

**SIM Report to the
AFRIMET General
Assembly**

28th July 2021

**Claire Saundry
SIM President**

A large, stylized green graphic of the letters 'SIM' is positioned in the center of the slide. The 'S' is a thick, curved line that loops around the 'I' and 'M'. The 'I' and 'M' are solid, blocky letters. To the left of this graphic is a vertical black line. The background of the slide is a light green color with a pattern of horizontal green lines of varying lengths, creating a textured, brushstroke-like effect.

SIM

**SISTEMA
INTERAMERICA
DE METROLOGIA**

IDENTIFIED NEEDS - SURVEY 2020:

Remote support for
personnel and customers
(digital resources)

Measurements in health
sector and for medical
devices prioritizing
ventilators

Respirator tests

Sterilization using UV
radiation

Improvements/developing
of calibration services for
low air flows (ventilators)

Improvements/developing
of calibration services for
IR thermometry

CRM to support
metrological traceability
for new and emerging test
methods for COVID-19

DE METROLOGI

SHARING PANDEMIC EXPERIENCES: June 2020



SISTEMA
INTERAMERICANA
DE METROLOGIA

National Efforts in SIM:

- INTI (Argentina) – procedures and proper use of non-contact IR thermometers for public health officials
- IBMETRO (Bolivia) – low flow measurements for ventilators
- INMETRO (Brazil) – supporting the development of a pulmonary ventilator
- NRC (Canada) – testing and evaluation of PPE
- LCM (Costa Rica) – 3-D printing masks, ventilator fans, ethanol in sanitizers
- INEN (Ecuador) – Infrared thermometers for clinical diagnosis
- CENAM (Mexico) – test methods for the identification of SARS-Cov-2 virus
- NIST (USA) – efficacy and safety of hand sanitizers; characterization of filtration efficiency of cloth masks

SIM Projects supporting Measurements for Health - addressing the impacts of COVID-19



UV Metrology:
Evaluation of UVC
Technologies for UV
Radiation Disinfection



Development of *basic metrology infrastructure* to support medical testing equipment (ventilators)



SIM Pilot Study – SARS-Cov-2 DNA Copy Number Quantification
Results will help validate services provided to PCR testing laboratories



Infrared Thermometry: noncontact, thermal infrared measurement devices





VIRTUAL GA NOVEMBER 2020



DE METROLOGIA

2020 SIM GA 19-20 November 2020

- CENAME-Guatemala accepted as new Active Member
- UTE-Uruguay accepted as an Associate Member (DI)
- Elections
- Bylaws reviewed
- 5 additional DIs join SIM as Associate Members
- 1 New Active Member - Dominica
- NEW technical WG on M4DT
 - Automation of Laboratory Processes
 - Digitalization in Legal Metrology
 - Digital Calibration Certificate
 - Metrology for Industry 4.0
 - NMI's Digital Transformation Strategy
- 2021 SIM GA scheduled for November in Saint Lucia

	Economy	Member NMIs	Associate member Dis	All Dis
1	Canada	NRC		TCC
2	Mexico	CENAM	INEC, ININ	INEC, ININ
3	USA	NIST		NUWC-USRD
4	Antigua and Barbuda	ABBS		
5	Bahamas	BBS		
6	Barbados	BNSI		
7	Dominican Republic	INDOCAL		
8	Grenada	GDBS		
9	Guyana	GNBS		
10	Haiti	BHN		
11	Jamaica	BSJ		
12	St. Lucia	SLBS		
13	St. Kitts and Nevis	SKNBS		
14	St. Vincent and Grenadines	SVGBS		
15	Trinidad and Tobago	TTBS		
16	Belize	BBS		
17	Costa Rica	LACOMET		ICE, RECOPE, Lanamme UCR
18	El Salvador	CIM		
19	Guatemala	CENAME		
20	Honduras	CEHM		
21	Nicaragua	LANAMET		
22	Panamá	CENAMEP		
23	Bolivia	IBMETRO		
24	Colombia	INM		
25	Ecuador	INEN		CMEE, SCAN
26	Peru	INACAL		
27	Argentina	INTI		CNEA
28	Brazil	INMETRO	LNMRI/IRD, ON/DSHO	LNMRI/IRD, ON/DSHO
29	Chile	INN	CCHEN, CESMEC, CISA, CODELCO, DICTUC S.A., ENAER, IDIC, ISPCH, UDEC	CCHEN, CESMEC, CISA, CODELCO, DICTUC S.A., ENAER, IDIC, ISPCH, UDEC
30	Paraguay	INTN		
31	Uruguay	LATU	UTE	MIEM, UTE

SIM Steering Council Council



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Belize



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Erica Caruth
TTBS Trinidad
and Tobago



NORAMET
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NRC Canada



SURAMET
Daniel Volpe
LATU Uruguay

Recent SIM Activities

OAS Committee on Science and Technology (COMCyT):

- S&T&I to mitigate effects of COVID: Metrology Challenges and Responses to Pandemic 7-2020
- 9th Meeting of COMCyT 12-2020
- Photometer Calibration Application for Air Quality Monitoring Networks (Feb 2021)
- OAS/COMCyT: National Quality Infrastructure as Pillar for Sustainable Development May 2021

Remote Peer Reviews and Internal Audits <https://sim-metrologia.org/2021/03/10/remote-peer-reviews-and-internal-audits-guidance-from-sim-mwg-12-and-qstf-members/>

Measurement Uncertainty:

<https://sim-metrologia.org/wp-content/uploads/2020/10/PossoloMeija2020-MeasurementUncertainty.pdf>

SIM webinars (in Spanish) with NCSLI:

- September 22, 2020- Risk management according to ISO / IEC 17025: 2017 (how to interpret risk management)
- September 29, 2020 - Metrology in Chemistry in Measuring the Efficiency of Respiratory Protection Devices (DPR)
- October 6, 2020: Infrared Thermometry and COVID-19

CBKT WORKSHOP For CARICOM
January 2021

BIPM Workshop – SI in FAIR Digital Data
February 2021

WORKSHOP “KCDB 2.0 at service of the SIM Region in Mass and Related Quantities”
March 2021

SIM Participation in COOMET Early Career Metrologist Competition
April 2021

Early Career Metrologist Competition
Launched in cooperation with NCSLI in 2020
2021 Competition finished- 3 winners (from Noramet, Andimet and Suramet)

Workshop on Metrology and Digital Transformation – SIM-PTB
(Virtual, 07-2020)
Next Events:
Monthly “Metrology For DT days”
Next event 7th Metrology for DT Day July 29 (Lab. automation)
M4DT Conference 1-2 September

Metrologists and experts share experiences in the fight against the global pandemic
December 2020
February 2021
June 2021

Quality Infrastructure Council of the Americas (QICA) Activities

- New MOU with the Pan American Standards Commission (COPANT) and the Inter-American Accreditation Cooperation (IAAC) establishing a reciprocal membership arrangement
- Joint activity to address the interpretation and application of the ILAC Policy on Metrological Traceability of Measurement Results (ILAC P10:07/2020) - initiated with the review and approval of a new version of the Spanish translation of the policy.
- Participation in OAS/COMCYT: National Quality Infrastructure as Pillar for Sustainable Development May 27th, 2021
- Training on Risk evaluation and Calibration intervals
- Saint Lucia Bureau of Standards accredited by the Jamaica National Agency for Accreditation – facilitated by QICA

Quality System Task Force (QSTF)

- Developed Guidelines for conducting and performing remote assessments <https://sim-metrologia.org/about-us/structure/quality-system-task-force-qstf/>
- Convened a Webinar on “Peer Review and Internal Audits” including remote assessments - 9 March 2021: <https://sim-metrologia.org/2021/03/10/remote-peer-reviews-and-internal-audits-guidance-from-sim-mwg-12-and-qstf-members/>
- Since June 2020 - 20 virtual meetings to review the quality management systems of 14 institutes, which support 28 discrete classifications of CMCs.
- Verified the successful transitions of the quality management systems to the ISO/IEC 17025:2017 for 18 institutes

Support for SIM Activities



Inter-American Development Bank (IADB)

- Strengthening National Metrology Institutes in the Hemisphere, in support of Emerging - COMPLETED
- Strengthening NMIs in health-related metrology areas and in digitalizing processes (Call for research projects ended 12th July)

German Development Fund/PTB

- Develop QI Service for Biodiversity and Climate Change
- Circular Economy
- COVID project: Ventilators

NIST

- Capacity Building and Research Exchanges (paused)
- NCSL International Technical Exchange
- Health Metrology efforts: IR Temperature and UV
- Grant: Strengthening NMIs in the Americas and regional cooperation through SIM, and promoting QI cooperation with related partner organizations

SIM CELEBRATION OF WMDay

- A virtual SIM Celebration for WMD took place on the 21st May 2021.
- 7 NMIs from SIM presented on on-going metrology activities related to Health

<https://sim-metrologia.org/2021/05/05/world-metrology-day-in-sim/>

World Metrology Day



Measurement
for Health



Bureau
International des
Poids et
Mesures



20 May 2021
www.worldmetrologyday.org

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QUESTIONS?



<https://sim-metrologia.org/about-us/>