

New User-Customized Calibrations for Handheld pXRF Analysers

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The latest advancements in portable XRF technology and complementary data analysis software enable users to request custom calibrations from manufactures and centres of excellence or to build their own regression models. These newly created calibrations can then be loaded onto the handheld portable XRF analysers for point-and-shoot use or for off-line data analysis.

EasyCal™ PC software, which comes standard with Bruker's newest instrument, the TRACER 5i, allows users to easily create their own custom calibrations. On-board qualitative data can be viewed directly on the pXRF screen and the advanced qualitative Artax™ PC software is configured for wireless operation of measurement conditions with live spectral viewing.

The advanced software takes advantage of the TRACER 5i's ability to have full control of the power settings, filter settings (manual customized and automatic standard), sample spot sizes and atmosphere (air, helium or vacuum). The hardware/software combination of the TRACER 5i adds to the flexibility and utility for point-and-shoot testing as well as to advanced research capabilities for handheld XRF.

This presentation will focus on new, factory-ready calibrations created with these software programs. Of particular interest are those calibrations related to Nutrient and Heavy Metals for Food Safety & Quality & Agricultural applications. It will also be demonstrated how these calibrations can be modified with user samples to further enhance the accuracy and precision for their particular matrix and application.