

## **Determining Saturation Curves through Oscillating U-tube Density Measurements**

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Thermodynamically, as a pure fluid held at a constant temperature transitions (through a loss or increase in system pressure) from the compressed-liquid state into the two-phase vapor-liquid state or vice versa, there is an abrupt change in the fluid density. The purpose of this instrument development was to explore if that density change could be measured quickly and repeatedly with careful modifications made to a commercial oscillating U-tube density meter. The details of the apparatus will be presented and the pure fluid data discussed.