

Wissenschaftliches Programm

Sonntag:

14:00-18:00 PhD Workshop

Impulsreferate von Dozenten (15-25 min) und Kurzvorträge der Teilnehmer/innen zu laufenden und geplanten Projekten (ca. 10 min + Diskussion)

Montag:

9:00-11:00 Firmenpräsentationen und Workshops

Raum A108:

9:00 Continuous stable isotope measurements with Cavity Ring-Down Spectroscopy.
(Umwelt-Geräte-Technik GmbH)

9:20 Recent advances in bulk and compound specific IRMS measurements (Sercon Limited)

9:40 Calibration mixtures for improving accuracy of stable isotope measurement (Air Liquide)

10:00 Datenanalyse & Datenmanagement leicht gemacht - Standardisierung, grafische Darstellung, statistische Auswertung und arbeitsgruppenübergreifende Zusammenarbeit (Elementar Analysensysteme GmbH)

Raum A122:

10:00 Thermo Fisher Scientific Workshop

12:00 Begrüßung, Eröffnung der Tagung

12:30 Session 1: Analytik, Methoden, Techniken und Qualitätssicherung (1/2)

12:30 (#105) Clumped isotopes of nitrous oxide by mid-IR laser spectroscopy
Kantnerová, Kristýna

12:50 (#139) Comparison of N₂O isotope spectrometers for high-precision measurements in ambient air and incubation experiments

Mohn, Joachim

13:10 (#125) Development of international N₂O reference materials for site preference measurements

Eggleston, Sarah

13:30 (#154) Measurement of challenging matrixes using the IsoFLOW headspace analyser

Volders, Filip

13:50 (#131) Utilizing Chromatographic Principles for High Sensitivity Isotope Ratio MS

Hilkert, Andreas

14:10 Postersession und Kaffee

16:00 Session 1: Analytik, Methoden, Techniken und Qualitätssicherung (2/2)

16:00 (#148) Methyl sulfates as methoxyl isotopic reference materials for $\delta^{13}\text{C}$ and $\delta^2\text{H}$ measurements

Greule, Markus

16:20 (#147) Improvements in sensitivity in IRMS measurements

Atkinson, Helen

16:40 Session 2: Lebensmittel, Forensik, Doping

16:40 (#161) Stable hydrogen isotopes as a world forensic tool: Potential and pitfalls

Voigt, Christian

17:00 (#104) Potential of multi-dimensional stable isotope fingerprinting for forensic identification of the organophosphorus pesticide chlorpyrifos

Kümmel, Steffen

17:20 (#130) Can mechanistic water isotope models predict the geographic origin of fruits?

Cueni, Florian

Dienstag:

9:00 Session 3: Hydrologie und Hydrogeologie inkl. Tiefengrundwässer (1/2)

9:00 (#101) Isotope im Niederschlag – Indikatoren für Herkunft und Prozesse

Weise, Stephan M.

9:20 (#109) Integrated altitude isotope effects in rivers of high-relief terrains: A correction method to identify water recharge altitudes

Juhlke, T.R.

9:40 (#162) Integrative isotope techniques to evaluate the fate and transport of nitrogen in the Erlauf River catchment, Austria

Bujak, Izabela

10:00 (#149) Tomography of anthropogenic nitrate contribution along the Holtemme River, Germany

Müller, Christin

10:20 Kaffeepause

10:50 Session 3: Hydrologie und Hydrogeologie inkl. Tiefengrundwässer (2/2)

10:50 (#159) Beiträge zur Stickstoffdynamik im landwirtschaftlich und urban belasteten und als Trinkwasserressource genutzten Tai See, China - Einsichten aus geochemischen Analysen und Messungen stabiler Isotope

Wilhelms, Andre

11:10 (#126) Determining uncertainties of $\delta^{15}\text{N}$ -nitrate interpretation in groundwater with the use of Monte Carlo simulations

Wild, Lisa

11:30 (#136) A new approach of groundwater dating using dissolved organic radio-carbon (DOC) in a carbonate aquifer in the Bavarian Molasse Basin

Heine, Florian

11:50 (#150) Isotopic approaches to assess potential impacts from shale gas development on shallow groundwater

Mayer, Bernhard

12:10 (#111) Isotope evidence for methane formation from cyanobacteria

Klitzsch, Thomas

12:30 Gemeinsames Mittagessen

14:00 Session 4: Boden-Pflanzen-Atmosphäre

14:00 (#135) Foliar water uptake, the way to grow for *Avicennia marina* (Forsk.) Vierh.

Schreel, Jeroen

14:20 (#170) Measured and modeled xylem-sap isotopic composition in tree stems with a borehole-equilibration technique

Marshall, John

14:40 (#157) Variability in xylem water isotopic signature triggers incorrect assessment of root water uptake depth

De Deurwaerder, Hannes

15:00 (#158) Water use strategies of mature beeches – a comparison of pure and mixed stands

Magh, Ruth-Kristina

15:20 (#143) Nutrient addition changes water and carbon fluxes through biodiversity effects: partitioning evapotranspiration and net ecosystem exchange

Kübert, Angelika

15:40 (#117) Is cheating on fungal partners among plants much more widespread? New insights for partial mycoheterotrophy in arbuscular mycorrhizae.

Giesemann, Philipp

16:00 (#116) Ecohydrological soil-plant feedbacks: a pool-weighted perspective on the two-water-worlds hypothesis

Dubbert, Maren

16:30 ASI Mitgliederversammlung

19:30 Konferenz-Abendessen

Mittwoch:

9:00 Session 5: Klimaforschung und Stoffkreisläufe

9:00 (#138) Intramolecular stable isotope variation: New ecophysiological signals, and consequences for isotope-based biogeochemistry

Schleucher, Jürgen

9:20 (#129) Interpretation of compound-specific $\delta^2\text{H}$ and $\delta^{18}\text{O}$ results from n-alkane and sugar biomarkers derived from Late Glacial to Early Holocene Lake Bergsee sediments

Hepp, Johannes

9:40 (#115) Simulating the isotopic composition of terrestrial N cycle components with the Stable Isotope MOdel for Nutrient cyclEs (SIMONE)

Denk, Tobias

10:00 (#132) Radiocarbon chronology and paleoclimate reconstruction based on coupled $\delta^{2}\text{H}/\delta^{18}\text{O}$ biomarker analyses of lacustrine sediments from Garba Guracha, Bale Mountains, Ethiopia

Bittner, Lucas

10:20 Postersession und Kaffee

11:20 Session 6: Physiologie und Metabolismus

11:20 (#112) The Effect of Parasite Infection on Stable Isotope Turnover Rates in Multiple Tissues of Eurasian Perch from Bodensee

Yohannes, Elizabeth

11:40 (#145) Compound-specific stable-isotope analysis for investigating bioavailability limitation of micro- pollutants in 2D flow-through tank experiments

Sun, Fengchao

12:00 (#160) Heterotrophic ^{13}C -Fixation – New insights to microbial DOC utilisation from stable isotope labelling?

Spona-Friedl, Marina

12:20 (#133) Bioavailability limitation influences the maintenance demand and physiology of *Arthrobacter aurescens* TC1 defining a limit of atrazine degradation at low concentrations

Kundu, Kankana

12:40 (#167) Measurement of albumin synthesis in endotoxemic pigs exposed to deoxynivalenol (DON) by using L-[$^2\text{H}_5$]-phenylalanine as tracer

t.b.a.

13:00 Abschlussworte, Preisverleihungen