

## Oral Presentations

Address: Heimatsaal, Paulustorgasse 13a

### Monday, July 10<sup>th</sup>

From 12:00	Registration desk open
15:00- 15:30	Opening of workshop
16:00	Poster Presentation - Session I
18:00	Ice Break Party

### Tuesday, July 11<sup>th</sup>

#### Isotope as tracers of climatic changes

Chairperson: Mariusz-Orion Jędrysek

08:30- 09:20	<i>Invited speaker:</i> Michael Ernst Böttcher	Isotope biogeochemistry of carbonate-bearing sinter in the Anthropocene
09:20- 09:40	Sławomirna Pawełczyk, Anna Pazdur	Climatic signal in oxygen and hydrogen stable isotope ratios of tree rings - case study for Suwałki region
09:40- 10:00	Ashish Sarkar	A Comprehensive Study of the Climatic Changes in the South Asian Region during the Latest Pleistocene till the Present, based on Planktonic Foraminiferal $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ with Special Reference to the Monsoonal Rainfall
10:00- 10:20	Czuppon György, Attila Demény, Szabolcs Leél-Össy, Mihály Óvári, Ke Lin, Mihály Molnár, Máté Karlik, Zoltán Siklósy, Surányi Gergely, Shen Chuan-Chou	The “overshoot” following 8.2 ky event recorded in speleothem from Béke Cave (NE Hungary)
10:20- 10:50	Coffee Break	

		<b>Isotopes in Ecological and Environmental Studies</b>
		Chairperson: Elke Bozau
10:50-11:40	<i>Invited speaker:</i> Dominika Lewicka-Szczebak	N <sub>2</sub> O isotopocules and mineral N isotopes in tracing N cycling in soil and waters
11:40-12:00	Adriana Trojanowska-Olichwer, Marta Jakubiak, Mariusz-Orion Jędrysek	Organic matter origin and transformation in the freshwater sediments of dam reservoirs - insights from C and N stable isotope ratio
12:00-12:20	Barbara Sensuła	Multiproxy, systematic and advanced stable isotopes investigations of Scots pine growing in Silesian forests (Poland) – review of the last ten years research
12:20-12:40	Mariusz Orion Jędrysek, Łukasz Pleśniak, Wojciech Drzewicki, Marta Jakubiak, Grzegorz Lis, Krzysztof Moskwa	Carbon isotope fractionation in the CO <sub>2</sub> -CO-CH <sub>4</sub> system during hard-coal stepwise heating
12:40-13:40	Lunch Break	
13:40-15:00	Poster Presentation - Session II	
15:00	General Assembly	
18:00	Guided tour in Graz, Part I: The city	

		<b>Wednesday, 12<sup>th</sup></b>
		<b>Methodological and Technical Advances in Isotope Studies</b>
		Chairperson: Andrzej Pelc
08:30-09:20	<i>Invited speaker:</i> Erik Kerstel	A quarter century of laser-based water isotope instrumentation
09:20-09:40	P. Swinkels, M. E. G. Hofmann, J. Bhattacharya, J. Woźniak, J. Yan	Performance of the Picarro CRDS water isotope analyzer for $\delta^2\text{H}$ tracer studies
09:40-10:00	Andrzej Pelc, Karolina Marciszuk	Mass spectrometric studies of the formation of negative ions from $\text{SO}_2$ and their application in the analysis of stable sulfur isotopes.
10:00-10:20	Puşcaş CM, Stremţan CC, Armstrong G, Sahlstedt, E, Green D	Laser ablation IRMS – the minimally destructive alternative for in-situ $\delta^{13}\text{C}$ analyses of solid or liquid matrices
10:20-10:50	Coffee Break	
		<b>Water cycle I - Isotopes in Hydro(geo)logy</b>
		Chairperson: Ana-Voica Bojar
10:50-11:40	<i>Invited speaker:</i> Kazimierz Rozanski	Oxygen-17 in isotope hydrology: is it worth to measure it?
11:40-12:00	István Fórizs, József Deák, Irma Dobos, Gyula Scheuer, György Czuppon	Hydrogeochemical study of the $\text{CO}_2$ -rich mineral medical springs at Balatonfüred, Hungary
12:00-12:20	Kanduč T., Novak R., Zuliani T.	Carbon cycling between surface water, groundwater and thermal water interaction at Čateško polje, SE Slovenia: geochemical and isotope approach
12:20-13:20	Lunch Break	
		<b>Water cycle II - Isotopes in Hydro(geo)logy</b>
		Chairperson: Christophe Lécuyer
13:20-13:40	Elke Bozau, Martina Jutta Weichmann, Michael Ernst Böttcher	Hydro- and isotope geochemistry of a ferruginous spring
13:40-14:00	Sarkar Sudipta	Validity of the precipitation minus evaporation (P – E) and/or evaporation minus precipitation (E – P) parameter in climate studies based on $\delta^{18}\text{O}$ , with special reference to a case history from the Eastern Arabian Sea

14:00-14:20	László Elemér, Palcsu László, Leelőssy Á	Cloud formation in different scales and their impact on water isotope signature
14:20	Announcement of price winners for Poster Competition	
17:00	Guided tour in Graz, Part II: The Museum: Natural Sciences	

<b>Thursday, 13<sup>th</sup></b>		
<b>Forensic, Archeology, Diet</b>		
Chairperson: Roxana Ionete		
08:30-09:20	<i>Invited speaker:</i> Thomas Tütken	New isotope approaches to reconstruct the diet and palaeoecology of fossil vertebrates
09:20-09:40	Christophe Lécuyer, Jean-Pierre Flandrois	Mitigation of the diagenesis risk in biological apatite $\delta^{18}\text{O}$ interpretation
09:40-10:00	Thomas Piper, Sophia Krombholz, Mario Thevis	Carbon Isotope Ratios of Phenethylamine and Phenylacetylglutamine and their Applicability to Doping Controls
10:20-10:40	Ana-Voica Bojar, Christophe Lécuyer, William Maher, Hans-Peter Bojar, François Fourel, Ștefan Vasile	Hydrothermal vent fauna, Manus Basin, Papua New Guinea: diet and ecology evidence from multi-element stable isotope geochemistry and arenic speciation
10:40-11:00	Wojciech Krztoń, Edward Walusiak, Iwona Gołaś, Keith Hobson, Petar Žutinić, Marija Gligora Udovič, Antonija Kulaš, Judita Koreivienė, Juřatė Karosienė, Beata Gebus-Czupyt, Anita Galir Balkić, Filip Stević, Tanja Žuna Pfeiffer, Dubravka Špoljarić Maronić, Elżbieta Wilk-Woźniak	Insights into the ecology of planktonic crustaceans: what can we learn using stable isotopes?
11:00-11:30	Coffee Break	
<b>Radiogenic Isotopes and Inert Gases I</b>		
Chairperson: Franz Neubauer		
11:30-11:50	Natalia Piotrowska, Alicja Ustrzycka, Adam Michczyński, Fatima Pawełczyk	AMS spectrometry in the $^{14}\text{C}$ and Mass Spectrometry Laboratory in Gliwice, Poland

11:50-12:10	Făurescu I., Varlam C., Făurescu D., Vagner I., Bogdan D, Costinel D.	Radiocarbon level in the vegetation and atmosphere of Râmnicu Vâlcea, Romania
12:10-12:30	Franz Neubauer, Ruihong Chang, Yunpeng Dong, Johann Genser, Yongjiang Liu	Unraveling mountain belts through U-Pb and Lu-Hf dating of detrital zircon and $^{40}\text{Ar}/^{39}\text{Ar}$ white mica: the Eastern Alps as an example
12:30-12:50	Vagner I., Varlam C., Făurescu I., Bogdan D., Miricioiu M., Făurescu D.	Tritium and Radiocarbon in wines from Drăgșani Area, Vâlcea, Romania
12:50-13:50	Lunch Break	
		<b>Radiogenic Isotopes and Inert Gases II</b>
		Chairperson: István Futó
13:50-14:10	Carmen Varlam, Irina Vagner, Ionuț Făurescu, Diana Bogdan, Denisa Făurescu	Update of the Present Challenges of Environmental Tritium Measurement Using Liquid Scintillation Counting
14:10-14:30	Boglárka-Mercedesz Kis, László Palcsu, Antonio Caracausi, Roland Szalay	The CO <sub>2</sub> -rich gas-emissions from the Carpathians: constraints from noble gas isotopic compositions
14:30-14:50	Gabriella Ilona Kiss, Marjan Temovski, István Futó, László Palcsu	Precise determination of uranium isotopes and their applications in geology
17:00	Congress Dinner Closing Ceremony	
		<b>Friday, 14<sup>th</sup></b>
Starting at 7:00	Field trip day, see Abstract Book for information	

## Poster Presentations

1	Barisevičiūtė R., Ežerinskis Ž., Šapolaitė J., Butkus L.	What can the sediments of a cooling pond say about liquid $^{14}\text{C}$ aqueous discharges from the nuclear power plant: case study Lake Drūkšiai, Ignalina nuclear power plant cooling pond
2	Benisiewicz B., Pawełczyk S., Klusek M.	$\delta^{13}\text{C}$ and intrinsic water use efficiency (iWUE) for trees in various health conditions – case study for Świerklaniec Forest District
3	Botoran O.R., Costinel D., Miricioiu M., Nechita C., Iordache A.M., Badea S.L., Zaharioiu A.M., Sandru C. and Ionete R.E.	Patterns of Isotopic and Biogeochemical Signatures in <i>Picea abies</i> L. Stands in Southern Romania: Implications for Nutrient and Metal Dynamics
4	Michael Ernst Böttcher, Carla Nantke, Antonia Schell, Donald E. Canfield, Cátia M. Ehlert von Ahn, Iris Schmiedinger	A stable isotope look on benthic sources for dissolved inorganic carbon in the North Sea: The Skagerrak example
5	Andrea Czébély, Marianna Túri, Diána Kiss, Gábor Újvári, László Rinyu	Clumped isotope temperatures obtained from snail shells and earthworm biospheriods from the Dunaszekcső loess record: comparability and the effect of sample preparation methods
6	Costinel Diana, Ionete Roxana Elena, Botoran Oana Romina, Miricioiu Marius Gheorghe, Mathiu Teodora Maria	Experimental study on $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ in conifer plant materials - investigation of their potential as markers for geographical and botanical origin
7	Czuppon Gy., Demény A., Palcsu L., Braun M., Stieber J., Dobosy P.	Cave monitoring in Hungarian: preliminary results from Ca and Mg isotopes analyses of drip water
8	Czuppon-Lázár M., Kovács J., Dobosy P., Stieber J., Gruber P., Czuppon Gy.	Chemical and isotopic characteristics of springs in Aggtelek karst, Hungary
8	Sushmita Deb and Dominika Lewicka-Szczebak	Nitrate removal in contaminated aquifers – laboratory incubations with isotope analyses of $\text{NO}_3^-$ , $\text{NO}_2^-$ and $\text{N}_2\text{O}$

9	Gebus-Czupyt B., Chmiel S., Kończak M., Jacek Stienss, Huber M., Mulczyk A., Radzikowska M., Stępniewski K., Plizga M., Zielińska B.	The use of isotopic approach ( $\delta^{18}\text{O-PO}_4$ ) to determine phosphorus origin in selected surface waters of the Vistula and Bug interfluve
10	Gebus-Czupyt B., Johnston V. E., Otoničar B., Tyc A., Šarc F., Ciesielczuk J., Gaidzik K.	Isotopic approaches in research on dedolomitization and speleogenesis processes in Rovte area (central Slovenia)
11	Hałaszko A., Pawełczyk S., Pawełczyk F., Piotrowska N.	Analyses of stable carbon ( $\delta^{13}\text{C}$ ) and nitrogen ( $\delta^{15}\text{N}$ ) isotope ratios from unburnt human remains from Świbie
12	Ionete R.E., Costinel D., Botoran O.R., Miricioiu M., Mathiu T.	Potential of $^{18}\text{O}$ isotope signature for detecting adulteration of wine
13	Marta Jakubiak, Adriana Trojanowska- Olichwer, Natalia Krzyśków, Mariusz Jędrysek, Zygmunt Kącki, Mateusz Meserszmit, Grzegorz Swacha	$\text{CO}_2$ and $\text{CH}_4$ fluxes from different meadows
14	Kukla J., Jandová K., Trubač J., Rajmonová E. and Kufnerová J.	Is stable isotope analysis useful for determining of the origin smuggled turtles?
15	Lewicka-Szczebak D., Lewicki M., Skrzypek G.	Isotope FRActionation and Mixing Evaluation (FRAME) with a new modelling tool applying the Monte Carlo approach
16	Lojen S., Zuliani T., Vreča P., Kanduč T., Tičar J., Lipar M., Anton Melik, Rusjan S.	Drip water monitoring in a shallow karst cave (Jama v Dovčku, SE Slovenia): O, H and C stable isotopes as input parameters for climate reconstruction
17	A. Pierchala, M. Dulinski, K. Rozanski, Z. Gorczyca, R. Czub, M. Marze	Isotope effects accompanying $\delta^2\text{H}$ , $\delta^{18}\text{O}$ and $\delta^{17}\text{O}$ analyses of brines using cavity ring-down laser spectroscopy: insights from dedicated laboratory experiments
18	Pleśniak Ł., Woźniak W., Wierzbicki M., Jędrysek M.-O.	Variability of gases concentration and carbon stable isotopic composition of methane and carbon dioxide in an exploited hard coal mine
19	Pușcaș C.M., Stremțan C.C., Armstrong G., Green D.	Laser Ablation IRMS analyses of $\delta^{13}\text{C}$ in solid and liquid food
20	Barbara Sensuła	Similarities and contrasts in $\delta^{15}\text{N}$ in pine growing in Silesia

21	Barbara Sensuła, Sławomir Wilczyński	The impact of pluvial and thermal conditions on the pines growing in the forests of Silesia and Opole voivodeships.
22	Siira J., Beier C., Jokinen S., Karhu S., Rantanen M., Welling A., Lahtinen M.	Strontium isotopes in Finnish strawberries and agricultural soils
23	Sławomira Pawełczyk, Anna Pazdur	Climatic signal in oxygen and hydrogen stable isotope ratios of tree rings - case study for Suwałki region
24	Marek Sulejewski, Jacek Pawlyta	Isotopic investigations of stratigraphic divisions in Triassic dolomites (Jaworzno, southern Poland)
25	Ustrzycka A., Piotrowska N., Rousseau D.D., Kaczmarek K., Bonk A., Tylmann W., Filipiak J	Carbonates isotopic response on physical and chemical condition for 50 Polish lakes
26	Wojciech Drzewicki, Henryk Marszałek, Dorota Górniak, Marta Jakubiak, Mariusz Jędrysek	Seasonal geochemical, isotopic and microbial circulation in the area of a closed pyrite mine in Wieściszowice (Sudetes, Poland)

All posters may participate to Poster Competition. Three Awarded Posters will be decided by a jury and announced on Wednesday; further information is included in the Programme.