

## Experts for Sessions

Faculty Members of IITs

## For whom:

Ph.D student, working professionals, entrepreneurs, academicians, owner- managers, senior / mid level managers, young graduates

## Outcomes

In-depth knowledge on nanofluids/hybrid nanofluids and its engineering applications, laboratory exposure and future research prospective

## About the T-L Cell, IIT(BHU)

A new cell named 'Teaching-Learning Cell (TLC)' was initiated by the Institute in July 2013 to strengthen the Teaching environment of the Institute & organize several programs to enhance teaching-learning processes at IIT (BHU). It covers all aspects of teaching, pedagogy, laboratory projects, assessment covering the other areas like course delivery, Role in designing courses, e-learning, sharing best practices in teaching by effective teachers, Faculty development programs etc.

## Call for Registration

Faculty Members and Research Scholar can apply through the Google form: <https://goo.gl/forms/yrm2tE6UjsqRKvLJ2>

## Dead Lines

Last date of receipt of registration form : **01.11.2017**  
Confirmation about participation : **02.11.2017**

## PATRON

Prof. Rajeev Sangal  
Director, IIT(BHU), Varanasi

## Chairman

Prof. S. Kumar, Chairman, T-L Cell

## Objectives

- Gain insights of the nanofluids fundamentals and applications
- Understand experimental and numerical methods for nanofluids
- Understand nanofluids research and development opportunities

## Course outline

Faculty Development Programme is split into three parts:

- Lectures and Assignments
- Computational & Experimental Labs
- Discussion on R&D Opportunities

## Contents:

The participants will be given a thorough understanding of the following topics:

- Nanofluids and Nanotechnology Fundamentals
- Synthesis and Characterization of Nanofluids
- Single and two phase heat transfer phenomenon using nanofluids (Macro and Micro levels)
- Numerical Techniques and Computation
- Application of Nanofluids in Reactor Cooling
- Application of nanofluids to transportation
- Application of nanofluids to cooling and heating
- Application of nanofluids to Manufacturing Process
- Application of nanofluids to Electrical and Electronic
- Application of nanofluids to Refrigeration and Airconditioning
- Application of nanofluids to Biomedical Applications

# Six Days Faculty Development Program on Nanofluid and its Engineering Applications (NFEA – 2017)

November 06-11, 2017

**PLEASE REGISTER HERE**

<https://goo.gl/forms/yrm2tE6UjsqRKvLJ2>



Organized by  
**Teaching-Learning Cell**  
**Indian Institute of Technology**  
**(Banaras Hindu University)**  
**Varanasi – 221 005**  
India

## Convener:

Dr. J. Sarkar, Dept of Mechanical Engineering  
Prof. P. Ghosh, Dept of Mechanical Engineering