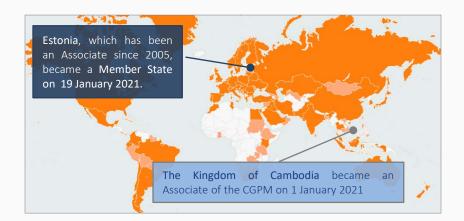


Members and Associates (March 2021)



- -63 Member States* and
- 39 Associates of the CGPM (States and Economies)

* The official term is "States Parties to the Metre Convention"; the term "Member States" is its synonym and used for easy reference.

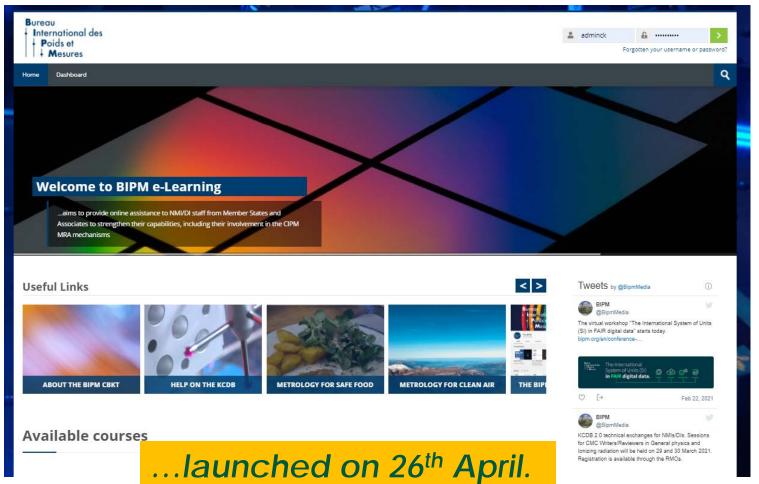


260 Institutes participating in the CIPM MRA

- 102 National Metrology Institutes
 - 63 Member States
 - 39 Associates
- 4 International organizations (ESA, IAEA, JRC, WMO)
- 154 Designated Institutes =152 (national) + 2 (IO)

1 710 comparisons 1082 KCs, 628 SCs

25 728 CMCsPeer-reviewed declarations



BIPM Laboratory knowledge transfer

Launch of on-line programs

Metrology for Safe Food:

- Mycotoxin Standards
- Pesticides and Residues (2021)

Visit: https://www.bipm.org/en/cbkt/safe-food.html

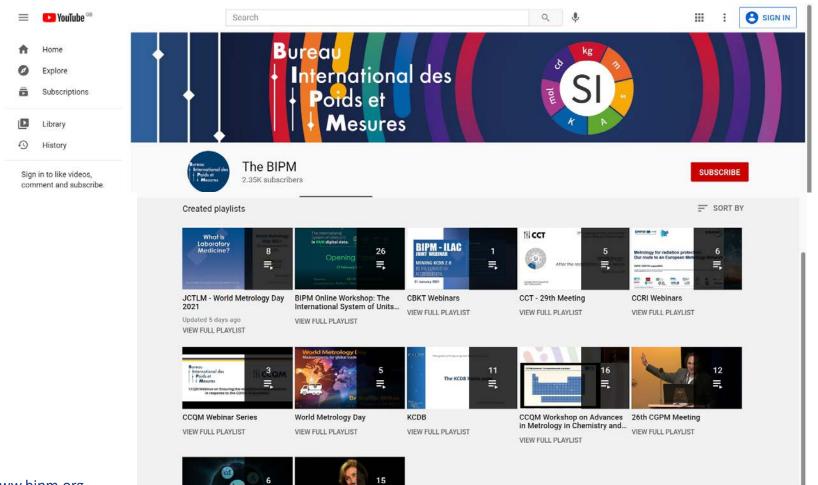
Metrology for Clean Air:

- FTIR operation for accurate gas analysis
- Dynamic gas standard generation (2022)

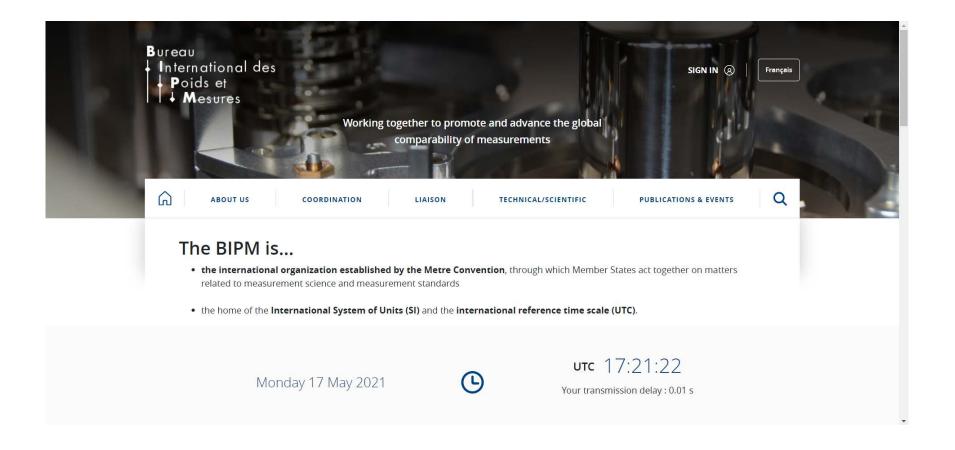
Visit: https://www.bipm.org/en/cbkt/clean-air.html

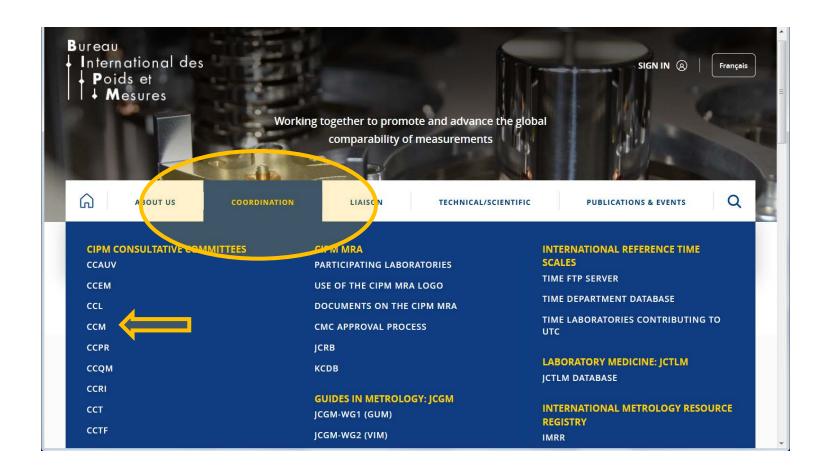
Metrology for Laboratory Medicine:

Peptide standards (2023)



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CIPM initiative to provide a <u>Digital SI Framework</u>

The CIPM has launched a Task Group on the "Digital SI Framework"

- To enable SI-based digital communication in industry
- To support the digital science and open-science paradigms
- To get metrological services ready for artificial intelligence





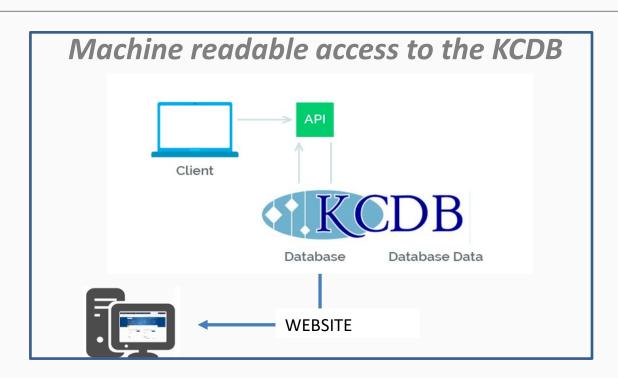
The **Key Comparison Database** (KCDB)

262 Institutes (August 2019)

- 102 National Metrology Institutes
 - 61 Member States
 - 41 Associates
- 4 International organizations (ESA, IAEA, JRC, WMO)
- plus 156 Designated Institutes

6 RMOs

Playing an important role to support mutual confidence in the validity of calibration and measurement certificates issued by participating institutes



1,613 comparisons

1039 key, 574 supplementary comparisons

25 242 CMCs

regionally and internationally peerreviewed CMC declarations

Work in progress - machine-readable products

Approved by the CIPM. Work in progress.

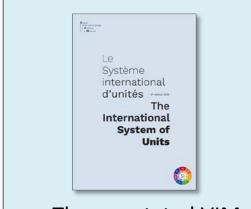


+ Time Dept database



API access

Real-time validation of traceability and scope of recognition for digital calibration certificates.



+ The annotated VIM

xml versions

The authoritative reference data defining the SI and how to use it.

Future work



Findable and Accessible data submitted to support key comparisons and publications



World Metrology Day

- The theme of World Metrology Day in 2021 is "Measurement for Health"
- Partner RMO is GULFMET

https://www.worldmetrologyday.org/index.html

