

# Geologica Carpathica: History and future of the open access international geoscience journal

## Geologica Carpathica celebrates 70 years anniversary

The mission of Geologica Carpathica (GC) — as an International open access geological journal — is to cover a broad spectrum of geological topics by high-quality publications. Of course, such focus only gradually evolved and broadened over the past 70 years. It was initially concentrated on geological problems of the Western Carpathians, but its scope currently expanded towards the geological evolution of the Alpine–Carpathian–Dinaride–Balkan regions. The journal began its existence in 1950 as the Geological Proceedings (“Geologický Sborník”) of the Slovak Academy of Sciences (Fig. 1), founded as a scientific journal devoted to the dissemination of scientific results from geological research in the Czechoslovak part of the Western Carpathians. It was founded by professors Dimitri Andrusov and Rudolf Lukáč from the Comenius University (Bratislava). The early articles were published in the Slovak language, with abstracts in two other languages, typically German and Russian. The creation of the journal resulted from an effort to encourage the development of the geological knowledge of Slovakia and the expansion of the Slovak raw material basis. Thanks to international contacts of geologists from the Slovak Academy of Sciences, the Comenius University, and Dionýz Štúr Geological Institute, and through collaborations with members of the Carpathian–Balkan Geological Association, number of articles from abroad published in the journal were increase since late sixties and seventies.

## Globalisation of journal

The first foreign contribution (in Slovak translation), which appeared in Geologica Carpathica was written on request of Professor Andrusov by Krysztof Birkenmajer (1957, Vol. 8, No.1) and clarified stratigraphy of the Pieniny Klippen Belt. Since 1963, with some exceptions, the contributions in Geologica Carpathica were mainly published in German, Russian and English, less commonly also in French. The papers published later on 1982 were almost only in English. The first really international article has been published by the leading Austrian geologist Alexander Tollmann who correlated the Tatricum with the Unterostalpin in 1965. The first international issue of Geologica Carpathica appeared in 1967, with articles published by authors from Austria, Poland, Romania, Bulgaria, Yugoslavia and the Soviet



Fig. 1. Timeline of the history of Geologica Carpathica.

Union. This issue was prepared on the occasion of the 70<sup>th</sup> birthday anniversary of Dimitri Andrusov with bibliography written by Bohuslav Cambel who later innovated and transformed the journal “Geologický Sborník”, into a truly international journal named “Geologický Zborník — Geologica Carpathica”. The dissemination of geoscience research in world languages became the new publishing concept of the Geologica Carpathica, and a base for further scientific growth of the journal. Bohuslav Cambel expanded the editorial office establishing a position of English interpreter at the Geological Institute of the Slovak Academy of Sciences (now Earth Science Institute). Under the leadership of Editor-in-chief Eduard Köhler since 1991, the journal published articles in English only, it changed the size format from B4 to A4, the title was simplified to “Geological Carpathica”, established international editorial board and the number of foreign authors increased, mainly from the Carpathian–Balkan region.

### Period after registration in Current Content database

In 1996, the journal was already indexed in the Current Contents Database, with the initial impact factor of 0.27. Then, under the direction of the Editor-in-chief Jozef Michalík, the contributors from abroad increased and came also from the eastern continuation of the Alpine zone, and the proportion of Slovak authors declined to ~20 %. The impact factor (IF) > 1 was reached for the first time in 2008, and is persistently above 1 since 2015 (Table 1). The journal importance was growing mutually up to 2016, when Web of Science (WOS) IF (2-year window) reached 1.52; together with Scimago index SJR=0.58, and the Scopus CiteScore computed over 3-year window is 1.49. In the WOS category “Geosciences-Multidisciplinary”, Geologica Carpathica belongs to the 3<sup>rd</sup> quartile, while the Scopus in category “Geology” ranks the journal to the 2<sup>nd</sup> quartile. Noteworthy, the paper published in Geologica Carpathica over the past 20 years have 90~98 % chance to be cited in the future according to Scimago evaluation of their titles and abstract. However, the reality is that only

67~78 % from the published papers recorded some citations. The peer-review process within last year’s brought expecting results and Sci evaluation of Geologica Carpathica for 2018 year recorded highest impact with WOS (Clarivate) IF=1.70; Scimago index SJR=0.63; Scopus CiteScore=1.76 and SNIP=1.20. Noteworthy that Geologica Carpathica is in the 2<sup>nd</sup> quartile on the 66<sup>th</sup> place from 218 similar journal of the Earth and Planetary Sciences/Geology category.

Since 1997, the co-publisher of journal is also the Geological Institute of the Czech Academy of Sciences in Prague and the Polish Geological Institute in Warsaw. The journal is published electronically since 2009, since 2014 the correspondence is in own electronic editorial system. The cooperation with the Versita/De Gruyter publishing House which helped journal with dissemination of electronic version of journal and organising of doi (Digital Object Identifier) for articles terminated in 2019. The history of the journal summarizes the timeline (Fig. 1) with the names of editors-in-chiefs. Figure 2 provides geographic coordinates of the sites described in the journal since 1996.

### Research output

Geologica Carpathica influenced the thinking of several generations of geologists, with 2403 articles published until now.

Several principal articles covered the crystalline basement of the Western Carpathians were published in Geologica Carpathica, including those that expanded basic knowledge on their genesis, revealed their Carboniferous age during 80-ties up to our knowledge of their development in several age and geodynamic evolutionary stages. The metamorphic crystalline basement was described from main areas in the Western Carpathians showing their pT history and on many places metamorphic zonality. Advances in stratigraphic, sedimentological, and paleontological studies of the Western Carpathians published by Geologica Carpathica included (1) paleogeographic and paleoenvironmental analyses of Mesozoic and Paleogene successions in the Pieniny Klippen Belt and Central Western Carpathians and bio-, magneto- and chemostratigraphic correlations

**Table 1:** Geologica Carpathica impact factor history.

<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
0.271	0.273	0.486	0.156	0.167	0.147	0.397	0.494	0.449	0.364	0.517
<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
1.081	0.963	0.909	0.787	1.143	0.835	0.761	1.523	1.358	1.169	1.699



**Fig. 2.** Sites assessed in the journal since 1996.

between the Tethyan and Boreal realms and (2) establishment of the chronostratigraphic and paleogeographic framework for the Miocene Paratethys and its correlation with the Mediterranean Miocene. In addition to the focus on paleogeographic and stratigraphic analyses, Ján Seneš was one of the first pioneers who introduced actualistic paleoecological analyses focusing on Holocene assemblages to improve paleoenvironmental analyses of Miocene deposits in the Paratethys. This work was primarily published in *Geologica Carpathica*, starting in 1953 (southern France) and 1966 (Cuba), and in 1989–1991 (Adriatic Sea), effectively pre-dating similar works in the western countries in 1960s and 1970s that became influential in the foundation of conservation paleobiology.

*Geologica Carpathica*, with its 70-year-old tradition, presents high-quality research papers devoted to all aspects of the Alpine–Carpathian–Balkan region and

adjacent regions derived from the Mediterranean Tethys and its continental foreland. *Geologica Carpathica* is an official journal of the Carpathian–Balkan Geological Association. We hope the heritage of journal will successfully keep on the future and *Geologica Carpathica* becomes even larger platform in higher number of fundamental and review contributions for dissemination of geoscience information.

Thousands of papers have been published in the seventy years of the history of our journal, and we think that this open-access scientific journal has a great future ahead. *Geologica Carpathica* is an open-access platform for all members of the geoscience community, including students. Therefore, the standard twelve printed papers with black and white pictures are cost-free, in accordance with the recommendations of the European Commission to eliminate the recent plethora of predator journals.

*Igor Broska, Adam Tomašových, Milan Kohút and Lubica Puškelová*