



# Indian Institute of Science Education and Research Mohali

## Colloquium

### Sustainable India @ 2047

#### Role of Education and Research



Prof. T. Ramasami

Prof. Thirumalachari Ramasami is a Former Secretary to the Government of India in the Department of Science of Technology. Prior to this, he served as the director of the Central Leather Research Institute, Chennai, India. He is a distinguished researcher and leather scientist. He was awarded India's National Civilian Honour the Padma Shri in 2001 and the Padma Bhushan in 2014 for excellence in Science and Engineering. He was awarded the Shanti Swarup Bhatnagar Award for notable and outstanding research in Chemical Sciences in 1993.

### Abstract

Developed India @ 2047 is a national aspiration and stated goal. It is becoming evident that the interlink between wealth creation and access to new knowledge would play critical impact on the rates of development of nation states. Large and populous economies like India might also need to ensure that the development path adopted is sustainable. There have been significant changes in the higher education as well as research and innovation sector in India since 2005 as evidenced from data on a) the number of Indian institutions figuring in the QS ranking, b) improved ranking of India in terms of both number of publications and highly cited paper and c) enhanced perception of India as an emerging knowledge powers of the world. Whereas most research intense nations in the world seem to have adopted competitive excellence with higher per capita emissions of Green House Gases and high per capita energy consumption, India enjoys an opportunity to innovate collaborative excellence model for embracing a responsible innovation model for ensuring that the per capita emissions of India does not increase significantly from its current @ 2 tons/ year and the Human Development Index of  $>0.9$  being realized at per capita emission levels of 50 GJ per year making embracing the goal of developed India @2047 also is sustainable. For realizing the goal of sustainable India @ 2047, higher education as well as research and innovation sector may need to play critical roles. An attempt would be made to present positive changes in higher education and research sector as well as responsibilities of higher education and research sector in India achieving the goal of Sustainable India @ 2047.

**Date - Tuesday, September 23 2025,**

**Time - 5:00 PM**

**Venue - LH-7, Lecture Hall Complex**

