



Seminar on Life and Works of Prof. M. N. Saha and Prof. S. N. Bose



To celebrate 125th birth anniversary of these two legendary Indian scientists, Department of Physics, Panjab University, Chandigarh and National Academy of Sciences India (NASI) (Chandigarh Chapter) are jointly organizing this program at PU, Chandigarh on November 02, 2018



Prof. M. N. Saha (born: October 6, 1893), founder president of NASI, is well-known for his works on Saha ionization equation (1919), for which he was nominated for the Nobel Prize several times. He had also contributed immensely in many other areas relevant to Physics and society.

The purpose of the seminar is to develop awareness among the young students & faculty about the great impact (both scientific and social) of the works of Prof. Bose and Prof. Saha.

Prof. S. N. Bose (born: January 1, 1894), who was classmate of Prof. Saha is best known for Bose-Einstein statistics. His works in other areas of Physics have also largely enriched research in India.

Speakers



Prof. Sri Krishna Joshi, is a well decorated condensed matter physicist, Padma Shri (1992), Padma Bhushan (2003), Meghnad Saha Award (1974), Bhatnagar Award (1972), Fellow of INSA, IAS, TWA. Besides holding many prestigious positions in professional bodies, he was Director of NPL and Director General for CSIR. Joshi's broad areas of interest are condensed matter and collision processes. His current research interests lie in strongly correlated electron systems, such as high temperature superconductors, and also in nanotechnology, especially electron transport in quantum dots and nanotubes. After a brief introduction to life and times of Meghnad Saha, Prof. Joshi shall outline the theory of thermal ionization which is an important pillar of Astrophysics and a very fundamental contribution of Saha. Brief introduction will be given about Saha's Equation, Saha's ionisation Potential, Temperature and pressure in stellar atmosphere in arriving at fraction of atoms ionized in stars.

Prof. S. K. Joshi



Prof. Keya Dharamvir obtained her M.Sc (1971) and Ph.D (1980) from IIT Kanpur and retired as a Professor at Dept. of Physics, Panjab University, Chandigarh, after a long and illustrious career. Her main research interests are Theoretical Condensed Matter physics: Mixed Valent Systems; Low dimensional electron gas, Theoretical Nanomaterials: Structure and vibrations of carbon nanomaterials (C60, Carbon Nanotubes); Clusters, metallic and doped: structure prediction and chemical reactivity and Heavy ion irradiation on carbon nanomaterials. Presently she's working for SPSTI, an NGO working to promote science and technology amongst people of all age groups. She is secretary, SPSTI (Society for Promotion for Science & Technology in India) Prof. Dharamvir shall discuss life and times of Satyendra Nath Bose.

Prof. Keya Dharamvir



Prof. Jurgen Bosse, Fachbereich Physik Freie Universität Berlin, Germany is a theoretical Condensed Matter physicist with interests in . Dynamical properties of quantum fluids, glass transition, Bose-Einstein condensation: current correlations of trapped low-temperature gases. He held visiting professor positions at various institutions, MIT, U.S.A.; Kyoto University, Japan; Panjab University, Chandigarh; IIT Roorkee etc. Prof. Bosse shall discuss Implications of Bose's trailblazing insight on photon statistics published in July 1924 in Zeitschrift für Physik are discussed for a gas of massive non-interacting particles. He will elaborate, from a present-day perspective, the most important consequence of his publication, the emergence of the concept of indistinguishability of quantum particles.

Prof. J. Bosse

Tentative Schedule

Session and Speaker	Topic	Time
Introduction		14:00
Prof. S.K. Joshi	Meghnad Saha and his Theory of Thermal Ionization	14:10-15:10
Break		15:10-15:40
Prof. Keya Dharamvir	Life and Times of Prof. S.N. Bose	15:45-16:15
Prof. J. Bosse	Dynamics of ideal quantum gases	16:15-17:00
TEA		17:00