PARIS LODRON UNIVERSITÄT SALZBURG

Dr. Giorgio Höfer Ziviltechniker GmbH

SINA 2023

19th Stable Isotope Network Austria Meeting

17th & 18th November 2023

Paris Lodron University Salzburg (PLUS)

Department Environment and Biodiversity

Hellbrunner Str. 34

5020 Salzburg

PROGRAM

Sponsors and exhibitors:

ThermoFisher SCIENTIFIC

elementar EXCELLENCE IN ELEMENTS

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PICARRO

LAND SALZBURG

Friday, 17.11.2023		
9:45 - 10:45	**Registration**	
10:45 - 10:55	**Opening**	
Chair: Giorgio Höfer and Sylke Hilberg		
10:55 - 12:35	**Session 1: Stable Isotope Methods**	
10:55- 11:15	Manfred Groening	Recent challenges for consistent δ13C scale value reporting
11:15 - 11:35	Kathiravan Meeran	Vienna Urban Carbon Laboratory: Investigating urban CO2 emissions through Isotope Analysis from Tall Tower Observations
11:35 - 11:55	Kathrin Rosenthal	Analysis of dissolved nitrate stable isotopes using the one-step Ti (III) reduction method and Elementar EnvirovisION System
11:55 - 12:15	Johannes Friedl	A synthesis of 15N isotope methods to inform measurement, scaling and modelling of N2O and N2 emissions from agricultural soils
12:15 - 12:35	Patric Simões Pereira	Acquisition of a new generation multicollector ICP-MS at the Institute of Geology, University of Innsbruck
12:35 - 14:00	**Lunch Break**	
Chair: Albrecht Leis		
14:00 - 14:40	**Keynote: Michael Ernst Böttcher et al.**	**Multi isotope biogeochemistry of a temperate coastal peatland under impact by submarine groundwater discharge and storm-induced flooding**
14:40 - 15:20	**Session 3: Stable Isotopes in Geology**	
14:40 -15:00	Patricia Roeser	Carbon(ate) diagenesis in Lake Constance: A stable isotope geochemical perspective
15:00 - 15:20	Ana-Voica Bojar	Monitoring multi-decadal temperature changes in the Eastern Alps: a tunnel stable isotope archive
15:20 - 15:50	**Coffee Break**	
Chair: Andrea Watzinger		
15:50 - 17:10	**Session 2: Stable Isotopes in Lifesciences**	
15:50 -16:10	Kathiravan Meeran	Effects of Tree Size and Site Characteristics on the Intraspecific Variability of Sessile Oak Growth and Water-Use-Efficiency Response Under Wet-Dry Years
16:10 - 16:30	Sabrina Santos Pires	Sugar Beet Water Uptake Studies Through Water Stable Isotopes
16:30 - 16:50	Magdalena Blanz	Stable isotope ratios to identify seaweed-consumption and fertilisation in archaeology
17:00 - 18:00	**Postersession**	
19:30	**Conference Dinner, Stiegl Keller**	
Saturday, 18.11.2023		
Chair: Stefan Wyhlidal		
9:30 - 11:10	**Session 4 Stable Isotopes in Hydrogeology**	
9:30 - 9:50	Giorgio Höfer-Öllinger et al.	The potential of Stable Isotopes to identify Permafrost degradation, Sattelkar Landslide, Obersulzbachtal, Salzburg
9:50 - 10:10	Julien Farlin et al.	Using isotopes to estimate groundwater recovery times from diffuse pollution
10:10 - 10:30	Michael Stockinger	Lessons learned from the spatiotemporal analysis of long-term and time-variable young water fractions of large Central European catchments
10:30 - 10:50	Selma Hajric	Investigating the impact of land use, slope position, and soil heterogeneity on soil water fluxes in a small agricultural catchment
10:50 -11:10	Eva Kaminsky	Identification of recharge processes in the shallow aquifer of Vienna
11:10 - 11:30	**Coffee Break**	
11:30 - 12:30 Generalversammlung	**SINA General Assembly**	

Poster Session, Friday, 17.11.2023 17:00 - 18:00		
Number	**Presenting Autor**	**Title**
P1	Michael Böttcher	Stable isotopes indicate sources and fate of sulfur in a modern analogue for the Baltic Sea freshwater stage
P2	Michael Böttcher	Biogeochemistry and hydrology of a tidal basin with the northern-most German submarine ground water discharge: A water and carbon isotope perspective
P3	Michael Böttcher	Seasonal and spatial multi-isotope hydrobiogeochemistry of a managed river draining into the southern Baltic Sea
P4	Monis Gcakasi	Establishment and application of the Ti(III) reduction method for analysis of nitrogen isotopes in water samples
P5	Sven Gindorf	Acquiring photosynthesis of cryoflora at remote field sites using stable isotopes (13C)
P6	Linee Goswami	The status of ecosystem functions of polluted lands assessed in situ using plant, soil, and microbial indicators
P7	Micha Horacek	The search for the GSSP for the Spathian-Anisian Boundary - a long story slowly approaching its end?
P8	Martin Kralik	Timing of an Alpine water cycle unraveled by water isotopes and age-dating tracers (3H, 3He, 14C, CFCs, SF6 and 222Rn), Eastern Alps, Austria
P9	Terzia Kunkelova	NAWI Graz Core Facility: Stable Isotopes
P10	Albrecht Leis	Regionalization of stable isotope data (oxygen-18 and deuterium) in Swiss Precipitation for Hydrological Studies
P11	Katharina Schott	Detection of climate change induced drought stress at Rosalia forest using stable isotope methods (13C,18O)
P12	Katharina Schott	Influence of alpine ranges on the isotope signature in precipitation in Austria
P13	Elisabeth Schwaiger	Traceability of fruit and vegetables
P14	Vera Winde	Method for determining the origin of water damage
P15	Paul Zemann	Characterization of the flow regime in a karst aquifer using stable water isotopes (Hochschwab, Austria)
P16	Rebecca Hood-Nowotny	A trans-European decomposition index study in arable soils, focusing on the impact of different depths and plant diversity using a common 13C-labelled litter.