

IIT Bombay is organising an Institute Colloquium on Monday, December 5, 2011. The details are as follows:



by  
**Dr. Subhendu Guha**  
Chairman, United Solar Ovonic  
Michigan, USA

Title : **From Innovation to Commercialization – The Story of Solar Cells**  
Day & Date : Monday, December 5, 2011  
Time : 4.00 p.m.  
Venue : F.C. Kohli Auditorium, KReSIT Building

*All are invited.*

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**Abstract:** During the last two decades, a phenomenal growth has taken place in the deployment of solar cells or panels. The market has grown from about 40 MW in 1990 to more than 1500 MW in 2010, and the price of the panels has gone down from about \$7 /watt to less than \$2 /watt during the same period. Innovation has played a key role in reducing the cost of manufacturing of the cells and modules. The goal is to reach grid parity without any incentive or subsidy. Since the first invention of solar cells in 1954 using single crystals of silicon, many new technologies and materials have emerged as candidates for low cost solar cells. In this talk I shall discuss the status of the various technologies and outline the process by which an innovation in the laboratory is translated to a viable product with special reference to thin film silicon technology.

**Relevance to IITB:**

Dr. Guha is in the area of photovoltaics, which is very relevant today for the country as well as for IITB. We have recently established the National Centre for Photovoltaic Research and Education at IIT Bombay, with 50 faculty investigators from 13 departments and centres. Further, there are over 100 postgraduate students working in this area across the institute.

**About the Speaker:** Dr. Subhendu Guha is the Chairman of United Solar Ovonic, the world's largest manufacturer of flexible solar laminates. Dr. Guha is an international authority in the science and technology of amorphous silicon alloy solar cells. His work has received many recognitions including the Bright Light Award from U.S. Department of Energy. He was also the recipient of World Technology Award in the Energy category in 2005 and PVSEC Award for Outstanding Contribution to Science and Technology of Photovoltaics (PV) in 2009. He has over 200 papers to his credit, and is widely acknowledged as an industry leader.

A Ph.D. from the University of Calcutta, Dr. Guha joined TIFR in 1975 and started working on semiconductors. In 1982, Guha left TIFR and joined ECD in USA. He co-founded United Solar, a subsidiary of ECD, and has been with it since its inception in 1990. Dr. Guha is a former Editor of the "Physics News". He is the author of over 200 publications and 30 patents in the area of solar photovoltaics.