CHEMISTRY DEPARTMENT – GAS METROLOGY

Demonstrating the equivalence of gas standards available from NMIs worldwide as the **pilot laboratory** for international interlaboratory comparisons.
Supporting the **development of gas standards** in countries with developing metrology systems through laboratory-based capacity building and knowledge transfer programmes.

IMPACT

The BIPM provides a common, trustworthy measurement foundation for monitoring the atmosphere, enabling environmental and regulatory decisions and international agreements to be based on data that the whole world can trust.

KEY ACHIEVEMENTS SINCE 2022

On-demand gas standard comparison service

On-demand gas standard comparisons are now available for **carbon dioxide, nitrogen dioxide** and **ozone** in air standards from the BIPM to support NMIs developing standards for industrial and environmental applications.



Credit: BIPM

Knowledge transfer for Gas Metrology Laboratories

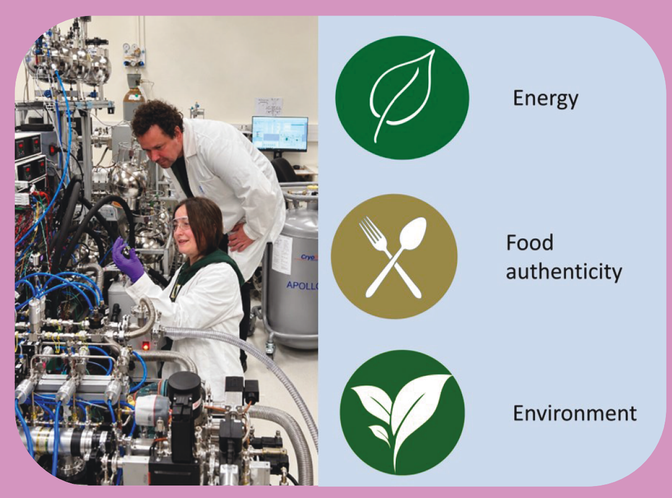


Credit: BIPM

The portfolio of knowledge transfer **e-learning courses** available from the BIPM has been expanded to **include isotope ratio measurement and standards, and gas auto-sampler production**, accelerating the development of gas metrology in countries with developing metrology laboratories.

Isotope ratio comparisons and standards

The BIPM provides NMIs with **highest precision standards** for **carbon isotope measurements,** as well as **interlaboratory comparisons**, to establish traceability and equivalence of reference materials for energy, food authenticity and environmental applications.



Credit: BIPM