# ANB Sensors presents a solution to reference electrode drift in ISEs

24x7 Ion selective Electrode Sensors without the need for recalibration

### **Benefits and Results**

- Insensitive to Cl<sup>-</sup> concentration
- Insensitive to interferences
  - (Br<sup>-</sup>, I<sup>-</sup>, CN<sup>-</sup>, Na, Ca, Li)
- Insensitive to ORP
- Insensitive to HCl and NaOH
- Very good storage lifetime
- Stable with repetitive measurements
- Long deployment lifetimes achievable

## (•)) ANB Sensors

#### The Challenge

Electrode drift issues currently account for up to 70% of the total sensor purchase and operational costs, severely limiting the use of in-situ ISE sensors.

Imagine a world where your ISE sensor didn't need to be calibrated to account for reference electrode drift!

#### The Solution

ANB Sensors have identified an opportunity to use part of its novel electrochemical sensor platform to address the issue of drift in all in-situ ISE sensors, enabling them to be utilized in smart, networked solutions.

ANB Sensors presents a novel means of verifying the performance of the reference electrode through an additional in-situ electrochemical measurement.



Research at ANB Sensors laboratories has been conducted to optimize the chemistry behind the Calibration Electrode, where the key challenge was maintaining a constant potential, independent of the bulk environment.

Many common interferences have been tested with no impact observed on the Calibration Electrode

#### **About ANB Sensors**

ANB Sensors are a Cambridge, UK technology company providing innovative solutions for todays chemical sensors. In October 2017 they were awarded Innovate UK funding to realize this groundbreaking technology.