VersiCal

COORDINATOR

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Developing expertise for the practical use of digital impedance bridges

Electrical impedance is one of the most widely measured electrical quantities, important for studying areas including supercapacitors, solar materials, and biological tissues. This means that increasingly accurate impedance analysers are required, which must be calibrated to international standards. Calibration services rely on ‘impedance bridges’, which are complex and labour intensive measuring systems beyond the means of most measurement laboratories. Digital impedance bridges offer an ideal solution as they are versatile, use inexpensive and readily available components, and do not require a high level of operator skill. As such, there is a need to show that they can be adapted for industry use.

This project will design, construct, and validate a single reference impedance bridge, develop a good practice guide for the application of digital impedance bridges, and create a virtual training lab. In doing so, the project will facilitate the training and dissemination of expertise in practical way, supporting industries in the adoption of digital techniques for accurate impedance measurements

PROJECT WEBSITE

Link

PUBLISHABLE SUMMARY

- **Publishable Summary A versatile electrical impedance calibration laboratory based on digital impedance bridges (17RPT04)** **0.14 MB**