4th Geoenergetics and Geothermal Heat Pumps Seminar on:

"GeoHorizons – discover potential of the Earth"

Krakow, Podhale, Poland, 16-18 of October 2024

The programme includes:

- U official speeches;
- U paper sessions;
- U posters session;
- U exhibition of equipment and materials;
- celebration of the 70th anniversary of the GEOWIERT Student Scientific Organization at AGH UoK;
- U presentations of geoenergetics installations at the AGH University of Krakow and in the Podhale;
- U integration events.

GEOENERGETICS

AGH





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Hybrid conference

www.geoenergetyka.agh.edu.pl +48 664 05 63 30; +48 660 59 64 28

"GeoHorizons - discovering the Earth's potential" Krakow, Podhale,16-18 October 2024.

Possibilities to participate in the Seminar

Package version	Printed Conference Materials	Electronic Conference Materials	Online participation via MS Teams on 16 and 17 October	A pass for the Gorący Potok thermal baths in Podhale	Adverts
A	×	×		× //	Nor
В	·	×	ling Il	×	- /
C	x	x	1	x	1
. D	x	×	×	35 7/	6
-E		x	- x-	3-1/7	-
F				1/2	x

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Preliminary program

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Day Hour		Event		
16 October 2024/AGH UoK Krakow	from 14 ⁰⁰	Registration of participants, ground floor pavilion A4		
	15 ⁰⁰ -16 ³⁰	Welcome session, papers by the GEOWIERT Student Scientific Association on its 70th anniversary		
	16 ³⁰ -16 ⁴⁵	Coffee break, advertising, ground floor pavilion A4		
	16 ⁴⁵ -17 ³⁰	Inauguration of an exhibition of drilling and installation equipment and materials		
	17 ³⁰ -18 ³⁰	Welcome cocktail, refreshments A4 room 1 and 2		
17 October 2024/AGH UoK Krakow	od 8 ⁰⁰	Registration of participants		
	$9^{00} - 10^{30}$ $10^{45} - 12^{15}$ $12^{30} - 14^{00}$ $15^{30} - 17^{00}$ $17^{15} - 18^{45}$	Papers sessions		
	14 ⁰⁰ – 15 ³⁰	Lunch, A4		
	$10^{30}-10^{45}$ $12^{15}-12^{30}$ $12^{15}-12^{30}$ $12^{15}-12^{30}$ $17^{00}-17^{15}$	Coffee breaks, advertisements, including an exhibition of drilling and installation equipment and materials		
	19 ³⁰	Drilling Beer Inn+Woman's Comber=Beer Feast in C.K. Brewery, Krakow, Podwale St. 7, <u>ckbrowar.pl</u>		
18 October 2024/Podhale*	12 ⁰⁰	Field session: Podhale		
	$14^{00} - 15^{00}$	Lunch		
18 2024.	17 ⁰⁰	Geothermal swimming pool complex*		

* Please bring your bathing "equipment"

*programme sub

Titles of the papers (as of September 23)

- 1. Seminar lecture what's new in geoenergetics and the Laboratory.
- 2. Adaptation of diagonal drilling for various boreholes, including borehole heat exchangers.
- 3. Construction of a Geothermal Heating Plant in Konin as an example of efficient use of the geothermal resources of the Polish Lowlands.
- 4. Energy consumption measurements for optimising the drilling process of borehole heat exchangers.
- 5. Overview of structures found in shallow geothermal applications.
- 6. Influence of selected design parameters of borehole heat exchangers on their thermal resistance.
- 7. Summary of the paper on the BANSKA PGP-4 geothermal borehole.
- 8. Geoenergetics in smart heat and air conditioning networks.
- 9. Cogeneration solar farms with borehole storage of heat and potential energy.
- 10. Experience in the provision and use of low-temperature geothermal energy.
- 11.Life cycle environmental impact analysis a new requirement also for geothermal heat pumps.
- 12. Monitoring of geothermal water parameters as part of proper plant operation.
- 13.Statistical comparison of the interpretation of TRT results by different methods.
- 14. Opportunities for the extraction of Earth's heat in specialised buildings.
- 15.Geothermal drilling muds key selection criteria.
- 16. Unconventional applications of HDD technology.
- 17. Activity plans of SKN GEOWIERT drilling section.
- 18. Plans of activities of SKN GEOWIERT geoengineering section.
- 19. Technical aspects of casing drilling of geothermal well sections in absorption formations with mud decay experience from oil wells.
- 20.Selection mothod of ground heat exchangers vs. efficiernt functioning of a heat pump system.
- 21. Geothermal Research at VSB Technical University of Ostrava

The 4th Seminar in particular invites:

- U designers of heating and air-conditioning systems, sanitary installations;
- U drillers;
- U district and local geologists;
- manufacturers and distributors of geothermal/ground source heat pumps;
- U students and doctoral candidates in geology, mining, district heating and construction;
- u suppliers and manufacturers of fittings, equipment and materials for the geoenergetics industry;
- U researchers and educators in the field of geoenergetics.

Organisational considerations

1. Accommodation in Krakow (nights from 16 to 17 October and/or from 17 to 18 October each participant books and pays on his/her own). We suggest that you stay at the hotels listed below by calling the phone number or sending an e-mail:

1) Hotel Logos (with the keyword **"GEOENERGETYKA" 15% discounts**), [Jozefa Szujskiego 5, 31-123 Krakow, +48 12 631 62 00, <u>rezerwacja@hotel-logos.pl</u>];

2) Hotel Krupnicza 30 (with the keyword **"GEOENERGETYKA" 13% discounts**), [Krupnicza 30, 31-123 Krakow, +48 690 624 267, <u>info@krupniczahotel.pl</u>, <u>https://www.larishotels.com/</u>];

Hotel Polonez [Wladyslawa Reymonta 15, 30-059 Krakow, +48 12 292 82 94, <u>recepcja@hotel-polonez.pl</u>]
2. Parking in the AGH area is chargeable. For those wishing to do so, it is possible to leave the car on the AGH premises.

3. Transport to the Podhale on 18 October is provided by each participant individually.

4. Travel between sites in the Podhale region is provided by each individual.

5. Registration at: <u>geoenergetyka.agh.edu.pl</u> (IV Seminar), **until 30 September** reduced fee (450 EUR + VAT), after 30 September 2024 full fee (650 EUR + VAT). Online participation on 16 and 17 October - fee 170 EUR + VAT. Registration until 11 October 2024.

6. Payments to bank account:

PKO Bank Polski S.A. Account number for deposits in euro (EUR): 57 1020 4405 0000 2102 0683 8470, GeoTec Energy Sp. z o.o., ul. Wincentego Pola 4/22, 35-021 Rzeszów, with the title "AGH Seminar, [pro-forma invoice number], [name and surname]".

7. Deadline for submitting topics and abstracts of speeches or posters: 30 September 2024 - form available with participation registration (geoenergetics.agh.edu.pl).

8. Deadline for submission of full papers for publication in post-seminar materials: **30 November 2024** - details will be provided to authors at a later date.

Honorary Committee

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UOS Drilling

Charges						
Package version	Package name	Price				
Α	Full seminar fee paid by 30 September 2024 ¹	450 EUR+ VAT				
В	Full seminar fee paid after 30 September 2024	650 EUR+ VAT				
С	Online participation ²	170 EUR + VAT				
D	Free participation ^{2,3}	0				
	Advertise	From 230 EUR+ VAT				
E	Diamond package (gadgets, roll up, advertising films during breaks in the papers [screen, monitor], files with advertising materials on pendrives, exhibition stand/exhibition table [outside/inside the building] size* adapted to your needs, post on LinkedIn) -> from 1550 EUR* the organisers must be informed in advance about the size of the stand needed					
	Platinium package (gadgets, roll up, advertising films during breaks in the papers [screen, monitor], files with advertising materials on pendrives, post on LinkedIn) -> from 755 EUR					
	Gold package (gadgets, roll up, advertising films during breaks in the papers [screen, monitor], post on LinkedIn) -> from 380 EUR					

Silver package (gadgets, leaflets with seminar materials) -> from 230 EUR

1 - the date of crediting the Organiser's account is decisive,

2 - Online participation: transmission of papers on 16 and 17 October 2024 and advertising,

3 - for students and graduates of the specialisation 'Geoengineering and Geothermal' in the course 'Geoengineering and Borehole Mining' (2nd degree), for doctoral students of the teaching module 'Geothermal Energy', for students of the Postgraduate Course 'Geothermal' at AGH University of Krakow.

The number of places for full-time participants is limited