Jurassica XIII – conference report

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The Jurassica XIII conference took place in Kościelisko, near Zakopane (Poland) on June 19–23, 2017. The meeting arranged by the Polish & Slovak Working Group of the Jurassic System was held in the Tatra Mountains (Central Carpathians) for the first time. This year's conference was organized by the Polish Geological Institute – National Research Institute and the Polish Geological Society. The organizing committee included: Jacek Grabowski (Polish Geological Institute, NRI – Warsaw), Jolanta Iwańczuk (Polish Geological Institute, NRI – Warsaw), Renata Jach (Jagiellonian University, Cracow), Piotr Łuczyński (University of Warsaw), Anna Jezierska (University of Warsaw), Jozef Michalík (Slovak Academy of Sciences, Bratislava), Vladimir Simo (Slovak Academy of Sciences, Bratislava) and Anna Bagińska (Polish Geological Institute, NRI – Warsaw). The Tatra National Park, University of Warsaw, Jagiellonian University in Cracow and State Geological Institute of Dionyz Stur (Bratislava) were the patrons of the Jurassica XIII conference. The conference and accommodation place was in the Rewita Hotel in Kościelisko (Fig. 1).

The Tatra Mountains are the highest ridge of the Western Carpathians. They consist of a pre-Mesozoic crystalline core (granitoidic intrusions and older metamorphic rocks), ?Permian and Mesozoic autochthonous sedimentary cover, allochthonous Mesozoic sedimentary rocks, detached locally from their crystalline basement in the form of nappes and smaller thrust sheets. The nappes were formed in the Late Cretaceous. The Mesozoic structures are discordantly overlain by rocks of the Central Carpathian Paleogene Basin. The sedimentary of the Tatra Mts are ascribed to three main tectonic-facies domains: Tatricum (High-Tatric autochthon and allochthon), Fatricum (Krížna Nappe = Lower Sub-Tatric Nappe) and Hronicum (Choč Nappe = Upper Sub-Tatric Nappe) on the basis of their characteristic facies development and tectonic position. The Krížna Nappe overlies the High-Tatric units and is covered by the Choč Nappe. It comprises Lower Triassic to Lower Cretaceous deposits and is built of several thrust sheets and so called "partial nappes".

A total of 43 participants from six countries: Poland, Slovakia, Czech Republic, Hungary, Austria and Russia, took part in this year's conference. During the meeting, 27 talks (including 4 keynote lectures) and 7 posters were presented. The following keynote lectures were given:

- Hans-Jürgen Gawlick (University of Leoben, Austria) Where and what was the Tethys myths, astonishing and confusing misusage of terms: back to the roots and open questions;
- Andrzej Wierzbowski (University of Warsaw) Lower Kimmeridgian of the Wieluń Upland and its borders: lithostratigraphy, ammonite stratigraphy (upper Planula/Platynota to Divisum zones), palaeogeography and climate-controlled cycles;
- Hubert Wierzbowski (Polish Geological Institute NRI) Strontium isotope variations in Middle–Late Jurassic seawater;
- Alfred Uchman (Jagiellonian University, Cracow) Geology of Tatra Mts introduction to the Field Trips.

The conference sessions were divided into two main thematic blocks: the Jurassic and the Jurassic / Cretaceous boundary topics. The first of them, lasted two days (June 19–20) and included also a poster session. The presentations embraced a wide spectrum of issues: from the detailed stratigraphy of Jurassic sediments (supported by palaeontological, geochemical and rock magnetic indicators), through palaeoenvironmental reconstructions, up to the palaeogeography and climate changes during the Jurassic period. The next two days (June 21–22) were intended for field trips. Four excursions (A–D) were prepared for members of the conference. All the trips were organized each day so that each participant had the possibility of taking part

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Fig. 1. Participants of the Jurassica XIII Meeting at the conference place (Rewita Hotel, Kościelisko) (photo by Jolanta Iwańczuk)

From the top: Michał Krobicki; first row from the left: Ewa Głowniak, Artur Teodorski, Piotr Ziółkowski; second row from the left: Kristýna Čížková, Kamil Fekete, Hubert Wierzbowski, Łukasz Słonka, Geza Csaszar; third row from the left: Otília Lintnerová, Andrea Svobodová, István Szente, István Főzy; fourth row from the left: Tiiu Elbra, Daniela Reháková, Anna Feldman-Olszewska, Paweł Brański, Andrzej Iwanow; fifth row from the left: János Haas, Urszula Hara, Jacek Grabowski; in the last row: Petr Schnabl, Šimon Kdýr, Andrzej Wierzbowski, Hans-Jürgen Gawlick, Jozef Michalík, Ekaterina Tesakova, Ágnes Görög

in two excursions. The field trip A, led by Renata Jach and Jacek Grabowski, concerned the Jurassic and Lower Cretaceous of the Krížna Nappe in the Western Tatra Mountains. All of the exposures were located near the Huciska Glade in the Chochołowska Valley and embraced exposures of: the Upper Pliensbachian spiculites; Lower Toarcian crinoidal limestones and manganese deposits, Lower Toarcian-Aalenian red limestones and marlstones, Bathonian Bositra limestones, Middle and Upper Jurassic radiolarites, Tithonian marly limestones, Berriasian calpionellid limestones; Upper Berriasian to Hauterivian marls and Valanginian sandstones. Field trip B prepared by Jolanta Iwańczuk and Jozef Michalík presented the Triassic/Jurassic boundary and the Lower to Middle Jurassic of the eastern part of the Krížna succession. The Triassic/Jurassic boundary was shown in the Kardolina section in the Belianske Tatry. The outcrops of the Lower and Middle Jurassic deposits were situated in the Sucha Woda Valley and Broniarski gully and embraced Pliensbachian spiculites, Toarcian calciturbidites (Fig. 2), uppermost Toarcian/lowermost Aalenian marly shales, middle to upper Aalenian black shales, Middle Jurassic radiolarites and microbreccias. Field trip C led by Alfred Uchman concerned the Jurassic of the Upper Sub-Tatric (Choč) Unit in the Kościeliska Valley. In the sections visited, the facies were represented by Lower Jurassic peloidal-oolitic, limestones, bioclastic limestones, crinoidal limestones, and silicified, crinoidal limestones with spiculites and by Middle Jurassic red



Fig. 2. Marls and shales of the Skalnite Member (Sucha Voda Valley) – lowermost Upper Toarcian; Krížna succession, field Trip B (photo by Michał Krobicki)

micritic limestones. Field trip D prepared by Piotr Łuczyński and Anna Jezierska was focused on the Jurassic of the High-Tatric units. The route ran through the Kościeliska Valley covering the most important tectonic units of the Tatra Mts, from the nummulitic Eocene up to the parautochthonous cover of the crystalline core. The exposures visited included the Lower Jurassic sandy-crinoidal facies of the Kominy Tylkowe Unit, the Middle Jurassic (Bajocian) crinoidal limestones of the Czerwone Wierchy Unit and the Upper Jurassic massive limestones (exposed in both tectonic units).

The last part of the conference was dedicated to the uppermost part of the Jurassic and the J/K boundary. During the session, six talks were presented. Four of them presented the integration of micro- and nannofosil stratigraphy with magnetic stratigraphy in variegated localities (Vocontian Basin, Transdanubian Range, Northern Calcareous Alps and Ukrainian sector of the Pieniny Klippen Belt). It is also worth mentioning that a significant part of the posters focused on this topic. This shows that the J/K boundary has become an important part of Jurassica meetings.

Abstracts and Field Trip Guidebook of the XIII Jurassica Meeting are available at: www.jurassica.pl/3-jurassica-xiii.