

Announcement of the EURADOS Intercomparison 2019 for extremity and eye lens dosimeters (IC2019exteye)

EURADOS, through its Working Group 2 (WG2), has established a programme self sustained dosimetry intercomparisons (IC) for individual monitoring services (IMS) with the aims of improving the harmonization of individual monitoring and helping IMS to comply with ISO 17025. Six ICs for whole body dosimeters and two ICs for extremity dosimeters have been completed since 2008. **EURADOS now has the pleasure of announcing IC2019exteye for extremity and eye lens dosimeters.**

Scope

- i) Extremity dosimeters designed to estimate $H_p(0.07)$. The dosimeters may be of type ring, stall or wrist, for wearing on fingers, wrist or ankle and are used **routinely** in individual monitoring of exposed workers.
- ii) Eye lens dosimeters designed to estimate $H_p(3)$ which are worn on the head (not on the chest).
- iii) Extremity and eye lens dosimeters designed to measure either photons and betas or photons only.

Irradiations will be carried out in an accredited or primary standard European irradiation facility in terms of $H_p(0.07)$ or $H_p(3)$ in the following ranges:

- > Photon energy: 16 to 662 keV
- > Beta mean energy 250 to 1000 keV
- > Dose: 0.5 mSv to 1 Sv
- > Angle of incidence: $\pm 60^\circ$

Intercomparison procedure

IMS wishing to participate will first register on the IC2019exteye on-line platform (IOP). Following registration, IMS will complete an application form for each dosimetry system which they wish to enter. The participating IMS will be informed when the applications have been accepted. On acceptance of the application, the participants will receive an invoice from EURADOS and instructions for dosimeter labelling and despatch.

The participation fee is 1350 Euro per dosimetry system. EURADOS sponsors will pay 1215 Euro for one system and 1350 Euro for any additional systems. Fees must be transferred in advance to the EURADOS bank account (free of bank transfer costs) after receiving the invoice from EURADOS. Refunding will only be possible in the unlikely event that the intercomparison is cancelled by EURADOS. The fees have been calculated on a non-profit basis and any surplus money will be used to support the harmonisation of individual monitoring and other EURADOS activities.

For this intercomparison a total of 32 dosimeters are required from each participant. For extremity 22 dosimeters will be irradiated, for eye lens 18 dosimeters will be irradiated; the remaining dosimeters will be used as transit and/or spare dosimeter.

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After the irradiations have been carried out, the co-ordinating laboratory will return the dosimeters to the participants for readout. Within one month from receiving the dosimeters the participants will submit the results in terms of $H_p(0.07)$ or $H_p(3)$ in accordance with the procedures that can be found on the IOP.

After the deadline for submitting results to the co-ordinating laboratory has passed, participants will receive details of their response values. Change of results after distribution of the irradiation data will only be possible in case of technical or administrative errors made by the irradiation laboratory or the co-ordinating laboratory.

After confirmation of the results, EURADOS will provide the participants with a "Certificate of Participation" including information on the irradiation qualities, doses, response values and overall uncertainties for all irradiations.

Intercomparison Report

The Organization Group will prepare a report summarizing the results of the intercomparison. The report will include the names of the IMS that have participated, the types of dosimeter and a photograph of dosimeters used but the results will be presented anonymously.

Intercomparison results will be treated by EURADOS as confidential data and IMS identity will not be disclosed. Data used in technical and scientific studies will be anonymous. The Organization Group has agreed to ensure confidentiality and the participants results will be known only to a minimum number of persons within the Organization Group.

Provisional Schedule – dates to be confirmed

Announcement - Call for participants	April 2019
*Registration of participants and systems	May 2019
Deadline for IMS sending application forms	31 May 2019
Deadline for IMS sending dosimeters to Coordinator	30 June 2019
Irradiations	July - September 2019
Coordinator sending dosimeters for readout	October 2019
Deadline for IMS sending dosimeters results to Coordinator	13 December 2019
Final results available	February 2020
IMS receiving certificates of participation	March 2020

EURADOS Intercomparison 2019 Organization Group

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