

## 6<sup>th</sup> Khwarizmi Award

Feb 1993

### Outstanding research in Chemistry

**Research Title:** A new frontier in analytical science

**Researcher:** Amir Hussain Khan

**Rank:** Third

**Country:** Bangladesh

**Field:** Basic Sciences



Dr. Amir Hussain Khan was born at Mymensingh (Bangladesh) on 23 January 1933. He had his early education from the R. K. High School, Gouripur (Matriculation, 1954) and Ananda Mohan College, Mymensingh. He obtained M. Sc. in Chemistry, University of Dhaka, 1962 and Ph.D. in Nuclear Chemistry, McGill University, 1968, as a Colombo Plan Scholar.

Research interests and experience are in the fields of Nuclear Reactions Mechanisms and Fission Theory (Nuclear Chemistry), Analytical and Applied Atomic Spectroscopy, Theory (Nuclear Chemistry), Analytical and Applied Atomic Spectroscopy, such as PIXE.

Post-doctoral research fellowship in the Spanish Atomic Energy Commission, Madrid, Spain, 1971 - 1972; Nuclear Research Centre, Debrecen, Hungary, 1984; and the Netherlands Institute for Sea Research, Den Burg, the Netherlands, (Senior EEC Fellowship), 1991 - 1992. IAEA Visiting scientist, Mol. Nuclear Research Centre, Gent University and Antwerp University, Belgium, 1980. Fundamental studies include nuclear charge dispersion phenomena in fission nuclear spectroscopy in isotopic studies of natural alpha emitters and chemical spectroscopy.

#### Professional Experience:

He has participated, as the Chief Investigator, in several internationally coordinated applied research programs supported by the International Atomic Energy Agency, Vienna, UNDP and the Regional Cooperative Agreement in South-East Asia and the Pacific Region (RCA), since 1976. Some of them include particle induced X-ray emission analysis as a new analytical methodology, health related environmental research using nuclear and related analytical methods, trace elements in foodstuff and drinking water, management of solid wastes, Atmospheric pollution, nuclear-analytical science in sustainable development etc. He founded the Analytical Chemistry and the PIXE laboratories at the Atomic Energy Centre, Dhaka, two leading laboratories in the country and pioneered Trace Element Analytical Science and Research in Bangladesh.