

Fully automated determination of fluoride in blood samples

Prosecution of drunken driving depends on reliable testing for blood alcohol. Thus, sodium fluoride is added as a preservative to blood samples taken from suspected offenders. This prevents glycolysis and the formation of ethanol, which may render samples useless as evidence in court. Metrohm presents a fully automatic system for the determination of fluoride in blood samples guaranteeing a high sample throughput while providing for highest accuracy.



A cutting edge fluoride analyzer

The system used for the automatic determination of fluoride in blood consists of a PC controlled 855 Robotic Titrosampler with three 800 Dosinos for pipetting the blood samples, adding TISAB buffer solutions and titration with $\text{La}(\text{NO}_3)_3$.

More than 300 samples in a single run

With a specially designed sample rack for glass vials the automated system can analyze 317 samples in one continuous run; the time required for each blood sample is 3 minutes including sample transfer and rinsing. In a similar way, the special rack for McCartney bottles allows to analyze 102 samples in one run.