



Medical Physics and Emerging Technologies: Shaping the Next Decade

AI Assisted Imaging

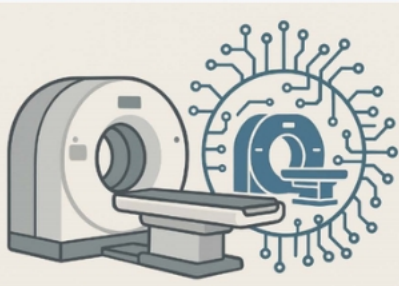


Proton Therapy

Theranostics



Digital Twin Model of SPECT-CT



ROBOTICS IN RADIOLOGY, NUCLEAR MEDICINE AND RADIOTHERAPY

PET - MRI



3D Printing Phantoms



Cyberknife

Telemedicine



Awards and Honours



Professor Golam Abu Zakaria Receives Prestigious Harold Johns Award

Asif Hasan Nabi

Advisor Alo Bhubon Trust, Dhaka, Bangladesh

The International Organization for Medical Physics (IOMP) has honoured Bangladeshi-born German scientist Professor Dr. Golam Abu Zakaria with the **Harold Johns Medal** for 2025, one of the highest international honours in the field of medical physics.

Professor Zakaria is a globally respected medical physicist who has made pioneering contributions in Radiation Oncology, Nuclear Medicine, and Diagnostic Radiology. In 2023, the German government recognized his outstanding service by awarding him the **Federal Cross of Merit**, its highest civilian honour.

A colleague first informed Professor Zakaria after seeing the announcement on the IOMP website. Shortly afterward, the IOMP President, Prof. Dr. John Damilakis officially contacted him to confirm the award. The medal was presented during the **World Congress on Medical Physics and Biomedical Engineering (IUPEM 2025)**, held **September 29 to October 4, 2025, in Adelaide, Australia**. This congress

occurs every three years. Professor Zakaria is the first German citizen of Bangladeshi origin to receive this honour.

This recognition highlights his decades of dedicated service to excellent teaching and contributions to international education and human development. Until his retirement six years ago, he headed the Department of Medical Physics at Gummersbach Academic Teaching Hospital, affiliated with the University of Cologne in Germany.

The German Society for Medical Physics (DGMP) congratulated him on its website, noting that this distinguished award recognizes his exceptional contributions in research, clinical innovation, and education. They emphasized his global impact, particularly through the creation of international training programs, academic development in Bangladesh, and long-term support for young professionals around the world.



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Now 72, Professor Zakaria first travelled to Germany at age 18. Throughout his career, he has remained committed to supporting young medical physicists, especially those from developing countries in South Asia. He has facilitated numerous scholarships for students and medical physicists to pursue education and advanced training in Germany and established the DGMP Committee for Medical Physics in Developing Countries over three decades ago.

Though the **Harold Johns Medal** is a major honour, it adds to a long list of distinctions. He has previously been named “**Outstanding Personality of the Decade 2000–2010**” by two international oncology organizations. In 2019, Harvard Medical School awarded him the **Global Radiation Oncology Distinguished Leader Award**. The German government also recognized his work through the **Federal Cross of Merit**, acknowledging both his scientific achievements and his development work in Bangladesh.

Today, Professor Zakaria continues to supervise PhD students worldwide and is actively involved in developing the South Asia Centre for Medical Physics and Cancer Research (SCMPCR). Speaking to the media, he joked, “*I had declined an earlier invitation to lecture in Adelaide because I did not feel like travelling so far. But now I really must go, because they are granting me a valuable award!*” This prestigious international award marks a significant milestone in his life’s work.

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Life and Work of Dr. Golam Abu Zakaria

Dr. Zakaria was born in Naogaon, Bangladesh, on December 31, 1953. He interrupted his studies at the Bangladesh University of Engineering and Technology (BUET) to travel to Germany in 1972 with a government scholarship. Here he completed his degree in Physics at the Martin Luther University of Halle-Wittenberg in 1978, pursued postgraduate studies at the University of Göttingen, and earned his PhD with distinction from Heidelberg University, followed by residency training in Medical Physics.

His doctoral research introduced the Pencil Beam treatment technique for head, neck, and lung cancers. This innovation was used for more than ten years at Heidelberg University Hospital before commercial treatment planning systems became available.

For over three decades, he served as Head of Medical Radiation Physics and Chief Medical Physicist at the Gummersbach Academic Teaching Hospital, improving radiotherapy planning, dosimetry, and quality assurance. Since 2003, he has also been a Professor of Clinical Engineering at the Anhalt University of Applied Sciences.

He has played a key role in advancing Medical Physics education in Bangladesh. In 2000, he helped launch the country's first Master's program at Gono University. Later, he founded the South Asian Centre for Medical Physics and Cancer Research (SCMPCR), which trains cancer care professionals from across South Asia and beyond. He is also the founder of the Alo Bhubon Trust (Alo-BT), dedicated to improving education, healthcare, and training opportunities in Bangladesh.

Professor Zakaria has held numerous international leadership positions, including:

- **Chair, DGMP Working Group for Developing Countries**
- **Vice-Chair, IOMP Accreditation Committee**
- **Chair, IMPCB Accreditation Committee 2 (Radiation Physics)**
- **Trainer for the ICTP Medical Physics Training Program**

He has authored more than 120 scientific publications, including research on Artificial Intelligence in radiotherapy.

AFOMP has also established a **Leadership Award** in his name to inspire the next generation of medical physicists.