

## MEMORANDUM OF AGREEMENT

KNOW ALL PERSONS BY THESE PRESENTS:

This **Memorandum of Agreement (MOA)** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_ by and between:

**ADVANCED SCIENCE AND TECHNOLOGY INSTITUTE**, an attached agency of the DEPARTMENT OF SCIENCE AND TECHNOLOGY (DOST), with office address at ASTI Building, C.P. Garcia Avenue, UP Diliman, Quezon City, herein represented by its **Director, FRANZ A. DE LEON, Ph.D.**, hereinafter referred to as "**DOST-ASTI**";

- and -

**METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER**, an attached agency of the DOST, with office address at General Santos Avenue, Bicutan, Taguig City, herein represented by its **Executive Director, ROBERT O. DIZON**, and hereinafter referred to as "**DOST-MIRDC**".

Both may collectively be referred to as "**PARTIES**".

### WITNESSETH:

**WHEREAS**, the **DOST-ASTI** needs calibration services for nineteen (19) PSL test equipment for the **Electronics Product Development Center (EPDC)**;

**WHEREAS**, the **DOST-MIRDC** is mandated to provide both government and private sectors in the metals, engineering and allied industries with professional management and technical expertise on the training of engineers and technicians, information exchange, quality control and testing, research and development, technology transfer, and business economics advisory services;

**WHEREAS**, **DOST-ASTI Bids and Awards Committee Resolution No. 23-10-185, S.2023** approved the Procurement of Calibration of Nineteen (19) PSL Test Equipment for EPDC through **Negotiated Procurement (Agency-to-Agency)** between **DOST-ASTI** and **DOST-MIRDC**;

**NOW, THEREFORE**, for and in consideration of the foregoing premises, the parties hereby agree and bind themselves as follows:

### I. GENERAL PROVISIONS

- A. This Agreement between **DOST-ASTI** and **DOST-MIRDC** shall be for Calibration Services as described in **Annex "A" (EPDC List of Equipment for Calibration)** following the specifications provided by the **DOST-ASTI**.

B. The contract price is **Sixty-Seven Thousand Four Hundred Forty-Five Pesos Only (P67,445.00)**.

## **II. DUTIES AND RESPONSIBILITIES OF THE PARTIES**

A. The **DOST-MIRDC** agrees to provide the following calibration services for the test equipment:

1. Verification of the equipment's accuracy;
2. Adjustment of the equipment's settings, if necessary;
3. Calibration of the equipment following the manufacturer's specifications; and
4. Issuance of a calibration certificate and calibration label.

B. The **DOST-ASTI** agrees to provide **DOST-MIRDC** with the following:

1. Access to the equipment and all necessary information to perform the calibration services;
2. A safe working environment for the **DOST-MIRDC's** personnel (for onsite calibration);
3. A schedule of availability for the equipment; and
4. Any specific calibration requirements, including the use of special procedures or equipment (if applicable).

## **III. TERM AND TERMINATION**

This Agreement shall commence on the date first written above and shall continue until the calibration services have been completed. Either party may terminate this Agreement at any time upon written notice to the other party.

Completion of the in-house calibration of each piece of equipment shall be as stated in the TSR, and completion of the in-plant calibration shall be on the agreed-upon schedule.

## **IV. FEES AND PAYMENT**

The **DOST-MIRDC** shall be paid the fees outlined in **Annex "B"** for the calibration services provided under this Agreement. The **DOST-ASTI** shall pay the fees within thirty (30) days upon receipt of billing or invoice from the **DOST-MIRDC**.

## **V. WARRANTY**

The **DOST-MIRDC** warrants that the calibration services performed under this Agreement shall conform to the **DOST-ASTI**. The **DOST-MIRDC's** sole obligation and the **DOST-ASTI's** sole remedy for any breach of this warranty

shall be for the **DOST-MIRDC** to re-perform the calibration services at no additional charge to **DOST-ASTI**.

**DOST-ASTI** warrants that it shall also adhere to the Terms and Conditions and Relevant MIRDC Policies stated at the back of the Quotation (Nos. 2023Q-1-0209-INS; 2023Q-1-0210-INS) and the Technical Service Request to be issued once the equipment has been submitted for calibration. The Quotations and TSRs shall also form an integral part of this MOA.

## **VI. AMENDMENTS**

No amendment or modification of any of the terms and conditions of this Agreement shall be valid unless evidenced by a written agreement executed by the respective authorized representatives of both parties.

## **VII. TERMINATION**

The termination of this Agreement shall follow the prescribed procedure under Guidelines on Termination of Contracts, Annex "I" of the 2016 Revised IRR of RA 9184.

**IN WITNESS WHEREOF**, the parties have executed this Agreement as of the date first written above.

**METALS INDUSTRY RESEARCH  
AND DEVELOPMENT CENTER**  
By:

**ROBERT O. DIZON**  
Executive Director

**ADVANCED SCIENCE AND  
TECHNOLOGY INSTITUTE**  
By:

  
**FRANZ A. DE LEON, Ph.D.**  
Director

**SIGNED IN THE PRESENCE OF**

  
**ALVIN E. RETAMAR**  
Chief Science Research Specialist

CERTIFIED FUNDS AVAILABLE

  
**GAY CONCEPCION S. BUGAGAO**

Accountant III

011011012023-11-0009118 PHTP 67,495.00

**ACKNOWLEDGMENT**

REPUBLIC OF THE PHILIPPINES)  
CITY OF TAGUIG ) S.S.

BEFORE ME, this \_\_\_\_ day of \_\_\_\_ 2023 in \_\_\_\_\_  
personally appeared:

NAME	GOV'T. ISSUED ID	ISSUANCE DETAILS
Franz A. De Leon, Ph.D.		
Robert O. Dizon		

both known to me to be the same persons who executed the foregoing agreement, duly signed by their witnesses, and they acknowledged to me that the same is their own free and voluntary act and deed as well as the agency they represent.

**WITNESS MY HAND AND NOTARIAL SEAL** on the date and place herein above stated.

Doc. No. \_\_\_\_\_  
Page No. \_\_\_\_\_  
Book No. \_\_\_\_\_  
Series of 2023.

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**ANNEX A**  
**EPDC List of Equipment for Calibration**

Equipment to be calibrated:

1. Calibration of HIOKI Clamp on Sensor
  - a. 5A AC Voltage Output Sensor (2 units)
  - b. 500A AC Voltage Output Sensor (4 units)
2. Calibration of HIOKI 3237 Digital HiTester
3. Calibration of HIOKI 3174 AC Automatic Insulation/Withstanding HiTester
4. Calibration of KIKUSUI PCZ1000A AC Electronic Load
5. Calibration of ED&D PFI-1000N 1000N Digital Force Gauge
6. Calibration of T&D TR-73U Thermo Recorder
7. Calibration of PREEN AFC-11005G AC Power Source
8. Calibration of TEKTRONIX P6015A High Voltage Probe
9. Calibration of HIOKI CM3286-01 AC Clamp Power Meter
10. Calibration of HIOKI ST5541 Leakage Current HiTester
11. Calibration of KIKUSUI TOS5101 Withstanding Voltage Tester
12. Calibration of TERCHYMHK-408AK Programmable Temperature and Humidity Chamber
13. Calibration of TERCHY MCK-290 Programmable Oven
14. Calibration of HIOKI PW3335 Power Meter
15. Calibration of MITUTOYO MDC-1" PX Digital Micrometer
16. Calibration of MITUTOYO CD-6" ASX Digital Caliper
17. Calibration of KEITHLEY 2380-120-60 DC Electronic Load
18. Calibration of HIOKI LR8402-20 Memory HiLogger
19. Calibration of MITUTOYO Pro 360 Digital Angle Meter

**ANNEX B**  
**List of Equipment Calibration Fees**

**IN-HOUSE CALIBRATION, AT MIRDC LABORATORIES (AS PER MIRDC QUOTATION NO. 2023Q-1-0133-INS)**

Item No.	Equipment Description	Calibration Range/Testpoints	Qty.	Unit	Amount (Php)
1.	Hioki 9694/9661 Clamp On Sensor	5A,AC Voltage output sensor (2 units)	1	Lot	4,800.00
		500A,AC Voltage output sensor (4 units)			
2.	Hioki 3237 Digital HiTest (Multimeter), 5 1/2 digits	as per range	1	Lot	7,900.00
3.	Hioki 3174 AC Automatic Insulation / Withstanding HiTester	partial calibration at Puncture Tester & Ammeter functions only	1	Lot	1,700.00
4.	Kikusui PCZ 1000A AC Electronic Load	at input power, voltage and current ranges only	1	Lot	3,700
5.	ED&D PFI-1000N Digital Force Gauge, 1000 N (101 kg)	as per range	1	Lot	1,100.00
6.	T and D TR-73U Temp./ R.H./ Barometric Pressure Data Logger	Partial Calibration, temp. and humidity function only, at one (1) point calibration, room conditions only.	1	Lot	1,550.00
7.	Preen AFC-11005G AC Power Source, Single Phase	as per range	1	Lot	3,400.00
8.	Tektronix P6015A High Voltage Probe	cal up to 10 kV	1	Lot	7,000.00
9.	Hioki CM3286-01 AC Clamp Power Meter	Partial Calibration, at AC Current and AC Voltage Measurement range only	1	Lot	1,500.00
10.	Hioki ST5541 Leak Current HiTester	as per range	1	Lot	2,350.00
11.	Kikusui TOS-5101 AC/DC Insulation Withstanding HiTester	as per range	1	Lot	2,700.00
12.	Hioki PW-3355 Power Meter	calibration at Voltage, Current & AC Power ranges	1	Lot	12,200.00
13.	Digital Micrometer, Range: 0 - 25 mm	as per range	1	Lot	700.00
14.	Digital Caliper, Range: 0 - 150 mm	as per range	1	Lot	850.00
15.	Keithley 2380-120-60 DC Electronic Load	partial calibration at DC Voltmeter, DC Ammeter, and DC Wattmeter functions only	1	Lot	3,545.00
16.	Hioki LR8402-20 Memory Hi-Logger	partial calibration at thermocouple type k range only	1	Lot	2,900.00
17.	Mitutoyo Digital Angle Meter	as per range	1	Lot	1,350.00

Sub-  
total **59,245.00**

**IN-PLANT CALIBRATION, AT EPDC PLANTSITE (AS PER MIRDC QUOTATION NO. 2023Q-1-0021-INS)**

Item No.	Equipment Description	Calibration Range/Testpoints	Qty.	Unit	Amount (Php)
1.	Terchy MHK-408 Programmable Temperature and Humidity Chamber	Partial Calibration, at temperature range only, at - 30, 10, 25 and 150 °C temperature settings	1	Lot	3,600.00
2.	Terchy MCK-290 Programmable Oven	cal. at 50 and 300 °C temperature settings	1	Lot	2,600.00

3.	In-plant Calibration Charge	Php 2,000/ day x one (1) day	1	Lot	2,000.00
				Sub- total	<b>8,200.00</b>
				<b>Total</b>	<b>67,445.00</b>