

# Dr. A.P.J. Abdul Kalam

March 13, 2021

## About A.P.J. Abdul Kalam

- He was an Indian aerospace scientist and politician who served as the 11th President of India from 2002 and 2007
- **Birth:** He was born on 15th October 1931 at Rameswaram in Tamil Nadu
- **Full Name:** Dr. Avul Pakir Jainulabdeen Abdul Kalam
- He graduated in Science from St. Joseph's College, Trichy in 1954 and specialized in Aeronautical Engineering from Madras Institute of Technology (MIT) in 1957.
- He lived as an example of hard work, resilience and positive attitude, and people remember him as the most beloved president.
- He was known to be the "missile man" for his work on the development of science and technology.
- **Death:** While delivering a lecture at the Indian Institute of Management Shillong, Kalam collapsed and died from an apparent cardiac arrest on 27 July 2015, aged 83

## His contributions: As aerospace scientist

- A.P.J. Abdul Kalam is a pioneer in fibre glass technology and led a young team to initiate this effort in ISRO from design, development leading to production of composites rocket motor cases.
- He made a significant contribution as Project Director to develop India's first indigenous Satellite Launch Vehicle (SLV-3) which successfully injected the Rohini satellite in the near earth orbit in July 1980 and made India an exclusive member of Space Club.

- Dr. Kalam responsible for the evolution of ISRO's launch vehicle programme, particularly the PSLV configuration.
- **IGMDP: He took up the responsibility of developing Indigenous Guided Missiles at DRDO as the Chief Executive of Integrated Guided Missile Development Programme (IGMDP).**
- He was responsible for the development and operationalisation of AGNI and PRITHVI Missiles and for building indigenous capability in critical technologies through networking of multiple institutions.
- One of his significant contribution was creating Research Centre Imarat for advanced technologies.
- He also gave thrust to self-reliance in defence systems by progressing multiple development tasks and mission projects such as Light Combat Aircraft.

### **His contributions:As Advisor to Govt of Onda & Nuclear technology**

- Abdul Kalam was the Scientific Adviser to Defence Minister and Secretary, Department of Defence Research & Development from July 1992 to December 1999.
- During this period he led to the weaponisation of strategic missile systems and the Pokhran-II nuclear tests in collaboration with Department of Atomic Energy, which made India a nuclear weapon State.
- Dr. Kalam has served as the Principal Scientific Advisor to the Government of India, in the rank of Cabinet Minister, from November 1999 to November 2001 and was responsible for evolving policies, strategies and missions for many development applications.
- He was also the Chairman, Ex-officio, of the Scientific Advisory Committee to the Cabinet (SAC-C) and piloted India Millennium Mission 2020.

## **Technology Vision 2020**

- As Chairman of Technology Information, Forecasting and Assessment Council (TIFAC) and as an eminent scientist, he led the country with the help of 500 experts to arrive at Technology Vision 2020 giving a road map for transforming India from the present developing status to a developed nation.

## **His contributions to Bio-medical area:**

- Dr. Kalam along with his team collaborated with medical specialists in the development of Kalam-Raju stent during 1994 – 1996. Kalam-Raju cardiac stent after qualification trials has been fitted to many needy patients.
- He had initiated the use of carbon-carbon and carbon-polymer materials for production of floor reaction orthosis calipers which has reduced the weight of the caliper to 1/10th of the original weight during 1995 & 1996

## **President of India**

Kalam was elected as the 11th President of India in 2002 with the support of both the ruling Bharatiya Janata Party and the then-opposition Indian National Congress. Widely referred to as the “People’s President” he returned to his civilian life of education, writing and public service after a single term.

## **As a Professor**

Dr. Kalam took up academic pursuit as Professor, Technology & Societal Transformation at Anna University, Chennai from November 2001 and was involved in teaching and research tasks. Above all he took up a mission to ignite the young minds for national development by meeting school students across the country.

## **PURA (Providing Urban Amenities to Rural Areas)**

He was passionate about bringing rural prosperity through PURA, in which science and technology has to play a key role.

## **His literary works**

Following are some of the Books of Dr. APJ:

Wings of Fire, India 2020 – A Vision for the New Millennium, My journey and Ignited Minds – Unleashing the power within India, Indomitable Spirit, Guiding Souls, Envisioning an Empowered Nation, Inspiring Thoughts, Children Ask Kalam, You are born to blossom, Family and the Nation, Life Tree and The Luminous Sparks etc

## **Awards & Honours**

Dr. Kalam is one of the most distinguished scientists of India with the unique honour of receiving honorary doctorates from 48 Universities and institutions from India and abroad.

He has been awarded with the coveted civilian awards – Padma Bhushan (1981) and Padma Vibhushan (1990) and the highest civilian award Bharat Ratna (1997).

The Royal Society, UK has awarded Dr Kalam with the King Charles-II Medal for Science and Technology in October 2007. He received the Woodrow Wilson Award in 2008. The Royal Academy of Engineering, London conferred on him the International Medal 2008 in June 2009 at London etc

**Island in his name:** Wheeler Island, a national missile test site in Odisha, was renamed Abdul Kalam Island in September 2015.

**Plant species:** In February 2018, scientists from the Botanical Survey of India named a newly found plant species as *Drypetes kalamii*, in his honour