# Bajaj College of Science, Wardha (Autonomous) Department of Physics

## Certificate course in Nanoscience and Nanotechnology

### (NANOSENSE)

**Objective:** Nanotechnology is the latest frontier of all developments in scientific sectors. This certificate course aims to give exposure to nanoscience and nanotechnology.

**Course Feature**: This is a certificate course in Bajaj College of Science (BCS), Wardha and which is specially designed for the students and professionals who aspire to pursue their career in this interdisciplinary emerging area of nanotechnology. This programme aims at inculcating the fundamental knowledge of nanoscience and nanotechnology to the participants through 30 hrs of interactive theoretical and practical sessions to be conducted at BCS. This programme also includes the virtual interaction sessions with Principal Scientist at National/International laboratory.

#### **Syllabus and Course Content:**

- Introduction of Nanoscience and Nanotechnology and History of nanomaterials
- Science of Nanomaterials and their importance in various fields
- Top down approach, bottom up approach to synthesize nanomaterials
- Inorganic nanomaterials, carbon nanomaterials and their wide applications
- Characterization techniques for Nanomaterials: Structural, optical, chemical, electrical, thermal and magnetic properties
- Applications of nanomaterials in physical and biological sciences.
- Live demonstrations of synthesis of nanomaterials and analysis using XRD, UV-vis.,
   FTIR techniques.
- Hands on laboratory training for synthesis
- Virtual Guest talks

#### Who can Register:

Third year Undergraduate student (B.Sc.)/Post Graduate student (M.Sc.)/Research Scholars of any stream of Biological Sciences and Mathematical Sciences.

**Duration of the Course**: January-March 2023, 30 hours (Including hands on laboratory sessions)

No. of Seats: 15

Registration Fee: Rs. 500/-

#### How to Register:

- 1. Candidates need to enroll for the programme online from the second week of December by filling the form (<a href="https://goo.gl/ivtQRN">https://goo.gl/ivtQRN</a> ).
- 2. 15 deserving candidates will be selected and will be intimated via e-mail for the final selection for the course in the last week of December.
- 3. Selected candidates need to confirm their participation by paying the registration fee only after receiving the confirmation mail from the co-ordinator.
- 3. Candidates will get the registration no. and schedule of the course via e-mail.
- 4. Course will commence from the 1st week of January 2023.
- 6. Exams will be conducted at the end of the course in March and certificates will be awarded to the participants.

#### **Course Coordinator**

Dr. G. V. Lakhotiya, Asst. Prof., BCS, Wardha

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**Registration QR Code:** 



Dr. S.H. Bagade

Head,

**Department of Physics** 

Dr. G.V. Lakhotiya

Co-ordinator.

Nanosense

**CC: All departmental Notice Boards**