

Name of Accreditation Program	JCSS Accreditation Program
Accreditation Identification	JCSS 0060 Calibration
Name of Conformity Assessment Body	Oarai Research Center, Chiyoda Technol Corporation
Name of Legal Entity	Chiyoda Technol Corporation JCN 7010001004851
Inquiry Point	Reference Radiation Section TEL: +81-029-266-3113 FAX: +81-029-264-9031

*JCN: Japan Corporate Number



20·04·28-NITE-026
2021-04-26

Certificate of Accreditation

International Accreditation Japan (IAJapan) hereby accredits the following conformity assessment body as a calibration laboratory of Japan Calibration Service System.

Accreditation Identification: JCSS 0060 Calibration

Name of Conformity Assessment Body: Oarai Research Center, Chiyoda Technol Corporation

Name of Legal Entity: Chiyoda Technol Corporation

Location of Conformity Assessment Body: 3681 Narita-cho, Oarai-machi, Higashiibaraki-gun, Ibaraki 311-1313, Japan

Scope of Accreditation: Radiation, Radioactivity and Neutron (as the following pages)

Accreditation Requirement: ISO/IEC 17025:2017*

* The relevant accreditation requirements described in the JCSS Accreditation Scheme Document are also applied.

Effective Date of Accreditation: 2021-04-26

Expiry Date of Accreditation: 2025-04-25

Date of Initial Accreditation: 1995-12-01

SAKAMOTO Kozo

Chief Executive, International Accreditation Japan (IAJapan)

National Institute of Technology and Evaluation

- International Accreditation Japan (IAJapan) is a laboratory accreditation body which has signed MRAs of ILAC (International Laboratory Accreditation Cooperation) and APAC (Asia Pacific Accreditation Cooperation).

- MRA requirements are, in addition to relevant international standards and guides, requirements for participation in proficiency testing programs, surveillance and reassessment, and the policy for the traceability of measurement for MRA purpose.

- This laboratory fulfills ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation means this laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

- The latest accreditation information is publicly available on IAJapan Website as an accreditation certificate.

General Field of Calibration: Radiation, Radioactivity and NeutronDate of Initial Accreditation of the Field: 1995-12-01Laboratory's permanent facility/On-site Calibration: Laboratory's permanent facilityCalibration and Measurement Capabilities

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range		Expanded Uncertainty (Level of Confidence Approximately 95 %)
γ-ray Measuring Equipment	Exposure Measuring Equipment	Exposure	From 0.8 mC/kg up to 23 mC/kg	1.9 %
			From 10 μC/kg less than 0.8 mC/kg	2.6 %
			From 13 nC/kg less than 10 μC /kg	3.8 %
		Exposure Rate	From 0.8 mC/(kg·h) up to 13 mC/(kg·h)	1.9 %
			From 10 μC/(kg·h) less than 0.8 mC/(kg·h)	2.6 %
			From 75 nC/(kg·h) less than 10 μC /(kg·h)	3.8 %
		Absotbed Dose	From 27 mGy up to 770 mGy	1.9 %
			From 0.34 mGy less than 27 mGy From 0.5 μGy less than 0.34 mGy	2.6 % 3.8 %
	Absotbed Dose Rate	From 27 mGy/h up to 440 mGy/h	1.9 %	
		From 0.34 mGy/h less than 27 mGy/h From 2.6 μGy/h less than 0.34 mGy/h	2.6 % 3.8 %	
	Kerma	From 27 mGy up to 770 mGy	2.8 %	
		From 0.34 mGy less than 27 mGy From 0.5 μGy less than 0.34 mGy	3.3 % 4.3 %	
	Kerma Rate	From 27 mGy/h up to 440 mGy/h	2.8 %	
		From 0.34 mGy/h less than 27 mGy/h From 2.6 μGy/h less than 0.34 mGy/h	3.3 % 4.3 %	
Dose Equivalent	From 32 mSv up to 900 mSv	4.9 %		
	From 0.40 mSv less than 32 mSv From 0.5 μSv less than 0.40 mSv	5.2 % 5.9 %		
Dose Equivalent Rate	From 32 mSv/h up to 515 mSv/h	4.9 %		
	From 0.40 mSv/h less than 32 mSv/h From 3.1 μSv/h less than 0.40 mSv/h	5.2 % 5.9 %		
Exposure Measuring Devices	Exposure	From 0.8 mC/kg up to 23 mC/kg	1.7 %	
		From 10 μC/kg less than 0.8 mC/kg	2.5 %	
		From 13 nC/kg less than 10 μC /kg	3.7 %	
	Absotbed Dose	From 27 mGy up to 770 mGy	1.7 %	
From 0.34 mGy less than 27 mGy From 0.5 μGy less than 0.34 mGy		2.5 % 3.7 %		
Kerma	From 27 mGy up to 770 mGy	2.7 %		
	From 0.34 mGy less than 27 mGy From 0.5 μGy less than 0.34 mGy	3.2 % 4.2 %		
Dose Equivalent	From 32 mSv up to 900 mSv	4.8 %		
	From 0.40 mSv less than 32 mSv From 0.5 μSv less than 0.40 mSv	5.1 % 5.8 %		

#All Calibration Procedures are in-house procedures developed by this laboratory.

Laboratory's permanent facility/On-site Calibration: On-site Calibration
Calibration and Measurement Capabilities

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range		Expanded Uncertainty (Level of Confidence Approximately 95 %)
γ-ray Measuring Equipment	γ-ray irradiation equipment, Radiation Source (¹³⁷ Cs, ⁶⁰ Co)	Exposure	From 0.8 mC/kg up to 23 mC/kg	2.2 %
			From 10 μC/kg less than 0.8 mC/kg	2.8 %
			From 65 nC/kg less than 10 μC /kg	4.0 %
		Exposure Rate	From 0.8 mC/(kg·h) up to 13 mC/(kg·h)	2.2 %
			From 10 μC/(kg·h) less than 0.8 mC/(kg·h)	2.8 %
			From 130 nC/(kg·h) less than 10 μC /(kg·h)	4.0 %
		Absotbed Dose	From 27 mGy up to 770 mGy	2.2 %
			From 0.34 mGy less than 27 mGy	2.8 %
From 1 μGy less than 0.34 mGy	4.0 %			
Absotbed Dose Rate	From 27 mGy/h up to 440 mGy/h	2.2 %		
	From 0.34 mGy/h less than 27 mGy/h	2.8 %		
	From 4.4 μGy/h less than 0.34 mGy/h	4.0 %		
Kerma	From 27 mGy up to 770 mGy	3.0 %		
	From 0.34 mGy less than 27 mGy	3.4 %		
	From 1 μGy less than 0.34 mGy	4.4 %		
Kerma Rate	From 27 mGy/h up to 440 mGy/h	3.0 %		
	From 0.34 mGy/h less than 27 mGy/h	3.4 %		
	From 4.4 μGy/h less than 0.34 mGy	4.4 %		
Dose Equivalent	From 32 mSv up to 900 mSv	5.0 %		
	From 0.40 mSv less than 32 mSv	5.3 %		
	From 1 μSv less than 0.40 mSv	6.0 %		
Dose Equivalent Rate	From 32 mSv/h up to 515 mSv/h	5.0 %		
	From 0.40 mSv/h less than 32 mSv/h	5.3 %		
	From 5.3 μSv/h less than 0.40 mSv/h	6.0 %		

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