

Press Release

Dr. Chandra Shekhar Mishra Conferred the Pravasi Bharatiya Samman Award

Honorable President of India Shri Ram Nath Kovind presents Dr. Mishra the highest honor conferred on overseas Indians at the Pravasi Bharatiya Divas Conventions

Varanasi (India) - January 23, 2019

Physicist Dr. Chandra Shekhar Mishra accepted the Pravasi Bharatiya Samman Award from the Honorable Shri Ram Nath Kovind, the President of India. He received this award as an eminent physicist of Indian origin who has fostered international cooperation and technological advancement in high-energy physics. This prestigious award was presented at the Pravasi Bharatiya Divas (Non-Resident Indian Day) Convention, organized by the Ministry of External Affairs.



Mishra is a Senior Scientist at Fermi National Accelerator Laboratory (Fermilab), USA and a Fellow of American Physical Society. He has held many senior management positions at Fermilab including: Deputy Project Manager, High-Intensity Superconducting Proton Accelerator (HISPA); Deputy Director, International Linear Collider; and Head, Main Injector Department.

“I am honored to receive this recognition from my motherland. I sincerely hope that my efforts over the last decade to return something back to India will help establish its energy independence and train future scientists and engineers of India,” said Shekhar Mishra after receiving the award from the president.

Mishra’s research interests are in experimental high-energy physics. He has made significant contributions in the research, design, development, and operation of the state-of-the-art technologies for particle physics experiments, proton-antiproton synchrotrons, electron-positron linac, and proton superconducting linac. Mishra has significantly cited fundamental physics and discovery papers including the discovery of the top quark, b-quark meson production, nuclear shadowing effect of J-psi and Dimuon production, the discovery of hyper-nuclei and associated eta meson production in pion-nucleon collision.

Under the guidance of Dr. Oddone, Director, Fermilab; Dr. Anil Kakodkar, Chairman, Atomic Energy Commission of India; Dr. William Brinkman, Director, Office of Science; Prof. VS Ramamurthy, Secretary, Department of Science and Technology; Prof. T Ramasami, Secretary, Department of Science and Technology; and the Honorable Dr. Abdul Kalam, President of India, Mishra innovated an international participation in US-based accelerator construction, a first for the US Department of Energy. This

partnership advanced India's nuclear program, which requires modern accelerator technology for the conversion of Thorium into Uranium.

"Dr. Shekhar Mishra has done extraordinary work building the collaboration between Indian laboratories and universities and US institutions in the field of accelerator science. He has supported scientists and engineers on both sides to achieve their respective goals, benefiting both Indian and US institutions," stated former Director of Fermilab, Dr. Pier Oddone. "With enormous tenacity he has navigated the complex environment of Indian and US funding agencies to satisfy their different requirements, overcoming many problems that would have defeated anyone else. Dr. Mishra richly deserves this great recognition."

"Mishra innovated an India Institutions and Fermilab Collaboration for indigenous development High Intensity Superconducting Proton Accelerator that is enabling India leapfrog technology development to achieve energy independence," said Dr. Anil Kakodkar, former Chairman, Atomic Energy Commission of India, in this recommendation for this award. "It is one of the best "Win-Win" scientific collaboration for the two largest democracies of the world."

Mishra is the founding US Technical Coordinator and worked closely with directors of three Department of Atomic Energy Laboratories. Dr. Vinod Sahni and Mishra worked together in laying the foundation of this collaboration under the guidance of Dr. Kakodkar. Mishra's "contributions over the last decade and a half to the Indo-US collaboration in the field of particle accelerators and their applications is truly unmatched, and will always remain a beacon for many budding scientists from several Indian Institutions who have been guided and inspired by you over the years" stated Dr. Vinod C Sahni, former Director, RRCAT and Director, Physics Group, BARC.

The collaboration operates under the US-India S&T Agreement (2006) and the annexed agreement (2014) signed by Dr. Ratan Sinha, Chairman, Atomic Energy Commission of India following the recommendation by the Indian Cabinet Committee on Security. Dr. Sinha stated that Mishra "played a pivotal role in Indian institutions and industries acquiring much needed critical technologies for the Indian Nuclear Energy program."

The collaboration produced an agreement in 2015 that resulted in India becoming a significant partner for a new Fermilab accelerator, which brings together money, expertise and scientists from both countries for a common goal and allows both nations to share the resulting technology. "Without international partnerships, we would not be able to afford to do this science in the United States," Mishra said. "The technology that we have together are not supposed to commercialize and sell it back to the United States markets; that is part of the agreement.

"As an American, and I am an American, you have to worry about the whole enterprise. The U.S. economy is part of the enterprise. We do worry about the bigger picture. We think of 10 years down the line and take care of it to the best of our ability. We are not selling U.S. technology; we have put in enough checks and balances."

Shekhar Mishra was conferred Pravasi Bhartiya Samman Award in acknowledgement of, "Your outstanding achievement in the field of Science and in recognition of your valuable contribution in promoting the honour and prestige of India and in fostering the interest of Overseas Indians". Ram Nath Kovind, President of India.

Friends and Family of Shekhar Mishra congratulates him for this recognition.