

One Day Symposium On

“Next generation organic and hybrid solar cells” 6th August, 2018

The Department of Solar Energy, School of Technology, PDPU is organizing a one-day symposium on **“Next generation organic and hybrid solar cells”** on 6th August, 2018.

Organic photovoltaics (OPVs), or organic solar cells, are generally viewed as one of most exciting near-future applications of organic electronics, not necessarily as a replacement for silicon based PVs, rather because of unique ways that OPVs can be used due to their flexibility, large-area coverage, and low cost. However, a key challenge to expanding solar cell production is industry-scale reproducibility. The harvesting of solar energy relies on chemical and physical interactions at the interfaces between materials that harvest the light and materials that transport electrical current. These interfaces can be either organic-organic or organic-inorganic. As chemical scientists gain a better understanding of the processes that occur at these various interfaces, engineers will be able to build interfacial structures that drive energy conversion even more efficiently than today's devices do. While current OPV technology boasts conversion efficiencies that exceed 10 percent, reaching even 12 percent, some researchers predict organic solar cells will reach 15-20 percent efficiency.

The symposium aims to highlight the key features and future of organic solar cell and how it will fulfill the energy demand and impact on the energy security of our country. The speakers of the symposium will share their work on organic photovoltaic, organic electronics, compound semiconductor etc. The speakers are internationally reputed in their field as depicted from their scientific profile. Not only the students from Electrical Engineering, Electronics Engineering, Physics, Chemistry, and Solar Energy will be benefited from this symposium but the faculties of those departments will also be equally benefited.

Following eminent speakers are invited to deliver talks:

1. Dr. Jyotishman Dasgupta, Associate Prof. TIFR, Mumbai.
2. Dr. Dinesh Kabra, Assistant Prof. IIT- Bombay
3. Prof. Saurabh Soni, S.P. University, V.V. Nagar, Gujarat

Program Schedule

6th August, 2018

11:00-11:30 hrs	Inauguration, Introduction and Program Overview
11:30- 13:00 hrs	(Topic) by Prof.Saurabh Soni
13:00 – 14:00 hrs	Lunch
14:00 – 15:15hrs	Raman Spanshots of Excitons and Polarons in Conjugated Polymers by Dr. Jyotishman Dasgupta
15:15 – 15:30 hrs	Tea break
15:30 – 16:45 hrs	Molecular Electronics: A sign of witnessing of carbon age! By Dr. Dinesh Kabra
16:45 hrs	Valediction