



Annex (1)

Updated on 08/10/2026

To the Accreditation Certificate No. **JAS Cal. - 008** Dated **18-02-2025**

For Secondary Standards Dosimetry Laboratory at Jordan Atomic Energy Commission  
(JAEC) / Amman

Scope of Accreditation

Calibration of Secondary Standard Dosimetry Systems (SSDSs) and Portable Neutron  
Dosimeters

| Measurand                                            | Measuring Range                           | Calibration and measurement Capability (CMC) <sup>a</sup> | Calibration Methods/ Standards/ Remarks                                                                                                              |
|------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measurements of Air Kerma rate (N <sub>k</sub> )     | from $16 \cdot 10^{-3}$ mGy/h to 4 mGy/h  | 2.41%<br>2.22%                                            | -For gamma Radiation Cs-137 : RID-SOP-016 Rev 4.1 based on ISO 4037<br>-For narrow spectrum series X-Ray beam: RID-SOP-020 Rev 1.2 based on ISO 4037 |
| Measurement of Ambient dose equivalent rate (H*(10)) | from $19 \cdot 10^{-3}$ mSv/h, to 5 mSv/h | 2.41%<br>2.22%                                            | -For gamma Radiation Cs-137 : RID-SOP-016 Rev 4.1 based on ISO 4037<br>-For narrow spectrum series X-Ray beam: RID-SOP-020 Rev 1.2 based on ISO 4037 |
| Measurement of Personal Dose equivalent rate         | from $19 \cdot 10^{-3}$ mSv/h, to 5 mSv/h | 2.41%<br>2.22%                                            | -For gamma Radiation Cs-137 : RID-SOP-016 Rev 4.1 based on ISO 4037<br>-For narrow spectrum series X-Ray beam: RID-SOP-020 Rev 1.0 based on ISO 4037 |
| Neutron Dosimetry                                    | Ambient Dose Equivalent : 20 -200 [μSv/h] | 12%                                                       | RID-SOP-028 Rev 2.0<br>Based on<br>ISO-8529-1 (2021)<br>ISO-8529-2 (2000)<br>ISO-8529-3 (2023)                                                       |
|                                                      | 2 mSv per day                             | 12%                                                       | RID-SOP-031 Rev 0.1<br>Based on<br>ISO-8529-1 (2021)<br>ISO-8529-2 (2000)<br>ISO-8529-3 (2023)                                                       |

a) The reported CMCs are expressed at approximately the 95 % level of confidence, using a coverage factor of  $k = 2$ . The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

List of employees in the laboratory who are technically responsible for issuing the calibration certificates in the scope of accreditation:

1. Dr. Ruba Alzubi (Quality Director)
2. Mr. Mamoun Al-Zoubi (Director of Research and Information Laboratories)
3. Alaa Aladwan (Section Head of Radiation Measurement Dosimetry and Secondary Standard Dosimetry)
4. Belal Amro (Section Head of the Neutron Calibration)
5. Eng. Hamzah Abdel-rahman (Acting Section Head of Quality control)
6. Eng. Seif Abu Assi (Lab supervisor)
7. Yazan Muslam (Lab supervisor)