10Th Khwarizmi International Award

Feb 1997

Researcher: Iqbal Hussain Qureshi

Research Title: Nuclear analytical techniques development and application in Pakistan

Rank: First Joint

Field: Basic Sciences

Country: Pakistan

Abstract:
The rapid growth of population and changing social patterns has added more impetus to the demand of food and energy which have significantly increased. The measurement of essential and toxic elements in food and human fluids will provide data for establishing baseline levels which will be useful for assessing the nutritional adequacy and safety of our food. Periodic analysis of food items will indicate the extent of pollution. The data on human fluid and tissues will be useful for co-relation of certain trace elements and malignant diseases and for their prevention. Representative samples will be collected and analyzed by neutron activation analysis technique to determine the concentration of toxic elements. This will provide information regarding the prevalent levels of these elements in various materials.

Dr. Qureshi a nuclear chemist of international fame, has not only carried out quality basic and applied research work in various disciplines of chemistry but has also contributed significantly in improving the academic and research standards of Pakistani educational and research institutions.

Iqbal Hussain Qureshi was born in Ajmer, Rajasthan, India on 27 September 1936. After the independence of Pakistan in 1947, his family moved to Hyderabad, where he matriculated from a public high school. He earned his BSc and MSc degrees from the University of Sind (Pakistan) in Chemistry. Then he went to United States to attend the University of Michigan where he earned MSc in nuclear chemistry in 1962. Qureshi continued his research on nuclear chemistry and took the PhD in nuclear chemistry from the University of Tokyo, with a doctoral thesis on the "Radiochemical separations by Amalgam exchange". In 1967, he availed a post-doctoral position at US's National Bureau of Standards and during 1969 he obtained a specialized training in the area of uranium and plutonium separation from Denmark.

He is the author of 143 R&D publications in the fields of nuclear and analytical chemistry and health related environmental pollution and participated in more than 50 international and nation science conferences / seminar. Dr. Quershi established comprehensive and modern analytical chemistry facilities at PINSTECH.