



## Providing precise calibration data with the help of Synchrotron Diffraction and a tailor-made sample delivery system

SpectraFlow Analytics (Spreitenbach) sells online measurement solutions using the Near Infra Red (NIR) technology that are mounted over conveyor belts and of raw materials processed in airslides. NIR provides phase information which enables structure determination. This online measurement

Within a project partnership ANAXAM together with SpectraFlow are building a tailor-made sample delivery system for Synchrotron Diffraction experiments. This novel

solutions are used in all mineral industries, with multiple installations in the cement, iron ore, gold, platinum copper and bauxite industry. Due to the mineralogically and chemically different conditions of the raw materials, the NIR analyzer must be individually calibrated for each project based on customer-specific reference samples.

infrastructure allows to upscale the amount of sample probed as well as the number of samples probed during the diffraction measurements.

Both, NIR and Synchrotron Diffraction provides the same information, namely the crystallographic phases. Here, SpectraFlow directly profit from the high-resolution phase

analysis, obtained by Synchrotron Diffraction, for a very precise calibration input for their NIR online analyzing systems that finally helps SpectraFlow to improve further their product.

“ ANAXAM offers small and midsize companys as we are access to know-how and analytics a top level. Thanks to the partnership with ANAXAM we were allready able to esentially improve our technology. We see a high potential that existing processes for industry can be further optimized and new processes can be developed.“

Tobias Füeg, CTO,  
– *SpectraFlow Analytics Ltd.*

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