



International conference
**Earth as a Human-Environmental System:
Challenges and Dynamics**

CONFERENCE PROGRAMME



Institute of Geography and Spatial Management
Jagiellonian University in Kraków
6–8 May 2024, Kraków, Poland

Honorary patronage
of the Rector of the Jagiellonian University

Prof. Jacek Popiel



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Organizer

Institute of Geography
and Spatial Management,
Jagiellonian University,
Kraków, Poland

Venue

Campus of the 600th Anniversary
of the Jagiellonian University Revival,
Kraków, Poland,
7 Gronostajowa St.



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Elżbieta Jagłowska, M.Sc. and Maciej Pilch, M.Sc. Eng. (Jagiellonian University
Centre for Communications and Marketing - Conferences)

Inspiration

The conference aims to stimulate new ideas and foster collaborations in the field of geography and related research areas. The meeting brings together scientists to discuss the diverse research areas that are relevant and linked to contemporary and perspective future geographical studies.

In 2024, Institute of Geography and Spatial Management celebrates **175th anniversary of its establishment as the second chair of geography in Europe**, after the one in the University of Berlin. In 1849, Professor Wincenty Pol organized this first Polish geographical university unit. Geographical studies were initiated in the University of Kraków (today: Jagiellonian University) already in the 15th century, as the university was established in 1364. The jubilee is a good opportunity to determine the issues relevant for future sustainable human-environmental interactions which are rooted both in the previous geographical studies and past environmental changes.



Wincenty Pol

Wincenty Pol (1807–1872)

Founder of the Institute of Geography and Spatial Management,
Jagiellonian University

Timing and location of the sessions: Overview

6.05.2024, Jagiellonian University – Campus, 7 Gronostajowa St.				
Lecture room: Main Aula	10:30-12:00 – Plenary keynote session 1			
	12:30-14:00 – Plenary keynote session 2			
Time Slots	Lecture rooms			
	1.21	1.23	1.25	1.26
1. 15:00–16:30	Session 1.1	Session 3.1	Session 4.1	Session 2
19:00	Conference Gala Dinner			
7.05.2024, Jagiellonian University – Campus, 7 Gronostajowa St.				
2. 10:00–11:30	Session 1.2	Session 3.2	Session 4.2	Session 5.1
3. 12:00–13:30	Session 1.3	Session 3.3	Session 4.3	Session 5.2
4. 14:30–16:00	Session 1.4	Session 3.4	Session 4.4	
8.05.2024, Jagiellonian University – Collegium Novum, 24 Gołębia St.				
Lecture room: Aula	10:00–12:00 – Special session: 175 years of geographical studies in Kraków			
	12:00–12:30 – Jubilee toast, presentation of the 3D map of Scotland and coffee break			
	12:30–14:00 – Closing panel session: conclusions from thematic sessions and future perspectives of geographical research			
9.05.2024, Conference trips				

6.05.2024, Monday

Location: Jagiellonian University in Kraków, Campus of the 600th Anniversary of the Jagiellonian University Revival, 7 Gronostajowa St., Didactic-Library Complex, Main Aula

9:00–10:00	Registration
10:00–10:30	Conference opening
10:30–12:00	Plenary keynote session 1
10:30–11:00	Prof. Dagmar Haase – Helmholtz Centre for Environmental Research, Leipzig, and Humboldt–Universität zu Berlin, Germany <i>Urban ecosystem: Services and conflicts</i>
11:00–11:30	Dr. Estela Nadal–Romero – El Instituto Pirenaico de Ecología, IPE–CSIC, Zaragoza, Spain <i>Soils in the Anthropocene: Hazards, challenges and opportunities</i>
11:30–12:00	Prof. Jens-Christian Svenning – Aarhus University, Denmark <i>Dynamic land use changes: opportunity for rewilding?</i>
12:00–12:30	Coffee break
12:30–14:00	Plenary keynote session 2
12:30–13:00	Prof. Stefan Brönnimann – University of Bern, Switzerland <i>Climate change: Detection and impacts</i>
13:00–13:30	Prof. Chiara Rabbiosi – University of Padova, Italy <i>Tourism (Re)configured: Geographical Thinking in Tourism Studies</i>
13:30–14:00	Discussion
14:00–15:00	Lunch

Location: Institute of Geography and Spatial Management, 7 Gronostajowa St., lecture rooms: 1.21, 1.23, 1.25, 1.26

15:00-16:30	Thematic sessions, time slot 1
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Session 1.

Urban ecosystem: Services and conflicts

Lecture room 1.21

1.1. Changes in urban ecosystems

Chairperson: Katarzyna Gorczyca

POSTERS	
15:00–15:10	1. Julia Gorzelany , Tomasz Noszczyk, Anita Kukulska-Koziel, Józef Hernik <i>Social ecosystem services provided by urban green spaces – experiences from Krakow</i>
	2. Klaudia Plac <i>Thermal-sensitive city users and the microclimate of human habitats. Thermal comfort, safety and urban fabric planning in the selected Polish cities</i>
ORAL PRESENTATIONS	
15:10–15:30	Katarzyna Krasnodębska , Przemysław Śleszyński, Andrzej Affek <i>Systematic mapping on modelling systemic changes in urban growth models - preliminary results</i>
15:30–15:50	Matej Wagner , Veronika Kvetonova, Michal Lehnert <i>Application of the 3-30-300 rule in Czech cities</i>
15:50–16:10	Veronika Kvetonova , Michal Lehnert, Jiri Panek, Jan Geletic, Petr Simacek <i>Different perspectives on the identification of urban thermal hotspots and coolspots, using the example of Prague</i>
16:10–16:30	Agata Lewandowska , Justyna Chodkowska-Miszczuk, Jagoda Ulewicz <i>Just transition – theory and practice. An example of an unfinished nuclear power plant in Żarnowiec, Poland</i>

Session 2.

Soils in the Anthropocene: Hazards, challenges and opportunities

Lecture room 1.26

Chairpersons: Anita Bernatek-Jakiel, Łukasz Musielok

POSTERS	
15:00–15:20	1. Anna Bucała-Hrabia , Rafał Krocak, Tomasz Bryndal <i>Mapping sensitivity to land degradation in a small catchment using a modified MEDALUS method (Polish Carpathians)</i>
	2. Maciej Liro , Anna Zielonka, Tim H.M. van Emmerik <i>Rivers as macrosplastic fragmenters</i>
	3. Anna Zielonka , Maciej Liro <i>Global riverine macroplastic hotspots</i>
	4. Beata Łabaz , Alfred E. Hartemink, Yakun Zhang, Annalisa Stevenson, Cezary Kabała <i>Organic carbon in Mollisols of the world – a review</i>
	5. Patrycja Kramarczuk , Wojciech Szymański <i>Influence of vegetation on soil organic matter composition and spectroscopic properties in the subalpine zone of the Bieszczady Mountains (Eastern Carpathians)</i>
ORAL PRESENTATIONS	
15:20–15:40	Maciej Liro , Anna Zielonka <i>Tracking macroplastic fragmentation across world biomes</i>
15:40–16:00	Milica Kašanin-Grubin , Nevena Antić, Snežana Štrbac, Sanja Stojadinović, Vukašin Rončević, Nikola Živanović <i>Soil dynamics in an urban forest as a result of parent material and land use</i>
16:00–16:20	Anita Bernatek-Jakiel , Matthias Vanmaercke, Jean Poesen, Anna Biernacka, Pasquale Borrelli, Anastasiia Derii, Joanna Hałys, Joseph Holden, Gergely Jakab, Michał Jakiel, Panos Panagos, Dawid Piątek, Taco H. Regensburg, Jan Rodzik, Estela Nadal-Romero, Mateusz Stolarczyk, Els Verachtert, Patryk Waclawczyk, Wojciech Zgłobicki <i>Susceptibility to piping erosion in Europe</i>
16:20–16:40	Dawid Piątek , Anita Bernatek-Jakiel <i>How does ski infrastructure change soil erosion processes on hillslope?</i>
16:40–17:00	Łukasz Musielok , Marek Drewnik, Mateusz Stolarczyk, Wojciech Szymański – <i>Assessing the effect of windthrows on soil organic carbon storage in different soil types – a case study in the Tatra Mountains, Southern Poland</i>

Session 3.

Dynamic land use changes: opportunity for rewilding?

Lecture room 1.23

3.1. Chairperson: Jacek Kozak

POSTERS	
15:00–15:50	1. Adriana Marcinkowska-Ochtyra , Adrian Ochtyra, Krzysztof Gryguc <i>Multitemporal satellite data as a potential for mapping mountain vegetation</i>
	2. Maciej Misztal <i>Functional mix on a city scale – the example of Warsaw</i>
	3. Małgorzata Kijowska-Strugała , Witold Bochenek, Sabina Wójcik, Tomasz Szydłowski <i>The impact of land use change on river water quality, an example from the Polish Western Carpathians</i>
	4. Maksymilian Solarski <i>The impact of contemporary hard coal exploitation on the development of subsidence basins in the Upper Silesian Coal Basin</i>
	5. Wojciech Haska , Maciej Liro, Paweł Mikuś, Elżbieta Górczyca <i>Road-side delivery of household waste to fluvial systems – the case of Kamienica Górczańska catchment (Polish Carpathians)</i>
ORAL PRESENTATIONS	
15:50–16:10	Anton Van Rompaey , Lisa-Marie Hemerijckx <i>Towards a new landscape typology for the analysis of rural abandonment in Europe</i>
16:10–16:30	Wiesław Ziąja <i>Natural rewilding of the Sørkappland (Spitsbergen) coastal landscape</i>

Session 4.

Climate change: Detection and impacts

Lecture room 1.25

4.1. Climate variability 1

Chairperson: Agnieszka Wypych

ORAL PRESENTATIONS	
15:00–15:20	Marián Melo , Martin Gera, Samuel Radič <i>Climate trends and climate change scenarios in Slovakia until 2100</i>
15:20–15:40	Ewa Łupikasza <i>Changing probabilities of days with snowfall and rainfall in the Atlantic Arctic under the climate warming</i>
15:40–16:00	Joanna Wibig <i>Are heatwaves and drought more likely to occur simultaneously with warming?</i>
16:00–16:20	Zbigniew Ustrnul , Jan Rehor, Agnieszka Wypych <i>Atmospheric circulation classifications for Central Europe – inventory approach</i>
POSTERS	
16:20–16:30	1. Julia Sałaja , Polina Danchenkova <i>Changes in the duration of snow cover extent in Central Europe (1951–2022)</i>
	2. Jakub Słotwiński <i>Urban heat island in the Górnośląsko-Zagłębiowska Metropolis: modelling the intensity and spatial extent of the phenomenon</i>

19:00	Conference Gala Dinner
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7.05.2024, TUESDAY

Location: Jagiellonian University in Kraków, Campus of the 600th Anniversary of the Jagiellonian University Revival, 7 Gronostajowa St., Institute of Geography and Spatial Management, lecture rooms: 1.21, 1.23, 1.25, 1.26

9:00–10:00	Registration
10:00–11:30	Thematic sessions, time slot 2

Session 1.

Urban ecosystem: Services and conflicts

Lecture room 1.21

1.2. Green urban areas: services and conflicts

Chairperson: Bolesław Domański

10:00–10:20	Agata Warchalska-Troll , Paweł Pistelok, Anna Zielonka <i>When green meets compactness. In search for good practices of and challenges for implementing a green compact city idea in four Polish cities</i>
10:20–10:40	Marcin Rechciński , Joanna Tusznio, Małgorzata Grodzińska-Jurczak <i>Urban protected areas within a complex social-ecological system: Navigating conflict determinants through spatial indicator clustering and analysis of residents' perceptions</i>
10:40–11:00	Agnieszka Nowak-Olejnik , Jarosław Działek, Joanna Hibner, Justyna Liro, Rafał Madej, Martin Sudmanns, Dagmar Haase <i>Exploring Cultural Ecosystem Services and Disservices in Urban Green Spaces</i>
11:00–11:20	Katarzyna Gorczyca , Łukasz Fiederń, Agnieszka Świgost Kapocsi, Magdalena Miśkowiec, Anna Sławik , Jacek Strojny <i>Green urban areas – places for building resilient communities or places where conflicts burn out?</i>
11:20–11:30	Discussion

Session 3.

Dynamic land use changes: opportunity for rewilding?

Lecture room 1.23

3.2. Rewilding in Central Europe

Chairperson: Ewa Grabska-Szwagryk

10:00–10:20	Roman Gula , Katarzyna Bojarska, Dominik Kaim, Jacek Kozak, Mahsa Shahbandeh, Joanna Toczydłowska <i>Renaturalization and wolf habitat</i>
10:20–10:40	Dominik Kaim , Michał Jakiel, Piotr Szubert, Volker Radeloff <i>Decline in the wildland-urban interface as opportunity for rewilding</i>
10:40–11:00	Aleksandra Zwolska , Marek Pótrolniczak, Leszek Kolendowicz <i>Urban Growth's Implication on Land Surface Temperature in a Medium-Sized European City based on LCZ classification</i>
11:00–11:20	Adam Babuljak , Raquel Nogueira Rizzotto Falcão, Josef Krása, Tomáš Dostál <i>Římov Catchment: A Chronicle of Land-Use Transformations and Their Hydrologic Impacts</i>
11:20–11:30	Discussion

Session 4.

Climate change: Detection and impacts

Lecture room 1.25

4.2. Climate variability 2

Chairperson: Joanna Wibig

10:00–10:20	Miloslav Muller, Marek Kašpar <i>Czech and Central-European extreme weather events since 1961</i>
10:20–10:40	Kristina Szaboova <i>Correlation between increasing average temperature and increasing sultry days in one of the hottest places in Slovakia</i>
10:40–11:00	Zuzanna Bielec-Bąkowska <i>Long-term variability of air masses temperature in Kraków (1961–2023)</i>
11:00–11:30	Discussion

Session 5.

Tourism (Re)configured: Geographical Thinking in Tourism Studies

Lecture room 1.26

5.1.

Chairperson: Joanna Hibner

POSTERS	
10:00–10:30	1. Vladimir Cech , Jana Vaskova, Radoslav Klamar <i>Adventure tourism development in Slovakia (on the example of hunting tourism and via ferrata´s climbing)</i>
	1. Justyna Liro <i>The interdependencies of religious tourists' attributes in the light of contemporary socio-cultural changes</i>
	3. Justyna Liro , Anna Zielonka, Magdalena Kubal-Czerwińska, Elżbieta Bilaska-Wodecka, Izabela Sołjan, Aneta Pawłowska-Legwand <i>The relations of the religiosity components and participation in religious and spiritual tourism of young adults – Generation Z</i>
ORAL PRESENTATIONS	
10:30–10:50	Adela Malak <i>Tourist experience of the national parks in Poland</i>
10:50–11:10	Weronika Michalska <i>Comparison of tourism potential of ZOO Wroclaw and Warsaw Zoological Garden</i>
11:10–11:30	Discussion
11:30–12:00	Coffee break
12:00–13:30	Thematic sessions, time slot 3

Session 1.

Urban ecosystem: Services and conflicts

Lecture room 1.21

1.3. Green transformation. Just plants or more?

Chairperson: Agnieszka Nowak-Olejnik

POSTERS	
12:00–12:30	1. Małgorzata Pietrzak , Małgorzata Luc <i>HEXAGEODESIGN GAME – an educational hierarchical game about public space</i>
	2. Sylwia Kulczyk, Piotr Matczak, Iwona Zwierzchowska, Michał Litwiński, Krzysztof Mączka, Alina Gerlée , Marta Derek, <i>Ecosystem Services-Based Planning and Management of Multifamily Residential Areas: Bridging Practitioners' Approaches and Residents' Preferences</i>
	3. Łukasz Gręda <i>Capitals and biggest cities – different ways to measure distance between countries</i>
	4. Anna Kropyvnytska , Maksymilian Łepeck, Mateusz Mirlak, Arleta Pająk , Marta Skupińska, Arkadiusz Wróbel, Jadwiga Gałka <i>Integration of immigrants with local society in the Berlin</i>
ORAL PRESENTATIONS	
12:30–12:50	Anna Avdiushchenko <i>Urban circular development and post-war green recovery: connections between concepts</i>
12:50–13:10	Jakub Taczanowski , Arkadiusz Kołoś, Łukasz Fiedzeń, Robert Guzik, Adam Parol, Krzysztof Gwosdz, Jakub Łodziński <i>Implementation of electromobility in public transport in the context of sustainable urban development and climate change challenges. The case of Poland</i>
13:10–13:30	Discussion

Session 3.

Dynamic land use changes: opportunity for rewilding?

Lecture room 1.23

3.3. Land cover remote sensing

Chairperson: Dominik Kaim

12:00–12:20	Zuzana Pazurova , Šimon Opravil, Robert Pazur <i>Hotspots of land cover change in national parks and their buffer zones in the last 20 years in Slovakia</i>
12:20–12:40	Adrian Ochtyra , Adriana Marcinkowska-Ochtyra, Krzysztof Gryguc, Edwin Raczko <i>Satellite imagery for monitoring changes in natural environment</i>
12:40–13:00	Katarzyna Cegielska, Anita Kukulska-Kozieł , Józef Hernik, <i>Human-environmental relation as a component of identification and assessment of areas susceptible to changes in land use and land cover</i>
13:00–13:20	Paulina Pisarczyk , Ewa Bubula, Ewa Grabska-Szwagrzyk <i>Land cover dynamics in Połaniec town over the last two decades seen from aerial imagery</i>
13:20–13:30	Discussion

Session 4.

Climate change: Detection and impacts

Lecture room 1.25

4.3. Urban climate

Chairperson: Ewa Łupikasza

12:00–12:20	<p>Marta Róg <i>Hottest days of summer 2023 in Kraków – what they tell us about interconnections between Biotope Area Factor, Land Surface Temperature, and Urban Heat Island.</i></p>
12:20–12:40	<p>Jan Geletic, Pavel Krc, Jaroslav Resler, Martin Bures, Hynek Reznicek, Michal Belda. <i>The complex role of trees as the most popular heat wave mitigation measure in Czech cities.</i></p>
12:40–13:00	<p>Anita Bokwa, Mateusz Durka, Piotr Sekuła <i>Quantitative evaluation of the impact of land form and urban structure on UHI intensity spatial pattern in Kraków, Poland.</i></p>
13:00–13:30	Discussion.

SESSION 5.

TOURISM (RE)CONFIGURED: GEOGRAPHICAL THINKING IN TOURISM STUDIES

Lecture room 1.26

5.2.

Chairperson: Magdalena Kubal-Czerwińska

12:00–12:20	Julia Glibowska , Tomasz Wites <i>Saving the indigenous – how to preserve Huaorani culture and cope with climate change.</i>
12:20–12:40	Chao Lei <i>Restructuring of rural cultural spaces in tourism development: A case study of reviving the Star Worshipping Festival in Zhangbi Ancient Fortress.</i>
12:40–13:00	Joanna Hibner <i>Exploring visitor spatial behavior trends in protected and recreational areas – a research concept.</i>
13:00–13:20	Małgorzata Luc , Krzysztof Grabarek, Bartłomiej Ślowski, Julia Zwolińska, Bartosz Zarzecki, Jerzy Walaszek <i>The Great Polish Map of Scotland – is this model really carthometric?</i>
13:20–13:30	Discussion

13:30–14:30	Lunch
14:30–16:00	Thematic sessions, time slot 4

Session 1.

Urban ecosystem: Services and conflicts

Lecture room 1.21

1.4. Conflicts, participation, research. Urban ecosystems

Chairperson: Łukasz Fiedeń

14:30–14:50	Marta Derek , Sylwia Kulczyk, Tomasz Grzyb, Edyta Woźniak <i>'Walk and talk' about nature in nature. A qualitative approach to analyse conflicts and trade-offs in urban green spaces</i>
14:50–15:10	Gergely Papp <i>Complex socio-ecological framework development of the revitalisation of post-industrial urban peripheries' intangible and tangible heritage</i>
15:10–15:30	Hossein Talebi Khiavi , Jan Feranec, Robert Pazur <i>Urban land use change in Europe; linking green space connectivity and biodiversity</i>
15:30–15:50	Ewa Bubula , Paulina Pisarczyk, Ewa Grabska-Szwagrzyk <i>Dynamics of land use in small towns in Poland: A case study of Bodzentyn and Połaniec</i>
15:50–16:00	Discussion

Session 3.

Dynamic land use changes: opportunity for rewilding?

Lecture room 1.23

3.4. Land use and land cover: Case studies

Chairperson: Dominik Kaim

POSTER	
14:30–14:40	Tomáš Hrdý <i>The Shift of the Upper Treeline in the Ďumbier Tatras on Historical Maps and Current Aerial Photographs</i>
ORAL PRESENTATIONS	
14:40–15:00	Pavel Hronček, Bohuslava Hrončeková Gregorová, Tomáš Hrdý <i>River landscape in Banska Bystrica (Slovakia) at the beginning of the 18th century</i>
15:00–15:20	Urszula Myga-Piątek, Anna Żemła-Siesicka , Bartłomiej Szypuła, Agnieszka Piechota <i>Method for assessing landscape changes caused by deep mining of hard coal in mining areas on the example of Jastrzębska Spółka Węglowa (Poland)</i>
15:20–15:40	Karol Król , Tomasz Salata, Józef Hernik, Anita Kukulska-Kozieł, Katarzyna Cegielska <i>GeoSen: map applications with an artificial intelligence (AI) component – prototype application</i>
15:40–16:00	Tomasz Salata <i>Application of machine learning algorithms and satellite imagery in identifying land cover changes</i>
16:00–16:20	Discussion

Session 4.

Climate change: Detection and impacts

Lecture room 1.25

4.4. Climate change impacts, adaptation and mitigation

Chairperson: Zbigniew Ustrnul

14:30–14:50	Oksana Pelyukh <i>Vulnerability of mountain forest ecosystem of the Ukrainian Carpathians: application of the DPSIR framework</i>
14:50–15:10	Agnieszka Sulikowska , Ewa Grabska-Szwagrzyk, Agnieszka Wypych <i>Air temperature impact on springtime tree phenology in Poland based on satellite data</i>
15:10–15:30	Patryk Kaczmarek , Paweł Churski, Katarzyna Fagiewicz, Tomasz Herodowicz, Piotr Lupa, Joanna Morawska, Andrzej Mizgajski <i>Co-creation for climate action – experience with implementing NBS's</i>
15:30–16:00	Discussion

8.05.2024, Wednesday

Location: Jagiellonian University in Kraków, Collegium Novum, 24 Gołębia St., Aula

9:00–10:00	Registration
10:00–12:00	Special session: 175 years of geographical studies in Kraków <i>175 years of the Institute of Geography and Spatial Management</i> <i>Wincenty Pol: The poet who loved geography</i> <i>The map of Scotland: Creative cartography yesterday and tomorrow</i> <i>Geographical kaleidoscope: Diversity of current geographical research in the Jagiellonian University</i>
12:00–12:30	Jubilee toast and presentation of the 3D map of Scotland
12:30–14:00	Closing panel session: conclusions from thematic sessions and future perspectives of geographical research
14:00–15:00	Lunch

9.05.2024, Thursday

Conference trips

1. The heritage of Lemko region in the South of Poland – an interpretative guided tour.
2. Visit in the Climatological Station of the Jagiellonian University in the Botanical Garden.

MILESTONES IN THE HISTORY OF THE GEOGRAPHY IN THE JAGIELLONIAN UNIVERSITY

- 1455–1480** Jan Długosz writes his main works describing the environment of Poland: “Chorographia Regni Poloniae” and “Liber Beneficiorum dioecesis Cracoviensis”
- 1490** First regular lectures on geography in the Jagiellonian University
- 1526** First map of Poland in the scale 1:1 000 000 by Bernard Wapowski, who was called a father of Polish cartography
- 1596** First Polish book on meteorology: “Teoria ventorum” by Andrzej Mirowski
- 1783** First plan of Kraków by Marcin Józef Kromer
- 1792** A meteorological station was established in the Astronomical Observatory of the Jagiellonian University, in the Botanical Garden
- 1849** The first Polish chair of geography was established in the Jagiellonian University and Wincenty Pol became its director.
- 1853** The activity of the chair of geography was suspended by the Austrian occupancy authorities
- 1874–1876** Lectures on mathematic geography and cartography realized in the Astronomical Observatory of the Jagiellonian University
- 1876** Franciszek Czerny-Schwarzenberg obtained the scientific title of docent and began the lectures on geography in the Jagiellonian University
- 1877** Reactivation of the chair of geography in the Jagiellonian University and F. Czerny-Schwarzenberg became its director
- 1881** Geographical Student’s Scientific Circle was established
- 1916** The chair of geography was turned into the institute of geography

- 1920** The institute was moved to the building in Grodzka St., its fourth seat where it functioned until 2005
- 1945** The Departments of General Geography and Physical Geography were established within the institute
- 1952** The institute was divided into two chairs: the chair of Physical Geography (with the Department of Physical Geography and the Department of Climatology and Meteorology) and the chair of Economical Geography
- 1963** The research station of the institute in Gaik-Brzezowa near Dobczyce was established and it operated until 2020
- 1967** The Departments of: Geomorphology, Hydrography and Geography of Demography, Settlement and Agriculture were established in the institute
- 1975** The Departments of: Geography Didactics and Cartography and Remote Sensing were established in the institute
- 1979** The Departments of Touristic and Spa Economy and the Department of Industry Geography were established in the institute
- 1988** The research station of the institute in Łazy near Bochnia has been established
- 1990** The Department of Soil Geography was established in the institute
- 1993** GIS Laboratory was established in the institute
- 1994** The Department of Geography of Religion was established in the institute
- 2005** The institute has been moved to the new Campus of the 600th Anniversary of the Jagiellonian University Revival
- 2006** The Award of Wincenty Pol was established for outstanding young researchers of the institute
- 2014** The Institute hosted Regional Conference of the International Geographical Union

WINCENTY POL: THE POET WHO LOVED GEOGRAPHY

Wincenty Pol was born in 1807 in Lublin, a city which at that time was located in Austrian partition of Polish lands. In 1809 his family moved to Lviv where he spent the childhood and completed the schools, including 2-year studies on philosophy in the University of Lviv. His first travel began in 1830



War Order of Virtuti Militari
awarded to W. Pol

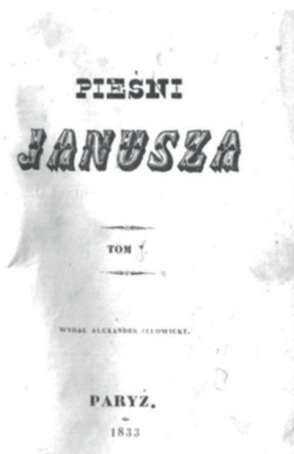
Source: www.zbiory.mnk.pl.

when he left Lviv to go to Lithuania through the regions of Podole, Wołyń, Polesie and Podlasie. He became a teacher of German language in the University of Vilnius. In 1831 W. Pol left the university to fight in the November Uprising, an armed rebellion in the heartland of partitioned Poland against the Russian Empire. His contribution was awarded with the silver War Order of Virtuti Militari

After the failure of the uprising he left to Eastern Prussia and then emigrated through the regions of Warmia, Pomerania and Greater Poland to Saxony where he stayed in Dresden and Leipzig. In Dresden, W. Pol presented his first poems to Adam Mickiewicz, one of the greatest Polish poets of that time. The first poems' collection

by W. Pol was titled "Pieśni Janusza" (The songs of Janusz) and was published in 1835 in Paris (although dated 1833).

In 1832, W. Pol returned to Galicia, a historical region which covered the area of the present southeastern Poland and western Ukraine. Count Ksawery Krasicki helped W. Pol to engage into conspiracy which was realized by travelling with political missions to the regions of Wołyń and Podole, and to Ukraine. In 1834 he came to Kraków but had to leave to the Tatra Mts. to hide from the Austrian police. There he studied the works of S. Staszic, G. Pusch and G. Wahlenberg and turned from a soldier-poet to a poet-geographer. During the stay in the mountains, he prepared another collection



First pages of “The songs of Janusz”

Source: www.polona.pl.

of poems “Pieśni o ziemi naszej” (Songs about our land) which was published in 1843.

In 1837 W. Pol married Kornelia Olszewska in Lviv. Thanks to the support of count Krasicki, they settled down in Kalnica in the Bieszczady Mts. and in 1840 moved to Gorlice where the family gradually enlarged with seven children. In 1840s, W. Pol studied maps and travelled a lot with a botanist Jan Kanty Łobarzewski in the Eastern Bieszczady Mts., Gorgany Mts., Czarnohora, Połoniny Hryniawskie, Czywczyńskie Mts. He measured the mountains’ height with barometric measurements. He also visited the Western Beskidy Mts. and the sources of the Vistula River. Parallel, W. Pol met and corresponded with scientists representing various branches of the science

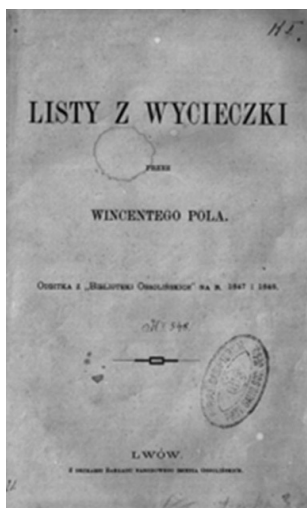


Cover of the poems’ collection “Songs about our land”

Source: National Museum in Lublin collection.

of that time: geologist L. Zejszner, hydrologist T. Torosiewicz, biologist A. Zawadzki, archaeologist Ż. Pauli and historian A. Bielowski. He was fascinated with the works of A. von Humboldt and C. Ritter and adopted their approach in understanding the nature and human activity. In 1845 W. Pol visited Styria, Tyrol and Moravia as a representative of Galician Economical Association. In 1846 during the Galician Peasant Uprising, the family of W. Pol tried to shelter in Lviv but on the way there they were attacked by the peasants and the notes of W. Pol burnt. W. Pol was arrested by the Austrian police for six months as he was suspected to contribute to conspiracy activity. In 1847 W. Pol became an editor of a journal “Biblioteka Zakładu Naukowego im. Ossolińskich” (Library of the Scientific Institution of Ossoliński Family), published in Lviv. Looking for topics and authors for the

journal, W. Pol began a travel to the island of Rügen in the Baltic Sea. The travel led through Kraków, Gliwice, Wrocław (where he travelled for the first time with the railway), Giant Mts. in the Sudety Mts., Cieplice (where he met J. Purkyn), Greater Poland, Berlin (where he met A. von Humboldt) and Frankfurt on the Odra River. He published the impressions from that trip in “Listy z wycieczki” (Letters from the trip) in 1848.

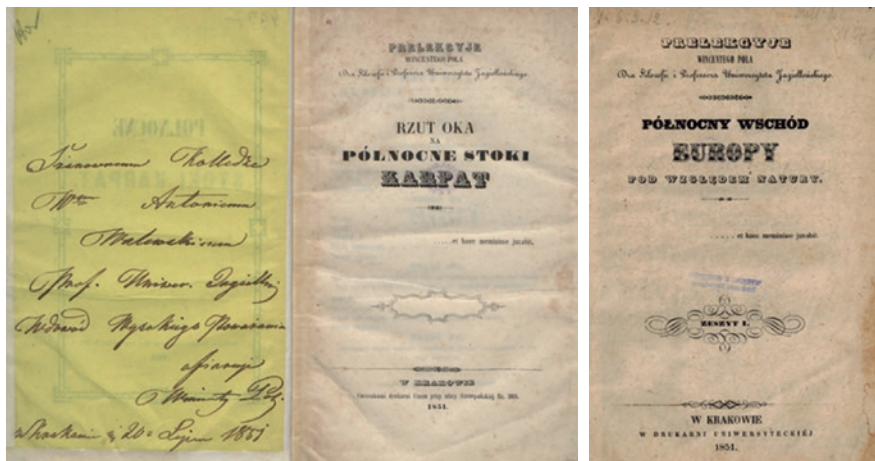


Cover of the
“Letters from the trip”

Source: National Museum
in Lublin collection.

W. Pol was engaged in the Revolutions of 1848 and therefore he had to leave Lviv. He travelled to Marienbad, Prague and Vienna where he met Leo von Thun, a ministry of religion and education in the Habsburg empire. W. Pol asked him to establish a chair of geography in the Jagiellonian University and obtained the nomination for the professor of geography. In 1849, W. Pol came to Kraków and organized the first chair of geography in Polish lands. His lectures were attended not

only by students but also by the inhabitants of Kraków as they contained many patriotic elements. Additionally, he organized many field trips to locations close to Kraków (Niepołomice, Krzeszowice, Pieskowa Skała) and to the Tatra Mts. In 1851, W. Pol published academic geographical works „Rzut oka na północne stoki Karpat” (A look at northern slopes of the Carpathians)



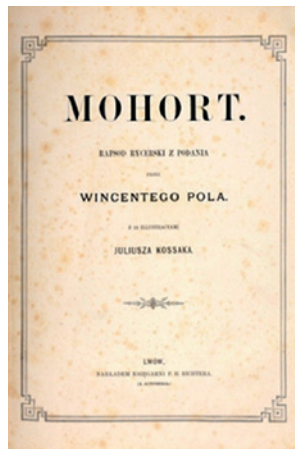
Title pages of the works “A look at northern slopes of the Carpathians” and “North-Eastern Europe’s nature”

Source: www.polona.pl.

and “Północny wschód Europy pod względem natury” (North-Eastern Europe’s nature).

W. Pol was constantly controlled and observed by the Austrian police. In 1852, he organized a trip to the Tatra Mts. during which patriotic and religious songs were performed by the students and the professors. One of the participants made a denunciation to the Austrian police and a few months later W. Pol was punished with the resignation and the chair was closed for over 20 years. W. Pol turned to writing poems and completed “Mohort” with many geographical descriptions of Polish lands.

W. Pol left Kraków and went to the region of Pokucie (today in Ukraine), studied the navigability of the river Dniestr, and then went to Przemyśl and Lviv. In 1867 he returned to Kraków and continued writing poems, among them “Obrazy z życia i natury” (Images from life and nature) with picturesque descriptions from his journeys. In 1872 W. Pol was invited



Title page of “Mohort”

Source: National Museum in Lublin collection.

to join the just established Academy of Sciences and a few months later on 2nd December, 1872, W. Pol died in his apartment in Kraków.

Wincenty Pol was a father of Polish modern geography. He implemented the current research trends of the time into Polish geography, carried many own studies, including field trips. He established many Polish geographical names and elaborated the concept of Polish geographical regions. He was a pioneer of Polish human and political geography. His poems were filled with patriotic attitude to the environment of the Polish lands, at that time partitioned among three countries which occupied the area of Poland. His work contributed to the survival of Polish nation and later reconstruction of the country.



The tomb of W. Pol in the crypt of the distinguished, Basilica of St. Michel Archangel in Kraków

Photo W. Kowalczyk.

Text by Wiktor Kowalczyk & Anita Bokwa

THE GREAT POLISH MAP OF SCOTLAND: CREATIVE CARTOGRAPHY YESTERDAY AND TOMORROW

Małgorzata Luc, Krzysztof Grabarek, Bartłomiej Ślawnski,
Jerzy Walaszek, Bartosz Zarzecki, Julia Zwolińska

Historical background

In the fall of 1973, Jan S. Tomasik and Mieczysław Klimaszewski met Sergeant Tomasik, a native of Krakow who fought in the 10th Armoured Cavalry Brigade, under the command of General Stanisław Maczek, remained in Scotland after the end of World War II. Professor Klimaszewski was then the Director of the Institute of Geography at Jagiellonian University in Krakow. At this meeting, cooperation was formed on the concept of building the Great Polish Map of Scotland. The site of the Barony Castle Hotel in Eddleston, which Tomasik owned, was designated as its location. The Barony Hotel was also the former headquarters of his Brigade and the place where the prototype of the 3D map was built. It was made by Polish engineers and military officers in late 1940-1941 and played a great role in the development of plans for the defence of the British Isles.

Tomasik and Klimaszewski first invited two cartographers from Jagiellonian University – Kazimierz Trafas and Roman Wolnik – to work on the new map, and later also Janusz Szewczuk, Zygmunt Olecki and Jerzy Zelech. They were assisted by local volunteers and Polish students. Work began in the summer of 1974 and took place in several stages: (1) field observations in the Highlands; (2) removal of topsoil and outlining the contours of land and islands; (3) test construction of two selected regions in concrete; (4) hydraulic installation; (5) on top of the hydraulic installation, landforms were poured from concrete, carving details by hand and mountain peaks were marked with vertical wooden posts.



Fig. 1. The Great Polish Map of Scotland in Barony Castle Hotel, Edelstone, Scotland

Source: <https://www.facebook.com/search/top?q=the%20great%20polish%20map%20of%20scotland>).

Map Features

The work was finally completed in 1979, including the construction of a wall, forming a pool surrounding the structure. The concrete surface of the Map was covered with synthetic resin. Finally, it was painted so that forested areas were green, larger cities were light brown, main roads and roads through cities were red, and rivers and lakes were blue. In the lakes and larger rivers flowed water supplied through a gravity system by more than 40 distributors.

In designing the Map, a scale of 1:10,000 was adopted horizontally and, following the pattern of military maps, a vertical scale of five times. Thus, the result was a map measuring, approximately, 50×40 m, which is located in an oval hollow surrounded by a wall with a perimeter of 142 m. Its area is thus 1590 m², making it considered the world's largest three-dimensional physical model of the country and the largest plastic map found outside.

Further fate of the Map

In later years, only minor renovation work was done, until 1995, when the Map, with its rail network ready, was renewed by the Ministry for Scotland. Since then, for the next dozen years or so, its fate has varied. Owners, sources of funding, as well as the level of interest in it changed. Efforts to restore it and gain greater recognition for the role of the Polish Armed Forces stationed in Scotland during World War II began in 2008 with an exhibition at Penicuik Town Hall. In 2010, the rediscovery of the Map by Keith Burns resulted in the formation of the Mapa Scotland group, which began fundraising. Significant moments in this story were the listing of the Map in the National Heritage of Scotland Category B in 2012 and a debate in the Scottish Parliament dedicated to it. During the deliberations, the unique value of the Map and its importance as a symbol of long-standing Polish-Scottish relations were emphasized. It was pointed out that the Map reminds every one of the role of the Polish community in Scotland during World War II and beyond. The reconstruction work was completed in 2017 and the Great Polish Map of Scotland was returned to its former appearance (Fig. 1).

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