

7th Khwarizmi International Award

Feb 1994

Outstanding research in Physics

Research Title: Investigations on various optical electrical properties, free carrier nonlinear effects, Stimulated Brillouin and Raman Scattering modulational instabilities, harmonic generations, etc. for reliable diagnostics and characterization of semiconductors



Researcher: Mohammad Salimullah

Rank: First

Country: Bangladesh

Field: Basic Sciences

Mohammad Salimullah was born on 5 January, 1949 in Dhaka, Bangladesh.

He passed his B.Sc. and M.Sc. in Physics from the University of Dhaka in 1971 and 1973, respectively. He began his career with a research fellowship on Theoretical Nuclear Physics at the University of Dhaka and joined Jahangirnagar University, Savar, Dhaka, Bangladesh, as a lecturer in physics in March 1975, and held the positions of Dean, Faculty of Physical and Mathematical Sciences and Chairman of Department of Physics. He obtained his Ph.D. in Physics from IIT Delhi in 1980 on “Nonlinear Interactions of Electromagnetic Waves in Plasmas and Semiconductors.” Prof. Salimullah has been actively engaged in teaching and research since his joining Jahangirnagar University. He was the first and only Ph.D. holder in Plasma Physics when he began to organize effective research in Plasma Physics in Bangladesh.

In 1983 Prof. Salimullah visited the Blackett Laboratory, Imperial College of Science and Technology, London for one year for post-doctoral research at the invitation of the British Royal Society. Since 1983 he paid several research visits to the Abdus Salam International Centre for Theoretical Physics (ICTP).

His research interest includes parametric instabilities in laser-produced plasmas, nonlinear effects in semiconductor plasmas; laser-plasma beat wave accelerators, and dusty plasmas of space and laboratory conditions. His recent works on dusty plasmas, in particular waves and instabilities and the theory of Coulomb dust crystal formations in dusty environments, have initiated a lot of interest in the plasma physics community of the world. Recently, his group is engaged in research in quantum plasmas. He has to his credit more than 200 research papers so far published in international journals.