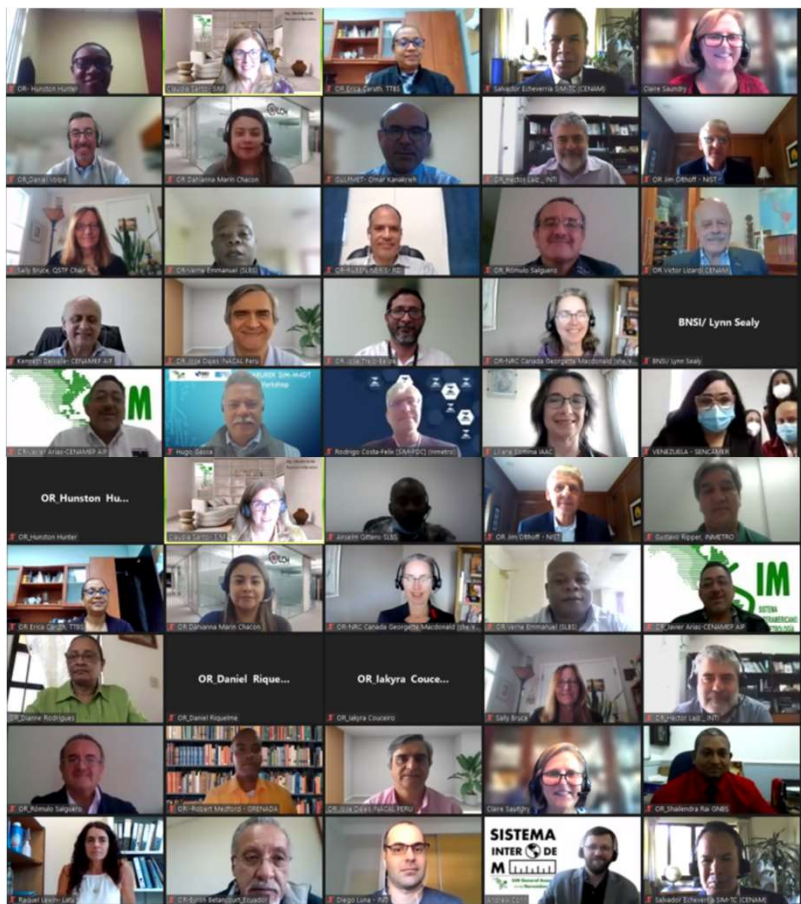
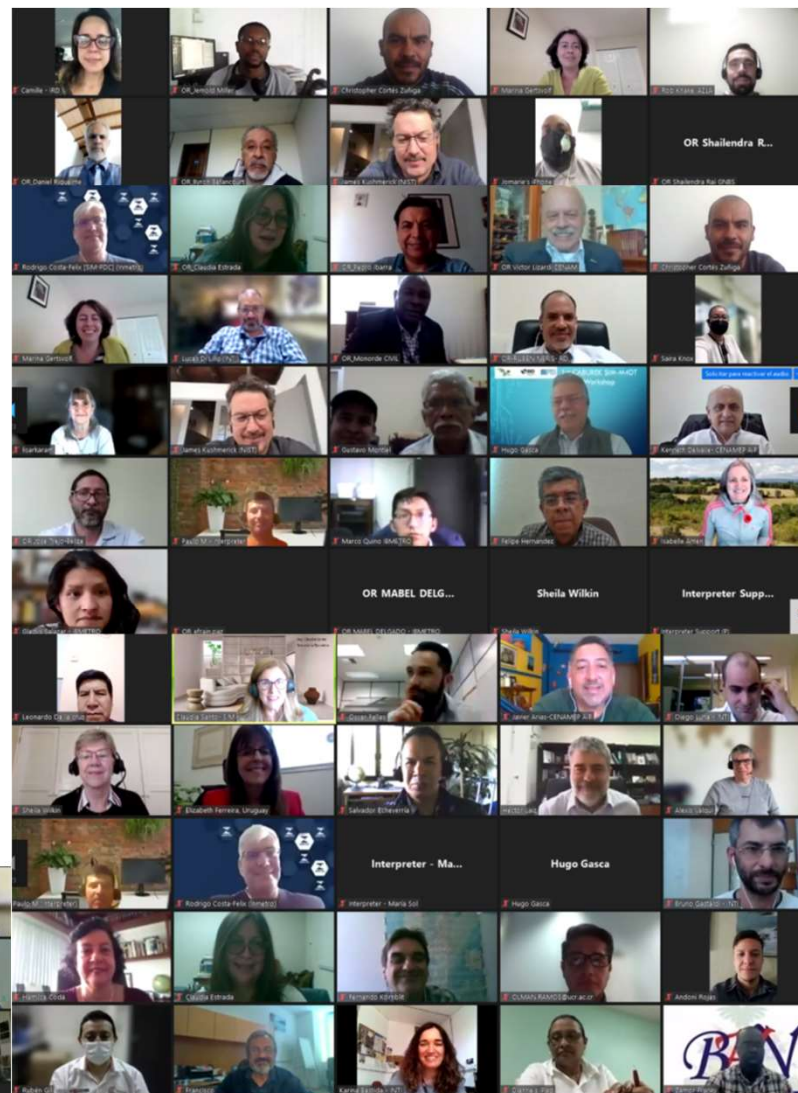


# SIM REPORT TO COOMET 33rd COMMITTEE MEETING

OCTOBER 2022



# SIM GA 2021



Country	NMI/Active member	DI/ Associate member
Canada	NRC	TCC
Mexico	CENAM	INECC, ININ
USA	NIST	NUWC-USRD
Antigua and Barbuda	ABBS	
Bahamas	BBSQ	
Barbados	BNSI	
Dominica	DBS	
Dominican Republic	INDOCAL	
Grenada	GDBS	
Guyana	GNBS	
Haiti	BHN	
Jamaica	BSI	
St. Lucia	SLBS	
St. Kitts and Nevis	SKNBS	
St. Vincent and Grenadines	SVGBS	
Trinidad and Tobago	TTBS	
Belize	BBS	
Costa Rica	LCM	LAMETRO-ICE, ICE LMVA, RECOPE, LanammeUCR
El Salvador	CIM	
Guatemala	CENAME	
Honduras	CEHM	
Nicaragua	LANAMET	
Panamá	CENAMEP	
Bolivia	IBMETRO	
Colombia	INM	
Ecuador	INEN	
Peru	INACAL	
Venezuela	SENCAMER	
Argentina	INTI	CNEA
Brazil	INMETRO	LNMRI/IRD, ON/DSHO
Chile	INN	
Paraguay	INTN	
Uruguay	LATU	UTE

# Membership and Updates:

## 2021 SIM GA 11-12 November (New members highlighted in Yellow)

- 2 NMIs Active Members (Total - 33 active members (NMIs))
- 11 DIs Associate Members (13 total -12 DIs plus IAEA)
- IAEA Associate member (RMO rotating policy)
- COPANT and IAAC Affiliate Members.
- SIM GA Resolution 004/2021 The SIM General Assembly approves of Version 02 of the SIM Bylaws and the procedure for their approval.
- The SIM Council established MWG 14: Metrology for Digital Transformation (M4DT), part of the SIM Technical Committee

**2022 SIM GA is scheduled in person for 3-4 November in Saint Lucia**



# SIM Steering Council Council



**President**  
**Claire Saundry**  
**NIST USA**



**Past President**  
**Hector Laiz**  
**INTI Argentina**



**TC Chair**  
**Lucas Di Lillo**  
**INTI Argentina**



**QSTF Chair**  
**Sally Bruce**  
**NIST USA**



**Project Coord.**  
**Javier Arias**  
**CENAMEP Panama**



**PDC Rodrigo**  
**Costa-Felix**  
**INMETRO Brazil**



**ANDIMET**  
**Jose Dajes**  
**INACAL Peru**



**CAMET**  
**Jose Trejo**  
**Belize**



**CARIMET**  
**Erica Caruth**  
**TTBS Trinidad**  
**and Tobago**



**NORAMET**  
**Georgette Macdonald**  
**NRC Canada**



**SURAMET**  
**Daniel Volpe**  
**LATU Uruguay**

# SIM Technical Committees (Metrology Working Groups)

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

Ensuring efficient and effective support and technical review of CMCs for publication in the KCDB to support calibration programs of SIM NMIs/DIs through inclusivity, interlaboratory cooperation for metrological rigor, and capacity building

<b>MWG 1: Electricity and Magnetism</b> Chair: Felipe Hernandez CENAM/Mexico <a href="mailto:fhernand@cenam.mx">fhernand@cenam.mx</a>	<b>MWG 2: Photometry and Radiometry</b> Chair: Thiago Menegotto INMETRO/Brazil <a href="mailto:Tmenegotto@inmetro.gov.br">Tmenegotto@inmetro.gov.br</a> Vice Chair: Juan Pablo Bárbaro INTI/Argentina <a href="mailto:jbabaro@inti.gob.ar">jbabaro@inti.gob.ar</a>
<b>MWG 3: Thermometry</b> Chair: Andrew Todd NRC/Canada <a href="mailto:andrew.todd@nrc-cnrc.ca">andrew.todd@nrc-cnrc.ca</a> Vice Chair: Ciro Alberto Sánchez INM/Colombia <a href="mailto:csanchez@inm.gov.co">csanchez@inm.gov.co</a>	<b>MWG 4 Length</b> Chair: Karina Bastida INTI/Argentina <a href="mailto:kbastida@inti.gob.ar">kbastida@inti.gob.ar</a>
<b>MWG 5: Time and Frequency</b> Chair: Diego Luna INTI/Argentina <a href="mailto:luna@inti.gov.ar">luna@inti.gov.ar</a> Vice Chair: Liz Hernández Forero, INM/Colombia <a href="mailto:lherndez@inm.gov.co">lherndez@inm.gov.co</a>	<b>MWG 6: Ionizing Radiation and Radioactivity</b> Chair: Raphael Galea NRC/Canada <a href="mailto:raphael.galea@nrc-cnrc.ca">raphael.galea@nrc-cnrc.ca</a> Vice Chair: Lizbeth Laureano-Pérez NIST/USA <a href="mailto:lizbeth.laureano-perez@nist.gov">lizbeth.laureano-perez@nist.gov</a>
<b>MWG 7: Mass and Related Quantities</b> Chair: Aldo Quiroga INACAL/Peru <a href="mailto:aquiroga@inacal.gob.pe">aquiroga@inacal.gob.pe</a>	<b>MWG 8: Chemistry and Biology</b> Chair: Valnei Da Cunha INMETRO/Brazil <a href="mailto:vsunha@inmetro.gov.br">vsunha@inmetro.gov.br</a> Vice Chair: Melina Pérez CENAM/Mexico <a href="mailto:meperez@cenam.mx">meperez@cenam.mx</a>
<b>MWG 9: Acoustics, Ultrasound and Vibrations</b> Chair: Gustavo Ripper INMETRO/Brazil <a href="mailto:gripper@inmetro.gov.br">gripper@inmetro.gov.br</a> Vice Chair: Akobuije Chijioke NIST/USA <a href="mailto:akobuije.chijioke@nist.gov">akobuije.chijioke@nist.gov</a>	<b>MWG 10: Flow and Volume</b> Chair: Hernán Brenta INTI/Argentina <a href="mailto:hbrenta@inti.gob.ar">hbrenta@inti.gob.ar</a> Vice Chair: Abed Morales INACAL/Peru <a href="mailto:amorales@inacal.gob.pe">amorales@inacal.gob.pe</a>
<b>MWG 11: Legal Metrology</b> Chair: Pedro Pérez Vargas SIC/Colombia <a href="mailto:pperez@sic.gov.co">pperez@sic.gov.co</a> Vice Chair: Sandra Rodríguez Zuñiga LACOMET/Costa Rica <a href="mailto:srodriguez@lacomet.go.cr">srodriguez@lacomet.go.cr</a>	<b>MWG 12: Quality Systems</b> Chair: Elizabeth Ferreira LATU/Uruguay <a href="mailto:eferre@latu.org.uy">eferre@latu.org.uy</a>
<b>MWG 13: Statistics and Uncertainty</b> Chair: Antonio Possolo NIST/USA <a href="mailto:antonio.possolo@nist.gov">antonio.possolo@nist.gov</a>	<b>MWG 14: Metrology for Digital Transformation</b> Chair: Hugo Gasca Aragón CENAM/Mexico <a href="mailto:hgasca@cenam.mx">hgasca@cenam.mx</a> Vice Chair: Diego Coppa INTI/Argentina <a href="mailto:dcoppa@inti.gob.ar">dcoppa@inti.gob.ar</a>

# SIM Quality System Task Force (QSTF)

Has met in virtual mode since June 2020 (due to the restrictions of the pandemic)

Annual 2021 reports (28) were reviewed by the various Institutes participating.

The International Atomic Energy Agency (IAEA) joined SIM as an associate member and received QSTF Approval of its quality system.

Published *Guidelines for the conduct of remote Peer Reviews & Internal Audits*

A Webinar was hosted on the Guidelines

Review of Citations for the SIM QSTF Certificates of Approval: matching the description of measurement categories of the KCDB 2.0

Hosted Webinar on SIM MWG (P&R) review processes for new CMCs

Collaborated with SIM's TC to revise *SIM 05 SIM Procedure for Review of Calibration and Measurement Capabilities Submitted on the KCDB 2.0 Platform of the CIPM MRA*

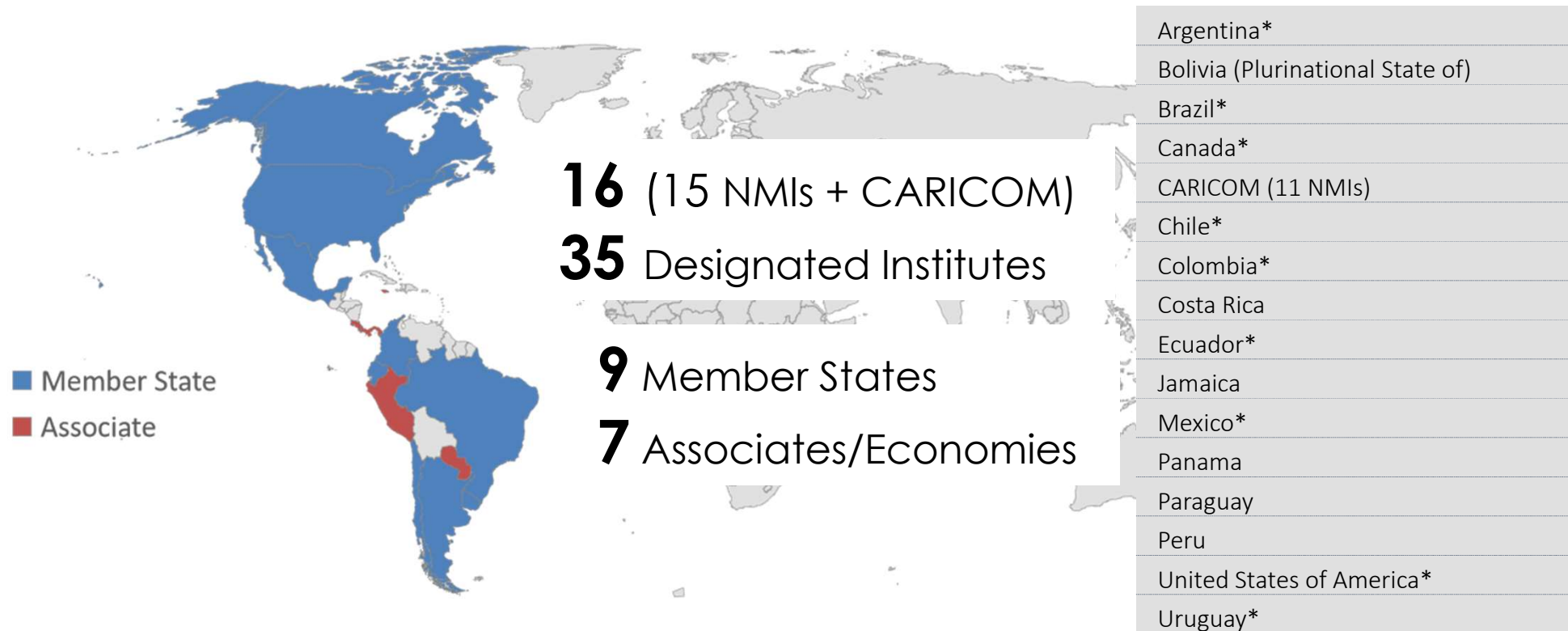
# SIM Quality System Task Force (QSTF)

*Institute's Quality Systems reviewed since June 2020*

**38 QSTF Web Meetings to review various QMS  
supporting >60 Measurement categories**

Argentina: INTI	Panama: CENAMEP-AIP
Bolivia: IBMETRO	Paraguay: INTN
Canada: NRC	Peru: INACAL
Chile: ISP, UDEC, IDIC	United States: NIST & US NAVY NUWC
Columbia: INM	Uruguay: LATU
El Salvador: CIM	<i>Intergovernmental Organizations (IGOs):</i>
Mexico: CENAM	WMO: US DOC NOAA
	IAEA

# CIPM MRA: participation of SIM





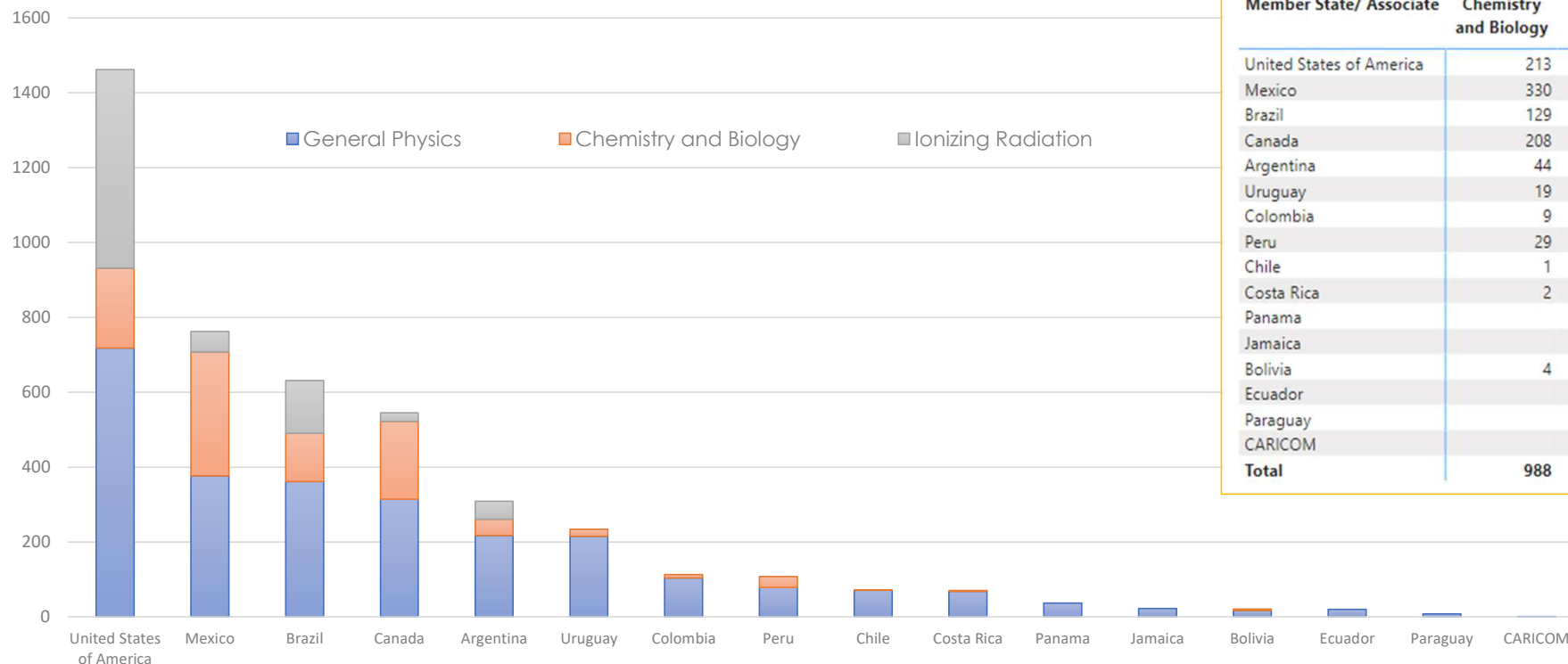
# SIM Comparisons and CMCs

- SIM actively submits CMCs in all technical areas (73 CMCs published between Sept 2021 and Feb 2022)
- Reviews continue during pandemic

Technical Field	NMIs Involved	New CMCs published between 2021-09-27 - 2022-02-06
Electricity and Magnetism	NIST, NRC, INM	27
Photometry and Radiometry	INMETRO, INTI	5
Thermometry		---
Length	CENAM, DICTUC SA	2
Time and Frequency		---
Ionizing Radiation and Radioactivity	NRC	5
Mass and Related Quantities		---
Chemistry and Biology	INTI, INMETRO, CENAM	30
Acoustics, Ultrasound and Vibration	NRC	4
Flow and Volume		---

# KCDB Statistics - SIM: *CMCs*

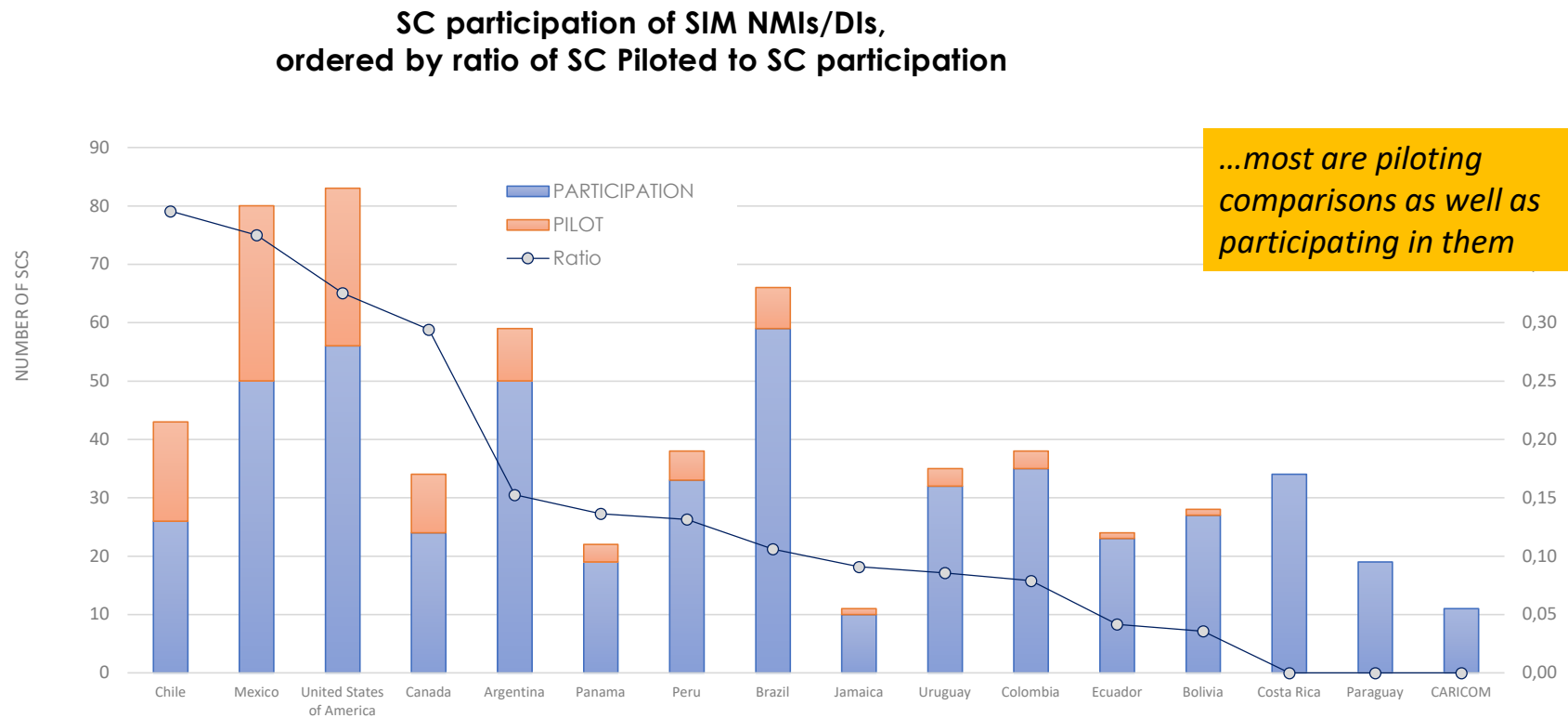
**SIM CMCs by Member States and Associates**



*All SIM CIPM MRA participants have published CMCs*

Member State/ Associate	Chemistry and Biology	General Physics	Ionizing Radiation	Total
United States of America	213	718	531	1462
Mexico	330	377	55	762
Brazil	129	361	141	631
Canada	208	314	23	545
Argentina	44	217	48	309
Uruguay	19	215		234
Colombia	9	104		113
Peru	29	79		108
Chile	1	71		72
Costa Rica	2	68		70
Panama		37		37
Jamaica		22		22
Bolivia	4	17		21
Ecuador		20		20
Paraguay		8		8
CARICOM		1		1
<b>Total</b>	<b>988</b>	<b>2629</b>	<b>798</b>	<b>4415</b>

# KCDB Statistics – SIM: *SC Piloted to SC total*





## SIM WEEK- BUENOS AIRES/ARGENTINA (Hybrid events) 31<sup>st</sup> May- 02<sup>nd</sup> June

- Ad-hoc Working Group on Strategic Planning Workshop to develop a new SIM strategic plan.
- Ad-hoc WG on SIM Rules of Order Meeting to modify SIM's existing rules of order to align with changes to the Bylaws adopted by the 2021 GA.
- Meeting of SIM Technical Committee
- Meeting of SIM Steering Council

# On-going SIM Projects and Activities

- **MWG 2: Radiometry.** Evaluating the use of UVC technologies for disinfection (NIST support).
- **MWG 6: Ionizing Radiation.** New facilities (CNEA/Argentina, CCHEN/Chile, NIST/USA): advancing capabilities and enhancing safety.
- **MWG 10: Flow and Volume.** With PTB support, developing a fundamental metrological infrastructure to support the testing of medical ventilators
- **MWG 14: Digital Transformation.** Metrology for the digital transformation has taken a high profile within SIM (as the rest of the world), reflected by the creation of the recent MWG 14. (Annual Conference 1-2 September, IMEKO Event, etc)
- **IDB SIM Project “Metrology for digital transformation to support health services in LAC”** The IDB- SIM project in digital transformation addresses the measurement challenges associated with pandemics such as COVID -19.
- **SIM/NCSLI Early Career Metrologist Competition**
- **SIM/COPANT/IAAC/OAS-PTB “Quality Infrastructure for the Circular Economy”**
  - National projects that involve quality infrastructure applications or the circular economy as related to plastics, construction, and agri-food are supported by this initiative.



# SIM CELEBRATION OF WMDay

- A virtual SIM Celebration for WMD took place on the 23<sup>rd</sup> May 2022.
- CIPM and OIML made presentations.
- Panel of NMI Directors from the 5 SIM subregions discussed strategies, the state of art and the future of DT in our region.



# SIM M4DT Annual Conference 2022

Our annual conference related to Metrology for Digital Transformation was held on 1<sup>st</sup> and 2<sup>nd</sup> of September 2022.

Information and presentations available on our webpage.

# SIM GA 2022

Next GA will be held in a Hybrid  
format in Saint Lucia  
3 – 4 November 2022.

## Other events:

31 October – 4 November

- a) Steering Council meetings
- b) QSTF meetings
- c) Lounge or new edition of “De Acuerdo” magazine: Health

Information is available on our  
webpage.



Questions?