Any technology depends on reliable temperature and/or humidity measurements

The CCT provides a global forum for NMIs on best practices and state of the art on measurements of temperature, humidity and thermophysical quantities.

The redefinition of the kelvin is a recent example of successful coordination. High-precision measurements using different techniques have allowed the determination of a robust value for the Boltzmann constant $k$. This result would not have been achieved without international collaboration.

A NEW stable reference from extreme cold to extreme heat is provided for future generations

$k = 1.380 649 \times 10^{-23} \text{ J/K}$

The CCT has defined a strategic set of key comparisons to demonstrate and improve global comparability for thermometry with traceability to the SI.

An example of outreach is the CCT KC of Standard Platinum Resistance Thermometers

The CCT closely monitors new and emerging technologies that may have a global impact on future thermometry measurements and calibration.

Self-calibrating thermal sensors, integrated small-size optical components, temperature-induced control of gene expression and tumour metabolism ...