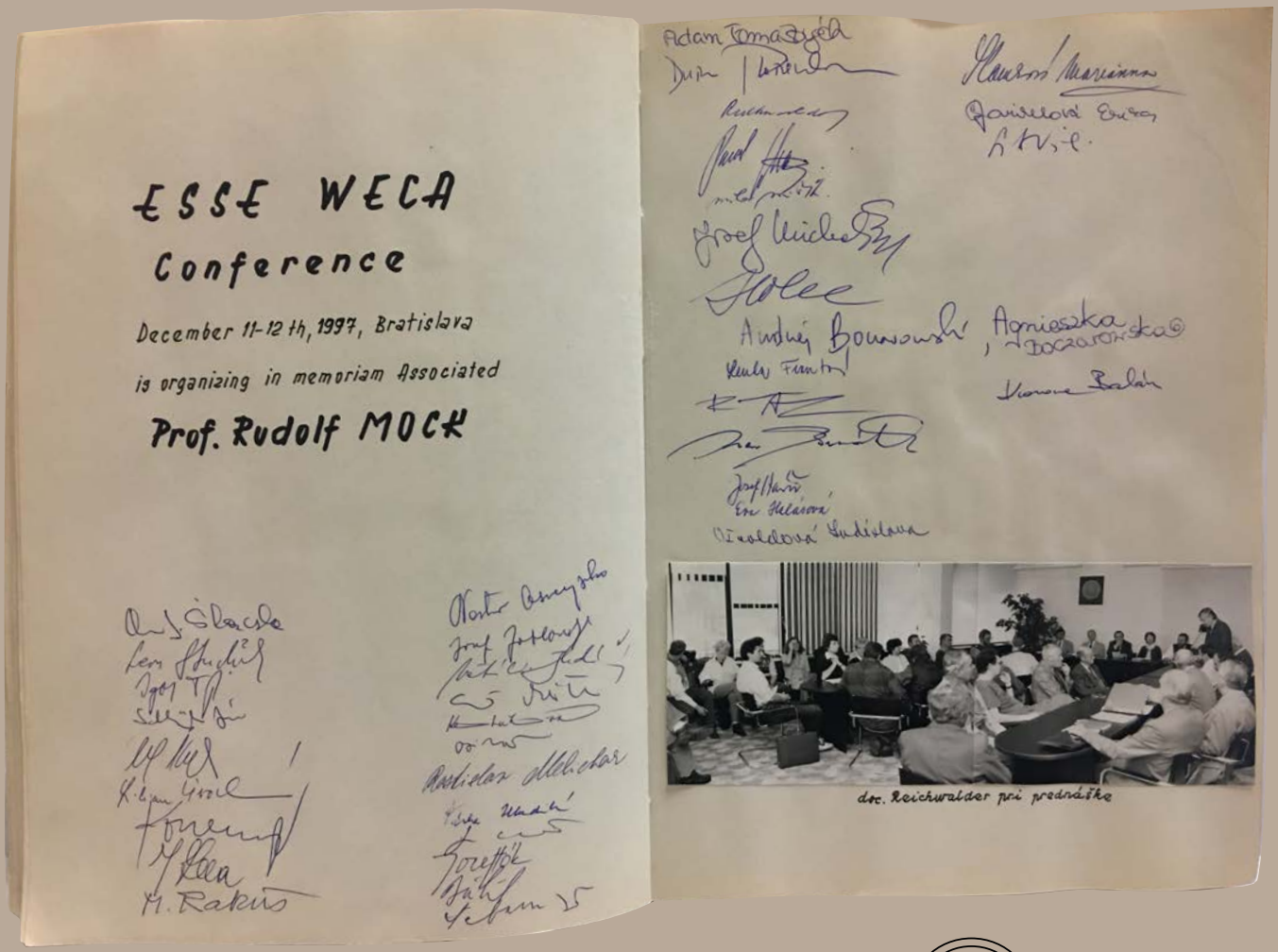
December 3 – 4, 2024

# 13th ESSEWECA Conference

Bratislava, Slovakia

# Environmental, Structural and Stratigraphical Evolution of the Western Carpathians

Natália Hudáčková – Ondrej Nemec – Andrej Ruman (Eds.)




## Abstract book

COMENIUS UNIVERSITY BRATISLAVA

# Faculty of Natural Sciences

prof. Mgr. Natália Hudáčková, PhD.
RNDr. Ondrej Nemec, PhD.
Mgr. Andrej Ruman, PhD.
**Editors**

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## Abstract Book

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# Contents

# From Nummulitic breccias to Flysch deposits: Eocene treasure of Central Dalmatia (Croatia)

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Eocene deposits from Dalmatia were disconformably deposited over Cretaceous rudist limestones near the coast of the Western Neotethys (Marjanac,1996, Ćosović et al. 2018). In the Omiš area, Lutetian-Early Bartonian Nummulitic limestones and bioclastic "breccias" are dominantly composed of large orthophragminid genera *Nummulites* and *Discocyclina*. In younger horizons they comprise planktic taxa *Globigerinatheka* and *Subbotina*. Red algae often compose macroids, with *Sporolithon* and *Lithoporella* being the main bioconstructors. They are associated with other coralgal genera (*Mesophyllum*, *Polystrata, Lithothamnion*, *Neogoniolithon* and *Hydrolithon*) and encrusting foraminifera *Acervulina, Solenomeris*, *Placopsilina* and *Nubecularia*, sometimes incorporating the genera *Rotalia* and *Eoannularia* (Sremac et al. 2020, 2024a,b). Less abundant but diverse macrofossils include solitary and colonial corals, bivalves (cockles, oysters, scallops), gastropods (*Columbella* sp.), rhynchonellid brachiopods, rotularian serpulids, crinoids (*Isselicrinus* sp.) and echinoids. Carbonate deposits are overlain with glauconite marls known as Transitional beds and, finally, Flysch deposits (Fig. 1). Grey marls comprise rich and diverse nannofossil assemblages (e.g. the genera *Chiasmolithus, Coccolithus, Corannulus, Discoaster, Reticulofenestra, Sphenolithus)*, pointing to the NP17 and NP18 nannozones (Bartonian-Early Priabonian) (Martini, 1971). Limestone olistoliths, dispersed along the Omiš area beaches, are a part of the regionally developed megabed, connected with the collapse of the platform margin (e.g. Marjanac 1996).

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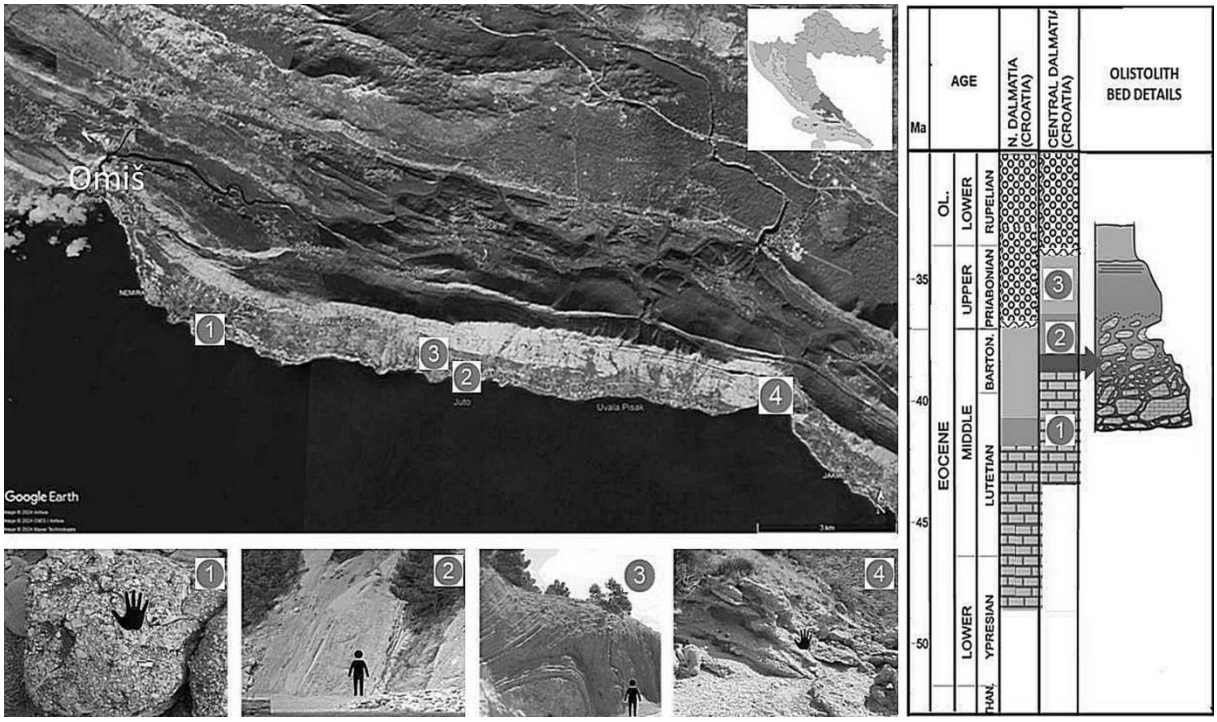


**Figure 1:** The geographic (Google Earth, 2024) and stratigraphic position of the studied outcrops in the vicinity of Omiš: 1. Nummulitic limestone; 2. Glauconite marl; 3. Folded flysch deposits; 4. Quaternary breccia. Clastic deposition started during the Bartonian, later than in Northern Dalmatia (partly after Sremac et al., 2020, 2024a). Outcrop size is shown by human or palm silhouettes.

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