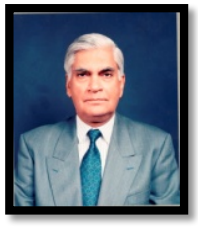
OBITUARY



Dr. Ishfaq Ahmad *(N.I, H.I, S.I)*
Chairman, Board of Governors,
National Centre for Physics, Islamabad, Pakistan

It is with profound grief to inform all colleagues, friends, associates and well-wishers that Dr. Ishfaq Ahmad (N.I, H.I, S.I), a versatile nuclear physicist of Pakistan and Chairman Board of Governors, National Centre for Physics (NCP) breathed his last on 18th January, 2018 at PAEC Hospital, Islamabad after an illness of several days. As one of the most highly decorated scientists of Pakistan, Dr. Ishfaq Ahmad has left behind a rich harvest of sweet memories and achievements as inspiration for all those who know him.

Dr. Ishfaq Ahmad had a long and distinguished career in the field of Physics and allied disciplines. He is highly renowned for his pioneering research contributions in the field of nuclear physics. His contributions as Postdoctoral Research Fellow at the prestigious Niels Bohr Institute of Theoretical Physics at Copenhagen, Denmark (1961 - 1962), Université de Montréal (1963 - 1964), University of Ottawa (1964 - 1965), Canada, and University of Paris, Sorbonne, Paris, France (1969) in the field of nuclear physics speak of his rank in the scientific arena.

In 1962, on the request of Dr. I. H. Usmani, he joined Pakistan Atomic Energy Commission (PAEC) as senior scientist. Since then, the scientific career of the distinguished scientist spans over 60 years of government service, during which he held many important positions such as Chairman, Member of the key scientific organizations in Pakistan. After his retirement, he served as Senior Advisor, Climate Change and Development, Planning Commission, Government of Pakistan (2008 - 2012) with the Status of Minister of State; Special Adviser to the Prime Minister on Strategic Program (2002 - 2008) and Special Adviser to the Chief Executive of Pakistan (2001 to 2002) with the status of Federal Minister.

The interaction of Dr. Ishfaq Ahmad with European Organization for Nuclear Research (CERN), Geneva, Switzerland started long ago when he first visited CERN in 1962 to perform nuclear emulsion experiments. At that time, he was working as a young post-doctoral fellow at the University Institute of Theoretical Physics in Copenhagen, now known as the Niels Bohr Institute (NBI). When Dr. Ishfaq Ahmad revisited CERN in 1994 as the Chairman of the PAEC, he was fascinated to see the exciting developments in physics that were taking place at CERN. Then he had only one wish, that his own country, Pakistan, should somehow become involved in scientific collaboration with CERN. Moreover, he desired that the Pakistani physicists and engineers could also become part of the most advanced, challenging and rewarding scientific endeavor; The Large Hadron Collider (LHC). A few months later after his visit to CERN, a formal co-operation

agreement was approved by the Government of Pakistan, which was signed by Dr. Ishfaq Ahmad, as the Chairman of PAEC, and then the Director General of CERN, Sir Professor Chris Llewellyn-Smith.

Due to his vision and support, the collaboration with CERN flourished with each passing year. In 2000, the Director General of CERN, Prof. Luciano Maiani, visited Pakistan. During this visit, another agreement was signed, which not only doubled the Pakistani contribution but also recognized NCP as the collaborating institute of Compact Muon Solenoid (CMS) experiment at LHC. This step led to the construction of the Resistive Plate Chambers (RPCs) required for CMS. In 2003, another protocol was signed that enhanced Pakistan's total contribution to the LHC program to US$ 10 million. The projects carried out under these agreements eventually paved the way for Pakistan to become the Associate Member of CERN in 2015.

PAEC has always kept nuclear safety separate from management of nuclear power. As Member Technical Dr. Ishfaq Ahmad was the Chairman of the Pakistan Nuclear Safety Committee. The nuclear safety division working under him evolved into a Directorate of Nuclear Safety and Radiation Protection (DNSRP) and then into a Pakistan Nuclear Board (PNRB) which was independent of PAEC, it had one thing in common Dr. Ishfaq Ahmad. After Pakistan ratified the International Nuclear Safety Convention, Dr. Ishfaq Ahmad godfathered a totally independent governmental body - the Pakistan Nuclear Regulatory Authority, the PNRA. It was an act of courage on his part that as Chairman of PAEC he on principle grounds established an independent PNRA for the oversight of PAEC.

Dr. Ishfaq Ahmad played a pivotal role in the creation of NCP on the pattern of *The Abdus Salam* International Center for Theoretical Physics (ICTP). He served as the Chairman of Board of Governors (BoG) of NCP from 2003 to 2018. His vision of science and wisdom to deal with the science projects were the guiding principles for NCP management. During the same period, he also established the Global Change Impact Study Centre (GCISC) and the Centre for Earthquake Studies (CES) both attached to NCP.

Dr. Ishfaq Ahmad was also honored with membership of various outstanding national and international bodies, including the Islamic World Academy of Sciences (2000); Board of Governors-Pakistan Science Foundation, Islamabad (1977-1980, 1982-1985, 1988-1991); Board of Governors, International Atomic Energy Agency (1991-2007); President, Pakistan Academy of Sciences (2007-2011) and many others. In recognition of his outstanding contributions in the field of science and technology, Dr. Ishfaq Ahmad received several prestigious civil awards, including: Nishan-i-Imtiaz (1998); Hilal-i-Imtiaz (1995); and Sitara-i-Imtiaz (1989).

Throughout his scientific career, Dr. Ishfaq Ahmad remained a strong source of encouragement and support for the scientific community and academicians in Pakistan. His effective and efficient management enabled Pakistan to achieve wonders in the field of defense, energy, and cutting-end technology for socioeconomic development in the country. His intellectual contributions to Pakistan were enumerable and his determination unmatched. He will always be remembered for his deeply professional attitude, problem solving capabilities, organizational and management skills, excellent judgment and calm good cheer. There are no words to describe how much he will be missed. Our thoughts and heartfelt condolences go out to the family, friends and colleagues around the world.