

D.Y.Patil International University Akurdi Pune

Brief Profile of the Vice Chancellor

Prof PRABHAT RANJAN



Prof Ranjan is a Nuclear Fusion Scientist, a Futurist, an Educator, an Innovator, an Entrepreneur and a Science Communicator. For last 5 years he was heading India's Technology Think Tank, TIFAC (Technology Information, Forecasting and Assessment Council) in Delhi as its Executive Director. TIFAC is an autonomous body of Dept of Science and Technology, GoI. TIFAC developed *Technology Vision 2035* during his tenure, which was released by Hon'ble PM in Jan 2016. PMO has directed all Dept/Ministries to follow this document and take the agenda forward under leadership of NITI Aayog. Earlier he worked for nearly 20 years making important contribution to Nuclear Fusion research as scientist in India and USA. After this he worked on Chandrayaan-II mission, wildlife, agriculture and brain computer interface. He has brought smile on faces of many persons with severe disability by innovative assistive technology for more than 11 years.

Education :

PhD(Physics) - Univ of Calif, Berkeley(1986);
Masters(Physics) - Delhi University(1981);
Bachelors(Physics) - IIT Kharagpur(1979)
Secondary - Netarhat School, Netarhat (1975)

Employment:

TIFAC, Delhi (2013-2018) – Executive Director
Dhirubhai Ambani Institute of ICT, Gandhinagar (2002-2013) - Professor
Institute for Plasma Research, Gandhinagar (1995-2002) – Scientist/Project Leader
Saha Institute of Nuclear Physics, Kolkata (1986-95) - Scientist
Lawrence Berkeley Laboratory, USA(1983-86) – Research Asst
Univ of California, Berkeley (1981-83) – Teaching Asst

Research areas : Wireless Sensor Networks and Embedded Systems – applications to Planetary Exploration, Wildlife, Nuclear Fusion, Assistive Technology for persons with severe disability, Brain-Computer Interface

Research Achievements :

- **Nuclear Fusion:**
 - Major contribution to improve both the first generation experimental Nuclear Fusion reactors (Tokamak) in India to International standards of operation
 - Designed Real Time control System for India's first superconducting Tokamak SST-1
- **Planetary Exploration:**
 - Designed LusseX to carry out Lunar Surface and Subsurface Exploration for Chandrayaan-II mission at request of Chandrayaan Mission Director
 - Worked on Lunar Seismic Sensor Network to monitor Seismic Activity on Moon
 - Worked to detect water in the shadowed craters of moon
- **Assistive Technology:**
 - Developed devices to improve quality of life of persons with severe disability using body/brainwave/touch sensors
- **Wildlife :** Developed Wireless Sensor Networks technology for tracking wildlife for four group of animals : (a) GPS based (b) GPS less (c) Image Sensor based and (d) Acoustic Sensor based

Awards and Academic Achievements :

- Rani Lakshmi Bai Nari Shakti Puraskar 2015 from President of India on behalf of TIFAC for women empowerment
- Samaj Ratna 2013 award for contribution to Science, Technology and Society
- NCPEDP-Mphasis Universal Design Award 2012 for developing technology to help severely disabled
- Bihar Gaurav Samman 2012 for contribution to Science and Technology by Guj CM Shri Narendra Modi.
- HP Innovate 2009 award for gesture based Universal Remote Control to help persons with disability
- IBM Faculty Innovation Grant Award - 2004
- National Science Talent Search Award - 1976
- Among top 20 of Bihar state Xth board examination - 1975
- Bihar state topper in prestigious Netarhat School Admission Test – 1970.

International Exposure:

USA, Germany, Netherland, Portugal, Spain, Australia, Brazil, China, Japan, Czech Republic, Austria, France

Entrepreneurship – Co-founder of “Sun Teknovation” in Gandhinagar focused on Technology Based Innovation

Science Popularization - Mentor and Actor in popular YouTube “Science Wience” Series.

Member of various external Boards/Committees:

- Member, Consultative Group on “Strengthening Science, Technology and Innovation Ecosystem in the Country”, NITI Aayog, 2017
- Member, Working Group for the Development of an India Innovation Index, NITI Aayog, 2017
- Chairman, NITI Aayog Task Force on Dissemination and public awareness about Methanol/DME, 2017
- Member, NITI Aayog S&T Vision 2032 Committee, 2017

- Chairman, Committee on Carbon Capture, Utilization and Storage, Ministry of Coal, 2017
- Member, Committee on Perspective plan of AICTE, 2017
- Chairman, CSIR CISAC award 2017
- Chairman, Committee for empanelment of IP firms, IPU, CSIR, 2017
- Member, Research Council, CSIR-CGCRI , 2017
- Member, Research Council, CSIR-CSIO, 2017
- Member, Committee for Outcome Review of 12th Plan Schemes of DSIR, 2017
- Member, Committee to review Policy Research Centres, DST, 2017
- Member, Sectoral Monitoring Committee for CSIR-800/Rural Sector project, 2017
- Member, National Panel for the formulation of the Technology – led Innovation Policy, DST, 2017
- Member, Senate, NID, Ahmedabad, 2017
- Member, Governing Council, NID, Kurukshetra, 2017
- Member, Expert Committee (EC) of Climate Change Programme (CCP) SPLICE, DST, 2017
- Member, Screening committee, Scheme on “Enhancement of Competitiveness in the Indian Capital Goods Sector”, DHI, 2017
- Member, CII Smart Manufacturing Council, 2017
- Invitee, Committee on “Technology Gaps in Defense Production Capability’ of RPMC, Ministry of Defense, 2017
- Member, Sub-Committee on Technology and Capacity Building for INDC Implementation, MOEFCC, 2016
- Member, PRSG, Project under National Programme on Perception Engg. Phese-II , MEITY, 2016
- Expert member, Committee of DSIR for formulating a New Scheme beyond 31.3.2017, 2016
- Member, Advisory and Screening Committee, CRTDHs, CSIR 2016
- Member, Steering Committee meeting on Scheme on Enhancement of Competitiveness in the Indian Capital Goods Sector, DHI, 2016
- Member of the Committee for evolving New Schemes/Policy for promoting MSME Sector/ Start-ups in the areas of Language Technologies, Ministry of Communication and Information Technology, 2015
- Member, PAC, NSTMIS, DST, 2015
- Member, RAB, CMTI Bangalore, DHI 2015
- Member, Technical Advisory Committee, NRDC , 2014
- Member, Technology Advisory Group (TAG) on Electric Mobility, 2014
- Scientific Advisory Board , National Institute of Mental Health(NIMH), 2014
- School Board, School of Engineering and Technology, Central University of Rajasthan
- Governing Body, Andhra Pradesh Technology Development & Promotion Centre (APTDC), Hyderabad
- Member, Academic Council, Aryabhata Knowledge Univ, Patna 2014
- Member, School Board – School of Engineering and Technology, Central University of Rajasthan, 2014
- Member, Faculty of Doctoral Studies & Research, Nirma University, 2013
- Member, Council , IIASA, Vienna (2013-) and Vice Chair(2015-2017)