Activity-1

NANOTECHNOLOGY RESEARCH LABORATORY (Established In 2005)

The Nanotechnology Research Laboratory at Shri Shivaji Science College, Amravati acts as a resource center to address the scientific problems related to nanotechnology. The Nanotechnology Research Laboratory is involved in developing state-of-the-art facilities at our college and is vigorously pursuing interdisciplinary research on various current aspects of Nanoscience and Nanotechnology. This is the first kind of research laboratory in the vidharbha region.

It was established in 2005 under the guidance of Prof and Head Dr G.N.Chaudhariina small room withan assembly for synthesis of nanoparticles and a hand-made muffle furnace. The gas sensing applications work was carried out at that time. As the time progressedwith the funds received combined with the genuine interest of the young researchers team ,the nanotechnology research spread out its branches with emerging applications in different fields. (Biosensor, SOFC. LCR, antibacterial etc) At present it is equipped with three muffle furnace, Autoclave unit, Bacteriological incubator, CH instrument, spin coating machine and many more instrument.

Objective:

The objectives of the laboratory include

- Synthesisand production of nanoparticles by sol gel method
- Investigation of Enzymatic biosensing and gas sensing.
- Solid Oxide Fuel Cell (SOFC)
- > Antibacterial study of synthesized nanomaterials are carried out and various other areas of nanotechnology relevant to future science and engineering.

Activities:

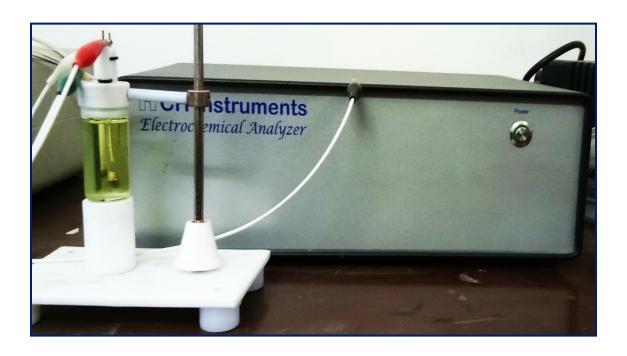
The nanotechnology research laboratory aims at initiating and pursuing research activities in area related to nanotechnology and nanoscience through funded research project, doctoral and master level project, bachelor degree projects and collaboration research with other institutes. The major funding of the laboratory is through UGC. Various research problems of academics and industrial importance are being addressed in the laboratory.

Facilities:

The major facilities available in the laboratory include standard equipment as well as custom made experimental system developed as part of the ongoing research project

- Equipment for the synthesis and preparation of nanomaterials
- Cyclic Voltammetry Studies
- LCR studies
- Antibacterial study

Appreciations by last NAAC Peer Team for Remarkable work of Nanotechnology Research laboratory.



CH Instruments Electrochemical Analyzer



Autoclave

