

ISO ¹³C COMPOUND ¹⁸ ¹⁵N 2009

JUNE 1-5

ecology ecosystem earth sciences

Advances in analyses and applications of compound-specific stable isotopes in ecology, ecosystem- and earth sciences

A meeting funded by the ESF network MOLTER and NSF network BASIN

Analytical advances in the measurement of stable isotope ratios on individual organic compounds provide a new set of tools for ecology, ecosystem- and earth sciences where the molecular specificity and the isotopic signature of compounds can be explored concomitantly.

The scope of applications is enormous. It will not only provide new levels of precision for the biochemical understanding of bulk sample stable isotope signals but will also allow for new

mechanistic research directions in ecology, and earth and ecosystem sciences.

Given the enormous potential of CSIA we believe it is the right time to assemble scientists with strong interests in CSIA in a multi day workshop that would allow the discussion of recent developments and future applications of CSIA in ecology, and earth and ecosystem sciences.

Bringing together the scientific communities from different fields is critical at this point to exchange expertise on the advances in CSIA across scientific disciplines and to stimulate new and interdisciplinary research and therefore allow exploiting the full power of CSIA for ecology, and earth and ecosystem sciences.

Session 1



Recent improvements in instrumentation and methodology

Session 2



Tracing biosynthetic processes using the stable isotope composition of biomarkers

Session 3



Use of compound-specific isotope analyses in ecology and ecosystem science

Session 4



Paleoclimatology - developments and applications

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