





**College of Science and Engineering** 

## **IRSN Nuclear Safety and Risk Seminar**

on

# The use of CATHARE and ASTEC codes for nuclear reactors accident analysis

## Presented by

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and

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Date: 22 October 2013 Time: 6:30- 8:30 pm Venue: Auditorium, Level 2, MTR Headquarters Building, Telford Plaza, Kowloon Bay Registration: For free registration, please send your name, affiliation and membership number (if available) to *seoffice@cityu.edu.hk* with email subject indicating "IRSN Seminar" on a first-come-first-served basis

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#### **Abstract:**

Severe accidents are studied with the ASTEC code. ASTEC includes several models dealing with heat transfer and thermal-hydraulics in the primary and secondary circuits and in the containment, and release/chemistry/transport of fission products which are based on the most recent experimental data and knowledge. It is used in several countries as a support to safety studies or research and it is an important tool for IRSN PSA-level 2 studies.

CATHARE is developed to perform best-estimate analysis of nuclear reactor and facilities, basically for PWR accident analysis. CATHARE includes modules that take into account any two-phase flow behavior like thermal and mechanical non-equilibrium, vertical co- and counter-current flows, horizontal stratified flow, and all flow regimes along with all heat transfer mechanisms. The code is for analysis of Design Basis Accidents and Beyond Design Basis accidents without core melting.

#### **Attendance/CPD Certificate will be provided**

#### **Supporting Organisations**



香港風險管理與安全協會 Hong Kong Association of Risk Management and Safety







## Auditorium, Level 2 Podium, MTR Headquarters Building Telford Plaza, 33 Wai Yip Street, Kowloon Bay A short walking distance from Kowloon



A short walking distance from Kowloon Bay Station "Exit A1". The main Reception Lobby is Level 2 Podium