

Name of Accreditation Program	JCSS Accreditation Program
Accreditation No.	JCSS0060
Date of Initial Accreditation	1995-12-01
Latest Date of Issue	2018-07-26
Name and Address of Accredited Organization	Chiyoda Technol Corporation Oarai Laboratory 3681 Narita-cho, Oarai-machi, Higashi-ibaraki-gun, Ibaraki-ken, 311-1313, Japan JCN 7010001004851
Inquiry Point	Reference Radiation Section Tel: +81-029-266-3113 FAX: +81-029-264-9031
Accreditation Standards	ISO/IEC 17025:2005 (Calibration)
Accreditation Scope	As attached

*JCN : Japan Corporate Number

General Field of Calibration : Radiation, Radioactivity and Neutron

Date of Initial Accreditation of the Field : 1995-12-01

Permanent Laboratory/On-site Calibration : Permanent Laboratory

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range		CMC (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 1.0 μC/kg less than 0.8 mC/kg	2.6 %
			From 13 nC/kg less than 1.0 μC /kg	3.8 %
		Exposure Rate	From 0.8 mC/(kg·h) up to 13 mC/(kg·h)	1.9 %
			From 1.0 μC/(kg·h) less than 0.8 mC/(kg·h)	2.6 %
			From 75 nC/(kg·h) less than 1.0 μC /(kg·h)	3.8 %
		Absorbed Dose	From 27 mGy up to 770 mGy	1.9 %
			From 34 μGy less than 27 mGy	2.6 %
	From 0.5 μGy less than 34 μGy		3.8 %	
	Absorbed Dose Rate	From 27 mGy/h up to 440 mGy/h	1.9 %	
		From 34 μGy/h less than 27 mGy/h	2.6 %	
		From 2.6 μGy/h less than 34 μGy/h	3.8 %	
	Kerma	From 27 mGy up to 770 mGy	2.8 %	
		From 34 μGy less than 27 mGy	3.3 %	
		From 0.5 μGy less than 34 μGy	4.3 %	
	Kerma Rate	From 27 mGy/h up to 440 mGy/h	2.8 %	
From 34 μGy/h less than 27 mGy/h		3.3 %		
From 2.6 μGy/h less than 34 μGy/h		4.3 %		
Dose Equivalent	From 32 mSv up to 900 mSv	4.9 %		
	From 40 μSv less than 32 mSv	5.2 %		
	From 0.5 μSv less than 40 μSv	5.9 %		
Dose Equivalent Rate	From 32 mSv/h up to 515 mSv/h	4.9 %		
	From 40 μSv/h less than 32 mSv/h	5.2 %		
	From 3.1 μSv/h less than 40 μSv /h	5.9 %		
Exposure Measuring Devices	Exposure	From 0.8 mC/kg up to 23 mC/kg	1.7 %	
		From 1.0 μC/kg less than 0.8 mC/kg	2.5 %	
		From 13 nC/kg less than 1.0 μC /kg	3.7 %	
	Absorbed Dose	From 27 mGy up to 770 mGy	1.7 %	
From 34 μGy less than 27 mGy		2.5 %		
From 0.5 μGy less than 34 μGy		3.7 %		
Kerma	From 27 mGy up to 770 mGy	2.7 %		
	From 34 μGy less than 27 mGy	3.2 %		
	From 0.5 μGy less than 34 μGy	4.2 %		
Dose Equivalent	From 32 mSv up to 900 mSv	4.8 %		
	From 40 μSv less than 32 mSv	5.1 %		
	From 0.5 μSv less than 40 μSv	5.8 %		

Permanent Laboratory/On-site Calibration : On-site Calibration

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range		CMC (Level of Confidence Approximately 95 %)
γ-ray Measuring Equipment	γ-ray irradiation equipment, Radiation Source (137Cs,60Co)	Exposure	From 0.8 mC/kg up to 23 mC/kg	2.2 %
			From 1.0 μC/kg less than 0.8 mC/kg	2.8 %
			From 65 nC/kg less than 1.0 μC /kg	4.0 %
		Exposure Rate	From 0.8 mC/(kg·h) up to 13 mC/(kg·h)	2.2 %
			From 1.0 μC/(kg·h) less than 0.8 mC/(kg·h)	2.8 %
			From 130 nC/(kg·h) less than 1.0 μC /(kg·h)	4.0 %
		Absotbed Dose	From 27 mGy up to 770 mGy	2.2 %
			From 34 μGy less than 27 mGy	2.8 %
			From 1 μGy less than 34 μGy	4.0 %
Absotbed Dose Rate	From 27 mGy/h up to 440 mGy/h	2.2 %		
	From 34 μGy/h less than 27 mGy/h	2.8 %		
	From 4.4 μGy/h less than 34 μGy/h	4.0 %		
Kerma	From 27 mGy up to 770 mGy	3.0 %		
	From 34 μGy less than 27 mGy	3.4 %		
	From 1 μGy less than 34 μGy	4.4 %		
Kerma Rate	From 27 mGy/h up to 440 mGy/h	3.0 %		
	From 34 μGy/h less than 27 mGy/h	3.4 %		
	From 4.4 μGy/h less than 34 μGy/h	4.4 %		
Dose Equivalent	From 32 mSv up to 900 mSv	5.0 %		
	From 40 μSv less than 32 mSv	5.3 %		
	From 1 μSv less than 40 μSv	6.0 %		
Dose Equivalent Rate	From 32 mSv/h up to 515 mSv/h	5.0 %		
	From 40 μSv/h less than 32 mSv/h	5.3 %		
	From 5.3 μSv/h less than 40 μSv /h	6.0 %		

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