GOVERNMENT OF INDIA SCIENCE AND TECHNOLOGY LOK SABHA

UNSTARRED QUESTION NO:271 ANSWERED ON:09.08.2012 RESEARCH IN GOD PARTICLE Meghwal Shri Arjun Ram

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) whether Indian scientists are also involved in the research for `God Particle` and if so, the number of Indian scientists working on this project alongwith the details thereof;
- (b) the new heights likely to be achieved in the field of space science with this new research of God Particle (Higgs Boson); and
- (c) the details thereof?

Answer

MINISTER OF STATE IN THE MINISTRY OF PLANNING; MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (ASHWANI KUMAR)

- (a) Yes, Madam. Indian scientists are also involved in the research for 'Higgs Boson' (popularly known as `God Particle`). A group of 80 Indian scientists including 30 Ph.D. students from 8 institutions are currently working on the Compact Muon Solenoid (CMS) Experiment, which is one of the two experiments that have led the research on the Higgs Boson. These institutions are â€" Bhabha Atomic Research Centre, Mumbai, University of Delhi, Indian Institute of Technology-Bombay, Mumbai, National Institute of Science Education and Research, Bhubaneswar, Panjab University, Chandigarh, Saha Institute of Nuclear Physics, Kolkata, Tata Institute of Fundamental Research, Mumbai and Visva Bharati, Santiniketan. Earlier, Indian scientists also participated in the construction of the massive particle accelerator at Geneva [viz. the Large Hadron Collider (LHC)], detector system for the CMS Experiment and the LHC Grid Computing System using which research on Higgs Boson is being carried out.
- (b) & (c): This research falls in the domain of Particle Physics. It is the Higgs particle which imparts mass to all fundamental particles in the Universe. With this finding, therefore, a major milestone in the human understanding of the fundamental constituents of matter and their interaction will be achieved.