

## Citation of the PAS Foreign Fellow Elected in 2013

The following eminent scientist was elected Foreign Fellow of the Pakistan Academy of Sciences during 2013:

### **Prof. Dr. Fatima Z. Basha**

*Prof. Dr. Fatima Z. Basha*, Lead Scientist at Abbott Laboratories, N. Chicago, USA, is among the most prominent synthetic organic chemists of Pakistani origin. She got her MSc with first class first position in organic chemistry from University of Karachi working under the supervision of Prof. Dr. Salim-uz-Zaman Siddiqui. On the advice of Prof. Dr. Atta-ur-Rahman, Fatima Basha proceeded to USA for her PhD with Prof. Dr. Franck at Fordham University. After completing her PhD in organic synthesis in 1977, she joined Prof. Dr. Weinreb's group at Fordham where she finished the first total synthesis of streptonigrin. Dr. Basha was hired by Prof. Dr. Hecht for post-doctoral research in one of the most premier academic institution of the world, the Massachusetts Institute of Technology (MIT), Boston, USA (1978-81). At MIT, Dr. Fatima Basha worked on the total synthesis of anticancer compounds such as bleomycin and verrucarin which earned her an international recognition.

In 1981, Dr. Fatima joined the Drug Discovery Research Area of Abbott Laboratories, Chicago as a research scientist and very soon rose to the rank of senior group leader. She proved her ability to lead in the field of drug discovery and development by using her outstanding skills in organic synthesis. She made notable contributions in several therapeutic areas such as cardiovascular, neuro-urology, anti-infective and immunoscience. In recognition of her scientific contributions in drug design and synthesis, she was elected in Abbott's prestigious Volwiler Society during 1991.

As a scientist of international stature, Dr. Fatima contributed immensely in the field of medicinal chemistry, synthetic chemistry and drug design. She has over 64 research papers in top international journals and 31 US and World patents to her credit. She has been invited in all major conferences of the world as plenary and invited speaker, including American Chemical Society National and Regional meetings and IUPAC conferences.

Throughout her stay in USA, Dr. Fatima remained engaged in helping Pakistani scientists and capacity building of young researchers. After the sudden demise of her only son, Mr. Umaer Basha, she decided to put her life long savings and her life to help young generation of Pakistan. She built the massive building of Umaer Basha Institute of Information Technology (UBIT) in University of Karachi, an exact replica of the MIT building, for over 2,000 students of information technology, computer science, and applications of ICT tools in production sector. She sent a large number of young Pakistani chemists to top laboratories of USA for further trainings, through Umaer Basha Foundation (UBF) USA. Along with this, she decided to help the H.E.J. Research Institute of Chemistry to establish world class synthetic chemistry, where she is currently engaged in training of bright young Pakistani researchers in the important field of organic synthesis.

In brief, the life and contributions of Prof. Fatima are *par excellence* and she is a human being of great attributes. Her contributions in the field of organic chemistry and her services to Pakistan are notable and praiseworthy. In recognition of her tremendous national services, in 2006 the President of Pakistan awarded *Tamgha-e-Imtiaz* to Prof. Dr. Fatima Basha.