

# Directory of Consultative Committees created by the CIPM



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Bureau international des poids et mesures



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## **Introduction**

The International Committee for Weights and Measures (CIPM) has ten Consultative Committees.

- Consultative Committee for Electricity and Magnetism (CCEM)<sup>\*</sup>
- Consultative Committee for Photometry and Radiometry (CCPR)
- Consultative Committee for Thermometry (CCT)
- Consultative Committee for Length (CCL)
- Consultative Committee for Time and Frequency (CCTF)
- Consultative Committee for Ionizing Radiation (CCRI)
- Consultative Committee for Units (CCU)
- Consultative Committee for Mass and Related Quantities (CCM)
- Consultative Committee for Amount of Substance: metrology in chemistry (CCQM)
- Consultative Committee for Acoustics, Ultrasound and Vibration (CCAUV)

The broad remit of each Committee is to advise the CIPM on matters related to its particular field of metrology.

This Directory gives a brief description of the current activities of each of these Committees, lists the members and the names and addresses of the participants, details the membership and tasks of working groups. The structure of the working groups differs from committee to committee depending on the nature of the work to be done. For example, in some working groups the members are laboratories while in others members are named individuals; some working groups are long standing and relatively formal, such as the CCEM Working Group on Radiofrequency Quantities. Others are set up for a particular task, such as running an international comparison or preparing a monograph, and are dissolved as soon as the work is completed. This is normal and no attempt is made to impose rules on how working groups should be established other than to require that the work be done in the simplest and most efficient way. At the end of this Directory is a list of the acronyms and full names and addresses of institutes and organizations around the world that participate in the work of the Consultative Committees.

The CIPM has asked all Consultative Committees to establish working groups to deal with the relevant operational aspects of the CIPM MRA. The CIPM also asked Consultative Committees to establish working groups on strategy. More details can be found in the document “Rules of procedure for the Consultative Committees (CCs) created by the CIPM, CC working groups and CC workshop” at <http://www.bipm.org>.

The purpose of this Directory is to make available a concise list of contact points for each Consultative Committee over the whole range of its activities and to identify the BIPM contact in each field. The printed version of this Directory is revised at the beginning of each year and an up to date version is maintained on the BIPM home page: <http://www.bipm.org> which also contains the text of the CIPM MRA and the BIPM key comparison database.

BIPM

December 2009

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\* Here and elsewhere in this document the acronyms come from the French names of the Committees.

## **Criteria for membership of the Consultative Committees of the CIPM**

On :

[www.bipm.org/en/committees/cc/cc\\_criteria](http://www.bipm.org/en/committees/cc/cc_criteria)

And note the special case of the Consultative Committee for Units at:

[www.bipm.org/en/committees/cc/ccu\\_criteria](http://www.bipm.org/en/committees/cc/ccu_criteria)

In general, the national metrology institute of each Member State of the Metre Convention wishing to participate can expect to be a member or, if they do not fulfil the criteria, an observer of at least one Consultative Committee.

Applications for Membership or Observer status should be sent to the Director of the BIPM or to the President of the Consultative Committee.

The Presidents of Consultative Committees may from time to time invite guests to meetings, including representatives of appropriate laboratories that are not yet members.

**Consultative Committee for Electricity and Magnetism (CCEM)****Created in 1927**

*Present activities concern practical realizations of the SI volt, ohm, ampere and watt, laboratory reference standards of the volt and the ohm based upon the Josephson and quantum-Hall effects, capacitance standards and ac/dc measurements, RF and microwave standards and advice to the CIPM on matters related to electrical standards.*

**President:** **Dr Barry D. Inglis**  
 National Measurement Institute, Australia  
 Department of Industry, Tourism and Resources  
 P.O. Box 264  
 NSW 2070, West Lindfield  
 Australia  
 Tel: +61 2 8467 3650  
 Fax: +61 2 8467 3655  
 E-mail: barry.inglis@measurement.gov.au or bkinglis@bigpond.com

**Executive Secretary:** **Dr Michael Stock, BIPM**  
 Tel: + 33 1 45 07 70 24  
 Fax: + 33 1 45 07 62 62  
 E-mail: mstock@bipm.org

**Members:**

Agency for Sciences Technology and Research [NMC-A\*STAR], Singapore  
 Centre for Metrology and Accreditation [MIKES], Espoo  
 D.I. Mendeleev Institute for Metrology, Rostekhregulirovaniye of Russia [VNIIM], St Petersburg  
 Federal Office of Metrology [METAS], Bern-Wabern  
 Istituto Nazionale di Ricerca Metrologica [I.N.RI.M], Torino  
 Justervesenet [JV], Kjeller  
 Korea Research Institute of Standards and Science [KRISS], Daejeon  
 Laboratoire National de Métrologie et d'Essais [LNE], Paris  
 Measurement Standards Laboratory of New Zealand [MSL], Lower Hutt  
 Nacional Institute of Metrology, Standardization and Industrial Quality [INMETRO], Rio de Janeiro  
 National Institute of Metrology [NIM], Beijing  
 National Institute of Standards and Technology [NIST], Gaithersburg  
 National Measurement Institute, Australia [NMIA], Lindfield  
 National Metrology Institute of Japan, [NMIJ/AIST], Tsukuba  
 National Metrology Institute of South Africa [NMISA], Pretoria  
 National Physical Laboratory [NPL], Teddington  
 National Physical Laboratory of India [NPLI], New Delhi  
 National Research Council of Canada [NRC-INMS], Ottawa  
 Physikalisch-Technische Bundesanstalt [PTB], Braunschweig  
 Technical Research Institute of Sweden [SP], Borås  
 The Director of the International Bureau of Weights and Measures [BIPM], Sèvres  
 VSL [VSL], Delft

**Observers:**

Centro Español de Metrología [CEM], Madrid  
 Czech Metrology Institute [CMI], Prague  
 Instituto Nacional de Tecnología Industrial [INTI], Buenos Aires  
 National Metrology Institute of Turkey [UME], Gebze-Kocaeli

**Attendees to the last meeting (March 2011)****President: Dr Barry D. Inglis****Delegates and experts of member laboratories:****Mr Saood Ahmad, NPLI**

Tel: + 91 11 456 093 12  
 E-mail: ahmads@nplindia.ernet.in

**Dr Ilya Budovsky, NMIA**

Tel : + 61 2 8467 3541  
 Fax : + 61 2 8467 3783  
 E-mail : ilya.budovsky@measurement.gov.au

**Dr Laurie Christian, MSL**

Tel: + 64 4 931 3110  
 Fax: + 64 4 931 3194  
 E-mail: l.christian@irl.cri.nz

**Mr Erik Dressler, NMISA**

Tel: + 27 12 841 4152  
 Fax: + 27 12 841 4458 or 2131  
 E-mail: redressler@nmisa.org

**Dr Randolph E. Elmquist, NIST**

Tel: +301 975 6591  
 Fax: +301 926 3972  
 E-mail: Randolph.elmquist@nist.gov

**Mr QiuLai Gao, NIM**

Tel: + 86 10 6452 5218  
 Fax: + 86 10 6429 2353  
 E-mail: gaoql@nim.ac.cn

**Dr Gérard Genevès, LNE**

Tel: + 33 1 30 69 21 62  
 Fax: + 33 1 30 16 28 41  
 E-mail: gerard.geneves.@lne.fr

**Dr Gleb B. Gubler, VNIIM**

Tel : +7 812 251 7444  
 Fax : +7 812 113 0114  
 E-mail : g.b.gubler@vniim.ru

**Dr Dave Inglis, NRC-INMS**

Tel: + 1 613 991 5650  
 Fax: + 1 613 952 1394  
 E-mail: dave.inglis@nrc-cnrc.gc.ca

**Dr Beat Jeckelmann, METAS**

Tel: + 41 31 323 3297  
 Fax: + 41 31 323 3210  
 E-mail: beat.jeckelmann@metas.ch

**Dr Tao Jing, A\*STAR**

Tel: + 65 6279 1911  
 Fax: + 65 6279 1995  
 E-mail: jing\_tao@nmc.a-star.edu.sg

**Dr Nobu-hisa Kaneko, NMIJ/AIST**

Tel: + 81 298 61 5136  
 Fax: + 81 298 61 3469  
 E-mail: nobuhisa.kaneko@aist.go.jp

**Dr Tae-Weon Kang, KRISS**

Tel: + 82 42 868 5175  
 Fax: + 82 42 868 5018  
 E-mail: twkang@kriss.re.kr

**Dr Alexander S. Katkov, VNIIM**

Tel: +7 812 323 9619  
 Fax: +7 812 113 0114  
 E-mail: a.s.katkov@vniim.ru

**Dr Kyu-Tae Kim, KRISS**

Tel: + 82 42 868 5157  
 Fax: + 82 42 868 5018  
 E-mail: ktkim@kriss.re.kr

**Dr Koji Komiyama, NMIJ/AIST**

Tel: + 81 29 861 5637  
 Fax: + 81 29 861 4289  
 E-mail: koji.komiyama@aist.go.jp

**Dr Gregory Kyriazis**, INMETRO  
 Tel: + 55 21 2679 1627  
 Fax: + 55 21 2679 1627  
 E-mail: gakyriazis@inmetro.gov.br

**Dr Vincenzo Lacquaniti**, I.N.RI.M  
 Tel: + 39 011 3919  
 Fax: + 39 011 346 384  
 E-mail: v.lacquaniti@inrim.it

**Dr Kåre Lind**, JV  
 Tel: + 47 64 84 84 84  
 Fax: + 47 64 84 84 85  
 E-mail: kli@justervesenet.no

**Dr Antti Manninen**, MIKES  
 Tel: + 358 10 6054 416  
 Fax: +358 10 6054 498  
 E-mail: antti.manninen@mikes.fi

**Dr Jürgen Melcher**, PTB  
 Tel: + 49 531 592 2100  
 Fax: + 49 531 592 2105  
 E-mail: juergen.melcher@ptb.de

**Dr James K. Olthoff**, NIST  
 Tel: + 1 301 975 2220  
 Fax: + 1 301 975 4091  
 E-mail: james.olthoff@nist.gov

**Dr François Piquemal**, LNE  
 Tel: + 33 1 30 69 21 73  
 Fax: + 33 1 30 69 12 34  
 E-mail: francois.piquemal@lne.fr

**Ing. Umberto Pogliano**, I.N.RI.M  
 Tel: + 39 011 3919 433  
 Fax: + 39 011 346 384  
 E-mail: u.pogliano@inrim.it

**Mr Flippie Prinsloo**, NMISA  
 Tel: +27 12 841 3013  
 Fax: + 27 12 841 2131  
 E-mail: fprinsloo@nmisa.org

**Prof. He Qing**, NIM  
 Tel: + 86 10 6452 4501  
 Fax: + 86 10 6421 8703  
 E-mail: heqing@nim.ac.cn

**Dr James Randa**, NIST  
 Tel: + 1 303 497 3150  
 Fax: + 1 303 497 3970  
 E-mail: randa@boulder.nist.gov

**Dr Gert Rietveld**, VSL  
 Tel: + 31 15 269 1645  
 Fax: + 31 15 261 2971  
 E-mail: grietveld@vsl.nl

**Dr Ian A. Robinson**, NPL  
 Tel: + 44 208 943 7139  
 E-mail: ian.robinson@npl.co.uk

**Mr Karl-Erik Rydler**, SP  
 Tel: + 46 33 16 54 01  
 Fax: + 46 33 12 50 38  
 E-mail: karlerik.rydler@sp.se

**Dr Yury P. Semenov**, VNIIM  
 Tel: + 7 812 323 9621  
 Fax: + 7 812 113 0114  
 E-mail: y.p.semenov@vniim.ru

**Dr Yoho Shimada**, NMIIJ/AIST  
 Tel: + 81 29 861 6835  
 Fax: + 81 29 861 4289  
 E-mail: yozo.shimada@aist.go.jp

**Dr Uwe Siegner**, PTB  
 Tel: + 49 351 592 2010  
 Fax: + 49 351 592 2015  
 E-mail: uwe.siegner@ptb.de

**Mr Shravan Singh**, NMISA  
 Tel: +27 12 841 3325  
 Fax: + 27 12 841 4458  
 E-mail: shravan@nmisa.org

**Dr Alan G. Steele**, NRC-INMS  
 Tel: + 1 613 993 9384  
 Fax: + 1 613 990 6439  
 E-mail: alan.steele@nrc-cnrc.gc.ca

**Mr Jonathan Williams**, NPL  
 Tel: + 44 208 943 6376  
 Fax: + 44 208 943 7138  
 E-mail: jonathan.williams@npl.co.uk

**Dr Barry Wood**, NRC-INMS  
 Tel: + 1 613 990 9225  
 Fax: + 1 613 952 1394  
 E-mail: Barry.wood@nrc-cnrc.gc.ca

**Observers:**

**Mr Yakup GÜLMEZ, UME**

Tel: + 90 262 679 5000

Fax: + 90 262 679 5001

E-mail: [yakup.gulmez@ume.tubitak.gov.tr](mailto:yakup.gulmez@ume.tubitak.gov.tr)

**Mr Miguel Neira, CEM**

Tel: + 34 91 807 4715

Fax: + 34 91 807 4807

E-mail: [mneirar@cem.mityc.es](mailto:mneirar@cem.mityc.es)

**Dr Hector Laiz, INTI**

Tel: + 54 11 4724 6413

Fax: + 54 11 4724 6244

E-mail: [laiz@inti.gob.ar](mailto:laiz@inti.gob.ar)

**Mr Jiri Streit, CMI**

Tel: + 420 545 555 208

Fax: + 420 545 555 183

E-mail: [jstreich@cmi.cz](mailto:jstreich@cmi.cz)

**Invited by the President:**

**Dr Thomas J. Witt, c/o BIPM**

E-mail: [thomasjwitt@gmail.com](mailto:thomasjwitt@gmail.com)

**Dr Bernd Ittermann, PTB**

E-mail: [bernd.ittermann@ptb.de](mailto:bernd.ittermann@ptb.de)

## CCEM Working Group on Radiofrequency Quantities (GT-RF)

**Chairman:**

**Dr James Randa**, NIST

Tel: + 1 303 497 3150

Fax: + 1 303 497 3970

E-mail: randa@boulder.nist.gov

**Members:**

Institute for Physical-Technical and Radiotechnical Measurements, Rostekhregulirovaniye of Russia [VNIIFTRI], Moscow

International Union of Radio Science, [URSI]

Istituto Nazionale di Ricerca Metrologica [I.N.R.I.M], Torino

Korea Research Institute of Standards and Science [KRISS], Daejeon

Laboratoire national de métrologie et d'essais [LNE], Paris

National Institute of Metrology [NIM], Beijing

National Institute of Standards and Technology [NIST], Gaithersburg

National Metrology Centre [NME-A\*STAR], Singapore

National Measurement Institute, Australia [NMIA], Lindfield

National Metrology Institute of Japan, [NMIJ/AIST], Tsukuba

National Metrology Institute of South Africa [NMISA], Pretoria

National Physical Laboratory [NPL], Teddington

National Research Council of Canada [NRC-INMS], Ottawa

Physikalisch-Technische Bundesanstalt [PTB], Braunschweig

Federal Office of Metrology [METAS], Bern-Wabern

Mr Luc Erard, [LNE, former chairman of GT-RF]

The Director of the International Bureau of Weights and Measures [BIPM], Sèvres

VSL [VSL], Delft

### Delegates and experts of member laboratories (March 2011)

**Chairman: Dr James Randa, NIST**

**Dr Saood Ahmad**, NPLI

Tel: + 91 11 456 093 12

E-mail: ahmads@nplindia.ernet.in

**Dr Djamel Allal**, LNE

Tel: + 33 1 30 69 21 50

Fax: + 33 1 30 69 12 34

E-mail: djamel.allal@lne.fr

**Dr Ilya Budovsky**, NMIA

Tel : + 61 2 8467 3541

Fax : + 61 2 8467 3783

E-mail : ilya.budovsky@measurement.gov.au

**Dr Luciano Brunetti**, I.N.R.I.M

Tel: + 39 011 391 9323

Fax: + 39 011 346 384 or 391 9259

E-mail: l.brunetti@inrim.it

**Dr Laurie Christian**, MSL

Tel: + 64 4 931 3110

Fax: + 64 4 931 3194

E-mail: l.christian@irl.cri.nz

**Mr Erik Dressler**, NMISA  
Tel: + 27 12 841 4152  
Fax: + 27 12 841 2131  
E-mail: redressler@nmisa.org

**Mr Luc Erard**, CIPM Member  
Tel: +33 1 40 43 40 52  
Fax: +33 1 40 43 37 37  
E-mail: luc.erard@lne.fr

**Mr QiuLai Gao**, NIM  
Tel: + 86 10 64 218 565  
Fax: + 86 10 64 218 703  
E-mail: gaoql@nim.ac.cn

**Mr David Gentle**, NPL  
E-mail: david.gentle@npl.co.uk

**Dr Yakup Gümez**, UME  
Tel: + 90 262 679 5000  
Fax: + 90 262 679 5001  
E-mail: yakup.gulmez@ume.tubitak.gov.tr

**Dr Barry D. Inglis**, NMIA, CCEM President  
Tel: + 61 2 8467 3650  
Fax: + 61 2 8467 3655  
E-mail: barry.inglis@measurement.gov.au

**Dr Rolf Judaschke**, PTB  
Tel: + 49 531 592 2229  
Fax: + 49 531 592 2228  
E-mail: rolf.judaschke@ptb.de

**Dr Nobu-hisa Kaneko**, NMIJ/AIST  
Tel: + 81 298 61 5136  
Fax: + 81 298 61 3469  
E-mail: nobuhisa.kaneko@aist.go.jp

**Dr Tae-Weon Kang**, KRISS  
Tel: + 82 42 868 5175  
Fax: + 82 42 868 5018  
E-mail: twkang@kriss.re.kr

**Dr Kyu-Tae Kim**, KRISS  
Tel: + 82 42 868 5157  
Fax: + 82 42 868 5018  
E-mail: ktkim@kriss.re.kr

**Dr Koji Komiyama**, NMIJ/AIST  
Tel: + 81 29 861 5637  
Fax: + 81 29 861 4289  
E-mail: koji.komiyama@aist.go.jp

**Dr Gregory Kyriazis**, INMETRO  
Tel: + 55 21 2679 1627  
Fax: + 55 21 2679 1627  
E-mail: gakyriazis@inmetro.gov.br

**Dr Hector Laiz**, INTI  
Tel: + 54 11 4724 6413  
Fax: + 54 11 4724 6244  
E-mail: laiz@inti.gob.ar

**Dr Antti Manninen**, MIKES  
Tel: + 358 10 6054 416  
Fax: +358 10 6054 498  
E-mail: antti.manninen@mikes.fi

**Dr Alain Michaud**, NRC-INMS  
Tel: + 613 998 6925  
Fax: + 613 952 1394  
E-mail: Alain.michaud@nrc-cnrc.gc.ca

**Dr Faisal Mubarak**, VSL  
Tel: + 31 15 269 1500  
Fax: + 31 15 269 1515

**Mr Flippie Prinsloo**, NMISA  
Tel: +27 12 841 3013  
Fax: + 27 12 841 2131  
E-mail: fprinsloo@nmisa.org

**Dr Yoho Shimada**, NMIJ/AIST  
Tel: + 81 29 861 6835  
Fax: + 81 29 861 4289  
E-mail: yozo.shimada@aist.go.jp

**Dr Yang Sup Song**, KRISS  
Tel: + 82 42 868 5447  
Fax: + 82 42 868 5018  
E-mail: yssong@kriss.re.kr

**Dr Michael Stock**, BIPM  
Tel: +33 1 45 07 70 24  
Fax: +33 1 45 34 20 21  
E-mail: mstock@bipm.org

**Mr Jiri Streit**, CMI  
Tel: + 420 545 555 208  
Fax: + 420 545 555 183  
E-mail: jstreit@cmi.cz

**Dr Jing Tao**, A\*STAR  
Tel: + 65 6279 1911  
Fax: + 65 6279 1995  
E-mail: jing\_tao@nmc.a-star.edu.sg

**Mr Jonathan Williams, NPL**  
Tel: + 44 208 943 6376  
Fax: + 44 208 943 7138  
E-mail: [jonathan.williams@npl.co.uk](mailto:jonathan.williams@npl.co.uk)

**Dr Markus Zeier, METAS**  
Tel: + 41 31 323 3491  
Fax: + 41 31 323 3210  
E-mail: [markus.zeier@metas.ch](mailto:markus.zeier@metas.ch)

### **CCEM Working Group on low frequency quantities (WGLF)**

#### **Chairman:**

**Mr Jonathan Williams, NPL**  
Tel: + 44 208 943 6376  
Fax: + 44 208 943 7138  
E-mail: [jonathan.williams@npl.co.uk](mailto:jonathan.williams@npl.co.uk)

#### **Members:**

INMETRO  
I.N.R.I.M  
KRISS  
LNE  
NIST  
NMIJ/AIST  
NMIA

NPL  
NRC-INMS  
PTB  
SP  
VNIIM  
VSL  
BIPM

### **Delegates and experts of member laboratories (March 2011)**

#### **Chairman: Mr Jonathan Williams**

**Dr Saood Ahmad, NPLI**  
Tel: + 91 11 456 093 12  
E-mail: [ahmads@nplindia.ernet.in](mailto:ahmads@nplindia.ernet.in)

**Mr Erik Dressler, NMISA**  
Tel: + 27 12 841 4152  
Fax: + 27 12 841 2131  
E-mail: [redressler@nmisa.org](mailto:redressler@nmisa.org)

**Ms Isabelle Blanc, LNE**  
Tel: + 33 1 40 43 37 00  
Fax: + 33 1 40 43 37 37

**Dr Randolph E. Elmquist, NIST**  
Tel: +301 975 6591  
Fax: +301 926 3972  
E-mail: [Randolph.elmquist@nist.gov](mailto:Randolph.elmquist@nist.gov)

**Dr Ilya Budovsky, NMIA**  
Tel : + 61 2 8467 3541  
Fax : + 61 2 8467 3783  
E-mail : [ilya.budovsky@measurement.gov.au](mailto:ilya.budovsky@measurement.gov.au)

**Dr Peter Filipski, NRC**  
**Dr Nick Fletcher, BIPM**  
Tel: +33 1 45 07 70 47  
Fax: +33 1 45 34 20 21  
E-mail: [nick.fletcher@bipm.org](mailto:nick.fletcher@bipm.org)

**Dr Laurie Christian, MSL**  
Tel: + 64 4 931 3110  
Fax: + 64 4 931 3194  
E-mail: [l.christian@irl.cri.nz](mailto:l.christian@irl.cri.nz)

**Dr Gleb B. Gubler**, VNIIM  
Tel: +7 812 251 7444  
Fax: +7 812 113 0114  
E-mail: g.b.gubler@vniim.ru

**Dr Yakup Gümez**, UME  
Tel: + 90 262 679 5000  
Fax: + 90 262 679 5001  
E-mail: yakup.gulmez@ume.tubitak.gov.tr

**Dr Dave Inglis**, NRC-INMS  
Tel: + 1 613 991 5650  
Fax: + 1 613 952 1394  
E-mail: dave.inglis@nrc-cnrc.gc.ca

**Dr Barry D. Inglis**, NMIA, CCEM President  
Tel: + 61 2 8467 3650  
Fax: + 61 2 8467 3655  
E-mail: barry.inglis@measurement.gov.au

**Dr Beat Jeckelmann**, METAS  
Tel: + 41 31 323 3297  
Fax: + 41 31 323 3210  
E-mail: beat.jeckelmann@metas.ch

**Dr Nobu-hisa Kaneko**, NMIJ/AIST  
Tel: + 81 298 61 5136  
Fax: + 81 298 61 3469  
E-mail: nobuhisa.kaneko@aist.go.jp

**Dr Tae-Weon Kang**, KRISS  
Tel: + 82 42 868 5175  
Fax: + 82 42 868 5018  
E-mail: twkang@kriss.re.kr

**Dr Alexander S. Katkov**, VNIIM  
Tel: +7 812 323 9619  
Fax: +7 812 113 0114  
E-mail: a.s.katkov@vniim.ru

**Dr Kyu-Tae Kim**, KRISS  
Tel: + 82 42 868 5157  
Fax: + 82 42 868 5018  
E-mail: ktkim@kriss.re.kr

**Dr Gregory Kyriazis**, INMETRO  
Tel: + 55 21 2679 1627  
Fax: + 55 21 2679 1627  
E-mail: gakyriazis@inmetro.gov.br

**Dr Koji Komiyama**, NMIJ/AIST  
Tel: + 81 29 861 5637  
Fax: + 81 29 861 4289  
E-mail: koji.komiyama@aist.go.jp

**Dr Hector Laiz**, INTI  
Tel: + 54 11 4724 6413  
Fax: + 54 11 4724 6244  
E-mail: laiz@inti.gob.ar

**Dr Antti Manninen**, MIKES  
Tel: + 358 10 6054 416  
Fax: +358 10 6054 498  
E-mail: antti.manninen@mikes.fi

**Dr Jürgen Melcher**, PTB  
Tel: + 49 531 592 2100  
Fax: + 49 531 592 2105  
E-mail: juergen.melcher@ptb.de

**Dr James K. Olthoff**, NIST  
Tel: + 1 301 975 2220  
Fax: + 1 301 975 4091  
E-mail: james.olthoff@nist.gov

**Dr François Piquemal**, LNE  
Tel: + 33 1 30 69 21 73  
Fax: + 33 1 30 69 12 34  
E-mail: francois.piquemal@lne.fr

**Ing. Umberto Pogliano**, I.N.R.I.M  
Tel: + 39 011 3919 433  
Fax: + 39 011 346 3970  
E-mail: u.pogliano@inrim.it

**Mr Flippie Prinsloo**, NMISA  
Tel: +27 12 841 3013  
Fax: + 27 12 841 2131  
E-mail: fprinsloo@nmisa.org

**Prof. He Qing**, NIM  
Tel: + 86 10 6452 4501  
Fax: + 86 10 6421 8703  
E-mail: heqing@nim.ac.cn

**Dr James Randa**, NIST  
Tel: + 1 303 497 3150  
Fax: + 1 303 497 3970  
E-mail: randa@boulder.nist.gov

**Dr Gert Rietveld**, VSL  
Tel: + 31 15 269 1645  
Fax: + 31 15 261 2971  
E-mail: grietveld@vsl.nl

**Dr Yury P. Semenov**, VNIIM  
Tel: + 7 812 323 9621  
Fax: + 7 812 113 0114  
E-mail: y.p.semenov@vniim.ru

**Dr Yoho Shimada**, NMJJ/AIST  
Tel: + 81 29 861 6835  
Fax: + 81 29 861 4289  
E-mail: yozo.shimada@aist.go.jp

**Dr Michael Stock**, BIPM  
Tel: +33 1 45 07 70 24  
Fax: +33 1 45 34 20 21  
E-mail: mstock@bipm.org

**Mr Shravan Singh**, NMISA  
Tel: +27 12 841 3325  
Fax: + 27 12 841 4458  
E-mail: shravan@nmisa.org

**Mr Jiri Streit**, CMI  
Tel: + 420 545 555 208  
Fax: + 420 545 555 183  
E-mail: jstreit@cmi.cz

**Dr Stéphane Solve**, BIPM  
Tel: +33 1 45 07 70 26  
Fax: +33 1 45 34 20 21  
E-mail: ssolve@bipm.org

**Dr Jing Tao**, A\*STAR  
Tel: + 65 6279 1911  
Fax: + 65 6279 1995  
E-mail: jing\_tao@nmc.a-star.edu.sg

### CCEM Working Group for RMO Coordination

#### Chairman:

**Dr Gregory Kyriazis**, INMETRO  
Tel: + 55 21 2679 9075  
Fax: + 55 21 2679 1627  
E-mail: gakyriazis@inmetro.gov.br

#### Members:

- Chairpersons of the “Regional Metrology Organizations” technical committees for electricity and magnetism
- Chairpersons of the Working Groups on low Frequency Quantities and on Radiofrequency Quantities
- Executive Secretaries of the CCEM and the Joint Committee of the Regional Metrology Organizations and the BIPM
- Coordinator of the Key comparison database

### CCEM Working Group for Strategic Planning

#### Chairman:

**Dr William E. Anderson**, NIST  
Tel: + 1 301 975 8280  
Fax: 1 301 975 3530  
E-mail: william.anderson@nist.gov

#### Members:

Barry D. Inglis, NMIA  
Nobu-hisa Kaneko, NMJJ/AIST  
Gert Rietveld, VSL  
Shravan Singh, NMISA  
Alan G. Steele, NRC-INMS  
Michael Stock, BIPM  
Jonathan Williams, NPL

**CCEM Working Group on Proposed Modifications to the SI**

**Chairman:**

**Dr Barry Wood**, NRC-INMS  
Tel: + 1 613 990 9225  
Fax: + 1 613 952 1394  
E-mail: barry.wood@nrc-cnrc.gc.ca

**Members:**

J. Melcher, PTB  
B. Jeckelmann, METAS  
F. Piquemal, LNE  
Ian Robinson, NPL  
M. Stock, BIPM  
C. Thomas, BIPM  
E. Williams, NIST

## Consultative Committee for Photometry and Radiometry (CCPR)

**Created in 1933**

*Present activities concern measurement standards for photometric and radiometric quantities,  
development of absolute radiometry  
and advice to the CIPM on matters concerned with radiometry and photometry*

**President:** **Dr Franz Hengstberger**  
 GTMS (Pty) Ltd.  
 P.O Box 38843  
 0060 Garsfontein East Pretoria  
 South Africa  
 Tel: + 27 12 841 4352  
 Fax: + 27 12 841 3382  
 E-mail: franz.hengstberger@gmail.com

**Executive Secretary:** **Dr Michael Stock, BIPM**  
 Tel: + 33 1 45 07 70 24  
 Fax: +33 1 45 07 62 62  
 E-mail: mstock@bipm.org

### **Members:**

Centre for Metrology and Accreditation [MIKES], Espoo  
 Centro Nacional de Metrología [CENAM], Querétaro  
 Federal Office of Metrology [METAS], Bern-Wabern  
 Hungarian Trade Licensing Office [MKEH], Budapest  
 Institute for Optico-Physical Measurements, Rostekhregulirovaniye of Russia [VNIIIFI], Moscow  
 Instituto de Física Aplicada, Consejo Superior de Investigaciones Científicas [IFA-CSIC], Madrid  
 Istituto Nazionale di Ricerca Metrologica [I.N.R.I.M], Torino  
 Korea Research Institute of Standards and Science [KRISS], Daejeon  
 Laboratoire National de Métrologie et d'Essais [LNE], Paris  
 Measurement Standards Laboratory of New Zealand [MSL], Lower Hutt  
 National Institute of Metrology [NIM], Beijing  
 National Institute of Standards and Technology [NIST], Gaithersburg  
 National Measurement Institute, Australia [NMIA], Lindfield  
 National Metrology Centre [NMC-A\*STAR], Singapore  
 National Metrology Institute of Japan, AIST [NMIJ/AIST], Tsukuba  
 National Metrology Institute of South Africa [NMISA], Pretoria  
 National Metrology Institute of Turkey [UME], Gebze-Kocaeli  
 National Physical Laboratory [NPL], Teddington  
 National Research Council of Canada [NRC-INMS], Ottawa  
 Physikalisch-Technische Bundesanstalt [PTB], Braunschweig  
 Slovak Institute of Metrology/Slovenský Metrologický Ústav [SMU], Bratislava  
 VSL [VSL], Delft  
 The Director of the International Bureau of Weights and Measures [BIPM], Sèvres

**Observers:**

Commission internationale de l'éclairage [CIE], Wien  
 World Meteorological Organization [WMO], Geneva

**Attendees to the last meeting (September 2009)****President: Dr Franz Hengstberger****Delegates and experts of member laboratories:**

**Mr György Andor**, MKEH  
 Tel: + 36 1 4585 984  
 Fax: + 36 1 4585 927  
 E-mail: andorgy@mkeh.hu

**Dr Peter Blattner**, METAS  
 Tel: + 41 31 32 33 340  
 Fax: + 41 31 32 33 210  
 E-mail: peter.blattner@metas.ch

**Dr Jimmy Dubard**, LNE  
 Tel: + 33 1 30 69 12 37  
 Fax: + 33 1 30 69 12 34  
 E-mail: jimmy.dubard@lne.fr

**Dr Nigel Fox**, NPL  
 Tel: + 44 208 943 6825  
 Fax: + 44 208 943 6935  
 E-mail: nigel.fox@npl.co.uk

**Mr A.A. Gaertner**, NRC-INMS  
 Tel: + 613 993 9344  
 Fax: +613 952 1394  
 E-mail: Arnold.Gaertner@nrc-cnrc.gc.ca

**Mr Xuebo Huang**, A\*STAR  
 Tel: + 65 6279 1939  
 Fax: + 65 6279 1995  
 E-mail: huang\_xuebo@nmc.a-star.edu.sg

**Prof. Erkki Ikonen**, MIKES  
 Tel: + 358 505 502 283  
 Fax: + 358 9 451 2222  
 E-mail: erkki.ikonen@mikes.fi

**Dr Boris Khlevnoy**, VNIIIFI  
 Tel : + 7 095 4475 653  
 Fax : + 7 095 4373 147  
 E-mail : khlevnoy-m4@vniiofi.ru

**Dr Seung Kwan Kim**, KRISS  
 Tel: + 82 42 861 5701  
 Fax: + 82 42 868 5022  
 Email: skkfiber@kriss.re.kr

**Dr Dong-Hoon Lee**, KRISS  
 Tel: + 82 42 868 5706  
 Fax: + 82 42 868 5022  
 E-mail: dh.lee@kriss.re.kr

**Dr Yandong Lin**, NIM  
 Tel: + 86 10 6421 8651  
 Fax: + 86 10 6421 8703  
 E-mail: linyd@nim.ac.cn

**Dr Peter Manson**, NMIA  
 Tel: + 61 2 8467 3858  
 Fax: + 61 2 8467 3752  
 E-mail: peter.manson@measurement.gov.au

**Dr Peter Nemeček**, SMU  
 Tel: +421 2 6029 4278  
 Fax: + 421 2 6542 9592  
 E-mail: nemecek@smu.gov.sk

**Mrs Kathryn Nield**, MSL  
 Tel: + 644 931 3272  
 Fax: + 644 931 3117  
 E-mail: k.niel@irl.cri.nz

**Dr Yoshihiro Ohno**, NIST  
 Tel: + 1 301 975 2321  
 Fax: + 1 301 840 8551  
 E-mail: yoshihiro.ohno@nist.gov

**Mrs Alicia Pons**, IFFA-CSIC  
 Tel: + 34 91 561 88 06  
 Fax: + 34 91 563 17 94  
 E-mail: apons@ifa.cetef.csic.es

**Dr Maria Luisa Rastello, I.N.R.I.M**  
Tel: + 39 011 3919 219  
Fax: + 39 011 346 384  
E-mail: rastello@inrim.it

**Dr Kent Rochford, NIST**  
Tel: + 1 303 497 5285  
Fax: + 1 303 497 7671  
E-mail: kent.rochford@boulder.nist.gov

**Dr Terubumi Saito, NMJJ/AIST**  
Tel: + 81 29 861 5654  
Fax: + 81 29 861 4860  
E-mail: t.saito@aist.go.jp

**Prof. Victor I. Sapritsky, VNIIIFI**  
Tel: + 7 495 437 2992  
Fax: + 7 495 437 3100  
E-mail: vsapritsky@aol.com

**Prof. Werner Schmutz, PMOD/WRC**  
Tel: + 41 81 417 51 11  
Fax: + 41 81 417 51 00  
E-mail: werner.schmutz@pmodwrc.ch

**Mr Reinhardt Sieberhagen, NMISA**  
Tel: + 27 12 841 27 29  
Fax: + 27 12 841 4458  
E-mail: rsieberhagen@nmisa.org

**Dr Klaus Stock, PTB**  
Tel: + 49 (0)531 592 4100  
Fax: + 49 (0)531 592 4105  
E-mail: klaus.stock@ptb.de

**Mr Kamuran Türkoglu, UME**  
Tel: + 90 262 679 5000  
Fax: + 90 262 679 5001  
E-mail: akt@ume.tubitak.gov.tr

**Dr Gerhard Ulm, PTB**  
Tel: + 49 30 3481 7312  
Fax: + 49 30 3481 7550  
E-mail: gerhard.ulm@ptb.de

**Dr Eric van der Ham, VSL**  
Tel: + 31 15 269 1586  
Fax: + 31 15 261 2971  
E-mail: evdham@nmi.nl

**Dr Emma Woolliams, NPL**  
Tel: + 44 208 943 6661  
Fax: + 44 208 943 6935  
E-mail: emma.woolliams@npl.co.uk

**Dr Gan Xu, NMC-A\*STAR**  
Tel: + 65 6279 1937  
Fax: + 65 6279 1995  
E-mail: xu\_gan@nmc.a-star.edu.sg

**Dr Tatsuya Zama, NMJJ/AIST**  
Tel: + 81 29 861 5649  
Fax: + 81 29 861 4259  
E-mail: zama-t@aist.go.jp

**Dr Joanne Zwinkels, NRC-INMS**  
Tel: + 1 613 993 9363  
Fax: + 1 613 952 1394  
E-mail: joanne.zwinkels@nrc-cnrc.gc.ca

### Observers:

**Dr Jean Bastie, CIE**  
Tel: + 33 1 39 13 11 38  
E-mail: jean.bastie@wanadoo.fr

### Invited by the President:

**Mr M. Smid, CMI**  
Tel: + 420 545 222 709  
Fax: + 420 545 222 728  
E-mail: msmid@cmi.cz

**Working Group on Key Comparisons (WG-KC)****Chairman:****Dr Yoshihiro Ohno**, NIST

Tel: + 1 301 975 2321

Fax: + 1 301 840 8551

E-mail: ohno@nist.gov

**Secretary:****Dr Michael Stock**, BIPM

Tel: + 33 1 45 07 70 24

Fax: +33 1 45 07 62 62

E-mail: mstock@bipm.org

**Members:**

KRISS

MIKES

NIST

NMJJ/AIST

NMIA

NPL

NRC

PTB

Pilots of ongoing key comparisons

**Working Group on Calibration and Measurement Capabilities (WG-CMC)****Chairman:****Ms Natasha nel-Sakharova**, NMISA

Tel: + 27 12 84 13 618

Fax: + 27 12 84 12 131

E-mail: nnelsakharova@nmisa.org

**Members:**

Chairs of the Technical Committees of Regional Metrology Organizations (RMOs) dealing with Photometry and Radiometry.

**CCPR Working Group on Strategic Planning (WG-SP)****Chair:** **Dr Joanne Zwinkels**, NRC-INMS

Tel: + 1 613 993 9363

Fax: + 1 613 952 1394

E-mail: joanne.zwinkels@nrc-cnrc.gc.ca

**Members:** I.N.R.I.M, KRISS, LNE, METAS, MSL, NIST, NMJJ/AIST, NMISA, VSL, NPL, NRC, PTB

## Consultative Committee for Thermometry (CCT)

**Created in 1937**

*Present activities concern matters related to the establishment and realization of the International Temperature Scale of 1990 (ITS-90) and thermodynamic temperature, extension and improvement of the ITS-90, secondary reference points, international reference tables for thermocouples and resistance thermometers.*

**President:** **Prof. Dr Hüseyin Ugur**  
 Ankara CAD. Mimoza apt. 50/19  
 34890 Pendik  
 Turkey  
 Tel: + 90 262 643 90 63  
 Fax: + 90 262 646 90 62  
 E-mail: ugurh@superonline.com

**Executive Secretary:** **Mr Alain Picard, BIPM**  
 Tel: + 33 1 45 07 70 28  
 Fax: +33 1 45 34 20 21  
 E-mail: apicard@bipm.org

**Members:**

Agency for Science, Technology and research [A\*STAR], Singapore  
 Centro Español de Metrología [CEM], Madrid  
 Centro Nacional de metrologia [CENAM], Querétaro  
 Conservatoire national des arts et métiers/Institut National de Métrologie [LNE-INM/CNAM], Paris  
 D.I. Mendeleev Institute for Metrology, Rostekhregulirovaniye of Russia [VNIIM], St Petersburg  
 Institute for Physical-Technical and Radiotechnical Measurements, Rostekhregulirovaniye of Russia [VNIIFTRI], Moscow  
 Istituto Nazionale di Ricerca Metrologica [I.N.R.I.M], Torino  
 Korea Research Institute of Standards and Science [KRISS], Daejeon  
 Measurement Standards Laboratory of New Zealand [MSL], Lower Hutt  
 National Institute of Metrology [NIM], Beijing  
 National Institute of Standards and Technology [NIST], Gaithersburg  
 National Measurement Institute, Australia [NMIA], Lindfield  
 National Metrology Institute of Japan, National Institute of Advanced Industrial Scienceand Technology [NMIJ/AIST], Tsukuba  
 National Metrology Institute of South Africa [NMISA], Pretoria  
 National Metrology Institute of Turkey [UME], Gebze-Kocaeli  
 National Physical Laboratory [NPL], Teddington  
 National Research Council of Canada [NRC-INMS], Ottawa  
 Physikalisch-Technische Bundesanstalt [PTB], Braunschweig  
 Slovak Metrology Institute /Slovenský Metrologický Ústav [SMU], Bratislava  
 VSL, [VSL], Delft  
 The Director of the International Bureau of Weights and Measures [BIPM], Sèvres

**Observers:**

Centre for Metrology and Accreditation [MIKES], Espoo  
 Instituto Nacional de Tecnología Industrial [INTI], Buenos Aires  
 Instituto Português da Qualidade [IPQ], Caparica  
 Instituto Nacional de Metrologia, Normalizaçao e Qualidade Industrial [INMETRO], Rio de Janeiro

## Attendees to the last meeting (May 2010)

**President: Prof. Hüseyin Ugur**

**Delegates and experts of member laboratories:**

**Mr Masaru Arai, NMIJ/AIST**

Tel: + 81 29 861 4295  
 Fax: + 81 29 861 4216  
 E-mail: masaru-arai@aist.go.jp

**Dr Tetsuya Baba, NMIJ/AIST**

Tel: + 81 29 861 4394  
 Fax: + 81 29 861 4236  
 E-mail: t.baba@aist.go.jp

**Dr Mark Ballico, NMIA**

Tel: + 61 2 8467 3573  
 Fax: + 61 2 8467 3752  
 E-mail: mark.ballico@measurement.gov.au

**Dr Stéphanie Bell, NPL**

Tel: + 44 208 943 6402  
 Fax: + 44 208 614 0437  
 E-mail: stephanie.bell@npl.co.uk

**Dr Dolores Del Campo, CEM**

Tel: + 34 91 807 4714  
 Fax: + 34 91 807 4807  
 E-mail: ddelcampo@cem.mitycs.es

**Dr Ahmet Diril, UME**

Tel: + 90 262 679 5000  
 Fax: + 90 262 679 5001  
 Email: ahmet.diril@ume.tubitak.gov.tr

**Mr Roman Dubnicka, SMU**

Tel: + 421 260 294 247  
 Fax: + 421 265 429 592  
 Email: rdubnicka@smu.gov.sk

**Dr Vito Fericola, I.N.R.I.M**

Tel: + 39 011 3919 737  
 Fax: + 39 011 3919 747  
 E-mail: v.fericola@inrim.it

**Dr Joachim Fischer, PTB**

Tel: + 49 30 34 81 7473  
 Fax: + 49 30 34 81 7508  
 E-mail: joachim.fischer@ptb.de

**Dr Leonard Hanssen, NIST**

Tel: + 1 301 975 2344  
 Fax: + 1 301 975 2328  
 Email: leonard.hanssen@nist.gov

**Dr Yves Hermier, LNE-INM/CNAM**

Tel: + 33 1 40 27 21 87  
 Fax: + 33 1 42 71 26 32  
 E-mail: hermier@cnam.fr

**Mr Ken D. Hill, NRC-INMS**

Tel: + 1 613 998 6077  
 Fax: + 1 613 952 1394  
 E-mail: ken.hill@nrc-cnrc.gc.ca

**Dr Jörg Hollandt, PTB**

Tel: + 49 30 3481 7369  
 Fax: + 49 30 3481 7508  
 E-mail: joerg.hollandt@ptb.de

**Dr Juntaro Ishii, NMIJ/AIST**

Tel: + 81 29 861 4031  
 Fax: + 81 29 861 4010  
 E-mail: j-ishii@aist.go.jp

**Dr Aliye Kartal Doğan, UME**

Tel: + 90 262 679 5000 / 3450  
 Fax: + 90 262 679 5001  
 E-Mail: aliye.kartal@ume.tubitak.gov.tr

**Dr Elena Korchagina, VNIIM**

Tel: +7 812 251 7601  
 Fax: +7 812 713 0114  
 Email: E.N.Korchagina@vniim.ru

**Dr Gennadiy Kytin, VNIIFTRI**

Tel: + 7 095 535 9348  
 Fax: + 7 495 744 81 79  
 E-mail: office@vniiftri.ru or cryom@vniiftri.ru

**Mr Hans Liedberg, NMISA**

Tel: + 27 12 841 2753  
 Fax: + 27 12 841 2131/4458  
 E-mail: hliedber@nmisa.org

**Dr Graham Machin**, NPL  
 Tel: + 44 208 943 6742  
 Fax: + 44 208 943 0491  
 E-mail: graham.machin@npl.co.uk

**Dr Mikhail Matveyev**, VNIIM  
 Tel: + 7 812 323 9637  
 Fax: + 7 812 713 0114  
 E-mail: m.s.matveyev@vniim.ru

**Dr Edgar Méndez-Lango**, CENAM  
 Tel: + 52 442 211 0542  
 Fax: + 52 442 211 0548  
 E-mail: emendez@cenam.mx

**Dr Andrea Merlone**, I.N.RI.M  
 Tel: + 39 011 391 91  
 Fax: + 39 011 346 384  
 Email: a.merlone@inrim.it

**Dr Peter Nemeček**, SMU  
 Tel: + 421 2 6029 4278  
 Fax: + 421 2 6542 9592  
 E-mail: nemecek@smu.gov.sk

**Dr Andrea Peruzzi**, NMi VSL  
 Tel: + 31 15 269 1519  
 Fax: + 31 15 261 2971  
 E-mail: aperuzzi@nmi.nl

**Dr Olga Podmurnaya**, VNIIFTRI  
 Tel: + 7 3952 468 303 or + 7 3952 468 026  
 Fax: + 7 3952 463 848 or + 7 3952 468 303  
 E-mail: office@niiftri.irk.ru or dep15@niiftri.irk.ru

**Prof. Ing. Anatoly Pokhodun**, VNIIM  
 Tel: + 7 812 315 52 07  
 Fax: + 7 812 713 01 14  
 E-mail: a.i.pokhodun@vniim.ru

**Dr Juraj Ranostaj**, SMU  
 Tel : + 421 2 6029 4220  
 Fax: + 421 2 6542 9592  
 Email: ranostaj@smu.gov.sk

**Dr Peter P. M. Steur**, I.N.RI.M  
 Tel: + 39 011 3919 737  
 Fax: + 39 011 3919 747  
 E-mail: p.steur@inrim.it

**Mr Gregory F. Strouse**, NIST  
 Tel: + 1 301 975 4803  
 Fax: + 1 301 548 0206  
 E-mail: gregory.strouse@nist.gov

**Dr Li Wang**, A\*STAR Singapore  
 Tel: + 65 62791959  
 Fax: + 65 62791996  
 E-mail: wang\_li@nmc.a-star.edu.sg

**Mr Rod White**, MSL  
 Tel: + 64 4 5690 491  
 Fax: + 64 4 5690 003  
 E-mail: r.white@irl.cri.nz

**Dr Kazuaki Yamazawa**, NMIJ/AIST  
 Tel: + 81 298 61 4304  
 Fax: + 81 298 61 4216  
 E-mail: kazuaki-yamazawa@aist.go.jp

**Dr Inseok Yang**, KRISS  
 Tel: + 82 42 868 5772  
 Fax: + 82 42 868 5022  
 E-mail: iyang@kriss.re.kr

**Dr Howard Yoon**, NIST  
 Tel: + 1 301 975 2482  
 Fax: + 1 301 869 5700  
 E-mail: howard.yoon@nist.gov

**Dr Zundong Yuan**, NIM  
 Tel: + 86 10 6452 5106  
 Fax: + 86 10 6421 8637  
 E-mail: yuanzd@nim.ac.cn

**Dr Boris Yuryev**, VNIIFTRI  
 Tel: + 7 495 535 24 01 / + 7 495 535 92 10  
 Fax: + 7 495 535 93 34  
 E-mail: office@niiftri.ru or yu@niiftri.ru

**Observers:**

**Dr Maria Eduarda Filipe, IPQ**  
Tel: + 351 21 294 8184  
Fax: + 351 21 294 8188  
E-mail: efilipe@mail.ipq.pt

**Dr Juergen Hartmann, PTB**  
Tel: + 49 531 592 1000  
Fax: + 49 531 592 1005  
Email: juergen.hartmann@ptb.de

**Dr Martti Heinonen, MIKES**  
Tel: +358 10 6054 402  
Fax: + 358 10 6054 499  
Email: martti.heinonen@mikes.fi

**Dr Renato Teixeira, INMETRO**  
Tel: + 55 21 2679 9019  
Fax: + 55 21 2679 9027  
E-mail: rnteixeira@inmetro.gov.br

**Invited by the President:**

**Dr Pieter Bloembergen, NMIJ/AIST**  
Tel: + 81 298 61 4132  
Fax: + 81 298 61 4010  
E-mail: p.bloembergen@aist.go.jp

**Dr Franco Pavese, I.N.R.I.M**  
Tel: + 39 011 3977 341  
Fax: + 39 011 3977 747  
E-mail: f.pavese@imgc.cnr.it

**Excused:**

**Dr Jintao Zhang, NIM**  
Tel: + 8610 6421 1631 ext 2216  
Fax: + 8610 6421 8637  
E-mail: zhangjint@nim.ac.cn

**Prof. Dr Nabila I. El Sayed, NIS**  
Tel: + 202 33 86 74 51  
Fax: + 202 33 86 74 51  
Email: elsayeda67@yahoo.com

**CCT Working Group 2***Secondary reference points and techniques for approximating the ITS-90***Chairman:**

**Mr Hans Liedberg**, NMISA  
Tel: + 27 12 841 2753  
Fax: + 27 12 841 2131/4458  
E-mail: hliedber@nmisa.org

**Delegates and experts of member laboratories:**

**Mr Masaru Arai**, NMIJ/AIST  
Tel: + 81 29 861 4295  
Fax: + 81 29 861 4216  
E-mail: masaru-arai@aist.go.jp

**Dr Peter Bloembergen**  
Tel: + 31 71 514 2409  
Fax: + 31 71 514 8329  
E-mail: pbloembergen@phys.leidenuniv.nl

**Dr Cetik Dogan**, UME  
Tel: + 90 262 679 5000 ext. 5654  
Fax: + 90 262 679 5001  
E-Mail: cetik.dogan@ume.tubitak.gov.tr

**Dr Frank Edler**, PTB, Berlin  
Tel: + 49 30 3481 538  
Fax: + 49 30 3941 490  
E-mail: frank.edler@ptb.de

**Mrs Carmen Garcia**, CEM  
E-mail : mcgarciaiz@cem.mityc.es

**Dr Edgar Méndez-Lango**, CENAM  
Tel: + 52 442 211 0545  
Fax: + 52 442 211 0548  
E-mail: emendez@cenam.mx

**Dr Andrea Merlone**, I.N.R.I.M  
Tel: + 39 011 39 77 354  
Fax: + 39 011 39 77 347  
E-mail: a.merlone@imgc.cnr.it

**Dr Jonathan Pearce**, NPL  
Tel: + 44 020 8943 6886  
Fax: + 44 020 8614 0547  
Email: Jonathan.pearce@npl.co.uk

**Mr Rod White**, MSL  
Tel: +64 4 5690 491  
Fax: +64 4 5690 003  
E-mail: r.white@irl.cri.nz

**Mr Yoshiro Yamada**, NMIJ/AIST  
Tel: + 81 298 61 4031  
Fax: + 81 298 61 4010  
E-mail: y.yamada@aist.go.jp

**Dr Kazuaki Yamazawa**, NMIJ/AIST  
Tel : + 81 298 61 4304  
Fax: + 81 298 61 4216  
E-mail: kazuaki-yamazawa@aist.go.jp

**Dr Inseok Yang**, KRISS  
Tel : + 82 42 868 5772  
Fax: + 82 42 868 5022  
E-mail: iyang@kriss.re.kr

**CCT Working Group 4**

*Thermodynamic temperature determinations and extension of the ITS-90 to lower temperatures*

**Chairman:**

**Dr Joachim Fischer**, PTB Berlin  
 Tel: + 49 30 34 81 369  
 Fax: + 49 30 34 81 490  
 E-mail: joachim.fischer@ptb.de

**Delegates and experts of member laboratories:**

**Dr Peter Bloembergen**  
 Tel: + 31 71 514 2409  
 Fax: + 31 71 514 8329  
 E-mail: pbloembergen@phys.leidenuniv.nl

**Dr M. de Podesta**, NPL  
 Tel: + 44 208 943 6476  
 E-mail: michael.depodata@npl.co.uk

**Dr Ken Hill**, NRC-INMS  
 Tel: + 1 613 998 6077  
 Fax: + 1 613 952 1394  
 E-mail: ken.hill@nrc.ca

**Dr Graham Machin**, NPL  
 Tel: + 44 208 943 6742  
 Fax: + 44 208 943 0491  
 E-mail: graham.machin@npl.co.uk

**Dr Andrea Merlone**, I.N.R.I.M  
 Tel: + 39 011 391 91  
 Fax: + 39 011 346 384  
 Email: a.merlone@inrim.it

**Dr Laurent Pitre**, LNE-INM/CNAM  
 Tel : + 33 1 40 27 21 55  
 Fax : + 33 1 42 71 37 36  
 E-mail: laurent.pitre@lne.fr

**Prof. Anatoly Pokhodun**, VNIIM  
 Tel: + 7 812 315 52 07  
 Fax: + 7 812 713 01 14 or + 7 812 315 52 07  
 Email: a.i.pokhodun@vniim.ru

**Mr Peter Steur**, I.N.R.I.M  
 Tel: + +39 011 3977 342  
 Fax: +39 011 3977 347  
 E-mail:p.steur@imgc.cnr.it

**Mr Gregory F. Strouse**, NIST  
 Tel: + 1 301 975 4803  
 Fax: + 1 301 548 0206  
 Email: gregory.strouse@nist.gov

**Dr Osama Tamura**, NMJJ/AIST  
 Tel: + 81 29 861 4297  
 Fax: + 81 29 861 4038  
 E-mail: o.tamura@aist.go.jp

**Prof. Dr Hüseyin Ugur**, Pendik  
 Tel: + 90 532 356 2014  
 Fax: + 90 216 491 2330  
 Email: ugurh@superonline.com

**Mr Rod White**, MSL  
 Tel: +64 4 5690 491  
 Fax: + 64 4 5690 003  
 E-mail: r.white@irl.cri.nz

**Dr Kazuaki Yamazawa**, NMJJ/AIST  
 Tel : + 81 298 61 4304  
 Fax: + 81 298 61 4216  
 E-mail: kazuaki-yamazawa@aist.go.jp

**Dr Inseok Yang**, KRISS  
 Tel: + 82 42 868 5772  
 Fax: + 82 42 868 5022  
 E-mail: iyang@kriess.re.kr

**CCT Working Group 5***Radiation thermometry***Chairman:****Dr Graham Machin, NPL**

Tel: + 44 208 943 6742

Fax: + 44 208 614 0491

E-mail: graham.machin@npl.co.uk

**Delegates and experts of member laboratories:****Dr Mauro Battuello, I.N.RI.M**

Tel: + 39 011 3977 338

Fax: + 39 011 3977 347

E-mail: m.battuello@imgc.cnr.it

**Dr Peter Bloembergen**

Tel: + 31 71 514 2409

Fax: + 31 71 514 8329

E-mail: pbloembergen@phys.leidenuniv.nl

**Dr Ferrucio Girard, I.N.RI.M**

Tel: + 39 011 3919.1

Fax: + 39 011 346 384

**Dr Leonard Hanssen, NIST**

Tel: + 1 301 975 2344

Fax: + 1 301 975 2328

Email: leonard.hanssen@nist.gov

**Dr Jürgen Hartmann, PTB**

Tel: + 49 531 592 1000

Fax: + 49 531 592 1005

E-mail: juergen.hartmann@ptb.de

**Dr Ken D. Hill, NRC-INMS**

Tel: + 1 613 998 6077

Fax: + 1 613 952 1394

E-mail: ken.hill@nrc.ca

**Dr Jörg Hollandt, PTB**

Tel: + 49 30 8481 369

Fax: + 49 30 8481 510

E-mail: joerg.hollandt@ptb.de

**Dr Maria-José Martin, CEM**

Tel : + 34 91 807 47 67

Fax : +34 91 807 48 07

Email : mjmartinh@cem.mityc.es

**Dr Mikhail Matveyev, VNIIM**

Tel: + 7 812 259 1064

Fax: + 7 812 113 0114

E-mail: m.s.matveyev@vniim.ru

**Dr Edgar Méndez-Lango, CENAM**

Tel: + 52 442 211 0542

Fax: + 52 442 211 0548

E-mail: emendez@cenam.mx

**Mr Mohamed Sadli, LNE-INM/CNAM**

Tel: + 33 1 40 27 21 55

Fax: 01 42 71 37 36

E-mail: sadli@cnam.fr

**Dr Li Wang, A\*STAR Singapore**

Tel: + 65 62791959

Fax: + 65 62791996

E-mail: wang\_li@nmc.a-star.edu.sg

**Mr Yoshiro Yamada, NMIJ/AIST**

Tel: + 81 29 861 4003

Fax: + 81 29 861 4010

E-mail: y.yamada@aist.go.jp

**Dr Howard W. Yoon, NIST**

Tel: + 1 301 975 2482

E-mail: howard.yoon@nist.gov

**Dr Yuan Zundong, NIM**

Tel: + 86 10 6421 8637

Fax: + 86 10 6429 1990

E-mail: yuanzd@nim.ac.cn

## CCT Working Group 6

*Humidity measurements***Chairman:**

**Dr Stephanie Bell**, NPL  
Tel: + 44 208 943 6402  
Fax: + 44 208 614 0437  
E-mail: stephanie.bell@npl.co.uk

**Delegates and experts of member laboratories:**

**Dr Robert Benyon**, INTA  
Tel: + 34 915 201 714  
Tel: + 34 915 201 645  
E-mail: benyonpr@inta.es

**Mr Javier Garcia Skabar**, INTI  
Tel : + 54 11 4724 6200/6300/6583  
Fax : + 54 11 4713 4140  
Email : jskabar@inti.gob.ar

**Mrs Aliye Kartal Dogan**, UME  
Tel: + 90 262 679 5000 Ext. 3450  
Fax: + 90 262 679 5001  
E-mail: aliye.kartal@ume.tubitak.gov.tr

**Dr Vito Fericola**, I.N.R.I.M  
Tel: +39 011 3977 337  
Fax: + 39 011 3977 347  
E-mail: v.fernicola@imgc.cnr.it

**Dr Eric Georgin**, LNE-INM/CNAM-CETIAT  
E-mail: eric.georgin@cetiat.fr

**Dr Peter H. Huang**, NIST  
Tel: + 1 301 975 2621  
Fax: + 1 1301 548 0206  
E-mail: phuang@nist.gov

**Dr Edgar Méndez-Lango**, CENAM  
Tel: + 52 442 211 0542  
Fax: + 52 442 211 0548  
E-mail: emendez@cenam.mx

**Dr Andrea Peruzzi**, VSL  
Tel: + 31 15 269 1519  
Fax: + 31 15 261 2971  
Email: aperuzzi@vsl.nl

**Dr Olga Podmurnaya**, VNIIFTRI  
Tel: + 7 3952 468 303 ; + 7 3952 468 026  
Fax: + 7 3952 463 848 ; + 7 3952 468 303  
E-mail: office@niiftri.irk.ru ; depl5@niiftri.irk.ru

**Dr Li Wang**, A\*STAR Singapore  
Tel: + 65 62791959  
Fax: + 65 62791996  
E-mail: wang\_li@nmc.a-star.edu.sg

## CCT Working Group 8

*Calibration and measurement capabilities*

### **Chairman:**

**Mr Gregory F. Strouse**, NIST

Tel: + 1 301 975 4803

Fax: + 1 301 548 0206

E-mail: [gstrouse@nist.gov](mailto:gstrouse@nist.gov)

### **Delegates and experts of member laboratories:**

**Dr Juntaro Ishii**, NMJJ/AIST

Tel: + 81 29 861 4031

Fax: + 81 29 861 4010

E-mail: [j-ishii@aist.go.jp](mailto:j-ishii@aist.go.jp)

**Mr Hans Liedberg**, NMISA

Tel: + 27 12 841 2753

Fax: + 27 12 841 2131/4458

E-mail: [hliedber@nmisa.org](mailto:hliedber@nmisa.org)

**Dr Mikhail Matveyev**, VNIIM

Tel: + 7 812 259 1064

Fax: + 7 812 113 0114

E-mail: [m.s.matveyev@vniim.ru](mailto:m.s.matveyev@vniim.ru)

**Dr Andrea Peruzzi**, VSL

Tel: + 31 15 269 1519

Fax: + 31 15 261 2971

Email: [aperuzzi@vsl.nl](mailto:aperuzzi@vsl.nl)

**Prof. Anatoly Pokhodun**, VNIIM

Tel: + 7 812 315 52 07

Fax: + 7 812 113 01 14

E-mail: [a.i.pokhodun@vniim.ru](mailto:a.i.pokhodun@vniim.ru)

**CCT Working Group 9***Thermophysical properties***Chairman:****Dr Tetsuya Baba, NMJJ/AIST**

Tel: + 81 29 861 4394

Fax: + 81 29 861 4236

E-mail: baba@aist.go.jp

**Delegates and experts of member laboratories:****Dr Megumi Akoshima, NMJJ/AIST**

Tel: + 81 298 61 6846

Fax: + 81 298 61 4039

Email: m-akoshima@aist.go.jp

**Ms Lindsay Chapman, NPL**

Tel: + 44 208 943 6596

Fax: + 44 208 943 6458

Email: lindsay.chapman@npl.co.uk

**Dr Jean-Rémy Filtz, LNE-INM/CNAM**

Tel: + 33 1 3069 1215

Fax: + 33 1 3069 1234

E-mail: jean-remy.filtz@lne.fr

**Dr Ferruccio Girard, I.N.R.I.M**

Tel: + 39 011 3919.1

Fax: + 39 011 346 384

**Dr Ulf Hammerschmidt, PTB**

Tel: + 49 531 592 3211

Fax: + 49 531 592 3209

Email: ulf.hammerschmidt@ptb.de

**Dr Leonard Hanssen, NIST**

Tel: + 1 301 975 2344

E-mail: leonard.hanssen@nist.gov

**Dr Bruno Hay, LNE**

Tel : + 33 1 40 43 37 00

Fax : + 33 1 40 43 37 37

**Dr Jörg Hollandt, PTB**

Tel : + 49 30 3481 7369

Fax : + 49 30 3481 7510

Email : joerg.hollandt@ptb.de

**Dr Juntaro Ishii, NMJJ**

Tel: + 81 298 61 4031

Fax: + 81 298 61 4010

E-mail: j-ishii@aist.go.jp

**Dr Sang Hyun Lee, KRISS**

Tel: + 82 42 868 5199

Fax: + 82 42 868 5022

E-mail: leesh@kriss.re.kr

**Dr M. Matveev, VNIIM**

Tel : +7 812 251 7601

Fax: +7 812 113 0114

**Dr Edgar Méndez-Lango, CENAM**

Tel: + 52 442 211 0542

Fax: + 52 442 211 0548

E-mail: emendez@cenam.mx

**Dr Jintao Zhang, NIM**

Tel: + 86 10 6421 1631

Fax: + 86 10 6421 8637

E-mail: zhangjint@nim.ac.cn

## Consultative Committee for Length (CCL)

**Created in 1952**

*Present activities concern matters related to the definition and realization of the metre, practical length and angle measurement and advice to the CIPM in the field of length metrology.*

**President:**

**Dr Attilio Sacconi**  
 Istituto Nazionale di Ricerca Metrologica  
 Stradadelle Cacce, 91  
 I-10135 Turin  
 ITALY  
 Tel : + 39 011 3919 966  
 Fax : + 39 011 3919 959  
 E-mail : a.sacconi@inrim.it

**Executive Secretary:** **Dr Lennart Robertsson**, BIPM

Tel: + 33 1 45 07 70 53  
 Fax: + 33 1 45 07 70 59  
 E-mail: lrobertsson@bipm.org

**Members:**

Standards, Productivity and Innovation Board [A\*STAR], Singapore  
 Bundesamt für Eich- und Vermessungswesen [BEV], Vienna  
 Centro Español de Metrología [CEM], Madrid  
 Centre for Metrology and Accreditation/Mittateknikaan Keskus [MIKES], Espoo  
 Centro Nacional de Metrología [CENAM], Querétaro  
 Conservatoire national des arts et métiers/Institut National de Métrologie [LNE-INM/CNAM], Paris  
 Czech Metrology Institut/Český metrologický Institut [CMI], Prague  
 D.I. Mendeleyev Institute for Metrology, Rostekhregulirovaniye of Russia [VNIIM], St Petersburg  
 Federal Office of Metrology METAS [METAS], Bern-Wabern  
 Instituto Nacional de Metrologia, Normalizacao e Qualidade Industrial [INMETRO], Rio de Janeiro  
 Istituto Nazionale di Ricerca Metrologica [I.N.R.I.M], Torino  
 Joint Institute for Laboratory Astrophysics [JILA], Boulder  
 Korea Research Institute of Standards and Science [KRISS], Daejeon  
 National Institute of Metrology [NIM], Beijing  
 National Institute of Standards and Technology [NIST], Gaithersburg  
 National Measurement Institute, Australia [NMIA], Lindfield  
 National Metrology Institute of Japan, Advanced Institute of Science and Technology [NMIJ/AIST], Tsukuba  
 National Metrology Institute of South Africa [NMISA], Pretoria  
 National Metrology Institute of Turkey/Ulusal Metroloji Enstitüsü [UME], Gebze-Kocaeli  
 National Physical Laboratory [NPL], Teddington  
 National Research Council of Canada, Institute for Measurement Standards [NRC-INMS], Ottawa  
 Physikalisch-Technische Bundesanstalt [PTB], Braunschweig  
 Slovak Institute of Metrology/Slovenský Metrologický Ústav [SMU], Bratislava  
 VSL [VSL], Delft  
 The Director of the International Bureau of Weights and Measures [BIPM], Sèvres

**Observers:**

Instituto Português da Qualidade [IPQ], Caparica

**Attendees to the last meeting  
(June 2009)**

**President: Dr Attilio Sacconi**

**Delegates and experts of member laboratories:**

**Dr Felicitas Arias, BIPM**

Tel: +33 1 45 07 70 07  
Fax: +33 1 45 07 70 59  
E-mail: farias@bipm.org

**Mr Andrew Baker, NMIA**

Tel: + 61 2 8467 3600  
Fax: + 61 2 8467 3610  
E-mail: andrew.baker@guest.npl.co.uk

**Dr Petr Balling, CMI**

Tel: + 420 257 288 326  
Fax: + 420 257 328 077  
E-mail: pballing@cmi.cz

**Dr Alessandro Balsamo, I.N.R.I.M**

Tel: + 39 011 3919 970  
Fax: + 39 011 3919 959  
E-mail: a.balsamo@inrim.it

**Dr Rob H. Bergmans, VSL**

Tel: + 31 15 269 1641  
Fax: + 31 15 261 2971  
E-mail: rbergmans@nmi.nl

**Dr Harrald Bosse, PTB**

Tel: + 49 531 592 5200  
Fax: + 49 531 592 5205  
E-mail: harald.bosse@ptb.de

**Dr Ronald Dixon, NIST**

Tel: + 301 975 4399  
Fax: + 301 869 0822  
E-mail: ronald.dixson@nist.gov

**<sup>1</sup>Mr Raymond Felder, CCL Executive Secretary**

Tel: + 33 1 45 07 70 52  
Fax: + 33 1 45 34 20 21  
E-mail: rfelder@bipm.org

**Dr Roman Fíra, SMU**

Tel: + 421 2 602 94 232  
Fax: + 421 2 654 29 592  
E-mail: fira@smu.gov.sk

**Prof. Sitian Gao, NIM**

Tel: + 86 10 6421 8565  
Fax: + 86 10 6421 8703  
E-mail: gaost@nim.ac.cn

**Mr Walter Giardini, NMIA**

Tel: + 61 2 8467 3678  
Fax: + 61 2 8467 3610  
E-mail: walter.giardini@measurement.gov.au

**Dr Patrick Gill, NPL**

Tel: + 44 20 8943 6986  
Fax: + 44 20 8943 7153  
E-mail: patrick.gill@npl.co.uk

**Dr Feng-Lei Hong, NMIIJ/AIST**

Tel: + 81 29 861 4032  
Fax: + 81 29 861 4045  
E-mail: f.hong@aist.go.jp

**Dr Patrick Juncar, LNE-INM/CNAM**

Tel: + 33 1 40 27 27 05  
Fax: + 33 1 58 80 89 00  
E-mail: juncar@cnam.fr

**Dr Jae-Wan Kim, KRISS**

Tel: + 82 42 868 5157  
Fax: + 82 42 868 5018  
E-mail: jaewan@kriss.re.kr

**Mr Oelof Kruger, NMISA**

Tel: +27 12 841 4340  
Fax: + 27 12 841 4458  
E-mail: oakruger@nmisa.org

**Dr Antti Lassila, MIKES**

Tel: +358 10 605 4413  
Fax: + 358 10 605 4499  
E-mail: antti.lassila@mikes.fi

**Dr Andrew Lewis, NPL**

Tel: + 44 20 8943 6124  
Fax: + 44 208 614 0533  
E-mail: andrew.lewis@npl.co.uk

<sup>1</sup> at the time of the meeting

**Dr Michael Matus**, BEV  
Tel: + 43 1 21 110 6540  
Fax: + 43 1 21 110 6000  
E-mail: michael.matus@bev.gv.at

**Dr Jim Pekelsky**, NRC-INMS  
Tel: + 1 613 993 7578  
Fax: + 1 613 952 1394  
E-mail: jim.pekelsky@nrc-cnrc.gc.ca

**Mr Emilio Prieto**, CEM  
Tel: + 34 91 807 4716  
Fax: + 34 91 807 4807  
E-mail: eprieto@cem.mityc.es

**Dr Fritz Riehle**, PTB  
Tel: + 49 531 592 4010  
Fax: + 49 531 592 4015  
E-mail: fritz.riehle@ptb.de

**Dr Lennart Robertsson**, BIPM  
Tel: + 33 1 45 07 70 53  
Fax: + 33 1 45 34 20 21  
E-mail: lroberts@bipm.org

**Dr Attilio Sacconi**, I.N.RI.M  
Tel : + 39 011 3919 966  
Fax: + 39 011 3919 959  
E-mail: a.sacconi@inrim.it

**Dr Giorgio Santarelli**, LNE  
Tel: + 33 01 40 51 22 55  
Fax: + 33 01 43 25 55 42  
E-mail: giorgio.santarelli@obspm.fr

**Dr Jack Stone**, NIST  
Tel: + 1 301 975 5638  
Fax: + 1 301 869 0822  
E-mail: jack.stone@nist.gov

**Dr Toshiyuki Takatsuji**, NMIJ/AIST  
Tel: + 81 3 5501 0844  
Fax: + 81 3 5501 0855  
E-mail: toshiyuki.takatsuji@aist.go.jp

**Ms Siew Leng Tan**, A\*STAR Singapore  
Tel: + 65 6279 1938  
Fax: + 65 6279 1994  
E-mail: tan\_siew\_leng@nmc.a-star.edu.sg

**Dr Rudolf Thalmann**, METAS  
Tel: + 41 31 32 33 385  
Fax: + 41 31 32 33 210  
E-mail: rudolf.thalmann@metas.ch

**Dr Claudine Thomas**, BIPM KCDB Coordinator  
Tel: + 33 1 45 07 70 73  
Fax: + 33 1 45 07 62 62  
E-mail: cthomas@bipm.org

**Mr Georges-Pierre Vailleau**, LNE-INM/CNAM  
Tel: + 33 1 40 43 37 77  
Fax: + 33 1 40 43 37 37  
E-mail: georges.vailleau@lne.fr

**Dr Miguel Viliesid**, CENAM  
Tel: + 52 442 211 0574  
Fax: + 52 442 215 3904  
E-mail: mviliesi@cenam.mx

**Prof. Andrew J. Wallard**, Director of the BIPM  
Tel: + 33 1 45 07 70 00  
Fax: + 33 1 45 34 86 70  
E-mail: awallard@bipm.org

**Dr Tanfer Yandayan**, UME  
Tel: + 90 262 679 5000 ext. 5300  
Fax: + 90 262 679 5001  
E-mail: tanfer.yandayan@ume.tubitak.gov.tr

**Dr Massimo Zucco**, I.N.RI.M  
Tel: + 39 011 3919 968  
Fax: + 39 011 346 384  
E-mail: m.zucco@inrim.it

**Invited by the President:**

**Dr Jose C. de Oliveira**, INMETRO  
Tel: + 55 21 2679 9024  
Fax: + 55 21 2679 1505  
E-mail: jcoliveira@inmetro.gov.br

**Also attending:**

**Dr Janet Miles, BIPM**  
Tel: +33 1 45 07 70 08  
Fax: + 33 1 45 34 20 21  
E-mail: jmiles@bipm.org

**Apologies :**

**Dr Konstantin Chekirda, VNIIM**  
Tel: +7 812 323 9664  
Fax: +7 812 323 9664  
E-mail: k.v.chekirda@vniim.ru

## CCL Working Group on Dimensional Metrology (WGDM)

**Chairman:** **Dr Rudolf Thalmann**, METAS

Tel: + 41 31 32 33 385

Fax: + 41 31 32 33 210

E-mail: rudolf.thalmann@metas.ch

### Participants at the meeting of 8-9 June 2009

#### **Dr A Baker, NMIA**

**Dr Alessandro Balsamo, I.N.R.I.M**

Tel: + 39 011 3919 970

Fax: + 39 011 3919 959

E-mail: a.balsamo@inrim.it

**Dr Rob H. Bergmans, VSL**

Tel: + 31 15 269 1641

Fax: + 31 15 261 2971

E-mail: rbergmans@nmi.nl

**Dr Harald Bosse, PTB**

Tel: + 49 531 592 5200

Fax: + 49 531 592 5205

E-mail: harald.bosse@ptb.de

**Dr K Chaudhary, NPLI**

**Dr Jose C. de Oliveira, INMETRO**

Tel: + 55 21 2679 9024

Fax: + 55 21 2679 1505

E-mail: jcoliveira@inmetro.gov.br

**Dr Ronald Dixson, NIST**

Tel: + 301 975 4399

Fax: + 301 869 0822

E-mail: ronald.dixson@nist.gov

**Dr Pedro Espina, BIPM**

Tel: + 33 1 45 07 62 72

Fax: + 33 1 45 34 20 21

E-mail: pedro.espina@bipm.org

**Mr Raymond Felder, CCL Executive Secretary**

Tel: + 33 1 45 07 70 52

Fax: + 33 1 45 34 20 21

E-mail: rfelder@bipm.org

**Dr Roman Fíra, SMU**

Tel: + 421 2 602 94 232

Fax: + 421 2 654 29 592

E-mail: fira@smu.gov.sk

**Prof. Sitian Gao, NIM**

Tel: + 86 10 6421 8565

Fax: + 86 10 6421 8703

E-mail: gaost@nim.ac.cn

**Mr Walter Giardini, NMIA**

Tel: + 61 2 8467 3678

Fax: + 61 2 8467 3610

E-mail: walter.giardini@measurement.gov.au

**Dr Feng-Lei Hong, NMIJ/AIST**

Tel: + 81 29 861 4032

Fax: + 81 29 861 4045

E-mail: f.hong@aist.go.jp

**Dr Jae-Wan Kim, KRISS**

Tel: + 82 42 861 5114

Fax: + 82 42 868 5444

E-mail: jaewan@kriiss.re.kr

**Mr Petr Kren, CMI**

Tel: + 420 257 288 388

Fax: + 420 2 5732 8077

E-mail: pkren@cmi.cz

**Mr Oelof Kruger, NMISA**

Tel: +27 12 841 4340

Fax: + 27 12 841 4458

E-mail: oakruger@nmisa.org

**Dr Antti Lassila, MIKES**

Tel: +358 10 605 4413

Fax: + 358 10 605 4499

E-mail: antti.lassila@mikes.fi

**Dr Andrew Lewis**, NPL  
Tel: + 44 20 8943 6124  
Fax: + 44 208 614 0533  
E-mail: andrew.lewis@npl.co.uk

**Dr Michael Matus**, BEV  
Tel: + 43 1 21 110 6540  
Fax: + 43 1 21 110 6000  
E-mail: michael.matus@bev.gv.at

**Dr Jim Pekelsky**, NRC-INMS  
Tel: + 1 613 993 7578  
Fax: + 1 613 952 1394  
E-mail: jim.pekelsky@nrc-cnrc.gc.ca

**Dr Gwo-Sheng Peng**, CMS/ITRI  
Tel: + 886 3 574 3773  
Fax: + 886 3 572 6445  
E-mail: gwo-sheng.peng@itri.org.tw

**Mr Emilio Prieto**, CEM  
Tel: + 34 91 807 4716  
Fax: + 34 91 807 4807  
E-mail: eprieto@cem.mityc.es

**Dr Lennart Robertsson**, BIPM  
Tel : + 33 1 45 07 70 53  
Fax : + 33 1 45 34 20 21  
E-mail : lroberts@bipm.org

**Dr Attilio Sacconi**, I.N.R.I.M  
Tel: + 39 011 3919 966  
Tel: + 39 011 3919 959  
E-mail: a.sacconi@inrim.it

**Dr Jack Stone**, NIST  
Tel: + 1 301 975 5638  
Fax: + 1 301 869 0822  
E-mail: jack.stone@nist.gov

**Dr R Thalmann**, METAS  
Tel: + 41 31 32 33 385  
Fax: + 41 31 32 33 210  
E-mail: rudolf.thalmann@metas.ch

**Dr Toshiyuki Takatsuji**, NMIJ/AIST  
Tel: + 81 3 5501 0844  
Fax: + 81 3 5501 0855  
E-mail: toshiyuki.takatsuji@aist.go.jp

**Ms Siew Leng Tan**, A\*STAR Singapore  
Tel: + 65 6279 1938  
Fax: + 65 6279 1994  
E-mail: tan\_siew\_leng@nmc.a-star.edu.sg

**Dr Claudine Thomas**, BIPM KCDB Coordinator  
Tel: + 33 1 45 07 70 73  
Fax: + 33 1 45 07 62 62  
E-mail: cthomas@bipm.org

**Mr Georges-Pierre Vailleau**, LNE-INM/CNAM  
Tel: + 33 1 40 43 37 77  
Fax: + 33 1 40 43 37 37  
E-mail: georges.vailleau@lne.fr

**Dr Miguel Viliesid**, CENAM  
Tel: + 52 442 211 0574  
Fax: + 52 442 215 3904  
E-mail: mviliesi@cenam.mx

**Dr Leonid Vitushkin**, BIPM  
Tel: + 33 1 45 07 70 81  
Fax: + 33 1 45 34 20 21  
E-mail: lvitushk@bipm.org

**Prof. Andrew Wallard**, BIPM Director  
Tel: + 33 1 45 07 70 00  
Fax: + 33 1 45 34 86 70  
E-mail: awallard@bipm.org

**Dr Tanfer Yandayan**, UME  
Tel: + 90 262 679 5000 ext. 5300  
Fax: + 90 262 679 5001  
E-mail: tanfer.yandayan@ume.tubitak.gov.tr

## CCL/CCTF Frequency Standards Working Group

After the decisions of the CCL 2005 and of the CCTF 2006 meetings, the former CCL Working Group for the "*Mise en Pratique*" and the former CCL-CCTF Joint Working Group have been merged to become the CCL-CCTF Frequency Standards Working Group

**Co-Chairs:** **Dr Patrick Gill, NPL**

Tel: + 44 208 943 6986  
 Fax: + 44 208 943 7153  
 E-mail: patrick.gill@npl.co.uk

**Dr Fritz Riehle, PTB**

Tel: + 49 531 592 4010  
 Fax: + 49 531 592 4015  
 E-mail: fritz.riehle@ptb.de

### Participants at the meeting of 2 June 2009

**Dr Elisa Felicitas Arias,**

Executive Secretary of the WG  
 Tel: + 33 1 45 07 70 76  
 Fax: + 33 1 45 07 70 59  
 E-mail: farias@bipm.org

**Dr Ramiz Hamid, UME**

Tel: + 90 262 679 5000/3150  
 Fax: + 90 262 679 5001  
 E-mail: ramiz.hamid@ume.tubitak.gov.tr

**Dr Petr Balling, CMI**

Tel: + 420 257 288 326  
 Fax: + 420 257 328 077  
 E-mail: pballing@cmi.cz

**Dr Feng-Lei Hong, NMIIJ/AIST**

Tel: + 81 29 861 4032  
 Fax: + 81 29 861 4045  
 E-mail: f.hong@aist.go.jp

**Dr James C. Bergquist, NIST**

Tel: + 1 303 497 5459  
 Fax: + 1 303 497 7375  
 E-mail: berky@boulder.nist.gov

**Mr Michito Imae, NMIIJ/AIST**

Tel: + 81 29 861 2291  
 Fax: + 81 29 861 4202  
 E-mail: michito.imae@aist.go.jp

**Mr Luc Erard, LNE-INM/CNAM**

Tel: + 33 1 40 43 40 52  
 Fax: + 33 1 40 43 37 37  
 E-mail: luc.erard@lne.fr

**Dr Patrick Juncar, LNE-INM/CNAM**

Tel: + 33 1 40 27 27 05  
 Fax: + 33 1 58 80 89 00  
 E-mail: juncar@cnam.fr

**Mr Raymond Felder,**

Executive Secretary of the CCL  
 Tel: + 33 1 45 07 70 52  
 Fax: + 33 1 45 34 20 21  
 E-mail: rfelder@bipm.org

**Dr Nicholas Koshelyaevsky, VNIIFTRI**

Tel: + 7 095 534 8222  
 Fax: + 7 095 534 0609  
 E-mail: nkoshelyaevsky@imvp.ru

**Prof. Xiaoxun Gao, NIM**

Tel: + 86 10 6421 2076  
 Fax: + 86 10 6429 2353  
 E-mail: gaoxx@nim.ac.cn

**Prof. Michael Kühne, Deputy Director BIPM**

Tel: + 33 1 45 07 62 90  
 Fax: + 33 1 45 34 20 21  
 E-mail: mkuehne@bipm.org

**Dr Aldo Godone, I.N.R.I.M**

Tel: + 39 011 391 9232  
 Fax: + 39 011 391 9259  
 E-mail: godone@inrim.it

**Dr Taeg Yong Kwon, KRISS**

Tel : + 82 42 868 5141  
 Fax : + 82 42 868 5287  
 E-mail : tykwon@kribs.re.kr

**Dr Pierre Lemonde**, LNE-SYRTE  
 Tel: + 33 1 40 51 22 24  
 Fax: + 33 1 43 25 55 42  
 E-mail: pierre.lemonde@obspm.fr

**Dr Tianchu Li**, NIM  
 Tel: + 86 10 6422 0524  
 Fax: + 86 10 6429 5811  
 E-mail: litch@nim.ac.cn or  
 tianchuli@yahoo.com.cn

**Dr José Mauricio López-Romero**, CENAM  
 Tel: + 52 442 211 0543  
 Fax: + 52 442 215 3904  
 E-mail: jlopez@cenam.mx

**Dr Alan Madej**, NRC-INMS  
 Tel: + 1 613 993 9385  
 Fax: + 1 613 952 1394  
 E-mail: alan.madej@nrc-cnrc.gc.ca

**Dr Mikko Merimaa**, MIKES  
 Tel: +358 10 605 4419  
 Fax: + 358 10 605 4499  
 E-mail: mikko.merimaa@mikes.fi

**Dr Janet Miles**, BIPM  
 Tel: +33 1 45 07 70 08  
 Fax: + 33 1 45 34 20 21  
 E-mail: jmiles@bipm.org

**Dr Vitaly Palchikov**, VNIIFTRI  
 Tel: + 7 499 720 9210  
 Fax: + 7 095 535 73 86  
 E-mail: palchikov@yahoo.com

**Dr Gianna Panfilo**, BIPM  
 Tel: + 33 1 45 07 70 75  
 Fax: + 33 1 45 34 20 21  
 E-mail: gpanfilo@bipm.org

**Dr Gérard Petit**, BIPM  
 Tel: + 33 1 45 07 70 67  
 Fax: + 33 1 45 07 70 59  
 E-mail: gpetit@bipm.org

**Dr Steven Van den Berg**, VSL  
 Tel : + 31 15 269 1523  
 Fax : + 31 15 261 2971  
 E-mail : svdberg@vsl.nl

**Dr Bruce Warrington**, NMIA  
 Tel : + 61 2 8467 3504 (Mobile: 0408 960 735)  
 Fax: + 61 2 8467 3610  
 E-mail: bruce.warrington@measurement.gov.au

**Dr Elena Zagirova**, VNIIFTRI  
 Tel: + 7 495 660 5722  
 Fax: + 7 495 744 8174 ; + 7 495 660 1741  
 E-mail: ezagirova@impv.ru

**Dr Massimo Zucco**, I.N.R.I.M  
 Tel: + 39 011 3919 968  
 Fax: + 39 011 346 384  
 E-mail: m.zucco@inrim.it

**Prof. Andrew J. Wallard**, Director of the BIPM  
 Tel: + 33 1 45 07 70 00  
 Fax: + 33 1 45 34 86 70  
 E-mail: awallard@bipm.org

### Invited by the co-chairs:

**Dr Michael Matus**, BEV  
 Tel: + 43 1 21 110 6540  
 Fax: + 43 1 21 110 6000  
 E-mail: michael.matus@bev.gv.at

**Ms Siew Leng Tan**, A\* STAR Singapore  
 Tel: + 65 6279 1938  
 Fax: + 65 6279 1994  
 E-mail: tan\_siew\_leng@nmc.a-star.edu.sg

**Mr Chris Matthee**, NMISA  
 Tel: + 27 12 841 2245  
 Fax: + 27 12 841 2131  
 E-mail: cmatthee@nmisa.org

**Regrets:**           **Dr Yury S. Domnin**, VNIIFTRI

## Consultative Committee for Time and Frequency (CCTF)

**Created in 1956**

*Present activities concern matters related to the definition and realization of the second, establishment and diffusion of International Atomic Time (TAI) and Coordinated Universal Time (UTC) and advice to the CIPM on matters related to time and time scales.*

President: **Mr Luc Erard**  
Laboratoire National de Métrologie et d'Essais  
1, rue Gaston Boissier  
75015 Paris / France  
Tel: + 33 1 40 43 40 52  
Fax: + 33 1 40 43 37 37  
E-mail: luc.erard@lne.fr

**Executive Secretary:** **Dr Elisa Felicitas Arias, BIPM**  
Tel: + 33 1 45 07 70 76  
Fax: + 33 1 45 07 70 59  
E-mail: farias@bipm.org

**Members :**

Centro Nacional de Metrología [CENAM], Mexico  
Federal Office of Metrology [METAS], Wabern  
Institute for Physical-Technical and Radiotechnical Measurements, Rostekhregulirovaniye of Russia [VNIIFTRI], Moscow  
International Astronomical Union [IAU]  
International GNSS Service [IGS]  
International Telecommunication Union [ITU-R], Radiocommunication Bureau  
International Union of Geodesy and Geophysics [IUGG]  
International Union of Radio Science [URSI]  
Istituto Nazionale di Ricerca Metrologica [I.N.R.I.M], Turin  
Korea Research Institute of Standards and Science [KRISS], Daejeon  
National Institute of Information and Communications Technology [NICT], Tokyo  
National Institute of Metrology [NIM], Beijing  
National Institute of Standards and Technology [NIST], Boulder  
National Measurement Institute of Australia [NMIA], Lindfield  
National Metrology Institute of Japan, National Intitute of Advanced Industrial Science and Technology [NMIJ/AIST], Tsukuba  
National Metrology Institute of South Africa [NMISA], Pretoria  
National Physical Laboratory [NPL], Teddington  
National Physical Laboratory of India [NPLI], New Delhi  
National Physical Laboratory of Israel [INPL], Jerusalem  
National Research Council of Canada – Institute for National Measurement Standards [NRC-INMS], Ottawa, Ontario  
Observatoire Cantonal [ON], Neuchâtel  
Observatoire de Paris/Systèmes de Référence Temps/Espace [LNE-SYRTE], Paris  
Observatoire Royal de Belgique [ORB], Bruxelles  
Physikalisch-Technische Bundesanstalt [PTB], Braunschweig  
Real Instituto y Observatorio de la Armada [ROA], Cadiz  
Space Research Center of the Polish Academy of Sciences [SRC], Warsaw

Technical Research Institute of Sweden [SP], Borås  
 Technical University [TUG], Graz  
 U.S. Naval Observatory [USNO], Washington  
 VSL [VSL], Delft  
 The Director of the International Bureau of Weights and Measures [BIPM], Sèvres

**Observers:**

Agency for Science, Technology and Research [A\*STAR], Singapore  
 National Metrology Institute of Turkey [UME], Gebze-Kocaeli

**Attendees to the last meeting (June 2009)**

**President : Mr Luc Erard LNE**

**Delegates and experts of member laboratories:**

**Dr Joseph Achkar, LNE-SYRTE**

Tel: + 33 01 40 51 22 16  
 Fax: + 33 01 43 25 55 42  
 E-mail: joseph.achkar@obspm.fr

**Dr Pascale Defraigne, ORB**

Tel: + 32 2 373 0260  
 Fax: + 32 2 374 9822  
 E-mail: pascale.defraigne@oma.be

**Dr Andreas Bauch, PTB**

Tel: + 49 531 592 4320  
 Fax: + 49 531 592 4479  
 E-mail: andreas.bauch@ptb.de

**Mr Erik Dierikx, VSL**

Tel: + 31 15 269 1591  
 Fax: + 31 15 261 2971  
 E-mail: edierikx@nmi.nl

**Dr Ronald Beard, ITU-R**

Tel: + 1 202 404 7054  
 Fax: + 1 202 767 2845  
 E-mail: ronald.beard@nrl.navy.mil or  
 ronald.beard@ties.itu.int

**Mr Luc Erard, LNE**

Tel: + 33 1 40 43 40 52  
 Fax: + 33 1 40 43 37 37  
 E-mail: luc.erard@lne.fr

**Dr James C. Bergquist, NIST**

Tel: + 1 303 497 5459  
 Fax: + 1 303 497 7375  
 E-mail: berky@boulder.nist.gov

**Dr Francisco Javier Galindo Mendoza, ROA**

Tel: + 34 956 599 286  
 Fax: + 34 956 599 366  
 E-mail: jgalindo@roa.es

**Dr Claude Boucher, IUGG**

Tel: + 33 1 55 55 98 96  
 Fax: + 33 1 55 55 98 46  
 E-mail: Claude.Boucher@espace.gouv.fr

**Prof. Xiaoxun Gao, NIM**

Tel: + 86 10 6421 2076  
 Fax: + 86 10 6429 2353  
 E-mail: gaoxx@nim.ac.cn

**Dr Franco Cordara, I.N.R.I.M**

Tel: + 39 011 3919.1  
 Fax: + 39 011 346 384  
 E-mail: f.cordara@inrim.it

**Dr Patrick Gill, NPL**

Tel: + 44 208 943 6986  
 Fax: + 44 208 943 7153  
 E-mail: patrick.gill@npl.co.uk

**Dr John Davis, NPL**

Tel: + 44 208 943 7137  
 Fax: + 44 208 943 6458  
 E-mail: john.davis@npl.co.uk

**Dr Aldo Godone, I.N.R.I.M**

Tel: + 39 011 391 9232  
 Fax: + 39 011 391 9259  
 E-mail: godone@inrim.it

**Dr Feng-Lei Hong**, NMIJ/AIST  
Tel: + 81 29 861 4032  
Fax: + 81 29 861 4045  
E-mail: f.hong@aist.go.jp

**Dr Mizuhiko Hosokawa**, NICT  
Tel: + 81 42 327 7557  
Fax: + 81 42 327 6634  
E-mail: hosokawa@nict.go.jp

**Dr Takeshi Ikegami**, NMIJ/AIST  
Tel: + 81 29 861 4253  
Fax: + 81 29 861 4010  
E-mail: t.ikegami@aist.go.jp

**Mr Michito Imae**, NMIJ/AIST  
Tel: + 81 298 61 2291  
Fax: + 81 298 61 4202  
E-mail: michito.imae@aist.go.jp

**Dr Nicholas Koshelyaevsky**, VNIIFTRI  
Tel: + 7 095 534 8222  
Fax: + 7 095 534 0609  
E-mail: nkoshelyaevsky@imvp.ru

**Dr Yasuhiro Koyama**, NICT  
Tel: + 81 42 327 7457  
Fax: + 81 42 327 7457  
E-mail: koyama@nict.go.jp

**Dr Taeg Yong Kwon**, KRISS  
Tel: + 82 42 868 5141  
Fax: + 82 42 868 5287  
E-mail: tykwon@kriss.re.kr

**Dr Pierre Lemonde**, SYRTE  
Tel: + 33 1 40 51 22 24  
Fax: + 33 1 43 25 55 42  
E-mail: pierre.lemonde@obspm.fr

**Dr Judah Levine**, NIST  
Tel: + 1 303 497 3903  
Fax: + 1 303 497 6461  
E-mail: jlevine@boulder.nist.gov

**Dr Tianchu Li**, NIM  
Tel: + 86 10 6422 0524  
Fax: + 86 10 6429 5811  
E-mail: litch@nim.ac.cn or  
tianchuli@yahoo.com.cn

**Dr José Mauricio López-Romero**, CENAM  
Tel: + 52 442 211 0543  
Fax: + 52 442 215 3904  
E-mail: jlopez@cenam.mx

**Dr Alan Madej**, NRC-INMS  
Tel: + 1 613 993 9385  
Fax: + 1 613 952 1394  
E-mail: alan.madej@nrc-cnrc.gc.ca

**Dr Louis Marmet**, NRC-INMS  
Tel: + 613 993 998 1317  
Fax: + 613 952 1394  
E-mail: louis.marmet@nrc-cnrc.gc.ca

**Dr Demetrios N. Matsakis**, USNO  
Tel: + 1 202 762 1587  
Fax: + 1 202 762 1511  
E-mail: dnm@usno.navy.mil

**Mr Chris Matthee**, NMISA  
Tel: + 27 12 841 2245  
Fax: + 27 12 841 2131  
E-mail: cmatthee@nmisa.org

**Mr James Mc A. Steele**, NPL and URSI  
Tel: + 44 1243 864 255  
Fax: + 44 2089 432 155  
E-mail: james.steele@tesco.net

**Dr Dennis McCarthy**, USNO and IAU  
Tel: + 1 202 762 1837  
Fax: + 1 202 762 1563  
E-mail: dmc@maia.usno.navy.mil

**Dr Thomas R. O'Brian**, NIST  
Tel: + 1 303 497 4570  
Fax: + 1 301 975 6461  
E-mail: obrian@boulder.nist.gov

**Dr Vitaly Palchikov**, VNIIFTRI  
Tel: + 7 499 720 9210  
Fax: + 7 095 535 73 86  
E-mail: palchikov@yahoo.com

**Dr Thomas E. Parker**, NIST  
Tel: + 1 303 497 7881  
Fax: + 1 303 497 6461  
E-mail: tparker@boulder.nist.gov

**Dr Dirk Piester**, PTB  
Tel: + 49 531 592 4421  
Fax: + 49 531 592 4015  
E-mail: dirk.piester@ptb.de

**Dr Fritz Riehle**, PTB  
Tel: + 49 531 592 4010  
Fax: + 49 531 592 4015  
E-mail: fritz.riehle@ptb.de

**Dr Kenneth Senior**, IGS  
Tel: + 1 202 767 2043  
Fax: + 1 202 767 2845  
E-mail: ken.senior@nrl.navy.mil

**Dr André Stefanov**, METAS  
Tel: + 41 31 32 33 298  
Fax: + 41 31 323 3210  
E-mail: Andre.Stefanov@metas.ch

**Dr Patrizia Tavella**, I.N.R.I.M.  
Tel: + 39 011 391 9235  
Fax: + 39 011 391 9259  
E-mail: tavella@inrim.it

**Dr Philip Tuckey**, LNE-SYRTE  
Tel: + 33 01 40 51 22 04  
Fax: + 33 01 43 25 55 42  
E-mail: philip.tuckey@obspm.fr

**Dr Bruce Warrington**, NMIA  
Tel: + 61 2 8467 3504 (Mobile: 0408 960 735)  
Fax: + 61 2 8467 3610  
E-mail: bruce.warrington@measurement.gov.au

**Dr Elena Zagirova**, VNIIFTRI  
+ 7 495 660 5722  
+ 7 495 744 8174 ; + 7 495 660 1741  
ezagirova@impv.ru

#### Observers:

**Dr Ramiz Hamid**, UME  
Tel: + 90 262 679 5000/3150  
Fax: + 90 262 679 5001  
E-mail: ramiz.hamid@ume.tubitak.gov.tr

**Ms Siew Leng Tan**, A\*STAR  
Tel: + 65 6279 1938  
Fax: + 65 6279 1994  
E-mail: tan\_siew\_leng@nmc.a-star.edu.sg

#### Invited by the President:

**Dr Thomas R. Bartholomew**  
Tel: + 1 240 456 2010 (office)  
Tel: + 1 240 599 1764 (mobile)  
E-mail: tombartholomew@netzero.com;  
thomas.bartolomew@ngc.com

**Dr William J. Klepczynski**  
Tel: + 1 410 798 8457  
Tel: + 1 202 286 3050  
Fax: + 1 410 798 8567  
E-mail: wklepczy@comcast.net

#### Apologies:

**Dr Parameswar Banerjee**, NPLI  
Tel : + 91 11 2584 1506 or 11 287 4318 (private)  
Fax : + 91 11 2584 1506  
E-mail : pbanerjee@mail.nplindia.ernet.in

**Dr Peter Fisk**, NMIA  
Tel: + 61 2 8467 3640  
Mobile: + 61 2 0418 693 962  
Fax: + 61 2 8467 3752  
E-mail: peter.fisk@measurement.gov.au

**Dr Yury S. Domnin**, VNIIFTRI  
Tel: + 7 095 535 9151  
Fax: + 7 095 534 0609  
E-mail: ydomnin@imvp.ru

**Dr Kenneth J. Johnston**, USNO  
Tel: + 81 422 34 3613  
Fax: + 81 422 34 3810  
E-mail: kjj@astro.usno.navy.mil

**Dr Ilya Kuselman, INPL**  
Tel: + 972 2 566 1856  
Fax: + 972 2 652 0797  
E-mail: ilya.kuselman@moital.gov.il

**Prof Ian M. Mills, CCU President, University of Reading**  
Tel: + 44 118 378 8456  
Fax: + 44 118 931 6331  
E-mail: i.m.mills@reading.ac.uk  
E-mail: millsat57@onetel.net.uk

**Dr Robert A. Nelson, Satellite Engineering Research Corporation**  
Tel: + 1 301 657 9641  
Fax: + 1 301 657 9642  
E-mail: robtnelson@aol.com

### **CCTF Working Group on TAI**

*The CCTF working group on TAI was set up by the CCDS in 1985 to make proposals for improvements in TAI and UTC based upon the needs of users. It organizes meetings of representatives of contributing laboratories to TAI, on the days preceding meetings of CCTF.*

**Chairwoman: Dr Patrizia Tavella, I.N.R.I.M**

Tel: + 39 011 391 9235  
Fax: + 39 011 391 9259  
E-mail: tavella@inrim.it

**Members:**

Representative of the IAU  
Representative of the IUGG  
Representative of the URSI  
Representative of the ITU-R

Representative of the CIPM

**Prof. Jean Kovalevsky**

Tel: + 33 4 93 40 53 87  
Fax: + 33 4 93 40 53 33  
E-mail: kovalevsky@obs-azur.fr

**Prof. Andrew J. Wallard**

Tel: + 33 1 45 07 70 00  
Fax: + 33 1 45 34 86 70  
E-mail: awallard@bipm.org

**Prof. Michael Kuehne**

Tel: +33 1 45 07 62 90  
Fax: +33 1 45 34 86 70  
E-mail: mkuehne@bipm.org

BIPM Time section

**Dr Elisa Felicitas Arias**

Tel: + 33 1 45 07 70 76  
Fax: + 33 1 45 07 70 59  
E-mail: farias@bipm.org

**BIPM Workshop on Development of Advanced Time and Frequency Transfer Techniques**  
**June 2011**

**Dr Ouali Acef**, LNE-SYRTE  
Tel: + 33 1 40 51 23 28  
Fax: + 33 1 43 25 55 42  
E-mail: ouali.acef@obspm.fr

**Dr Joseph Achkar**, LNE-SYRTE  
Tel: + 33 01 40 51 22 16  
Fax: + 33 01 43 25 55 42  
E-mail: joseph.achkar@obspm.fr

**Dr Felicitas Arias**, BIPM  
Tel: +33 1 45 07 70 76  
Fax: +33 1 45 34 20 21  
E-mail: farias@bipm.org

**Dr Sébastien Bize**, LNE-SYRTE  
Tel: + 33 01 40 51 22 13  
Fax: + 33 01 43 25 55 42  
E-mail: sebastien.bize@obspm.fr

**Dr Celia Clivati**, Politecnico di Torino  
Tel : + 39 011 3919.1  
Fax : + 39 011 346 384  
E-mail : C.Clivati@INRIM.it

**Dr Franco Cordara**, I.N.R.I.M  
Tel: + 39 011 3919.1  
Fax: + 39 011 346 384  
E-mail: f.cordara@inrim.it

**Dr Scott Crane**, USNO  
Tel: + 202 762 1587  
Fax: + 202 762 1511  
E-mail: scott.crane@usno.navy.mil

**Dr Pascale Defraigne**, ORB  
Tel: + 32 2 373 0260  
Fax: + 32 2 374 9822  
E-mail: pascale.defraigne@oma.be

**Dr Noël Dimarcq**, LNE-SYRTE  
Tel: + 33 1 40 51 22 53  
Fax: + 33 1 43 25 55 42  
E-mail: noel.dimarcq@obspm.fr

**Mr Luc Erard**, LNE  
Tel: + 33 1 40 43 40 52  
Fax: + 33 1 40 43 37 37  
E-mail: luc.erard@lne.fr

**Dr Hao Fang**, BIPM  
Tel: +33 1 45 07 62 56  
Fax: +33 1 45 34 20 21  
E-mail: hfang@bipm.org

**Dr Miho Fujieda**, NICT  
Tel: + 81 42 3276 316  
Fax: + 81 42 3276 664  
E-mail: miho@nict.go.jp

**Dr Francisco Javier Galindo Mendoza**, ROA  
Tel: + 34 956 599 286  
Fax: + 34 956 599 366  
E-mail: jgalindo@roa.es

**Dr Serge Galliou**, LNE-LTFB  
Tel: + 33 3 81 402 839  
Fax: + 33 3 381 885 714  
E-mail: serge.galliou@femto-st.fr

**Dr Yuan Gao**, NIM  
Tel: + 86 10 6421 6289  
Fax: + 86 10 6521 4828  
E-mail: gaoy@nim.ac.cn

**Dr Patrick Gill**, NPL  
Tel: + 44 208 943 6986  
Fax: + 44 208 943 7153  
E-mail: patrick.gill@npl.co.uk

**Dr Philippe Guillemot**, CNES  
Tel: +33 5 61 27 44 01  
E-mail: Philippe.Guillemot@cnes.fr

**Dr Thomas Hobiger**, NICT  
Tel: + 81 42 3277 561  
Fax: + 81 42 327 6664  
E-mail: hobiger@nict.go.jp

**Dr Feng-Lei Hong**, NMII/AIST  
Tel: + 81 29 861 4032  
Fax: + 81 29 861 4045  
E-mail: f.hong@aist.go.jp

**Dr Amale Kanj**, LNE-SYRTE  
Tel: + 33 01 40 51 22 38  
Fax: + 33 01 43 25 55 42  
E-mail: Amale.Kanj@obspm.fr

**Dr Jeroen Koelemeij**, VU University  
 Tel: + 31 20 5987 903  
 Fax: + 31 20 5987 7992  
 E-mail: j.c.j.koelemeij@vu.nl

**Prof. Michael Kuehne**, Director of the BIPM  
 Tel: +33 1 45 70 62 90  
 Fax: +33 1 45 34 20 21  
 E-mail: mkuehne@bipm.org

**Dr Judah Levine**, NIST  
 Tel: + 1 303 497 3903  
 Fax: + 1 303 497 6461  
 E-mail: jlevine@boulder.nist.gov

**Dr Włodzimierz Lewandowski**, BIPM  
 Tel: +33 1 45 70 70 63  
 Fax: +33 1 45 34 20 21  
 E-mail: wlewando@bipm.org

**Dr José Mauricio López-Romero**, CENAM  
 Tel: + 52 442 211 0543  
 Fax: + 52 442 215 3904  
 E-mail: jlopez@cenam.mx

**Dr Andrew Ludlow**, NIST  
 Tel: + 1 303 497 4972  
 Fax: + 1 303 497 6461  
 E-mail: ludlow@boulder.nist.gov

**Dr Werner Mache**, BEV  
 Tel: + 43 1 21 110 6302  
 Fax: + 43 1 21 110 6000  
 E-mail: Werner.Mache@bev.gv.at

**Dr Giuseppe Marra**, NPL  
 Tel: + 44 208 9436 163  
 Fax: + 44 208 943 6458  
 E-mail: giuseppe.marra@npl.co.uk

**Dr Alberto Mura**, I.N.R.I.M  
 Tel: + 39 011 3919.1  
 Fax: + 39 011 346 384  
 E-mail: a.mura@inrim.it

**Dr Demetrios N. Matsakis**, USNO  
 Tel: + 1 202 762 1587  
 Fax: + 1 202 762 1511  
 E-mail: dnm@usno.navy.mil

**Dr Jerzy Nawrocki**, SRC  
 Tel: + 48 061 817 0187  
 Fax: + 48 061 817 0219  
 E-mail: nawrocki@cbk.poznan.pl

**Dr Vadim Nozdrin**, ITU-R  
 Tel: + 41 22 730 5111  
 Fax: + 41 22 730 5785  
 E-mail: Vadim.Nozdrin@itu.int

**Dr Gianna Panfilo**, BIPM  
 Tel: +33 1 45 70 75  
 Fax: +33 1 45 34 20 21  
 E-mail: g.panfilo@bipm.org

Dr Gérard Petit, BIPM  
 Tel: +33 1 45 07 70 67  
 Fax: +33 1 45 34 20 21  
 E-mail: gpetit@bipm.org

**Dr Dirk Piester**, PTB  
 Tel: + 49 531 592 4421  
 Fax: + 49 531 592 4015  
 E-mail: dirk.piester@ptb.de

**Dr Edward Powers**, USNO  
 Tel: + 202 762 1587  
 Fax: + 202 762 1511  
 E-mail: edward.powers@usno.navy.mil

**Dr Fritz Riehle**, PTB  
 Tel: + 49 531 592 4010  
 Fax: + 49 531 592 4015  
 E-mail: fritz.riehle@ptb.de

**Dr Lennart Robertsson**, BIPM  
 Tel: +33 1 45 07 70 53  
 Fax: +33 1 45 34 20 21  
 E-mail: lroberts@bipm.org

**Dr Etienne Samain**, OCA  
 Tel: + 33 4 9340 5429  
 Fax: + 33 4 9340 5433  
 E-mail: etienne.samain@obs-azur.fr

**Dr Giorgio Santarelli**, LNE-SYRTE  
 Tel: + 33 01 40 51 22 55  
 Fax: + 33 01 43 25 55 42  
 E-mail: giorgio.santarelli@obspm.fr

**Dr Wolfgang Schaefer**, TIMETECH  
 Tel: + 49 711 67808-0  
 Fax: + 49 711 67808-99  
 E-mail: Wolfgang.Schaefer@timetech.de

**Dr Philip Tuckey**, LNE-SYRTE  
Tel: + 33 01 40 51 22 04  
Fax: + 33 01 43 25 55 42  
E-mail: philip.tuckey@obspm.fr

**Dr Massimo Zucco**, I.N.R.I.M  
Tel: + 39 011 3919 968  
Fax: + 39 011 346 384  
E-mail: m.zucco@inrim.it

**Dr Peter Wolf**, LNE-SYRTE  
Tel: + 33 01 40 51 22 13  
Fax: + 33 01 43 25 55 42  
E-mail: peter.wolf@obspm.fr

**Observers:**

**Dr Ramiz Hamid**, UME  
Tel: + 90 262 679 5000/3150  
Fax: + 90 262 679 5001  
E-mail: ramiz.hamid@ume.tubitak.gov.tr

**CCTF Working Group on Coordination of the Development of Advanced Time and Frequency And Frequency Transfer Techniques**  
**June 2011**

**Chairman:**

**Dr Philippe Tuckey**, LNE-SYRTE  
Tel: + 33 01 40 51 22 04  
Fax: + 33 01 43 25 55 42  
E-mail: philip.tuckey@obspm.fr

**Executive Secretary:**

**Dr Lennart Robertsson**, BIPM  
Tel: +33 1 45 07 70 53  
Fax: +33 1 45 34 20 21  
E-mail: lroberts@bipm.org

**Participants:**

**Dr Pascale Defraigne**, ORB  
Tel: + 32 2 373 0260  
Fax: + 32 2 374 9822  
E-mail: pascale.defraigne@oma.be

**Mr Luc Erard**, LNE  
Tel: + 33 1 40 43 40 52  
Fax: + 33 1 40 43 37 37  
E-mail: luc.erard@lne.fr

**Dr Miho Fujieda**, NICT  
Tel: + 81 42 3276 316  
Fax: + 81 42 3276 664  
E-mail: miho@nict.go.jp

**Dr Marina Gertsvolf**, NRC-INMS  
Tel: + 1 613 998 1311  
Fax: + 1 613 952 1394  
E-mail: marina.gertsvolf@nrc-cnrc.gc.ca

**Dr Patrick Gill**, NPL  
Tel: + 44 208 943 6986  
Fax: + 44 208 943 7153  
E-mail: patrick.gill@npl.co.uk

**Dr Thomas Hobiger**, NICT  
Tel: + 81 42 3277 561  
Fax: + 81 42 327 6664  
E-mail: hobiger@nict.go.jp

**Dr Feng-Lei Hong**, NMIJ/AIST  
Tel: + 81 29 861 4032  
Fax: + 81 29 861 4045  
E-mail: f.hong@aist.go.jp

**Dr Nicholas Koshelyaevsky**, VNIIFTRI  
Tel: + 7 095 534 8222  
Fax: + 7 095 534 0609  
E-mail: nkoshelyaevsky@vniiftri.ru

**Dr Yasuhiro Koyama**, NICT  
Tel: + 81 42 327 7457  
Fax: + 81 42 327 7457  
E-mail: koyama@nict.go.jp

**Dr Taeg Yong Kwon**, KRISS  
Tel: + 82 42 868 5141  
Fax: + 82 42 868 5287  
E-mail: tykwon@kriss.re.kr

**Dr Judah Levine**, NIST  
Tel: + 1 303 497 3903  
Fax: + 1 303 497 6461  
E-mail: jlevine@boulder.nist.gov

**Dr Huang-Tien Lin**, TL  
Tel: + 886 3 424 4066  
Fax: + 886 3 424 5474  
E-mail: linht@cht.com.tw

**Dr Yanying Liu**, A\*STAR  
Tel: + 65 6279 1927  
Fax: + 65 6279 1995  
E-mail: liu\_yan Ying@nmc.a-star.edu.sg

**Dr José Mauricio López-Romero**, CENAM  
Tel: + 52 442 211 0543  
Fax: + 52 442 215 3904  
E-mail: jlopez@cenam.mx

**Dr Andrew Ludlow, NIST**

Tel: + 1 303 497 4972  
Fax: + 1 303 497 6461  
E-mail: ludlow@boulder.nist.gov

**Dr Demetrios N. Matsakis, USNO**

Tel: + 1 202 762 1587  
Fax: + 1 202 762 1511  
E-mail: dnm@usno.navy.mil

**Dr Jerzy Nawrocki, SRC**

Tel: + 48 061 817 0187  
Fax: + 48 061 817 0219  
E-mail: nawrocki@cbk.poznan.pl

**Dr Thomas E. Parker, NIST**

Tel: + 1 303 497 7881  
Fax: + 1 303 497 6461  
E-mail: tparker@boulder.nist.gov

**Dr Dirk Piester, PTB**

Tel: + 49 531 592 4421  
Fax: + 49 531 592 4015  
E-mail: dirk.piester@ptb.de

**Dr Fritz Riehle, PTB**

Tel: + 49 531 592 4010  
Fax: + 49 531 592 4015  
E-mail: fritz.riehle@ptb.de

**Dr Giorgio Santarelli, LNE-SYRTE**

Tel: + 33 01 40 51 22 55  
Fax: + 33 01 43 25 55 42  
E-mail: giorgio.santarelli@obspm.fr

**Dr Kenneth Senior, NRL**

Tel: + 1 202 767 2043  
Fax: + 1 202 767 2845  
E-mail: ken.senior@nrl.navy.mil

**Dr Sung Hoon Yang, KRISS**

Tel: + 82 42 868 5147  
Fax: + 82 42 868 5287  
E-mail: shyang@kriss.re.kr

**CCTF Group on GNSS\* Time Transfer Standards (CGGTTS)**

\*GNSS = Global navigation satellite systems

**Chairman:**

**Dr Judah Levine**, NIST  
Tel: + 1 303 497 3903  
Fax.: + 1 303 497 6461  
E-mail: jlevine@boulder.nist.gov

**Delegates and experts of member laboratories:**

No official membership has been drawn up for the sub-group which organizes open forums whose attendees are representatives of national timing centres and manufacturers of GPS and GLONASS time receivers. However, a core of members can be listed as follows.

**Dr Franco Cordara**, I.N.RI.M  
Tel: + 39 0 11 39 19 239  
Fax: + 39 0 11 34 87 046  
E-mail: cordara@inrim.it

**Dr Pascale Defraigne**, ORB  
Tel: + 32 2 373 0260  
Fax: + 32 2 374 9822  
E-mail: pascale.defraigne@oma.be

**Mr Michito Imae**, NMIJ/AIST  
Tel: + 81 29 861 2291  
Fax: + 81 29 861 4145  
E-mail: michito.imae@aist.go.jp

**Dr William J. Klepczynski**  
Innovative Solutions International  
Tel: + 1 703 841 2669  
Fax: + 1 703 465 9158  
E-mail: wklepczy@aol.com

**Dr Nicholas Kosheyalevsky**, NPO-VNIIFTRI  
Tel: + 7 095 534 8222  
Fax: + 7 095 534 0609  
E-mail: atime@adonis.iasnet.com

**Dr Włodzimierz Lewandowski**, BIPM  
(Secretary of the Working Group)  
Tel: + 33 1 45 07 70 63  
Fax: + 33 1 45 07 70 59  
E-mail: wlewandowski@bipm.org

**Dr Jerzy Nawrocki**, SRC  
Tel: + 48 22 851 1810 or 840 3570  
Fax: + 48 22 840 3131  
E-mail: nawrocki@cbk.poznan.pl

**Dr Gérard Petit**, BIPM  
Tel: + 33 1 45 07 70 67  
Fax: + 33 1 45 07 70 59  
E-mail: gpetit@bipm.org

**Dr Pierre Uhrich**, LNE-SYRTE  
Tel: + 33 1 40 51 22 16  
Fax: + 33 1 43 25 55 42  
E-mail: pierre.uhrich@obspm.fr

**Dr Marc A. Weiss**, NIST  
Tel: + 1 303 497 3261  
Fax: + 1 303 497 6461  
E-mail: mweiss@boulder.nist.gov

**Sub-Group of the CCTF Working Group on TAI on Algorithms**

**Chairwoman:**

**Dr Patrizia Tavella, I.N.R.I.M**  
Tel: + 39 011 391 9235  
Fax: + 39 011 391 9259  
E-mail: tavella@inrim.it

No official membership is established.

**CCTF Working Group on Two-way Satellite Time and Frequency Transfer**

**Dr Dirk Piester, PTB**  
Tel: + 49 531 592 4332  
Fax: + 49 531 592 4479  
E-mail: dirk.piester@ptb.de

**Delegates and experts of member laboratories:**

No official membership has been drawn up for this working group which organizes meetings whose attendees are representatives of national timing centres interested in two-way time and frequency transfer and manufacturers of two-way equipment. However, a core of members can be listed as follows:

**Dr Joseph Achkar, LNE-SYRTE**  
Tel: + 33 1 40 51 22 16  
Fax: + 33 1 40 51 55 42  
E-mail: joseph.achkar@obspm.fr

**Dr Peter Fisk, NMIA**  
Tel: + 61 2 9413 7221  
Fax: + 61 2 9413 7200  
E-mail: peterf@measurement.gov.au

**Dr Françoise Baumont, OCA/CERGA**  
Tel: + 33 4 93 40 53 38  
Fax: + 33 4 93 40 53 33  
E-mail: baumont@obs-azur.fr

**Dr Mizuhiko Hosokawa, NICT**  
Tel: + 81 42 327 7557  
Fax: + 81 42 327 6694  
E-mail: hosokawa@nict.go.jp

**Dr Franco Cordara, I.N.R.I.M**  
Tel: + 39 0 11 39 19 239  
Fax: + 39 0 11 34 87 046  
E-mail: cordara@inrim.it

**Mr Michito Imae, NMIIJ/AIST**  
Tel: + 81 29 861 2291  
Fax: + 81 29 861 4145  
E-mail: michito.imae@aist.go.jp

**Dr John Davis, NPL**  
Tel: + 44 208 943 71 37  
Fax: + 44 208 943 71 39  
E-mail: jad@newton.npl.co.uk

**Dr Zhiheng Jiang, BIPM**  
Tel: + 33 1 45 07 70 34  
Fax: + 33 1 45 07 70 59  
E-mail: zjiang@bipm.org

**Dr James A. De Young, USNO**  
Tel: + 1 202 762 15 00  
Fax: + 1 202 762 15 11  
E-mail: dey@herschel.usno.navy.mil

**Dr Huanxin Li, NTSC**  
Tel: +86-29-83890451  
Fax: +86-29-83890196  
E-mail: lhx@ntsc.ac.cn

**Dr Włodzimierz Lewandowski, BIPM**  
(Secretary of the Working Group)  
Tel: + 33 1 45 07 70 73  
Fax: + 33 1 45 07 70 59  
E-mail: wlewandowski@bipm.org

**Dr Demetrios N. Matsakis, USNO**  
Tel: + 1 202 762 1587  
Fax: + 1 202 762 1511  
E-mail: dnm@usno.navy.mil

**Dr Juan Palacio, ROA**  
Tel: + 34 956 599 286  
Fax: + 34 956 599 366  
E-mail: jpalacio@roa.es

**Dr Thomas E. Parker, NIST**  
Tel: + 1 303 497 7881  
Fax: + 1 303 497 6461  
E-mail: tparker@boulder.nist.gov

**Dr Peter Whibberley, NPL**  
Tel: + 44 208 943 6746  
Fax: + 44 208 943 6529  
E-mail: peter.whibberley@npl.co.uk

**Prof. Li Zhigang, CSAO**  
Tel: + 86 29 389 0320  
Fax: + 86 29 389 0196  
E-mail: kyc@ms.sxso.ac.cn

### **CCTF Working Group on Primary Frequency Standards**

#### **Chairman:**

**Dr Thomas E. Parker, NIST**  
Tel: + 1 303 497 7881  
Fax: + 1 303 497 6461  
E-mail: tparker@boulder.nist.gov

No official membership is established.

### **CCTF Working Group on Key Comparisons in Time and Frequency**

#### **Chairman:**

**Dr Franco Cordana, I.N.R.I.M**  
Tel: + 39 011 3919 239  
Fax: + 39 011 34 87 046  
E-mail: cordana@inrim.it

#### **Delegates and experts of member laboratories:**

**Consultative Committee for Ionizing Radiation (CCRI)****Created in 1958**

*Present activities concern matters related to the definitions of quantities and units, standards and comparisons for x-ray,  $\gamma$ ray, charged particle and neutron dosimetry, radioactivity measurement and the International Reference System for radionuclides (SIR), and advice to the CIPM on matters related to ionizing radiation standards.*

**President:** **Dr Kim Carneiro**

Membre CIPM  
Morlenesvej 16  
DK 2840 Holte  
Denmark  
Tel: + 45 2616 2406  
E-mail: kim@carneiro.biz

**Executive Secretary:** **Dr Penelope Allisy-Roberts, BIPM**

Tel: + 33 1 45 07 70 90  
Fax: + 33 1 45 34 20 21  
E-mail: allisy-roberts@bipm.org

**Members at the last meeting in June 2011:**

The Chairman of Section I (**Dr Peter Sharpe**, NPL)  
The Chairman of Section II (**Dr L.R. Karam**, NIST)  
The Chairman of Section III (**Dr David Thomas**, NPL)  
The Director of the BIPM (**Prof. Michael Kuehne**)

**CCRI RMO Working Group on IR CMCs**

Coordinator: **Dr A.H.L. Aalbers, VSL**  
Tel: + 31 15 269 1500  
Fax: + 31 15 261 2971  
E-mail: aaalbers@nmi.nl

**Section I (X and  $\gamma$  rays, charged particles)**

**Chairman:** **Dr Peter Sharpe, NPL**  
Tel: + 44 208 943 6647  
Fax: + 44 208 943 6680  
E-mail: peter.sharpe@npl.co.uk

**Members:**

Australian Radiation Protection And Nuclear Safety Agency [ARPANSA], Yallambie  
 Bundesamt für Eich- und Vermessungswesen [BEV], Vienna  
 Central Office of Measures/Główny Urzad Miar [GUM], Warsaw  
 Commissariat à l'énergie atomique/Laboratoire National Henri Becquerel [LNE-LNHB], Gif sur Yvette  
 D.I. Mendeleev Institute for Metrology, Rostekhregulirovaniye of Russia [VNIIM], St Petersburg  
 Ente per le Nuove Tecnologie, l'Energia e l'Ambiente -Istituto Nazionale di Metrologia delle Radiazioni Ionizzanti [ENEA-INMRI], Roma  
 Federal Office of Metrology [METAS], Bern-Wabern  
 Hungarian Trade Licensing Office [MKEH], Budapest  
 International Commission on Radiation Units and Measurements [ICRU]  
 Korea Research Institute of Standards and Science [KRISS], Daejeon  
 National Institute of Metrology [NIM], Beijing  
 National Institute of Standards and Technology [NIST], Gaithersburg  
 National Metrology Institute of Japan, AIST [NMJJ/AIST], Tsukuba  
 National Physical Laboratory [NPL], Teddington  
 National Research Council of Canada [NRC-INMS], Ottawa  
 Physikalisch-Technische Bundesanstalt [PTB], Braunschweig  
 VSL, [VSL], Delft  
 The Director of the International Bureau of Weights and Measures [BIPM], Sèvres

**Observers:**

Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas [CIEMAT], Madrid  
 Comision Nacional de Energia Atomica [CNEA], Buenos Aires  
 Czech Metrology Institute [CMI], Brno  
 Instituto Tecnológico e Nuclear [ITN], Sacavém  
 International Atomic Energy Agency [IAEA]  
 International Organization for Medical Physics [IOMP]  
 International Radiation Protection Association [IRPA]  
 National Laboratory for Metrology of Ionising Radiation/Institute of Radiation Protection and Dosimetry  
 CNEN [LNMRI/IRD], Rio de Janeiro  
 National Metrology Institute of South Africa [NMISA], Pretoria  
 Swedish Radiation Safety Authority [SSM], Stockholm

**Attendees at the last meeting of Section I (May 20011)**

**Chairman: Dr Peter Sharpe, NPL**

**Delegates and experts of member laboratories:**

**Dr Ulrike Ankerhold, PTB**  
 Tel: +49 531 592 6200  
 Fax: +49 531 592 6205  
 E-mail: ulrike.ankerhold@ptb.de

E-mail : jean-marc.bordy@cea.fr

**Dr Duncan Butler, ARPANSA**  
 Tel: + 61 3 9433 2274  
 Fax: + 61 3 9432 1835  
 E-mail: duncan.butler@arpansa.gov.au

**Dr Jean-Marc Bordy, LNE-LNHB**  
 Tel : + 33 1 69 08 41 89  
 Fax : + 33 1 69 08 47 73

**Dr István Csete, MKEH**  
 Tel: + 36 1 458 5945

Fax: + 36 1 458 5937  
 E-mail: cseteis@mkeh.hu

**Mr Frank Delaunay**, LNE-LNHB  
 Tel: + 33 1 69 08 84 05  
 Fax: + 33 1 69 08 47 73  
 E-mail: frank.delaunay@cea.fr

**Dr Simon Duane**, NPL  
 Tel: + 44 208 943 6568  
 Fax: + 44 208 943 6070  
 E-mail: simon.duane@npl.co.uk

**Mr Adrian Knyziak**, GUM  
 Tel: + 48 22 581 93 58  
 Fax: + 48 22 581 93 88  
 E-mail: radiologia@gum.gov.pl

**Dr Hans-Michael Kramer**, PTB  
 Tel: + 49 531 592 6200  
 Fax: + 49 531 592 6205  
 E-mail: hans-michael.kramer@ptb.de

**Prof. Barry D. Michael**, ICRU  
 E-mail: barry.mchl@googlemail.com

**Dr Michael Mitch**, NIST  
 Tel: +1 301 975 5491  
 Fax: + 1301 869 7682  
 E-mail: michael.mitch@nist.gov

**Dr Massimo Pinto**, ENEA-INMRI  
 Tel: +39 06 3048 3957  
 Fax: + 39 06 3048 3558  
 E-mail: massimo.pinto@enea.it

**Dr Jacco de Pooter**, VSL  
 Tel: + 31 15 269 1623  
 Fax: + 31 15 261 2571

E-mail: jdpoote@vsl.nl

**Dr Carl Ross**, NRC-INMS  
 Tel: + 1 613 993 9352 ext : 233  
 Fax: + 1 613 952 9865  
 E-mail: carl.ross@nrc-cnrc.gc.ca

**Dr Norio Saito**, NMJJ/AIST  
 Tel: + 81 29 861 5656  
 Fax: + 81 29 861 5673  
 E-mail: norio.saito@aist.go.jp

**Dipl; Ing. Andreas Steurer**, BEV  
 Tel: + 43 1 21 110 6379  
 Fax: + 43 1 21 110 6000  
 E-mail: andreas.steurer@bev.gv.at

**Dr Maria Pia Toni**, ENEA-INMRI  
 Tel: + 39 06 3048 3957  
 Fax: + 39 06 3048 6097  
 E-mail: mariapia.toni@casaccia.enea.it

**Dr Damian Twerenbold**, METAS  
 Tel: + 41 31 323 3274  
 Fax: + 41 31 323 3210  
 E-mail: damian.twenrenbold@metas.ch

**Ms Anna Y. Villevalde**, VNIIM  
 Tel: + 7 812 323 9613  
 Fax: + 7 812 323 9617  
 E-mail: vay@vniim.ru

**Dr David Webb**, ARPANSA  
 Tel: + 61 3 9433 2227  
 Fax: + 61 3 9432 1835  
 E-mail: david.webb@arpansa.gov.au

**Dr Chul-Young Yi**, KRISS  
 Tel: + 82 42 861 5114  
 Fax: + 82 42 868 5444  
 E-mail: cyyi@kriiss.re.kr

**Prof. Yanli Zhang**, NIM  
 Tel: + 86 10 6452 5009  
 Fax: + 86 10 6421 4927  
 E-mail: zhangyl@nim.ac.cn

### Observers:

**Prof. Jean Chavaudra**, IOMP  
 Tel: +33 (0)6 81 86 30 44

E-mail: jean.chavaudra@wanadoo.fr

**Dr Ahmed Meghzifene, IAEA**  
Tel: + 43 1 2600 21653  
Fax: + 43 1 2600 721 662  
E-mail: a.meghzifene@iaea.org

**Ms Zakithi Msimang, NMISA**  
Tel: + 27 12 841 3303  
Fax: + 27 12 841 3367  
E-mail: zmsimang@nmisa.org

**Dr Carlos Oliveira, ITN**  
Tel: + 351 21 994 6309  
Fax: + 351 21 994 1995  
E-mail: coli@itn.pt

**Dr Margarita Saravi, CNEA**  
Tel: +54 11 6779 8228  
Fax: +54 11 6779 8228  
E-mail: saravi@cae.cnea.gov.ar

**Dr Miguel Embib Segura, CIEMAT**  
Tel: +34 91 3466 097  
Fax: +34 91 3466 442  
E-mail: miguel.embib@ciemat.es

**Dr Vladimir Sochor, CMI**  
Tel: + 420 266 020 285  
Fax: + 420 266 020 466  
E-mail: vsochor@cmi.cz

**Invited by the Chairman:**

**Dr José Alvarez Romero, ININ**  
Tel: + 52 55 53 29 7200  
Fax: + 52 55 53 29 7244  
E-mail: Trinidad.alvarez@inin.gob.mx

**Mr Hans Bjerke, NRPA**  
Tel: + 47 67 16 25 75  
Fax: + 47 67 14 74 07  
E-mail: hans.bjerke@nrpa.no

**CCRI Section I Working Group on Key Comparisons**

Coordinator: **Dr Peter Sharpe, NPL**  
Tel: + 44 208 943 6647  
Fax: + 44 208 943 6680  
E-mail: peter.sharpe@npl.co.uk

### CCRI Section I Working Group on Brachytherapy Standards

Coordinator: **Dr Penelope Allisy-Roberts**, BIPM  
 Tel: + 33 1 45 07 70 90  
 Fax: + 33 1 45 34 20 21  
 E-mail: allisy-roberts@bipm.org

### CCRI Section I Working Group on Accelerator Dosimetry

Coordinator: **Dr Peter Sharpe**, NPL  
 Tel: + 44 208 943 6647  
 Fax: + 44 208 943 6680  
 E-mail: peter.sharpe@npl.co.uk

### Section II (Measurement of radionuclides)

**Chairman:** **Dr Lisa Karam**, NIST  
 Tel: + 1 301 975 5561  
 Fax: + 1 301 869 7685  
 E-mail: lisa.karam@nist.gov

**Members:**

"Horia Hulubei" National Institute of Research and Development for Physics and Nuclear Engineering [IFIN-HH], Bucharest - Magurele  
 Australian Nuclear Science & Technology Organization [ANSTO], Menai  
 Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas [CIEMAT], Madrid  
 Commissariat à l'énergie atomique/Laboratoire National Henri Becquerel [LNE-LNHB], Gif sur Yvette  
 Czech Metrology Institute [CMI], Brno  
 D.I. Mendeleyev Institute for Metrology, Rostekhregulirovaniye of Russia [VNIIM], St Petersburg  
 Ente per le Nuove Tecnologie, l'Energia e l'Ambiente -Istituto Nazionale di Metrologia delle Radiazioni Ionizzanti [ENEA-INMRI], Roma  
 Hungarian Trade Licensing Office [MKEH], Budapest  
 Institute for Reference Materials and Measurements [IRMM], Geel  
 Institut de Radiophysique Appliquée [IRA], Lausanne  
 Korea Research Institute of Standards and Science [KRISS], Daejeon  
 National Institute of Metrology [NIM], Beijing  
 National Institute of Standards and Technology [NIST], Gaithersburg  
 National Laboratory for Metrology of Ionising Radiation/Institute of Radiation Protection and Dosimetry CNEN [LNMRI/IRD], Rio de Janeiro  
 National Metrology Institute of Japan, AIST [NMIJ/AIST], Tsukuba  
 National Metrology Institute of South Africa [NMISA], Cape Town  
 National Physical Laboratory [NPL], Teddington  
 Physikalisch-Technische Bundesanstalt [PTB], Braunschweig  
 Radioisotope Centre POLATOM [RC], Swierk  
 Prof. Dr Gerhard Winkler [IIK], Vienna  
 The Director of the International Bureau of Weights and Measures [BIPM], Sèvres

**Observers:**

Bhabha Atomic Research Centre [BARC], Mumbai  
 Bundesamt für Eich- und Vermessungswesen [BEV], Vienna  
 Comision Nacional de Energia Atomica [CNEA], Buenos Aires  
 International Atomic Energy Agency [IAEA], Vienna  
 International Commission on Radiation Units and Measurements [ICRU], Bethesda  
 International Organization for Medical Physics [IOMP],  
 International Radiation Protection Association [IRPA], Fontenay aux Roses  
 National Research Council of Canada [NRC-INMS], Ottawa  
 VSL (Dutch Metrology Institute) [VSL], Delft

**Attendees at the last meeting of Section II (June 2011)**

**Chairman:** Dr Lisa R. Karam, NIST

**Delegates and experts of member laboratories:****Dr Dirk Arnold, PTB**

Tel: + 49 531 592 6100  
 Fax: + 49 531 592 6305  
 E-mail: dirk.arnold@ptb.de

**Dr Christophe Bobin, LNE-LNHB**

Tel: + 33 1 69 08 29 64  
 Fax: + 33 1 69 08 26 19  
 E-mail: christophe.bobin@cea.fr

**Dr François Bochud, IRA**

Tel: + 41 21 623 3435  
 Fax: + 41 21 623 3434  
 E-mail: francois.bochud@chuv.ch

**Dr Ryszard Broda, RC**

Tel: + 48 22 718 07 21  
 Fax: + 48 22 718 03 50  
 E-mail: r.broda@polatom.pl

**Dr Marco Capogni, ENEA-INMRI**

Tel: + 39 06 3048 6628  
 Fax: + 39 06 3048 3558  
 E-mail: marco.capogni@enea.it

**Dr Carlos José da Silva, LNMR/IRD**

Tel: + 55 21 2173 2874  
 Fax: + 55 21 2173 2875  
 E-mail: carlos@ird.gov.br

**Ms Carole Fréchou, LNE-LNHB**

Tel: +33 1 69 08 42 78  
 Fax: +33 1 69 08 26 19  
 E-mail: carole.frechou@cea.fr

**Dr Eduardo García-Toraño, CIEMAT**

Tel: + 34 91 3466 225  
 Fax: + 34 91 3466 442  
 E-mail: e.garciatorano@ciemat.es

**Dr Lena Johansson, NPL**

Tel: + 44 208 943 8587  
 Fax: + 44 208 943 8700  
 E-mail: lena.johansson@npl.co.uk

**Dr Lisa R. Karam, NIST**

Tel: + 1 301 975 5561  
 Fax: + 1 301 869 7685  
 E-mail: lisa.karam@nist.gov

**Dr John Keightley, NPL**

Tel: + 44 20 8943 6398  
 Fax: + 44 20 8943 8700  
 E-mail: john.keightley@npl.co.uk

**Dr José María Los Arcos, CIEMAT**

Tel: + 34 91 346 6288  
 Fax: + 34 91 346 6442  
 E-mail: jm.losarcos@ciemat.es

**Dr Tae-Soon Park, KRISS**

Tel: + 82 42 868 5372  
 Fax: + 82 42 868 5671  
 E-mail: tspark@kriss.re.kr

**Dr Mark Reinhard, ANSTO**

Tel: + 612 9717 3396  
 Fax: + 612 9717 9265  
 E-mail: mark.reinhard@ansto.gov.au

**Dr Maria Sahagia**, IFIN-HH  
 Tel: + 4021 404 61 63  
 Fax: + 4021 457 4432 or 4440  
 E-mail: masahagia@nipne.ro

**Mrs Tatiana Shilnikova**, VNIM  
 Tel: + 7 812 323 96 12  
 Fax: + 7 812 323 96 17  
 E-mail: shti@vniim.ru

**Dr Jana Sochorová**, CMI  
 Tel: + 420 266 020 400  
 Fax: + 420 266 020 466  
 E-mail: jsochorova2@cmi.cz

**Mr László Szűcs**, MKEH  
 Tel/ + 36 1 458 5911  
 Fax: + 36 1 458 5937  
 E-mail: szucslaszlo@mkeh.hu

**Dr Michael P. Unterweger**, NIST  
 Tel: + 1 301 975 5536  
 Fax: + 1 301 926 7416  
 E-mail: michael.unterweger@nist.gov

**Dr Freda van Wyngaardt**, NMISA  
 Tel: + 27 21 685 7776  
 Fax: + 27 21 686 2759  
 E-mail: fwyngaardt@nmisa.org

**Dr Uwe Wätjen**, IRMM  
 Tel: + 32 14 571 882  
 Fax: + 32 14 584 273  
 E-mail: uwe.waetjen@ec.europa.eu

**Prof. Yang Yuandi**, NIM  
 Tel: + 86 10 6452 5001  
 Fax: + 86 10 6421 9860  
 E-mail: yangyd@nim.ac.cn

**Dr Akira Yunoki**, NMIIJ/AIST  
 Tel: + 81 29 861 3470  
 Fax: + 81 29 861 5673  
 E-mail: a.yunoki@aist.go.jp

### Observers:

**Prof. Jean Chavaudra**, IOMP  
 Tel: +33 (0)6 81 86 30 44  
 E-mail: jean.chavaudra@wanadoo.fr

**Dr Raphael Galea**, NRC-INMS  
 Tel: + 613 993 2715 ext 229  
 Fax: + 613 952 9865  
 E-mail: raphael.galea@nrc-crnc.gc.ca

**Dr F.A Iglicki**, CNEA  
 Tel: + 54 11 6779 8218  
 Fax: + 54 11 6779 8554  
 E-mail: iglicki@cae.cnee.gov.ar

**Dr Leena Joseph**, BARC  
 Tel: + 00 91 22 2559 2278  
 Fax: + 00 91 22 2550 5151  
 E-mail: leena@barc.gov.in

**Dr Franz Josef Maringer**, BEV  
 Tel: + 43 1 21 110 6372  
 Fax: + 43 1 21 110 6000  
 E-mail: franz-josef.maringer@bev.gv.at

**Invited by the Chairman:**

**Dr Carri Borras**, Departamento de Energia Nuclear (Recife)  
Tel: +34 93 531 95 42  
E-mail: cariborras@starpower.net or borrasc@hotmail.com

**Dr Stefaan Pommé**, IRMM  
Tel: + 32 14 571 289  
Fax: + 32 14 578 864  
E-mail: stefaan.pomme@ec.europa.eu

**CCRI Section II Working Group on High-efficiency detection systems**

Coordinator: **Prof. Dr Gerhard Winkler**, IIK  
Tel: + 43 1 4277 51754  
Fax: + 43 1 4277 51752  
E-mail: winkler@ap.univie.ac.at

**CCRI Section II Working Group on Extension of the SIR to pure  $\beta$ -emitters**

Coordinator: **Dr José María Los Arcos**, CIEMAT  
Tel: + 34 91 346 6288  
Fax: + 34 91 346 6442  
E-mail: jm.losarcos@ciemat.es

**CCRI Section II Working Group on Realization of the Becquerel**

Coordinator: **Dr Uwe Wätjen**, IRMM  
Tel: + 32 14 571 882  
Fax: + 32 14 584 273  
E-mail: uwe.waetjen@cec.eu.int

**CCRI Section II Working Group on Key Comparisons**

Coordinator: **Dr Lisa R. Karam**, NIST  
Tel: + 1 301 975 5561  
Fax: + 1 301 869 7682  
E-mail: lisa.karam@nist.gov

**CCRI Section II Working Group on the SIR Transfer Instrument**

Coordinator: **Dr Carine Michotte**, BIPM  
Tel: + 33 1 45 07 70 85  
Fax: + 33 1 45 34 20 21  
E-mail: cmichotte @bipm.org

**CCRI Section II Working Group on Uncertainties**

Coordinator: **Dr Michael Unterweger**, NIST  
Tel: + 1 301 975 5536  
Fax: + 1 301 926 7416  
E-mail: michael.unterweger@nist.gov

### Section III (Neutron measurements)

**Chairman:** **Dr David Thomas**, NPL  
 Tel: + 44 208 943 6853  
 Fax: + 44 208 943 7037  
 E-mail: david.thomas@npl.co.uk

**Members:**

Commissariat à l'énergie atomique/Laboratoire National Henri Becquerel [LNE-LNHB], Gif sur Yvette  
 Czech Metrology Institute [CMI], Brno  
 D.I. Mendeleev Institute for Metrology, Rostekhregulirovaniye of Russia [VNIIM], St Petersburg  
 Institute for Reference Materials and Measurements [IRMM], Geel  
 Korea Research Institute of Standards and Science [KRISS], Daejeon  
 National Institute of Metrology [NIM], Beijing  
 National Institute of Standards and Technology [NIST], Gaithersburg  
 National Laboratory for Metrology of Ionising Radiation/Institute of Radiation Protection and Dosimetry  
 CNEN [LNMRI/IRD], Rio de Janeiro  
 National Metrology Institute of Japan, AIST [NMIJ/AIST], Tsukuba  
 National Physical Laboratory [NPL], Teddington  
 Physikalisch-Technische Bundesanstalt [PTB], Braunschweig  
 The Director of the International Bureau of Weights and Measures [BIPM]

**Observers:**

Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas [CIEMAT], Madrid  
 Chinese Institute of Atomic Energy [CIAE], Beijing  
 International Atomic Energy Agency [IAEA]  
 International Commission on Radiation Units and Measurements [ICRU]

**Attendees at the last meeting of Section III (March-April 2011)**

**Chairman: Dr David Thomas**, NPL

**Delegates and experts of member laboratories:**

**Dr Philippe Cassette**, LNE-LNHB  
 Tel: +33 1 69 08 48 68  
 Fax: +33 1 69 08 26 19  
 E-mail: philippe.cassette@cea.fr

**Dr M. Scott Dewey**, NIST  
 Tel: + 1 301 975 4843  
 Fax: + 1 301 926 1604  
 E-mail: maynard.dewey@nist.gov

**Dr Vincent Gressier**, LNE-IRSN  
 Tel: + 33 4 42 25 75 02  
 Fax: + 33 4 42 19 91 44  
 E-mail: vincent.gressier@irsn.fr

**Dr Hideki Harano**, NMIJ/AIST  
 Tel: + 81 298 61 5382  
 Fax: + 81 298 61 5673  
 E-mail: h-harano@aist.go.jp

**Dr Miloslav Kralik, CMI**  
Tel: + 420 266 020 299  
Fax: + 420 266 020 466  
E-mail: [mkralik@cmi.cz](mailto:mkralik@cmi.cz)

**Dr Tetsuro Matsumoto, NMIJ/AIST**  
Tel: + 81 29 861 5670  
Fax: + 81 29 861 5673  
E-mail: [t-matsumoto@aist.go.jp](mailto:t-matsumoto@aist.go.jp)

**Mr Nikolay N. Moisseev, VNIIM**  
Tel: + 7 812 323 9614  
Fax: + 7 812 323 9617  
E-mail: [n.n.moiseev@vniim.ru](mailto:n.n.moiseev@vniim.ru)

**Dr Ralf Nolte, PTB**  
Tel: + 49 531 592 6420  
Fax: + 49 531 592 6405  
E-mail: [ralf.nolte@ptb.de](mailto:ralf.nolte@ptb.de)

**Dr Stephan Oberstedt, IRMM**  
Tel: + 00 32 14 571 361  
Fax: + 00 32 14 571 376  
E-mail: [stephan.oberstedt@ec.europa.eu](mailto:stephan.oberstedt@ec.europa.eu)

**Dr Hyeonseo Park, KRISS**  
Tel: + 82 42 868 5703  
Fax: + 82 42 868 5671  
E-mail: [hyeonseo@kriss.re.kr](mailto:hyeonseo@kriss.re.kr)

**Dr Walsan Wagner Pereira, LNMRI/IRD**  
Tel: + 55 21 2173 2870  
Fax: + 55 21 2442 1605  
E-mail: [walsan@ird.gov.br](mailto:walsan@ird.gov.br)

**Mr Neil Roberts, NPL**  
Tel: + 44 20 8943 6869  
Fax: + 44 20 8943 7082  
E-mail: [neil.roberts@npl.co.uk](mailto:neil.roberts@npl.co.uk)

**Dr Hui Zhang, NIM**  
Tel: + 86 10 6452 5006  
Fax: + 86 10 6421 4927  
E-mail: [zhanghui@nim.ac.cn](mailto:zhanghui@nim.ac.cn)

**Observers:**

**Dr Mark Kellett, IAEA**  
Tel: + 43 1 2600 21708  
Fax: + 43 1 26007  
E-mail: [m.a.kellett@iaea.org](mailto:m.a.kellett@iaea.org)

**Dr Jun Chen, CIAE**  
Tel: + 86 10 6935 7172  
Fax: + 86 10 6935 7178  
E-mail: [cj332@163.com](mailto:cj332@163.com)

**Dr Hongsheng Ye, CIAE**  
Tel: + 86 10 6935 7163  
Fax: + 86 10 6935 7178  
E-mail: [yshbzz@ciae.ac.cn](mailto:yshbzz@ciae.ac.cn)

**Invited by the Chairman:**

**Mr John-Paul Archambault, NRC-INMS**  
Tel: + 613 993 2715 ext 252  
Fax: + 613 993 9865  
E-mail: [johnpaul.archambault@nrc-cnrc.gc.ca](mailto:johnpaul.archambault@nrc-cnrc.gc.ca)

**CCRI Section III Working Group on Key Comparisons**

Coordinator: **Dr David Thomas**, NPL  
Tel: + 44 208 943 6853  
Fax: + 44 208 943 7037  
E-mail: [david.thomas@npl.co.uk](mailto:david.thomas@npl.co.uk)

**Consultative Committee for Units (CCU)****Created in 1964**

*Present activities concern matters related to the development of the International System of Units (SI),  
preparation of successive editions of the SI brochure  
and advice to the CIPM on matters concerning units of measurement.*

**President:****Prof. Ian M. Mills**

University of Reading - Department of Chemistry  
Whiteknights  
Reading, RG6 6AD  
United Kingdom  
Tel: + 44 118 378 8456  
Fax: + 44 118 378 6331  
E-mail : i.m.mills@reading.ac.uk or ian704mills@btinternet.com

**Executive Secretary:****Dr Claudine Thomas, BIPM**

Tel: + 33 1 45 07 70 73  
Fax: + 33 1 45 34 20 21  
E-mail: cthomas@bipm.org

**Members:**

Centro Español de Metrología [CEM], Madrid  
Commission internationale de l'éclairage [CIE]  
Committee on Data for Science and Technology, [CODATA Task Group on Fundamental Constants]  
International Astronomical Union [IAU]  
International Commission on Radiation Units and Measurements [ICRU]  
International Electrotechnical Commission [IEC]: Technical Committee 25  
International Federation of Clinical Chemistry and Laboratory Medicine [IFCC]  
International Organization for Standardization [ISO]: Technical Committee 12  
International Organization of Legal Metrology [OIML]  
International Union of Pure and Applied Chemistry [IUPAC]: Committee ICTNS  
International Union of Pure and Applied Physics [IUPAP]: Commission SUN-AMCO  
National Institute of Metrology [NIM], Beijing  
National Institute of Standards and Technology [NIST], Gaithersburg  
National Metrology Institute of Japan, AIST [NMJJ/AIST], Tsukuba  
National Physical Laboratory [NPL], Teddington  
Physikalisch-Technische Bundesanstalt [PTB], Braunschweig  
Rostekhregulirovaniye of Russia [Rostekhregulirovaniye], Moscow  
Dr Terry Quinn CBE FRS, Sèvres  
Prof. Marc Himbert [LNE], Paris  
The Director of the International Bureau of Weights and Measures [BIPM], Sèvres

## Attendees to the last meeting (September 2010)

**President: Prof. Ian M. Mills**

**Delegates and experts of member laboratories:**

**Dr Jean Bastie, CIE**

Tel: + 33 1 40 27 20 25  
 Fax: + 33 1 58 80 89 00  
 E-mail: jean.bastie@wanadoo.fr

**Prof. Carlo Angelo Borghi, IEC/TC 25**

Tel: + 39 051 209 3566  
 Fax: + 39 051 209 3588  
 E-mail: ca.borghi@mail.ing.unibo.it

**Dr Nicole Capitaine, IAU**

Tel: + 33 1 40 51 22 31  
 Fax: + 33 1 40 51 22 91  
 E-mail: nicole.capitaine@obspm.fr

**Dr Jeff Flowers, NPL**

Tel: + 44 20 8943 6671  
 Fax: + 44 20 8614 0417  
 E-mail: jeff.flowers@npl.co.uk

**Dr Kenichi Fujii, NMJJ/AIST**

Tel: + 81 298 61 4316  
 Fax: + 81 298 50 1464  
 E-mail: fujii.kenichi@aist.go.jp

**Dr Paul Gérôme, ISO/TC 12**

Tel: + 41 79 203 21 28  
 Fax: + 41 79 203 21 28  
 E-mail: 113322.1543@compuserve.com

**Dr Arnold Leitner, OIML**

Tel: + 43 1 21 110 6322  
 Fax: + 43 1 21 110 60005  
 E-mail: a.leitner@arnold.leitner@bev.gv.at

**Dr Barry Michael, ICRU**

Tel: + 44 192 382 8611  
 Fax: + 44 192 383 5210  
 Email: barry.mchl@googlemail.com

**Dr Martin J.T. Milton, NPL**

Tel: + 44 208 943 6826  
 Fax: + 44 208 943 6755  
 E-mail: martin.milton@npl.co.uk

**Dr Peter Mohr, NIST and IUPAP**

Tel: + 1 301 975 3217  
 Fax: + 1 301 975 4578  
 E-mail: mohr@nist.gov

**Dr David B. Newell, NIST and CODATA**

Tel: + 1 301 975 4228  
 Fax: + 1 301 975 4091  
 E-mail: david.newell@nist.gov

**Prof. Jan Obdržálek, IEC/TC 25**

Tel: + 41 22 919 02 11  
 Fax: + 41 22 919 03 00  
 E-mail: janobdr@gmail.com

**Mr Emilio Prieto, CEM**

Tel: + 34 91 807 4716  
 Fax: + 34 91 807 4807  
 E-mail: eprieto@cem.mityc.es

**Dr Jörn Stenger, PTB**

Tel: + 49 531 592 1009  
 Fax: + 49 531 592 1005  
 E-mail: joern.stenger@ptb.de

**Dr Barry N. Taylor, NIST**

Tel: + 1 301 975 4220  
 Fax: + 1 301 990 1350  
 E-mail: barry.taylor@nist.gov

**Dr Ambler Thompson, NIST**

Tel: + 301 975 2333  
 Fax: + 301 975 8091  
 E-mail: ambler@nist.gov

**Prof. Anders J Thor, ISO/TC 12**

Tel: + 46 8 555 521 59  
 Fax: + 46 8 555 520 01  
 E-mail: anders.j.thor@sis.se

**Dr Leonid Vitushkin,**

VNIIM/Rostekhregulirovaniye  
 Tel: +7 950 008 35 93  
 Fax: +7 812 713 01 14  
 Email: eluar@mail.ru & vlf@vniim.ru

**Dr Barry Wood**, NRC-INMS  
 Tel: + 1 613 990 9225  
 Fax: + 1 613 952 1394  
 E-mail: Barry.wood@nrc-cnrc.gc.ca

**Dr Jintao Zhang**, NIM  
 Tel: + 8610 6452 6172  
 Fax: + 8610 6421 8637  
 Email: zhangjint@nim.ac.cn

**Dr Zhonghua Zhang**, NIM  
 Tel: + 86 10 6429 7138  
 Fax: + 86 10 6422 0525  
 E-mail: zzh@nim.ac.cn

### Personal Members

**Dr Terry Quinn CBE FRS**  
 E-mail: terry.quinn@physics.org

**Prof. Marc Himbert**, LNE  
 Tel: + 33 1 40 27 24 19  
 Fax: + 33 1 58 80 89 00  
 E-mail: himbert@cnam.fr

### Invited by the President:

**Dr Penelope Allisy-Roberts**, BIPM  
 Tel: + 33 1 45 07 70 90  
 Fax: + 33 1 45 34 20 21  
 E-mail: allisy-roberts@bipm.org

**Dr Saveliy Karshenboim**, VNIIM  
 Tel: +7 812 323 9675  
 Fax: +7 812 113 0114  
 E-mail: sgk@vniim.ru ; sek@mpg.de

**Dr Elisa Felicitas Arias**, BIPM  
 Tel: + 33 1 45 07 70 76  
 Fax: + 33 1 45 07 70 59  
 E-mail: farias@bipm.org

**Prof. Jean Kovalevsky**, Honorary Member of the  
 CIPM  
 Tel: + 33 4 93 70 60 29  
 Fax: + 33 4 93 40 53 33  
 E-mail: kovalevsky@obs-azur.fr

**Dr Walter Bich**, I.N.R.I.M  
 Tel: + 39 011 3919 945  
 Fax: + 39 011 3919 937  
 Email: w.bich@inrim.it

**Mr Alain Picard**, BIM  
 Tel: + 33 1 45 07 70 28  
 Fax: + 33 1 45 34 20 21  
 E-mail: apicard@bipm.org

**Prof. Christian J. Bordé**, Académie des Sciences,  
 CNRS  
 Tel: + 33 6 0822 1484  
 E-mail: chbo@ccr.jussieu.fr or  
 christian.borde@obspm.fr

**Dr Philippe Richard**, METAS  
 Tel: + 41 31 323 34 15  
 Fax: + 41 31 323 3573  
 E-mail: philippe.richard@metas.ch

**Dr Richard S. Davis**, BIPM  
 Tel: + 33 1 45 07 70 11  
 Fax: + 33 45 34 20 21  
 E-mail: rdavis@bipm.org

**Dr Lennart Robertsson**, BIPM  
 Tel: +33 1 45 07 70 53  
 Fax: + 33 1 45 34 20 21  
 Email: lroberts@bipm.org

**Dr Joachim Fischer**, PTB  
 Tel: + 49 30 34 81 7473  
 Fax: + 49 30 34 81 7508  
 E-mail: joachim.fischer@ptb.de

**Dr Michael Stock**, BIPM  
 Tel: + 33 1 45 07 70 24  
 Fax: +33 1 45 07 62 62  
 E-mail: mstock@bipm.org

**Dr Robert Wielgosz, BIPM**  
Tel: + 33 1 45 07 62 51  
Fax: + 33 1 45 34 20 21  
E-mail: [rwielgosz@bipm.org](mailto:rwielgosz@bipm.org)

**Also present:**

**Dr Estefania De Mirandés, BIPM**

Tel : +33 1 45 07 70 09  
Fax : +33 1 45 34 20 21  
E-mail : [stefania.de.mirandes@bipm.org](mailto:stefania.de.mirandes@bipm.org)

**Prof. Michael Kühne, Deputy Director of the BIPM**

Tel: + 33 1 45 07 62 90  
Fax: + 33 1 45 34 20 21  
E-mail: [mkuehne@bipm.org](mailto:mkuehne@bipm.org)

**Dr Janet R. Miles, BIPM**

Tel : +33 1 45 07 70 08  
Fax : +33 1 45 34 20 21  
E-mail : [jmiles@bipm.org](mailto:jmiles@bipm.org)

**Dr Luis Mussio, BIPM**

Tel : +33 1 45 07 62 57  
Fax : +33 1 45 34 20 21  
E-mail : [luis.mussio@bipm.org](mailto:luis.mussio@bipm.org)

**Mrs Céline Planche, BIPM**

Tel: +33 1 45 07 70 06  
Fax: + 33 1 45 34 20 21  
Email: [celine.planche@bipm.org](mailto:celine.planche@bipm.org)

**Mr Robert Sitton, BIPM**

Tel : +33 1 45 07 70 21  
Fax : +33 1 45 34 20 21  
Email : [rsitton@bipm.org](mailto:rsitton@bipm.org)

**CIPM members :**

**Mr Luc Erard, LNE**

Tel: +33 1 40 43 40 52  
Fax: +33 1 40 43 37 37  
Email: [luc.erard@lne.fr](mailto:luc.erard@lne.fr)

**Dr Attilio Sacconi, I.N.R.I.M**

Tel: + 39 011 3919 966  
Fax: + 39 011 3919 959  
Email: [a.sacconi@inrim.it](mailto:a.sacconi@inrim.it)

:

## Consultative Committee for Mass and Related Quantities (CCM)

**Created in 1980**

*Present activities concern matters related to the comparisons of mass standards with the international prototype of the kilogram, considerations affecting the definition of the unit of mass, also density, pressure and force standards and advice to the CIPM on these matters.*

**President:** **Dr Mitsuru Tanaka**

Director-General  
 National Metrology Institute of Japan, AIST  
 Tsukuba Central 3  
 Tsukuba 305-8563  
 Japan  
 Tel: + 81 298 61 4111  
 Fax: + 81 298 61 4007  
 E-mail: mitsuru.tanaka@aist.go.jp

**Executive Secretary:** **Mr Alain Picard, BIPM**

Tel: + 33 1 45 07 70 28  
 Fax: + 33 1 45 34 20 21  
 E-mail: apicard@bipm.org

**Members:**

Bundesamt für Eich- und Vermessungswesen [BEV] Vienna  
 Central Office of Measures/Główny Urzad Miar [GUM], Warsaw  
 Centro Español de Metrología [CEM], Madrid  
 Centro Nacional de Metrología [CENAM], Querétaro  
 D.I. Mendeleev Institute for Metrology, Rostekhregulirovaniye of Russia [VNIIM], St Petersburg  
 Federal Office of Metrology [METAS], Bern-Wabern  
 Istituto Nazionale di Ricerca Metrologica [I.N.R.I.M], Torino  
 Korea Research Institute of Standards and Science [KRISS], Daejeon  
 Laboratoire National de Métrologie et d'Essais [LNE], Paris  
 Measurement Standards Laboratory of New Zealand [MSL], Lower Hutt  
 National Institute of Metrology [NIM], Beijing  
 National Institute of Standards and Technology [NIST], Gaithersburg  
 National Measurement Institute, Australia [NMIA], Lindfield  
 National Metrology Institute of Japan, AIST [NMIJ/AIST], Tsukuba  
 National Metrology Institute of South Africa [NMISA], Pretoria  
 National Physical Laboratory [NPL], Teddington  
 National Physical Laboratory of India [NPLI], New-Delhi  
 National Research Council of Canada [NRC-INMS], Ottawa  
 Physikalisch-Technische Bundesanstalt [PTB], Braunschweig  
 Slovak Institute of Metrology/Slovenský Metrologický Ústav [SMU], Bratislava  
 Technical Research Institute of Sweden [SP], Borås  
 VSL [VSL], Delft  
 The Director of the International Bureau of Weights and Measures [BIPM], Sèvres

**Observers:**

Agency for Science, Technology and Research [A\*STAR], Singapore  
 Instituto Português da Qualidade [IPQ], Caparica  
 Laboratorio Tecnológico del uruguay [LATU], Montevideo  
 National Metrology Institute of Turkey/TÜBİTAK Ulusal Metroloji Enstitüsü [UME], Gebze-Kocaeli

**Attendees to the last meeting (May 2011)****President: Dr Mitsuru Tanaka****Delegates and experts of member laboratories:****Dr Patrick Abbott, NIST**

Tel: + 1 301 975 2300  
 Fax: + 1 301 975 4091  
 E-mail: patrick.abbott@nist.gov

**Mr Fredrik Arrhen, SP**

Tel: +46 10-516 50 00  
 Fax: +46 33-13 55 02  
 E-mail: fredrik.arrhen@sp.se

**Dr Ashis Kumar Bandyopadhyay, NPLI**

Tel: + 91 11 2574 6270  
 Fax: + 91 11 2574 6270  
 E-mail: akband@mail.nplindia.ernet.in

**Dr Henri Baumann, METAS**

Tel: + 41 31 323 32 43  
 Fax: + 41 31 323 32 10  
 E-mail: henri.baumann@metas.ch

**M. in. Sc Luis Omar Becerra, CENAM**

Tel: + 52 442 211 0500 to 04  
 Fax: + 52 442 211 0568  
 E-mail: lbecerra@cenam.mx

**Dr Peter Becker, PTB**

Tel: + 49 531 592 4300  
 Fax: + 49 531 592 4305  
 E-mail: peter.becker@ptb.de

**Dr Horst Bettin, PTB**

Tel: + 49 531 592 3330  
 Fax: + 49 531 592 3015  
 E-mail: horst.bettin@ptb.de

**Dr Walter Bich, I.N.R.I.M**

Tel: + 39 011 3977 445  
 Fax: + 39 011 3977 437  
 E-mail: w.bich@inrim.it

**Dr Michael Borys, PTB**

Tel: + 49 531 592 1110  
 Fax: + 49 531 592 691 110  
 E-mail: michael.borys@ptb.de

**Mr Christian Buchner, BEV**

Tel: + 43 1 21 110 6361  
 Fax: + 43 1 21 110 6000  
 E-mail: christian.buchner@bev.gv.at

**Dr Jin Wan Chung, KRISS**

Tel: + 82 42 868 5111  
 Fax: + 82 42 868 5012  
 E-mail: jwchung@kriss.re.kr

**Dr Stuart Davidson, NPL**

Tel: + 44 208 943 6224  
 Fax: + 44 208 943 6132  
 E-mail: stuart.davidson@npl.co.uk

**Dr Peter Farar, SMU**

Tel: + 421 260 294 491  
 Fax: + 421 265 429 592  
 E-mail: farar@smu.gov.sk

**Dr Kenichi Fujii, NMIJ/AIST**

Tel: + 81 298 61 4316  
 Fax: + 81 298 50 1464  
 E-mail: fujii.kenichi@aist.go.jp

**Dr Gérard Genevès, LNE**  
 Tel: + 33 1 30 69 21 62  
 Fax: + 33 1 30 16 28 41  
 E-mail: gerard.geneves@lne.fr

**Dr Alessandro Germak, I.N.R.I.M**  
 Tel: + 39 011 3919 924  
 Fax: + 39 011 3919 926  
 E-mail: a.germak@inrim.it

**Dr Claude Jacques, NRC-INMS**  
 Tel: + 1 613 993 9330  
 Fax: + 1 613 952 1394  
 E-mail: claude.jacques@nrc-cnrc.gc.ca

**Dr Karl Jousten, PTB**  
 Tel: + 49 30 3481 7262  
 Fax: + 49 30 3481 7490  
 E-mail: karl.jousten@ptb.de

**Dr Yu A. Kiselev, VNIIM**  
 Tel: +7 812 323 9629  
 Fax: +7 812 113 0114  
 E-mail: y.a.kiselev@vniim.ru

**Dr Rolf Kumme, PTB**  
 Tel: + 49 531 592 1200  
 Fax: + 49 531 592 1205  
 E-mail: rolf.kumme@ptb.de

**Ms Elzbieta Lenard, GUM**  
 Tel: + 48 22 620 02 41  
 Fax: + 48 22 620 83 78  
 E-mail: density@gum.gov.pl or  
 mass.force@gum.gov.pl

**Dr John Man, NMIA**  
 Tel: + 61 2 8467 3513  
 Fax: + 61 2 8467 3610  
 E-mail: john.man@measurement.gov.au

**Mrs Maria Nieves Medina, CEM**  
 Tel: + 34 91 807 47 89  
 Fax: +34 91 807 48 07  
 E-mail: mnmedina@cem.mityc.es

**Dr Paul André Meury, LNE**  
 Tel: + 33 1 40 43 38 86  
 Fax: + 33 1 40 43 37 37  
 E-mail: paul-andre.meury@lne.fr

**Dr James K. Olthoff, NIST**  
 Tel: + 1 301 975 2220  
 Fax: + 1 301 975 4091  
 E-mail: james.olthoff@nist.gov

**Dr Akira Ooiwa, NMJJ/AIST**  
 Tel: + 81 29 861 4024  
 Fax: + 81 29 861 4020  
 E-mail: akira-ooiwa@aist.go.jp

**Dr Patrick Pinot, LNE**  
 Tel: + 33 1 58 80 85 63  
 Fax: + 33 1 58 80 89 00  
 E-mail: patrick.pinot@cnam.fr

**Dr Philippe Richard, METAS**  
 Tel: + 41 31 323 34 15  
 Fax: + 41 31 323 3573  
 E-mail: philippe.richard@metas.ch

**Dr Roman Schwartz, PTB**  
 Tel: + 49 531 592 1010  
 Fax: + 49 531 592 6910  
 E-mail: roman.schwartz@ptb.de

**Dr Ian Severn, NPL**  
 Tel: + 44 208 943 6862  
 Fax: + 44 208 943 6132  
 E-mail: ian.severn@npl.co.uk

**Dr Chris M. Sutton, MSL**  
 Tel: + 644 931 3499  
 Fax: + 644 931 3117  
 E-mail: c.sutton@irl.cri.nz

**Mr Benjamin van der Merwe, NMISA**  
 Tel: +27 12 841 3455  
 Fax: + 27 12 841 4458  
 E-mail: bvdmerwe@nmisa.org

**Dr Leonid Vitushkin, VNIIM**  
 Chair of Working Group on Gravimetry  
 Tel: + 33 1 45 07 70 81 or 62 68  
 Fax: + 33 1 45 34 20 21  
 E-mail: lvitush@bipm.org

**Dr Sam Yong Woo, KRISS**  
 Tel: + 82 42 868 5118  
 Fax: + 82 42 868 5679  
 E-mail: sywoo@kriss.re.kr

**Dr John Wright, NIST**  
 Tel: + 1 301 975 2300  
 Fax: + 1 301 975 4091  
 E-mail: john.wright@nist.gov

**Mr Yue Zhang, NIM**  
 Tel: + 86 10 6421 3040  
 Fax: + 86 10 6421 8628  
 E-mail: zhangy@nim.ac.cn

**Observers:**

**Dr Cetik Dogan, UME**  
Tel: + 90 262 679 5999 ext. 5653  
Fax: + 90 262 679 5001  
E-mail: [cetin.dogan@ume.tubitak.gov.tr](mailto:cetin.dogan@ume.tubitak.gov.tr)

**Dr Claudia Santo, LATU**  
Tel : +598 260 13 724 / 1296  
Fax : + 598 2 60 8588  
E-mail : [csanto@latu.org.uy](mailto:csanto@latu.org.uy)

**Mrs Isabel Spohr, IPQ**  
Tel: + 351 212 948 173  
Fax: + 351 212 948 188  
E-mail: [ispohr@mail.ipq.pt](mailto:ispohr@mail.ipq.pt)

**Invited by the President:**

**Dr Richard S. Davis, BIPM**  
Tel: +33 1 45 07 70 11  
Fax: +33 1 45 34 20 21  
E-mail: [rdavis@bipm.org](mailto:rdavis@bipm.org)

**Dr Lars Nielsen, DFM**  
Tel: +45 4593 1144  
Fax: +45 4593 1137  
E-mail: [ln@dfm.dtu.dk](mailto:ln@dfm.dtu.dk)

**Mr Francisco García, CESMEC Ltda**  
Tel: + 56 2 445 8800  
Fax: + 56 2 238 4135  
E-mail: [fgarcia@cesmec.cl](mailto:fgarcia@cesmec.cl)

**Dr Henning Wolf, PTB**  
Tel: + 49 531 592 3320  
Fax: + 49 531 592 693 320  
E-mail: [henning.wolf@ptb.de](mailto:henning.wolf@ptb.de)

**CCM Working Group on Density****Chairman:**

**Dr Kenichi Fujii**, NMIJ/AIST  
Tel: + 81 298 61 4316  
Fax: + 81 298 50 1464  
E-mail: fujii.kenichi@aist.go.jp

**Members :**

BEV  
BIPM  
I.N.R.I.M  
KRISS  
METAS  
NIST  
NMIA  
NMIJ/AIST  
NPL  
NRC-INMS  
PTB  
SMU  
SP  
VNIIM

**CCM Working Group on Mass Standards****Chairman:**

**Dr Philippe Richard**, METAS  
Tel: + 41 31 32 33 415  
Fax: + 41 31 32 33 210  
E-mail: philippe.richard@metas.ch

**Members:**

BEV	NIST
BIPM	NMIA
CEM	NMIJ/AIST
CENAM	NMISA
GUM	NPL
I.N.R.I.M.	NPLI
KRISS	NRC-INMS
LNE	PTB
LNE-INM/CNAM	SMU
METAS	VNIIM
NIM	VSL

**CCM Working Group on High Pressures****Chairman:**

**Dr Jorge Torres-Guzman**, CENAM  
Tel: + 52 442 211 05 72  
Fax: + 52 442 211 0578  
E-mail: jtorres@cenam.mx

**Members:**

CEM	NMIJ/AIST
CENAM	NPL
INMETRO	NPLI
I.N.R.I.M.	NRC-INMS
KRISS	PTB
LNE	SMU
MSL	UME
NIM	VNIIFTRI
NIST	VNIIM
NMIA	VSL

**CCM Working Group on Low Pressures****Chairman:**

**Dr Karl Jousten**, PTB  
Tel: + 49 30 3481 262  
Fax: + 49 30 3481 490  
E-mail: karl.jousten@ptb.de

**Members:**

A*STAR	NIST
CENAM	NMIA
CEM	NMIJ/AIST
CMI	NPLI
I.N.R.I.M.	PTB
KRISS	SMU
LNE	UME
METAS	VNIIM
MSL	VSL
NIM	

**CCM Working Group on Force**

**Interim Chairman:**

**Dr Rolf Kumme**, PTB  
Tel: +49 531 592 1120  
Fax: +49 531 592 1205  
E-mail: rolf.kumme@ptb.de

**Members:**

BEV	NIM
CENAM	NIS
CMI	NIST
FORCE Technology	NMIA
GUM	NMIJ/AIST
INMETRO	NMISA
I.N.R.I.M.	NPL
IPQ	NPLI
KIM-LIPI	PTB
KRISS	SP
LNE	UME
METAS	VNIIM
Metrology Division	VSL
MIKES	
MKEH	

**CCM Working Group on the Avogadro Constant**

**Chairman:**

**Dr Horst Bettin**, PTB  
Tel: + 49 531 592 3330  
Fax: + 49 531 592 3015  
E-mail: horst.bettin@ptb.de

**CCM Working Group on Hardness****Chairman:**

**Dr Alessandro Germak, I.N.R.I.M**

Tel: + 39 011 3977 367

Fax: + 39 011 3977 426

E-mail: a.germak@imgc.cnr.it

**Members:**

CENAM	NMIJ/AIST
GUM	NPL
INMETRO	PTB
I.N.R.I.M.	SMU
KRISS	SP
LNE	UME
METAS	VNIIFTRI
NIM	VNIIM
NIST	VSL

**CCM Working Group on Fluid Flow****Chairman:**

**Dr J. Wright, NIST**

Tel: + 1 301 975 2300

Fax: + 1 301 975 4091

E-mail: john.wright@nist.gov

**Members:**

A*STAR	NMIJ/AIST
BEV	NMISA
CENAM	NCR-INMS
CMI	PTB
GUM	SMU
INMETRO	SP
I.N.R.I.M.	UME
KRISS	VSL
LNE-LADG	
METAS	
NEL	
NIM	
NIST	
NMIA	

## CCM Working Group on Gravimetry

### Chairman:

**Dr Leonid Vitushkin**, BIPM  
Tel: + 33 1 45 07 70 81  
Fax: + 33 1 45 34 20 21  
E-mail: lvitushk@bipm.org

### Members:

BIPM	NPL
METAS	NRC-INMS
LNE-SYRTE	UME
I.N.R.I.M.	VNIIM
NIM	
NMIJ	

## CCM Working Group on Viscosity

### Chairman:

**Dr Henning Wolf**, PTB  
Tel: + 49 531 592 3320  
Fax: + 49 531 592 3320  
E-mail: henning.wolf@ptb.de

### Members:

A*STAR	NIM
BEV	NIS
Cannon	NIST
CENAM	NMIJ/AIST
GUM	NPLI
I.N.R.I.M.	PTB
INMETRO	SMU
IPQ	UME
KRISS	VNIIM
LNE	VSL

**CCM Working Group on CMCs**

**Interim Chairman:**

**Dr Chris Sutton**, MSL  
Tel: + 64 4 569 0499  
Fax: + 64 4 569 0117  
E-mail: c.sutton@irl.cri.nz

**Members:**

Chairs of CCM Working Groups  
Chairs of RMO Technical Committees for Mass and Fluid Flow

**Invited:**

Secretary of the JCRB  
Coordinator of the KCDB

**CCM Working Group on the SI kg**

**Chairman:**

**Dr Philippe Richard**, METAS  
Tel: + 41 31 323 34 15  
Fax: + 41 31 323 3573  
E-mail: philippe.richard@metas.ch

BIPM  
DFM  
I.N.R.I.M  
METAS  
NIST

NMIJ/AIST  
PTB

**Consultative Committee for Amount of Substance: metrology in chemistry (CCQM)****Created in 1993**

*Present activities concern primary methods for measuring amount of substance and international comparisons, establishment of international equivalence between national laboratories and advice to the CIPM on matters concerned with metrology in chemistry.*

**President:** **Dr Robert Kaarls**

Klaverwydenstraat 13  
2381 VX Zoeterwoude  
The Netherlands  
Tel: + 31 71 580 22 31  
Fax: + 31 71 580 47 77  
E-mail: rkaarls@euronet.nl

**Executive Secretary:** **Dr Robert Wielgosz, BIPM**

Tel: + 33 1 45 07 62 51  
Fax: + 33 1 45 34 20 21  
E-mail: rwielgosz@bipm.org

**Members:**

Centro Nacional de Metrología [CENAM], Querétaro  
D.I. Mendeleev Institute for Metrology, Rostekhregulirovaniye of Russia [VNIIM], St Petersburg  
Danish Fundamental Metrology Ltd. [DFM], Lyngby  
Federal Institute for Materials Research and testing/Bundesanstalt für Materialforschung und -prüfung [BAM], Berlin  
Federal Office of Metrology [METAS], Bern-Wabern  
Institute for Reference Materials and Measurements [IRMM], Geel  
Instituto Nacional de Metrologia, Normalizacao e Qualidade Industrial [INMETRO], Rio de Janeiro  
International Atomic Energy Agency [IAEA]  
International Federation of Clinical Chemistry and Laboratory Medicine [IFCC]  
International Organization for Standardization, Committee on Reference Materials [ISO REMCO]  
International Union of Pure and Applied Chemistry [IUPAC]  
Istituto Nazionale di Ricerca Metrologica [I.N.R.I.M], Turin  
Korea Research Institute of Standards and Science [KRISS], Daejeon  
Laboratoire national de métrologie et d'essais [LNE], Paris  
Laboratory of the Government Chemist [LGC Ltd], Teddington  
National Institute of Metrology [NIM], Beijing  
National Institute of Standards and Technology [NIST], Gaithersburg  
National Measurement Institute, Australia [NMIA], Lindfield  
National Metrology Institute of Japan, National Institute of Advanced Industrial Science and Technology, [NMIJ/AIST], Tsukuba  
National Metrology Institute of South Africa [NMISA], Pretoria  
National Physical Laboratory [NPL], Teddington  
National Research Council of Canada, Institute for National Measurement Standards [NRC-INMS], Ottawa  
Physikalisch-Technische Bundesanstalt [PTB]/Federal Institute for Materials Research and Testing /  
Slovak Institute of Metrology/Slovenský Metrologický Ústav [SMU], Bratislava  
State Laboratory [SL], Co. Kildare  
Technical Research Institute of Sweden [SP], Borås  
VSL [VSL], Delft  
The Director of the International Bureau of Weights and Measures [BIPM], Sèvres

**Observers:**

Agency for Science, technology and research [A\*STAR], Singapore  
 Bulgarian Institute of Metrology [BIM], Sofia  
 Central Office of Measures/Główny Urzad Miar [GUM], Warsaw  
 Centro Español de Metrología [CEM], Madrid  
 Co-Operation on International Traceability in Analytical Chemistry [CITAC],  
 Hungarian Trade Licensing Office [MKEH], Budapest  
 Instituto Português da Qualidade [IPQ], Caparica  
 National Institute of Metrology [NIMT], Pathumthani  
 National Metrology Institute of Turkey/Ulusel Metroloji Enstitüsü [UME], Gebze-Kocaeli  
 National Physical Laboratory of India [NPLI], New Delhi  
 The National Physical Laboratory of Israel [INPL], Jerusalem

**Attendees to the last meeting (April 2011)****President: Dr Robert Kaarsl****Delegates and experts of member laboratories:****Dr Hanspeter Andres, METAS**

Tel: + 41 31 323 33 70  
 Fax: + 41 31 323 32 10  
 E-mail: hanspeter.andres@metas.ch

**Prof. Dr Hendrik Emons, IRMM**

Tel: + 32 14 571 722  
 Fax: + 32 14 571 548  
 E-mail: hendrik.emons@ec.europa.eu

**Dr Laurence Besley, NMIA**

Tel: + 61 2 8467 3650  
 Fax: + 61 2 8467 3655  
 E-mail: laurie.besley@measurement.gov.au

**Dr Ales Fajgelj, IAEA and IUPAC**

Tel: + 43 1 2600 28233 or 28200  
 Fax: + 43 1 2600 282222  
 E-mail: a.fajgelj@iaea.org

**Dr Grainne Carroll, SL**

Tel: + 353 1 505 7017  
 Fax: + 353 1 505 7070  
 E-mail: gcarroll@statelab.ie

**Dr Paola Fisicaro, LNE**

Tel: + 33 1 40 43 37 59  
 Fax: + 33 1 40 43 37 37  
 E-mail: Paola.Fisicaro@lne.fr

**Dr Valnei Da Cunha, INMETRO**

Tel: + 55 21 2679 9243  
 Fax: + 55 21 2679 9069  
 E-mail: vscunha@inmetro.gov.br

**Dr Toshiyuki Fujimoto, NMIJ/AIST**

Tel: + 81 298 61 4149  
 Fax: + 81 298 61 4202

**Dr Romeu Daroda, INMETRO**

Tel: + 55 21 2563 2802  
 Fax: + 55 21 2679 7909  
 E-mail: dimci@inmetro.gov.br

**Dr Bernd Gütler, PTB**

Tel: + 49 531 592 3100  
 Fax: + 49 531 592 3015  
 E-mail: bernd.guettler@ptb.de

**Prof. Dr Paul de Bièvre, IUPAC/CIAAW**

Tel: + 32 14 851 338  
 Fax: + 32 14 853 908  
 E-mail: paul.de.bievre@skynet.be

**Dr Qiao Han, NIM**

Tel: + 86 10 8425 2300  
 Fax: + 86 10 6422 9379  
 E-mail: hanqiao@nim.ac.cn

**Dr Stephen Ellison, LGC**

Tel: + 44 208 943 7325  
 Fax: + 44 208 943 2767

**Dr Euijin Hwang, KRISS**

Tel: + 82 42 868 5343  
 Fax: + 82 42 868 5842  
 E-mail: ehwang@kribs.re.kr

**Dr Hans D. Jensen**, DFM  
 Tel: + 45 4525 5874  
 Fax: + 45 4593 1137  
 E-mail: hdj@dfm.dtu.dk

**Dr Kenji Kato**, NMIJ/AIST  
 Tel: + 81 298 61 6851  
 Fax: + 81 298 61 6857  
 E-mail: k.kato@aist.go.jp

**Dr Yuri Kustikov**, VNIIM  
 Tel: + 7 812 315 11 45  
 Fax: + 7 812 327 97 76  
 E-mail: lkonop@b10.vniim.ru

**Ms Hongmei Li**, NIM  
 Tel: + 86 10 6421 1639  
 Fax: + 86 10 6427 1639  
 E-mail: lihm@nim.ac.cn

**Dr Wynand Louw**, NMISA  
 Tel: +27 12 841 4227  
 Fax: + 27 12 841 3382  
 E-mail: wlouw@nmisa.org

**Dr Lindsey Mackay**, NMIA  
 Tel: + 61 2 9449 0125  
 Fax: + 61 2 9449 1653  
 E-mail: lindsey.mackay@measurement.gov.au

**Dr Bertil Magnusson**, SP  
 Tel: + 46 703 16 52 75  
 Fax: + 46 33 12 37 49  
 E-mail: bertil.magnusson@sp.se

**Dr Michal Máriássy**, SMU  
 Tel: + 421 2 6029 4522  
 Fax: + 421 2 6542 9592  
 E-mail: michal.mariassy@smu.gov.sk

**Dr Willie E. May**, NIST CSTL  
 Tel: + 1 301 975 8300  
 Fax: + 1 301 975 3845  
 E-mail: willie.may@nist.gov

**Dr Juris Meija**, NRC-INMS  
 Tel: + 613 998 7751  
 Fax: + 613 993 2451  
 E-mail: juris.meija@nrc-cnrc.gc.ca

**Dr Zoltan Mester**, NRC-INMS  
 Tel: + 613-993-5008  
 Fax: + 613-993-2451  
 E-mail: Zoltan.Mester@nrc-cnrc.gc.ca

**Dr Martin J.T. Milton**, NPL  
 Tel: + 44 208 943 6826  
 Fax: + 44 208 943 6755  
 E-mail: martin.milton@npl.co.uk

**Dr Yoshito Mitani**, CENAM  
 Tel: + 52 442 211 0560  
 Fax: + 52 442 211 0569  
 E-mail: ymitani@cenam.mx

**Prof. Dr Ulrich Panne**, BAM  
 Tel: + 49 30 81 04 11 00  
 Fax: + 49 30 81 04 11 07  
 E-mail: ulrich.panne@bam.de

**Ms Helen Parkes**, LGC  
 Tel: + 44 208 943 7676  
 Fax: + 44 208 943 2767

**Dr Mike Sargent**, LGC  
 Tel: + 44 208 943 7360  
 Fax: + 44 208 943 2767  
 E-mail: ms@lgc.co.uk

**Dr Michela Sega**, I.N.R.I.M  
 Tel: + 39 011 3977 448  
 Fax: + 39 011 3977 437  
 E-mail: m.sega@inrim.it

**Dr Sophie Vaslin-Reimann**, LNE  
 Tel: + 33 1 40 43 37 37  
 Fax: + 33 1 40 43 37 37  
 E-mail: sophie.vaslin-reimann@lne.fr

**Prof. Dr Hun-Young So**, KRISS  
 Tel: + 82 42 848 5020  
 Fax: + 82 42 868 5042  
 E-mail: hys@kriss.re.kr

**Dr Ralph Sturgeon**, NRC-INMS  
 Tel: + 1 613 993 6395  
 Fax: + 1 613 993 2451  
 E-mail: ralph.sturgeon@nrc-cnrc.gc.ca

**Dr Wolfgang Unger**, BAM  
 Tel: + 49 30 8104 1823  
 Fax: + 49 30 8104 1827  
 E-mail: wolfgang.unger@bam.de

**Prof. Michael Kuehne**, Director of the BIPM  
 Tel: + 33 1 45 07 62 90  
 Fax: + 33 1 45 34 20 21  
 E-mail: mkuehne@bipm.org

**Dr Robert L. Watters**, NIST  
Tel: + 1 301 975 4122  
Fax: + 1 301 926 4751  
E-mail: robert.watters@nist.gov

**Mr Rob Wessel**, VSL  
Tel: + 31 15 269 1677  
Fax: + 31 15 261 2971  
E-mail: rwessel@vsl.nl

**Dr Stephen A. Wise**, NIST  
Tel: + 1 301 975 3112  
Fax: + 1 301 926 8671  
E-mail: stephen.wise@nist.gov

**Dr Maria Paola Sassi**, I.N.R.I.M  
Tel: + 39 011 3919965  
Fax: + 39 011 3919959  
E-mail: m.sassi@inrim.it

**Observers:**

**Dr Oktay Cankur**, UME  
Tel: + 90 262 679 5000 Ext. 6501  
Fax: + 90 262 679 5001  
E-mail: oktay.cankur@ume.tubitak.gov.tr

**Mr Teo Chin Chye**, A\*STAR  
Tel: + 65 6279 1934  
Fax: + 65 6279 1993  
E-mail: teo\_chin\_chye@nmc.a-star.edu.sg

**Dr Florbelo Dias**, IPQ  
Tel: + 351 212 948 175  
Fax: + 351 212 948 188  
E-mail: florbelad@mail.ipq.pt

**Dr Andrés Rojo Esteban**, CEM  
Tel: + 34 9180 74 751  
Fax: + 34 91 807 48 07  
E-mail: AROJO@cem.mityc.es

**Dr Prabhat K. Gupta**, NPLI  
Tel: + 91 11 4560 8232  
Fax: + 91 11 4560 9310  
E-mail: prabhat@nplindia.org

**Dr Włodzisław Kozłowski**, GUM  
Tel: + 48 22 654 72 49  
Fax: + 48 22 581 93 95  
E-mail: chemistry\_wk@gum.gov.pl

**Dr Ilya Kuselman**, INPL (&CITAC)  
Tel: + 92 2 566 1856  
Fax: + 972 2 652 0797  
E-mail: ilya.kuselman@moital.gov.il

**Dr Krairerk Obromsook**, NIMT  
Tel: + 662 577 5100 ext. 2342  
Fax: + 662 577 5096  
E-mail: krairerk@nimt.or.th ;  
kr020696@hotmail.com

**Ms Agata Rakowska**, A\*STAR  
Tel: + 65 6279 1991  
Fax: + 65 6279 1993  
E-mail: agata\_rakowska@nmc.a-star.edu.sg

**Dr Zsófia Nagyné Szilágyi**, MKEH  
Tel: + 36 1 4585800  
Fax: + 36 1 4585937  
E-mail: nagynesz@mkeh.hu

**Dr Pian Totarong**, NIMT  
Tel: + 66 25 77 5100 ext 4201  
Fax: + 66 25 77 2823  
E-mail: pian@nimt.or.th

**Dr Agnieszka Zoń**, GUM  
Tel: + 48 22 581 94 05  
Fax: + 48 22 581 93 95  
E-mail: ref.mat@gum.gov.pl

**Invited by the President:**

**Dr Mirella Maria Buzoianu, INM**

Tel: + 40 21 334 55 20  
Fax: + 40 21 334 55 33 or 5345  
E-mail: mirella.buzoianu@inm.ro

**Mr Luvonga Caleb, KEBS**

Tel: + 254 20 694 8475  
Fax: +254 0260 4031  
E-mail: luvongac@kebs.org, car\_lebo@yahoo.com

**Prof. Maurice Cox, NPL**

Tel: + 44 20 8943 6096  
Fax: + 44 20 8614 0548  
E-mail: maurice.cox@npl.co.uk

**Dr Lee Tong Kooi, HSA**

Tel: + 65 6213 0731  
Fax: + 65 6213 0749  
E-mail: Lee\_Tong\_Kooi@hsa.gov.sg

**Dr Eugenia Lampi, EIM**

Tel: + 30 210 6479 136  
Fax: + 30 210 6479 114  
E-mail: elampi@chem.uoa.gr; e.lampi@gcsl.gr

**Ms Reenie Parris, NIST MML**

Tel: + 1 301 975 3103  
Fax: + 1 301 975 3845  
E-mail: reenie.parris@nist.gov

**Dr Adriana Rosso, INTI**

Tel: + 54 11 4724 6359  
Fax: + 54 11 4724 6368/4066  
E-mail: adrosso@inti.gob.ar

**Dr Steve Stein, NIST**

Tel: + 301 975 2505  
E-mail: stephen.stein@nist.gov

**Prof. Dr Miloslav Suchanek, EURACHEM**

Tel: + 42 060 355 2698  
E-mail: miloslav.suchanek@vscht.cz

**Ms Owiti Orwa Tabitha, KEBS**

Tel: + 254 20 6948 484  
Fax: + 254 20 60431  
E-mail: orwat@kebs.org

**Dr Yong- Hyeon Yim, KRISS**

Tel: + 82 42 861 5343  
Fax: + 82 42 868 5042  
E-mail: yhyim@kriiss.re.kr

**Dr Liqing Wu, NIM**

Tel: + 86 10 6427 6678  
Fax: + 86 10 6427 6678  
E-mail: wulq@nim.ac.cn

**Dr Della Wai Mei Sin, GLHK**

Tel: + 852 2762 3879  
Fax: + 852 2714 4083  
E-mail: wmsin@govtlab.gov.hk

**Sent regrets:**

**Dr Teresa Fernández Vicente, CEM**

Tel: + 34 91 807 47 51  
Fax: +34 91 807 48 07  
E-mail: tefernandez@cem.mityc.es

**Mr Alan Squirrell, ILAC**

Tel: + 61 2 9736 8374  
Fax: + 61 2 9736 8373  
E-mail: alan.squirrell@nata.asn.au or  
ilac@nata.asn.au

**Also present:**

**Ms Adeline Daireaux, BIPM**

Tel: + 33 1 45 07 70 89

Fax: + 33 1 45 34 20 21

E-mail: adeline.daireaux@bipm.org

**Mr Edgar Flores Jardines, BIPM**

Tel: + 33 1 45 07 70 92

Fax: + 33 1 45 34 20 21

E-mail: edgar.flores@bipm.org

**Dr Ralf Josephs, BIPM**

Tel: + 33 1 45 07 62 83

Fax: + 33 1 45 34 20 21

E-mail: ralf.josephs@bipm.org

**Prof. Dr Michael Kuehne, Director of the BIPM**

Tel: + 33 1 45 07 62 90

Fax: + 33 1 45 34 20 21

Email: mkuehne@bipm.org

**Dr Stéphanie Maniguet, BIPM**

Tel: + 33 1 45 07 62 73

Fax: + 33 1 45 34 20 21

Email: smaniguet@bipm.org

**Dr Norbert Stoppacher, BIPM**

Tel: + 33 1 45 07 62 89

Fax: + 33 1 45 34 20 21

Email: nstoppacher@bipm.org

**Mr Philippe Moussay, BIPM**

Tel: + 33 1 45 07 76 07 or 76 09

Fax: + 33 1 45 34 20 21

E-mail: pmoussay@bipm.org

**Dr Claudine Thomas, Coordinator of the KCDB**

Tel: + 33 1 45 07 70 73

Fax: + 33 1 45 34 20 21

E-mail: cthomas@bipm.org

**Dr Joëlle Viallon, BIPM**

Tel: + 33 1 45 07 62 70

Fax: + 33 1 45 34 20 21

E-mail: jviallon@bipm.org

**Dr Steven Westwood, BIPM**

Tel: + 33 1 45 07 70 57

Fax: + 33 1 45 34 20 21

E-mail: steven.westwood@bipm.org

**Dr Robert Wielgosz, Executive Secretary of the CCQM, BIPM**

Tel: + 33 1 45 07 62 51

Fax: + 33 1 45 34 20 21

E-mail: rwielgosz@bipm.org

## CCQM Working Group on Key Comparisons and CMC Quality

**Chair:**

**Dr Lindsey Mackay, NMIA**

Tel: + 61 2 9449 0125

Fax: + 61 2 9449 1653

E-mail: lindsey.mackay@measurement.gov.au

**Working Group Contact Persons:**

**Dr Carlos Gomez, CQM**

Tel: + 56 2 242 8181

Fax: + 56 2 242 8182

E-mail: cgomez@fundacionchile.cl

**Dr Bernd Güttler, PTB**

Tel: + 49 531 592 3100

Fax: + 49 531 592 3015

E-mail: bernd.guettler@ptb.de

**Dr Ruth Hearn, LGC**

Tel: + 44 20 8943 7361

Fax: + 44 208 943 2767

E-mail: rh@lgc.co.uk

**Dr Akiharu Hioki, NMIJ/AIST**

Tel: + 81 29 861 9341

Fax: + 81 29 861 6890

E-mail: aki-hioki@aist.go.jp

**Dr Yury Kustikov, VNIIM**

Tel: + 7 812 315 11 45

Fax: + 7 812 327 97 76

E-mail: lkonop@b10.vniim.ru

**Dr Wynand Louw, NMISA**

Tel: +27 12 841 4227

Fax: + 27 86 530 5916

E-mail: wlouw@nmisa.org

**Ms Hongmei Li, NIM**

Tel: + 86 10 6422 8896

Fax: + 86 10 6427 1639

E-mail: lihm@nim.ac.cn

**Dr Stéphanie Maniguet, BIPM**

Tel : +33 1 45 07 62 73

Fax : +33 1 45 34 20 21

E-mail : smaniguet@bipm.org

**Dr Gabriela Massiff, CMQ**

Tel: + 56 2 242 8180

Fax: + 56 2 242 8182

E-mail : gmassiff@fundacionchile.cl

**Dr Yoshito Mitani, CENAM**

Tel: + 52 442 211 0560

Fax: + 52 442 211 0569

E-mail: ymitani@cenam.mx

**Dr Rennie Parris, NIST MML**

Tel: + 1 301 975 3103

Fax: + 1 301 975 3845

E-mail : reenie.parris@nist.gov

**Dr Kenneth Pratt, NIST**

Tel: + 1 301 975 4131

Fax: + 1 301 869 0413

E-mail: kenneth.pratt@nist.gov

**Dr Heinz Schimmel, IRMM**

Tel: + 32 14 571 720

Fax: + 32 14 571 548

E-mail: heinz.schimmel@ec.europa.eu

**Dr Michela Sega, I.N.R.I.M**

Tel: + 39 011 39 19948

Fax: + 39 011 3977 437

E-mail: m.sega@inrim.it

**Dr Della Wai Mei Sin,**  
 Tel: + 852 2762 3706  
 Fax: + 852 2714 4083  
 E-mail: wmsin@govtlab.gov.hk

**Dr Thomas Steiger, BAM**  
 Tel: + 49 30 8104 5860  
 Fax: + 49 30 8104 5577  
 E-mail: thomas.steiger@bam.de

**Dr Rainer Stosch, PTB**  
 Tel: + 49 531 592 3122  
 Fax: + 49 531 592 3015  
 E-mail: rainer.stosch@ptb.de

**Dr Zsófia Nagyné Szilágyi, MKEH**  
 Tel: + 36 1 4585 838  
 Fax: + 36 1 4585 937  
 E-mail: nagynesz@mkeh.hu

**Dr Robert Wielgosz, BIPM**  
 Tel: +33 1 45 07 62 51  
 Fax: +33 1 45 34 20 21  
 E-mail: rwielgosz@bipm.org

**Dr Peter Woods, NPL**  
 Tel: + 44 208 943 7095  
 Fax: + 44 208 943 6755  
 E-mail: peter.woods@npl.co.uk

## CCQM Working Group on Gas Analysis

### Chair:

**Dr Martin J.T. Milton, NPL**  
 Tel: + 44 208 943 6826  
 Fax: + 44 208 943 6755  
 E-mail: martin.milton@npl.co.uk

### Working Group Contact Persons:

**Dr Fatma Akçadağ, UME**  
 Tel: + 90 262 679 5000 ext 6400  
 Fax: + 90 262 679 5001  
 E-mail:  
 fatma.agcadag@ume.tubitak.gov.tr

**Dr Mariana Arce Osuna, CENAM**  
 Tel: + 52 442 211 0562  
 Fax: + 52 442 511 0528  
 E-mail: marce@cenam.mx

**Dr Cristina Augusto, INMETRO**  
 Tel: + 55 21 2679 9243  
 Fax: + 55 21 2679 9069  
 E-mail: craugusto@inmetro.gov.br

**Dr Maria Belli**  
 Tel: + 3906 500 73206  
 Fax: + 3906 505 0519  
 E-mail: maria.belli@isprambiente.it

**Dr Annette Borowiak, JRC**  
 Tel: + 39 0332 789 956  
 Fax: + 39 0332 785 236  
 E-mail: annette.borowiak@jrc.it

**Dr Angelique Botha, NMISA**  
 Tel: + 27 12 841 3800  
 Fax: + 27 12 841 2131  
 E-mail: abotha@nmisa.org

**Dr Andrew Brown, NPL**  
 Tel: + 44 208 943 6831  
 Fax: + 44 208 943 6458  
 E-mail: andrew.brown@npl.co.uk

**Mr Teo Chin Chye, A\*STAR**  
 Tel: + 65 6279 1934  
 Fax: + 65 6279 1992  
 E-mail: teo\_chin\_chye@nmc.a-star.edu.sg

**Dr Valnei Smarçaro Da Cunha, INMETRO**  
 Tel: + 55 21 2679 9243  
 Fax: + 55 21 2679 9069  
 E-mail: vscunha@inmetro.gov.br

**Dr Florbel Dias, IPQ**  
 Tel: + 351 212 948 175  
 Fax: + 351 212 948 188  
 E-mail: florbelad@mail.ipq.pt

**Dr Edward Dlugokencky, NOAA**  
 Tel: + 1 301 497 6228  
 Fax: + 1 303 497 6290  
 E-mail: ed.dlugokencky@noaa.gov

**Prof. Volker Ebert, PTB**  
 Tel: + 49 531 592 3200  
 Fax: + 49 531 592 3015  
 E-mail: Volker.Ebert@ptb.de

**Dr Teresa Fernández Vicente, CEM**  
 Tel: + 34 91 807 47 51  
 Fax: + 34 91 807 48 07  
 E-mail: tefernandez@cem.mityc.es

**Mr Andrea Fioravante, INMETRO**  
 Tel: + 5521 2679 9243  
 Fax: + 5521 2679 9069  
 E-mail: aalima@inmetro.gov.br

**Ms Marina Froehlich, BEV**  
 Tel: + 43 1 21 110 5862  
 Fax: + 43 1 31304 5800  
 E-mail:  
 marina.froehlich@umweltbundesamt.at

**Dr Toshiyuki Fujimoto, NMJ/AIST**  
 Tel: + 81 29 861 4623  
 Fax: + 81 29 861 4623  
 E-mail: t.fujimoto@aist.go.jp

**Ms Judit Főkő, MKEH**  
 Tel: + 361 458 5988  
 Fax: + 361 458 5937  
 E-mail: tothnefj@mkeh.hu

**Dr Holger Gerwig, UBA**  
 Tel: + 49 6103 704 108  
 Fax: + 49 6103 704 147  
 E-mail: Holger.Gerwig@UBA.de

**Dr Frank Guenther, NIST**  
 Tel: + 1 301 975 3939  
 Fax: + 1 301 977 8392  
 E-mail: fguenther@nist.gov

**Dr Prabhat K. Gupta, NPLI**  
 Tel: + 91 11 4560 8232  
 Fax: + 91 11 4560 9310  
 E-mail: prabhat@nplindia.org

**Dr Bernd Güttler, PTB**  
 Tel: + 49 531 592 3100  
 Fax: + 49 531 592 3015  
 E-mail: bernd.guettler@ptb.de

**Dr Brad Hall, NOAA**  
 Tel: + 1 301 497 7011  
 Fax: + 1 303 497 6290  
 E-mail: bradley.hall@noaa.gov

**Dr Qiao Han, NIM**  
 Tel: + 86 10 6452 5303  
 Fax: + 86 10 6422 9379  
 E-mail: hanqiao@nim.ac.cn

**Dr Prabha Johri, NPLIA**  
 Tel: + 91 11 4560 8365  
 Fax: + 91 11 4560 9310  
 E-mail: pjohri@nplindia.org

**Dr Kenji Kato, NMJ/AIST**  
 Tel: + 81 298 61 4841  
 Fax: + 81 298 61 6857  
 E-mail: k.kato@aist.go.jp

**Dr Elias Kakoulides, EIM**

Tel: + 30 210 6479 136

Fax: + 30 210 6479 114

E-mail: i.kakoulidis@gcsl.gr;  
metrology@gcsl.gr**Prof. Dr Leonid Konopelko, VNIIM**

Tel: + 7 812 251 76 01

Fax: + 7 812 113 01 11 or 812 315 09 81

E-mail: l.konopelko@vniim.ru  
lkonop@mail.rcom.ru**Dr Yury Kustikov, VNIIM**

Tel: + 7 812 315 11 45

Fax: + 7 812 327 97 76

E-mail: lkonop@b10.vniim.ru

**Dr Eugenia Lampi, EIM**

Tel: + 30 210 6479 136

Fax: + 30 210 6479 114

E-mail: elampi@chem.uea.gr e.lampi@gcsl.gr

**Mr Ovsiy Levbang, Ukrmetrteststandard**

Tel: + 380 44 526 5298

Fax: + 380 44 526 3469

E-mail: molar@ukrcsm.kiev.ua

**Dr Tatiana Macé, LNE**

Tel: + 33 1 40 43 38 53

Fax: + 33 1 40 43 37 37

E-mail: tatiana.mace@lne.fr

**Dr Michael Maiwald, BAM**

Tel: + 49 30 8104 1140

Fax: + 49 30 8104 1144

E-mail: michael.maiwald@bam.de

**Dr Martin J.T. Milton, NPL**

Tel: + 44 208 943 6826

Fax: + 44 208 943 6755

E-mail: martin.milton@npl.co.uk

**Dr Yoshito Mitani, CENAM**

Tel: + 52 442 211 0560

Fax: + 52 442 211 0569

E-mail: ymitani@cenam.mx

**Dr Bernhard Niederhauser, METAS**

Tel: + 41 31 32 33 262

Fax: + 41 31 32 33 210

E-mail: bernhard.niederhauser@metas.ch

**Ms Tomoe Nishino, CERI**

Tel: + 03 5804 6131

Fax: + 03 5804 6139

E-mail: nishino-tomoe@ceri.jp

**Dr Krairerk Obromsook, NIMT**

Tel: + 662 577 5100 ext. 2342

Fax: + 662 577 5100 ext. 2342

E-mail: krairerk@nimt.or.th

**Dr Grzegorz Ochman, GUM**

Tel: + 48 22 581 94 39

Fax: + 48 22 581 93 95

E-mail: gas@gum.gov.pl

**Dr Sang-Hyub Oh, KRISS**

Tel: + 82 42 868 5341

Fax: + 82 42 868 5344

E-mail: shoh@kriss.re.kr

**Dr Villam Patoprsty, SMU**  
Tel: + 421 2 602 94 285  
Fax: + 421 2 602 94 561  
E-mail: patoprsty@smu.gov.sk

**Dr Jean-Philippe Putaud, IRMM**  
Tel: + 39 033 2785 041  
Fax: + 39 0332 785837  
E-mail: jean.putaud@jrc.ec.europa.eu

**Ms Agata Rakowska, A\*STAR**  
Tel: + 65 6279 1991  
Fax: + 65 6279 1992  
E-mail: agata\_rakowska@nmc.a-star.edu.sg

**Dr George Rhoderick, NIST**  
Tel: + 1 301 975 3937  
Fax: + 1 301 977 8392  
E-mail: george.rhoderick@nist.gov

**Dr Andrés Rojo Esteban, CEM**  
Tel: + 34 9180 74 751  
Fax: + 34 91 807 48 07  
E-mail: arojo@cem.mityc.es

**Dr Mykhailo Rozhnov, Ukrmetrteststandard**  
Tel: + 380 44 526 5298  
Fax: + 380 44 526 3469  
E-mail: rozhnov@ukrcsm.kiev.ua

**Dr Laly Samuel, MSL**  
Tel: + 64 3 358 6837  
Fax: + 64 3 358 9506  
E-mail: l.samuel@irl.cri.nz

**Dr Maria Paola Sassi, I.N.R.I.M**  
Tel: + 39 011 3919965  
Fax: + 39 011 3919959  
E-mail: m.sassi@inrim.it

**Dr Micela Segà, I.N.R.I.M**  
Tel: + 39 011 39 19948  
Fax: + 39 011 3977 437  
E-mail: m.sega@inrim.it

**Ms Ratirat Sinweeruthai, NIMT**  
Tel: + 662 577 5100 ext 4126  
Fax: + 662 577 5096  
E-mail: ratirat@nimt.or.th

**Dr Damian Smeulders, NMIA**  
Tel: + 61 2 8467 3534  
Fax: + 61 2 8467 3752  
E-mail :  
damian.smeulders@measurement.gov.au

**Dr Christophe Sutour, LNE**  
Tel: + 33 1 40 43 37 49  
Fax: + 33 1 40 43 37 37  
E-mail: christophe.sutour@lne.fr

**Dr Tanil Tarhan, UME**  
Tel: + 90 262 679 5000  
Fax: + 90 262 679 5001  
E-mail: tanil.tarhan@ume.tubitak.gov.tr

**Dr Oksana Tarasova**, WMO  
Tel: + 41 22 730 8169  
Fax: + 41 22 730 8049  
E-mail: OTarasova@wmo.int

**Dr Andrew Tromans**, MSL  
Tel: + 64 03 358 1012  
Fax: + 64 03 358 9506  
E-mail: a.tromans@irl.cri.nz

**Dr James Tshilongo**, NMISA  
Tel: +27 12 841 2267  
Fax: + 27 12 841 2131  
E-mail: jtshilongo@nmisa.org

**Dr Dirk Tuma**, BAM  
Tel: + 49 30 8104 4113  
Fax: + 49 30 8104 3207  
E-mail: dirk.tuma@bam.de

**Dr Shinji Uehara**, CERI  
Tel: + 81 480 37 2601  
Fax: + 81 480 37 2521  
E-mail: uehara-shinji@ceri.jp

**Mr Moroslava Valkova**, SMU  
Tel: + 421 2 602 94 211  
Fax: + 421 2 602 94 561  
E-mail: valkova@smu.gov.sk

**Dr Adriaan van der Veen**, VSL  
Tel: + 31 15 2 691 733  
Fax: + 31 15 2 612 971  
E-mail: avdveen@vsl.nl

**Mrs Janneke van Wijk**, VSL  
Tel: + 31 15 2691 679  
Fax: + 31 15 261 2971  
E-mail: jvanwijk@vsl.nl

**Dr Joëlle Viallon**, BIPM  
Tel: +33 1 45 07 62 70  
Fax: +33 1 45 34 20 21  
E-mail: jviallon@bipm.org

**Dr Jari Walden**, FGI  
Tel: + 358 50 591 4615  
Fax: + 358 9 1929 5403  
E-mail: jari.walden@fmi.fi

**Dr Robert Wielgosz**, BIPM  
Tel: +33 1 45 07 62 51  
Fax: +33 1 45 34 20 21  
E-mail: rwielgosz@bipm.org

**Dr Klaus Wirtz**, UBA  
Tel: +49 6103 704 134  
Fax: + 49 6103 704 147  
E-mail: klaus.wirtz@uba.de

**Dr Osman Zakaria**, SIRIM  
Tel: + 603 8778 1668  
Fax: + 603 8778 1661  
E-mail: osman\_zakaria@sirim.my

**Dr Zhou Zeyi**, NIM  
Tel: + 86 10 8425 3206  
Fax: + 86 10 8425 2306  
E-mail: Zhouzy@nim.ac.cn

## CCQM Working Group on Electrochemical Analysis

### Chair:

**Dr Michal Máriássy**, SMU  
Tel: + 421 2 6029 4522  
Fax: + 421 2 6542 9592  
E-mail: mariassy@smu.gov.sk  
michal.mariassy@smu.gov.sk

### Working Group Contact Persons:

**Mr Steve Acco**, INDECOP  
Tel: + 511 224 7800 1331  
Fax: + 511 224 7800 1264  
E-mail: sacco@indecopi.gob.pe

**Dr Mariana Arce Osuna**, CENAM  
Tel: + 52 442 211 0562  
Fax: + 52 442 511 0528  
E-mail: marce@cenam.mx

**Dr Paulo Borges**, INMETRO  
Tel: + 55 21 2679 9134  
Fax: + 55 21 2679 9069  
E-mail: ppborges@inmetro.gov.br

**Dr Paul Brewer**, NPL  
Tel: + 44 208 943 6007  
Fax: + 44 208 943 6458  
E-mail: paul.brewer@npl.co.uk

**Dr Richard J.C. Brown**, NPL  
Tel: + 44 208 943 6409  
Fax: + 44 208 614 0423  
E-mail: richard.brown@npl.co.uk

**Mrs Rachel Champion**, LNE  
Tel: + 33 1 40 43 38 77  
Fax: + 33 1 40 43 37 37  
E-mail: rachel.champion@lne.fr

**Dr Lyudmila Dimitrova**, BIM  
Tel: + 359 2 9702 720  
Fax: + 359 2 9702 735  
E-mail: l.dimitrova@bim.government.bg

**Dr Francesca Durbiano**, I.N.R.I.M  
Tel: + 39 011 3919 316  
Fax: + 39 011 346 384  
E-mail: f.durbiano@inrim.it

**Dr Enzo Ferrara**, I.N.R.I.M  
Tel: + 39 011 391 9837  
Fax: + 39 011 391 9834  
E-mail: ferrara@inrim.it

**Dr Paola Fisicaro**, LNE  
Tel: + 33 1 40 43 37 59  
Fax: + 33 1 40 43 37 37  
E-mail: Paola.Fisicaro@lne.fr

**Mr Dmitriy Frolov**, VNIIFTRI  
Tel: + 7 495 744 8177  
Fax: + 7 495 744 8177  
E-mail: mera@vniiftri.ru

**Dr Fabiano Gonzaga**, INMETRO  
Tel: + 55 21 2679 9134  
Fax: + 55 21 2679 9069  
E-mail: fbgonzaga@inmetro.gov.br

**Mr Volodymyr Gravylkin**

Tel: + 380 44 526 5569  
 Fax: + 380 44 526 5569  
 E-mail: vgarilkin@ukrcsm.kiev.ua

**Dr Bernd Gütter, PTB**

Tel: + 49 531 592 3100  
 Fax: + 49 531 592 3015  
 E-mail: bernd.guettler@ptb.de

**Dr Akiharu Hioki, NMIJ/AIST**

Tel: + 81 29 861 9341  
 Fax: + 81 29 861 6890  
 E-mail: aki-hioki@aist.go.jp

**Dr Pia Tønnes Jakobsen, DFM**

Tel: + 45 4525 5887 (direct)/ + 45 4593 1144  
 Fax: + 45 4593 1137  
 E-mail: ptj@dfm.dtu.dk

**Dr Hans D. Jensen, DFM**

Tel: + 45 4525 5874  
 Fax: + 45 4593 1137  
 E-mail: hdj@dfm.dtu.dk

**Dr Elias Kakoulides, EIM**

Tel: + 30 210 6479 136  
 Fax: + 30 210 6479 114  
 E-mail: i.kakoulidis@gesl.gr;  
 metrology@gcsl.gr

**Dr Elena Kardash, INPL**

Tel: + 972 2 6303 507  
 972 2 5661856  
 + 972 2 5661856  
 Fax: + 972 2 630 3516  
 E-mail: elena.kardash@moital.gov.il

**Prof. Dr Leonid Konopelko, VNIIM**

Tel: + 7 812 251 76 01  
 Fax: + 7 812 113 01 11 or 812 315 09 81  
 E-mail: l.konopelko@vniim.ru  
 lkonop@mail.rcom.ru

**Dr Wladyslaw Kozlowski, GUM**

Tel: + 48 22 581 91 52  
 Fax: + 48 22 581 93 95  
 E-mail: chemistry\_wk@gum.gov.pl

**Dr Yury Kustikov, VNIIM**

Tel: + 7 812 315 11 45  
 Fax: + 7 812 327 97 76  
 E-mail: lkonop@b10.vniim.ru

**Dr Viatcheslav Kutovoy, VNIIFTRI**

Tel: + 7 495 535 0862  
 Fax: + 7 495 744 8177  
 E-mail: kutovoy@vniiftri.ru ; mera@vniiftri.ru

**Dr Eugenia Lampi, EIM**

Tel: + 30 210 6479 136  
 Fax: + 30 210 6479 114  
 E-mail: elampi@chem.uoa.gr e.lampi@gcsl.gr

**Dr Tong Kooi Lee, HSA**

Tel: + 65 6775 1651  
 Fax: + 65 6775 1398  
 E-mail: Lee\_Tong\_Kooi@hsa.gov.sg

**Dr Liandi Ma, NIM**

Tel: + 86 10 6422 3987  
 Fax: + 86 10 6422 3987  
 E-mail: mald@nim.ac.cn ; inorg@nim.ac.cn

**Dr Yoshito Mitani, CENAM**

Tel: + 52 442 211 0560  
 Fax: + 52 442 211 0569  
 E-mail: ymitani@cenam.mx

**Dr Sergiy Nagibin, Ukrmetrteststandard**

Tel: + 380 44 522 6655  
 Fax: + 380 44 526 5569  
 E-mail: snagibin@ukrcsm.kiev.ua

**Dr Krairerk Obromsook, NIMT**

Tel: + 662 577 5100 ext. 2342  
 Fax: + 662 577 5100 ext. 2342  
 E-mail: krairerk@nimt.or.th

**Dr Kenneth Pratt, NIST**

Tel: + 1 301 975 4131  
 Fax: + 1 301 869 0413  
 E-mail: kenneth.pratt@nist.gov

**Dr Laly Samuel, MSL**

Tel: + 64 3 358 6837  
Fax: + 64 3 358 9506  
E-mail: l.samuel@irl.cri.nz

**Ing. Alena Sobina, UNIIM**

Tel: + 7 343 369 1258  
Fax: + 7 912 280 9807  
E-mail: avs@uniim.ru

**Dr Petra Spitzer, PTB**

Tel: + 49 531 592 3130  
Fax: + 49 531 592 3015  
E-mail: petra.spitzer@ptb.de

**Dr Zsófia Nagyné Szilágyi, MKEH**

Tel: + 36 1 4585 838  
Fax: + 36 1 4585 937  
E-mail: nagynesz@mkeh.hu

**Ms Nongluck Tangpaisarnkul, NIMT**

Tel: + 66 2 577 5100 ext 2214  
Fax: + 662 577 5094  
E-mail: nongluck@nimt.or.th

**Dr Gennady Terentiev, UNIIM**

Tel: + 7 343 355 49 22  
Fax: + 7 343 355 355 4922  
E-mail: terentiev@uniim.ru

**Ms Galia Ticona, INDECOP**

Tel: + 511 224 7800 1331  
Fax: + 511 224 7800 1264  
E-mail: gticona@indecopi.gob.pe

**Dr Adriano Troia, I.N.R.I.M**

Tel: + 39 011 3919 625  
Fax: + 39 011 346 384  
E-mail: a.troia@inrim.it

**Dr Andrew Tromans, MSL**

Tel: + 64 03 358 1012  
Fax: + 64 03 358 9506  
E-mail: a.tromans@irl.cri.nz

**Dr Gregory Turk, NIST**

Tel: + 1 301 975 4118  
Fax: + 1 301 869 0413  
E-mail: turk@nist.gov

**Mr Christian Uribe, INDECOP**

Tel: + 511 224 7800 1331  
Fax: + 511 224 7800 1264  
E-mail: curibe@indecopi.gob.pe

**Mr Leoš Vyskočil, SMU**

Tel: + 421 2 602 94 225  
Fax: + 421 2 602 94 561  
E-mail: vyskocil@smu.gov.sk

**Dr Robert Wielgosz, BIPM**

Tel: +33 01 45 07 62 51  
Fax: +33 01 45 34 20 21  
E-mail: r.wielgosz@bipm.org

## CCQM Working Group on Inorganic Analysis

### Chair:

**Dr Mike Sargent, LGC Ltd**

Tel: + 44 208 943 7360

Fax: + 44 208 943 2767

E-mail: ms@lgc.co.uk

### Working Group Contact Persons:

**Mr Steve Acco, INDECOPI**

Tel: + 511 224 7800 1331

Fax: + 511 224 7800 1264

E-mail: sacco@indecopi.gob.pe

**Dr Mariana Arce Osuna, CENAM**

Tel: + 52 442 211 0562

Fax: + 52 442 511 0528

E-mail: marce@cenam.mx

**Dr John Bennett, ANSTO**

Tel: + 61 2 9717 3743

Fax: + 61 2 9717 9669

E-mail: john.bennett@ansto.gov.au

**Dr Luigi Bergamaschi, I.N.R.I.M**

Tel: + 39 0382 526 252

Fax: + 39 0382 423 578

E-mail: l.bergamaschi@inrim.it

**Dr Angelique Botha, NMISA**

Tel: + 27 12 841 3800

Fax: + 27 12 841 2131

E-mail: abotha@nmisa.org

**Dr Richard J.C. Brown, NPL**

Tel: + 44 208 943 6409

Fax: + 44 208 614 0423

E-mail: richard.brown@npl.co.uk

**Mr Rodrigo Caciano de Sena,  
INMETRO**

Tel: + 55 21 2679 9069

Fax: + 55 21 2679 9069

E-mail: rcsena@inmetro.gov.br

**Dr Süleyman Z. Can, UME**

Tel: + 90 262 679 5000 ext 6207

Fax: + 90 262 679 5001

E-mail:

suleyman.can@ume.tubitak.gov.tr

**Dr Oktay Cankur, UME**

Tel: + 90 262 679 5000 Ext. 6200)

Fax: + 90 262 679 5001

E-mail:

oktay.cankur@ume.tubitak.gov.tr

**Dr Grainne Carroll, SL**

Tel: + 353 1 505 7017

Fax: + 353 1 505 7070

E-mail: gcarroll@statelab.ie

**Dr Paola Fisicaro, LNE**

Tel: + 33 1 40 43 37 59

Fax: + 33 1 40 43 37 37

E-mail: Paola.Fisicaro@lne.fr

**Dr Heidi Goenaga Infante, LGC Ltd**

Tel: + 44 208 943 7555

Fax: + 44 208 943 2767

E-mail:

Heidi.Goenaga-Infante@lgcgroup.com

**Dr Carlos Gomez, CMC**

Tel: + 56 2 242 8181

Fax: + 56 2 242 8182

E-mail: c.gomez@fundacionchile.cl

**Dr Petra Gowik, BVL**  
 Tel: + 49 1888 412 2302  
 Fax: + 49 1888 412 2300  
 E-mail: petra.gowik@bvl.bund.de

**Dr Bernd Gütter, PTB**  
 Tel: + 49 531 592 3100  
 Fax: + 49 531 592 3015  
 E-mail: bernd.guettler@ptb.de

**Mrs Zuzana Hanková, SMU**  
 Tel: + 421 260 294 491  
 Fax: + 421 265 429 592  
 E-mail: hankova@smu.gov.sk

**Dr Akiharu Hioki, NMIJ/AIST**  
 Tel: + 81 29 861 9341  
 Fax: + 81 29 861 6890  
 E-mail: aki-hioki@aist.go.jp

**Dr Elias Kakoulides, EIM**  
 Tel: + 30 210 6479 136  
 Fax: + 30 210 6479 114  
 E-mail: i.kakoulidis@gcsl.gr;  
 metrology@gcsl.gr

**Ms Jacqueline Kang'iri, KEBS**  
 Tel: + 254 6948 475  
 Fax: + 254 20 600 4031  
 E-mail: kangiri@kebs.org

**Dr Timo Kapp, BVL**  
 Tel: + 49 30 8412 2309 (2304)  
 Fax: + 49 30 8412 2300  
 E-mail: timo.kapp@bvl.bund.de

**Mr Joël M. Kioko, KEBS**  
 Tel: + 254 020 6948 244  
 + 254 02 605 550  
 + 254 0252 3310  
 605642,605673,603476,603482  
 020 6948000/605490  
 Fax: + 254 020 604031 or 609660  
 E-mail: joelkioko@hotmail.com  
 jkioko@kebs.org

**Mr Heinrich Kipphardt, BAM**  
 Tel: + 49 30 8104 1116  
 Fax: + 49 30 8104 1117  
 E-mail: heinrich.kipphardt@bam.de

**Prof. Dr Leonid Konopelko, VNIIM**  
 Tel: + 7 812 251 76 01  
 Fax: + 7 812 113 01 11 or 812 315 09 81  
 E-mail: l.konopelko@vniim.ru ;  
 lkonop@mail.rcom.ru;  
 lkonop@b10.vniim.ru

**Dr Wladyslaw Kozlowski, GUM**  
 Tel: + 48 22 581 91 52  
 Fax: + 48 22 581 93 95  
 E-mail: chemistry\_wk@gum.gov.pl

**Dr Yury Kustikov, VNIIM**  
 Tel: + 7 812 315 11 45  
 Fax: + 7 812 327 97 76  
 E-mail: lkonop@b10.vniim.ru

**Dr Guillaume Labarraque, LNE**  
 Tel : + 33 1 40 43 37 12  
 Fax: + 33 1 40 43 37 37  
 E-mail : guillaume.labarraque@lne.fr

**Dr Eugenia Lampi, EIM**  
 Tel: + 30 210 6479 136  
 Fax: + 30 210 6479 114  
 E-mail: elampi@chem.uea.gr e.lampi@gcsl.gr

**Ms Maré Linsky, NMISA**  
 Tel: + 27 12 841 3974  
 Fax : + 27 12 841 2131  
 E-mail: mlinsky@nmisa.org

**Dr Stephen Long, NIST**  
 Tel: + 1 301 975 4101  
 Fax: + 1 301 869 0413  
 E-mail: stephen.long@nist.gov

**Dr Bertil Magnusson, SP**  
 Tel: + 46 703 16 52 75  
 Fax: + 46 33 12 37 49  
 E-mail: bertil.magnusson@sp.se

**Dr Michal Máriássy, SMU**  
 Tel: + 421 2 6029 4522  
 Fax: + 421 2 6542 9592  
 E-mail: michal.mariassy@smu.gov.sk

**Ms Janaína Marques Rodrigues Caixeiro,**  
INMETRO  
Tel : + 55 21 2679 9069  
Fax : + 55 21 2679 9069  
E-mail : jmrodrigues@inmetro.gov.br

**Dr Gabriela Massiff,** CMQ  
Tel: + 56 2 242 8180  
Fax: + 56 2 242 8182  
E-mail : gmassiff@fundacionchile.cl

**Dr Yoshito Mitani,** CENAM  
Tel: + 52 442 211 0560  
Fax: + 52 442 211 0569  
E-mail: ymitani@cenam.mx

**Dr Tsutomu Miura,** NMIJ/AIST  
Tel : +81 29 861 6840  
Fax : + 81 298 61 6890  
E-mail : t.miura@aist.go.jp

**Dr John Murby,** NMIA  
Tel: + 61 2 9449 0193  
Fax: + 61 2 9449 1653  
E-mail: john.murby@measurement.gov.au;  
Edwin.Murby@measurement.gov.au;  
Edwin.Murby@measurement.gov.au

**Dr Krairerk Obromsook,** NIMT  
Tel: + 662 577 5100 ext. 2342  
Fax: + 662 577 5100 ext. 2342  
E-mail: krairerk@nimt.or.th

**Mr Tom Okumu,** KEBS  
Tel: + 254 20 6948 301  
Fax: +254 0260 4031  
E-mail: oduort@kebs.org

**Dr Christophe Quétel,** IRMM  
Tel: + 32 14 571 658  
Fax: + 32 14 571 548  
E-mail: christophe.quetel@ec.europa.eu

**Dr Laly Samuel,** MSL  
Tel: + 64 3 358 6837  
Fax: + 64 3 358 9506  
E-mail: l.samuel@irl.cri.nz

**Dr Gennady Terentiev,** UNIIM  
Tel: + 7 343 355 49 22  
Fax: + 7 343 355 355 4922  
E-mail: terentiev@uniim.ru

**Dr Nilgün Tokman,** UME  
Tel: + 90 262 679 5000  
Fax: + 90 262 679 5001  
E-mail: nilgun.tokman@ume.tubitak.gov.tr

**Dr Andrew Tromans,** MSL  
Tel: + 64 03 358 1012  
Fax: + 64 03 358 9506  
E-mail: a.tromans@irl.cri.nz

**Dr Gregory Turk,** NIST  
Tel: + 1 301 975 4118  
Fax: + 1 301 869 0413  
E-mail: turk@nist.gov

**Mr David Saxby,** NMIA  
Tel: + 61 2 9449 0105  
Fax: + 61 2 9449 1653  
E-mail: david.saxby@measurement.gov.au

**Dr Detlef Schiel,** PTB  
Tel: + 49 531 592 3110  
Fax: + 49 531 592 3015  
E-mail: detlef.schiel@ptb.de

**Dr Richard Shin,** HSA  
Tel: + 65 6775 1605  
Fax: + 65 6775 1398  
E-mail: Richard\_Shin@hsa.gov.sg

**Dr Emarah Uysal,** UME  
Tel: + 90 262 679 5000 ext 6512  
Fax: + 90 262 679 5001  
E-mail: emrah.uysal@ume.tubitak.gov.tr

**Dr Della Wai Mei Sin,** GLHK  
Tel: + 852 2762 3706  
Fax: + 852 2714 4083  
E-mail: wmsin@govtlab.gov.hk

**Dr James Snell,** IRMM  
Tel: + 32 14 571 968  
Fax: + 32 14 571 548  
E-mail: james.snell@ec.europa.eu

**Ing. Alena Sobina, UNIIM**  
Tel: + 7 343 369 1258  
Fax: + 7 912 280 9807  
E-mail: avs@uniim.ru

**Dr Ralph Sturgeon, NRC-INMS**  
Tel: + 1 613 993 6395  
Fax: + 1 613 993 2451  
E-mail: ralph.sturgeon@nrc-cnrc.gc.ca

**Mr Christian Uribe, INDECOP**  
Tel: + 511 224 7800 1331  
Fax: + 511 224 7800 1264  
E-mail: curibe@indecopi.gob.pe

**Ms Judith Velina-Lara, CENAM**  
Tel: + 52 442 211 0564  
Fax: + 52 442 2153 903  
E-mail: vlara@cenam.mx

**Dr Jochen Vogl, BAM**  
Tel: + 49 30 8104 1144  
Fax: + 49 30 8104 3527  
E-mail: jochen.vogl@bam.de

**Dr Jun Wang, NIM**  
Tel: + 86 10 6429 4060  
Fax: + 86 10 6427 1639  
E-mail: wangjun@nim.ac.cn

**Dr Robert Wielgosz, BIPM**  
Tel: +33 01 45 07 62 51  
Fax: +33 01 45 34 20 21  
E-mail: rwielgosz@bipm.org

**Dr S.K. Wong, GLKH**  
Tel: + 852 2762 3859  
Fax: + 852 2714 4083  
E-mail: skwong@govtlab.gov.hk

**Dr Cahrun Yafa, NIMT**  
Tel: + 662 577 5100 Ext. 2346  
Fax: + 662 577 5096  
E-mail: charun\_yafa@yahoo.com;  
charun@nimt.or.th

**Dr Agnieszka Zoń, GUM**  
Tel: + 48 22 581 94 05  
Fax: + 48 22 581 93 95  
E-mail: a.zon@gum.gov.pl

## CCQM Working Group on Organic Analysis

### Chair:

**Dr Willie E. May, NIST**

Tel: + 1 301 975 3108  
Fax: + 1 301 926 8671  
E-mail: willie.may@nist.gov

**Working Group Contact Persons :****Mr Steve Acco, INDECOP**

Tel: + 511 224 7800 1331  
Fax: + 511 224 7800 1264  
E-mail: sacco@indecopi.gob.pe

**Dr Seonghee Ahn, KRISS**

Tel: + 82 42 868 5652  
Fax: + 82 42 868 5800  
E-mail: sahn@kriss.re.kr

**Dr Mariana Arce Osuna, CENAM**

Tel: + 52 442 211 0562  
Fax: + 52 442 511 0528  
E-mail: marce@cenam.mx

**Mrs Annarita Baldan, VSL**

Tel: + 31 15 269 1728  
Fax: + 31 15 261 2971  
E-mail: abaldan@vsl.nl

**Dr Mine Bilsel, UME**

Tel: + 90 262 679 50 00/6100  
Fax: + 90 262 679 50 01  
E-mail: mine.bilsel@ume.tubitak.gov.tr

**Ms Meg Croft, NMIA**

Tel: + 61 2 9449 0192  
Fax: + 61 2 9449 1653  
E-mail: meg.croft@measurement.gov.au

**Ms Betty-Jayne de Vos, NMISA**

Tel: + 27 12 841 4078  
Fax: + 27 12 841 2131  
E-mail: bjdevos@nmisa.org

**Dr Malka Epstein, INPL**

Tel: + 972 2 630 3506  
Fax: + 972 2 630 3516  
E-mail: malka.epstein@moital.gov.il

**Dr Maria Fernandes-Whaley, NMISA**

Tel: + 27 12 841 2105  
Fax: + 27 86 509 5996  
E-mail: MFWhaley@nmisa.org

**Mrs Patricia Gatti, INTI**

Tel: + 54 11 4724 6317  
Fax: + 54 11 4754 4068  
E-mail: pagatti@inti.gob.ar

**Dr Carlos Gomez, CMC**

Tel: + 56 2 242 8181  
Fax: + 56 2 242 8182  
E-mail: c.gomez@fundacionchile.cl

**Dr Ahmet Ceyhan Gören**, UME  
 Tel: + 90 262 679 5000 ext. 6102  
 Fax: + 90 262 679 5001  
 E-mail:  
[ahmetceyhan.goren@ume.tubitak.gov.tr](mailto:ahmetceyhan.goren@ume.tubitak.gov.tr)

**Dr Petra Gowik**, BVL  
 Tel: + 49 1888 412 2302  
 Fax: + 49 1888 412 2300  
 E-mail: [petra.gowik@bvl.bund.de](mailto:petra.gowik@bvl.bund.de)

**Dr Bernd Güttler**, PTB  
 Tel: + 49 531 592 3100  
 Fax: + 49 531 592 3015  
 E-mail: [bernd.guettler@ptb.de](mailto:bernd.guettler@ptb.de)

**Dr André Henrion**, PTB  
 Tel: + 49 531 592 3100/3120  
 Fax: + 49 531 592 3015  
 E-mail: [andre.henrion@ptb.de](mailto:andre.henrion@ptb.de)

**Dr Ralf Josephs**, BIPM  
 Tel: +33 1 45 07 70 55  
 Fax: +33 1 45 34 20 21  
 E-mail: [ralf.josephs@bipm.org](mailto:ralf.josephs@bipm.org)

**Dr Elias Kakoulides**, EIM  
 Tel: + 30 210 6479 136  
 Fax: + 30 210 6479 114  
 E-mail: [i.kakoulidis@gcsl.gr](mailto:i.kakoulidis@gcsl.gr);  
[metrology@gcsl.gr](mailto:metrology@gcsl.gr)

**Dr Nikolai I. Khanov**, VNIIM  
 Tel: + 7 812 251 7601/327 58 35  
 Fax: + 7 812 113 0114  
 E-mail: [vsa@vniim.ru](mailto:vsa@vniim.ru)

**Dr Byung Joo Kim**, KRISS  
 Tel: + 82 42 868 5367  
 Fax: + 82 42 868 5800  
 E-mail: [byungjoo@kribs.re.kr](mailto:byungjoo@kribs.re.kr)

**Dr Matthias Koche**, BAM  
 Tel: + 49 30 8104 1123  
 Fax: + 49 30 8104 1127  
 E-mail: [matthias.koch@bam.de](mailto:matthias.koch@bam.de)

**Prof. Dr Leonid Konopelko**, VNIIM  
 Tel: + 7 812 251 76 01  
 Fax: + 7 812 113 01 11 or 812 315 09 81  
 E-mail: [l.konopelko@vniim.ru](mailto:l.konopelko@vniim.ru)  
[lkonop@mail.rcom.ru](mailto:lkonop@mail.rcom.ru);  
[lkonop@b10.vniim.ru](mailto:lkonop@b10.vniim.ru)

**Dr Ilya Kuselman**, INPL  
 Tel: + 972 2 566 1856  
 Fax: + 972 2 652 0797  
 E-mail: [ilya.kuselman@moital.gov.il](mailto:ilya.kuselman@moital.gov.il)

**Dr Yury Kustikov**, VNIIM  
 Tel: + 7 812 315 11 45  
 Fax: + 7 812 327 97 76  
 E-mail: [lkonop@b10.vniim.ru](mailto:lkonop@b10.vniim.ru)  
[a.zon@gum.gov.pl](mailto:a.zon@gum.gov.pl)

**Dr Eugenia Lampi**, EIM  
 Tel: + 30 210 6479 136  
 Fax: + 30 210 6479 114  
 E-mail: [elampi@chem.uoa.gr](mailto:elampi@chem.uoa.gr) [e.lampi@gcsl.gr](mailto:e.lampi@gcsl.gr)

**Dr Tong Kooi Lee**, HSA  
 Tel: + 65 6775 1651  
 Fax: + 65 6775 1398  
 E-mail: [Lee\\_Tong\\_Kooi@hsa.gov.sg](mailto:Lee_Tong_Kooi@hsa.gov.sg)

**Dr Yoshito Mitani**, CENAM  
 Tel: + 52 442 211 0560  
 Fax: + 52 442 211 0569  
 E-mail: [ymitani@cenam.mx](mailto:ymitani@cenam.mx)

**Dr Gabriela Massiff**, CMQ  
 Tel: + 56 2 242 8180  
 Fax: + 56 2 242 8182  
 E-mail : [gmassiff@fundacionchile.cl](mailto:gmassiff@fundacionchile.cl)

**Dr John Murby**, NMIA  
 Tel: + 61 2 9449 0193  
 Fax: + 61 2 9449 1653  
 E-mail: [john.murby@measurement.gov.au](mailto:john.murby@measurement.gov.au);  
[Edwin.Murby@measurement.gov.au](mailto:Edwin.Murby@measurement.gov.au);  
[Edwin.Murby@measurement.gov.au](mailto:Edwin.Murby@measurement.gov.au)

**Dr Chris Mussell**, LGC  
 Tel : + 44 208 943 7357  
 Fax : + 44 208 943 2767

**Dr Masahiko Numata**, NMJJ/AIST  
 Tel: + 81 29 861 2254  
 Fax: + 81 29 861 6866  
 E-mail: mas-numata@aist.go.jp

**Dr Evaldas Naujalis**, VMT  
 Tel: + 370 5 213 0219  
 Fax: + 370 5 216 3469  
 E-mail: naujalis@pfi.lt

**Dr Gavin O'Connor**, LGC Ltd  
 Tel: + 44 208 943 7318  
 Fax: + 44 208 943 2767  
 E-mail: gavin.o'connor@lgc.co.uk;  
 goc@lgc.co.uk

**Dr Krairerk Obromsook**, NIMT  
 Tel: + 662 577 5100 ext. 2342  
 Fax: + 662 577 5100 ext. 2342  
 E-mail: krairerk@nimt.or.th

**Ms Reenie Parris**, NIST-MML  
 Tel: + 1 301 975 3103  
 Fax: + 1 301 975 3845  
 E-mail: reenie.parris@nist.gov

**Dr Rosemarie Philipp**, BAM  
 Tel: + 49 30 8104 5893  
 Fax: + 49 30 8104 5990  
 E-mail: rosemarie.philipp@bam.de

**Msc Eliane Cristina Pires do Rego**,  
 INMETRO  
 Tel: + 55 21 2679 9069  
 Fax: + 55 21 2679 9069  
 E-mail: ecrego@inmetro.gov.br

**Dr Joachim Polzer**, BVL  
 Tel: + 49 30 8412 2353 (2302)  
 Fax: + 49 30 8412 2300  
 E-mail: joachim.polzer@bvl.bund.de

**Dr Preeyaporn Pookrod**, NIMT  
 Tel: + 66 2 577 5100 ext 2347  
 Fax: + 66 2 577 5096  
 E-mail: ppoookrod@yahoo.com ;  
 preeyaporn@nimt.or.th

**Dr Kenneth Pratt**, NIST  
 Tel: + 1 301 975 4131  
 Fax: + 1 301 869 0413  
 E-mail: kenneth.pratt@nist.gov

**Dr Marina Ricci**, IRMM  
 Tel: + 32 14 571 962  
 Fax: + 32 14 571 548  
 E-mail: marina.ricci@ec.europa.eu

**Dr Adriana Rosso**, INTI  
 Tel: + 54 11 4724 6359  
 Fax: + 54 11 4724 6368/4066  
 E-mail: adrosso@inti.gob.ar

**Dr Laly Samuel**, MSL  
 Tel: + 64 3 358 6837  
 Fax: + 64 3 358 9506  
 E-mail: l.samuel@irl.cri.nz

**Dr Kazuhiro Shikakume**, CERI  
 Tel: + 81 480 37 2601  
 Fax: + 81 480 37 2521  
 E-mail: shikakume-kazuhiro@ceri.jp

**Dr Micela Sega**, I.N.R.I.M  
 Tel: + 39 011 39 19948  
 Fax: + 39 011 3977 437  
 E-mail: m.sega@inrim.it

**Dr Della Wai Mei Sin**, GLHK  
Tel: + 852 2762 3706  
Fax: + 852 2714 4083  
E-mail : wmsin@govtlab.gov.hk

**Dr Akiko Takatsu**, NMIJ/AIST  
Tel: + 81 29 861 6394  
Fax: + 81 29 861 4137  
E-mail: akiko-takatsu@aist.go.jp

**Dr Tang Lin Teo**, HAS  
Tel: + 65 6775 1605 ext 104  
Fax: + 65 6775 1398  
E-mail: TEO\_Tang\_Lin@hsa.gov.sg

**Dr Andrew Tromans**, MSL  
Tel: + 64 03 358 1012  
Fax: + 64 03 358 9506  
E-mail: a.tromans@irl.cri.nz

**Ms Hiroko Ueno**, CERI  
Tel: + 81 480 37 2601  
Fax: + 81 480 37 2521  
E-mail: ueno-hiroko@ceri.jp

**Mr Christian Uribe**, INDECOPI  
Tel: + 511 224 7800 1331  
Fax: + 511 224 7800 1264  
E-mail: curibe@indecopi.gob.pe

**Dr Adriaan van der Veen**, VSL  
Tel: + 31 15 2 691 733  
Fax: + 31 15 2 612 971  
E-mail: avdveen@vsl.nl

**Dr Steven Westwood**, BIPM  
Tel: +33 1 45 07 70 57  
Fax: +33 1 45 34 20 21  
E-mail: steven.westwood@bipm.org

**Dr Robert Wielgosz**, BIPM  
Tel: +33 01 45 07 62 51  
Fax: +33 01 45 34 20 21  
E-mail: rwielgosz@bipm.org

**Dr Anthony Windust**, NRC-INMS  
Tel: + 1 613 993 6339  
Fax: + 1 613 993 2451  
E-mail: anthony.windust@nrc.ca

**Dr Stephen A. Wise**, NIST MML  
Tel: + 1 301 975 3112  
Fax: + 1 301 926 8671  
E-mail: stephen.wise@nist.gov

**Msc Wagner Wollinger**, INMETRO  
Tel: + 5521 2679 9069  
Fax: + 5521 2679 9069  
E-mail: wwollinger@inmetro.gov.br

**Dr S.K. Wong**, GLKH  
Tel: + 852 2762 3859  
Fax: + 852 2714 4083  
E-mail: skwong@govtlab.gov.hk

**Mr Ruifeng Xu**, NIM  
Tel: + 86 10 6427 9562  
Fax: + 86 10 6427 1639  
E-mail: xurf@nim.ac.cn

**Dr Osman Zakaria**, NML-SIRIM  
Tel: + 603 8778 1668  
Fax: + 603 8778 1661  
E-mail: osman\_zakaria@sirim.my

## CCQM Working Group on Bioanalysis

**Chair:**

**Dr Helen Parkes, LGC**  
 Tel: + 44 208 943 7676  
 Fax: + 44 208 943 2767

**Working Group Contact Persons:**

**Dr Jale Åžahin, UME**  
 Tel: + 90 262 679 5000 ext 6106  
 Fax: + 90 262 679 5001  
 E-mail: jale.sahin@ume.tubitak.gov.tr

**Prof. Muslum Akgöz, UME**  
 Tel: + 90 262 679 5000-6105  
 Fax: + 90 262 679 5001  
 E-mail:  
 muslum.akgoz@ume.tubitak.gov.tr

**Dr Mariana Arce Osuna, CENAM**  
 Tel: + 52 442 211 0562  
 Fax: + 52 442 511 0528  
 E-mail: marce@cenam.mx

**Dr Daniel Burke, NMIA**  
 Tel: + 61 2 8467 3674  
 Fax: + 61 2 8467 3756  
 E-mail:  
 daniel.burke@measurement.gov.au

**Dr Philippe Corbisier, IRMM**  
 Tel: + 32 14 571 890  
 Fax: + 32 14 571 548  
 E-mail: philippe.corbisier@ec.europa.eu

**Dr Vincent Delatour, LNE**  
 Tel: + 33 1 40 43 40 75  
 Fax: + 33 1 30 16 28 31  
 E-mail: Vincent.delatour@lne.fr

**Dr Steve Ellison, LGC Ltd**  
 Tel: + 44 208 943 7325  
 Fax: + 44 208 943 2767

**Dr Kerry Emslie, NMIA**  
 Tel: + 61 2 8467 3700  
 Fax: + 61 2 8467 3756  
 E-mail:  
 kerry.emslie@measurement.gov.au

**Dr Maria Fernandes-Whaley, NMISA**  
 Tel: + 27 12 841 2105  
 Fax: + 27 86 509 5996  
 E-mail: MFWhaley@nmisa.org

**Dr Paola Fisicaro, LNE**  
 Tel: + 33 1 40 43 37 59  
 Fax: + 33 1 40 43 37 37  
 E-mail: Paola.Fisicaro@lne.fr

**Dr José Mauro Granjeiro, INMETRO**  
 Tel: + 5521 2679 9835  
 Fax: + 5521 2679 9837  
 E-mail:  
 jmgranjeiro@inmetro.gov.brjmgranjeiro@gmail.com

**Dr Bernd Güttler, PTB**  
 Tel: + 49 531 592 3100  
 Fax: + 49 531 592 3015  
 E-mail: bernd.guettler@ptb.de

**Ms Daniela Ierace, INTI**  
 Tel: + 54 11 4713 5311  
 Fax: + 54 11 4713 5311  
 E-mail: dierace@inti.gob.ar

**Dr Janaina Japiassu de Vasconcelos Calvacante, INMETRO**  
 Tel: + 5521 2679 9835  
 Fax: + 5521 2679 9837  
 E-mail: jcavalcante@inmetro.gov.br

**Dr Ralf Josephs**, BIPM  
 Tel: +33 1 45 07 70 55  
 Fax: +33 1 45 34 20 21  
 E-mail: ralf.josephs@bipm.org

**Dr Alex Knight**, NPL  
 Tel: + 44 20 8943 6308  
 Fax: + 44 20 8614 0567  
 E-mail: alex.knight@npl.co.uk

**Prof. Dr Leonid Konopelko**, VNIIM  
 Tel: + 7 812 251 76 01  
 Fax: + 7 812 113 01 11 or 812 315 09 81  
 E-mail: l.konopelko@vniim.ru  
 lkonop@mail.rcom.ru;  
 lkonop@b10.vniim.ru

**Dr Yury Kustikov**, VNIIM  
 Tel: + 7 812 315 11 45  
 Fax: + 7 812 327 97 76  
 E-mail: lkonop@b10.vniim.ru

**Dr Tong Kooi Lee**, HSA  
 Tel: + 65 6775 1651  
 Fax: + 65 6775 1398  
 E-mail: Lee\_Tong\_Kooi@hsa.gov.sg

**Dr Qinde Liu**, HSA  
 Tel: + 65 6775 1605 ext 102  
 Fax: + 65 6775 1398  
 E-mail: LIU\_Qinde@hsa.gov.sg

**Dr Laurie Locascio**, NIST  
 Tel: + 301 975 2629  
 Fax: + 301 330 3447  
 E-mail: laurie.locascio@nist.gov

**Dr Zoltan Mester**, NRC-INMS  
 Tel: + 613-993-5008  
 Fax: + 613-993-2451  
 E-mail: Zoltan.Mester@nrc-cnrc.gc.ca

**Mr Mojca Milavec**, NIB  
 Tel: + 386 59 232 820  
 Fax: + 386 1 257 3847  
 E-mail: mojca.milavec@nib.si

**Dr Yoshito Mitani**, CENAM  
 Tel: + 52 442 211 0560  
 Fax: + 52 442 211 0569  
 E-mail: ymitani@cenam.mx

**Dr James Noble**, NPL  
 Tel: + 44 208 943 6927  
 Fax: + 44 208 614 0567  
 E-mail: james.noble@npl.co.uk

**Dr Sang-Ryoul Park**, KRISS  
 Tel: + 82 42 868 5020  
 Fax: + 82 42 868 5801  
 E-mail: srpark@kriss.re.kr

**Dr Celia Puglisi**, INTI  
 Tel: + 54 11 4713 5311  
 Fax : + 54 11 4713 5311  
 E-mail: cpuglisi@inti.gob.ar

**Ms Desirée Prevoo-Franzsen**, NMISA  
 Tel: + 27 12 841 4576  
 Fax: + 27 12 841 2131  
 E-mail: dprevoo@nmisa.org

**Dr Ute Resch-Genger**, BAM  
 Tel: + 49 30 8104 1134  
 Fax: + 49 30 8104 1137  
 E-mail: ute.resch@bam.de

**Dr Andrea Mario Rossi**, I.N.R.I.M  
 Tel: + 39 011 3919 342  
 Fax: + 39 011 346 384  
 E-mail: a.rossi@inrim.it

**Dr Marc Salit**, NIST MML  
 Tel: + 1 301 975 3646  
 Fax: + 1 301 751 2720  
 E-mail: salit@nist.gov

**Dr Laly Samuel**, MSL  
 Tel: + 64 3 358 6837  
 Fax: + 64 3 358 9506  
 E-mail: l.samuel@irl.cri.nz

**Dr Maria Paola Sassi**, I.N.R.I.M  
 Tel: + 39 011 3919965  
 Fax: + 39 011 3919959  
 E-mail: m.sassi@inrim.it

**Dr Andrew Tromans**, MSL  
Tel: + 64 03 358 1012  
Fax: + 64 03 358 9506  
E-mail: a.tromans@irl.cri.nz

**Dr Heinz Schimmel**, IRMM  
Tel: + 32 14 571 720  
Fax: + 32 14 571 548  
E-mail: heinz.schimmel@ec.europa.eu

**Dr Rudolph Schneider**, BAM  
Tel: + 49 30 8104 1151  
Fax: + 49 30 8104 1157  
E-mail: rudolf.schneider@bam.de

**Dr Della Wai Mei Sin**, GLHK  
Tel: + 852 2762 3706  
Fax: + 852 2714 4083  
E-mail: wmsin@govtlab.gov.hk

**Dr Rainer Stosch**, PTB  
Tel: + 49 531 592 3122  
Fax: + 49 531 592 3015  
E-mail: rainer.stosch@ptb.de

**Dr Akiko Takatsu**, NMIJ/AIST  
Tel: + 81 29 861 6394  
Fax: + 81 29 861 6394  
E-mail: akiko-takatsu@aist.go.jp

**Dr Jing Wang**, NIM  
Tel: + 86 10 6427 6678  
Fax: + 86 10 6422 8404 or 6427 6678  
E-mail: wj@nim.ac.cn;  
jingwang\_0318@yahoo.com

**Dr Robert Wielgosz**, BIPM  
Tel: +33 1 45 07 62 51  
Fax: +33 1 45 34 20 21  
E-mail: rwielgosz@bipm.org

**Dr S.K. Wong**, GLKH  
Tel: + 852 2762 3859  
Fax: + 852 2714 4083  
E-mail: skwong@govtlab.gov.hk

**Dr Inchul Yang**, KRISS  
Tel: + 82 42 868 5764  
Fax: + 82 42 868 5801  
E-mail: icy@kriss.re.kr

**Dr Jana Žel**, NIB  
Tel: + 386 59 232 816  
Fax: + 386 59 232 820  
E-mail: jana.zel@nib.si

## CCQM Working Group on Surface Analysis

**Chair:**

**Dr Wolfgang Unger, BAM**

Tel: + 49 30 8104 1823

Fax: + 49 30 8104 1827

E-mail: wolfgang.unger@bam.de

**Working Group Contact Persons:**

**Dr Toshiyuki Fujimoto, NMJJ/AIST**

Tel: + 81 29 861 4623

Fax: + 81 29 861 4623

E-mail: t.fujimoto@aist.go.jp

**Dr Ian Gilmore, NPL**

Tel: + 44 208 943 6922

Fax: + 44 208 943 6453

E-mail: ian.gilmore@npl.co.uk

**Dr Vasile-Dan Hodoroaba, BAM**

Tel: + 49 30 8104 3144

Fax: + 49 30 8104 1827

E-mail: dan.hodoroaba@bam.de

**Mr Werner Jordaan , NMISA**

Tel: + 27 12 841 3515

Fax: + 27 12 841 5914

E-mail: wajordaan@nmisa.org

**Dr Ludger Koenders, PTB**

Tel: + 49 531 592 5100

Fax: + 49 531 592 5105

E-mail: ludger.koenders@ptb.de

**Prof. Dr Leonid Konopelko, VNIIM**

Tel: + 7 812 251 76 01

Fax: + 7 812 113 01 11 or 812 315 09 81

E-mail:l.konopelko@vniim.ru

lkonop@mail.rcom.ru

lkonop@b10.vniim.ru

**Dr Michael Krumrey, PTB**

Tel: + 49 30 6392 5085

Fax: + 49 30 3481 69 7110

E-mail: michael.krumrey@ptb.de

**Dr Ilya Kuselman, INPL**

Tel: + 972 2 566 1856

Fax: + 972 2 652 0797

E-mail: ilya.kuselman@moital.gov.il

**Dr Yury Kustikov, VNIIM**

Tel: + 7 812 315 11 45

Fax: + 7 812 327 97 76

E-mail: lkonop@b10.vniim.ru

**Dr Wynand Louw, NMISA**

Tel: +27 12 841 4227

Fax: + 27 86 530 5916

E-mail: wlouw@nmisa.org

**Dr Yoshito Mitani, CENAM**

Tel: + 52 442 211 0560

Fax: + 52 442 211 0569

E-mail: ymitani@cenam.mx

**Dr Inna Popov, INPL**

Tel: + 972 2 658 4808

Fax: + 972 2 658 4809

E-mail: innap@savion.huji.ac.il

**Ms Sara Prins, NMISA**

Tel: + 27 12 841 4806

Fax: + 27 12 841 4458

E-mail: sprins@nmisa.org

**Dr Andrea Mario Rossi, I.N.R.I.M**

Tel: + 39 011 3919 342

Fax: + 39 011 346 384

E-mail: a.rossi@inrim.it

**Mr José Antonio Salas Téllez,**  
CENAM  
Tel: + 52 442 211 0563  
Fax: + 52 442 211 0569  
E-mail: antonio.salas@cenam.mx;  
jsalas@cenam.mx

**Dr Alex Shard,** NPL  
Tel: + 44 208 943 6193  
Fax: + 44 208 943 6453  
E-mail: alex.shard@npl.co.uk

**Dr Peter Sjövall,** SP  
Tel: + 46 10 516 52 99  
Fax: + 46 33 10 33 88  
E-mail: Peter.Sjovall@sp.se

**Dr John Small,** NIST  
Tel: + 1 301 975 3900  
Fax: + 1 301 216 1134  
E-mail: john.small@nist.gov

**Dr Eric B. Steel,** NIST  
Tel: + 1 301 975 3902  
Fax: + 1 301 216 1134  
E-mail: eric.steel@nist.gov

**Dr Hai Wang,** NIM  
Tel: + 86 10 6422 5042  
Fax: + 86 10 6427 1639  
E-mail: wanghai@nim.ac.cn

**Dr Robert Wielgosz,** BIPM  
Tel: +33 1 45 07 62 51  
Fax: +33 1 45 34 20 21  
E-mail: rwielgosz@bipm.org

## **Consultative Committee for Acoustics, Ultrasound and Vibration (CCAUVE)**

**Created in 1998**

*In addition to its formal work in the organization of key comparisons in acoustics (airborne and underwater), in ultrasound and in vibration measurement, the CCAUVE acts as the focus for this diverse community, seeking to develop common aims and increased collaboration between national metrology institutes and appropriate designated organizations in Member Countries of the Metre Convention.*

**President:** **Prof. Dr Joaquín Valdés**  
 Quality and Metrology Manager  
 Instituto Nacional de Tecnología Industrial  
 Av. Gral. Paz 5445  
 INTI – Parque Tecnológico Miguelete  
 1650 San Martín  
 Prov. Buenos Aires  
 República Argentina  
 Tel: + 54 11 4724 6244  
 Fax: + 54 11 4724 6244  
 E-mail: jovaldes@inti.gov.ar

**Executive Secretary:** **Dr Susanne Picard**, BIPM  
 Tel: + 33 1 45 07 70 27  
 Fax: + 33 1 45 34 20 21  
 E-mail: susanne.picard@bipm.org

### **Members:**

Central Office of Measures/Główny Urzad Miar [GUM], Warsaw  
 Centro Nacional de Metrología [CENAM], Querétaro  
 Conservatoire national des arts et métiers/Institut National de Métrologie [LNE], Paris  
 D.I. Mendeleev Institute for Metrology, Rostekhregulirovaniye of Russia [VNIIM], St Petersburg  
 Danish Fundamental Metrology Ltd [DFM]/Danish Primary Laboratory for Acoustics [DPLA], Naerum  
 Instituto Nacional de metrologia, Normalizacao e Qualidade Industrial [INMETRO], Rio de Janeiro  
 Istituto Nazionale di Ricerca Metrologica [I.N.R.I.M], Torino  
 Korea Research Institute of Standards and Science [KRISS], Daejeon  
 National Institute of Metrology [NIM], Beijing  
 National Institute of Standards and Technology [NIST], Gaithersburg  
 National Measurement Institute, Australia [NMIA], Lindfield  
 National Metrology Institute of Japan, AIST [NMIJ/AIST], Tsukuba  
 National Metrology Institute of South Africa [NMISA], Pretoria  
 National Metrology Institute of Turkey [UME], Gebze-Kocaeli  
 National Physical Laboratory [NPL], Teddington  
 National Research Council of Canada [NRC-INMS], Ottawa  
 Physikalisch-Technische Bundesanstalt [PTB], Braunschweig  
 The Director of the International Bureau of Weights and Measures [BIPM], Sèvres

**Observers:**

Agency for Science, Technology and Research [A\*STAR], Singapore  
 Bulgarian Institute of Metrology [BIM], Sofia  
 Bundesamt für Eich- und Vermessungswesen [BEV], Vienna  
 Centro Español de Metrología [CEM], Madrid  
 Czech Metrology Institute [CMI], Prague  
 Federal Office of Metrology METAS [METAS], Bern-Wabern  
 Institute for Physical-Technical and Radiotechnical Measurements, Rostekhregulirovaniye of Russia [VNIIFTRI], Moscow  
 Instituto Português da Qualidade [IPQ], Caparica  
 Institutul National de Metrologie [INM], Bucharest  
 International Electrotechnical Commission [IEC], Geneva  
 International Organization for Standardization [ISO], Geneva 20  
 National Physical Laboratory of India [NPLI], New Delhi  
 Slovak Institute of Metrology/Slovenský Metrologický Ústav [SMU], Bratislava  
 VSL [VSL], Delft

**Attendees at the last meeting (October 2010)****President: Dr Joaquín Valdés****Delegates and experts of member laboratories:****Dr Philippe Averlant, LNE**

Tel: + 33 1 40 43 38 71  
 Fax : + 33 1 40 43 37 37  
 E-mail : philippe.averlant@lne.fr

**Mr Richard Barham, NPL**

Tel: + 44 208 943 6725  
 Fax: +44 208 943 6217  
 E-mail: richard.barham@npl.co.uk

**Dr Thomas Bruns, PTB**

Tel: + 49 531 592 1220  
 Fax: + 49 531 592 691220  
 E-mail: thomas.bruns@ptb.de

**Dr Wan Sup Cheung, KRISS**

Tel: + 82 42 868 5302  
 Fax: + 82 42 868 5643  
 E-mail: wansup@kriss.re.kr

**Dr Zemar Martins Defilippo Soares, INMETRO**

Tel: + 55 21 2679 9221-9112  
 Fax: + 55 21 2145 3245  
 E-mail: zmsoares@inmetro.gov.br

**Mrs Danuta Dobrowolska, GUM**

Tel: + 48 22 581 91 36  
 Fax: + 48 22 581 93 80  
 E-mail: d.dobrowolska@gum.gov.pl

**Dr Jean-Noël Durocher, LNE**

Tel: + 33 1 30 69 14 88  
 Fax: + 33 1 30 69 12 34  
 E-mail: jean-noel.durocher@lne.fr

**Dr José Salvador Echeverría-Villagómez,  
CENAM**

Tel: + 52 442 211 0550  
 Fax: + 52 442 211 0558  
 E-mail: saleche@cenam.mx

**Dr Salvador Barrera-Figueroa, DFM**

Tel: + 45 4593 1144  
 Fax: + 45 4593 1137  
 E-mail: SBF@dfm.dtu.dk

**Dr Isabel Godinho, IPQ**

Tel: + 351 212 948 166  
 Fax: + 351 212 948 188  
 E-mail: igodinho@mail.ipq.pt

**Dr Claudio Guglielmino, I.N.R.I.M**

Tel: + 39 011 391 9626  
 Fax: + 39 011 346 384  
 E-mail: guglielm@inrim.it

**Dr Christian Hof, METAS**

Tel: + 41 31 32 34 750  
 Fax: + 41 31 323 3210  
 E-mail: christian.hof@metas.ch

**Dr Tsuneo Kikuchi, NMIJ/AIST**

Tel: + 81 298 61 5589  
 Fax: + 81 298 61 2226  
 E-mail: tsuneo.kikuchi@aist.go.jp

**Dr Christian Koch, PTB**

Tel: + 49 531 592 1600  
 Fax: + 49 531 592 1605  
 E-mail: christian.koch@ptb.de

**Dr Joanna Kolasa, GUM**

Tel: + 48 22 581 92 07  
 Fax: + 48 22 581 93 80  
 E-mail: j.kolasa@gum.gov.pl

**Dr Torben R. Licht, DPLA**

Tel: + 45 7741 2313  
 Fax: +45 7741 2013  
 E-mail: tricht@bksv.com

**Dr Ana Lilia Lopez-Sanchez, CENAM**

Tel: + 52 442 211 0550  
 Fax: +52 442 211 0557  
 E-mail: saleche@cenam.mx

**Dr Victor Nedzelnitsky, NIST**

Tel: + 1 301 975 6638  
 Fax: + 1 301 990 3851  
 E-mail: victor.nedzelnitsky@nist.gov

**Mr Riaan Nel, NMISA**

Tel: +27 12 841 2534  
 Fax: +27 86 530 5163  
 E-mail: rnel@nmisa.org

**Mr Anthony Paolero, NIST**

Tel: + 401 832 8961  
 Fax: + 401 832 4989  
 E-mail: anthony.paolero@navy.mil

**Dr Andrey Pepelyshev, VNIIM**

Tel: + 7 812 251 7601  
 Fax: + 7 812 713 0114  
 E-mail: andrey@ap7236.spb.edu

**Dr Susanne Picard, BIPM**

Tel: +33 1 45 07 70 27  
 Fax: +33 1 45 34 20 21  
 E-mail: Susanne.picard@bipm.org

**Prof. Knud Rasmussen, DFM**

Tel: + 45 4593 1144  
 Fax: + 45 4593 1137  
 E-mail: kra@dfm.dtu.dk

**Dr Gustavo Ripper, INMETRO**

Tel: + 55 21 2679 9112 or 9191  
 Fax: + 55 21 2679 1296  
 E-mail: lavib@inmetro.gov.br

**Mr Stephen Robinson, NPL and IEC TC WG 15**

Tel: +44 208 943 7152  
 Fax: + 44 208 943 6217  
 E-mail: stephen.robinson@npl.co.uk

**Mr Dominique Rodrigues, LNE**

Tel: + 33 1 30 69 14 87  
 Fax: + 33 1 30 69 12 34  
 E-mail: dominique.rodrigues@lne.fr

**Dr Enver Sadikoğlu, UME**

Tel: + 90 262 679 5000/3150  
 Fax: + 90 262 679 5001  
 E-mail: enver.sadikoglu@ume.tubitak.gov.tr

**Dr Guillermo Silva-Pineda, CENAM**

Tel: + 52 442 211 0587  
 Fax: + 52 442 211 05 58  
 E-mail: gsilva@cenam.mx

**Dr Andrew Scott, NMIA**

Tel: + 61 2 8467 3766  
 Fax: + 61 2 8467 3610  
 E-mail: andrew.scott@measurement.gov.au

**Mr Qiao Sun, NIM**

Tel: + 86 10 6452 4623  
 Fax: + 86 10 6421 8628  
 E-mail: sunq@nim.ac.cn

**Dr Claudine Thomas, BIPM**

Tel: + 33 1 45 07 70 73  
 Fax: + 33 1 45 07 62 62  
 E-mail: cthomas@bipm.org

**Dr Takashi Usuda, NMIJ/AIST**

Tel: + 81 298 61 4356  
 Fax: + 81 298 61 4047  
 E-mail: takashi.usuda@aist.go.jp

**Mr Ian Veldman, NMISA**

Tel: + 27 12 841 4008  
 Fax: + 27 12 841 2131  
 E-mail: csveldman@nmisa.org

**Prof. Andrew J. Wallard**, BIPM  
 Tel: + 33 1 45 07 70 00  
 Fax: + 33 1 45 34 86 70  
 E-mail: awallard@bipm.org

**Dr Lixue Wu**, NRC-INMS  
 Tel: + 1 613 993 6966  
 Fax: + 1 613 952 1394  
 E-mail: lixue.wu@nrc-cnrc.gc.ca

**Dr Bajram Zeqiri**, NPL and IEC TC 87  
 Tel: + 44 208 943 6806  
 Fax: + 44 208 943 6161  
 E-mail: bajram.zeqiri@npl.co.uk

### Observers:

**Mr Hock Ann Chua**, A\*STAR Singapore  
 Tel: + 65 6279 1926  
 Fax: + 65 6279 1995  
 E-mail: chua\_hock\_ann@nmc.a-star.edu.sg

**Dr Alexander E. Isaev**, VNIIFTRI  
 Tel: + 7 495 536 9443  
 Fax: + 7 495 744 8129  
 E-mail: isaev@vniiftri.ru or office@vniiftri.ru

**Dr Anatolij Konkov**, VNIIFTRI  
 Tel: + 7 495 535 9256  
 Fax: + 7 495 744 8128  
 E-mail: akustika@vniiftri.ru

**Mrs Maria Nieves Medina**, CEM  
 Tel: + 34 91 807 47 89  
 Fax: + 34 91 807 48 07  
 E-mail: mnmedina@cem.mityc.es

### Excused:

**Dr Marek Blabla**, CMI  
 Tel: + 420 257 288 316  
 Fax: + 420 257 328 077  
 E-mail: mblabla@cmi.cz

**Mr Robert Drake**, NIST  
 Tel: + 1 401 832 9203  
 Fax: + 1 401 832 4989  
 E-mail: robert.m.drake@navy.mil

**Dr Alexander Enyakov**, VNIIFTRI  
 Tel: + 7 495 535 9397  
 Fax: + 7 495 744 8129  
 E-mail: enyakov@vniiftri.ru

**Dr Richard Koops**, VSL  
 Tel: + 31 15 269 1500  
 Fax: + 31 15 269 1515  
 E-mail: rkoops@vsl.nl

**Ms Valentina Pozdeeva**, RMO COOMET  
 Tel: + 375 17 288 0735  
 Fax: + 375 17 288 0938  
 E-mail: pozdeeva@belgium.by

**Dr Erling Sandermann-Olsen**, DPLA  
 Tel: + 45 7741 2000  
 Fax: +45 4580 1405  
 E-mail: ErlingSandermann.Olsen@bksv.com

**Dr Steven Van den Berg**, VSL  
 Tel: + 31 15 269 1523  
 Fax: + 31 15 261 2971  
 E-mail: svdberg@vsl.nl

**Dr Hans-Jürgen von Martens**, PTB/ISO  
 and ISO TC 108  
 Tel: + 49 348 176 53  
 Fax: + 49 348 175 02  
 E-mail: hans-juergen.v.martens@ptb.de

**Honorary Member:**

**Dr Terry Quinn, CBE FR**  
E-mail: [tjqfrs@gmail.com](mailto:tjqfrs@gmail.com)

**CCAU**V RMO Working Group on CMCs

**Chairman:** **Mr C. S. Veldman, NMISA**  
Tel: +27 12 841 4008  
Fax: + 27 86 509 0831  
E-mail: [csveldma@nmisa.org](mailto:csveldma@nmisa.org)

**CCAU**V Strategic Planning Working Group

**Chairman:** **Dr Bajram Zeqiri, NPL**  
Tel: + 44 208 943 6806  
Fax: + 44 208 943 6161  
E-mail: [bajram.zeqiri@npl.co.uk](mailto:bajram.zeqiri@npl.co.uk)

## Acronyms and Addresses

**ANSTO** Australian Nuclear Science & Technology Organization  
Organization Building 16  
Private Mail Bag 1  
2234 Menai  
Australia

**ARPANSA** Australian Radiation Protection and Nuclear Safety Agency  
Lower Plenty Road  
Yallambie  
3085 Victoria  
Australia

**BARC** Bhabha Atomic Research Centre  
Trombay  
400 085 Bombay  
India

**BAM** Federal Institute for Materials Research and Testing/Bundesanstalt für Materialforschung und -prüfung  
Unter den Eichen 87  
D-12205 Berlin  
Germany

**BEV** Bundesamt für Eich- und Vermessungswesen  
Arltgasse 35  
A-1160 Vienna  
Austria

**BIM** Bulgarian Institute of Metrology  
52B G.M. Dimitrov Blvd  
1125 Sofia  
Bulgaria

**CEM** Centro Español de Metroología  
Calle del Alfar nº 2  
28760 Tres Cantos - Madrid  
Spain

**CENAM** Centro Nacional de Metroología  
km 4,5 Carretera a Los Cués  
Municipio El Marqués  
76241 Querétaro  
Mexico

**CIAE** China Institute of Atomic Energy  
P.O. Box 275 (20)  
102413 Beijing  
China

**CIE** Commission internationale de l'éclairage  
Central Bureau  
Kegelgasse 27  
A-1030 Vienne  
Austria

**CIEMAT** Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas  
Ministerio de Industria y Energía  
Avenida Complutense, 22  
28040 Madrid  
Spain

**CMI** Czech Metrology Institute  
102 00 Praha  
Radiova 3  
Prague  
Czech Republic

**CODATA Task Group on Fundamental Constants** Committee on Data for Science and Technology, Task Group on Fundamental Constants

**DFM** Danish Fundamental Metrology Ltd.  
Matematiktorvet  
Building 307  
DK-2800 Lyngby  
Denmark

**DPLA** Danish Primary Laboratory for Acoustics  
Brüel & Kjaer A/S  
Shodsborgvej 307  
DK-2850 Naerum  
Denmark

**ENEA-INMRI** Ente per le Nuove Tecnologie, l'Energia e l'Ambiente -Istituto Nazionale di Metrologia delle Radiazioni Ionizzanti  
via Anguilarese km 1,300  
00060 S. M. di Galeria  
C. P. 2400 Roma  
Italy

**GUM** Central Office of Measures/Główny Urzad Miar  
P.O. Box P-10  
PL 00-950 Warsaw  
Poland

**IAEA** International Atomic Energy Agency  
Wagramerstrasse, 5  
P.O. Box 100  
A-1400 Vienna  
Austria

**IAU** International Astronomical Union  
IAU Secretariat  
98 bis, Boulevard Arago  
75014 Paris  
France

**ICRU** International Commission on Radiation  
Units and Measurements  
7910 Woodmont Avenue  
Suite 800  
MD 20814-3095 Bethesda  
United States

**IEC** International Electrotechnical Commission  
3, rue de Varembé  
P.O. Box 131  
1211- 20 Geneva  
Switzerland

**IFA-CSIC** Instituto de Física Aplicada-Consejo  
Superior de Investigaciones Científicas  
Calle Serrano, 144  
28006 Madrid  
Spain

**IFCC** International Federation of Clinical  
Chemistry and Laboratory Medicine

**IFIN-HH** "Horia Hulubei" National Institute of  
Research and Development for Physics and  
Nuclear Engineering  
Str. Atomistilor no.407  
P.O.Box MG-6 Bucharest - Magurele  
Romania

**IGS** International GNSS Service  
Central Bureau  
JPL MS 238-540  
4800 Oak Grove Drive  
Pasadena, CA, 91109  
United States

**IIK** Institut für Isotopenforschung und  
Kernphysik  
"Radiuminstitut"  
der Universität Wien  
Boltzmanngasse 3  
A-1090 Vienna  
Austria

**INMETRO** National Institute of Metrology,  
Standardization and Industrial Quality  
Santa Alexandrina St, 416  
Rio Comprido  
20261-232 Rio de Janeiro  
Brazil

**INPL** National Physical Laboratory of Israel  
Danciger "A" Bldg  
Hebrew University, Givat-Ram  
91904 Jerusalem  
Israel

**INTI** Instituto Nacional de Tecnología Industrial  
Parque Tecnológico Miguelete  
Av. Gral. Paz e/Albarellos y Constituyentes  
(B1650KNA)  
C.C. 157 - (B1650WAB) San Martín Prov.  
Buenos Aires  
Argentina

**I.N.R.I.M** Istituto Nazionale di Ricerca  
Metrologica  
Strada delle Cacce 91  
I-10135 Turin  
Italy

**IOMP** International Organization for Medical  
Physics  
<http://www.iomp.org/index.html>

**IPQ** Instituto Português da Qualidade  
Laboratório Central de Metrologia  
Rua António Gião, 2  
2829-513 Caparica  
Portugal

**IRA** Institut de Radiophysique Appliquée  
Centre Universitaire  
CH-1015 Lausanne  
Switzerland

**IRI** Interfaculty Reactor Institute  
Department of Radiation Technology  
Mekelweg 15  
2629 JB Delft  
The Netherlands

**IRMM** Institute for Reference Materials and  
Measurements  
European Commission - Directorate  
General JRC  
Retieseweg  
B-2440 Geel  
Belgium

**IRPA** International Radiation Protection Association  
<http://www.irpa.net/>

**ISO** International Organization for Standardization  
Central Secretariat  
1, rue de Varembé  
Case postale 56  
CH-1211 Geneva  
Switzerland

**ISO REMCO** International Organization for Standardization, Committee on Reference Materials

**ITU** International Telecommunication Union Radiocommunication Bureau  
Place des Nations  
CH-1211 Genève 20  
Switzerland

**IUGG** International Union of Geodesy and Geophysics

**IUPAC** International Union of Pure and Applied Chemistry  
P.O. Box 13757  
Research Triangle Parc  
NC 27709-3757  
United States

**IUPAP** International Union of Pure and Applied Physics

**JILA** Joint Institute for Laboratory Astrophysics  
80303-0440 Colorado, Boulder,  
United States

**JV** Justervesenet  
Norwegian Metrology and Accreditation Service  
Fetveien 99  
2007 Kjeller  
Norway

**KRISS** Korea Research Institute of Standards and Science  
P.O. Box 102  
Yuseong  
305-600 Daejeon  
Korea, Republic of

**LGC** Laboratory of the Government Chemist  
Queens Road  
Middlesex TW11 OLY  
Teddington  
United Kingdom

**LNE** Laboratoire national de métrologie et d'essais  
1, rue Gaston Boissier  
75015 Paris  
France

**LNE** Conservatoire national des arts et métiers/Institut National de Métrologie  
292, rue Saint-Martin  
75141 - CEDEX 03 Paris  
France

**LNE-LNHB** Commissariat à l'énergie atomique/Laboratoire National Henri Becquerel  
DIMRI - CEA Saclay  
Boite postale 52  
91193 Gif-sur-Yvette  
France

**LNE-SYRTE** Observatoire de Paris/Systèmes de Référence Temps-Espace  
61 avenue de l'Observatoire  
75014 Paris  
France

**LNMRI/IRD** National Laboratory for Metrology of Ionising Radiation/Institute of Radiation Protection and Dosimetry CNEN  
Av. Salvador Allende  
s/nº - Recreio  
CEP. 22780-160 Rio de Janeiro  
Brazil

**METAS** Federal Office of Metrology  
Lindenweg 50  
CH - 3003 Bern-Wabern  
Switzerland

**MIKES** Centre for Metrology and Accreditation  
P.O. Box 9  
Tekniikantie 1  
FIN-02151 Espoo  
Finland

**MKEH** Hungarian Trade Licensing Office  
Metrology Department  
P.O. Box 919  
1535 Budapest  
Hungary

**MSL** Measurement Standards Laboratory of New Zealand  
PO Box 31 310 Lower Hutt  
New Zealand

**NICT** National Institute of Information and Communications Technology  
4-2-1 Nukui-Kitamachi  
Koganei  
184-8795 Tokyo  
Japan

**NIM** National Institute of Metrology  
Nº 18, Bei San Huan Dong Lu  
100013 Beijing  
China

**NIST** National Institute of Standards and Technology  
325 Broadway  
CO 80305-3328 Boulder  
United States

**NIST** National Institute of Standards and Technology  
100 Bureau Drive  
Maryland 20899-0001, Gaithersburg  
United States

**VSL** Dutch Metrology Institute  
Thijsseweg 11  
P.O. Box 654  
**2629 JA Delft**  
**The Netherlands**  
Tél: + 31 15 269 1500  
Fax: + 31 15 261 2971  
WWW: <http://www.vsl.nl>

**NMIJ/AIST** National Metrology Institute of Japan, AIST  
Department of National Institute of Advanced Industrial Science and Technology  
Tsukuba Central 3  
305-8563 Tsukuba  
Japan

**NMIA** National Measurement Institute, Australia  
PO Box 264  
West Lindfield  
NSW 2070  
Australia

**NMISA** National Metrology Institute of South Africa  
Private Bag X34  
0040 Lynnwood Ridge  
Pretoria  
South Africa

**NMISA** National Metrology Institute of South Africa  
Radioactivity Standards Laboratory  
15 Lower Hope Road  
Rosebank 7700 Cape Town  
South Africa

**NPL** National Physical Laboratory  
Hampton Road  
Middlesex  
TW11 0LW Teddington  
United Kingdom

**NPLI** National Physical Laboratory of India  
Dr K.S. Krishnan Road  
110012 New Delhi  
India

**NRC-INMS** National Research Council of Canada  
Institute for National Measurement Standards  
Montreal Road  
K1A 0R6 Ottawa  
Canada

**OIML** International Organization of Legal Metrology

**ON** Observatoire Cantonal de Neuchâtel  
58, rue de l'Observatoire  
CH-2000 Neuchâtel  
Switzerland

**ORB** Observatoire Royal de Belgique  
Avenue Circulaire, 3  
B-1180 Bruxelles  
Belgium

**PTB** Physikalisch-Technische Bundesanstalt  
Bundesallee 100  
D-38116 Braunschweig  
Germany

**RC** Radioisotope Centre POLATOM  
Metrological Laboratory of Radioactive Materials  
05-400 Otwock- Swierk  
Poland

**ROA** Real Instituto y Observatorio de la Armada  
Cecilio Pujazón S/N  
11.110 San Fernando Cadiz  
Spain

**ROSTEKHREGULIROVANIYE OF RUSSIA**  
Leninsky prospekt, 9  
117049 Moscou  
Russian Federation

**SL** State Laboratory  
Young's Cross  
Celbridge  
Co. Kildare  
Ireland

**SMU** Slovak Institute of Metrology/Slovenský Metrologický Ústav  
Karloveská 63  
842 55 Bratislava  
Slovakia

**SP** Technical Research Institute of Sweden  
PO Box 857  
S-501 15 Borås  
Sweden

**A\*STAR** Standards, Productivity and Innovation Board  
National Metrology Centre  
1 Science Park Drive  
118 221 Singapour  
Singapore

**SRC** Space Research Centre of Polish Academy of Sciences  
Bartycka 18A  
00-716 Warszawa  
Poland

**SSI** Swedish Radiation Protection Authority  
S-171 16 Stockholm  
Sweden

**STUK** Radiation and Nuclear Safety Authority  
P.O. Box 14  
Laippatie 4  
FIN-00881 Helsinki

**TUG** Technical University of Graz  
Rechbauerstraße 12  
A-8010 Graz  
Austria

**UME** National Metrology Institute of Turkey  
P.O. Box 54  
41470 Gebze-Kocaeli  
Turkey

**URSI** International Union of Radio Science  
Secrétariat Général  
c/o INTEC, Universiteit Gent  
Sint-Pietersnieuwstraat 41  
B-9000 Gent  
Belgium

**USNO** U.S. Naval Observatory  
Time Service Department  
3450 Massachusetts Avenue NW  
20392-5420 Washington D.C.  
United States

**VNIIFTRI** Institute for Physical-Technical and Radiotechnical Measurements,  
Rostekhregulirovaniye of Russia  
Mendeleevo  
141570 Moscow  
Russian Federation

**VNIIM** D.I. Mendeleyev Institute for Metrology, Rostekhregulirovaniye of Russia  
19, Moskovsky Prospekt  
198005 St Petersburg  
Russian Federation

**VNIIOFI** Institute for Optico-Physical Measurements, Rostekhregulirovaniye of Russia  
Ozernaya 46  
119361 Moscow  
Russian Federation

**VTT** Information Technology Centre for Metrology and Accreditation  
Technical Research Centre of Finland  
Measurement Technology  
POB 1304  
FIN 02044 Espoo  
Finland