

Department Testing Laboratory ISO/IEC 17025 Accreditation No. 152 Appendix to certificate No. 152-03

Calibration Laboratory ISO/IEC 17025

Name and Address:

Organization Name NRC SOREQ - Radiation Safety Division

 Address
 Yavne, 81800, Israel

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 +972-8-943-4363

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 E-Mail
 radsafe@soreq.gov.il

This appendix includes 6 parts, one for each accredited organization in the list below:

1.	Personal Dosimetry Laboratory-badges	<b>Phone No.</b> +972-8-943-4511
2.	Radioactivity in water Laboratory	<b>Phone No.</b> +972-8-943-4554
3.	Radiotoxilogic Laboratory	<b>Phone No.</b> +972-8-943-4242
4.	Gamma Spectrometry Laboratory	<b>Phone No.</b> +972-8-943-4550
5.	Laser and Optical Radiation Measurments Laboratory	<b>Phone No.</b> +972-8-943-4240
6.	Non-ionizing EM radiation meters calibration laboratory	<b>Phone No.</b> +972-8-943-4550

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## **Schedule of Accreditation**

Name and Address:

Organization name NRC SOREQ - Radiation Safety Division Laboratory name Personal Dosimetry Laboratory-badges

 Address
 Yavne, 81800, Israel

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 +972-8-943-4511

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Item	Scope Type	Site	Materials / Products Tested	Types of Test / Prop	erties Measured	Standard / Method	Sampling Standard / Method	Opinion and interpretation	Remarks
Gro	up of p	products	s: Ionizing Radiation Do	simeters				(ייננת	משפחת מוצרים: <i>דוזימטרים לקרינה</i> מ
Heal	Health – Personal Dosimetry, Measurement of Ionizing Radiation							<b>קרינה</b>	בריאות – <i>דוזימטריה אישית,</i> מדידת מנות ס
1	A	P	Employee Dosimeter	Personnel Radiation dose measurements	מדידת חשיפת אדם לקרינה מייננת				Based On: IAEA Safety Guide RS-G-1.3 and Manufacturer's Instruction Harshaw 8800-pc

Site: P or T or M, P-Permanent, T-Temporary, M-Mobile

Type of Scopes: A- Fixed, C- flexible

Flexible scope in analytical tests: Type of matrix, analytes, experimental systems and/or analytical characteristics may be subject to changes, in accordance with the laboratory's approved and documented procedures. For details, please refer to the list of Accredited Tests, available from the laboratory upon request.

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## Schedule of Accreditation

Organization name NRC SOREQ - Radiation Safety Division

Laboratory name Radioactivity in water Laboratory

 Address
 Yavne, 81800, Israel

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 radsafe@soreq.gov.il

Item	Scope Type		Materials / Products Tested	Types of Test / Properties Measured		Standard / Method	Sampling Standard / Method	Opinion and interpretation	Remarks
Grou	up of p	product	s: Soil, Aggregates and	Water				ים	משפחת מוצרים: <i>קרקע, אגרגאטים ומי</i>
Healt	th - Ch	emical tes	ting, Counting and Spectromet	ry, Radioactivity				<i>יה,</i> רדיואקטיביות	בריאות - בדיקות כימיות,מנייה וספקטרומטריי
2	A	P	Drinking water	Gross Alpha and Gross Beta Radioactivity by evaporation	מדידת ריכוז פולטי אלפא וביתא באידוי				
3	A	P	Drinking water	Gross Alpha Radioactivity by coprecipitation	מדידת ריכוז פולטי אלפא בשיקוע	SM7110C			
4	A	P	Drinking water	Gamma emitting Isotopes	מדידת רדיואיזוטופים פולטי גאמא	SM7120B			
5	A	P	Drinking water	Measurement of Radium Isotopes	מדידת רדיואיזוטופים של ראדיום	In house procedure			Based On: Moore W.S., Radium Isotope Measurements using Germanium Detectors, Nuclear Instruments and Methods in Physics Research 223 (1984) 407-411, North-Holland, Amsterdam

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Type of Scopes: A- Fixed, C- flexible

Flexible scope in analytical tests: Type of matrix, analytes, experimental systems and/or analytical characteristics may be subject to changes, in accordance with the laboratory's approved and documented procedures. For details, please refer to the list of Accredited Tests, available from the laboratory upon request.

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Item	Scope Type	Site	Materials / Products Tested	Types of Test / Properties Measured		Standard / Method	Sampling Standard / Method	Opinion and interpretation	Remarks
Gro	Group of products: Soil, Aggregates and Water						ים	משפחת מוצרים: קרקע, אגרגאטים ומ	
Health - Chemical testing, Counting and Spectrometry, Radioactivity						יה, רדיואקטיביות	בריאות - בדיקות כימיות,מנייה וספקטרומטרי		
6	A	P	Drinking water	Measurement of Uranium Isotopes	מדידת אורניום	In house procedure			Based On: Venso E, et al; Measurements of Isotopic Uranium in Texas Drinking water supplies by Liquid Scintillation with alpha/beta discrimination, Liquid Scintillation Spectrometry 1992, Radiocarbon 1993, 425-430
7	A	P	Soil	Measurements of $\gamma$ emitters	γ מניית רדיונוקלידים פולטי	In house procedure			42.14 Based on: AN SI
8	A	P	Sludges	Measurements of $\gamma$ emitters	γ מניית רדיונוקלידים פולטי	In house procedure			42.14 Based on: AN SI

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Name and Address:

Organization name NRC SOREQ - Radiation Safety Division

radsafe@soreq.gov.il

Laboratory nameRadiotoxilogic LaboratoryAddressYavne, 81800, IsraelPhone+972-8-943-4242Fax+972-8-943-4696

Item	Scope Type	Site	Materials / Products Tested	Types of Test / Prop	erties Measured	Standard / Method	Sampling	Opinion and interpretation	Remarks	
Group of products: Body fluids							Standard / Method	шегргешин	משפחת מוצרים: <i>נוזלי גוף</i>	
Heal	Health - Chemical testing, Counting and Spectrometry, Radiotoxicology				בריאות <i>- בדיקות כימיות,מנייה וספקטרומטרייה,</i> רדיוטוקסיקולוגיה					
9	A	P	Urine	Measurements of $\gamma$ emitters	γ מניית רדיונוקלידים פולטי	In house procedure				
10	A	P	Urine	Measurements of $\beta$ emitters	β מניית רדיונוקלידים פולטי	In house procedure				

Site: P or T or M, P-Permanent, T-Temporary, M-Mobile

Type of Scopes: A- Fixed, C- flexible

Flexible scope in analytical tests: Type of matrix, analytes, experimental systems and/or analytical characteristics may be subject to changes, in accordance with the laboratory's approved and documented procedures. For details, please refer to the list of Accredited Tests, available from the laboratory upon request.

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Name and Address:

Organization name NRC SOREQ - Radiation Safety Division

Laboratory name Gamma Spectromatry Laboratory

 Address
 Yavne, 81800, Israel

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 +972-8-943-4550

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 +972-8-943-4696

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 radsafe@soreq.gov.il

Item	Scope Type	Site	Materials / Products Tested	Types of Test / Properties Measured		Standard / Method	Sampling Standard / Method	Opinion and interpretation	Remarks		
Gro	Group of products: Construction materials					משפחת מוצרים: <i>חומרים לבניה</i>					
Heal	Health - Chemical testing, Counting and Spectrometry					בריאות - בדיקות כימיות,מנייה וספקטרומטרייה					
11	A	P	Construction materials, Industrial Waste	Measurements of $\gamma$ emitters	γ מניית רדיונוקלידים פולטי	In house procedure			Sample preparation and reporting Based on: SI 5098 February 2007 Testing-Based on: ANSI 42.14 - 1999		
Gro	up of p	product	s: Air		משפחת מוצרים: <i>אוויר</i>						
Heal	Health - Chemical testing, Counting and Spectrometry			בריאות - בדיקות כימיות,מנייה וספקטרומטרייה							
12	A	P	Air	Measurements of $\gamma$ emitters	γ מניית רדיונוקלידים פולטי	In house procedure			Based on ANSI 42.14-1999		

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Name and Address:

Organization name

NRC SOREQ - Radiation Safety Division

Laboratory name

Laser and Optical Radiation Measurments

Laboratory

Address Yavne, 81800, Israel

**Phone** 08-9434240 **Fax** 08-9434196

E-Mail radsafe@soreq.gov.il

Item	Scope Type		Materials / Products Tested	Types of Test / Properties Measured		Standard / Method	Sampling Standard / Method	Opinion and interpretation	Remarks
Gro	Group of products: Laser and Led radiation emitting							לטי קרינה	משפחת מוצרים: לייזר ומקורות אור פוי
Safe	ty class	ification	tests						בדיקות לסיווג בטיחות
13	A	P	Light emitting devices	Power 300 µW to 3 W	הספק 300 µW to 3 W	In house procedure			Classification- IEC 60825-1 (9) AEL. Wavelength range, $\lambda$ : 193 nm-10600 nm
14	A	P	Light emitting devices	Energy 200 μJ to 2 J	אנרגיה 200 µJ to 2 J	In house procedure			Classification- IEC 60825-1 (9) AEL. Wavelength range, $\lambda$ : 193 nm-10600 nm
15	A	P	Light emitting devices	Frequency Up to 60 MHz	תדר עד 60 MHz עד	In house procedure			Classification- IEC 60825-1 (9) AEL. Wavelength range, λ: 193 nm-1100 nm
16	A	P	Light emitting devices	Pulse Duration 30 nsec to 0.25 sec	משך פולס 30 nsec to 0.25 sec	In house procedure			Classification- IEC 60825-1 (9) AEL. Wavelength range, λ: 193 nm-1100 nm
17	A	P	Light emitting devices	Wavelength 253 nm to 1064 nm	אורך גל 253 nm to 1064 nm	I F			Classification- IEC 60825-1 (9) AEL.

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The certificate attached is an integral part of the schedule and is numbered identically המעודה המצורפת לנספח זה מהווה חלק בלתי נפרד ממנו ומספרה זהה למספר הנספח המשרח ומספרה המצורפת לנספח ומספרה המצורפת לנספח והמנור ממנו ומספרה ומספרה המצורפת למספר הנספר המכור המצור ממנו ומספרה המכור המצור ממנו ומספרה המכור המ

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## **Schedule of Accreditation**

Organization name

NRC SOREQ - Radiation Safety Division

Laboratory name

Non-ionizing EM radiation meters calibration

**Address** laboratory

Yavne, 81800, Israel

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 +972-8-943-4550

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 +972-8-943-4696

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 radsafe@soreq.gov.il

Item	Scope Type	Site	Measurand, Instrument, Gauge	Range	CMC Expressed as an Expanded Uncertainty (95%)	Reference Document	Remarks
Cali	bratio	n – <i>Non</i>	-ionizing radiation EM	I fields		נטיים	כיול- קרינה לא מייננת, שדות אלקטרומגו
18	A	P	Magnetic field meters  Magnetic flux density	50 Hz [0.05 μT to 300 μT]	3 %	IEEE 644	
19	A	P	Electric field meters	[1 MHz to 18 GHz]	1.75 dB	IEEE 1309	1 MHz to 1 GHz, uncertainty 1.75 dB
20	A		Electric field strength	[6 V/m to 200 V/m]	1.52 dB		1 GHz to 18 GHz, uncertainty 1.52 dB
21	A	P		[0.1 MHz to 3 GHz]	1.75 dB	IEEE 1309	0.1 MHz to 1 GHz, uncertainty 1.75 dB
22	A			[2 V/m to 200 V/m]	1.52 dB		1 GHz to 3 GHz, uncertainty 1.52 dB
23	A	P	RF Power density meters	[1 MHz to 18 GHz]	1.75 dB	IEEE 1309	1 MHz to 1 GHz, uncertainty 1.75 dB
24	A		RF Power density	$[0.01 \text{ mW/cm}^2 \text{ to } 10 \text{ mW/cm}^2]$	1.52 dB		1 GHz to 18 GHz, uncertainty 1.52 dB צפיפות הספק מחושבת מהשדה החשמלי
25	A	P		[0.1 MHz to 3 GHz]	1.75 dB	IEEE 1309	0.1 MHz to 1 GHz, uncertainty 1.75 Db
				$[0.001 \text{ mW/cm}^2 \text{ to } 10 \text{ mW/cm}^2]$	1.52 dB		1 GHz to 3 GHz, uncertainty 1.52 dB צפיפות הספק מחושבת מהשדה החשמלי

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