

**ONLINE MEASUREMENT OF THE ANTIFREEZE MASS FRACTION IN AQUEOUS SOLUTIONS****Vincent AYEL**

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This paper describes a new type of probe for on-line measurements of antifreeze mass fraction in aqueous solutions. The method we propose can also be used for the experimental determination of the freezing point of various water-antifreeze mixtures and is tested by comparison of our results to those of the literature. The on-line measurement system is compact and robust; its accuracy is tested with carefully calibrated mixtures of water and antifreeze. The results show that its application fields are fully compatible with the antifreeze concentrations usually encountered in cold distribution circuits. Both the scientific principles and the technical realization are detailed in the paper. Perspective, consisting in the measurement of the ice mass fraction in ice slurry loops is considered.

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