

The Centre of Excellence for Green Energy and Sensor Systems (CEGESS) has started functioning as a seat of multi-disciplinary research and education in the year 2009. The need to integrate the efforts of scientists and engineers working with different aspects of green energy and sensors has been the primary motivation for creation of this centre. This centre on Green Energy and Sensor Systems is perhaps the first of its kind in the country to promote research and manpower development in both the areas in an integrated fashion. This is intended to impart a comprehensive overview of two closely related modern technologies largely based on semiconductor technology and electronics. We emphasize at providing a holistic approach in research to create new knowledge and lay the foundations for new technologies.

The centre aims at providing quality postgraduate education to meritorious undergraduates with keen interest in both the fields of green energy and sensor systems. Students in CEGESS are provided with an educational grounding in the fundamental principles so as to enable them to undertake cutting edge research in these fields. The research and education at CEGESS is closely associated with industry and several national & foreign academic institutions of repute with an aim to foster cutting edge research and establish ourselves as a leader in this field.

Interests and activities in the centre include solar cell design, fabrication and characterization with a special focus on nano materials , solar photovoltaic systems design and development , solar energy storage system , smart microgrid , sensor design ,fabrication and characterization using novel materials and methods for agricultural, environmental , automobile and healthcare applications (including quantum dot based biosensors) and development of SMART sensor system.

The centre also undertakes Industry Interactive Development and service including consultancy services.

The centre has been recognized as the West Bengal Renewable Energy Development Agency (WBREDA ) Centre of Excellence for cooperative R&D and manpower training in the field of solar energy by the Department of Power, Govt. of West Bengal.

The centre is also engaged for design and development of multimedia resource material intended both for the academic and industry.

