

DST Nano Mission Project

IIT Bhilai has made concerted efforts to align its Research and Development activities to focus for technological self-reliance. The institute has received a DST- sponsored project entitled **“Large Area, Semi-Flexible and Indium-free Perovskite Solar Cells”** under the Nano Mission Program with an outlay of Rs. 1.38 Crore. The Nano Mission is an umbrella program for capacity building which envisages the overall development of this field of research in the country and to tap some of its applied potential for nation’s development.

The sanctioned project aims at development of indium-free, mechanically flexible, large area perovskite solar cells with high efficiencies of exceeding 12-15%, and prolong lifetime exceeding 5000 hours. The project aims to identify the underlying degradation mechanism of the encapsulated solar modules containing suitably connected perovskite solar cells in real world testing conditions.

The project team will be consisting of Dr. Dhriti Sundar Ghosh, Dr. Sanjib Banerjee, Dr. Nikhil Chander, Dr. Satyajit Gupta, and Dr. Soumya Gangopadhyay who have multidisciplinary expertise in the field.