

Knowledge Network of Indian Institute of Technology, Gandhinagar Under TEQIP-II Initiative (MHRD, Govt. of Gujarat)

## Workshop on

## **Teaching Thermodynamics**

## Date: 26/06/2014 to 27/06/2014 (2-days)

**Time:** 9:00 am reporting time on 12<sup>th</sup> June

Venue: L-block, IIT Gandhinagar

Target group: Faculty members

Register At: www.iitgn.ac.in/kn

Dead line: 23<sup>rd</sup> June 2014

The subject of Thermodynamics is often perceived by a large number of students to be an abstract science. This misconceived notion develops in the students due to the approaches in which the subject of thermodynamics is being presented to them. Academicians now acknowledge that there is a dichotomy between intuitive concepts and the theory of thermodynamics, and it should be addressed by improvising the way thermodynamics has been classically taught. Further, studies show that even though students appear to acquire a reasonable grasp on the thermodynamic concepts in classes, they encounter major difficulties to apply these concepts in practice. Several pedagogical approaches have been developed by academicians in light of the aforementioned views. In this workshop, we will demonstrate some such pedagogical approaches that have been designed for efficiently teaching zeroth, first and second laws of thermodynamics. We will delve into what attributes enable these approaches to facilitate an efficient and righteous student learning. The workshop will provide an exposure to the teachers on the different styles of delivering the thermodynamic concepts and will help them adopt a method most effective in their setting.