

Public Customized Training Course on ‘Groundwater contamination transport modelling and remediation of contaminated subsurface systems’

(Venue : Ara room)

Date/Time	Program Description	Remarks
10.13 (Mon)	Registration and orientation	IS-Geo
09:50-10:00		
10.13 (Mon)	Contaminant transport modelling – Analytical models	
10:00-11:00	Fundamentals of groundwater transport – advection-dispersion processes	Dr. Clement
11:10-12:10	Development of advection-dispersion equation and solution to one-dimensional problems	Dr. Clement
12:10-13:30	<i>Lunch</i>	
13:30-14:30	Introduction of EXCEL-Visual Basic	Dr. Chang
14:40-15:40	Development of one-dimensional analytical models using Visual Basic	Dr. Clement
15:50-16:50	Development of one-dimensional analytical models using Visual Basic(Continued)	Dr. Clement
17:00-18:00	Fundamentals of finite-difference solution to differential equations	Dr. Clement
10.14 (Tue)	Contaminant transport modelling – Numerical models	
10:00-11:00	Numerical solution to advections-dispersion equations and development of a visual basic code	Dr. Clement
11:10-12:10	Numerical solution to advections-dispersion equations and development of a visual basic code (Continued)	Dr. Chang
12:10-13:30	<i>Lunch</i>	
13:30-14:30	Fundamentals of sorption and other chemical/biochemical reactive transport mechanisms	Dr. Clement
14:40-15:40	Introduction to MODFLOW/MT3DMS and RT3D codes	Dr. Clement
15:50-16:50	Demonstration of MODFLOW/MT3DMS codes	Dr. Chang
17:00-18:00	Demonstration of MODFLOW/MT3DMS codes(Continued)	Dr. Clement
10.15 (Wed)	Remediation of groundwater contamination problems	
10:00-11:00	Managing groundwater contaminated field site - LNAPL sites and active remediation option	Dr. Clement
11:10-12:10	Managing groundwater contaminated field site - LNAPL sites and active remediation option(Continued)	Dr. Clement
12:10-13:30	<i>Lunch</i>	
13:30-14:30	DNAPL contamination problems and active remediation option	Dr. Clement
14:40-15:40	Discussion of bioremediation and natural attenuation processes	Dr. Clement
15:50-16:50	Case-study for natural attenuation screening and design using USEPA’s BIOCHLOR model	Dr. Chang
17:00-18:00	Camp Lejune case study presentation	Dr. Clement

※ The working language is English