#### Brief Resume of Prof. Bikash Sinha



Bikash Sinha (b.1945) is a first class Science Graduate from the University of Calcutta, obtained TRIPOS from the Cambridge University in Natural Science in 1967 and Ph.D. from London University in 1970 and D.Sc. in 1981. Dr. Sinha had lived in England almost 12 years, teaching and researching in Rutherford High Energy Physics Laboratory and Kings College, London, and internationally well-known for his pioneering work

on Quark Gluon Plasma, through his significant 250 papers. He led the team from India for the first time to participate in the experiments at CERN, Geneva, as well as RHIC and BNL, USA.

Dr. Sinha joined Bhabha Atomic Research Centre in 1976 after coming back from England and was appointed Director of Variable Energy Cyclotron Centre in 1987. Dr. Sinha held the concurrent charge as Director, Saha Institute of Nuclear Physics, Kolkata, from November 1992 to June 2009. He is currently the Homi Bhabha Distinguished Professor of the Department of Atomic Energy, India. He is a Fellow of the prestigious Indian National Science Academy as recognition of his outstanding research in Physics (1989) & Fellow of National Academy of Sciences, Allahabad; Fellow of the 3rd World Academy of Sciences, Italy, 2002 and Indian Academy of Sciences, Bangalore, 2004, and received S.N. Bose Birth Centenary Award of the Indian Science Congress Association in 1994. The Radiation Medicine Centre in Kolkata is a part of the Cyclotron Centre, established by Dr. Sinha.

Dr. Sinha has been conferred Padma Shri Award by the Government of India in 2001 and the prestigious Padma Bhusan Award by the Government of India in 2010 for his significant contribution in Science & Technology, Dr. Raja Ramanna Prize'2001 and the Pandya Endowment Lecture Award, IPA, 2001 and Rais Ahmed Memorial Lecture Award, Aligarh, 2001.

Hon'ble Prime Minister of India has nominated Dr. Sinha as a Member of the Scientific Advisory Council from January 27, 2005. Ministry of Human Resource Development appointed him as the Chairman of the Governing Council of National Institute of Technology (NIT), Durgapur from June 2005.

Dr. Sinha had recived numerous awards and honours, noteworthy awards are The Humboldt Research Award by the Alexander von Humboldt Foundation, Germany, Prof. Meghnad Saha Memorial Lecture Award from The National Academy of Sciences, India, and he has been elected as President of the Indian Physics Association from November, 2007 to 2010.

Recently Dr. Sinha is appointed as Distinguished Visiting Scholar to Christs College, Cambridge & elected to the Fellowship of the Institute of Physics, London, UK. Prof. Sinha has become a Member of the State Planning Board, Govt. of West Bengal, since September 2011. He recently authored a book entitled "Sristi O Kristi ......." which made an unprecedented impact on many readers.



# National Science Day Celebration 2014

28th February 2014, Friday



## VISVA-BHARATI

Siksha-Bhavana (Institute of Science) Santiniketan

#### VISVA-BHARATI



The Faculty Members of Siksha-Bhavana (Institute of Science) request the pleasure of your company at the

# **National Science Day Celebration**

on Friday, the 28th February 2014 at 11.00 hrs.

at the Lipika Auditorium, Santiniketan

## Professor Dr. Sushanta Dattagupta, FNA, FNASc, FASc, FTWAS

Padma Shri Awardee Hon'ble Vice-Chancellor, Visva-Bharati Former Director, Indian Institute of Science Education & Research

> has kindly agreed to inaugurate and preside over the programme.

S N Bose National Centre for Basic Sciences

#### Professor Dr. Bikash Sinha, FNA, FNASc, FASc, FTWAS

Padma Shri & Padma Bhushan Awardee Homi Bhabha Professor of Atomic Energy (Govt. of India) Former Director, Variable Energy Cyclotron Centre Saha Institute of Nuclear Physics Member, Prime Minister's Scientific Advisory Council

has kindly agreed to deliver the NSD Oration Lecture on

#### "GOD" PARTICLE and the INFANT UNIVERSE at CERN

#### Professor Anil Kr. De and Professor Samir Bhattacharya

Celebrated Scientists of Siksha-Bhavana will be felicitated for their life time contribution.

Santiniketan 17\* February 2014 Professor Dr. Sudhendu Mandal

Adhyaksha (Dean)

Siksha-Bhavana (Institute of Science)

#### PROGRAMME

(11.00 hrs.)

Reception of Guests

Invocation & Opening Song : Sangit Bhavana

Welcome Address : Prof. Sudhendu Mandal Inauguration : Prof. Sushanta Dattagupta

Felicitation : Prof. Anil K. De

Prof. Samir Bhattacharya

NSD Oration Lecture : Prof. Bikash Sinha

Presidential Address : Prof. Sushanta Dattagupta Vote of Thanks : Prof. Ashis Bhattacharjee

Closing Song : Sangit Bhavana

## "GOD" PARTICLE and the INFANT UNIVERSE at CERN

#### ABSTRACT

The most elementary constituents of all matter in the universe, as per conventional wisdom, are quarks strongly interacting by exchanging gluons.

The universe, about a microsecond after the Big Bang, as per contemporary wisdom, must have consisted of quarks, leptons (electrons....etc) and photons (light particle).

What is the mechanism that generates the mass of these elementary particles? Higgs Boson (GOD Particle) and the Higgs mechanism does that. Higgs Boson was discovered on July'2012 at CERN, using Large Hadron Collider (LHC), ATLAS and CMS detector. We present the theatre of that discovery. When two nuclei collide at this awesome energy (2.7 TeV/nucleon) the neutrons and protons of the atomic nucleus melt into their fundamental constituents, quarks and gluons — the scenario mimicking the infant universe, microsecond after the Big Bang. We present this drama.