Co-organisers:

Supporting Organisation:



THE HONG KONG YOUNG ACADEMY OF SCIENCES 香港青年科區院

教育局 Education Bureau



E2TEC010T (Not-token required)

Talk Series on Emerging Technologies — Science, Opportunities and Challenges 2024: The Solar Energy Solutions Towards Carbon Neutrality in Hong Kong

Prof. YIP Hin Lap, Angus Professor Department of Materials Science and Engineering and School of Energy and Environmental Science, City University of Hong Kong

> Application Deadline 16 Dec 2024 12:00 noon

Intended Learning Outcomes

Upon completion of the gifted programme, gifted students should be able to:

- 1. learn about the background and main drivers of renewable energy;
- 2. figure out the working principles of solar photovoltaic (PV) cells;
- 3. determine the latest PV technologies and their potential integration with buildings and other community facilities;
- 4. address the challenges and opportunities for solar energy development in Hong Kong

Co-organisers:

Supporting Organisation:



Gifted Programme Introduction

Hong Kong government has set an ambitious goal of reaching carbon neutrality by 2050, and a critical strategy in its overall planning is to increase the deployment of renewable solar energy. In this talk, the speaker will discuss how we can rely on technological innovation to tackle this grand challenge; particularly, we have identified a new generation of printable, flexible, transparent, and colour-tunable solar cells as the most prominent photovoltaic technology to promote solar energy deployment in Hong Kong. Such a new generation solar cell technology can be integrated as tinted solar windows, façades, or curtains with buildings to generate significantly more solar electricity in an urban city, which usually has limited lands and rooftops for installing conventional silicon solar panels.

The speaker, Prof. YIP Hin-Lap, Angus is a Professor at the Department of Materials Science and Engineering and School of Energy and Environment at City University of Hong Kong. He is the associate director of Hong Kong Institute for Clean Energy. His research focuses on understanding the structure-property relationships, device physics and photophysics, device design and optimization of 1) organic solar cells, 2) perovskite solar cells and 3) perovskite light-emitting devices(LEDs).

"Talk Series on Emerging Technologies — Science, Opportunities and Challenges 2024: The Solar Energy Solutions Towards Carbon Neutrality in Hong Kong" is co-organised by YASHK and HKAGE and supported by the Education Bureau.

Schedule

Session	Date	Time	Venue
1	24 Dec	10:00 a.m 12:00 noon	Zoom meeting

Suitable for

- S1 S6 students and teachers in 2024/25 school year.
- Class size: 200
- * First-come, first-served.

Medium of Instruction

Cantonese

Certificate

E-Certificate will be awarded to participants who have attended the talk.

Holistic Talk

Series

Remark

Starting from the 2023/24 school year, after the first review period, ALL student members must complete the following requirements in each school year in order to maintain their membership:

- Attend One Talk; AND
- Participate in One programme or activity of any kind

This talk is one of the items in the four domains of the Holistic Talk Series. The objective is to facilitate the all-round development of student' gifted potential.

