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# Expansion of European research capabilities in humidity measurement

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**Abstract.** Humidity is among the most important measured parameters related to HVAC applications, the storage of food products, industrial and medical gases, textile, paper and many other products requiring humidity measurement and control within certain limits. Humidity measurement techniques are diverse and each presents different challenges for use and calibration for a range of pressures and gases. Over the past few years, the development of humidity sensors and apparatus has matured to a level where traceable calibration is beneficial to all industries in which humidity and moisture measurement and control are important.

## 1 Introduction

Humidity measurement techniques are diverse and each presents different challenges for use and calibration for a range of pressures and gases. Over the past few years, the development of humidity sensors and apparatus has matured to a level where traceable calibration is beneficial to all industries in which humidity and moisture measurement and control are important.

This paper presents a new European project for Establishing the infrastructure for humidity measurements, assuring traceability and providing dissemination as important concepts in both developed and emerging NMI/DIs as well as a precondition to related research, industrial applications and quality standards as well as support for various services, including the grand challenges (health, environment and energy) and closely associated with quality of life

measures and implementation of specific EU legislation. The overall objective of the project is to develop measurement and research capabilities in humidity measurements of participating emerging NMI countries, based on stakeholder's needs.

Specific objectives are: identifying existing and future needs, transfer of knowledge, developing measurement methods and sharing procedures as best practice, narrowing the gap of the offered calibration services, performing an inter-comparison, building research potential and strengthening the co-operation between the NMIs.

## 2 Consortium overview

The consortium consists of leading European NMI/DIs and emerging NMIs in the field of humidity in a

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