



SIM MWG-9 WORKSHOP AND MEETING

8-10 November, 2017

Rio de Janeiro, Brasil

Venue: INMETRO

Address: Av. Nossa Senhora das Graças 50, Xerém, Duque de Caxias, Rio de Janeiro 25250-020, Brazil

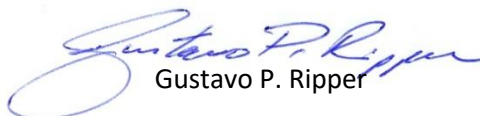
Schedule: from 9h to 16h30min, 8 to 10 November 2017

The activities to be developed during this event will include:

1. Awareness sessions about outcomes of recent CCAUV, IMEKO, ISO and IEC meetings
2. Workshop about CMCs in AUV
3. Technical presentations given by each NMI
4. Technical visit to AUV laboratories of INMETRO and discussion about calibration systems
5. SIM MWG-9 Annual Meeting

The detailed draft Agenda is in the following pages.

Best Regards,



Gustavo P. Ripper



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Table 1 – Recipients to the convocation for the SIM MWG-9 workshop and annual meeting

REPRESENTATIVE	INSTITUTION (NMI OR DI)	E-MAIL	Country
Gustavo Palmeira Ripper	INMETRO	"Gustavo P. Ripper" <gripper@inmetro.gov.br>	Brazil
Michael Gaitan	NIST	"Gaitan, Michael (Fed)" <michael.gaitan@nist.gov>	USA
Lixue Wu	NRC	"Dr Lixue Wu" <lixue.wu@nrc-cnrc.gc.ca>	Canada
Andrés Pérez Matsumoto	CENAM	"Andrés Pérez M" <eperez@cenam.mx>	Mexico
Federico Serrano	INTI	"Federico Serrano" <fserrano@inti.gob.ar>	Argentina
Henry Diaz / Luis Palma	INACAL	"Henry Diaz" <hdiaz@inacal.gob.pe>; "Luis Palma" <lpalma@inacal.gob.pe>	Peru
Adrian Solano Mena	LACOMET	"Adrian Solano Mena" <asolano@lacomet.go.cr>	Costa Rica
Nelson Bahámon Cortés	INM - Colombia	"Nelson Bahámon Cortés" <nbahamon@inm.gov.co>	Colombia
Franklin David Espejo Alcazar	IBMETRO	"Franklin David Espejo Alcazar" <fespejo@ibmetro.gob.bo>	Bolivia

Henry Diaz from INACAL/Peru and Franklin David Espejo Alcazar from IBMETRO/Bolivia informed that they can not participate in the events.

Table 2 – Participants of the SIM MWG-9 workshop and annual meeting

Participant	INSTITUTION	E-MAIL	Country
Humberto S. Brandi	INMETRO	Humberto S Brandi <hsbrandi@inmetro.gov.br>	Brazil
Gustavo Palmeira Ripper	INMETRO	"Gustavo P. Ripper" <gpripper@inmetro.gov.br>	Brazil
Bibiana Serna Salazar	OAS	"Serna, Bibiana" <BSerna@oas.org>	USA
Jessica Ribeiro	INMETRO	Jessica S Ribeiro <jsribeiro@colaborador.inmetro.gov.br>	Brazil
Lixue Wu	NRC	"Dr Lixue Wu" <lixue.wu@nrc-cnrc.gc.ca>	Canada
Richard Allen	NIST	"Allen, Richard A. (Fed)" <richard.allen@nist.gov>	USA
Andrés Pérez Matsumoto	CENAM	"Andrés Pérez M" <eperez@cenam.mx>	Mexico
Federico Serrano	INTI	"Federico Serrano" <fserrano@inti.gob.ar>	Argentina
Adrian Solano Mena	LACOMET	"Adrian Solano Mena" <asolano@lacomet.go.cr>	Costa Rica
Ronaldo da Silva Dias (head of Lavib)	INMETRO	"Ronaldo S. Dias" <rsdias@inmetro.gov.br>	Brazil
Giancarlo B. Micheli (deputy head of Lavib)	INMETRO	"Giancarlo B. Micheli" <gbmicheli@inmetro.gov.br>	Brazil
Rodrigo P.B. Costa-Felix (head of Labus)	INMETRO	"Rodrigo P.B. Costa-Felix" <rpfelix@inmetro.gov.br>	Brazil
Andre V Alvarenga (deputy head of Labus)	INMETRO	"Andre V Alvarenga" <avalvarenga@inmetro.gov.br>	Brazil
Everande Gobira (Labus)	INMETRO	Everande Gobira <egobira@inmetro.gov.br>	Brazil
Nelson M. do Espírito Santo (deputy head of Laeta)	INMETRO	"Nelson Mello do Espírito Santo" <nelson@inmetro.gov.br>	Brazil
Thiago A. B. Milhomem (Laeta)	INMETRO	"Thiago Antônio B. Milhomem" <tbmilhomem@inmetro.gov.br>	Brazil

Ricardo Luis D'Avila Villela (deputy head of Laena)	INMETRO	"Ricardo L Villela" <rlvillela@inmetro.gov.br>	Brazil
Silvio F Santos	INMETRO	Silvio F Santos <sfsantos@inmetro.gov.br>	Brazil

Zemar M. D. Soares (head of Laeta, Electroacoustics Laboratory) and Paulo M. Massarani (head of Laena, Acoustics testing laboratory) will not be able to attend the workshop because will be participating in other activities at INMETRO. Dr. M. Gaitan sent apologies for not attending the event due to health related problems.

Schedule of SIM MWG-9 Workshop and Meeting

	Wednesday, 08/November/2017
08:30 - 10:30	Workshop
10:30 - 10:45	Coffee Break
10:45 - 12:00	Workshop
12:00 - 13:00	Lunch Break
13:00 - 14:30	Workshop
14:30 - 14:45	Coffee Break
14:45 - 16:30	Workshop

	Thursday, 09/November/2017
08:30 - 10:30	Workshop
10:30 - 10:45	Coffee Break
10:45 - 12:00	Workshop
12:00 - 13:00	Lunch Break
13:00 - 16:15	Visit to laboratories
16:15 - 16:30	Coffee Break

	Friday, 10/November/2017
08:30 - 10:30	Meeting
10:30 - 10:45	Coffee Break
10:45 - 12:00	Meeting
12:00 - 13:00	Lunch Break
13:00 - 14:30	Meeting
14:30 - 14:45	Coffee Break
14:45 - 16:30	Meeting

1st day – 8 November 2017 – Workshop / Awareness session 1:

1. Opening of activities, welcome to participants ([OPENNING](#))
2. Self-presentation of participants / definition of expectations from participants
3. Review of current SIM MWG-9 status by chairman (members, participation in reviews, level of activity, etc.) ([STATUS SIM MWG9](#))
4. Presentation of M4SET Project by Bibiana Serna ([M4SET-INMETRO](#))
5. Technical presentation about the current status and recent developments of the NMIs (15 min per each participant + time for discussions) ([BRAZIL](#), [MEXICO](#), [ARGENTINA](#))
6. Discussion about regional demands for metrological services in AUV
7. [Discussion about local demands to support emerging technologies as for instance Wind Power generation and MEMs](#)
 - 2a- [Acoustics measurements in low frequencies and infrasound](#)
 - 2b- [Low-frequency vibration calibrations](#)
8. Outcomes of the [11th CCAUV meeting](#) and its WGs ([RMO](#), [SP](#) and [KC](#))
9. Outcomes of recent [IMEKO](#), [ISO](#) and [IEC](#) meetings

2nd day – 9 November 2017 – Workshop / Awareness session 2 (morning):

10. [Workshop and awareness session about CMCs in AUV:](#)
 - a) Needs for new entries and improvement of currently published CMCs (List should be more inclusive)
 - b) [List of services](#) (possible updates in 2017)

Vibration - Inclusion of signal conditioner for vibration transducers

The list was expanded following a harmonized structure with greyed out services that are not available yet. Dynamic force related services will be submitted to the Force group of CCM for their approval.

Sound in air – it was accepted to include the service category item “electrostatic actuator normalised response” being greyed out (not available for immediate use, but possible future use).

Sound in Water and Ultrasound – Stephen Robinson from NPL will submit a proposal of revision

- c) Key and supplementary comparisons to support CMCs
- d) Intra- and inter-regional review process
 - Intra-regional review: [QSTF – QMS approval] plus [MWG-9 – Technical approval]

- Inter-regional review: Format and technical issues
- e) Future changes of CMCs by SIM members
- f) Greyed-out CMCs / Reinstatement of CMCs
 - CENAM experienced this situation recently
- g) SIM REFERENCE DOCUMENT Nº 05 - SIM Procedure for Review of Calibration and Measurement Capabilities
 - Guidance document is currently under review by MWG chairs and TC chair (request from Sally Bruce from NIST / SIM QSTF)
- h) KCDB 2.0 – New platform for intra- and interregional review of CMCs is being developed by the BIPM
- i) Review of SI units used in AUV CMCs – request from CCAUV president to RMO TC chairs in order to harmonize presentation format

2nd day – 9 November 2017 – Visit to AUV Laboratories (afternoon):

11. Technical visits to the AUV laboratories of INMETRO and discussion about calibration and measurement systems

Building 1:

- Vibration laboratory,
- Electroacoustics laboratory,
- Acoustics testing laboratory (anechoic chamber and reverberation chamber),
- Ultrasound laboratory,

Building 3:

- Vibration laboratory.

3rd day – 10 November 2017 – SIM MWG-9 meeting:

- 1) Opening of SIM MWG-9 meeting
- 2) Self-presentation of participants / definition of expectations from participants
- 3) Appointment of rapporteur
- 4) Approval of agenda
- 5) Topics for discussion:
 - a) SIM TC meetings:
 - [Montevideo/2016](#),
 - [Rio de Janeiro/2017](#).

- b) SIM GA in October 2017
 - approval of new TC chair - James Olthoff from NIST
 - approval of new PDC chair – Rodrigo P B Costa-Félix from INMETRO

- c) Review of current status of SIM MWG-9

SIM NMIs, with published CMCs: NRC, NIST, CENAM, INMETRO and INTI

Currently published CMCs need update?

- d) Review of CMCs – Format and Technical content are both important
- e) Change of ISO 17025
 - SIM is currently elaborating a policy and transition plan to be followed by the SIM members. This will impact on future submissions and reapproval of NMIs' QMS carried out by SIM/QSTF in 2018.
 - Presentation of Transition Plan by Silvio Francisco dos Santos from INMETRO
- f) Future on-site Peer reviews, reports to SIM QSTF
- g) Interlaboratory comparisons

SIM NMIs, members of CCAUV: NRC, NIST, CENAM and INMETRO

- ✓ SIM key and supplementary comparisons – need to increase activity within SIM
 - SIM Key comparisons for linking to recent CIPM KCs (Acoustics and Vibration)
 - SIM supplementary comparisons to address its individual needs
 - Future CIPM key comparisons
 - number of participants per RMO is limited
 - participation of SIM members (criteria: link, scope, uncertainty)
 - Review of results obtained by participants in interlaboratory comparisons (responsibility of the NMI and of its RMO)
- h) Technical cooperation within SIM members
 - Training, internships
 - Pilot studies / informal comparisons
- i) SIM projects

SIM workshop - Precursor of a SIM peer reviewer's school – beginning of 2018, 3 members from each WG

- j) Future MWG-9 activities



k) Other Issues

NCSLi

l) Chairman of MWG-9

m) Next meeting

n) Closing of meeting



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