

International Training Course **BASIC INTERNAL DOSIMETRY**

Jointly organised by
FANR, ICRP, and
EURADOS

**14-18 OCTOBER 2024
ABU DHABI, UAE**

Grand Hyatt Abu Dhabi Hotel &
Residences Emirates Pearl

OVERVIEW

The international **Basic Internal Dosimetry** training course is designed to provide participants with a comprehensive understanding of internal radiation exposure theoretical knowledge and practical experience.

The course is aimed at professionals working in radiation protection and related fields who seek to develop or enhance their skills in internal dosimetry calculations. By the end of the course, participants will be equipped with the necessary tools to assess cases of internal contamination, and estimate the corresponding doses.

Morning Sessions: Theory Lectures

Afternoon Sessions: Practical Exercises

IMPORTANT INFORMATION FOR PARTICIPANTS

Compulsory Participation

Participation in all practical exercise sessions is mandatory. Active involvement in these exercises is essential to successfully completing the course.

Laptop Requirements

Participants are required to bring their own laptops to the course, and will need to install and use specific software tools necessary for completing the exercises. Instructions for software installation will be provided prior to the course.

TRAINING COURSE SCIENTIFIC COMMITTEE

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MONDAY 14 OCTOBER 2024

BIOKINETICS AND DOSIMETRY

8:30 - 9:30	Welcome and Course Purpose
9:30 - 10:20	Introduction to Internal Dosimetry
10:30 - 11:20	Biokinetics: Inhalation, Ingestion and Systemic Models
11:20 - 11:50	Coffee Break
11:50 - 12:40	Dosimetric Models and Statistical Methods for Internal Dose Assessment
12:40 - 14:00	Prayer and Lunch Break
14:00 - 14:30	Introduction to the Afternoon Exercise Session: Scope and Purpose
14:30 - 15:20	First Exercise
15:20 - 15:40	Coffee Break
15:40 - 16:30	Second Exercise
16:30 - 17:00	Q&A and Discussion

TUESDAY 15 OCTOBER 2024

IN-VIVO MONITORING AND WBC

8:30 - 9:00	Welcome and Recap
9:00 - 10:00	Whole Body Counter Facilities: Organization and Operation; Techniques and Methods for Direct Bioassay Measurements
10:00 - 11:00	Intake Assessment by Direct Bioassay Measurement in a Whole Body Counter Facility
11:00 - 11:30	Coffee Break
11:30 - 12:30	Accuracy Requirements and Uncertainty Analysis in Internal Dosimetry
12:30 - 14:00	Prayer and Lunch Break
14:00 - 14:30	Introduction to the Afternoon Exercise Session: Scope and Purpose

14:30 - 15:20	First Exercise
15:20 - 15:40	Coffee Break
15:40 - 16:30	Second Exercise
16:30 - 17:00	Q&A and Discussion

WEDNESDAY 16 OCTOBER 2024

IN-VITRO MONITORING AND CODES FOR ID

8:30 - 9:00	Welcome and Recap
9:00 - 10:00	Techniques and Methods Used in Excreta Analyses
10:00 - 11:00	Intake Assessment by Indirect Bioassay Measurement of Excreta
11:00 - 11:30	Coffee Break
11:30 - 12:30	Codes and Software for Internal Dosimetry (I)
12:30 - 14:00	Prayer and Lunch Break
14:00 - 14:30	Introduction to the Afternoon Exercise Session: Scope and Purpose
14:30 - 15:20	First Exercise
15:20 - 15:40	Coffee Break
15:40 - 16:30	Second Exercise
16:30 - 17:00	Q&A and Discussion

THURSDAY 17 OCTOBER 2024

ICRP JOURNEY, RADON, AND PHANTOMS

8:30 - 9:00	Welcome and Recap
9:00 - 10:00	The ICRP Journey in Internal Dosimetry: OIR Publications, EIR and the New ICRP Approach to Radon Exposure Calculations

10:00 - 11:00	Human Phantoms and Their Use in Internal Dosimetry
11:00 - 11:30	Coffee Break
11:30 - 12:00	Decorporation Treatments
12:00 - 12:30	Codes and Software for Internal Dosimetry (II)
12:30 - 14:00	Prayer and Lunch Break
14:00 - 14:30	Introduction to the Afternoon Exercise Session: Scope and Purpose
14:30 - 15:20	First Exercise
15:20 - 15:40	Coffee Break
15:40 - 16:30	Second Exercise
16:30 - 17:00	Q&A and Discussion

FRIDAY 18 OCTOBER 2024

DOSE ASSESSMENTS AND INFRASTRUCTURE

8:30 - 9:00	Welcome and Recap
9:00 - 9:30	Internal Dosimetry Infrastructure Development Needs in the UAE
9:30 - 10:00	Internal Dosimetry as a Service in Radiation Protection in the UAE
10:00 - 11:00	Round Table Discussion on the Requirements to Setup In-vivo and In-vitro Laboratories for Bioassay Intake Assessments in the UAE
11:00 - 11:30	Coffee Break
12:00 - 12:15	Open Discussion with the Participants and Course Feedback
12:15 - 12:30	Final Remarks and Closure of the IDTC