



**Prof. M. Muhibur Rahman**  
(1944-2025)

## In Memoriam Professor M Muhibur Rahman

Professor Muhammad Muhibur Rahman was born on January 2, 1944 in the village Manikpur of Upazila Zakiganj, Sylhet.

Muhibur Rahman passed the Matriculation (SSC) Examination of the then East Pakistan Secondary Education Board in 1959, securing the 16th place in order of merit. He obtained the first-grade merit scholarship on the result of this Examination and got admitted to Dhaka College for Higher Secondary Education in Science (1959 – 1961). He passed the ISc (HSC), Examination conducted by University of Dhaka, in 1961, securing the Second place in order of merit.

He subsequently studied in the Department of Chemistry, Dhaka University (1961-1965) and obtained the BSc (Honours in Chemistry) degree in 1964 and MSc (Chemistry) degree in 1965, securing first positions in the First Class in both. For the partial fulfillment of the requirements of the MSc degree in Chemistry, Muhibur Rahman studied the solid-state reactions of Ba-oxalate and Ba-carbonate with ferric oxide under the supervision of Professor M H Khundkar, Head of the Department of Chemistry. His ingenuity in making electrically controlled small furnaces for this work was praiseworthy.

Muhibur Rahman was awarded Commonwealth Scholarship (1967), tenable in the UK, and he worked on the Mössbauer spectroscopy of ferrites and the heterogeneous gaseous reactions on solid catalysts for his PhD degree under the supervision of Professor J W Linnett FRS, Head of the Department of Physical Chemistry, University of Cambridge. He obtained the Degree in 1970.

Muhibur Rahman started his teaching career in the Department of Chemistry, University of Dhaka in 1966 as Lecturer. He was appointed Assistant Professor in 1971, Associate Professor in 1974, and Professor in 1987. He was also a House Tutor of Shahidullah Hall (1977–1983) during this time. He became Chairman of the Department of Chemistry (1996 -1999) and retired on 30 June 2010.

Professor Muhibur Rahman was Director of the Centre for Advanced Research in Sciences (2009-2010) and Bose Centre for Advanced Study and Research in Natural Sciences (1999-2003), University of Dhaka, a member of the University Grants Commission of Bangladesh (2010–2014) and an elected Fellow (2012) of the Bangladesh Academy of Sciences. He was selected as UGC Professor for two years, (2017 and 2018), in the Department of Chemistry.

He was Editor of the Dhaka University Journal of Science, 1997-1999 and the Journal of the Bangladesh Academic Sciences, 2020-2021.

Muhibur Rahman obtained a Post-Doctoral Research Fellowship of the Alexander von Humboldt Foundation to work in the Institute of Physical Chemistry, Göttingen University (1974-1976), Germany, followed by another Fellowship of the German Research Society (DFG), 1976-1977 to work with Professor Dr. Ing. Karl Hauffe, whose work involved investigations of the photo-electronic properties of red-ZnO, TiO<sub>2</sub> and heterogeneous catalysts for the removal of CO and NO from automobile exhaust gases. His other visits to the Institute of Physical Chemistry, University of Kiel, Germany, (Sept. 1984 – February 1987, Sept. 1990 – March 1992 and Sept. 1994 - July 1995) as a Guest Scientist, gave him an opportunity to work with Professor R. N. Schindler, who was investigating the kinetics of gas phase reactions of atmospheric interest using Fast Flow systems. He also co-supervised two PhD students of this Institute. Later on, he was invited as an Alexander Humboldt Foundation research scientist to work on atmospheric chemistry in the Wuppertal University, Germany (September 2012 and October 2013). He was especially interested, along with Professor Thorsten Benter, in studying atmospheric pollutants.

Muhibur Rahman was a long-time General Secretary (1983-2003) of the Association of Humboldt Fellows of Bangladesh (AHFB) and served as its President (2003–2010). He was a founding member of AHFB and tenaciously worked for its growth and development. His untiring efforts for creating Bangladesh- Germany academic and cultural ties were remarkable.

In the January 1984 to May 1984 period, the British Council of Bangladesh supported Professor Muhibur Rahman's stay as a Senior Visiting Scientist at the School of Chemical Sciences, University of East Anglia (UEA), Norwich, UK. He worked with Professor Norman Sheppard, FRS who was doing FTIR investigations of the adsorbed species on the surface of metal oxides there.

In 1991, University of Dhaka invited Professor Sheppard (at that time aged 70 and an Emeritus Professor at UEA) for the 11<sup>th</sup> Khundkar Memorial Lecture. He brought with him some glass devices for Muhibur Rahman, useful in IR/FTIR studies of adsorbed solid surfaces, but the time constraints and work schedule did not permit his visit to Bangladesh from University of Kiel. Obviously, Professor Sheppard wanted to help him overcome the initial technical difficulties that were expected to be associated at the beginning of the work.

Mid-1960 saw the Department of Chemistry, University of Dhaka, introducing a number new courses in the BSc Honours Chemistry Syllabus. One of these was titled 'Radiochemistry and Chemical spectroscopy'. This course, with an unusual title, immediately drew the attention of Muhibur Rahman when he joined the Department after his return from Cambridge. It was a compulsory course and quite popular in the colleges affiliated with University of Dhaka and taught courses for BSc Honours degree in Chemistry. At long last the course system was introduced in the of University of Dhaka, with the provision of many half-unit courses and Muhibur Rahman was happy to work on updating the half-unit 'Chemical spectroscopy' course. Such updating of existing courses is, of course, regularly done by the Department to bring the knowledge in chemistry at par with that in the Chemistry World.

The building, which is now known as Khundkar Building (খান্দকার ভবন) in brief, had its ground floor completed and made serviceable. Muhibur Rahman's critical eyes discovered that the ground level walls, supporting the windows, were too high to allow the entrance of sufficient natural light in the building. He, supported by his department, saw that the defect was corrected and incorporated in the future construction of the whole building complex.

As President of Bangladesh Chemical Society (2007-2008 and 2009-2010), he took initiatives to award Honorary Fellowship to Chemists like Nobel Laureate Professor Yuan Tseh Lee of Taiwan and IUPAC President Professor Jung III Jin of South Korea. He was also a pioneer in launching the Bangladesh Chemistry Olympiad, in order foster a culture of scientific curiosity among high school students.

As Director of CARS, Muhibur Rahman helped establishing the first Air Quality Monitoring facilities of the country there.

Because of his experience of Administration of Higher Education in Bangladesh, particularly during his tenure as a Member of the University Grants Commission, Professor Muhibur Rahman was made consultant (24 February 2015– 24 February, 2017) of the Higher Education Quality Enhancement Project (HEQEP) of the Ministry of Education, GoB. He helped introducing a mechanism of Quality Assurance of Higher Education (IQAC) in the Universities of Bangladesh. He also used to provide necessary support to the relevant academics in various Universities of Bangladesh in the implementation of the Academic Innovation Fund (AIF) component of the HEQEP. For this purpose, sometimes he visited the relevant Universities to be acquainted with their typical physical conditions. The HEQEP period was extend up to 2018, and Professor Muhibur Rahman showed that his ingenuity, as the HEQEP Consultant, equally matched to handle the volume of work to be done within the allotted budget.

Professor Muhibur Rahman trained and supervised over 90 postgraduate research students, including PhD and MPhil candidates in the Department of Chemistry at Dhaka University. He also co-supervised two PhD students at the Institute of Physical Chemistry, University of Kiel, Germany. He had 95 peer-reviewed papers and wrote several book chapters, including a Text Book on Higher Secondary level Chemistry.

He died on 30 March 2025 at 81 and survived by his wife, Mrs Shamim Rahman, and four daughters.

### **Professor A J Mahmood**

Former Chairman (1988 -1991 & 2002 – 2005), Department of Chemistry, University of Dhaka, Dhaka, Bangladesh