

New Tool for Enzymatic Analysis in Raw Materials

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Industries, such as pharma, feed, and food, are increasingly looking for enzymes to solve production and product issues. Correct and adequate information on enzyme activity would help producers avoid prolonged production times, reduce waste, improve end-products, prolong shelf-life and save costs for overtreatment.

Most of the production processes turning raw materials into products are under the influence of a wide variety of enzyme combinations. Existing tools for screening of enzymatic activity, are cumbersome, time-consuming and often requires expert staff. Each assay needs to be constructed from the bottom up forcing the user to aliquot substrates with high precision into a large number of reaction vessels manually. Furthermore, all existing assays measure the activity of one enzyme only at a time.

We have developed a ready-to-use screening technology, where it is possible to detect important enzymatic activity in raw material. We will show different examples of endogenous enzymatic activity in the grain, flour and malt. This data helps to minimize uncertainties when using technical aids and eventually, desired properties of the final product are ensured.

Biography:

Dr. Julia Schüchel holds a M.Sc. degree in chemistry from the Technical University of Dresden, Germany and a PhD degree in biochemistry from the University of York, United Kingdom. She developed together with her colleague Stjepan K. Kracun the screening technology for testing enzyme activities in raw material.