

# President's Report to GA

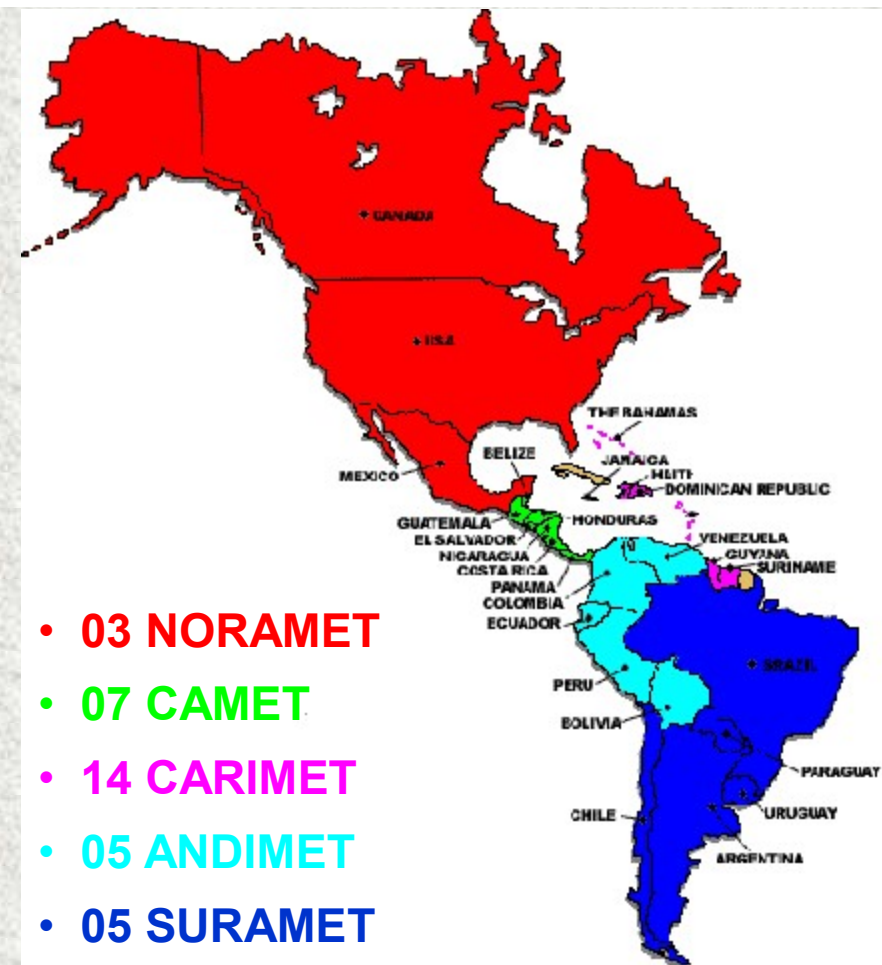
Mgter. Javier Arias-Real  
jarias@cenamep.org.pa  
SIM President



November 10, 2023

# SIM Members

	Region	Country	NMI Active member	DI Associate member
1	NORAMET	Canada	NRC	TCC
2		Mexico	CENAM	INEC, ININ
3		USA	NIST	NUWC-USRD
4	CARIMET	Antigua and Barbuda	ABBS	
5		Bahamas	BBSQ	
6		Barbados	BNSI	
7		Dominica	DBS	
8		Dominican Republic	INDOCAL	
9		Grenada	GDBS	
10		Guyana	GNBS	
11		Haiti	BHN	
12		Jamaica	BSI	
13		St. Lucia	SLBS	
14		St. Kitts and Nevis	SKNBS	
15		Suriname		
16		St. Vincent and Grenadines	SVGBS	
17		Trinidad and Tobago	TTBS	
18	CAMET	Belize	BBS	
19		Costa Rica	LCM	LAMETRO-ICE, ICE LMVA, RECOPE, LanammeUCR
20		El Salvador	CIM	
21		Guatemala	CENAME	
22		Honduras	CEHM	
23		Nicaragua	LANAMET	
24		Panamá	CENAMEP	
25	ANDIMET	Bolivia	IBMETRO	
26		Colombia	INM	
27		Ecuador	INEN	
28		Peru	INACAL	
29		Venezuela	SENCAMER	
30	SURAMET	Argentina	INTI	CNEA
31		Brazil	INMETRO	LNMRI/IRD, ON
32		Chile	INN	
33		Paraguay	INTN	
34		Uruguay	LATU	UTE

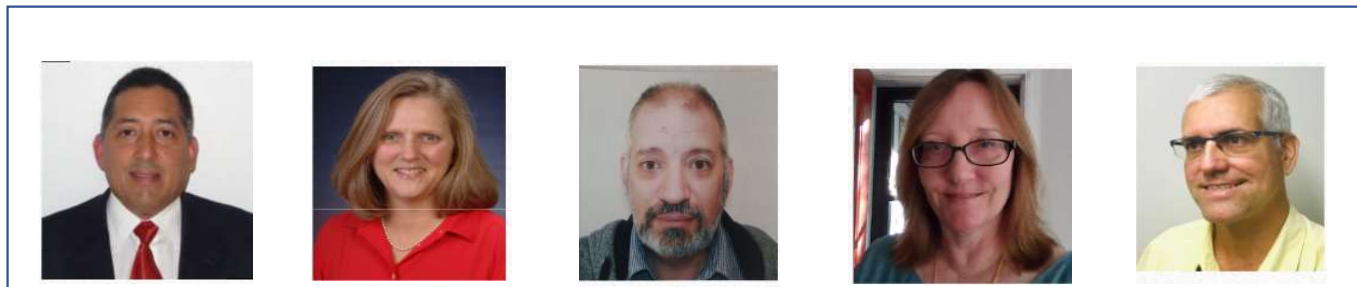


- 03 NORAMET
- 07 CAMET
- 14 CARIMET
- 05 ANDIMET
- 05 SURAMET

**Currently SIM has 50 members:**

- 34 active members, (Cuba & Suriname Pending members)
- 13 associate members,
- 03 affiliate members (COPANT, IAAC, CARICOM)

# SIM GENERAL STEERING COUNCIL



<b>President</b> Javier Arias CENAMEP AIP Panama	<b>Vice President</b> Claire Saundry NIST USA	<b>TC Chair</b> Lucas Di Lillo INTI Argentina	<b>QSTF Chair</b> Sally Bruce NIST USA	<b>PDC</b> Rodrigo Costa-Felix INMETRO Brazil
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<b>ANDIMET</b> José Dajes INACAL Perú	<b>CAMET</b> Fernando Andrés LCM Costa Rica	<b>CARIMET</b> Erica Caruth TTBS Trinidad & Tobago	<b>NORAMET</b> James Kushmerik I NIST - USA	<b>SURAMET</b> Gregory Kyriazys INMETRO Brazil
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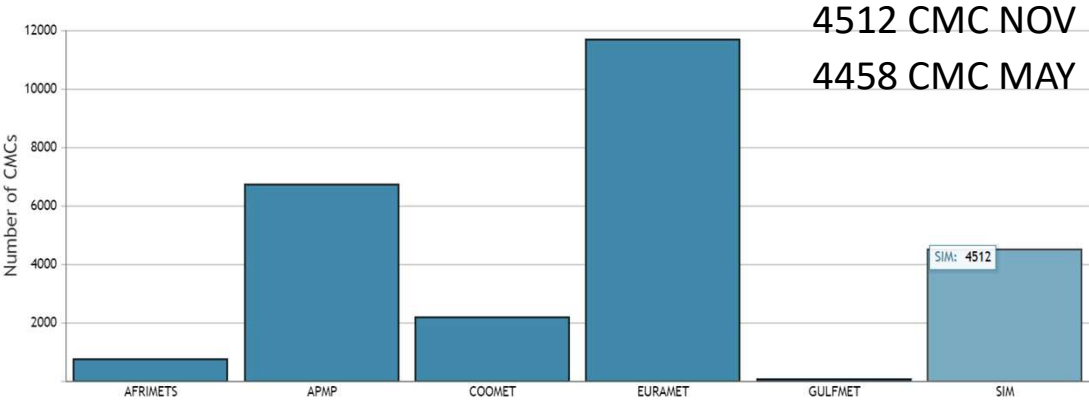
**TC:**  
14 Metrology Working Groups

**QSTF:**  
16-Member Quality System Task Force

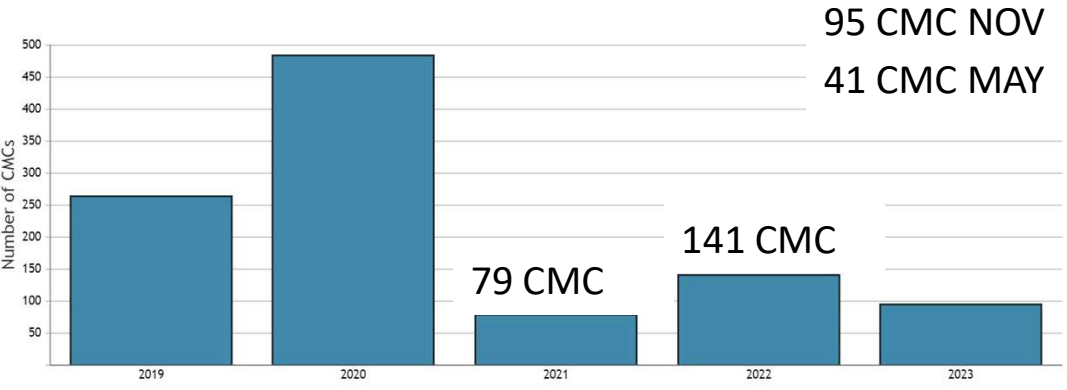
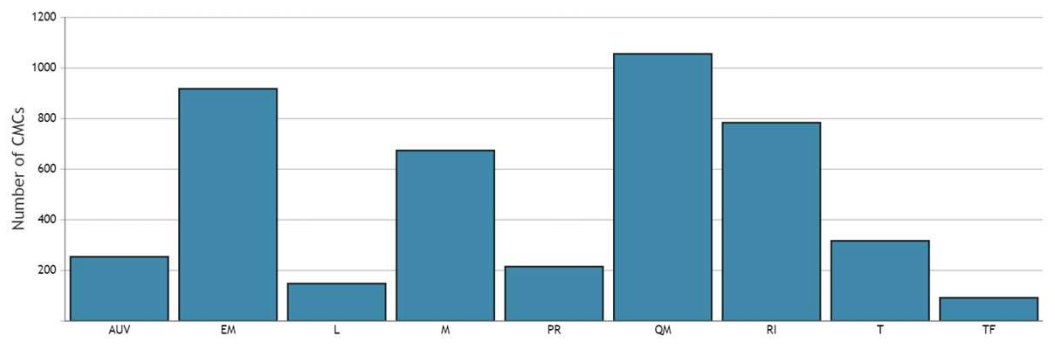
**PDC:**  
Regional Projects

# QSTF: Quality System Task Force

- Chair: Sally Bruce (NIST)
- Deputy Chair: Isabelle Amen(NRC)



Number of CMCs by metrology area



SIM submitted **225 CMCs** in 2022

Peer Reviews continue **on site, virtual or mixed**





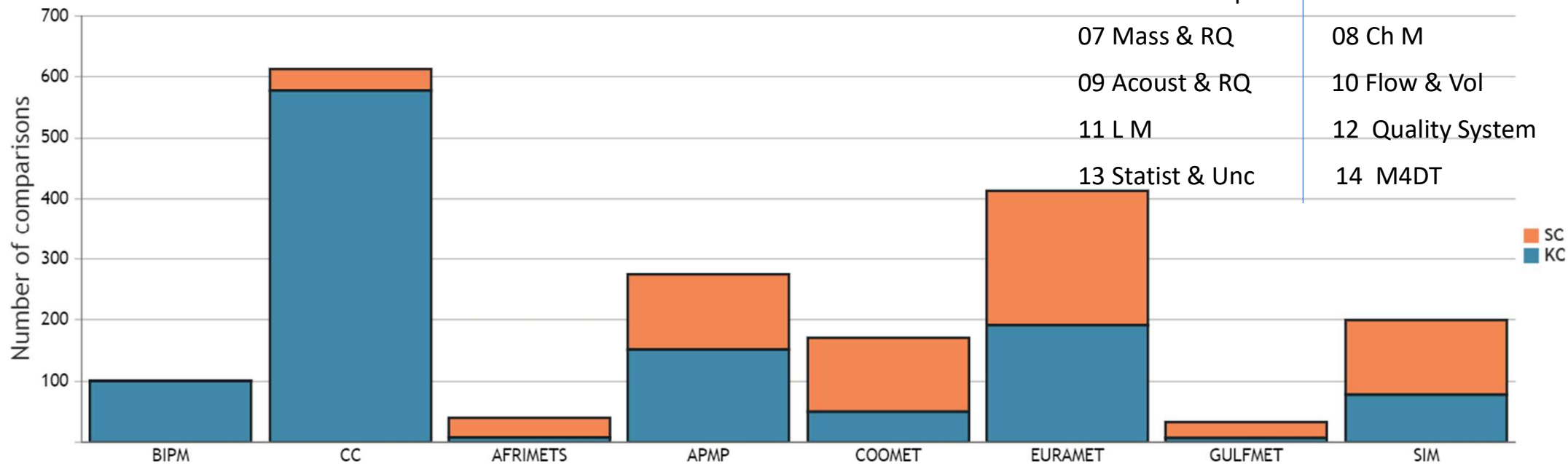
# SIM Technical Committees (Metrology Working Groups)



- TC Chair: Lucas Di Lillo (INTI)
- Deputy Chair: Marina Gertsvolf (NRC)



- |                  |                      |
|------------------|----------------------|
| 01 Elec & Magn   | 02 Phot & Radiometry |
| 03 Themp & Hum   | 04 Length            |
| 05 Time & Freq   | 06 Ion. Rad          |
| 07 Mass & RQ     | 08 Ch M              |
| 09 Acoust & RQ   | 10 Flow & Vol        |
| 11 L M           | 12 Quality System    |
| 13 Statist & Unc | 14 M4DT              |





## Inter-American Development Bank (IADB)

- Strengthening NMIs in support of the Digital Economy to support health services
  - Research Projects
  - Internships
  - Capacity Building & Knowledge Transfer
  - Awareness events

## NIST / OAS

- Capacity Building and Research Exchanges
- Grant to support SIM Capacity Building related to QI
  - Equipment and materials
  - Meeting attendance
  - MWG Events (MWG3- ITS)
  - TC Meeting

## NCSLI

- Early Career Metrologist
- Tech Exchange

## German Development Fund/PTB

- Supporting the QI Council of the Americas (QICA)
- Quality Infrastructure for Circular Economy (QI4CE)
- Metrology for Digital Transformation (M4DT)

# SIM PROJECTS





# Strategic Plan

2022 - 2032

## SIM Strategic Plan

This plan aligns with SIM vision, mission and values and presents to SIM leaders and members a clear view of our goals and objectives. It is specific and focussed and assigns relevant tasks to appropriate committees to ensure efficiency and progress, and to guarantee SIM viability, sustainability and relevance throughout the upcoming years

### Vision

To be an inclusive, innovative, and internationally leading Regional Metrology Organization-RMO

### Mission

To support the development of the measurement capabilities and quality infrastructure in America; to foster science and innovation; and to enable Members' international recognition to underpin competitiveness, trade, consumer safety and sustainability

### Values

Teamwork, Equity, Aspiration, Motivation (TEAM)

Science, Innovation, Mastery (SIM) = TEAM SIM

# SIM STRATEGIC PLAN

Strategic Goals & Objectives	
<b>GOAL I: To advance SIM Members metrological capabilities</b>	<b>Improve the scientific &amp; technical capabilities of SIM NMIs...</b>
<b>OBJECTIVE I.1: To have a 5-year capacity building plan approved &amp; funded. The plan should be evaluated every year &amp; updated every two (2) years</b>	<b>Activities I.1.1 - I.1.5</b>
<b>OBJECTIVE I.2: To identify the upper &amp; lower key technical areas among SIM NMIs to help prepare the 5y plan &amp; level up knowledge within subregions</b>	<b>Activities I.2.1 - I.2.4</b>
<b>OBJECTIVE I.3 To support the implementation of an organized M4DT plan for the the next 5 years (Based on OBJECTIVE I.1)</b>	<b>Activities I.3.1 - I.3.3</b>
<b>GOAL II: To enhance SIM international standing as an RMO and as a pillar of the regional QI</b>	<b>Establish SIM as a worldwide leader in metrology at the international fora...</b>
<b>OBJECTIVE II.1: To Promote SIM Member’s participation &amp; leadership within the SIM framework &amp; the international arena (including the CIPM-MRA)</b>	<b>Activities II.1.1 - II.1.4</b>
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<b>OBJECTIVE II.3: To enhance SIM Sustainability &amp; growth</b>	<b>Activities II.3.1 - II.3.5</b>
<b>GOAL III: To address the measurement challenges of the future</b>	<b>Identify the scientific &amp; technical measurement needs that NMIs might face in the near by future...</b>
<b>OBJECTIVE III.1: Identify in a continuos way the challenges of the future and the needs to face them</b>	<b>Activities III.1.1 - III.1.3</b>
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# NIST GRANT

**Trough this Project we fund Technical activities prioritized by our Technical Committee.**

- Acquisition of equipment and materials for comparisons in MWG 6, MWG 8 and MWG 9.
- Attendance of 3 SIM members to APMP organized event related to water in Malaysia in March 2023
- Meeting of MWG 3 in April 2023 together with ITS 10 Symposium in Los Angeles USA
- TC meeting during mid term SIM week in Bogota (24-25 May 2023)



The Early Career Metrologist Award (for metrologists under 5 years) selects the best Papers of young metrologists among the 5 SIM Sub Regions & takes them to present their projects at the NCSLI annual Conference.



# IDB SIM Project “Metrology for digital transformation to support health services in LAC”

## **NEW DT SERVICES DEVELOPED BY NMIs (CABUREK methodology):**

Areas: DCC, automation and remote calibrations and digitalization of NMI’s services.

Last presentational meeting: Perú October 21-25, 2022

The 4th virtual Workshop for the M4DT CABUREK project was virtually held the week of April 17, 2023.

The last meeting will be face to face on the week of the 20<sup>th</sup> November 2023.

## **RESEARCH PROJECTS:**

4 research projects with 3 or more NMI participants are being funded:

- Development of a low-cost THB.
- Optical 3D measuring systems - Dimensional traceability for industrial and medical applications
- Metrological evaluation of lung ultrasound using virtual vector machine for diagnosis of acute respiratory distress syndrome (ME-LUS-VVM-DARDS)” project.
- Open platform for time and frequency measurements” is in the phase of buying the equipment for the project.

## **AWARENESS EVENTS IN DT:**

Awareness events are planned this year in 3 different SIM subregions:

- ANDIMET: INM Colombia : 23rd May 2023
- CAMET: CIM – El Salvador : 18 August 2023
- SURAMET: INTN – Paraguay: November 2023 (together with SIM GA)





# Develop SIM Members Metrological Competence

Bilateral MOU  
Benchmarking



Work at NCSLI  
TC Meetings



SIM – BIPM e-learning MOU



CAMET S/R Meeting



MWG Technical Meetings





# Activities of Technical Groups

## MWG 5: Time and Frequency:

- Development of travelling GNSS calibration system for UTC(k) traceability and the development of calibration protocol for SIM

## MWG 6: Ionizing Radiation:

- Development of travelling reference calibration system for SIM to support of KCs in gamma radiation.
- Seconded training at BIPM

## MWG 7: Mass & Related Quantities:

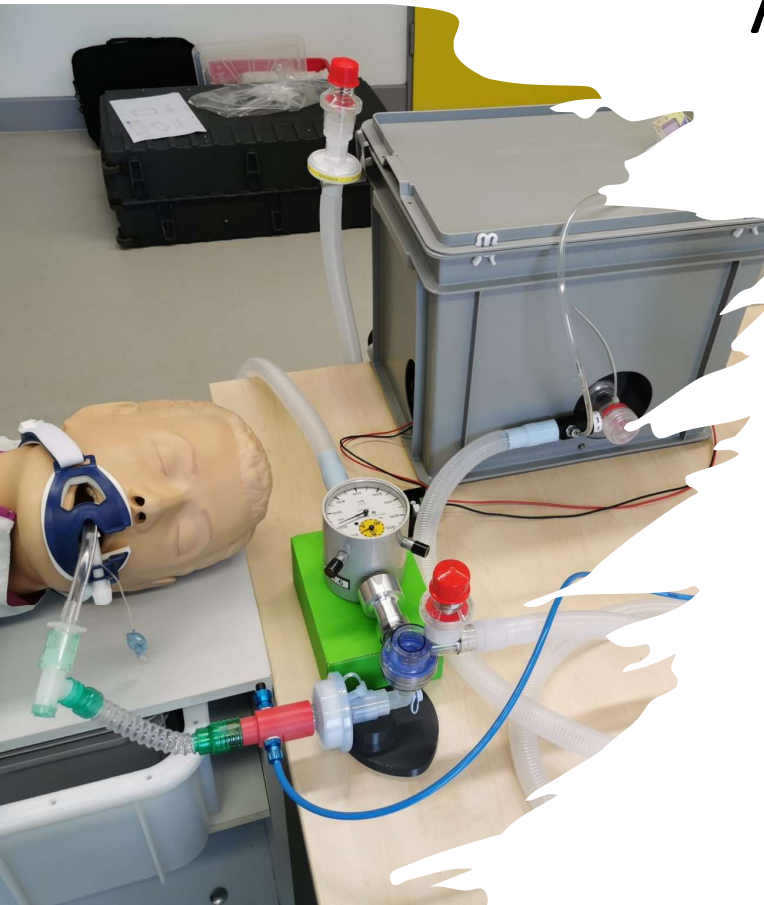
- Procurement of various reference masses to support KCs in SIM

## MWG 8: Chemistry and Biology:

- Development of Cannabis reference materials to support KCs in SIM
- Development capabilities for measurements of Cd and Pb in Cocoa for KCs in SIM
- Capacity building in drinking water quality control



# Activities of Technical Groups



## MWG 9: Acoustic and Vibrations:

- Procurement of various reference equipment to support KCs in SIM

## MWG 10: Flow and Volume:

- Project for developing a fundamental metrological infrastructure to support the testing of medical ventilators concluded (supported by PTB).
- The closing workshop of this projects was held in Lima, Peru on Nov 7-12, 2022, More than 25 metrologists participated

## MWG 14: Digital Transformation::

- M4DT DAY – An open access training activity that takes place every 2 months on a variety of topics related to DT in SIM (see SIM webpage to register)
- MWG 14 TC Meeting was organized in Panamá (Oct 11-13, 2022)

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# Enhance SIM International Standing as an RMO & as a pillar of the QI



**Bureau  
International des  
Poids et  
Mesures**



Organisation Internationale de  
**Métrologie Légale**  
International Organization of  
**Legal Metrology**



BIPM & OIML Meetings  
JCRB Meetings Mar (FRA) & Sep (CRC)  
Member States & NMI Directors Meeting



# Enhance SIM International Standing as an RMO & as a pillar of the QI



OAS Science & Educ Ministerial  
May 2023

QICA Meetings  
PAQI Meeting

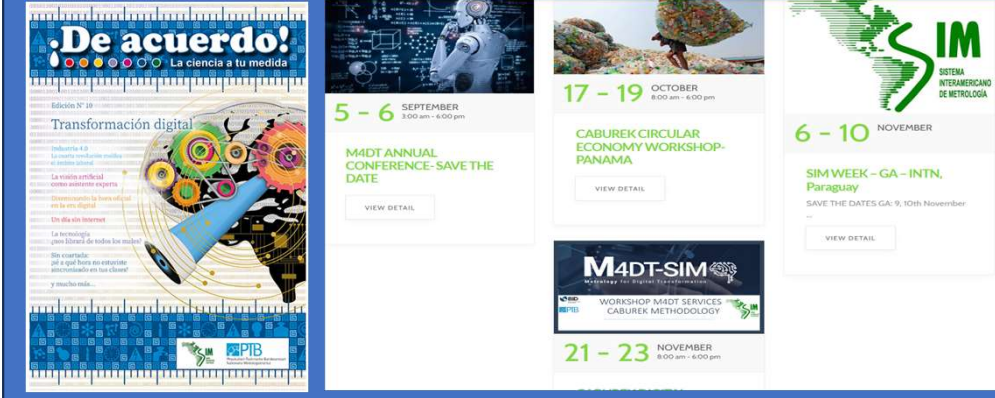


IAAC GA  
Regional Accreditation Body  
Mar 2023



COPANT GA  
Regional Standardization Body  
Sep 2013

Communication Strategy  
Improve relation w/ RMO  
Regional Magazine  
Web Page & You Tube  
E-learning



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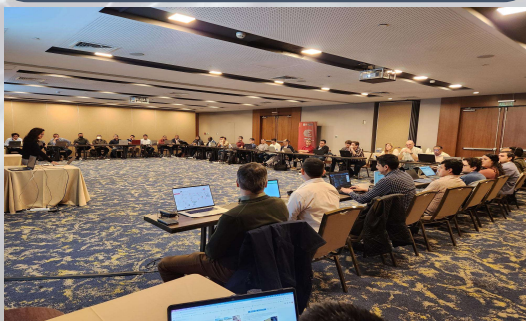




Digital SI  
Unique Identifier  
2050+ Young Met



Support the  
MWG14 &  
M4DT CABUREK



Support for  
QI4CE CABUREK  
Project



Support for  
QICA  
development



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Thanks for your attention!!!

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Gracias por su atención !!!

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Obrigado pela atenção !!!

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Merci pour votre attention!!

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WEB PAGE: <https://sim-metrologia.org>