







# Theoretical and Practical Dosimetry course for Radiation Processing

October 14 **1**8, 2024

Aerial CRT, 250 rue Laurent Fries, Parc d'Innovation 67400 ILLKIRCH / France

This five-day course will provide training in both the theory and practical implementation of dosimetry for radiation processing through lectures, irradiations, measurements and their interpretation. Particular emphasis will be placed on medical device sterilization and the requirements of standard EN/ISO 11137, but the course will also be applicable to dosimetry for other radiation processing applications.

The practical aspects of the course will be carried out using the Aerial 10 MeV e-beam facility. Gamma and X-ray processing will be addressed in the theoretical parts of the course, and differences to e-beam will be highlighted.

#### This course is limited to 12 participants.

### Provisional program

### Day 1 (start at 9 am):

**Radiation and Dosimetry Fundamentals** 

Reference Dosimetry Systems

**Routine Dosimetry Systems** 

Influence quantities and Uncertainties

Practical session on dosimetry system calibration

#### Day 2:

Practical session on dosimetry system calibration (continued)

Overview of standards/guides (ISO 11137-1, -3, and -4, ASTM 51261, 52628, ...)

Installation and Operational Qualification (IQ/OQ)

Practical session on IQ/OQ

#### Day 3:

Practical session on IQ/OQ (continued)

Overview of ISO 11137-2 (Microbiology aspects)

Impact of radiation dose on polymeric material properties

Process Definition – Sterilisation Dose and Maximum Acceptable dose

#### Day 4:

Performance Qualification (PQ)

Practical session on Performance Qualification

Establishing the process.

Day 5 (finish at 2 pm):

Control and monitoring the process (ISO 11137-4)

**Maintaining Process Effectiveness** 

# Speakers

Mark Bailey Risø HDRL, DTU, Denmark Florent Kuntz Aerial CRT, France Peter Sharpe National Physical Laboratory, UK Arne Miller Risø HDRL, DTU, Denmark Nicolas Ludwig Aerial CRT, France Marie-Hélène Desmonts Aerial CRT, France









#### Location

The course will be held at the premises of Aerial CRT. A block of 12 rooms has been booked at a nearby hotel:

Address: Contact:

7Hotel&Spa Tel.: +33 (0)3 88 40 84 84
550 Boulevard Sébastien Brant Fax.: +33 (0)3 88 66 22 83
Parc d'innovation Mail: commercial@7hotel.fr
67400 STRASBOURG ILLKIRCH Website: http://www.7hotel.fr/

The rate is 103 € per night (travel tax of 2,75 € per person and per night as extra cost), breakfast included. The rooms shall be paid by the attendee him/herself.

Rooms are bookable till September 1st 2024 the latest and by using the e-mail address vcabiddu@7hotel.fr.

A credit card number will be requested as a guarantee, while booking the room. The room booking is cancellable without fees till 15 days upon arrival. In case of late cancelation (minor than 15 days upon arrival), the room will be fully charged.

Reservations should be made directly with the hotel quoting the booking reference: "Dosimetry Course / Aerial"

Registration Form		
Title First name	Family Name	
Company	Address	
· ·	Country	
•	·	
Tel No	E-mail	

**Fee is 3800 €** (+ VAT for French attendees), including course notes, refreshments and course dinner.

NB: on receipt of registration form a confirmation of registration will be sent with payment instructions (Bank transfer or Credit card).

## Course cancellation

- early cancellation (more than 6 weeks prior to the course): 100% of the registration fees will be reimbursed
- late cancellation (less than 6 weeks prior to the course): 50% of the registration fees will be reimbursed
- cancellation less than 2 weeks prior to the course will not be reimbursed but participant may be substituted
- cancellation by Aerial: 100% of the registration fees will be reimbursed

Please send completed form to **both**:

Florent KUNTZ / Aerial CRT 250 rue Laurent Fries Parc d'innovation F – 67400 ILLKIRCH florent.kuntz@aerial-crt.com Romane CHERUY / Aerial CRT 250 rue Laurent Fries Parc d'innovation F – 67400 ILLKIRCH r.cheruy@aerial-crt.com