

## ORGANIZERS

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University of Delhi



Hansraj College



Internal Quality Assurance Cell  
Hansraj College

Faculty Development  
Workshop

On

Embedded Systems  
and Synthesis of  
Nano-materials

JANUARY 6-7, 2017

under the aegis of DBT - star  
college scheme

Organized by

DEPARTMENT OF  
PHYSICS & ELECTRONICS  
&  
IQAC

HANSRAJ COLLEGE

# Embedded Systems and Synthesis of Nano-materials

**6<sup>th</sup> January 2017**

The Department of Physics & Electronics of Hansraj College is organizing a 2-day faculty development workshop on “Embedded Systems and Synthesis of Nano-materials”, under the aegis of DBT star college scheme.

The first day of the workshop will cover a brief introduction to Nano-materials, followed by their synthesis using chemical routes. Introductory lecture and hands-on sessions on embedded systems and AVR microcontroller based projects will be the highlights of the second day of the workshop.

The workshop is being organized for College Faculty.

Registration Fee: Rs 500/-  
Limited Seats

## VENUE

Lab 5, First Floor, Block B  
Hansraj College

**Registration 09:00 a.m.-10:00 a.m.**

**Inauguration 10:00 a.m.-10:30 a.m.**

**Session I: 10:30 a.m.-12:00 p.m.**

## Introduction to Synthesis of Nano-Materials

**Prof. Vinay Gupta**

Dean Examination, University of Delhi.  
Professor, Department of Physics and Astrophysics,  
University of Delhi.

**Lunch Break: 12: 00 p.m. – 1: 00 p.m.**

**Session II: 1:00 p.m.-04:00 p.m.**

## Lab session: synthesis of Nano-Materials

**Prof. Vinay Gupta**

**Workshop website**

<https://sites.google.com/site/workshophrc2017>

**7<sup>th</sup> January 2017**

**Session I 10:00 a.m.-11:30 a.m.**

- Electronic LED Lamp Lighting.
- Demonstration of Innovative Projects.
- Power point presentation on Embedded Systems with AVR.

**Dr. Dhananjay Gadre**

Director, TI Centre for Embedded product Design, NSIT

**Tea Break: 11:30 a.m. – 11:45 a.m.**

**Session II 11:45 a.m.-01:00 p.m.**

- AVR microcontroller family features.
- Instruction set architecture.
- Memory, port and peripherals

**Dr. Dhananjay Gadre**

**Lunch Break: 1:00 p.m. – 1:30 p.m.**

**Session III 01:30 p.m.-04:00 p.m.**

- Assembly language programming.
- Physical interfacing.
- Embedded C programming.
- Program download options.
- Arduino flavor of AVR.

**Dr. Dhananjay Gadre**

**Valedictory**