

3rd International Conference and Exhibition on **Metabolomics & Systems Biology**

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Use of highly ¹³C enriched biological samples and pure tracer substances for LC-HRMS based metabolomics R Schuhmacher¹, C Bueschl¹, B Kluger¹, N Neumann¹, A Simader¹, M Doppler¹, A Koutnik¹, M Lemmens¹, G Adam¹, AW Chassy², A Waterhouse³ and R Krska¹ ¹University of Natural Resources & Life Sciences (BOKU), Austria

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Stable isotope labeling assisted techniques show a high potential for being used in untargeted metabolomics studies. The presentation gives an introduction to the general concept and various applications of stable isotope labeling assisted LC-HRMS based metabolomics. Isotope techniques, recently established in the authors' laboratory will be presented including the preparation of highly stable isotope enriched filamentous fungi and plants. Moreover, the data processing concept and recently developed and refined MetExtractsoftware will be presented. Its use will be exemplified with a real-world dataset to illustrate the scope and power of the approach for the untargeted profiling of tracer metabolisation.

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