



## **Integrated Computational Materials Engineering (ICME) National Hub to be Inaugurated at IIT Kanpur**

**Kanpur, U.P:** Indian Institute of Technology, Kanpur and Tata Consultancy Services have come together to set up a world-class educational and research ecosystem for Integrated Computational Materials Engineering (ICME) at the institute's campus. The inauguration, which will be held on March 2, will include addresses by **Prof. Indranil Manna, Director, IIT Kanpur and Mr. K. Ananth Krishnan, Vice President and Chief Technology Officer, Tata Consultancy Services.**

ICME is an emerging discipline that has huge potential in materials development by integrating a number of disciplines to cut down on the time and cost required in development and manufacturing. In other words, ICME is useful for accelerating the time required in the development of materials and of the products. For example, a car which would otherwise require 10 years to be developed, can be done so in a much shorter time period using ICME.

The setting up of the National Hub was decided upon as part of the **MoU between IIT-K and TCS** which was signed in November 2015, with the aim of carrying out cutting edge research on ICME-based materials and technology that are of national importance, strengthening research in key areas in the field of ICME, training professionals in this field through a variety of courses and research projects as well as developing open-source tools for facilitating ICME-based development of materials and teaching products.

At this National Hub, academic and industry collaborations will also be a key focus area. IIT Madras, IISc Bangalore, IIT Bombay, DRDO, National Metallurgical Laboratory, Georgia Tech and Purdue are some of the academic institutes and national labs with which the National Hub will be collaborating.

ICME-based solutions have huge potential in government sectors such as defence, atomic energy and railways as well as public and private industries working in the area of steel, aluminium and automotive. Therefore, the hub will work on providing ICME-based solutions for these sectors as a starting point. The current focus areas for research will include structural materials such as high strength steel and aluminium, engineering polymers, composites and additive manufacturing.

**Venue:** Conference Room, FB212, IIT Kanpur

**Date:** 2<sup>nd</sup> March, 2017

**Time:** 9am onwards