional video from PTW on advances in radiation dosimetry was displayed after the tea break moderated by Dr Mary Joan, Medical Physicist and Dr Abraham P Abraham, Radiation Oncologist. The next talk was 'Personal monitoring: What we should know' by Dr Abraham P Abraham, Radiation Oncologist moderated by Dr Shekhar Kapoor, Head, Oral Medicine and Radiology, CMCH Ludhiana and Dr Julie Mathew, Christian Dental College Ludhiana. The next talk was on 'Improving Patient Safety in Radiology- Minimizing Human Errors', by Dr Vineet Alexander Joseph a third year PG resident in Radio Diagnosis moderated by Dr Manbir Singh, Head, Urology, CMCH Ludhiana and Dr Sunil Varghese, ENT, CMCH Ludhiana. Varying situations in Radiology in radiation safety and physical safety was discussed in the session along with practical examples from Urology and ENT. Following that the 'Facts and Myths in Radiation Protection' was discussed by Mrs Manjinder Kaur Dhanoa, Tutor and Senior Radiotherapy Technologist. This session was moderated by Dr Kamlesh Passi, Senior Medical

Physicist, Mohan Dai Oswal Cancer Hospital, Dr Paul S John, Head, Neurosurgery, CMCH Ludhiana and Dr Gurbhej Sing, Head, Cardiology, CMCH Ludhiana. A thriving discussion followed including various practical situations and challenges in neurosurgery, cardiology and even considering patient safety and patient doses. A poster making competition on the theme 'Standing on the Shoulders of Giants' was organized for the graduate students to promote awareness and to nurture all round development. An enthusiastic participation from students comprising 52 posters and 2 models upheld the spirit of the IDMP celebrations. The rapporteuring of posters was done by Dr Mary Joan. Mr Nikhil Mathew and Ms Harshpreet Kaur won the first and second prizes for model and Ms Vedika Choudhary, Ms Samreen Ansari and Ms Komal Pal won the 1st, 2nd and 3rd Prizes in poster respectively. Dr Samuel David, Associate Director, CMCH Ludhiana presented the results and awards to the winners. Following the prize distribution, the CME came to an end with a vote of thanks and the ethos of 'Standing on the Shoulders of Giants' strongly reverberating in all participants.



THREE CHEERS

Dr Vysakh Raveendran, Medical Physicist, ACTREC, Proton Therapy Centre, Navi Mumbai has been awarded Best Poster Award at the School of Hadron Therapy at the International Centre for Theoretical Physics (ICTP), Trieste, Italy during April 2024. Congratulations!

THREE CHEERS

Dr Satish Uniyal has been promoted as Professor & Head, Department of Medical Physics, Himalayan Institute of Medical Sciences, Dehradun. Congratulations!

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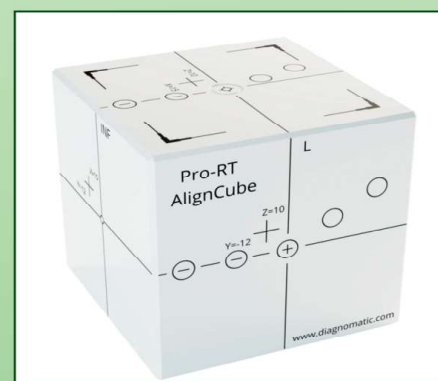
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A BRIEF ABOUT CMPI AND CMPI CERTIFICATION EXAMINATION 2023

Dr C P Bhatt

Consultant Medical Physicist, Department of Radiation
Oncology, Sarvodaya Hospital & Research Centre, Faridabad,
Haryana-121006. secretary@cmpi.org.in

The College of Medical Physics of India (CMPI), where excellence meets certification in the clinical medical physics fields of Diagnostic Imaging, Radiation Oncology, and Nuclear Medicine. Established in 2010, CMPI is a non-profit Academic wing of AMPI; dedicated to setting and upholding the highest standards in the practice of Medical Physicists in India.

Vision Statement: Our vision at CMPI is to establish and maintain standards in the practice of Medical Physicists, ensuring excellence in Diagnostic Imaging, Radiation Oncology, and Nuclear Medicine through the certification of professionals.

Mission Statement: CMPI is committed to serving the public and the medical profession by certifying that its members have acquired, demonstrated, and maintained a requisite standard of knowledge in medical physics, showcasing competence in the practice of Diagnostic Imaging, Radiation Oncology, and Nuclear Medicine Physics.

Scope of the College: As a part of our mission, CMPI works tirelessly to certify Medical Physicists practicing in India and actively engages in the review and accreditation of educational programs in medical physics.

Certification Programme: Since its inception in 2010, CMPI has been at the forefront of the certification process. The CMPI Certification Exam, conducted pan-India, at different centers. The examination comprises two parts: Part A (Written Examination, Two Papers) and Part B (Oral Evaluation), ensuring a comprehensive evaluation of candidates' competency. To be successful, a candidate must score at least 50% in each paper of Part A and a minimum of 60% aggregate.

Academic activities: CMPI understands the importance of supporting its examinees and clinical medical physicist; for that we routinely conducting the academic activities for clinical medical physicist. In 2023 alone, the CMPI conducted three refresher courses and routine academic activities for clinical medical physicists, providing additional resources to enhance their preparation.

- 1. First academic refresher course** for medical physics organized by AMPI Eastern chapter, held in Apollo, Kolkata, on the 25th and 26th of March 2023. This course was a great success. The course was organized by CMPI in association with the AMPI-Eastern chapter and attended by more than 65 participants from various institutions across the eastern part of the country.
- 2. Second academic refresher course:** The Centre for Medical Physics, Panjab University, Chandigarh, in

collaboration with PGIMER and AMPI, successfully organized the second academic refresher course for medical physics on July 1 & 2, 2023. Attended by over 75 participants from diverse institutions across the northern region of the country, the two-day course covered a comprehensive array of medical physics topics.

3. Third academic refresher course

The Medical Physics Division at Mangalore University, in collaboration with the AMPI, successfully organized the third academic refresher course for medical physics at Mangalore University Campus, Mangalagangothri, Mangalore on October 28th & 29th, 2023. With over 70 participants from various institutions across the southern part of the country.

Maintenance of Certification Implementation Continuing Professional Development (CPD): Year 2024 onwards CMPI starting the Maintenance of certificate with CPD with credit points from different activities like Conference attendance, Academic events like publications, projects and education.

CMPI Certification Exam 2023: In the year 2023, CMPI conducted its certification exam, with 48 candidates applying for the written exam. A commendable 70.5% of the candidates who appeared passed the Part A examination. Following this success, 24 candidates qualified for the Part B (Oral Evaluation) exam, held on December 4-5, 2023, at RP&AD, BARC, Mumbai. Total 20 candidates appeared for CMPI oral (part 2) exam 2023 and 16 (80%) qualified the Exam. CMPI congratulate all 16 members and welcome to the college.

CMPI Certified members for Year 2023

Sr No	Name	CMPI NO
1	G Kesavan	MM083
2	Muthu Sivakumar	MM084
3	K Nithin	MM085
4	Panda Subhajit	MM086
5	Muhammed Anaz RC	MM087
6	Kumar Narendar	MM088
7	K Mahesh Raja	MM089
8	Sanju Sanju	MM090
9	C Prasobh	MM091
10	Kataria Alka	MM092
11	S Giridharan	MM093
12	A Satheesh Kumar	MM094
13	Chopal Yachika	MM095
14	S Pradeed Kumar	MM096
15	Kushwaha Vidya Sagar	MM097
16	Sajini S Kurup	MM098

Best Two in the CMPI Exam 2023 are: 1st: K Mahesh Raja and 2nd: Sanju Sanju For Further detail about CMPI, please visit to <https://cmpi.org.in/>



CMPI Exam 2023 Certified Members



First CMPI Refresher Course for medical physics was organized by AMPI Eastern chapter, held in Apollo, Kolkata, on the 25th and 26th of March 2023.



Second CMPI Refresher Course for medical physics was organized by the Centre for Medical Physics, Panjab University, Chandigarh, in collaboration with PGIMER and AMPI, on July 1 & 2, 2023.

THREE CHEERS

Dr. Gopishankar N., Assoc. Professor, Medical Physics, Deptt. of Radiation Oncology, AIIMS, New Delhi has been awarded third prize in the category "innovation and devices" at AIIMS third annual research day celebration during January 2024. He was also granted Indian patent in the title "An apparatus for verification of radiosurgery using film dosimetry" in January 2024. He is an AMPI EC member currently. Congratulations!

THREE CHEERS

Dr. Richa Sharma, Senior Medical Physicist, Radiation Oncology Department, BLK-MAX Super Speciality Hospital, New Delhi has been awarded Ph.D. degree by Amity Institute of Applied Sciences, Amity University, Noida in December, 2023. The topic of her Ph.D. thesis was "**Study on photon and ion beam irradiation of cancer via Monte Carlo simulation (theoretical) and experimental methods**". Congratulations!

Dr. Sukhvir Singh, Scientist 'E' (Medical Physics), INMAS, DRDO was awarded with the Best Oral Paper award by AMPI during International Conference on Medical Physics (ICMP-2023), 6-9 Dec, 2023 at BARC Mumbai for his research titled '**Optimisation of target, beam, and degrader foil parameters of solid targetary system for 64-Cu production using medical Cyclotron**'. Congratulations!

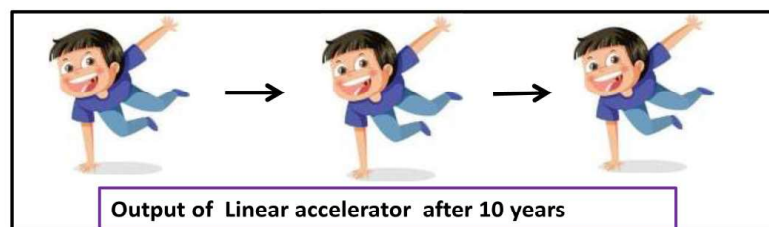
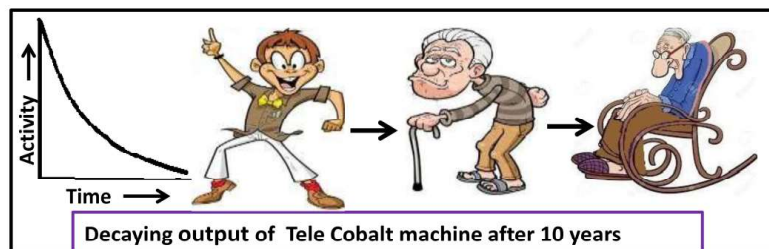
Dr. Atul Mishra, Asstt. Professor (Medical Physics), Deptt. of Radiation Oncology, U.P. Univ. of Medical Sciences, Saifai, Etawah was awarded AMPI Meritorious Medical Physicist Award during ICMP-2023 at Mumbai. Congratulations!

Dr Saurabh Raut, Medical Physicist, LNJP Hospital, New Delhi was awarded PhD degree by Bharathiar University, Coimbatore in April 2023. The topic of his thesis was "**Dosimetric analysis of treatment planning optimization methods of high dose rate brachytherapy of cervical cancer**". Congratulations!

Dr Mohit Kumar, Medical Physicist, LNJP Hospital, New Delhi was awarded PhD degree by Delhi Technological University (DTU) in Nov. 2023. The topic of his thesis was "**Spectroscopic studies of rare earth ions doped lithium bismuth alumino borosilicate glasses for photonic applications**". Congratulations!

Dr Amanjot Kaur, Chief Medical Physicist, Deptt. of Radiotherapy, Mahatma Phule Charitable Trust (MPCT) Hospital, Navi Mumbai has been awarded Ph.D. degree by D. Y. Patil University, Kolhapur in January 2024. The title of her thesis was "**Studies on radiation shielding considerations of installations housing advanced radiotherapy equipments**". Congratulations!

MEDICAL PHYSICS FUN TIME



Ranjana Agrawal, Surat

OBITUARY



Vikash Kumar Pathak, **M.Sc. (Physics), DipRP (32nd Batch, BARC)** (6th January 1969 - 28th August 2023)

Medical Physics community of India is deeply saddened by the untimely demise of **Vikash Kumar Pathak**, Chief Physicist & RSO of Venkateshwar Hospital, Dwarka, New Delhi. It has been a personal loss for me as Vikash was not only a good friend of mine but also my batch-mate in M.Sc. (Phy) at Bhagalpur University, Bhagalpur as well as Dip. R. P. (32nd batch) at BARC, Mumbai. Going through the memory lane, I recall his jolly nature, sincerity and dedication and cherish his companionship. He was friendly to all of us and was liked by each one of us. Professionally, Vikash was highly dynamic and intelligent and had earned vast experience in different aspects of Medical physics and was an asset to Medical Physicist community. Vikash started his professional career as Medical Physicist and RSO at North Delhi Cancer Research Institute in 1995 from where he moved to, Gamma Knife at VIMHANS, New Delhi at the very initial stage of its installation way back in 1997. In 2005 Vikash moved to Elekta Systems and worked as Asst. Director till 2012 where he was responsible for dosimetric aspects of Elekta Systems during installation and commission in and around the country. In mid 2012 he moved to Amrita Institute of Medical Science and Research Centre as Asst. Professor and contributed towards treatment, teaching and various research and development of the institute. In May 2014 he moved to Sarvodaya Cancer Hospital and Research Institute, Hisar as Senior Medical Physicist cum RSO and was responsible for development of Medical Physics at the institute. In May 2017, Vikash joined Venkateshwar Hospital, Dwarka, New Delhi as Chief Physicist cum RSO where he was working till, he breathed his last. He had many publications in different journals and presented papers in various conferences. His article "A comparative study of surface dose using auto flash functionality of Monaco" was selected for presentation in AAPM annual meeting. He is survived by his wife and two daughter, elder one is in internship of her BDS and younger one is in final year of B.Tech (CS). In this time of grief, we pray almighty to give his soul place in his abode and to give his family the courage and strength to come out of this irreparable loss. Medical Physicist community and Dip R P alumnae are with the family in this tough time.

Ras Bihari Rakesh
Scientific Officer / G, BARC, Mumbai

OBITUARY



Dr Chandra Prakash Joshi **PhD, DipRP, DABMP, FCCPM**

Our medical physics community lost a great supporter of its cause on 20 Aug 2023 at Cooperstown, New York, USA when Dr Chandra Prakash Joshi, commonly known as Joshi to friends and as Chandan to his family, passed way following an accident. He had recently shifted to Cooperstown to work as Senior Medical Physicist at Bassett Cancer Institute, after working for over two decades at Kingston Regional Cancer Centre, Ontario, Canada.

Dr Joshi was born on 20 May 1962 at Chani, a remote hilly village, in district Almora of the then state of Uttar Pradesh (now Uttarakhand) to Smt Godawari and Shri Gauri Dutt Joshi. He was the eldest among his four siblings. After his schooling at Chani and Rishikesh, Joshi completed his MSc (Physics) from HNB Garhwal University, Srinagar (Uttarakhand), and DipRP from BARC/University of Mumbai. Subsequently he completed PhD in Physics from University of Pune and qualified as Diplomate of American Board of Medical Physics and Fellow of Canadian College of Physicists in Medicine. His academic and professional achievements were remarkable especially considering his childhood struggles in severe financial constraints in a remote place in India. He would not hesitate to share about those difficult times of his childhood among his friends with a sense of achievement. Joshi started his career as an RSO with an industry before switching to medical physics at MD Oswal Cancer Hospital, Ludhiana (Punjab) where he worked for about two years and then moved to the prestigious TMH, Mumbai. Here he met his future wife Ms Blanche, a medical physics colleague at TMH at that time. As was his wont he continued to explore avenues to expand his horizons and moved to Mafraq Hospital, Abu Dhabi in the mid 1990's. Subsequently, Joshi got an opportunity to work at Kingston Cancer Centre, Canada around the end of last millennium where he stayed put for over two decades before again moving to NY in Nov 2022. Joshi was endowed with a great sense of propriety and truthfulness in whatever he did and expected the same from others. Over the years he became an excellent communicator who rejoiced in sharing his knowledge and skills with others; be it in the field of medical physics or any other field of his interest. Despite being away from India for about three decades, raising the standards of medical physics profession in India was closest to his heart. For this he would attend AMPI conferences, write in JMed Phys and even sponsor awards on behalf of his institution in Canada for best research paper at AMPI conferences. Joshi was keen that the best practices in the profession should be adopted in India too. Strengthening and popularizing CMPI certification was one of his oft repeated suggestions to improve the standards of practice in medical physics. Reading biographies of eminent global personalities, listening to light music, especially Ghazals from maestros like Mehdi Hassan and Ghulam Ali, were his favourite pastime besides visiting different parts of the world and going on long walks in the wild in solitude. The last of his hobby, hiking alone, tragically led to the fatal accident on 20th August 2023. He was a socio-politically aware person and kept himself abreast about the happenings in India too. In Canada he took part in the social activities of the small Indian community at Kingston and was an office bearer of the society for some time. Yet he was very universal in outlook and his views on religious matters bordered on atheism. He had great admiration for the Canadian way of life, its academic/professional institutions and the opportunities that exist in the country for fulfilling one's potential. The untimely and sudden passing away of Joshi has created a deep void for all those who knew him. He will be remembered for his benign pleasing persona and generous nature. His close friends from BARC days who called him G saab will fondly cherish his camaraderie, unique self-deprecating humour and the eternally romantic persona that he was.

Dr Chandra P Joshi was a family man who deeply cared for his family. After shifting to Cooperstown he would visit his family at Kingston generally on week-ends. He is survived by his daughter Tanya, wife Mrs Blanche Joshi and his younger siblings Lalit Mohan, Lila, Pushpa and their families. Our heartfelt condolences to the families. May God grant them strength to bear this tragic loss. Om Shanti !

Dr Manoj K Semwal
New Delhi