

## **BILATERAL COMPARISON BETWEEN CEM AND LACOMET IN THE RANGE 83,805 8 K TO 993,473 K, LINKING TO CCT COMPARISONS**

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A bilateral comparison between Centro Español de Metrología (CEM) and Laboratorio Costarricense de Metrología (LACOMET) in the range 83.805 8 K to 993.473 K has been developed during 2009 and it is aimed to provide linkage to the CCT key comparisons K3 and K4 to LACOMET. This comparison gives support to the Calibration Measurement Capabilities requested by LACOMET. The participation of CEM in the EURAMET regional comparisons EUROMET-T.K3 and EUROMET-T.K4 is the basis of the link.

Two 25  $\Omega$  standard platinum resistance thermometers (SPRTs) were used as traveling standards. One of them was used only in the aluminum freezing point while the other one covered the remaining fixed points. An exception was made at the temperature of 83.805 8 K, CEM performed the measurements in an Argon Triple Point Apparatus but LACOMET calibrated the SPRT at a temperature close to the argon point using a Liquid Nitrogen Boiling Point Apparatus.

Both SPRTs were provided by LACOMET and they were measured before and after CEM measurements. The SPRTs showed no significant drifts during the comparison. The results for both laboratories agreed within their expanded uncertainties and are summarized. Proposals for key comparison reference values and for the linkage to the results of CCT-K3 and CCT-K4 are presented.