



Theory, Applications and Challenges of Air Quality Modelling

ABOUT THE WORKSHOP

The workshop is focused on technical training on air quality modelling. It is designed to give the applicability of models to problems and interpretation of the results through case studies. The workshop will be different from existing courses in the sense that students will learn the nature of modeling and the applicability of the model results rather than applying the models mechanically to problems.

The benefit of this workshop is to provide students with a good understanding of the air dispersion science and how to use models properly for decision making. In that sense the workshop is both a science and management course. At the end of the workshop, students will have a clear understanding of what models do and how the modeling results should be used.

PROGRAM DETAILS

Session I

Date: 7-9 December 2009 (Monday to Wednesday)
Venue: Room 3209A, Lift 19, Clear Water Bay, Kowloon.
The Hong Kong University of Science & Technology

Session II

Date: 10 December 2009 (Thursday)
Venue: Session A at Room 1003 (lift 4); Session B at Room 4480 (lift 25/26),
Clear Water Bay, Kowloon.
The Hong Kong University of Science & Technology

Date: 11 December 2009 (Friday)
(For Environmental Protection Department participants ONLY)
Venue: Room 4723, Revenue Tower, 5 Gloucester Road, Wanchai.
The Hong Kong Environmental Protection Department, HKSAR

TARGET AUDIENCE

Modelling practitioners and air quality workers with interest in modelling and have a general understanding of fluid dynamics, physics and chemistry

PROGRAM FEES

Regular Rate : HK\$3,000
Early Bird Rate : HK\$2,500 (*registration on or before 20 November*)
Student Rate : HK\$900 (*no early bird discount*)

****Seats are limited and will be on a first-come-first-served basis. Form and payment must be received by date to receive early bird rate.***

| | | |
|---------------|---|---|
| For enquiries | : | Eliza TANG, Division of Environment, HKUST Clear Water Bay, Kowloon, HKSAR |
| Telephone | : | 2358-6927 or 2358-8363 |
| Fax | : | 2335-9317 |
| Email | : | envr@ust.hk or eliza@ust.hk |
| Website | : | http://envr.ust.hk/AQ_Modelling_Workshop.htm |

Program

Session I

Day One (7 December 2009; 9:00-12:30am & 2:00-5:00pm)

The first day gives an introduction to Atmospheric Boundary Layer Science.

- Introduction to the Atmospheric Boundary Layer Science
- Atmospheric Transport, Dispersion, and Chemical Reaction processes related to air pollutants

Day Two (8 December 2009; 9:00-12:30 am & 2:00-5:00pm)

The second day extends the ideas introduced in day 1.

- State of Air Pollution Modelling
 - a. Pollutant Dispersion from Point Sources
 - b. Long Range Transport Modelling
 - c. How to interpret model outputs
- Model Applications: Input parameters for Point Source Modelling
- Emissions Inventory, Initial and Boundary conditions for regional scale modeling

Day Three (9 December 2009; 9:00-12:30am & 2:00-5:00pm)

The third day gives more examples of the usage of the modeling packages.

- How to use AERMOD (US, EPA modeling package): with modeling CD's (attendees will be asked to bring their lap top computers)
- Discussion on challenges in using the modeling package
- Future modeling challenges: Climate change adaptation modeling
- Q and A's and discussions

Session II

Day Four (10 December 2009)

Session A

10:00-12:30am, Room 1003 (lift 4), HKUST

- Consultation on air quality modeling
(All are welcome)

Session B

3:30-4:30pm, Room 4480 (lift 25/26), HKUST

- Seminar on "Pollutant Dispersion in the Atmosphere with Finite Diffusion speeds"
(All are welcome)

Day Five (11 December 2009; 9:00-12:30am & 2:00-5:00pm)

(For Environmental Protection Department participants ONLY)

- A general description of air quality modelling, summarising the main points in Session 1 followed by discussions of model applications

COURSE INSTRUCTOR

Dr. P.K. Misra (independent modelling consultant, Canada)

MEDIUM OF INSTRUCTION

English

Registration by FAX: 2358-1582 (Attn.: Ms. Amy Lau)

REGISTRATION FORM

Registration for the Workshop on 'Theory, Applications and Challenges of Air Quality Modelling'

Date: 7 December 2009 to 11 December 2009

Venue: Hong Kong University of Science and Technology

Prof/Dr/Mr/Ms/Mrs _____

Position _____

Company/Affiliation _____

Address _____

Tel _____ **Fax** _____ **E-mail** _____

Registration (please put a 'tick' for the rate you would choose)

Regular rate

HKD3,000

Early Bird rate

(Registration by fax on or before 20 Nov 2009 followed by payment to made within 10 days after registration)

HK\$2,500

Student rate

HK\$900

Remarks

1. Seats are limited and will be offered on a first-come-first-served basis.
2. Early bird rate is offered for delegates who registered by fax on or before 20 November 2009 and settled the payment within 10 working days after the registration.
3. For student rate, please submit a copy of student identity card together with the registration form.
4. An official receipt will be issued upon receipt of the payment; normally the receipt will be distributed at the workshop.

Payment

Registration by FAX followed by payment in the form of crossed cheque or bankdraft payable to '**HKUST R and D Corporation Ltd**' and send it to 'The Hong Kong University of Science and Technology, c/o Division of Environment, Room 5492, Clear Water Bay, Kowloon, Hong Kong'.