

General Assembly  
Virtual meeting  
18-19th November  
2020

# Report from the SIM Technical Committee

SISTEMA  
INTERAMERICANA  
DE METROLOGIA



# SIM as a legal entity

	Economy	Institute	DIs
1	Canada	NRC	TCC
2	Mexico	CENAM	INECC, 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
18	El Salvador	CIM	
19	Honduras	CEHM	
20	Nicaragua*	LANAMET	MIFIC
21	Panamá	CENAMEP	
22	Bolivia	IBMETRO	
23	Colombia	INM	
24	Ecuador	INEN	CMEE, SCAN
25	Peru	INACAL	
26	Argentina	INTI	CNEA
27	Brazil	INMETRO	LNMRI/IRD, ON/DSHO
28	Chile	INN	CCHEN, CESMEC, CISA, CODELCO, DICTUC S.A., ENAER, IDIC, ISPCH, UDEC
29	Paraguay	INTN	
30	Uruguay	LATU	MIEM, UTE

**Mission:** To promote and support an integrated measurement infrastructure in the Americas which enables each member national measurement institute to stimulate innovation, competitiveness, trade, consumer safety and sustainable development by effectively participating in the international metrology community.

**Currently, there are 30 signatories to the legal entity**

## New developments:

- **Agreement on Membership dues reached in Sept. 2019**
- **Guidance documents (SIM-D-01 SIM Technical Committee, SIM-D-05 CMC Review Process, and SIM-D-07 SIM Comparisons) approved; published on SIM website**
- **Revisions to SIM-D-05 and SIM-D-07 to align with KCDB 2.0 approved by TC (presented to Council for this meeting)**



# SIM Steering Council Members

President – Claire Saundry (NIST), [claire.saundry@nist.gov](mailto:claire.saundry@nist.gov)

Former SIM President – Hector Laiz (INTI), [laiz@inti.gov.ar](mailto:laiz@inti.gov.ar)

QSTF Chair – **Sally Bruce\*** (NIST), [sally.bruce@nist.gov](mailto:sally.bruce@nist.gov)

Technical Committee Chair – Salvador Echeverria (CENAM), [saleche@cenam.mx](mailto:saleche@cenam.mx)

Professional Development Coordinator – Rodrigo Costa-Felix (INMETRO/Brazil), [rpfelix@inmetro.gov.br](mailto:rpfelix@inmetro.gov.br)

Project Coordinator – Javier Arias (CENAMEP), [jarias@cenamep.org](mailto:jarias@cenamep.org)

SIM Executive Secretary – Claudia Santo, [secretariat.sim.org@gmail.com](mailto:secretariat.sim.org@gmail.com)

ANDIMET Coordinator – Edwin Cristancho\* (INM), [director@inm.gov.co](mailto:director@inm.gov.co)

CAMET Coordinator – Claudia Alejandrina Estrada (CIM), [caestrada@cim.gob.sv](mailto:caestrada@cim.gob.sv)

CARIMET Coordinator – I-Ronn Audain (SKNBS), [chemicalengineerskb@yahoo.com](mailto:chemicalengineerskb@yahoo.com)

NORAMET Coordinator – Víctor Lizardi (CENAM), [vlizardi@cenam.mx](mailto:vlizardi@cenam.mx)

SURAMET Coordinator – Pedro Ibarra (INN)\*, [pedro.ibarra@inn.cl](mailto:pedro.ibarra@inn.cl)





# SIM Technical Committees (Metrology Working Groups)

- TC Chair: Salvador Echeverria (CENAM)
- Deputy Chair: Lisa Karam (NIST)

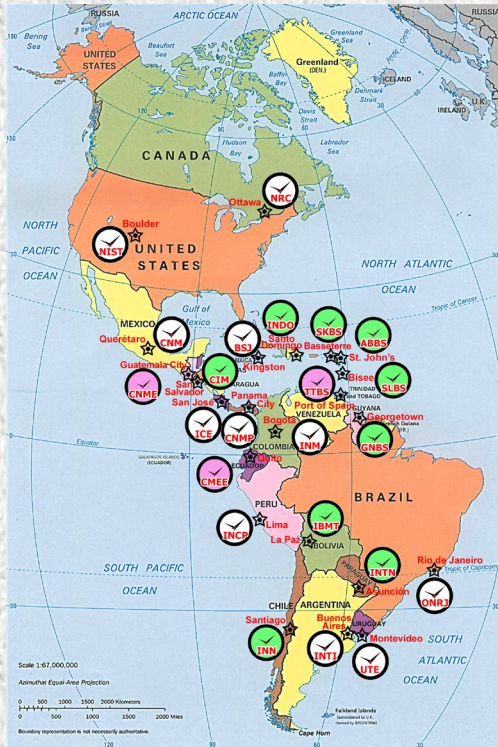
Ensuring efficient and effective support and technical review of calibration and measurement capabilities (CMCs) for publication in the Key Comparison Database in order to support calibration programs of SIM NMIs/DIs through inclusivity, interlaboratory cooperation for metrological rigor, and capacity building

<b>MWG 1: Electricity and Magnetism</b> Chair: Lucas di Lillo INTI/Argentina <a href="mailto:ldilillo@inti.gov.ar">ldilillo@inti.gov.ar</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>
<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 Babaro* INTI/Argentina <a href="mailto:jbabaro@inti.gov.ar">jbabaro@inti.gov.ar</a>	<b>MWG 9: Acoustics, Ultrasound, &amp; Vibration</b> Chair: Michael Gaitan* NIST/USA <a href="mailto:michael.gaitan@nist.gov">michael.gaitan@nist.gov</a>  Vice Chair: Gustavo Ripper* INMETRO/Brazil <a href="mailto:gpripper@inmetro.gov.br">gpripper@inmetro.gov.br</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 10: Flow and Volume</b> Chair: Hernán Brenta* INTI/Argentina <a href="mailto:hbrenta@inti.gov.ar">hbrenta@inti.gov.ar</a>  Vice Chair: Abed Morales INACAL/Peru <a href="mailto:amorales@inacal.gob.pe">amorales@inacal.gob.pe</a>
<b>MWG 4: Length</b> Chair: Karina Bastida INTI/ARGENTINA <a href="mailto:bastida@inti.gov.ar">bastida@inti.gov.ar</a>	<b>MWG 11: Legal Metrology</b> Chair: Pedro Pérez Vargas* SIC/Colombia <a href="mailto:pperezv@sic.gov.co">pperezv@sic.gov.co</a>  Vice Chair: Sandra Rodríguez Zúñiga* LACOMET/Costa Rica <a href="mailto:srodriguez@lacomet.go.cr">srodriguez@lacomet.go.cr</a>
<b>MWG 5: Time and Frequency</b> Chair: Raúl Solís CENAMEP/PANAMA <a href="mailto:rsolis@cenamep.org.pa">rsolis@cenamep.org.pa</a>  Vice Chair: Marina Gerstvolff NRC/Canada <a href="mailto:marina.gerstvolff@nrc-cnrc.gc.ca">marina.gerstvolff@nrc-cnrc.gc.ca</a>	<b>MWG 12: Quality System</b> Chair: Elizabeth Ferreira (LATU, Uruguay) <a href="mailto:eferre@latu.org.uy">eferre@latu.org.uy</a>  Vice Chair: Silvio dos Santos INMETRO/Brazil <a href="mailto:sfsantos@inmetro.gov.br">sfsantos@inmetro.gov.br</a>
<b>MWG 6: Ionizing Radiation and Radioactivity</b> Chair: Raphael Galea NRC/CANADA <a href="mailto:raphael.galea@nrc-cnrc.gc.ca">raphael.galea@nrc-cnrc.gc.ca</a>  Vice Chair: Lizbeth Laureano-Perez NIST/USA <a href="mailto:lizbeth.laureano-perez@nist.gov">lizbeth.laureano-perez@nist.gov</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 7: Mass &amp; Related Quantities</b> Chair: Aldo Quiroga INACAL/Peru <a href="mailto:aquiroga@inacal.gob.pe">aquiroga@inacal.gob.pe</a>	<p style="text-align: right;">*New since last update</p>



# Activities in SIM Comparisons and CMCs to fulfill RMO obligations under the CIPM MRA

- SIM Document on SIM Comparisons reiterates CIPM MRA guidance on comparisons (SIM-D-07)
- In addition to RMO comparisons, active SIM participation in other RMOs, CC and BIPM comparisons
- To strengthen relationships with other organizations supporting Regional Quality Infrastructure, SIM participates in COPANT (regional normalization body) and IAAC (regional accreditation body) General Assemblies, and on the Quality Infrastructure Council for the Americas (QICA)



Status of “Active” (omitting continuous) SIM-Participant Comparisons (2020\*)

Technical Field	Planned/ Protocol	Measurements		Reporting		
		In Progress	Completed	Draft A	Draft B	Published
Electricity and Magnetism	4	3				2
Photometry and Radiometry	5	3	1		1	
Thermometry (2 waiting approval)	1	1	1	3	2	1
Length (1 waiting approval)		3		1	2	
Time and Frequency	26 laboratories participate in the SIM Time Network project that includes the SIM Time Scale, NTP comparison and SIM bilateral comparison					
Ionizing Radiation and Radioactivity	3	6		2	2	1
Mass and Related Quantities	8	1	6	6	4	4
Chemistry and Biology	5	4	1	4	1	5
AUV	1					1
Flow and Volume (1 waiting approval)	3			1	2	
<b>TOTAL ACTIVE SIM COMPARISONS</b>	<b>30</b>	<b>21</b>	<b>9</b>	<b>17</b>	<b>14</b>	<b>14</b>

\*As found on KCDB August 2020



# Status of SIM (or SIM-Piloted) Comparisons

- To support a CMC, a comparison result needs to be available to reviewers\*
- Comparisons beyond a specified time period (depending on technical area) are not considered suitable for use to support a CMC

\*CMCs may be supported by other means than comparison results.

## Status of “Old” SIM-Piloted Comparisons (as of 10 November 2020)

Comparison	Status on KCDB	Year	Institute	Status (10 Nov 2020)	MWG
SIM.M.P-S3	abandoned	2010	LCPN-P	ABANDONED	7
SIM.M.P-S4	abandoned	2010	LCPN-P	ABANDONED	7
SIM.M.P-S9	abandoned	2012	LCPN-P	ABANDONED	7
SIM.T-S8	measurements in progress	2014	CESMEC	Pilot updated to CESMEC (Marinka Quezada)	3
SIM.QM-S5	planned	2015	CENAM	Draft A in preparation (KCDB to be updated)	8
CCT-K9	measurements completed	2012	NIST	Revised Draft A expected 1 Dec	3
CCL-K1.2011	measurements in progress	2014	CENAM	In Draft A (KCDB to be updated)	4
SIM.M.P-S2	measurements in progress	2011	INMETRO	Change in pilot; final report expected soon (KCDB to be updated)	7
SIM.M.P-K1	protocol complete	2010	CENAM	Final report published outside KCDB; to be linked to comparison on KCDB as final report once KCRV is determined (KCDB to be updated)	7

# Activities in SIM Comparisons and CMCs to fulfill RMO obligations under the CIPM MRA

- SIM remains active in submitting CMCs in all technical areas (661 CMCs published 1 Jan – 10 Nov 2020)
- SIM-D-05 (SIM document on CMC Review Process) revised to align with KCDB 2.0
- Reviews continue during pandemic

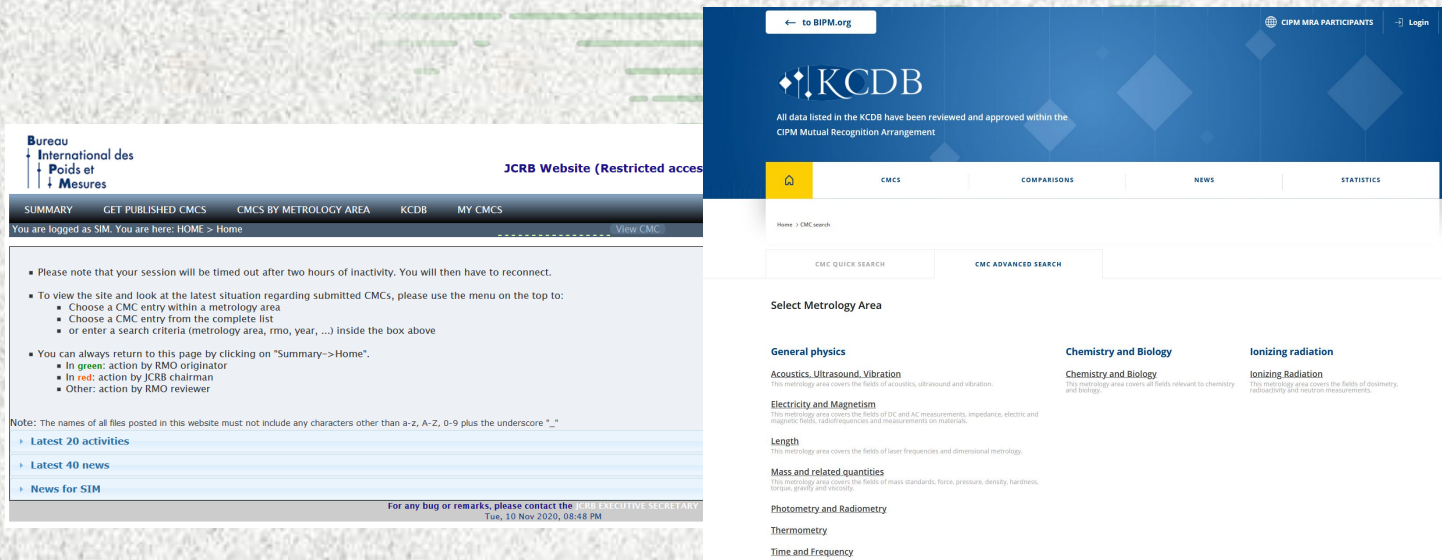
SIM Economies with Published CMCs

Argentina	Ecuador
Bolivia	Jamaica
Brazil	Mexico
Canada	Panama
CARICOM (Caribbean Community)	Paraguay
Chile	Peru
Colombia	United States
Costa Rica	Uruguay

Technical Area	# of CMCs Published in 2020 (10 Nov 20)
Electricity and Magnetism	81
Photometry and Radiometry	18
Thermometry	---
Length	34
Time and Frequency	18
Ionizing Radiation and Radioactivity	11
Mass and Related Quantities	10
Chemistry and Biology	325
AUV	142
Flow and Volume	22



# Status of SIM CMCs



- Active CMC files were migrated to the “new” KCDB 2.0 early in 2020
- New CMC in gravimetry for Mexico was the first publication of a CMC conceived and completely conducted through the KCDB 2.0 platform
- Three sets of SIM CMCs did not transition to the KCDB 2.0 (last communicated to JCRB secretary 17 September)

CMC File	Lab	Economy	Last Comments	Status
SIM.M.30.2016 (pressure)	INM	Colombia	May 2016	Abandoned
SIM.M.38.2017 (vol. of liquid)	CENAMEP	Panama	June 2019	Abandoned
SIM.M.43.2019 (mass)	LATU	Uruguay	September 2019	Revision still in progress on old KCDB platform (APMP votes “no”)



# Building a Strong SIM Training and Scientific Exchange

## Project Collaboration Brazil/Paraguay



## NIST-SIM Engagement Opportunity

2019 - 2020

The NIST-SIM Engagement Opportunity provides support to Active Members\*, National Metrology Institutes (NMIs) or Designated Institutes (DIs), of the Interamerican Metrology System (SIM). NIST supports SIM efforts to promote an integrated metrology infrastructure throughout the Americas.

### Applications

Applications must have approval by NMI or DI Management. Applicants must specify what type of activity is being sought, the level of support required, and the project plan. Applicants requesting Guest Researcher appointments must meet language proficiency requirements.

### Evaluation Criteria

Efforts will be taken to ensure support is provided to as many NMIs as possible. New activities/partnerships will be given priority. Applications must clearly identify project objectives. Applicants should contact NIST hosts/ collaborators prior to submitting an application.

### NIST Contact Information

For more information regarding this opportunity and to answer any questions you might have regarding the application process, please contact Andrew Conn at [andrew.conn@nist.gov](mailto:andrew.conn@nist.gov).

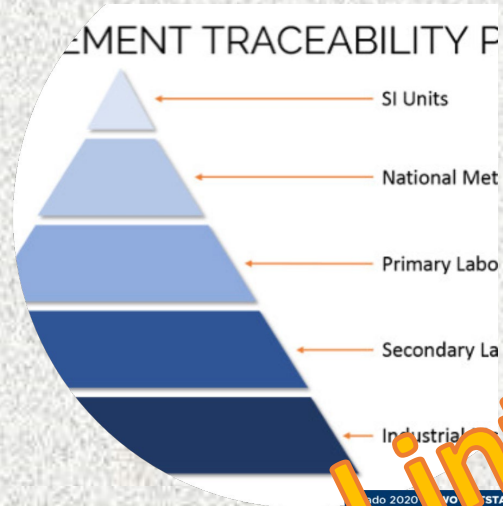
\*Participating SIM NMI or DI must possess an Active Membership type with SIM to receive support.

### Activity Types

FOREIGN GUEST RESEARCHER APPOINTMENTS  
GUEST RESEARCHER EXCHANGES, RUNNING FROM 3-MONTHS TO 1-YEAR. BRING NIST LABORATORY STAFF TOGETHER WITH SIM AFFILIATED METROLOGISTS TO ADVANCE KEY MEASUREMENT SCIENCE OBJECTIVES.  
CALIBRATION SERVICES  
NIST OFFERS CALIBRATIONS IN A WIDE ARRAY OF MEASUREMENT FIELDS. THROUGH THIS OPPORTUNITY, NIST MAY BE ABLE TO SUPPORT PARTICULAR CALIBRATION NEEDS. VISIT [www.nist.gov/calibrations](http://www.nist.gov/calibrations) FOR MORE INFORMATION.

### Application Timeline

**Deadline to Apply**  
11 October 2019  
**Application Review**  
14 October - 1 November 2019  
**Applicants Notified of Final Decision**  
4 November 2019



## SIM-NCSLI Cooperation:

SIM-NCSLI COOPERATION: EARLY CAREER METROLOGISTS  
FREE WEBINARS OFFERED THROUGH NCSLI

- Risk management according to ISO / IEC 17025: 2017 (how to interpret risk management?) - 22<sup>nd</sup> September 2020
- Chemical Metrology in measuring the efficiency of respiratory protection devices (RPD) - 29<sup>th</sup> September 2020
- Infrared thermometry and Covid-19 - 6<sup>th</sup> October 2020



- Variety of training activities during MWG meetings and separately
  - Historically supported by IADB, SIM, OAS, PTB, NIST
  - SIM NMI experiences and impact of implementation of ILAC P10, to be reported at mid-term 2020 meeting (suspended due to pandemic)
- 30+ working group Chairs, Deputies, and potential future leadership to participate in the on-line tech exchange on the KCDB 2.0 (3 and 10 September), replacing the original regional training in April 2020
- SIM-NCSLI Cooperation
  - SIM Early Career Metrologists competition and presentation at NCSLI August Conference (virtual)
  - Free webinars through NCSLI (Spanish language)
- Active idea exchanges among labs
  - Scientific "in lab" internships (suspended due to pandemic)
  - Technical training, strategic planning, comparison experience
- Training beyond the NMI/DI to the user community (suspended due to pandemic)

Physical interactions curtailed March-present



# Building a Strong SIM

## Approved SIM Projects 2019-2020

**JUNE 18 - 19/2019**  
CHALLENGES IN METROLOGY FOR ADVANCED MANUFACTURING AND THE 4TH INDUSTRIAL REVOLUTION

**SCOPE**  
Discuss the role of metrology, sensors and smart measurements in advanced manufacturing. Challenges and opportunities of the NMIs to support their manufacturing base in the 4th industrial revolution

**CENAM**  
CENTRO NACIONAL DE METROLOGIA

**BID**  
Banco Interamericano de Desarrollo

**VENUE**  
CENAM facilities  
Carretera a la Estación 1500  
Ciudad de México, México

**NIST**  
National Institute of Standards and Technology  
U.S. Department of Commerce

**Canada**  
NRC-CRC

### Workshop Challenges and Opportunities for NMIs in the Americas

- Role of metrology in advanced manufacturing
- Public-private dialogue workshop
- Context included the revision of the SI and impact on supporting transitioning the manufacturing base into the 4th industrial revolution
- Representatives of NMIs from the SIM community (especially from economies developing and improving manufacturing capabilities)
- Focus on innovation, sustainability and energy usage

- Workshop on Challenges in Metrology for Advanced Manufacturing and the 4th Industrial Revolution (18 – 19 June 2019) in Querétaro, Mexico, hosted by NORAMET and sponsored by the IADB.
- Workshop on Metrology and Digital Transformation (9 – 11 June 2020) at INTI Argentina
- Metrology training: “Fundamentals of Metrology” (20-24 July 2020) and Balance Scale Calibrations and Uncertainties (13-16 July 2020) at INM Colombia
- SIM-IADB Projects: knowledge transfer for building capabilities
  - Calibration of standard reference material for use in calibrating the magnification or scale of optical microscopy and scanning electron microscopy
  - Improvement and updating of interferometric systems for traceable dimensional nanometrology in SIM
  - Supporting the Quality Infrastructure Council of the Americas (QICA) (“Implementing ISO IEC 17025:2017. Challenges for Quality Infrastructure Organizations in Latin America & the Caribbean”), 24-26 July 2019 in Asunción, Paraguay; anticipated in 2020: “Risk analysis” based on the requirement of ISO IEC 17025:2017





# Metrology in the Time of COVID-19

SIM laboratories responding to measurement needs

## Major Challenges for the Laboratories

- Sudden and unexpected closure of work locations
- Laboratory access curtailed; potential environmental impacts on metrology infrastructure
- IT infrastructure not adequate to fully support remote work
- Suspension of calibration services to users and significant reduction of revenue stream
- Ensuring the physical and mental health of staff

## LESSONS LEARNED:

- Lack of equipment and trained staff to address critical health-related measurement needs (e.g., body temperature, blood pressure, flow rate for respirators)
- Need to accelerate the digitalization process for NMI services (some that were not previously considered for web-based services) and adopt available Web-based tools
- Need faster and simpler processes & procedures
- Need regulation of health-related instruments
- Restart will be slow and challenging





# Sharing Virtually: How NMIs are responding to the COVID-19 Crisis

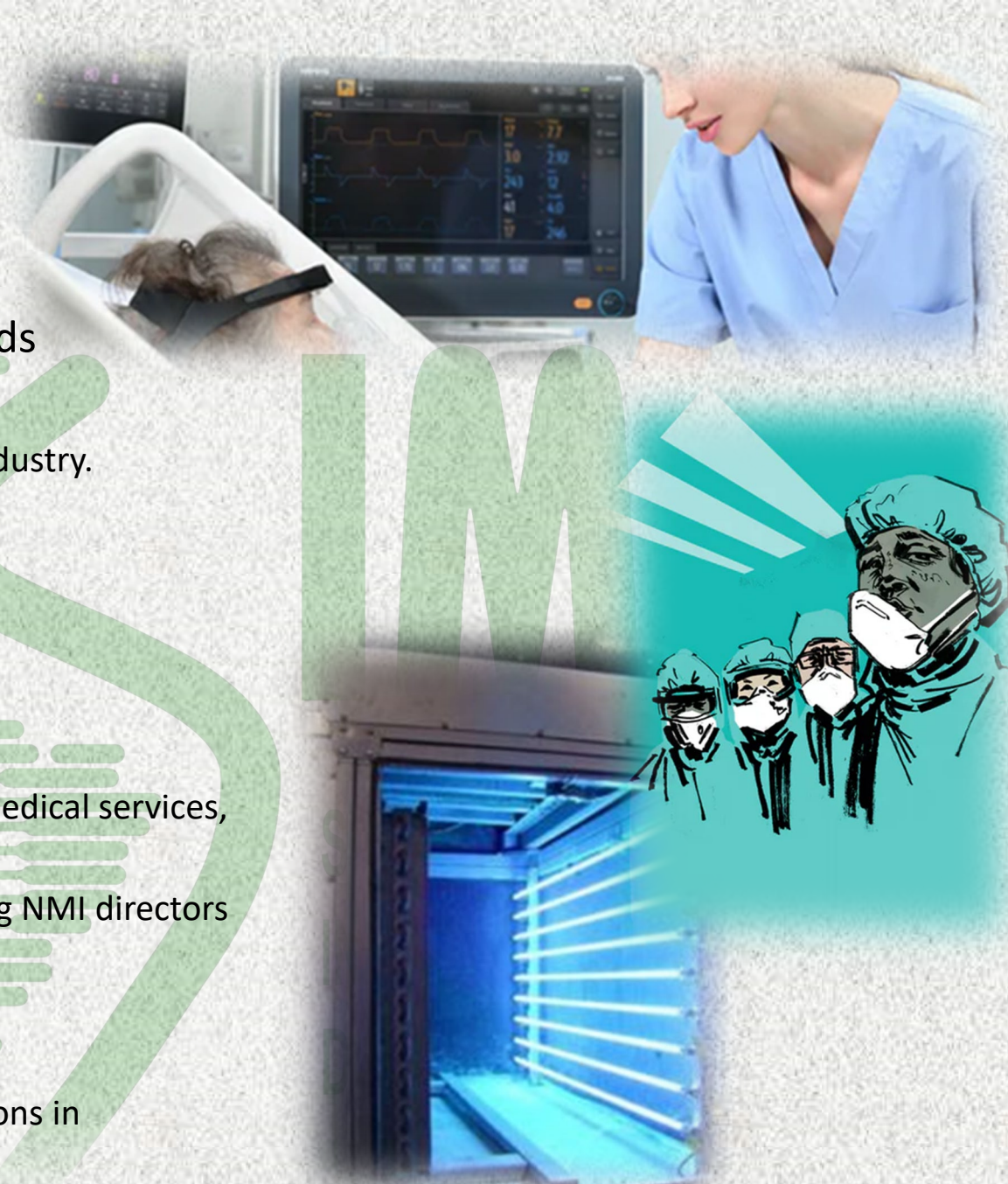
- Members discussed the situation in their respective countries and identified areas where regional cooperation could support the improvement of measurement services to their stakeholders.
- Unique roles of NMIs in supporting their countries' responses to COVID-19
  - diagnostic and antibody testing
  - body temperature measurements
  - low flow rate measurements (critical to the use of mechanical ventilators)
  - safe and effective application of UV radiation for disinfection





# April 2020 Survey of National Metrology Institutes (NMIs)

- Improvements to existing services, new capabilities needs
  - Measurements and calibration of medical devices
  - N95 respirators testing during the crisis, will be transferred to industry.
  - Small flows for respirators
  - Micro Volume, Chemical & Bio services
  - Test of respirators and sterilization systems
  - Need of association with other institutions
- How the SIM organization can help
  - Metrological training programs and assessment on all types of medical services, including traceability and reliability of rapid test kits
  - Maintain communication between members, cooperation among NMI directors
  - Create a community of needs between countries and share info
  - Maintain remote activities
  - Documents and guides for remote calibrations
  - Funding for calibration or temperature reference, intercomparisons in temperature
  - Extension of deadline for payment of SIM membership fees





# Capacity building for SIM NMIs

## Developing SIM NMIs

### Proposed Activities in Response to COVID-19

- RNA CRM for SARS-COV2 test validation
- CRMs for PPE materials
- **Medical equipment testing – prioritizing ventilators\***
- **Evaluation of UV technologies for disinfection\***
- **Calibration of non-contact, IR thermometers and screening cameras for human body temperature readings\***
- **Mask testing capabilities**

\*supported by NIST  
\*supported by PTB



## Capacity building supported by the Inter-American Development Bank (IADB)

- Strengthening National Metrology Institutes in the Hemisphere, in support of Emerging Technologies (internships, workshops and 6 joint research projects involving 11 institutions in 10 countries)
- *Strengthening NMIs in support of the Digital Economy (under development)*

## Continued support from the Organization of American States (OAS):

- Advancing Metrology for Sustainable Energy Technologies and the Environment in the Western Hemisphere
- Advancing Metrology for Energy Efficient Measurements and Compliance in Central America and the Dominican Republic

## Ongoing significant support from the German Development Fund/PTB

- Quality Infrastructure (QI) for Renewable Energy Sources and Energy Efficiency; QI Service for Biodiversity and Climate Change
- Promoting Innovation in the Green Economy by including QI
- Supporting the QI Council of the Americas (QICA) through Spanish / English virtual training (on determination of calibration intervals for measurement and on risk management according to ISO/IEC 17025:2017)
- Support for COVID-19 response activities

## NIST support for students and guest researchers

- Capacity Building and Research Exchanges (11 research assignments from 6 countries at NIST)
- 19 SIM representatives to NCSL International Technical Exchange for training, including a large contingency from CARIMET
- Support for COVID-19 response activities, including facilitations of virtual cooperation between NIST scientists and others in SIM

**TECHNICAL EXCHANGE**

MEASUREMENT TRAINING PROVIDED BY NCSL INTERNATIONAL

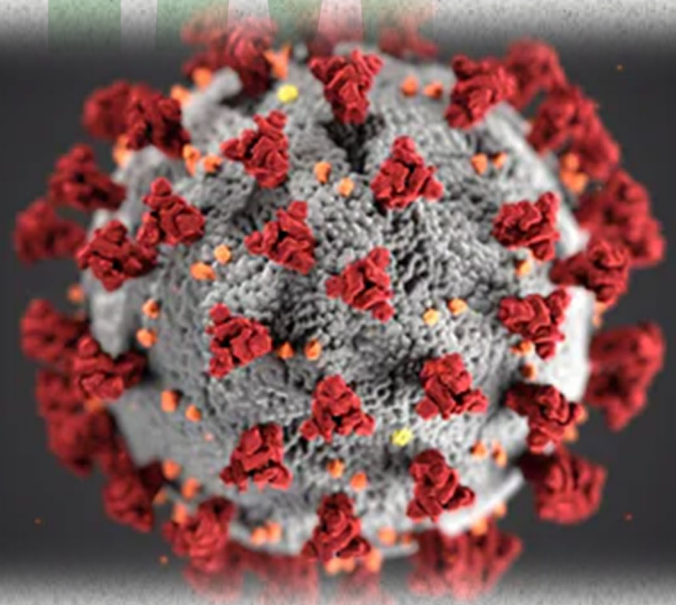
**February 24–26, 2020 in Houston, Texas**





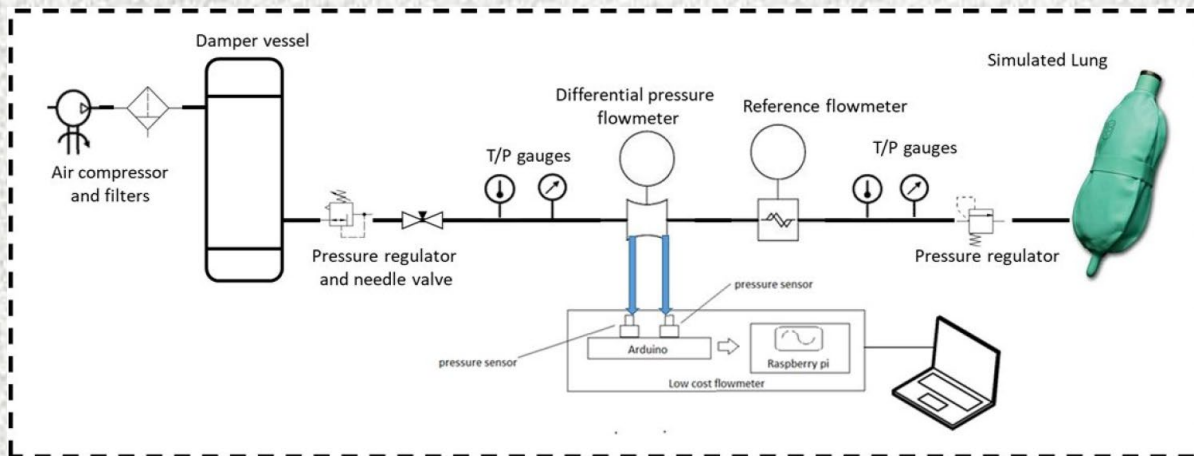
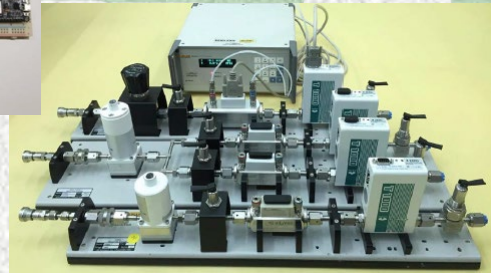
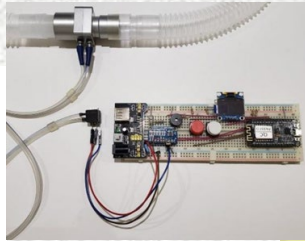
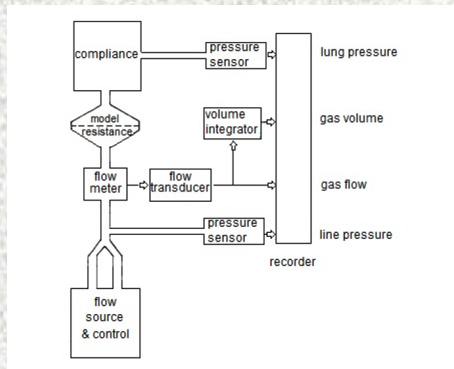
# SIM Members Responding

- CENAM (Mexico): measurement sensors in ventilator prototypes  
[https://www.bipm.org/utis/common/pdf/COVID-19-repository/CENAM\\_summary.pdf](https://www.bipm.org/utis/common/pdf/COVID-19-repository/CENAM_summary.pdf)
- INTI (Argentina): low cost alternative ventilators, temperature measurements textiles for PPE  
[https://www.bipm.org/utis/common/pdf/COVID-19-repository/INTI\\_summary.pdf](https://www.bipm.org/utis/common/pdf/COVID-19-repository/INTI_summary.pdf)
- INMETRO – supporting development of a pulmonary ventilators ventilator  
<https://www4.inmetro.gov.br/coronavirus>
- IBMETRO (Bolivia): mechanical respirators
- INEN (Ecuador): Infrared thermometers for clinical diagnosis  
[https://www.bipm.org/utis/common/pdf/COVID-19-repository/INEN\\_summary.pdf](https://www.bipm.org/utis/common/pdf/COVID-19-repository/INEN_summary.pdf)
- LACOMET (Costa Rica): 3-D printed masks, ventilator sanitizers.  
[https://www.bipm.org/utis/common/pdf/COVID-19-repository/LACOMET\\_summary.pdf](https://www.bipm.org/utis/common/pdf/COVID-19-repository/LACOMET_summary.pdf)
- NIST (USA): Testing & Modeling, Biological Measurements, Tech Transfer  
<https://www.nist.gov/coronavirus>
- NRC (Canada) Test bench for N95 respirators  
<https://nrc.canada.ca/en/corporate/nrc-covid-19-response>





# Development of Basic Metrology Infrastructure to Support Medical Test Equipment (Ventilators)



- Supported by the PTB
- Development of new metrological services (e.g., improved equipment quality and calibration services) adapted to the conditions of the region and addressing the COVID-19 crisis.
- Exchange and dissemination of experiences and knowledge among NMIs, industry, national health systems and secondary calibration laboratories in Latin American countries
- **Outputs**
  - Measurement of low gas flow and developing cheap low gas flow and volume standards
  - Development of low-cost mechanical ventilators (designed by national Latin American NMIs, produced by private companies or the government)
- **Goals**
  - Strengthening the Quality Infrastructure for healthcare in Latin America and the Caribbean Promote
  - Mutual acceptance of measurement results (specifically volume and flow measurements related to ventilators control)
  - Enhanced communication with the QSTF regarding status of the QMS during intra-RMO CMC review process
- **Project Coordination:**
  - MWG10 Flow and volume
  - Steering Committee: Hernán Brenta (INTI), Abel Morales (INACAL), Salvador Echeverría (CENAM), Claudia Santo (SIM), Franziska Kamm (PTB), Christian Goethner, and Javier Arias (CENAMEP)



# SIM Meetings of Interest



SIM Technical Committee  
Reconnection Interim (Virtual) Meeting/Reunión Provisional de Reconexión (virtual)  
DRAFT Agenda  
Friday, 22/05/2020: 13:00 ~ 18:00 UTC  
Zoom Link: <https://us02web.zoom.us/j/86964764550>

Friday, 22/05/2020

Viernes, 22/05/2020

13:00- Welcome to the interim TC meeting / Bienvenido de la reunión interina del TC

~13:30- Following up from last meeting, status of actions, pending actions / Seguimiento de la última reunión, estado de las acciones, acciones pendientes

- Updates of SIM Reference Document 05 ("SIM Procedure for Review of Calibration and Measurement Capabilities Submitted for Appendix C of the CIPM MRA /Actualizaciones del Documento de Referencia de la SIM 05 ("Procedimiento de la SIM para la Revisión de las Capacidades de Calibración y Medición presentado para el Apéndice C del MRA de CIPM")
  - o Should the MWGs review the relevant quality system? How? ¿Deberían los grupos de trabajo hacer revisan los sistemas de calidad relevante? ¿Cómo?
  - o Harmonization with KCDB 2.0/Armonización con el KCDB 2.0
- Reminder of request for funding proposals / Recordatorio de solicitud de propuestas de financiación
- Updates of SIM webpages (<http://www.sim-metrologia.org.br/>) and contributions from the MWGs /Actualizaciones de las páginas web de SIM y contribuciones de los grupos de trabajo.

~14:15- Updates from the Working Groups and status of activities during current pandemic / Actualizaciones de los grupos de trabajo y estado de las actividades durante la pandemia presente: Brief (5-10 minutes) comments including key changes (e.g., changes of chairmen), comparisons or other issues in each Group / Comentarios breves (5-10 minutos) incluyendo cambios clave (por ejemplo, cambios de presidentes), comparaciones u otros problemas en cada grupo.

~16:45- JCRB issues /Asuntos del JCRB

~17:15- Other Business; next meeting / Otros asuntos; próxima reunión

~17:30-End of meeting / final de la reunión

- Argentina will host SIM events on 24 April 2020
  - Meeting of the QSTF
  - Meeting of the TC (MWG 6 chairs)
  - Meeting of SIM Council
  - BIPM Course on the KCDB 2.0 (many speakers from SIM)
- Meeting of SIM Council (virtual) 28 April
- SIM Technical Committee meeting (virtual) 22 May
  - Included full (minus 1) TC membership, leadership from SIM
  - Members of QSTF
  - Extensive discussion on what the QSTF needs from the TC
- Meeting of MWG 3 (Thermometry) held virtually 20 July 2020 (focus on human temperature measurements)
- Planned virtual meeting of MWG 2 (Photometry and Radiometry) on 8 September 2020
- Exploratory virtual meeting on optical tachometers (MWG 5, Time and Frequency) hosted by NMI (Colombia) and with more than 25 participants on 2 October 2020
- Virtual meeting of CCTF (28-29 October 2020)
- MWG 5 virtual meeting (30 October 2020) on laboratory activity updates, with plans for monthly virtual meetings and a face to face in 2021



# Supporting the QSTF Leveraging Expertise for Review Confidence



To strengthen relationships with other organizations supporting Regional Quality Infrastructure, SIM President, with support of MWG 12 (Quality Systems) participates in COPANT (regional normalization body) and IAAC (regional accreditation body) General Assemblies

**CCPR** (Consultative Committee for Photometry and Radiometry; 3 SIM members and 1 SIM Observer)

**WG-SP** (Working Group on Strategic Planning) Chair: Maria Nadal (NIST)

**WG-CMC** (Working Group on Calibration and Measurement Capabilities) Chair: Marek Smid (CMI)

**WG-KC** (Working Group on Key Comparisons) Chair: Dong-Hoon Lee (KRISS)

- Joint workshops/meetings continue to provide opportunities for direct communication on new requirements and changes
  - Planned KCDB 2.0 training session for joint TC/QSTF (April) converted to on-line virtual sessions (September)
  - BIPM to hosted virtual (September) and SIM to follow up with Spanish-language training opportunities
- QSTF members participated in TC virtual meeting (May)
- Advantages to having technical expert advice on QS reviews
  - Input from the CC level
  - Guidance on the validity of technical relationships between comparisons and claims
- MWGs encouraged to communicate with the QSTF regarding status of the QMS during intra-RMO CMC review



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Thanks for your attention!!!

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iii Gracias por su atención !!!

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Obrigado pela atenção !!!

J. Salvador Echeverria Villagomez, CENAM Mexico  
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The logo for the Sistema Interamericano de Metrología (SIM) features a large, stylized green 'S' on the left and the letters 'I' and 'M' on the right, all in a light green color. The 'S' is thick and curved, while the 'I' and 'M' are blocky and upright.

SIM

SISTEMA  
INTERAMERICANO  
DE METROLOGÍA