

## SPD5152 Industry-Based Student Project

<http://ibse.hk/SPD5152/>

### Proposed Topics (2016-2017)

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Title:	Study of indoor air pollution sources in Hong Kong
Description:	According to statistics, about 70% of lifetime of Hong Kong citizens have been spent in the buildings. Indoor air quality greatly influences the health of the human bodies. Common air pollution usually includes formaldehyde, benzene, VOC and so on. This project is to investigate the main source of indoor air pollution in the office or home, and give feasible solutions to decrease the pollution concentration.

Title:	Feasibility analysis of building integrated photovoltaics in Hong Kong
Description:	The photovoltaics, which directly convert the solar energy into electrical energy, has been treated as one of the most promising alternatives for the traditional fossil fuels. As the land area of Hong Kong is very limited, it is necessary to utilize the empty roof to install the PV panels. This project aims to study the feasibility of building integrated photovoltaics in Hong Kong and the maximum power generation it could produce every year.

Title:	Feasibility study of superhydrophobic self-cleaning coatings for buildings
Description:	The so called “superhydrophobic self-cleaning coatings” has attracted great attention for their potential application for the internal and external walls of the buildings. This study aims to study their practical application effect on THEi buildings.