



Natural Molecules and Molecular Complexes: Characterization and Biomedical Effects

@Aboca – Sansepolcro – from June 28th to 30th 2017

MAIN TOPICS:

- Complex substances
- Non covalent complexes
- Study of macromolecules
- Pharmacokinetics and pharmacodynamics
- MS in preclinical and/or clinical studies
- High resolution mass spectrometry
- ICP-MS
- MS imaging
- Complex substances MS and MS/MS analysis methods
- Characterization of natural products such as herbal extracts or animal derivatives and their mixtures
- Metabolomics
- Targeted and untargeted metabolomic methods
- Metabolomics assessment of natural products to seek quality, efficacy and safety.
- Nutraceutical products
- Standardization issues
- Fraudulent miss-description on food and nutraceutical products labels, adulteration
- Biochemical markers detection
- Metabolomics-based toxicology
- Biomarker-detection in the food quality/safety field
- Analytical approaches to overcome metabolomic reproducibility issues/analytical variability
- Data processing to multivariate data analysis
- Validated procedures to prove the appropriateness of the conclusion drawn from the data analysis
- Strategies to develop and validate analytical methods based on metabolomics

A “natural product” is really a highly complex substrate, being the chemical image of the high number of chemical equilibria responsible for the life. It usually consists of hundreds (or more!) different organic molecules and oligoelements.

Mass spectrometry plays a key role as it is highly effective in the fingerprinting as well as in the identification, structural characterization and quantization of various natural compounds, such as volatile molecules, polyphenols, terpenes, alkaloids, saponins, aminoacids, peptides, proteins, inorganic elements, organosulfur, vitamins, etc. Mass spectrometry may help researcher daily work to describe “natural extract” and/or “natural product” in a comprehensive way by means of different MS methods.

The **2nd MS-NatMedDay** is the second edition of a series of conferences that we are dedicating to the applications of mass spectrometry in the study of complex substances as “natural products”, along with the latest innovations in instrumentation. This will also create the optimum opportunity to meet the needs and offerings of academic institutions, pharma and instrumentation companies. The conference will include plenary lectures, oral and poster communications.

***Fellowships for participation
of young researchers***