

Participation of RCChem–LIPI in the Key Comparison APMP.QM-K91 for pH Measurement of Phthalate Buffer

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Abstract: Metrology in Chemistry (MiC) Laboratory of Research Center for Chemistry, Indonesian Institute of Sciences (RCChem–LIPI) has been participated in key comparison APMP.QM-K91 for the pH measurement in phthalate buffer. This participation is indispensable for supporting the Calibration and Measurement Capabilities (CMC) claim in the field of pH measurement. The method used in this measurement was validated using differential potentiometry cell method and the pH measurements were performed at 15, 25 and 37 C. The results of RCChem-LIPI in this key comparison were satisfied with the degree of equivalence (Di) and uncertainty of degree of equivalence (uDi) was in agreement with the key comparison reference value (KCRV). It demonstrates the capability of MiC Laboratory of RCChem-LIPI in measuring the pH of phthalate buffer, which is crucial in obtaining the CMC claim.

Keywords: Key comparison; pH measurement; Phthalate buffer; Potential differential potentiometric