

Thailand's Annual International Training Course (AITC) 2017

“Environmental and Health Risk Assessment and Management of Toxic Chemicals”

Course Title Environmental and Health Risk Assessment and Management of Toxic Chemicals

Duration 6 – 20 December 2017

Closing date for application 15 October 2017

Course Content

This course, which is an integration of science and policy, covers the fundamental basis of the human health and environmental risk assessment and management process, which starts from identification of hazard and exposure, assessment methods, the mode of action and human relevance framework, characterization of risk, the inherent uncertainties in each step, the relationship between risk assessment and risk management, and the need for open, transparent and participatory acceptance procedures and credible communication methods. Emphasis will be placed on potential adverse health effects of human exposure to environmental hazards. The course also teaches the practical application of risk assessment methods to various problems through the use of case studies. The application of environmental impact assessment procedures of identifying and assessing risk is also covered.

Course Outline

PART 1: FUNDAMENTALS OF RISK ASSESSMENT

- Introduction to the Electronic Distance Learning Tool (eDLT)
- Toxic effects of chemicals and factors influencing toxicity
- Hazard identification: human data
- The risk assessment process
- Hazard identification and characterization – toxicity testing
- Introduction to the WHO Human Health Risk Assessment Toolkit
- Dose-response assessment (threshold, non-threshold effects)
- Ecological risk assessment – environmental fate, bioaccumulation, metabolism
- Ecological risk assessment – dose response, relationships in ecotoxicology
- Guideline derivation/standard setting
- Exposure assessment – environmental monitoring and modeling
- Integrated Health Impact Assessment
- REACH
- Risk reduction, risk perception, risk communication
- Risk assessment case studies and exercises

PART 2: PROBLEM FORMULATION, MODE OF ACTION & HUMAN RELEVANCE FRAMEWORK

- Problem formulation
- Mode of action/human relevance
- Dose-response; benchmark dose modelling
- Introduction to Physiologically Based Pharmacokinetic Modelling
- Introduction to Chemical Specific Adjustment Factors

Number of Participants 15 persons

Qualifications

- 1) Less than fifty (50) years of age.
- 2) At least two (2) years work experiences related to assessment of risk from the use of chemicals.
- 3) Hold a bachelor's degree from a university/technical college in chemistry, biomedical sciences, or medicine.
- 4) Demonstrate proficiency in English (speaking, reading and writing).
- 5) Participants should be in good health (both physically and mentally), and have a health certificate provided by an authorized physician. This form is also attached together with the Nomination Form.

Fellowship coverage

The fellowship will cover round trip airfare, accommodation (CRI residence), daily stipend, training material, and health insurance for the training period.

Venue Bangkok, Thailand

Training Institution

Chulabhorn Research Institute (CRI)

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