Evidence of Late Quaternary environmental changes preserved within the Privlaka pedo-sedimentary complex at the eastern Adriatic coast, Croatia

Hećej, Nina; Galović, Lidija; Beerten, Koen; Poch, Rosa Maria; Husnjak, Stjepan; Martinčević Lazar, Jasmina; Pandurov, Mihajlo; Gajić, Rodoljub; Stejić, Petar; Ružičić, Stanko; ...

Source / Izvornik: Abstracts book / 36th International Meeting of Sedimentology, 2023, 411 - 411

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:169:230112

Rights / Prava: In copyright/Zaštićeno autorskim pravom.

Download date / Datum preuzimanja: 2025-01-06

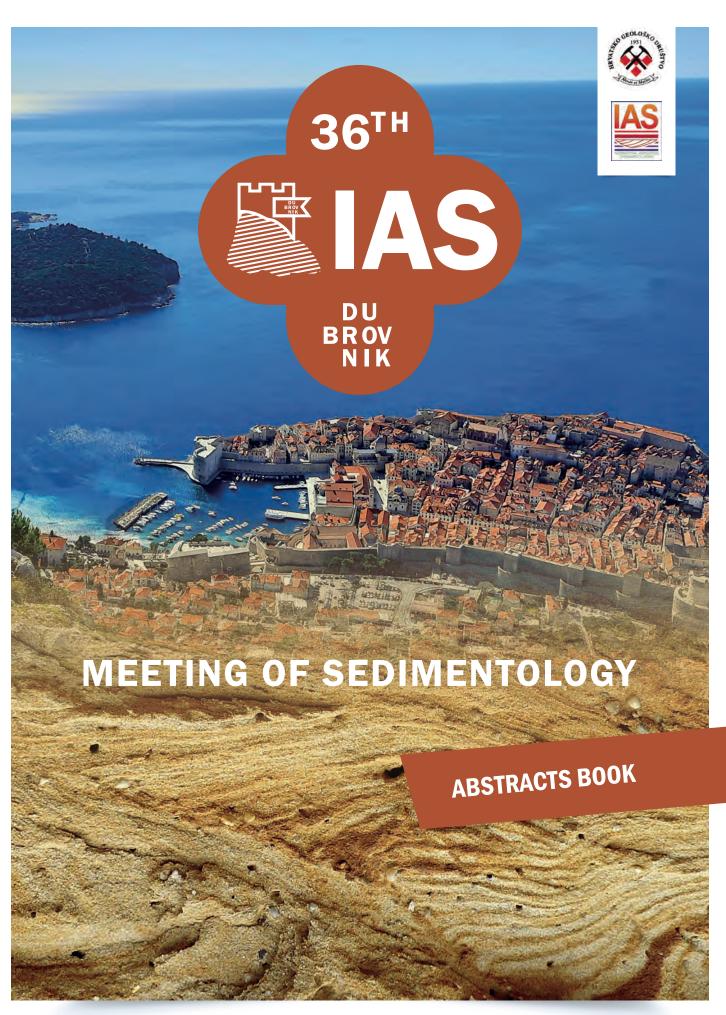


Repository / Repozitorij:

<u>Faculty of Mining, Geology and Petroleum</u> <u>Engineering Repository, University of Zagreb</u>









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 Mining*, *Geology and Petroleum Engineering*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

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 12. Stratigraphic markers and archives

Special Session 12.6. Paleosols as valuable records of terrestrial climate and environments

Oral presentation

Evidence of Late Quaternary environmental changes preserved within the Privlaka pedo-sedimentary complex at the eastern Adriatic coast, Croatia

Nina Hećej¹, Lidija Galović¹, Koen Beerten², Rosa Maria Poch³, Stjepan Husnjak⁴, Jasmina Martinčević Lazar¹, Mihajlo Pandurov⁵, Rodoljub Gajić⁵, Petar Stejić⁵, Stanko Ružičić⁶, Ajka Šorša¹

nhecej@hgi-cgs.hr

The Privlaka pedo-sedimentary succession (Eastern Adriatic coast, Croatia) is a promising archive of palaeoenvironmental changes as it shows a clear alternation of (a) palaeosol(s) and glacio-fluvial deposits. The objective of this study is to describe the palaeosols and sediments, and unravel the nature, magnitude and timing of environmental change preserved within this terrestrial record. To this end, a more than 12 m thick section was investigated in detail, which is divided into four different units of which one is represented by a reddish palaeosol, and the other three by sediment packages, each indicating a different pedosedimentological context. For the purpose of delineating the absolute thickness and lateral extent of the complex, geoelectrical soundings and remote sensing techniques were deployed. The profile was thoroughly described and sampled for the purpose of conducting high-resolution palaeoenvironmental research using mineralogical, geochemical, pedophysical and micromorphological properties. Preliminary results will be presented and discussed in the light of the Late Quaternary palaeoenvironmental evolution of the region and surroundings.

The research is funded by the Croatian Science Foundation under the projects ACCENT (IP-2020-02-3274) and DOK-2021-02-9476.

¹Croatian Geological Survey, Department of Geology, Zagreb, Croatia

²Belgian Nuclear Research Centre SCK CEN, Mol, Belgium

³University of Lleida, Department of Environment and Soil Sciences, Lleida, Spain

⁴Faculty of Agriculture, Zagreb, Croatia, ⁵Geological Survey of Serbia, Belgrade, Serbia

⁶Faculty of Mining, Geology and Petroleum Engineering, Zagreb, Croatia