

A VISIONARY LEADER IN ELECTRICAL AND ELECTRONICS ENGINEERING

Professor Saifur Rahman, PhD
Director, Virginia Tech
President & CEO, IEEE



Dr. Saifur Rahman, a distinguished figure in the realm of electrical and electronics engineering, served as the IEEE President and CEO in 2023, marking a significant milestone in his illustrious career. The Institute of Electrical and Electronics Engineers (IEEE), headquartered in New York, is a global organization that boasts over half a million members across 190 countries, dedicated to advancing technology and innovation. Dr. Rahman previously held the presidency of the IEEE Power and Energy Society (PES) during the calendar years 2018 and 2019, further solidifying his leadership credentials.

Currently, Dr. Rahman directs the Advanced Research Institute and the Center for Energy and the Global Environment at Virginia Tech. His expertise has been instrumental in shaping national policies, as evidenced by his role as chair of the US National Science Foundation Advisory Committee for International Science and Engineering from

2010 to 2013. His academic journey began with a BSc in electrical engineering from Bangladesh University of Engineering & Technology, followed by an MS in electrical sciences from Stony Brook University and a PhD from Virginia Tech.

In recognition of his significant contributions to energy efficiency research, Dr. Rahman was appointed to the State of Virginia Governor's Executive Committee on Energy Efficiency in 2015, serving as the only academic member on this influential 12-member committee. His advisory role extended to the board of governors of the Virginia Energy Efficiency Council, highlighting his commitment to sustainable energy practices.

A Life Fellow of the IEEE, Dr. Rahman received the prestigious IEEE Millennium Medal in 2000 for his outstanding achievements. His leadership roles within the IEEE include serving on the Board of Directors as Chair of the IEEE Publications Board



in 2006 and as a vice president of the IEEE Power and Energy Society from 2009 to 2013. In 2014, he was inducted into the IEEE Technical Activities Board Hall of Honor for his sustained contributions to quality improvements in IEEE publications.

Dr. Rahman's research portfolio is extensive and impactful, encompassing areas such as electrical power, renewable energy, smart grid technologies, internet-of-things device integration, and climate sustainability. His groundbreaking work on energy efficiency garnered a \$2.5 million contract from the US Department of Energy in 2013, paving the way for advancements in the field. He has supervised over 80 postgraduate students who have successfully earned their master's and PhD degrees under his guidance.

Beyond academia, Dr. Rahman has established himself as a consultant and lecturer for various international organizations, including the World Bank, the United Nations Development Program, and the US Agency for International Development. Notably, his leadership at the Virginia Tech Advanced Research Institute facilitated a \$47 million US Department of Energy contract awarded to Dominion Virginia Power for the development of a multi-megawatt wind turbine facility off the coast of Virginia.

Dr. Rahman is also the founder of BEM Controls LLC, a Virginia-based software company providing energy management solutions, and Akash Solar Engineering Ltd., which specializes in solar energy projects in Bangladesh. His influence extends globally, as he has delivered over 160 keynote speeches and 800 invited lectures across more than 35 countries.

As the founder editor-in-chief of the IEEE Transactions on Sustainable Energy and the IEEE Electrifications Magazine, Dr. Rahman has significantly contributed to the dissemination of knowledge in his field. He has also guest-edited numerous issues of respected journals, showcasing his dedication to advancing research and publication quality.



In addition to his academic and research endeavors, Dr. Rahman has played a crucial role in organizing major conferences, including the IEEE Innovative Smart Grid Technologies Conferences and the Asia Pacific Power and Energy Conference. His professional experience includes working with notable organizations such as Tokyo Electric Power Company, Duke Energy, and the Brookhaven National Laboratory,

further enhancing his comprehensive understanding of the energy landscape.

Dr. Rahman's contributions to the energy sector in Bangladesh are noteworthy. Appointed as an advisor to the Bangladesh Energy and Power Research Council, he engages with officials on planning and operational issues in the power sector. He has conducted numerous lectures on various energy topics at prestigious institutions, promoting dialogue and knowledge sharing.

In July 2024, Dr. Rahman delivered an inspirational talk at the Cantonment School and College in Saidpur, focusing on motivating young generations, especially girls, to dream big and overcome limitations. His commitment to fostering future leaders is evident in his active engagement with educational initiatives.

Moreover, as President and CEO of the IEEE, Dr. Rahman played a pivotal role in establishing the IEEE Jagadish Chandra Bose Medal in Wireless Communications, a significant recognition announced during a ceremony in Washington, DC, in January 2024. The article published in the Times of India highlighted this achievement, marking the first time a Bangladesh-born scientist/engineer received recognition in the esteemed publication.

In summary, Dr. Saifur Rahman is not only a leader in electrical and electronics engineering but also a passionate advocate for energy efficiency and sustainable practices. His extensive contributions to academia, research, and global initiatives have made a lasting impact, inspiring future generations of engineers and technologists. Dr. Rahman's journey exemplifies excellence, innovation, and a steadfast commitment to advancing the field of electrical and electronics engineering. ◀