

Book of abstracts

	Page
Program	3
Abstracts for oral sessions	6
Abstracts for poster sessions	18
Notes	28
List of participants	32
Sponsors	34

09:00 – 09:30 **Registration** Hoch Špalíček (Klenby)

09:30 – 09:50 **Welcome & introduction**

09:50 – 10:50 **Oral session I – Nitrogen cycle**

Chair: Stehrer Polášková

1. **Kristýna Kantnerová** *Unravelling new isotopic dimensions of molecules involved in the nitrogen cycle*
2. **Jan Jansa** *Arbuscular mycorrhiza and soil nitrification*

10:50 – 11:30 **Coffee break**

11:30 – 13:00 **Oral session II – Bio/geo/chemistry & ivory**

Chair: Novotná Jaroměřská

1. **Travis Meador** *Stable isotope signatures of substrate utilization by different fungal ecotypes via dual stable isotope probing approach*
2. **Sarah Coffinet** *Compound specific isotope analysis of lipids and metagenomics indicate predominant autotrophic metabolism of Candidatus Bathyarchaeota in a continental wetland*
3. **Sebastien Santoni** *Isotope geochemistry reveals the role of groundwater in CO₂ production and carbon storage in Mediterranean peatlands. Case of the Moltifau peatland (Corsica Island, France)*

13:00 – 15:00 **Conference lunch**

15:00 – 17:00 **Ice skating | Free time**

17:00 – 20:00 **Poster session I + dinner** (Rabenštejnská Tower)



- Micha Horacek – Stable isotope investigations to control the declared geographic origin of Austrian and Slovak apricots, and apricots from other countries
- Kateřina Jandová – Wild or captive bred? Stable isotope analysis of shed skins of green tree pythons as forensic evidence for prohibited trade
- Rebeca Lopez-Adams – Nitrogen fixation dynamics in *Trichodesmium* spp. at the single-cell level
- Travis Meador – Rapid analysis of fungal membrane lipids and their isotopic composition by TMSH derivatization pyrolysis coupled GC-MS/IRMS analysis
- Daniel Petráš – Anoxic iron monosulfide oxidation keeps-up with bacterial sulfate reduction in the transition from nitrogenous to sulfidic redox conditions
- Ljubov Poláková – Determination of nitrate and methane stable isotope composition by modified GasBench and GC-Isolink peripherals
- Mojmír Vašek – Fish scale stable isotopes as potential indicators of nutrient pollution

09:00 – 10:00 **Oral session III – Cryosphere** (Klenby)

Chair: Coffinet

1. **Anna Stehrer Polášková** *The origin of subglacial methane released along the western margin of the Greenland Ice Sheet*
2. **Tereza Novotná Jaroměřská** *Uncovering $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ of invertebrates living on the glacier surface*

10:00 – 10:30 **Coffee break**

10:30 – 11:30 **Oral session IV – Sediments & ivory**

Chair: Santoni

1. **Kateřina Jandová** *Geogenic organic carbon and nitrogen from sedimentary rocks feed the modern decomposer food web*
2. **Micha Horacek** *Species identification of ivory by stable isotope investigations*

12:15 – 17:00 **Lunch + Budvar brewery tour, optional | Ice skating | Free time**

17:00 – 20:00 **Poster session II + dinner** (Rabenštejnská Tower)

- Micha Horacek – Stable isotope investigations to control the declared geographic origin of Austrian and Slovak apricots, and apricots from other countries
- Kateřina Jandová – Wild or captive bred? Stable isotope analysis of shed skins of green tree pythons as forensic evidence for prohibited trade
- Jaroslav Kukla – Legal or illegal pet tortoises? Stable isotope analysis can provide an answer
- Travis Meador – Rapid analysis of fungal membrane lipids and their isotopic composition by TMSH derivatization pyrolysis coupled GC-MS/IRMS analysis
- Anna Mičanová – Organic matter and water isotopes in South Bohemian water bodies
- Daniel Petráš – Anoxic iron monosulfide oxidation keeps-up with bacterial sulfate reduction in the transition from nitrogenous to sulfidic redox conditions
- Jakub Trubač – Effective application of deuterium and oxygen isotopes in the fight against wildlife crime
- Mojmír Vašek – Fish scale stable isotopes as potential indicators of nutrient pollution

09:00 – 09:30 **Oral session V – Plant physiology** (Klenby) *Chair: Kantnerová*

1. **Jiří Šantrůček** *Why so many mouths? Stable isotopes in searching for the purpose of leaf amphistomy*

09:30 – 10:30 **Coffee break**

10:30 – 11:30 **Oral session VI – Food webs** *Chair: Jansa*

1. **Ivana Vejříková** *Individual specialization as an ecological phenomenon strongly dependent on the monitoring period and method*
2. **Lukáš Veselý** *Improved species-specific trophic isotope discrimination factors reduce the uncertainty of aquatic Bayesian food web model*

11:30 **End of meeting**