26th National Symposium on Cryogenics and Superconductivity

Contribution ID: 8

Capacitance level sensor with integrated Cold electronics

Content:

Capacitance type level sensors are extensively used for level measurement both for cryogenic and room temperature applications. The measurement of capacitance was carried out using various commercially available electronic circuits. All these circuit are operational normally at room temperature. In this paper a Cold Electronics based level measurement circuit is prepared which operates from 300 K down to 4.2 K. This cold electronics, frequency modulates the cryogen level on to the carrier signal. The details of the calibration setup are discussed. Liquid Nitrogen was used as cryogen for the calibration. The details of developed cold electronics and its performance are discussed in this paper.

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Session classification: Poster Session 1: Abstract ID

1,2,3,8,9,15,16,21,23,25,27,28,29,30,42,44,46,47,49,50,51,58,61,65,79,81,82,87,96,97,98,

106,126,130,189

Track classification: Cryogenic System Instrumentation and Control

Type: --not specified--