

## ANNOUNCEMENT

2-week training course on

# Radiation Epidemiology, Dosimetry and Radiation Protection Concepts of ICRP

Munich & Salzburg, 21st January -1st February 2019

## About the Course

Dear Colleagues

The 2-week training course on "Radiation Epidemiology, Dosimetry and Radiation Protection Concepts of ICRP" is jointly organized by the Helmholtz Zentrum München and the Technical University of Munich TUM, Germany. The course is supported by the 'CONCERT-European Joint Programme for the Integration of Radiation Protection Research' under Horizon 2020. This programme aims to contribute to the sustainable integration of European and national research programs in the field of radiation protection and supports innovative research projects in radiation protection.

During the course we will teach the concepts and designs of studies into the elucidation of the health effects of low, moderate and high radiation doses by epidemiological methods in suitable cohorts. Presented topics will include methods and uncertainties of dose reconstruction, the strength and weakness of different epidemiological study designs, use of concepts in radiological protection with some emphasis in medical applications. The relevant health consequences as studied with the epidemiological tools will cover both cancer as well as non-malignant diseases (cardiovascular, ocular and neurological disorders). As a particular feature of the course, leading members of the International Commission on Radiological Protection ([ICRP](#)) will highlight the use of scientific knowledge for the purpose of radiation protection.

The course is open to postgraduate students and to scientists studying biological or medical aspects of ionizing irradiation in laboratories in the European Union. All lectures are given in English. Based on the great success of our previous courses in 2013, 2014 and 2017 we are able to present you a very interesting, balanced and multi-faceted program.

Welcome in Munich and Salzburg in January 2019!

**Prof. Dr. W. Rühm**

Helmholtz Zentrum München  
ICRP Main Commission /Chair C1

**Prof. Dr. K. Trott**

TU München

**Ao. Univ. Prof. Dr. H. Lettner**

Universität Salzburg

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*A joint course between  
Helmholtz Zentrum  
München, Technische  
Universität München &  
Universität Salzburg  
supported by*



## Timetable

<b>Mo, 21.01.</b>	11:00	Introduction to the CONCERT Course
	13:00	Principles of Radiation Epidemiology
	15:00	Principles of Radiation Dosimetry
<b>Tue, 22.01.</b>	10:00	ICRP and Radiation Protection I
	13:00	ICRP and Radiation Protection II
	15:00	ICRP and Radiation Protection III
	<b>19:30</b>	<b>Get-Together - Dinner</b>
<b>Wed, 23.01.</b>	10:00	Radiation Doses to the A-bomb Survivors in Japan
	13:00	Radiation Effects among A-bomb Survivors: Cancer, Non-cancer
	15:00	Doses and Effects after the Fukushima Accident
<b>Thu, 24.01.</b>	10:00	Lessons learned after the Fukushima Accident / ICRP Dialogue
	13:00	Doses and Effects after the Chernobyl Accident
	15:00	Doses and Effects among the Techa River Population
<b>Fr, 25.01.</b>	10:00	Radiation Doses from Medical Applications (Therapy and Diagnostics)
	13:00	Radiation Effects from Medical applications - Diagnostics
	15:00	Radiation effects from Medical applications - Radiotherapy
<b>Sa, 26.01.</b>		*** no lecture ***
<b>Su, 27.01.</b>	<b>tbd</b>	<b>Transfer to Salzburg</b>
<b>Mo, 28.01.</b>	10:00	Radon in the Human Environment
	13:00	Metrology
	15:00	Lung Dosimetry and Epidemiological Studies: Miners, Radon in Homes
<b>Tue, 29.01.</b>	09:30	<b>Field trip to BAD GASTEIN</b> Water Sampling, Trip into Thermal Gallery, Field Work in Thermal Gallery: Sampling Rn in the Air, Information by Gallery's Staff
<b>Wed, 30.01.</b>	09:00	Lab-Work: Measuring Samples
	13:30	Lab-Work: Measuring Samples by Cascade Impactor
	15:00	Discussion of Results
	<b>17:00</b>	<b>Transfer to Munich</b>
<b>Thu, 31.01.</b>	10:00	Dosimetry and Epidemiology of Radiation-induced Vascular Diseases
	13:00	Radiation Doses and Effects in the Eyes
	15:00	Radiation-induced Genetic and In-utero Effects
<b>Fr, 01.02.</b>	10:00	Controversial Issues in Radiological Protection
	13:00	Test of CONCERT Course Participants & Course Evaluation
	15:00	General Discussion of the CONCERT Course
	16:00	End

Lectures HMGU

Lectures Salzburg

## Information for Applicants

- ✓ There is no course fee.
- ✓ Certificate of attendance will be issued to each participant at the end of the course.
- ✓ The maximum of participants is 15.
- ✓ Bus transport to Salzburg and back is organized and covered.
- ✓ Lunch, coffee and water are available during the lectures at Helmholtz Zentrum München.
- ✓ We recommend the following hotels:

### Munich:

[IBIS Budget Garching](#)

[Motel One Garching](#)

[IBIS Garching](#)

### Salzburg:

[Meininger Hotel Salzburg](#)

[Gasthof Überfuhr](#)

## Registration

Please submit the following documents via e-mail before **10th December 2018**

- ✓ Letter of application
- ✓ CV with a description of the scientific career
- ✓ Supporting letter from the supervisor/head of laboratory (only for PhD students)

### To:

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## Venue

**21.-25.1.2019 & 31.1.-1.2.2019**

Institute of Radiation Protection

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German Research Center for Environmental Health (GmbH)

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