

Professor Dr. Md. Atiqur Rahman Patoary

Dr. Md. Atiqur Rahman Patoary was born in Kurigram on 1 October 1980. He successfully completed his secondary education in 1995 from Panga Rani Laxmi Priya High School, Kurigram and his higher secondary education in 1997 from Carmichael College, Rangpu. He received his B.Sc. (Honours) degree in 2001 from the Department of Physics, University of Rajshahi, and was placed in the first class, securing third position. Subsequently, he obtained his M.Sc. degree in 2002 and was placed in the first class, securing first position in the Nuclear Physics thesis group. In September 2004, he joined the same department as a Lecturer, and in 2007 he became an Assistant Professor. Dr. Patoary received his M.Sc. and Ph.D. degrees in Condensed Matter Physics from the University of the Ryukyus, Japan, in 2010 and 2013, respectively. He was promoted to Associate Professor in April 2014. Dr. Patoary has been a Professor since October 2019.

Dr. Patoary developed a local-ansatz wavefunction approach with momentum-dependent variational parameters (momentum-dependent local-ansatz = MLA) to describe the correlated electrons in the ground state. Recently, Dr. Patoary has been working in atomic physics, particularly in electron impact single ionization cross-section calculations and modeling; stopping power for electrons, protons, alpha particles, and ions in material media; atomic collision phenomena, modeling, and applications; and elastic scattering of  $e^{\pm}$  by atoms, molecules, and ions. Professor Patoary has published 48 scientific articles in international journals. Dr. Patoary is a HOPE Fellow of the Japan Society for the Promotion of Science (JSPS), a life member of the Bangladesh Physical Society, a member of the American Physical Society (APS), USA, and a founding member of the National Young Academy of Bangladesh. He was a member of the Physical Society of Japan from 2009 to 2013. According to Google Scholar, Dr. Patoary's total citations are 486; his h-index and i10-index are 13 and 23, respectively.

He has received several awards, including the Madar Bux Hall Gold Medal, the Engineer Akbar Hossain Scholarship for B.Sc. (Honours) results, the University Prize 2002 (for the top marks in the M.Sc. examination of the Department of Physics in a year) from the University of Rajshahi, the Razzak-Shamsun Physics Research Award (for the best research by a Bangladeshi physicist in a year) from the University of Dhaka in 2008, the Monbukagakusho Scholarship (2008-2013) from the Japanese government, the President's Honorary Award in recognition of scholarly achievement and contributions to the university community from the Graduate School of Science and Engineering, University of the Ryukyus, Japan, in 2010, the Director's Honorary Award in recognition of scholarly achievement from the Graduate School of Science and Engineering, University of the Ryukyus, Japan, in 2013, and the Best Poster Award in 2014, 2016, 2017, and 2024 at the annual conferences of the Bangladesh Physical Society.

In recognition of his valuable contributions to the field of physics, The World Academy of Sciences (TWAS) honored Dr. Md. Atiqur Rahman Patoary with the TWAS Prize for Young Scientists in Physical Sciences for the year 2017.