



Anil Kakodkar (born on 11th November, 1943) joined the Bhabha Atomic Research Centre (BARC) in 1964, following the one year post graduate Training with top rank in Nuclear Science and Technology in the then Atomic Energy Establishment. He became the Director of BARC in the year 1996 and was the Chairman, Atomic Energy Commission and Secretary to the Government of India, Department of Atomic Energy, during the years 2000 -2009. He was DAE Homi Bhabha Chair Professor during Jan. 2010-Jan. 2015 and INAE Satish Dhawan Chair of Engineering Eminence during Jan. 2015 to Jan. 2017.

Kakodkar obtained his BE (Mech. Engineering) degree from the Bombay University in 1963 and M.Sc. in the Experimental Stress Analysis from the Nottingham University in 1969.

Kakodkar has worked for the development of the atomic energy programme in India throughout his professional life. Focus of his work has been on self-reliant development of nuclear reactor systems to address the Indian programme requirements. Undeterred by the restrictions imposed by the international community, he succeeded in developing various systems for the pressurized heavy water reactor, in building the Dhruva reactor starting from the conceptual stage, in rehabilitation of Madras Atomic Power Station Units 1&2 both of which at one stage appeared to be on the verge of being written off following failure of the moderator inlet manifolds, in conceptualization and development of Advanced Heavy Water Reactor that realizes the next generation objectives through innovative configuration of present day technologies besides use of thorium and such other technology systems. Utilisation of our vast Thorium resources for energy production has received special attention under Kakodkar's leadership. He has created a roadmap for shaping the third stage of India's nuclear power programme aimed at tapping vast energy potential of our thorium resources not only as source for electricity production but also as a primary source for other forms of energy use. A number of new technology areas such as accelerator driven systems, high temperature reactors, materials and recycle technology etc. have been nucleated for this purpose. Kakodkar continues to be actively involved in programmes related to augmentation of Thorium utilisation in our nuclear power programme and for development of non-fossil primary energy sources for meeting our overall energy needs.

Kakodkar has been a key contributor to India's strategic programme. He was amongst the chosen few involved in the first successful Peaceful Nuclear Explosion Experiment that India conducted on May 18, 1974 at Pokhran. And later, he played a key role in the series of successful Nuclear Tests conducted during May 1998, again at Pokhran. India also demonstrated nuclear submarine powerpack technology under Kakodkar's leadership.

Kakodkar's sterling leadership led to a significant boost to India's nuclear power programme notwithstanding the uranium supply constraints. What made this possible was him paying attention to a range of issues : augmentation of uranium exploration and mining activities, reconfiguration of power reactor cores to produce considerably larger energy output with the available uranium, relaxation of nuclear supply group (NSG) restrictions which opened doors to international nuclear trade, initiation of the second stage of India's nuclear power programme through commencement of prototype fast breeder reactor (PFBR) project along with the associated fuel recycle facility and creation of the Nuclear Recycle Board. As a result, India's nuclear generation capacity is well poised for a rapid scale up. The comprehensive and robust programme under Kakodkar's leadership has earned India a distinctive status as a country with advanced nuclear technology.

Kakodkar championed observer status for India at CERN (European Centre for Nuclear Research), partnership in the ITER (International Thermonuclear Experimental Reactor) project and exemption for nuclear trade from Nuclear Supplier's Group (NSG) besides several international cooperation agreements in the area of nuclear power, acquisition of Uranium and nuclear research.

There is hardly any aspect of India's atomic energy programme that has not seen a significant impact of Kakodkar's leadership. The deployment of technologies for better quality of life of our people has received considerable boost under Kakodkar's leadership. Besides energy these cover radiation processing of food and agro-products, agriculture with emphasis on oilseeds and pulses, healthcare particularly related to cancer, urban and rural waste management and desalination of water.

Notable also are his innovative contributions to human resource development activities. Establishment of NISER (National Institute of Science Education and Research), DAE-Mumbai University CBS (Centre for Basic Sciences) and HBNI (Homi Bhabha National Institute) are expected to result in a fresh wave of human resource development, generating greater experimental capabilities and bringing in linkage between basic research and technology development for the acceleration of India's multifaceted atomic energy programme. Other initiatives of Kakodkar include new centres for research at Vishakhapatnam, Hyderabad, Kolkatta and Bangalore.

He has, over the years, built competent teams of highly specialised scientists and engineers in the reactor engineering programme. He has brought out more than 250 scientific papers and reports on various aspects of his work.

A committee under his Chairmanship has worked out a detailed report for greater autonomy of IITs and taking them to world class level. He also chaired an Empowered Committee to implement the recommendations made. Another Committee led by him has carried similar exercise in the context of NITs. He also led a committee set up by Government of Maharashtra to look at higher education in the State. The committee has made important recommendations that could lead to a paradigm change for improvement of higher education in the State.

Another high level committee under his Chairmanship has made comprehensive recommendations for improvement of safety on Indian Railway. A TIFAC apex group led by him has brought out a Technology Vision 2035. The document was released by Hon. Prime Minister of India during the Science Congress on January 3,2016.

Kakodkar was Chairman, Solar Energy Corporation in its formative stage. He was also Chairman of Inter University Centre for Astronomy and Astrophysics (IUCAA) during 2006 -- 2012 , Chairman, Governing Board, Inter University Accelerator Centre, New Delhi, and Chairman, Board of Governors of the Indian Institute of Technology, Bombay during 2006-2015.

Dr. Kakodkar presently devotes his time primarily on issues related to energy, education and societal development. He has been propagating the concept of CILLAGE, a knowledge based ecosystem for bridging city and village gaps for technology enabled sustainable development in rural areas..