

## **DOSAGE OF SILICA IN POLYMERS BY X-RAY FLUORESCENCE**

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Silica is an additive commonly used in polymers for modifying their properties such as flow for example. There is a balance between not adding enough (lack of flow, blockage) and adding too much (surface blooming, haziness). Hence, accurately measuring the amount of silica in the polymer is of primary importance. We recently worked on different approaches for the measurement of silica using X-ray fluorescence. They are applicable over the range of silica concentrations we explored so far (up to 1.3 wt%). Different methods called for different sample preparations, which were found to affect directly the precision of the measurements. The ultimate precision achieved was around 5% relative at a  $2\sigma$  level, and the presentation will illustrate the different approaches we took to develop this new method.