

SIM TC Summary for 2021



	Economy	Institute (NM)	DI(s)
1	Canada	NRC	TCC
2	Mexico	CENAM	INEC, ININ
3	USA	NIST	NWIC-USRD
4	Antigua and Barbuda	ABBS	
5	Bahamas	BBSQ	
6	Barbados	BBSI	
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	St. Vincent and the Grenadines	SVGBS	
16	Trinidad and Tobago	TTBS	
17	Belize	BBS	
18	Costa Rica	LACOMET	ICE, RECOPE
19	El Salvador	CIM	
20	Guatemala	CENAME	
21	Honduras	COHM	
22	Nicaragua	LANAMET	MIFIC
23	Panama	CENAMEP	
24	Bolivia	IBMETRO	
25	Colombia	INM	
26	Ecuador	INEN	CMEC, SCAN
27	Peru	INACAL	
28	Argentina	INTI	CNEA
29	Brazil	INMETRO	LNIMRI/IRD, ON/DSHO
30	Chile	INM	COHEN, CESMEC, CISA, CODELCO, DICTUC S.A., ENEAR, IDIC, ISPOH, UDEC
31	Paraguay	INTN	
32	Uruguay	LATU	MIEM, UTE

* New since last update

SIM Technical Committee
Chair

J. Salvador Echeverria Villagomez
CENAM Mexico
saleche@cenam.mx

SIM Technical Committee
Vice-Chair

Lisa Karam NIST USA
lkaram@nist.org.mx

November 2021

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SIM Leadership

SIM Technical Committee Ratified by
SIM Council 28 June 2021

SIM Steering Council October 2021

President – Claire Saundry (NIST), claire.saundry@nist.gov

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

SIM Executive Secretary – Claudia Santo,
secretariat.sim.org@gmail.com

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

Project Coordinator – Javier Arias (CENAMEP), jarias@cenamep.org

QSTF Chair – Sally Bruce (NIST), sally.bruce@nist.gov

Technical Committee Chair – José Salvador Echeverria (CENAM),
saleche@cenam.mx

NORAMET Coordinator – Georgette Macdonald (NRC)

CAMET Coordinator – José Trejo (BBS)

ANDIMET Coordinator – José Dajes (INACAL)

SURAMET Coordinator – Daniel Volpe (LATU)

CARIMET Coordinator – Erica Caruth (TTBS)

MWG 1: Electricity and Magnetism
Chair: Felipe Hernández / CENAM / México * NEW
fhernandez@cenam.mx

MWG 3: Thermometry
Chair: Andrew Todd / NRC / Canada
andrew.todd@nrc-cnrc.ca
Vice Chair: Ciro Alberto Sánchez / INM / Colombia
csanchez@inm.gov.co

MWG 5: Time and Frequency
Chair: Diego Luna / INTI / Argentina * NEW
luna@inti.gov.ar
Vice Chair: Liz Hernández Forero / INM / Colombia
lhernandez@inm.gov.co * NEW

MWG 7: Mass & Related Quantities
Chair: Aldo Quiroga / INACAL / Peru
aquiroga@inacal.gob.pe

MWG 9: Acoustics, Ultrasound and Vibration
Chair: Gustavo Ripper / INMETRO / Brazil * NEW
gripper@inmetro.gov.br
Vice Chair: Akobulje Chijoke / NIST / USA * NEW
akobulje.chijoke@nist.gov

MWG 11: Legal Metrology
Chair: Pedro Pérez Vargas / SIC / Colombia
pperez@sic.gov.co
Vice Chair: Sandra Rodríguez Zuñiga / LACOMET / Costa Rica
srodriguez@lacomet.go.cr

MWG 13: Statistics and Uncertainty
Chair: Antonio Possolo / NIST / USA
antonio.possolo@nist.gov

MWG 2: Photometry and Radiometry
Chair: Thiago Menegotto / INMETRO / Brazil
tmenegotto@inmetro.gov.br
Vice Chair: Juan Pablo Bábaro / INTI / Argentina
jbabaro@inti.gov.ar

MWG 4: Length
Chair: Karina Bastida / INTI / Argentina
bastida@inti.gov.ar

MWG 6: Ionizing Radiation and Radioactivity
Chair: Raphael Galea / NRC / Canada
raphael.galea@nrc-cnrc.gc.ca
Vice Chair: Lizbeth Laureano-Pérez / NIST / USA
lizbeth.laureano-perez@nist.gov

MWG 8: Chemistry and Biology
Chair: Valnei Da Cunha / INMETRO / Brazil
vcunha@inmetro.gov.br
Vice Chair: Melina Pérez / CENAM / México
meperez@cenam.mx

MWG 10: Flow and Volume
Chair: Hernán Brenta / INTI / Argentina
hbrenta@inti.gov.ar
Vice Chair: Abel Morales / INACAL / Peru
amorales@inacal.gob.pe

MWG 12: Quality System
Chair: Elizabeth Ferreira / LATU / Uruguay
eferre@latu.org.uy
Vice Chair: Silvio dos Santos / INMETRO / Brazil
sfsantos@inmetro.gov.br

MWG 14: Metrology for Digital Transformation
Chair: Hugo Gasca Aragón / CENAM / México
hgasca@cenam.mx
Vice Chair: Diego Coppa / INTI / Argentina
dcoppa@inti.gov.ar

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TC Activities

Fulfilling RMO obligations under the CIPM MRA

"Active" (omitting continuous) SIM-Participant Comparisons (2021*)

Technical Field	Planned/ Protocol	Measurements		Reporting		
		In Progress	Completed	Draft A	Draft B	Published
Electricity and Magnetism	1/1	6				
Photometry and Radiometry	0/2	5	3		3	
Thermometry	3/1	2	2	3	4	
Length	1/1	4		2	1	
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	4/1	7		2	3	
Mass and Related Quantities	3/6	3	6	5	5	
Chemistry and Biology	1/5	2	1	7		
AUV	1/0	1		1	3	
Flow and Volume	3/1			1	4	
TOTAL ACTIVE SIM COMPARISONS	17/18	30	12	21	23	

CMCs Published Since March 2021*

Economies with Published CMCs (2021*)		Technical Area	# of CMCs Published Since 1 March 2021
Argentina	Ecuador	Electricity and Magnetism	--
Bolivia	Jamaica	Photometry and Radiometry	--
Brazil	Mexico	Thermometry	--
Canada	Panama	Length	--
CARICOM (Caribbean Community)	Paraguay	Time and Frequency	--
Chile	Peru	Ionizing Radiation and Radioactivity	--
Colombia	United States	Mass and Related Quantities	13
Costa Rica	Uruguay	Chemistry and Biology	28
		AUV	6
		Flow and Volume	3

*As found on KCDB August 2021

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SIM Comparisons More Than 5-Years Old From Last Date of Intended Measurement

Comparison ID	Area	Time of Measurements	Pilot Institute	KCDB October 2021
SIM.M.FF-S4	Mass (flow)	2006	CENAM	Report in progress, draft B
SIM.M.FF-S8	Mass (flow)	2014	CENAM/EP AIP	Report in progress, draft A
SIM.M.FF-S9	Mass (flow)	2016	CENAM	Protocol complete
SIM.M.F-S2	Mass (force)	2012	IDIC	Report in progress, draft A
SIM.M.F-S3	Mass (force)	2012-2013	NIST	Report in progress, draft B
SIM.M.M-S12	Mass (mass standards)	2012-2013	CESMEC	Report in progress, draft A
SIM.M.M-S6	Mass (mass standards)	2009	CESMEC	Report in progress, draft B
SIM.M.P-K1	Mass (pressure)	2008-2010	CENAM	APPROVED FOR EQUIVALENCE
SIM.M.P-K6	Mass (pressure)	2008-2011	CENAM	APPROVED FOR EQUIVALENCE
SIM.M.P-K6.1	Mass (pressure)	2011-2013	LACOMET	Report in progress, draft B
SIM.M.P-K7	Mass (pressure)	2001	CENAM	Report in progress, draft B
SIM.M.P-S2	Mass (pressure)	2009-2011	INMETRO	Measurements in progress
SIM.M.P-S8	Mass (pressure)	2012	LCPN - P	Planned
SIM.M.T-S1	Mass (torque)	2016	CENAM	Report in progress, draft B
SIM.QM-K1	Chemistry (organics)	2009	INMETRO	Report in progress, draft B
SIM.QM-S3	Chemistry (gases)	2012	NIST	Report in progress, draft A
SIM.QM-S4	Chemistry (gases)	2012	NIST	Report in progress, draft A
SIM.QM-S5	Chemistry (gases)	2015	NIST	Report in progress, draft A
SIM.QM-S6	Chemistry (gases)	2016	INMETRO	Protocol complete
SIM.T-S4	Thermometry (standard platinum resistance thermometers)	2008	LATU	Report in progress, draft B
SIM.T-S6	Thermometry (Type S thermocouples)	2012-2014	NIST	Report in progress, draft A

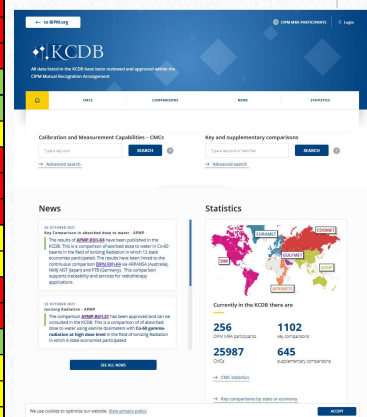
Status on KCDB

Changed since April 2021

Active but no change since April 2021

Inactive and no change since April 2021

(Final update expected by end of 2021)



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“Old” Comparisons Under Revision (Oct 2021)

To Be Resolved by End of 2021

SIM.M.FE-S8	VOLUME OF LIQUIDS 2014
Mass and related quantities	Fluid Flow Temperature <i>Report in progress, draft A</i> Supplementary Comparison
SIM.M.F-S2	CALIBRATION OF A FORCE TESTING MACHINE IN COMPRESSION 2012
Mass and related quantities	Force <i>Report in progress, draft A</i> Supplementary Comparison
SIM.M.F-S3	COMPARISON OF INSTRUMENTED CHARPY TESTS 2012 - 2013
Mass and related quantities	Force <i>Report in progress, draft B</i> Supplementary Comparison
SIM.M.M-S6	COMPARISON OF MASS STANDARDS 2009
Mass and related quantities	Mass Standards <i>Report in progress, draft B</i> Supplementary Comparison
SIM.M.M-S12	COMPARISON OF MASS STANDARDS 2012 - 2015
Mass and related quantities	Mass Standards <i>Report in progress, draft A</i> Supplementary Comparison
SIM.M.P-K7	PRESSURE MEASUREMENTS IN LIQUID (GAUGE MODE) 2001
Mass and related quantities	Pressure <i>Report in progress, draft B</i> Key Comparison

SIM.M.P-S2	PRESSURE MEASUREMENTS (GAUGE MODE) 2009 - 2011
Mass and related quantities	Pressure <i>Measurements in progress</i> Supplementary Comparison
SIM.M.P-S8	PRESSURE MEASUREMENTS (HYDRAULIC GAUGE PRESSURE) 2012
Mass and related quantities	Pressure Pressure medium: oil <i>Planned</i> Supplementary Comparison
SIM.QM-S3	METHANE IN AIR 2012
Chemistry and Biology	Gases <i>Report in progress, draft A</i> Supplementary Comparison
SIM.QM-S4	NITRIC OXIDE IN AIR 2012
Chemistry and Biology	Gases <i>Report in progress, draft A</i> Supplementary Comparison

Comparison ID	Area	Time of Measurements	Pilot Institute	KCDB October 2021
SIM.M.FE-S8	Mass (flow)	2014	CENAMEP AIP	Report in progress, draft A
SIM.M.F-S2	Mass (force)	2012	IDIC	Report in progress, draft A
SIM.M.F-S3	Mass (force)	2012-2013	NIST	Report in progress, draft B
SIM.M.M-S12	Mass (mass standards)	2012-2013	CESMEC	Report in progress, draft A
SIM.M.M-S6	Mass (mass standards)	2009	CESMEC	Report in progress, draft B
SIM.M.P-K7	Mass (pressure)	2001	CINAM	Report in progress, draft B
SIM.M.P-S2	Mass (pressure)	2009-2011	INMETRO	Measurements in progress
SIM.M.P-S8	Mass (pressure)	2012	LCPN -P	Planned
SIM.QM-S3	Chemistry (gases)	2012	NIST	Report in progress, draft A
SIM.QM-S4	Chemistry (gases)	2012	NIST	Report in progress, draft A

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Projects and Activities



Metrology Infrastructure:
“early-career metrologists”
competition (with the NCSLI)

IDB-SIM Project in Digital
Transformation: Metrology for DT
Supporting Health Services in Latin
American Countries

Virtual Meetings and News

- “Metrologists and Experts from America Share Experiences in the Fight Against a Worldwide Historical Pandemic Crisis,” multiple
- “Performing and Conducting Remote Assessments within SIM RMO”
- SIM Council
- “KCDB 2.0 at service of the SIM Region in Mass and Related Quantities”
- Metrology for Digital Transformation Days, multiple (monthly)
- “The Best Young Metrologist of COOMET” Competition
- World Metrology Day Celebration: Health-Related Activities in SIM, multiple
- Annual Meeting of the SIM Technical Committee
- M4DT-SIM Conference 2021
- Workshop for launching the “Implementation of new NMI services related to Digital Transformation” - IDB project
- MWG member meetings, multiple
- SIM Week (virtual) 10-12 Nov 2021
- **UPCOMING BIPM-SIM Training Course (KCDB 2.0) (postponed from 2020) at next in-person SIM meeting**

KCDB 2.0

CBKT: BIPM-SIM TRAINING COURSE

BIPM Capacity Building & Knowledge Transfer Programme

PROGRAMME HIGHLIGHTS

- CIPM MRA requirements
- Demonstration of the KCDB platform facilities
- Interactive exercises using the KCDB Platform
- Case study: CCG approaches on OMCs and comparisons
- Case study: SIM WG experiences on sharing the workload
- Case study: Experience of piloting comparisons
- Case study: SIM WG Chair experience of a OMC review

WHEN
20 MAY 2021
DURATION: 2.5 days

VENUE
XXXXXX
YYYYYYYY

PARTICIPATION
SIM WG Chairs and WG members are welcome.

CONTACT:
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WWW.BIPM.ORG/KCDB/

All dates listed in the KCDB have been reviewed and approved within the CIPM Mutual Recognition Arrangement



SIM/COPANT/IAAC/OAS-PTB Project
(Circular Economy): Leveraging
CABUREK (CApacity Building Using
Regional Exchange of Knowledge)
workshop (June 2021)

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NIST Grant Support

- Original proposal awarded pre-pandemic
- Call for modification (since in-person activities stopped for >19 months)
- Several proposals (comparisons, development of calibration methods) submitted to justify modification
- For 2021-2022, ~US\$ 35,500 available
 - US\$ 4,000 for translation services for virtual meetings/workshops
 - US\$ 25,500 distributed (comparisons in chemistry and ionizing radiation, calibration methods in digital accelerometry)
 - US\$ 6,000 in reserve

Name of Project	Participating NMIs
Developing the Capability within SIM for Calibration of Triaxial Digital Accelerometers	CENAM-INMETRO (collaborating with NIST)
SIM.QM-SXX Supplementary Comparison on elements in copper concentrate and ore	CENAM-INMETRO-INTI-CODELCO/INN-INACAL (with JSI, NMISA, NIS)
SIM-SIRTI Development	LMNRI/IRD-NRC-NIST
SIM.RI(II)-K2.Zn-65 Key Comparison of Zn-65 Activity	LMNRI/IRD-CNEA-ININ-NIST-NRC (with BARC, BFKH, CIEMAT, FTMC, POLATOM, SMU, VINS)
SIM.RI(I).S3 Supplementary Comparison in Dosimetry	ININ (1 st time pilot)-NRC-NIST-others

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From the JCRB Meeting



API KCDB for CMCs

Status of 17 March 2021

Susanne Picard

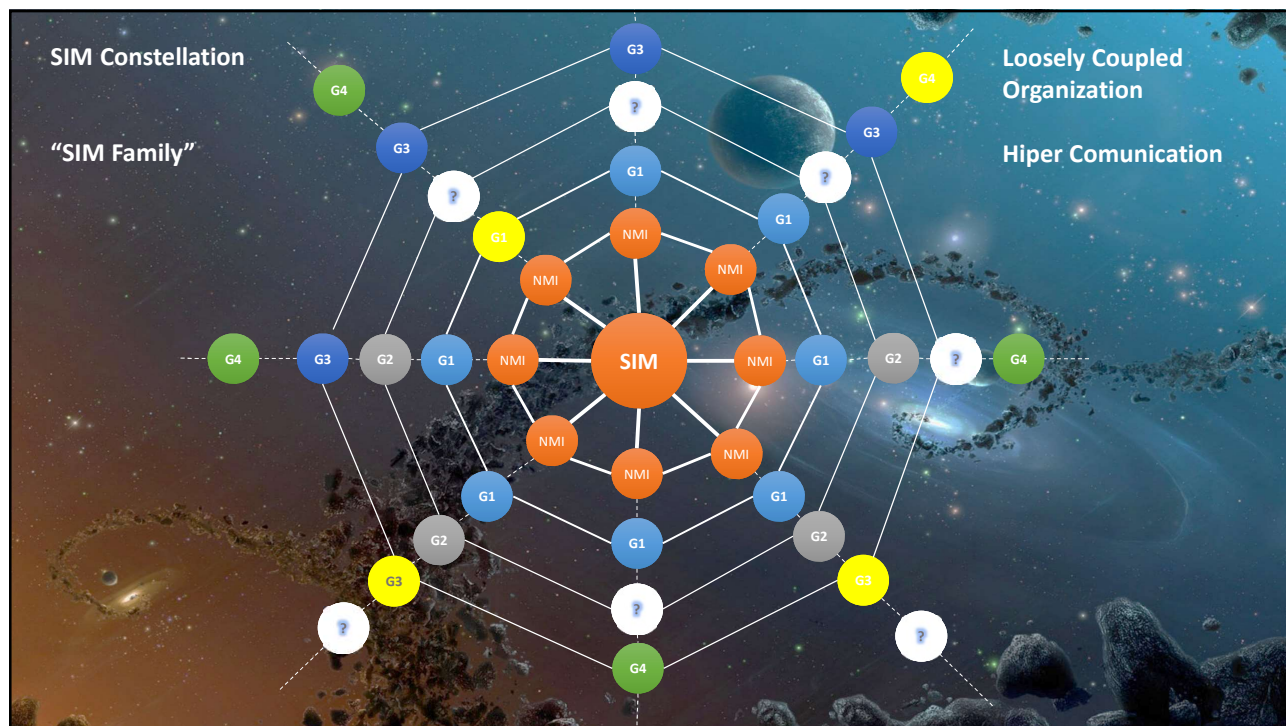
KCDB Office – International Liaison and Communication Department

 Bureau
 International des
 Poids et
 Mesures

43rd meeting held virtually 15-17 March 2021

- Discussions on possible Actions (finalization expected in next few weeks)
 - Contact persons to exchange information on digital transformation
 - Changes to CIPM MRA-P-11 (on the CIPM MRA) and CIPM MRA-G-13 (on CMCs) needed (nothing major)
 - Ad hoc task groups to propose changes to CIPM MRA-G-11 (on comparisons) and CIPM MRA-G-12 (quality management systems)
- Closure of “old” JCRB CMC website once last CMC (EURAMET.RI.32.20) is finalized
- Due to on-going pandemic, RMO-approved quality management systems to continue validity one year more; to be revisited at the 44th meeting at end of 2021 (likely virtual)
- Updates on improvements to KCDB platform

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