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://urn.nsk.hr/urn:nbn:hr:169:543215

Rights / Prava: In copyright/Zaštićeno autorskim pravom.

Download date / Datum preuzimanja: 2025-04-02

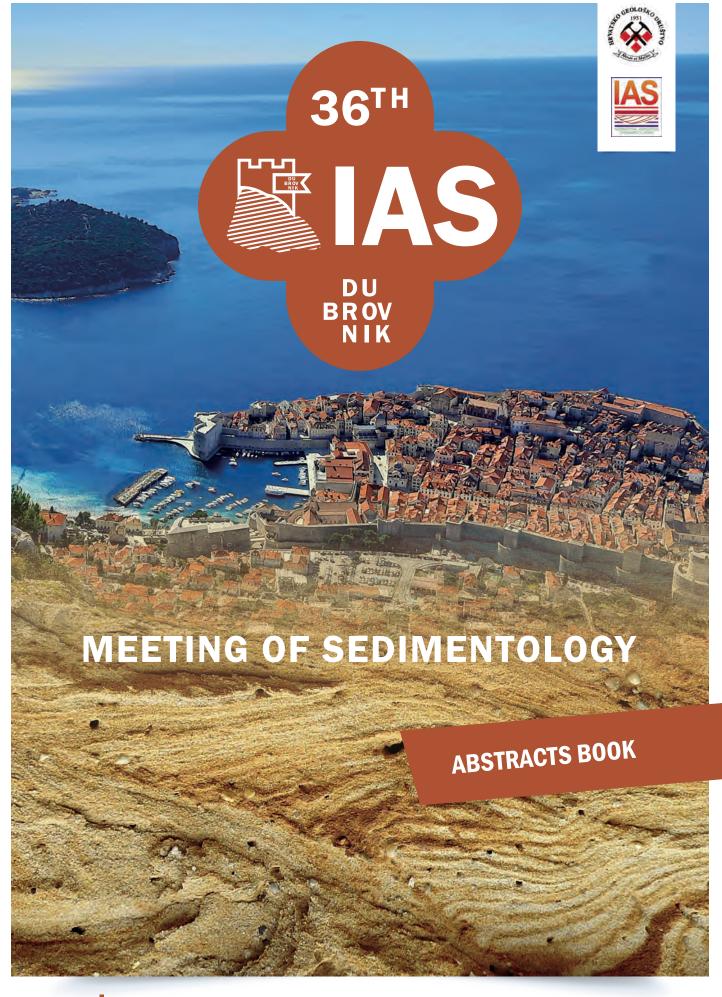


Repository / Repozitorij:

Faculty of Mining, Geology and Petroleum Engineering Repository, University of Zagreb









12-16 June 2023, DUBROVNIK, CROATIA

36th 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, Germanv 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

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 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 Slootman, 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



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 Tešović¹, Felix Schlagintweit², Maja Martinuš¹, Igor Vlahović³

¹University of Zagreb, Faculty of Science, Department of Geology, Zagreb, Croatia
²Lerchenauerstr. 167, München, Germany
³University of Zagreb, Faculty of Mining, Geology and Petroleum Engineering, Zagreb, Croatia
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 LFB 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.