

*Whole body dosimeter intercomparison IC2018ph***Certificate of Participation****EURADOS Intercomparison 2018 for whole body dosimeters (IC2018ph)**

Certificate Number: EURADOS-2018-S074/2018 for system S074/2018

Number of pages: 3

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Participating Institute: DOZIMED SRL, Romania

Dosimetry System: Panasonic UD802AT, ODA 166/2018, ISO 17025 accredited - RENAR LI 1047/2015

Reporting number: 38 (this anonymous number will be used in further publications)

Intercomparison procedure: The EURADOS Intercomparison 2018 for whole body dosimeters was managed and coordinated on behalf of EURADOS by the WG2 Intercomparison Organization Group (OG). The OG established the irradiation plan and announced the intercomparison, including the range limits of the doses and radiation qualities, in February 2018.

The IC2018ph on-line platform (IOP) was used by the participants for registration and for all data transfer between the participants and the OG Coordinator. Participants were required to provide details of their dosimeters (including the dosimeter reference point) on the IOP. The participants then sent their dosimeters to the Coordinator (May 2018). The Coordinator checked the correct labelling of the dosimeters and transferred all dosimeters, along with the technical details provided by the participants, to the two irradiation laboratories. The dosimeters were irradiated according to the irradiation plan and returned to the Coordinator (September 2018).

The Coordinator then returned the dosimeters to the participants and indicated which dosimeters had not been irradiated. The participants were instructed to follow normal routine procedures as far as possible. The participants then sent the results of the dosimeter readings to the Coordinator (November 2018). After receipt of all the participants' results, the Coordinator sent the appropriate irradiation data to each participant.

Number of participants: 101 institutes participated in IC2018ph with a total of 121 systems.

Coordinator: A.McWhan, W.Dobrzynska, S.Eliasik (Cavendish Nuclear Ltd., Berkley ADS, Berkeley, GL13 9FB Gloucestershire, United Kingdom)

Intercomparison results: See the table on pages 2 to 4 of this certificate.

Irradiation data: See the attached certificate of the irradiation laboratories No: 3320722-S074/2018 and DOS /2107-S074/2018

Participant results: See the attached signed dose report provided by the participant.

On behalf of the intercomparison
Organization Group:



Andrew McWhan

On behalf of EURADOS:



Werner Rühm

Whole body dosimeter intercomparison IC2018ph

Coordinator

Chairperson

Result of the Intercomparison IC2018ph (Dosimetry System S074/2018)

EURADOS Dosimeter ID	Participant's Dosimeter ID	Radiation Quality	Quantity	Participant's Value	Reference Value	Ratio
S074/2018-6	501745	Co-60	$H_p(10)$	476.000 mSv	390.000 mSv	1.22
S074/2018-10	523476	Co-60	$H_p(10)$	483.420 mSv	390.000 mSv	1.24
S074/2018-16	504979	Co-60	$H_p(10)$	4.230 mSv	4.300 mSv	0.98
S074/2018-19	499965	Co-60	$H_p(10)$	4.020 mSv	4.300 mSv	0.93
S074/2018-27	495971	Co-60	$H_p(10)$	70.810 mSv	57.000 mSv	1.24
S074/2018-31	515641	Co-60	$H_p(10)$	73.530 mSv	57.000 mSv	1.29
S074/2018-15	494766	Cs-137	$H_p(10)$	0.710 mSv	0.700 mSv	1.01
S074/2018-17	503725	Cs-137	$H_p(10)$	0.680 mSv	0.700 mSv	0.97
S074/2018-18	509855	Cs-137	$H_p(10)$	6.160 mSv	5.200 mSv	1.18
S074/2018-21	514720	Cs-137	$H_p(10)$	5.720 mSv	5.200 mSv	1.10
S074/2018-30	504892	Cs-137	$H_p(10)$	5.860 mSv	5.200 mSv	1.13
S074/2018-34	501767	Cs-137	$H_p(10)$	5.750 mSv	5.200 mSv	1.11
S074/2018-1	510031	N-150 & Cs-137	$H_p(10)$	6.410 mSv	6.800 mSv	0.94
S074/2018-2	522425	N-150 & Cs-137	$H_p(10)$	7.020 mSv	6.800 mSv	1.03
S074/2018-9	501937	N-150(60°)	$H_p(10)$	1.900 mSv	1.734 mSv	1.10
S074/2018-28	501721	N-150(60°)	$H_p(10)$	1.920 mSv	1.734 mSv	1.11
S074/2018-5	522793	N-60(0°)	$H_p(10)$	1.220 mSv	1.272 mSv	0.96
S074/2018-12	501025	N-60(0°)	$H_p(10)$	1.260 mSv	1.272 mSv	0.99
S074/2018-23	521272	N-60(60°)	$H_p(10)$	1.710 mSv	1.506 mSv	1.14
S074/2018-25	508820	N-60(60°)	$H_p(10)$	1.580 mSv	1.506 mSv	1.05
S074/2018-11	523026	W-110(0°)	$H_p(10)$	4.250 mSv	5.002 mSv	0.85
S074/2018-14	523377	W-110(0°)	$H_p(10)$	4.370 mSv	5.002 mSv	0.87

Radiation Qualities and average photon energy (according to ISO 4037-1):

▪ Gamma Radiation:

- S-Cs: 662 keV
- S-Co: 1250 keV

▪ X-Rays:

- N-60: 48 keV
- W-110 79 keV
- N-150 118 keV

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Result of the Intercomparison IC2018ph (Dosimetry System S074/2018, continued)

EURADOS Dosimeter ID	Participant's Dosimeter ID	Radiation Quality
S074/2018-3	521846	not irradiated
S074/2018-4	499950	not irradiated
S074/2018-7	514399	not irradiated
S074/2018-8	522863	not irradiated
S074/2018-13	501394	not irradiated
S074/2018-20	514018	not irradiated
S074/2018-22	511774	not irradiated
S074/2018-24	501628	not irradiated
S074/2018-26	499758	not irradiated
S074/2018-29	504110	not irradiated
S074/2018-32	493383	not irradiated
S074/2018-33	522754	not irradiated

