National Institute of Technology Rourkela

Defence Seminar

Seminar Title	: Investigation of Magnetoelectric Properties in Lead-free Ba0.95Ca0.05Ti0.95Sn0.05O3-Ni0.7Zn0.3Fe2O4 Particulate and Bilayer Composites
Speaker	: Biman Kar (Rollno : 518ph1011)
Supervisor	: Pawan Kumar
Venue	: Committee Room of Physics & Astronomy Department.
Date and Time	: 23 May 2025 (8:30 AM)
Abstract	: In the development of multifunctional devices, magnetoelectric (ME) multiferroic materials have gained an ever-increasing research interest in the field of science and technology. Magnetoelectric (ME) composites, which are an artificial combination of ferroelectric and ferromagnetic materials, show better coupling even above room temperature making them more practically important. In the present work we have investigated the eco-friendly ME composites in particulate (0-3 type) and bi-layered (2-2) forms using Ni-Zn ferrite as the ferrimagnetic phase and Ca, Sn substituted $BaTiO_3$ as the ferroelectric phase. Bilayered ME composite thin films, synthesized by PLD technique, with these individual phases was also carried out.