



High throughput analysis using robust Q-ICP-MS coupled with an advanced sample handling system

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Inductively coupled plasma mass spectrometry (ICP-MS) has cemented its place in routine environmental and exploration geochemistry laboratories through its wide elemental coverage, high sensitivity and rapid analysis.

However, in a modern multi technique routine laboratory, sample throughput (in terms of the number of reportable samples analysed per day) can sometimes be poorer for ICP-MS than ICP-AES. Often ICP-AES sample preparation used is not suited for ICP-MS due to the high levels of dissolved solids, requiring additional dilution, more frequent reruns due to quality control (QC) failures and increased instrument maintenance.

In this presentation an advanced sample handling system will be described that reduces sample deposition on the ICP-MS interface leading to increased first time pass QC analyses and longer periods between necessary maintenance.