

QUAESTIONES GEOGRAPHICAE – FIVE DECADES OF GEOGRAPHICAL EXCELLENCE

ANDRZEJ KOSTRZEWSKI ¹, JOANNA DOMINIAK ², ZBIGNIEW ZWOLIŃSKI ¹,
MONIKA RZODKIEWICZ ¹, KRZYSZTOF STACHOWIAK ², TADEUSZ STRYJAKIEWICZ ²

¹ Faculty of Geographical and Geological Sciences, Adam Mickiewicz University, Poznań, Poland

² Faculty of Human Geography and Planning, Adam Mickiewicz University, Poznań, Poland

Manuscript received: December 6, 2024

Revised version: December 19, 2024

KOSTRZEWSKI A., DOMINIAK J., ZWOLIŃSKI ZB., RZODKIEWICZ M., STACHOWIAK K., STRYJAKIEWICZ T., 2024. *Quaestiones Geographicae* – Five decades of geographical excellence. *Quaestiones Geographicae* 43(4), Bogucki Wydawnictwo Naukowe, Poznań, pp. 193–201. 2 figs.

ABSTRACT: The journal *Quaestiones Geographicae*, founded by Professor Stefan Kozarski in 1974, has played a key role in the development of geography and related sciences for five decades, promoting both Polish and international scientific research. Initially focused on physical geography, it evolved towards interdisciplinarity, encompassing a broad range of themes within the geographical sciences. Through its collaboration with the Sciendo platform and adoption of the Open Access model, the journal has expanded its international reach, attracting authors from over 40 countries and achieving an Impact Factor of 1 in 2023. Its most influential publications have explored statistical methods, geodiversity, and geomorphological heritage, highlighting the journal's interdisciplinary character. The 50th anniversary is an opportunity to reflect on its contribution to the advancement of geography and to set new goals in addressing global challenges such as environmental crises, urbanisation, and digital technology development. *Quaestiones Geographicae* remains an invaluable platform for knowledge exchange, inspiring future researchers and supporting sustainable development at local and global levels.

KEYWORDS: geography, interdisciplinarity, scientific journals, international collaboration, knowledge exchange

Corresponding author: Krzysztof Stachowiak, Faculty of Human Geography and Planning, Adam Mickiewicz University, Poznań, ul. Krygowskiego 10, 61-680 Poznań; e-mail: krzysztof.stachowiak@amu.edu.pl

Introduction

The anniversary of *Quaestiones Geographicae* offers an excellent opportunity to reflect on 50 years of this renowned and highly esteemed Polish English-language journal. *Quaestiones Geographicae* was established in 1974 as an annual journal of the Institute of Geography at the Adam Mickiewicz University, Poznań, Poland. Its founder and first editor was Professor Stefan Kozarski. Professor Stefan Kozarski was a prominent Polish geographer and geomorphologist

renowned for his groundbreaking work on glacial geomorphology and environmental changes. He was instrumental in developing modern methods for studying glacial landscapes and was deeply involved in academic initiatives to enhance geographical sciences in Poland. Since its inception, the journal has published English papers initially on physical geography and human geography, later expanding to include spatial management and planning, sustainable development, environmental sciences, GIS, and tourism and recreation. The mission of *Quaestiones*

Geographicae is to disseminate the research results of international research teams and Polish and foreign scholars while promoting Polish science by publishing high-quality academic works. The journal is distinguished not only by its high level of content but also by its ability to adapt to changing scientific and technological needs. With publications addressing theoretical and practical issues, *Quaestiones Geographicae* consistently contributes to expanding knowledge about natural and social phenomena and their mutual interactions. Over five decades, the journal has witnessed and participated in revolutionary changes in geography and related sciences.

Quaestiones Geographicae has played a significant role in developing Polish geography, providing insights into the discipline's advancements and its cognitive and practical functions. Over the past century, Polish geography has undergone significant transformations in line with global trends, shifting from traditional descriptive and regional approaches to quantitative methods and embracing modern digital geoinformation technologies. Geography, with its dual nature as a natural and social science, provides data and insights into physical, environmental, social, economic, and political changes in geographical space. For the past 50 years, *Quaestiones Geographicae* has been a platform for exchanging ideas and presenting achievements by geographers from

Poland and abroad. Initially, the journal primarily featured work by Polish authors, focusing on domestic issues and participation in European and global research programmes, including scientific expeditions to various parts of the world. Over time, Polish geographers have successfully aligned their research with global trends, and the journal has seen a notable increase in contributions from international authors.

Currently published quarterly by the Faculty of Geographical and Geological Sciences since 1984, and since 2019 also by the Faculty of Human Geography and Planning at the Adam Mickiewicz University in Poznań, *Quaestiones Geographicae* is available in print through Bogucki Scientific Publishers and online via the Sciendo and PRESSto platforms. The journal is one of the most important geographical journals in Central and Eastern Europe. As one of Poland's most important scientific journals, *Quaestiones Geographicae* has contributed to the global recognition of Polish geographical schools and scientific achievements.

Geographical odyssey through 50 years

We want to invite the reader on a brief journey through the five decades of *Quaestiones Geographicae*, presenting the main topics explored by the journal since its inception. This reflection

CONTENTS

KOZARSKI S.: Geography Institute of Adam Mickiewicz University	5
BARTKOWSKI T.: Natural Resources and the Interaction System Man – Nature Considered as Categories of Space	17
CHOJNICKI Z., CZYŻ T.: The Regional Structure of Poland: a Study by Factor Analysis	37
KARCZEWSKI A.: Structural Features of Kame Forms as an Expression of the Dy- namics of Morphogenetic Environment	53
KOZARSKI S.: Evidences of Late-Würm Permafrost Occurrence in North-West Po- land	65
KRYGOWSKI B.: Some Features of Abrasion of Quartz Grain from Crystalline Waste in the Plana Mountains (Bulgaria)	87
MARSZ A.: A New Method of Physiographic Regionalization	
ROTNICKI K.: Slope Development of Riss Glaciation End Moraines during the Würm; its Morphological and Geological Consequences	109
Woś A.: Climatic Regions of the Great Polish Lowland and Pomeranian Lake District in the Light of the Frequency of Occurrence of Particular Weather Types (Outline of a Method of Climatic Regionalization)	141

Fig. 1. Contents of the first volume of *Quaestiones Geographicae* (published in 1974).

will provide a deeper understanding of the evolution of Polish geography and its close connections with global research trends.

The first issue of *Quaestiones Geographicae*, published in 1974, addresses a broad spectrum of topics within geography, combining physical and socio-economic perspectives. The papers explore themes such as the dynamics of natural environments, including geomorphological processes, permafrost phenomena, and glacial impacts on landscape development. Climatic studies focus on regional patterns and their classification, reflecting an interest in environmental differentiation. From a human geography perspective, the issue examines the spatial structure of regions and the relationship between humans and natural resources, emphasising their mutual interactions. This collection illustrates the interdisciplinary nature of geographical research, integrating theoretical approaches with empirical analyses.

Research published in *Quaestiones Geographicae* during the late 1970s and 1980s focused on glaciation, sedimentology, and hydrology. A key theme was the study of the last glaciation (Vistulian), examining ice-sheet dynamics, glaciotectonic deformations, and the sedimentary environments in glacial marginal zones. These studies often used field observations and geomorphological mapping to reconstruct glacial and periglacial processes in regions like Pomerania, the Carpathians, and Spitsbergen. In sedimentology, the research explored fluvial, aeolian, and deltaic processes, linking sedimentary structures to climate fluctuations and vegetation influences. Paleoenvironmental reconstruction was also a central focus, with studies using geological and stratigraphic records to understand past climates, vegetation, and soil development. This research often connected environmental changes to human activity. Hydrological and geomorphological processes, including river dynamics, floodplain activity, and erosion, were examined with an emphasis on spatial variability and landform evolution. Innovative methods such as aerial photography, paleobotanical analysis, and statistical modelling were used to enhance understanding of these processes.

Human geography focuses on the spatial structure of human activity, regional diversity, and the interaction between natural and anthropogenic factors. Studies utilised multivariate

statistical techniques to analyse spatial patterns and their socio-economic implications, reflecting an interdisciplinary approach that combined human and physical geography.

In its first decade, the themes presented in the journal illustrate its commitment to advancing geographical knowledge through rigorous analysis of natural processes and their intersections with human activities, with particular emphasis on Polish and Northern European landscapes.

The research themes in the 1990s reveal the journal's focus on Quaternary geology, geomorphology, and environmental changes within glacial and periglacial environments. Key topics include the sedimentological and petrographical characteristics of glacial deposits, emphasising their textural and structural analysis, which provides insights into past ice dynamics and depositional environments. Studies also address glaciotectonic processes, subglacial channel morphology, and landforms shaped by glacial and glaciofluvial activity, reflecting an interest in reconstructing ice-sheet behaviour during the Pleistocene and Holocene. These works often integrate advanced methods, such as remote sensing, to enhance spatial analysis of glaciated terrains.

The interaction between geomorphological processes and climatic variations was also a key focus in that period. Researchers examined Holocene and Pleistocene climatic changes, particularly their effects on fluvial systems, lake surface dynamics, peatland evolution, and aeolian processes. Studies of periglacial and cold-climate environments, such as mass movements in the High Tatra Mountains and permafrost features in Normandy, further illustrated landscape transformations under different climate conditions. Additionally, paleohydrological and sedimentological analyses provided broader insights into environmental changes on both regional and global scales, showcasing a multidisciplinary approach that integrated geomorphology, hydrology, and climatology.

The 1990s, marked by the systemic transformation of the Polish society and economy, resulted in numerous papers addressing the social and economic changes in Poland and the region. These works made by human geographers focused on transformations in various sectors of the national economy, such as industry, agriculture, and the growing disparities in

socio-economic development. Emerging opportunities for cross-border cooperation during the period of pre-accession to the European Union also generated a wealth of research on the subject.

In the **2000s**, research published in *Quaestiones Geographicae* spanned physical and socio-economic geography, reflecting diverse topics. Physical geography papers focused on processes shaping natural landscapes, particularly in post-glacial regions, with studies on soil erosion, aeolian processes, and changes in coastal and fluvial environments. Key themes included the analysis of environmental factors like wind velocity, sea level changes, and lithological transformations in coastal lagoons, as well as detailed geomorphological studies on landslides, glacial deposits, and hydrological patterns. The interdisciplinary approach also involved applying advanced techniques such as dendrogeomorphology, seismic surveys, and GIS to understand natural phenomena in different regions, including Poland, Scandinavia, and the Baltic.

In the field of human geography, the journal addressed urban and regional development, particularly in Poland's transformation after joining the European Union. Key topics included cross-border governance, regional policy, and the impact of globalisation on Polish cities. The authors also explored rural development, agricultural changes, and the role of knowledge in shaping regional economies. The research highlighted the dynamics of urban planning and the challenges local governments face in adapting to European standards. The effects of environmental changes on tourism and the relationship between regional development and geopolitical shifts were also explored. These studies reflect the growing integration of environmental and socio-economic factors in understanding spatial dynamics in the 21st century.

The research papers published in the **2010s** reveal diverse physical and socio-economic geography topics. In the physical geography domain, several studies focus on regional climatic variations, such as the influence of atmospheric circulation on weather phenomena and detailed studies of hydrological processes, geomorphology, and landscape changes. Topics like the impact of anthropogenic pressures on water relations, temperature changes in Poland, and hydrological modelling in various regions reflect a significant

interest in climate and environmental dynamics. Furthermore, research into changes in sediment transport, flood management, and the role of natural forces in shaping landscapes also plays a prominent role in physical geography. During that time, studies on geodiversity were initiated not only for areas of Poland.

In the human geography field, studies explore the interconnections between urban and regional development, the role of creative industries in economic growth, and the socio-cultural impacts of tourism and revitalisation projects. Topics such as the spatial distribution of economic growth, the transformation of post-socialist urban spaces, and the influence of cultural industries on city development illustrate a strong focus on regional planning, governance, and cultural economics. Additionally, research examining land use changes, rural development, and the impact of EU policies on agriculture highlights ongoing concerns about sustainability and regional competitiveness. The international scope of these studies is evident, indicating the global relevance and comparative nature of socio-economic geographical research.

The most recent period (**2020 onwards**) covers a broad spectrum of issues, intertwining physical and human geography perspectives. One of the most prominent themes is the impact of climate change and its geomorphological consequences. This includes studies on coastal erosion, the effects of rapid climate warming on Arctic landscapes, and the role of environmental factors in shaping local communities. In parallel, the interaction between geomorphological processes and climatic variations is also explored, mainly focusing on Holocene and Pleistocene climatic changes and their impact on fluvial systems, lake dynamics, peatland evolution, and aeolian processes. Studies of periglacial environments, such as mass movements in the High Tatra Mountains and permafrost features in Normandy, provide insights into past landscape transformations. These papers emphasise the growing need for sustainable management and mitigation strategies in vulnerable coastal areas, urban environments, and rural settings affected by environmental stressors like extreme weather events.

Human geography's research presented in the journal in recent years is focused on the relationship between urbanisation, mobility, and

socio-economic disparities. Studies examine how social and economic factors influence commuting patterns, energy demand, and public space usage, particularly in urban settings. Other papers explore the potential of geotourism and geo-education as tools for sustainable development in regions, highlighting the interplay between conservation, local economies, and community involvement. Additionally, topics such as urban shrinkage, public participation in tourism planning, and the effects of social and economic factors on urban development remain key areas of exploration, indicating a continued interest in understanding the dynamics of urban spaces and their social and economic implications.

Initially focused on physical geography, especially geomorphology, the journal has expanded its interests to include interdisciplinary research on climate change, urbanisation, spatial management, and sustainable development. Today, *Quaestiones Geographicae* publishes papers on topics such as modelling environmental processes using GIS, the impact of globalisation on urban development, climate change adaptation strategies, geodiversity protection, and natural resource management. Modern technologies in geographical research, such as digital tools and procedures, are an important part of the publication, providing innovative methods of analysing spatial data.

Over five decades, the journal has reflected the dynamic changes in geographical sciences. The development of technology, the emergence of new research methods (such as geographic information systems – GIS), and the growing interest in global challenges such as climate change, urbanisation, and environmental degradation have all been reflected in the pages of *Quaestiones Geographicae*. *Quaestiones Geographicae* also published works by many outstanding Polish geographers whose research activities significantly influenced the development of geography both in Poland and abroad. The journal became a platform, thanks to which the research results of Polish scientists gained recognition in the international academic community. Each volume and paper is a testimony to the evolution of geography as a science increasingly open to interdisciplinarity and international cooperation.

The topics above illustrate the journal's commitment to exploring the complex relationships

between physical and human geography, providing a comprehensive understanding of the natural environment and socio-economic factors shaping our world today. The journal particularly values contributions with strong theoretical and methodological foundations in Earth sciences, reviews, and comparative studies representing diverse geographical regions worldwide. This approach ensures a holistic view of geographical issues, encouraging interdisciplinary research that bridges various subfields of the discipline.

Landmark studies

The journal *Quaestiones Geographicae* has published numerous influential papers that have significantly contributed to geographical research. Addressing key problems related to statistical methods, geomorphology, geoheritage, spatial planning, and regional development has cemented its role as a platform for advancing knowledge in these areas. Its most cited articles exemplify the diversity and depth of these contributions, offering valuable insights into pressing issues in geography. Below, we outline landmark studies published in *Quaestiones Geographicae*, with citation data from Google Scholar, as of December 5, 2024.

One of the most impactful themes is advancing statistical methods and spatial analysis. Hauke and Kossowski's (2011) article, with over 2,600 citations, remains a cornerstone in socio-economic and regional studies. It compares Pearson's and Spearman's correlation coefficients rigorously, demonstrating their applicability to different data distributions. Bivand (1980) also makes a notable contribution to this field through his Monte Carlo study on correlation coefficient estimation with spatially autocorrelated observations (78 citations). This work highlights the complexities of analysing spatial data and lays the groundwork for improved statistical methodologies. Similarly, Kaim et al. (2014) tackle the uncertainty in historical land-use reconstructions using topographic maps (66 citations), offering a framework for enhancing the reliability of landscape change analyses.

Another central topic is geomorphology and geoheritage, with studies exploring the dynamics of landforms and their implications for conservation and tourism. Reynard et al. (2017) emphasise

the significance of urban geomorphological heritage, addressing the challenges of integrating geomorphology into urban planning while advocating for preserving natural landscapes (135 citations). Pelfini and Bollati (2014) focus on geomorphosites and their changing nature due to climate conditions, linking geomorphological research with sustainable tourism and education (100 citations). Zwoliński and Stachowiak (2012) further emphasise this connection by mapping geodiversity in the Tatra National Park, illustrating its potential to enhance tourism while promoting conservation (71 citations). Ollier (2012), with 74 citations, critiques evolving definitions of geotourism and geodiversity, arguing for preserving scientific rigour in these emerging fields.

Coastal and fluvial systems also emerge as impactful areas of inquiry. Kozarski and Rotnicki (1977) investigate the evolution of river channels and valley floors in the North Polish Plain (144 citations), providing insights into Late Würm and Holocene dynamics. Marfai (2014) explores the socio-ecological consequences of sea level rise in Indonesia, highlighting the vulnerability of coastal ecosystems and the need for adaptive strategies (75 citations). Billah (2018) examines riverbank changes along the Padma River in Bangladesh, utilising satellite imagery to map erosion and accretion processes over decades (78 citations). These studies collectively enhance understanding of the interactions between natural processes and human systems in vulnerable environments.

Lastly, spatial planning and regional development constitute another important theme. Domański and Gwosdz (2010) investigate multiplier effects in local and regional economies, providing tools to analyse investments' spatial and industrial impacts (129 citations). Strykiewicz and Jaroszevska (2016) address urban shrinkage, emphasising the governance challenges posed by population decline and proposing adaptive and regenerative strategies (70 citations). Anisiewicz and Palmowski (2014) focus on cross-border tourism and small border traffic between Poland and the Kaliningrad Oblast, exploring the socio-economic opportunities offered by regional cooperation (66 citations). Haklay et al. (2018) review modern methods for public participation in urban planning, highlighting the transformative role of geospatial technologies in fostering collaborative decision-making (78 citations).

By tackling these diverse yet interconnected issues, *Quaestiones Geographicae* has established itself as a key platform for advancing geographical knowledge. Its contributions span theoretical innovations, methodological advancements, and practical applications, demonstrating the journal's pivotal role in shaping contemporary geographical discourse.

Journal recognition

These papers collectively illustrate the journal's impact across diverse geographical fields, from statistical methodologies to geomorphological studies and environmental management. Their broad citation records affirm their significance in shaping contemporary geographical research. A notable achievement of the journal is its role in building bridges between scientists from different countries and academic environments. Over the years, the *Quaestiones Geographicae* editorial team has established numerous partnerships with researchers from Europe, Asia, Africa and both Americas, allowing for the exchange of knowledge and experience in studying complex natural and social processes. The international nature of the publications has enriched their content and increased the journal's visibility on the global scientific market. All efforts undertaken by the Editorial Board are aimed at internationalising the journal despite increasing competition. The Editorial Advisory Board has been strengthened to support this goal, now consisting of distinguished scholars from Poland and abroad. The Board includes:

- Louis Albrechts, Catholic University of Leuven, Belgium
- Yuko Aoyama, Clark University, Worcester MA, USA
- Paolo Billi, University of Ferrara, Italy
- Pierluigi Brandolini, University of Genoa, Italy
- Jan Buček, Comenius University, Bratislava, Slovakia
- Elias G. Carayannis, George Washington University, Washington DC, USA
- Michael Crozier, University of Wellington, New Zealand
- Christine Embleton-Hamann, University of Vienna, Austria

- Monique Fort, Paris 7 – Denis Diderot University, France
- Robert Hassink, University of Kiel, Germany
- Denes Loczy, University of Pécs, Hungary
- Jean Poesen, Catholic University of Leuven, Belgium
- Andrés Rodríguez-Pose, London School of Economics and Political Science, UK
- Tadeusz Stryjakiewicz, Adam Mickiewicz University, Poznań, Poland
- Jef Vandenberghe, University of Amsterdam, The Netherlands
- Kai Zhou, Hunan University, Changsha, China.

As one of Poland’s most important scientific journals, *Quaestiones Geographicae* has contributed to the global recognition of Polish geographical schools and scientific achievements. The journal is highly regarded within the academic community and is one of the most respected Polish English-language journals, both among authors and readers. It meets all international editorial standards, including Open Access and COPE. Thanks to the Open Access model, *Quaestiones Geographicae* supports the idea of democratising scientific knowledge, enabling the widespread sharing of its content. For over 50 years, the journal has gained increasing significance in the international geography journal market. A turning point in the perception of *Quaestiones Geographicae* was 2010, when the journal began cooperation with De Gruyter Publishing House. Currently, the journal is presented on the Sciendo platform, reflected in a significant rise in citations since 2010 (Fig. 2). The journal was one of the first Polish geographical periodicals to fully adapt to the digital reality, offering access to papers in an online format.

The journal *Quaestiones Geographicae* has published research from teams representing all of the geographical centres in Poland, as well as from nearly all of Europe, including Austria, Belarus, Belgium, the Czech Republic, Finland, Germany, Greece, Hungary, Ireland, Italy, Lithuania, the Netherlands, Norway, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Ukraine, and the United Kingdom. It has also featured contributions from many other countries worldwide, such as Japan, Vietnam, Indonesia, India, China, Iran, Iraq, Israel, Algeria, Nigeria, South Africa, and Brazil. The number of non-European papers significantly increased after the journal was placed on the Sciendo platform. It is indexed in nearly 100 bibliographic databases, including Web of Science – Emerging Sources Citation Index, SCOPUS, AGRO, CABI, DOAJ, EBSCO, Elsevier – SCOPUS, ERIH PLUS, GeoRef, Google Scholar, Index Copernicus, Microsoft Academic, POL-index, Publons, SCImago, and WorldCat. In 2023, *Quaestiones Geographicae* received its first Impact Factor of 1 (5-year IF = 1.2), calculated by Clarivate’s Journal Citation Reports 2023. The current impact factor and ranking in prestigious databases such as Scopus and Web of Science confirm the growing influence of the journal on global science as well as its visibility and prestige.

Concluding remarks

Quaestiones Geographicae is one of the most important scientific journals in the field of geographical sciences, which has played a key role in promoting geographical research and related

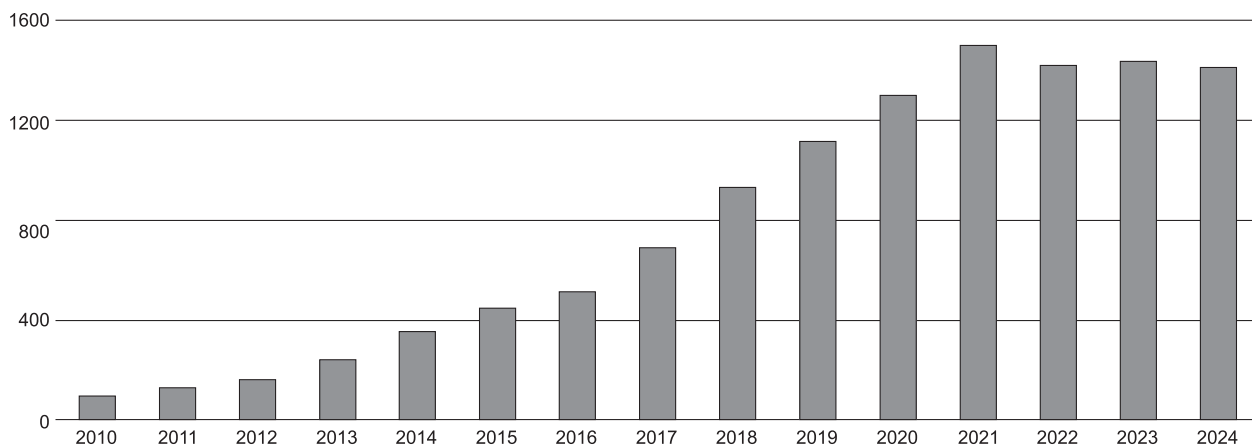


Fig. 2. Citations of papers published in *Quaestiones Geographicae* (2010–2024), according to Google Scholar.

sciences for five decades and has been a platform for the exchange of scientific ideas, presenting research works of both theoretical and practical nature. Individual volumes have evolved, adapting to changing scientific, technological, interdisciplinary, and sustainable development trends. Thanks to its international reach, the journal attracts authors and readers from all over the world, which significantly enriches the diversity of topics covered from local to global and is a testimony to its lasting influence on the development and shaping of contemporary geography and spatial sciences. The scientific quality of the journal is possible thanks to high standards of peer review and cooperation with recognised specialists from various fields.

Recapitulating five decades of activity, *Quaestiones Geographicae* can be proud of its contribution to the development of geography and related sciences – an example of perseverance, adaptation, and scientific excellence. Thanks to the commitment of the editorial staff, authors, and reviewers, the journal has gained a reputation as one of the most important scientific forums in this field, inspiring subsequent generations of researchers to seek new answers to questions about the functioning of the natural and social environment and to solve the most important problems of the modern world.

The 50th anniversary of the journal is not only a time for reflection on its past and a look into the future. The future brings many challenges, such as the need to respond to global and local environmental and socio-economic crises, the development of research technologies and the growing importance of interdisciplinary cooperation. On this exceptional anniversary, *Quaestiones Geographicae* looks to the future, hoping to continue its mission – providing reliable and inspiring scientific studies that contribute to understanding the world around us and supporting sustainable development on various scales. In the era of globalisation and the growing environmental and social challenges, *Quaestiones Geographicae* plans to continue its mission as a space to exchange interdisciplinary research. Increasing the share of papers on global topics and expanding cooperation with international research centres remain key goals of the editorial office.

The fifty-year history of *Quaestiones Geographicae* is a story of passion, dedication, and

commitment to science. This anniversary is an excellent opportunity to express gratitude to all editors, reviewers, and authors who, over the decades, have contributed to the journal's success. Their work has resulted in the publication of many groundbreaking studies that not only deepen our understanding of the world but also point the way forward for the further development of geography.

References

- Anisiewicz R., Palmowski T., 2014. Small border traffic and cross-border tourism between Poland and the Kaliningrad Oblast of the Russian Federation. *Quaestiones Geographicae* 33(2): 79–86. DOI [10.2478/quageo-2014-0024](https://doi.org/10.2478/quageo-2014-0024).
- Billah M.M., 2018. Mapping and monitoring erosion-accretion in an alluvial river using satellite imagery—the river bank changes of the Padma river in Bangladesh. *Quaestiones Geographicae* 37(3): 87–95. DOI [10.2478/quageo-2018-0027](https://doi.org/10.2478/quageo-2018-0027).
- Bivand R., 1980. A Monte Carlo study of correlation coefficient estimation with spatially autocorrelated observations. *Quaestiones Geographicae* 6: 5–10.
- Bouzekraoui H., Barakat A., El Youssi M., Touhami F., Mouaddine A., Hafid A., Zwoliński Z., 2018. Mapping geosites as gateways to the geotourism management in central High-Atlas (Morocco). *Quaestiones Geographicae* 37(1): 87–102. DOI [10.2478/quageo-2018-0007](https://doi.org/10.2478/quageo-2018-0007).
- Domański B., Gwosdz K., 2010. Multiplier effects in local and regional development. *Quaestiones Geographicae* 29(2): 27–37. DOI [10.2478/v10117-010-0014-5](https://doi.org/10.2478/v10117-010-0014-5).
- Haklay M., Jankowski P., Zwoliński Z., 2018. Selected modern methods and tools for public participation in urban planning – a review. *Quaestiones Geographicae* 37(3): 127–149. DOI [10.2478/quageo-2018-0039](https://doi.org/10.2478/quageo-2018-0039).
- Hauke J., Kossowski T., 2011. Comparison of values of Pearson's and Spearman's correlation coefficients on the same sets of data. *Quaestiones Geographicae* 30(2): 87–93. DOI [10.2478/v10117-011-0021-1](https://doi.org/10.2478/v10117-011-0021-1).
- Kaim D., Kozak J., Ostafin K., Dobosz M., Ostapowicz K., Kolecka N., Gimmi U., 2014. Uncertainty in historical land-use reconstructions with topographic maps. *Quaestiones Geographicae* 33(3): 55–63. DOI [10.2478/quageo-2014-0032](https://doi.org/10.2478/quageo-2014-0032).
- Kozarski S., Rotnicki K., 1977. Valley floors and changes of river channel patterns in the North Polish Plain during the Late Würm and Holocene. *Quaestiones Geographicae* 4: 51–93.
- Marfai M.A., 2014. Impact of sea level rise to coastal ecology: A case study on the northern part of Java Island, Indonesia. *Quaestiones Geographicae* 33(1): 107–114. DOI [10.2478/quageo-2014-0009](https://doi.org/10.2478/quageo-2014-0009).
- Ollier C., 2012. Problems of geotourism and geodiversity. *Quaestiones Geographicae* 31(3): 57–61. DOI [10.2478/v10117-012-0028-2](https://doi.org/10.2478/v10117-012-0028-2).
- Pelfini M., Bollati I., 2014. Landforms and geomorphosites ongoing changes: Concepts and implications for geoheritage promotion. *Quaestiones Geographicae* 33(1): 131–143. DOI [10.2478/quageo-2014-0012](https://doi.org/10.2478/quageo-2014-0012).

- Reynard E., Pica A., Coratza P., 2017. Urban geomorphological heritage. *Quaestiones Geographicae* 36(3): 7-20. DOI [10.1515/quageo-2017-0025](https://doi.org/10.1515/quageo-2017-0025).
- Rotnicki K., 1976. The theoretical basis for and a model of the origin of glacio-tectonic deformations. *Quaestiones Geographicae* 3: 103-139.
- Slaymaker O., 2011. Criteria to distinguish between periglacial, proglacial and paraglacial environments. *Quaestiones Geographicae* 30(1): 85-94. DOI [10.2478/v10117-011-0007-z](https://doi.org/10.2478/v10117-011-0007-z).
- Stryjakiewicz T., Jaroszewska E., 2016. The process of shrinkage as a challenge to urban governance. *Quaestiones Geographicae* 35(2): 27-37. DOI [10.1515/quageo-2016-0012](https://doi.org/10.1515/quageo-2016-0012).
- Thomas M., 2012. A geomorphological approach to geodiversity - its applications to geoconservation and geotourism. *Quaestiones Geographicae* 31(1): 81-89. DOI [10.2478/v10117-012-0005-9](https://doi.org/10.2478/v10117-012-0005-9).
- Zwoliński Z., Stachowiak J., 2012. Geodiversity map of the Tatra National Park for geotourism. *Quaestiones Geographicae* 31(1): 99-107. DOI [10.2478/v10117-012-0007-7](https://doi.org/10.2478/v10117-012-0007-7).