



Fakultät für Physik

Isotopenforschung und Kernphysik

EINLADUNG

zum

VERA-SEMINAR

von

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Comprehension of complex biological processes by analytical methods: how far can we go using mass spectrometry?

Comprehensive understanding of complex biological processes is the basis for many biomedical issues of great relevance for modern society including risk assessment, drug development, quality control of industrial products and many more. Screening methods provide means for investigating biological samples without research hypothesis. However, the first boom of analytical screening efforts has passed and we again need to ask whether and how to apply screening methods. Mass spectrometry is a modern tool with unrivalled analytical capacities. This applies to all relevant characteristics of analytical methods such as specificity, sensitivity, accuracy, multiplicity and diversity of applications. Indeed, mass spectrometry qualifies to deal with complexity. Chronic inflammation is a common feature of almost all relevant diseases challenging our modern society; these diseases are apparently highly diverse and include arteriosclerosis, cancer, back pain, neurodegenerative diseases, depression and other. The complexity of mechanisms regulating chronic inflammation is the reason for the practical challenge to deal with it.

The presentation shall give an overview of capabilities and limitations of the application of this analytical tool to solve critical questions with great relevance for our society.

Donnerstag, 05. Dezember 2013, 16:30 Uhr

1090 Wien, Währinger Str. 17, "Kavalierstrakt", 1. Stock, Victor-Franz-Hess-Hörsaal

W. Kutschera