

## **SCHOOL COLLOQUIUM**

## Alternative Sustainable Energy Sources: Prospects of Solar Cell Development

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## **Talk Abstract**

Photovoltaics (PV) converts sunlight directly into electricity. It provides a key to secure the future energy supply of the world and at the same time to address the environmental pollution and global warming problems. However, the present PV-produced electricity accounts for only a very small portion in global energy consumption. The major barrier preventing dominance of PV technology in today's market is the cost, making the PV-produced electricity unaffordable for many applications. Therefore the race is on across the world to develop PV technologies that are efficient, inexpensive, and environmentally benign. Central to the development are the efficient harvesting of solar photons and the efficient conversion to usable electricity, which require to address the associated scientific, materials and engineering issues. In this colloquium, we will introduce the development, current status, and future prospects of thin-film solar cells and the new generation of nanostructured solar cells, with some examples from our own studies at HKUST

Date: 20 January 2014 (Monday)

Time : 3:30 p.m.

\*\* Refreshment will be served at 3:15 p.m. outside the lecture

theatre \*\*

**Venue : Chow Tak Sing Lecture Theatre (LT-G)** (via Lifts No. 25/26)

The Hong Kong University of Science & Technology

Clear Water Bay, Kowloon

All are Welcome!!