CHEMISTRY DEPARTMENT – ORGANIC ANALYSIS

The BIPM demonstrates the equivalence of small organic molecule and protein standards available from NMIs world-wide as the **pilot laboratory** for international interlaboratory comparisons.
It supports the development of Chemical Standards in countries with developing metrology systems **through laboratory-based capacity building and knowledge transfer programmes**.

IMPACT

The BIPM has improved the accuracy of clinical diagnostic measurements through international comparison activities and has strengthened food safety by making reliable chemical measurement standards more accessible world-wide.

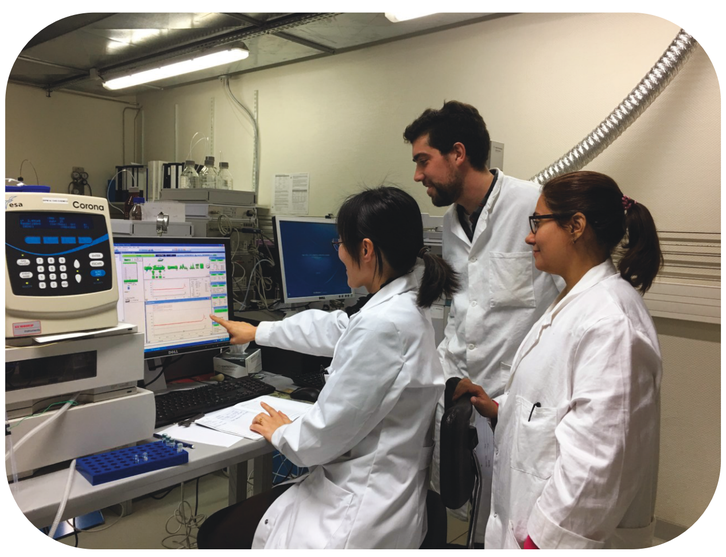
KEY ACHIEVEMENTS SINCE 2022

Demonstrated equivalence of pesticide and drug reference materials world-wide

Pesticide and veterinary drug residues represent important food contaminants regulated world-wide. Accurate measurements are ensured through **calibration standards** from NMIs with their equivalence demonstrated through **BIPM-coordinated comparisons.**



Credit: ChatGPT



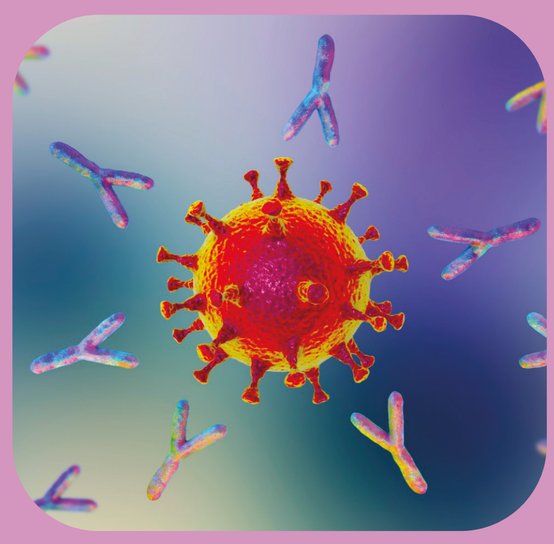
Credit: BIPM

New mycotoxin standard capabilities in developing economies

Mycotoxin contamination is a major cause of food import rejection. The **BIPM's CBKT programme** has allowed NMIs to develop metrology systems by producing and demonstrating the quality of their **Mycotoxin Calibration Standards.**

Demonstrated equivalence for monoclonal antibody quantification world-wide

The measurement of antibodies indicates the presence of past infections. The BIPM and NIM (China) coordinated **the first comparison on mAb quantification** during the SARs-CoV-2 pandemic to support accurate diagnosis.



Credit: Canva AI