



Citations of the PAS Fellows Elected in 2014

The following eminent scientists were elected Fellows of the Pakistan Academy of Sciences during 2014:

Prof. Dr. Haq Nawaz Bhatti

Dr. Haq Nawaz Bhatti, Professor of Chemistry, was born on 20th September, 1965 in Village Chah Pakka, P.O. Kot Hussain Khan, Tehsil & District Nankana Sahib, Pakistan. He has 1st class academic career throughout, and got merit scholarships from Matric to PhD. He obtained his MSc in 1987 with distinction from University of the Punjab, Lahore and was awarded 3 Gold Medals. He did his PhD in 2004 from University of Agriculture, Faisalabad, and Postdoctoral training in 2007 from University of Winnipeg, Canada.

Dr. Bhatti is involved in teaching and research at University of Agriculture, Faisalabad since 1989 and has supervised 200 MSc/M.Phil/PhD students. He has more than 200 publications with Impact Factor and 33 national publications to his credit. His total Impact Factor of about 250. His research work has been cited for about 2000 times in the literature. He has attended more than 50 international/national conferences, symposia and presented his research work. He has also completed five projects and is running two research projects funded by HEC. He has written 11 Books/Manuals for graduate and postgraduate students. He is working on Material & Environmental Chemistry related projects. His current research interests include leaching and recovery of precious metals from low grade ores, bioremediation of environmental pollutants, such as heavy metals, dyes, textile effluents and organic pollutants, using agricultural wastes and nanocomposites.

Professor Bhatti has also been actively involved in co-curricular and extra-curricular activities of students at the university level, in the capacity of Advisor Chemical Society, Hall Superintendent and Associate Hall Warden.

Dr. Bhatti is Fellow of Chemical Society of

Pakistan, Member of American Chemical Society, and Member of Biochemical Society, UK. He was awarded Better Incentives for the years 2006, 2007 and 2008 by University of Agriculture, Faisalabad, and Research Productivity Award by Pakistan Council for Science and Technology for the years 2009, 2010, 2011 and 2012. Also, he has received President's Medal for Technology 2009; HEC Best Teacher Award 2010; PAS Gold Medal in Chemistry 2011; and Top Cited Paper Award from University of Agriculture during 2012 and 2013.

Currently Dr. Bhatti is Chairperson of Department of Chemistry at University of Agriculture, Faisalabad.

Professor Dr. M. Rasul Jan

Dr. M. Rasul Jan did his MSc and M.Phil in Chemistry from Department of Chemistry, University of Peshawar in 1976 and 1979, respectively. In 1980 he was awarded teaching fellowship to conduct his doctoral research in Analytical Chemistry at University College, Cork, Ireland and got his PhD in 1982. Soon after his PhD, Dr. Rasul Jan was awarded the E.E.C. (Now European Union) Post-Doctoral Fellowship for conducting research in designing recycling methods for toxic chemical Chromium used in the tanning industry, and worked there till August 1985.

In September 1985 he joined University of Peshawar as Assistant Professor in Chemistry Department. Dr. Rasul Jan proved himself to be a good teacher/ researcher. He established one of the most well equipped labs in Chemistry Department, with his personal efforts and research grants received from outside sources and inculcated the culture of research work at the University.

Dr. Rasul Jan has organized several conferences at national level in the area of Analytical and Environmental Chemistry and has supervised over 120 MSc, 18 M.Phil and 19 PhD postgraduate students. He has published more than 155 publications in International Journals.

Dr. Rasul Jan has presented papers in conferences at national and international level. Dr. Rasul Jan received senior *US Fulbright Award* in 2003 for conducting research in USA and was invited there as a Visiting Scientist in 2005. Dr Rasul Jan's publications have a high impact factor; currently, he the most cited scientist in the field of Chemistry in Khyber Pakhtunkhwa. He is a regular recipient of Research Productivity Award from Pakistan Council of Science and Technology. He has served as Vice-Chancellor University of Malakand from April 2008 to October 2012 and since 24th January 2013 is serving the University of Peshawar as its Vice Chancellor. In recognition of his meritorious services in the field of Chemistry, he was conferred the award of *Pride of Performance* by President of Pakistan in 2010. In January 2014 he was awarded the status of Professor Emeritus in the University of Peshawar.

Dr. Shahid Mansoor

Dr. Shahid Mansoor, Deputy Chief Scientist is the Director of National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad. Dr. Mansoor is a leading scientist of the country and has contributed in the areas of Molecular Virology, RNA interference, genomics and genetic engineering of crops. Dr. Mansoor pioneered research on cotton leaf curl virus, and discovered DNA satellites associated with cotton leaf curl and other begomovirus diseases. His research group also worked on the molecular diversity of whiteflies and genomics of cotton. Dr. Mansoor pioneered research on the use of RNA interference for understanding of gene function, resistance against multiple RNA and DNA viruses and other novel traits in crop plants. He is also working on introgression of multiple genes in cotton and other crop plants by using constitutive and tissue-specific promoters. He has worked on collaborative projects with leading scientists in Europe, USA and Australia.

Dr. Mansoor has an illustrious academic career with positions in BSc (Hons) and MSc. Dr. Mansoor completed his PhD from John Innes Centre, Norwich, UK, and later joined the group of Prof. Sir David Baulcombe under a Royal

Society Fellowship. He has recently completed his Fulbright Fellowship with Prof. Andrew Paterson at University of Georgia, Athens, USA. He has published around 126 papers with a total impact factor of over 400 and 2190 citations in leading international journals. He has filed seven patents and has supervised 20 MPhil and 20 PhD students. In recognition of his services, the President of Pakistan awarded him *Sitara-e-Imtiaz* in 2009. He also received "Outstanding Performance Award" from Higher Education Commission in 2009 and shared "Outstanding Performance Award" in 2011. Dr. Mansoor has been receiving "Research Productivity Award" every year from Pakistan Council for Science and Technology (PCST), Ministry of Science and Technology (MoST). The Higher Education Commission (HEC) has awarded him the prestigious title of "HEC Distinguished National Professor".

Prof. Dr. Khan Bahadar Marwat

Prof. Dr. Khan Bahadar Marwat, Vice Chancellor, SBB University, Sheringal, Dir Upper, is a Weed Scientist and Botanist of international fame, having 2 PhDs (from Pakistan and US). He was elected as President of Asia-Pacific Weed Science Society in 2007. He served as President of Pakistan Botanical Society during 2013-14 and as Vice Chancellor of University of Agriculture, Peshawar during 2010-2013. He introduced Weed Science as an independent discipline for the first time in the country. Currently, he is establishing four campuses for SBB University, two each in Chitral district (at Chitral and Booni) and Upper Dir (at Wari and Sheringal). He has established Rs. 10 Million Endowment Fund for females of Chitral with a donation from a philanthropist in Karachi.

Professor Marwat has supervised 30 M.Phil, 3 MS and 11 PhD students. He has 219 citable publications, with 80 publications in Impact Factor/ Foreign Journals. He has run 6 Research Projects and now is working as Advisor with Pak-Australian Linkage Project on Parthenium. He has served as examiner for PhD theses from Malaysia, India, Bangladesh and US. He is Principal Signatory for the Sino-Pakistan MoU on Biodiversity. He has the distinction of initiating MoUs with QU

& Charles Sturt University of Australia, Tsukuba University and Cheba University of Japan, Ohio State University of US and Hasho Foundation. He has signed several MOUs with Turkish Universities and the Maulana Protocol for exchange of students and faculty with Turkish Universities. Dr Marwat is Chief Editor of Pakistan Journal of Weed Science Research and subject Editor of Pakistan Journal of Botany.

Currently, Prof. Marwat is President of Pakistan Ethno-botanical Society, Vice President of Pakistan Botanical Society, and President of Weed Science Society of Pakistan. He has served

as Convener of HEC PhD Review Committee for Khyber Pakhtunkhwa and Baluchistan, and on the Board of Trustees of Pakistan Science Foundation as nominee of President of Pakistan. As nominee of Prime Minister of Pakistan, he is on Executive Committee of National Commission of Science and Technology (ECNCST).

Dr. Marwat was awarded *Sitara-i-Imtiaz* by Government of Pakistan in 2012, Outstanding Weed Scientist Award, HEC's Best University Teacher Award, President's Medal for Technology, Quaid-i-Azam Gold Medal, and Research Productivity Award (PCST).

Citation of the PAS Foreign Fellow Elected in 2014

The following eminent scientist was elected Foreign Fellow of the Pakistan Academy of Sciences during 2014:

Professor Michael Paul Searle

Professor Mike Searle is a leading researcher on the tectonic evolution of mountain belts, in particular the Himalaya, Karakoram and Tibet. He obtained his BSc from University of Wales, Aberystwyth in 1975, and PhD from Open University, UK in 1980. Dr Searle has worked as Post-Doctoral Fellow at Memorial University of Wales, Newfoundland, Canada, 1980-1984, and University of Leicester during 1984-1989; Senior Research Fellow at University of Oxford, 1989-2006; Lecturer at University of Oxford, 2006-2008. Since 2008, he is Professor of Earth Sciences at University of Oxford. His research areas are Structural and Tectonic Evolution of Mountain Belts, in particular the Himalaya, Karakoram, Tibet and Oman Mountains.

Professor Searle has spent more than 10 years working on the geology of the high Karakoram and Hindu Kush ranges of north Pakistan, in particular working on the structure, metamorphism and magmatism of the Chitral, Hunza, Baltoro and Hushe regions of Pakistan. He is the author of more than 170 peer-reviewed papers, and two books “*Geology and Tectonics of the Karakoram Mountains*” (Wiley, 1990) and “*Colliding Continents: A Geological Exploration of the Himalaya, Karakoram and Tibet*” (Oxford University Press, 2013). He has co-edited four books, Special Publications of the Geological Society, London: volume 49, *Geology and Tectonics of the Oman Region* (1990); volume 74, *Himalayan Tectonics* (1993); volume 170,

Tectonics of the Nanga Parbat Syntaxis and Western Himalaya (2000); and volume 268, *Channel Flow, Ductile Extrusion and Exhumation in Continental Collision zones* (2006). He has published numerous geological maps including those of the Hindu Kush ranges, NW Frontier region, Geological Map of North Pakistan (1996), Geological Map of the Mount Everest-Makalu region, Nepal and South Tibet (2003, 2007). Working with colleagues from Peshawar University, Prof. Mike Searle has studied the geological structure of the Kohistan island arc, Hindu Kush, Nanga Parbat and Karakoram ranges in Pakistan. This work has involved working alongside mountaineering expeditions to peaks such as K2, Masherbrum, Biale, Trango Towers, amongst others. He combines studies of structural geology, mineralogy, metamorphic and igneous petrology, thermobarometry and geochronology in order to unravel the tectonic evolution of mountain belts through time. In the last 20 years he has concentrated particularly on processes of ophiolite obduction, subduction, large-scale faulting, including strike-slip faults (e.g., Karakoram Fault), thrust faults (e.g., Main Central Thrust) and normal faults (e.g., South Tibetan Detachment), Himalayan crustal melting (channel flow) and exhumation processes. In addition to central Asian geology, Prof. Searle is also working on ophiolites and oceanic crust processes in Oman and the Andaman Islands, on the Dead Sea fault zone in Syria, Palestine and Jordan, on tin-tungsten granites in Malaysia-Thailand, on deep crustal gem mineralisation in Burma (Mogok belt) and on the Red River fault zone in Yunnan-Vietnam.

Professor Searle has received Murchison Medal from Geological Society London, 2008.