

# Larger benthic foraminifera as an important tool for palaeoenvironmental interpretation of Campanian inner platform settings, island of Brač (Croatia)

---

Cvetko Tešović, Blanka; Schlagintweit, Felix; Martinuš, Maja; Vlahović, Igor

Source / Izvornik: **Abstracts book / 36th International Meeting of Sedimentology, 2023, 52 - 52**

Conference paper / Rad u zborniku

Publication status / Verzija rada: **Published version / Objavljena verzija rada (izdavačev PDF)**

Permanent link / Trajna poveznica: <https://um.nsk.hr/um:nbn:hr:169:543215>

Rights / Prava: [In copyright](#) / [Zaštićeno autorskim pravom.](#)

Download date / Datum preuzimanja: **2024-07-06**



Repository / Repozitorij:

[Faculty of Mining, Geology and Petroleum Engineering Repository, University of Zagreb](#)





36<sup>TH</sup>



IAS

DU  
BROV  
NIK

MEETING OF SEDIMENTOLOGY

ABSTRACTS BOOK



12-16 June 2023, DUBROVNIK, CROATIA

**36<sup>th</sup> International Meeting of Sedimentology**  
**June 12–16, 2023, Dubrovnik, Croatia**

# ABSTRACTS BOOK



## Organized by:

Croatian Geological Society (HGD) and International Association of Sedimentologists (IAS)



## Organizing Committee

Lara Wacha, **chair**, *Croatian Geological Survey, Zagreb*  
Katarina Gobo, *University of Zagreb, Faculty of Science*  
Nikolina Ilijanić, *Croatian Geological Survey, Zagreb*  
Tvrtko Korbar, *Croatian Geological Survey, Zagreb*  
Marijan Kovačić, *University of Zagreb, Faculty of Science*  
Duje Kukoč, *Croatian Geological Survey, Zagreb*  
Borna Lužar-Oberiter, *University of Zagreb, Faculty of Science*  
Maja Martinuš, *University of Zagreb, Faculty of Science*  
Slobodan Miko, *Croatian Geological Survey, Zagreb*  
Davor Pavelić, *University of Zagreb, Faculty of Mining, Geology and Petroleum Engineering*  
Kristina Pikelj, *University of Zagreb, Faculty of Science*  
Igor Vlahović, *University of Zagreb, Faculty of Mining, Geology and Petroleum Engineering*

## Scientific Committee

Igor Vlahović, **president**, *University of Zagreb, Croatia*  
Nevena Andrić Tomašević, *Karlsruhe Institute of Technology, Germany*  
Bruno Campo, *University of Bologna, Italy*  
Sonia Campos Soto, *Complutense University of Madrid, Spain*  
Luca Caracciolo, *FAU Erlangen-Nürnberg, Germany*  
Blanka Cvetko Tešović, *University of Zagreb, Croatia*  
Shahin E. Dashtgard, *Simon Fraser University, Canada*  
Andrea Di Capua, *National Research Council – IGAG, Italy*  
Goran Durn, *University of Zagreb, Croatia*  
Gianluca Frijia, *University of Ferrara, Italy*  
Massimiliano Ghinassi, *University of Padova, Italy*  
Luis Gibert Beotas, *University of Barcelona, Spain*  
Bosiljka Glumac, *Smith College, USA*  
Antun Husinec, *St. Lawrence University, USA*  
Stuart Jones, *Durham University, UK*  
Tvrtko Korbar, *Croatian Geological Survey, Croatia*  
Marijan Kovačić, *University of Zagreb, Croatia*  
Juan Carlos Laya, *Texas A&M University, USA*  
Marta Marchegiano, *University of Granada, Spain*  
Cole McCormick, *Pennsylvania State University, USA*  
Mardi McNeil, *Geoscience Australia, Australia*  
Theresa Nohl, *University of Vienna, Austria*  
Shuxin Pan, *PetroChina – NWGI, China*  
Guido Pastore, *University of Milano–Bicocca, Italy*  
Maximiliano Paz, *University of Saskatchewan, Canada*  
Daniel A. Petráš, *Czech Geological Survey, Czech Republic*  
Miquel Poyatos-Moré, *Universitat Autònoma of Barcelona, Spain*  
Joanna Pszonka, *Polish Academy of Sciences – MEERI, Poland*  
John J.G. Reijmer, *Vrije Universiteit Amsterdam, The Netherlands*  
Valentina Marzia Rossi, *National Research Council – IGG, Italy*  
Arnoud Sloopman, *Colorado School of Mines, USA*  
Miroslaw Slowakiewicz, *University of Warsaw, Poland*  
Thomas Steuber, *Khalifa University of Science and Technology, Abu Dhabi, UAE*  
Finn Surlyk, *University of Copenhagen, Denmark*  
Michal Šujan, *Comenius University in Bratislava, Slovakia*  
Romain Vaucher, *University of Geneva, Switzerland*  
Alan Vranjković, *INA Oil Company, Croatia*  
Lara Wacha, *Croatian Geological Survey, Croatia*  
Guodong Wang, *PetroChina, China*  
Pujun Wang, *Jilin University, China*  
Valentin Zuchuat, *RWTH Aachen University, Germany*  
Nadja Zupan Hajna, *Research Centre of the Slovenian Academy of Sciences and Arts, Slovenia*

**Publisher:** Croatian Geological Society (HGD)

**For the publisher:** Slobodan Miko

**Editors:** Igor Vlahović and Darko Matešić

**Language Editor:** Julie Robson (Scotland, United Kingdom)

**Digital layout:** Laser Plus d.o.o

**Cover design:** Ana Badrić

**eISBN:** 978-953-6907-79-3

**Theme 2. Shallow-marine carbonate depositional systems and carbonate platforms****General Session**

Oral presentation

## Larger benthic foraminifera as an important tool for palaeoenvironmental interpretation of Campanian inner platform settings, island of Brač (Croatia)

Blanka Cvetko Tešović<sup>1</sup>, Felix Schlagintweit<sup>2</sup>, Maja Martinuš<sup>1</sup>, Igor Vlahović<sup>3</sup><sup>1</sup>University of Zagreb, Faculty of Science, Department of Geology, Zagreb, Croatia<sup>2</sup>Lerchenauerstr. 167, München, Germany<sup>3</sup>University of Zagreb, Faculty of Mining, Geology and Petroleum Engineering, Zagreb, Croatia[bcvetko@geol.pmf.unizg.hr](mailto:bcvetko@geol.pmf.unizg.hr)

The informal group of larger benthic foraminifera (LBF) generally exhibits a high potential for biostratigraphy, palaeoenvironmental interpretations, and palaeobiogeographic comparisons in Tethys, especially during the Cretaceous greenhouse period.

Late Cretaceous Global Community Maturation Cycle (GCMC) encompasses the Turonian–Maastrichtian interval representing a special period of increasing diversity of LBF in shallow water settings. The LBF suffered from the palaeoenvironmental distributions associated with the Cenomanian–Turonian boundary OAE2 event leading to the almost complete extinction. During the Coniacian–Santonian, LBF already underwent a remarkable diversification in a wider area of Tethys associated with widely distributed extensive platform carbonate evolution. From Campanian inner platform facies, numerous taxa of LBF have been reported from Spain, Greece and Croatian island of Brač. Shallow-marine carbonate platform deposition on Brač represents an essential contribution to understanding Late Cretaceous evolution of one of the best preserved Mesozoic Perimediterranean carbonate platforms with especially favourable conditions for the development of LBF in Campanian (Gornji Humac and Pučišća fms) as a consequence of gradual progradation of platform environments over hemipelagic Dol fm resulted in diachronous upper boundary. Platform progradation resulted in establishment of shallow-marine environments progressively covering larger areas until the final covering of the Brač Marbles mb: Rasotica and Lovrečina mbrs of Pučišća fm that merged with the Gornji Humac fm. Such complexity of very different lithofacies enabled Campanian assemblages to be most diversified.

Ongoing studies have revealed additional four new taxa (one new genus) of LBF described from lower–middle Campanian carbonates of the island of Brač, Croatia, two of them are also reported from time-equivalent strata of the Gavrovo–Tripolitza Platform (SW Greece), while providing further evidence for the pronounced Campanian diversification within the Late Cretaceous GCMC of AdCP.