

## Obituary



**Prof. Dr. Md. Anwar Hossain**  
(August 19, 1944 - May 27, 2021)

Professor Dr. Anwar Hossain was not only a classroom teacher in my B.Sc and M.Sc studies in the Department of Mathematics at Dhaka University but he was next to the parent, second guardian of me like many other of his students. Professor Anwar Hossain was a teacher, a mentor, supervisor, and a guide to us, a great advocate and a lighthouse for all the students around him. He was like an institution for us. Many of his students are now well known for their contribution in their respective research fields and for working as professors and researchers in various academic institutions or scientists in research institutions worldwide.

Professor Hossain was a fellow of the Bangladesh Academy of Sciences (BAS). He was and former President of Bangladesh Mathematical Society, University Grants Commission (UGC) Professor, Senior Associate of International Centre for Theoretical Physics in Italy. He was also visiting professor of different universities abroad, an honorary fellow of the Australian Institute of High Energetic Materials, and a Member of the Editorial Board of several international reputed journals.

With heavy and breaking heart, we are announcing with immense sadness that our beloved Professor Dr. Anwar Hossain has passed away on May 27, 2021, in his residence in Dhaka, Bangladesh. He was admitted first to Square Hospital and then to Bangabandhu Sheikh Mujib Medical University Hospital with complications and infection of the liver and lung. Later, he was brought to his home, and treatment continued according to the doctor's suggestion; and died there while his family members and well-wishers around him. He was only 76 years old. Prof. Md. Anwar Hossain is survived by his wife, Ms. Rowshan Akhtar, their only son, Mr. Iftekhar Anwar (Upal), and one granddaughter, Adrita Anwar.

In addition to the classroom teacher, Professor Dr. Anwar Hossain was my supervisor during my M. Sc. in Applied Mathematics study at Dhaka University. Though I liked pure mathematics subjects very much and craved to learn more and more about them, Professor Anwar Hossain grabbed me from the classroom to his office room and asked me to do research in Applied Mathematics, whereas I almost know nothing about research in this area. He asked me to do some research-related work, and he was so pleased with what I did instantly at that time. That

was the starting and later. He taught other students and me how to do computer programming, write programming codes for mathematical models of particular physical problems, run computer programs, get data, write a thesis, journal papers, etc. He has given us suggestions and guidance till the end of his life. What I am now and where I am standing now because of his guidance and advice, and he made me work on that.

One of his students, Dr. Bidyut Baran Saha, Associate Editor, Thermal Science and Engineering Progress and Professor, Mechanical Engineering Department, Kyushu University, Japan, has published an obituary of Professor Anwar Hossain in the Elsevier journal, Thermal Science and Engineering Progress, vol. 25 (2021), <https://doi.org/10.1016/j.tsep.2021.100996>, mentioning some of the research contributions of Professor Anwar Hossain, states that "Professor Dr. Md. Anwar Hossain, known worldwide as a leader of computational fluid dynamics and a champion for his investigation on mixed convective flows."

Dr. K C Amanul Alam, lives in Australia along with his family, currently working at the University of Technology Sydney, NSW, who is also a favorite student of Professor Anwar Hossain, who has written about Prof. MA Hossain that "Dr. Anwar Hossain was my M.Phil supervisor. When I completed my Master's degree in Applied Mathematics, I prepared myself for my future career, either as an Academic or a government official. Dr. Anwar Hossain insists me not go to government service even in teaching in Government College. He showed me the path to how to be a good researcher as well as an Academic. I followed his guidelines to be an Academic. He was a good thesis supervisor and a good mentor who brings out the talent and ability of his student as good researchers. He was very friendly towards his students and helped students in every way to be successful in their future careers. It is worth mentioning that he helped me to build up my academic career. I still remember my first meeting with Dr. Anwar Hossain. When I decided to do M.Phil after completing my Master's degree, I contacted my Master's thesis supervisor, Dr. Hasna Banu; she said that she had no time to supervise a student, and she took me to Dr. Anwar Hossain. He agreed to supervise me and gave me many books and articles to make photocopies of, and provided guidelines to read an article that I had to explain to him later. It was his technique to judge a student's interest in doing research. Later, I studied the article and explained the article's topic with a description to solve a non-linear differential equation. He was incredibly pleased and asked me to make a code in FORTRAN. I did it and showed him. He was so impressed and praised my ability of critical thinking. Within a few days, he created a friendly atmosphere between us and became a friendly supervisor. We discussed and criticized each other's thinking, writing, and analysis. His behavior and ability to be friendly with his students were amazing, which had a big impact on me. I always tried to be a researcher like him and tried to follow in his footsteps. I had contact with him even when I was too far away from him. Whenever I had a problem with my research or in personal matters, I contacted him. He often gave me good advice and showed me the way to overcome my mental anxiety and stress. He was such an impressive and impactful person, whoever had the privilege of knowing him became his friend and never forgot him. There is nothing to say about his achievement as a

teacher and researcher because everybody in his field of research knew him very well. He was one of the world-class scientific researchers who made Dhaka University proud.

Another of his students, Dr. Susanta K Das, Professor, Department of Mechanical engineering, Kettering University, USA, says:

I was his first M.Sc. thesis student after he returned from abroad in 1987. Prof. Anwar Hossain was a genuine world-class researcher. He taught me many things, including conducting fundamental research, thinking critically, contributing, and disseminating knowledge among world scientific communities. I published numerous research articles from my M.Sc. thesis and UGC grant-funded research project in both national and international reputed research journals with Professor Anwar Hossain.

As an M.Sc. thesis student, I quickly forged a friendly relationship with him. I still remembered a frequent scenario; Anwar Sir and I were riding a Rickshaw from the Mathematics Department corridor and discussing different issues while going to his Jashim Uddin Road (Kamalapur) house to run simulation in Anwar sir's home computer for my M. Sc. thesis and UGC-grant funded project works. Prof. Anwar Hossain and I were in close contact even I am living abroad for the last 25 years. Each time I visited Bangladesh, Prof. Anwar Hossain asked me to deliver a talk in a research seminar to encourage and engage young faculty, researchers, and current senior students in fundamental research activities. Prof. Anwar Hossain arranged research seminars in the Dept. of Mechanical Engineering at BUET, Mathematics Dept. at Dhaka University, Shajalal Science and Technology University, and Chittagong University at different times, and I delivered research talk in those seminars to encourage young faculty, fellow researchers and current senior students in cutting-edge research activities. Professor Anwar Hossain was a strong proponent of promoting scientific research excellence in academia. He always tried and encouraged young faculty and students to engage in cutting-edge research activities to foster scientific innovations and advancements in his beloved University and country.

Dr. Susanta K Das was just one year senior to me, and many of my work experiences with prof. Anwar Hossain is quite similar to of Dr. S K Das.

Dr. Rifat Ara Rouf (Bindu), Department of Physical Sciences, School of Engineering, Technology and Sciences, Independent University, Bangladesh, An excellent, energetic Lady, also a very good student of Prof. Md. Anwar Hossain, she has mentioned

that Professor Anwar Hossain was a respected academician, researcher and mentor. His office room on the 2<sup>nd</sup> floor of the Annex building was always crowded with the students of his research group but was never restricted to let others join in on their endeavor. He was a superb visionary who had introduced countless students of the then department of mathematics of the University of Dhaka to pursue their dreams.

Intellectuals for generations will undoubtedly discuss his glorious working life, but I want to mention also the lesser-known side of this remarkable personality, which perhaps people who did not know him personally weren't aware of. Above all of Professor Anwar's many identities, he was a motivator and a guardian to us all. He had motivated a substantial number of female

students who would have been lost from the academy world due to social barriers. This adjacent contribution of Professor Anwar may not have been noticed with much fanfare. However, without a doubt, it still acts as a huge inspiration to aspiring students and educators who surrounded him. His engagement with academic and extracurricular activities was selfless and persuasive. His efforts were remarkable in bridging together renowned public universities with numerous up-and-coming private universities that are now well-established under one umbrella, which encouraged sharing views and a culture of working together.

I want to recall the memories of my respected Anwar Hossain sir who involved us, the small department of Physical Sciences of Independent University, Bangladesh, to have the courage to hold an International Conference and even a few Undergraduate Mathematics Olympiads and provided us enormous support – both in the form of his motivation and his rigorous work - which helped us to be confident. I hope that there would be a fresh new group inspired by the ideals of this exemplary intellectual who will carry forward his legacy of prosperity, innovation, and provision of academic accessibility and thereby, justly keep his memories alive.“

The author wants to express his sincere thanks to Dr. K C Amanul Alam, Dr. Susanta K Das, and Dr. Rifat Ara Rouf; all are former students of Prof. Md. Anwar Hossain, for their input in preparing this obituary write-up.

Professor Hossain was such a brilliant man, a great scholar and researcher, and an effective leader, who steered the Department of Mathematics, his research group and research in the department, Bangladesh Mathematical Society as President, arranging many workshops and conferences with deft hands but full of compassion and fair play. We, along with his former colleagues, students will miss him and remain thankful for what he has given to us as a teacher, a mentor and as a scientist, and as a memorable and charming person. Prof. Anwar Hossain stayed a very amiable person till the end of his life.

Professor Anwar Hossain's legacy will continue, and he will always be remembered as an inspirational teacher, great scholar, reputed researcher, well-wisher, and a friendly mentor.

He has done so many good works for society and did so much for his students, who are now doing very well in their teaching and research in universities of home and abroad, thus contributing to society and mankind. It is only the decision of our Lord, the only one God, the Almighty Allah, that who will be forgiven. He alone is the One in whose control is our final destiny. We loved Professor Anwar Hossain very much; we pray for him and love to believe that The Almighty, The Most Merciful, will forgive him and instate him in the place of eternal peace in the eternal destination.

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