

Upper Albian carbonate facies and diagenesis in the Western Istrian Anticline (WIA), Croatia

Barudžija, Uroš

Source / Izvornik: **Abstract volume // 11th International Cretaceous Symposium, 2022, 122 - 123**

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:169:842873>

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

Download date / Datum preuzimanja: **2024-11-10**



Repository / Repozitorij:

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



Dufrenoyia. The very poor ammonite record and the apparent total absence of age-diagnostic ammonites during the lowermost to middle Lower Aptian make developing an ammonite zonation for this interval in America completely non-viable.

REFERENCES

Moreno-Bedmar, J.A., Bover-Arnal, T., Barragán, R. and Salas, R. 2012. Uppermost Lower Aptian transgressive records in Mexico and Spain: chronostratigraphic implications for the Tethyan sequences. *Terra Nova*, 24 (4), 333–338. <http://dx.doi.org/10.1111/j.1365-3121.2012.01069.x>

Reboulet, S., Szives, O., Aguirre-Urreta, B., Barragán, R., Company, M., Frau, C., Kakabadze, M.V., Klein, J., Moreno-Bedmar, J.A., Lukeneder, A., Pictet, A., Ploch, I., Raisossadat, S.N., Vašiček, Z., Baraboshkin, E.J. and Mitta, V.V. 2018. Report on the 6th International Meeting of the IUGS Lower Cretaceous Ammonite Working Group, the Kilian Group (Vienna, Austria, 20th August 2017). *Cretaceous Research*, 91(4), 100–110. <http://dx.doi.org/10.18814/epiiugs/2017/v40i3/017021>

UPPER ALBIAN CARBONATE FACIES AND DIAGENESIS IN THE WESTERN ISTRIAN ANTICLINE (WIA), CROATIA

Uroš Barudžija

Faculty of Mining, Geology and Petroleum Engineering, University of Zagreb, Pierottijeva 6, HR10000 Zagreb, Croatia; uros.barudzija@rgn.unizg.hr

Regional unconformities and events in the shallow-marine carbonate successions of the Western Istrian Anticline (WIA) in the north-western part of the Adriatic Carbonate Platform (AdCP) (Vlahović et al. 2005) were studied within the WIA nLab project. Although shallow-marine carbonate deposits predominated on the AdCP during the Albian, as it did most of the time during the Mesozoic when the AdCP migrated and developed in the Tethyan Ocean, occasional emergences occurred (Durn et al. 2003). Upper Albian deposits document a facies shift from shallow-marine limestone with predominant benthic foraminiferal communities (including *Pseudonummoloculina heimi*, *Nezzazata* sp. and *Cuneolina* sp.) to nearly terrestrial and lagoonal environments (with charophytes and ostracods). Their characteristics and facies architecture indicate the influence of processes that occurred in variable depositional and diagenetic environments. Silicified limestones and diagenetic quartz-rich sediments accompanied by dolomites and clays have been documented. Global data on silicification of continental and near-terrestrial carbonates are generally sparser

than in marine environments (Bustillo 2010). Important clues to the Late Albian palaeoenvironment, palaeoclimate and provenance have been obtained from these deposits associated with the WIA, an ideal natural laboratory for studying regional unconformities in carbonate rocks.

This work has been fully supported by the Croatian Science Foundation under the project IP-2019-04-8054 HRZZ – WIANLab (*Western Istrian Anticline as an ideal natural laboratory for the study of the regional unconformities in carbonate rocks*).

REFERENCES

Bustillo, M.A. 2010. Silicification of continental carbonates. In: Alonso-Zarza, A.M. and Tanner, L.H. (Eds), Carbonates in continental settings: Geochemistry, diagenesis and applications [Developments in Sedimentology 62], pp. 153–178. Elsevier; Amsterdam. [http://dx.doi.org/10.1016/S0070-4571\(09\)06203-7](http://dx.doi.org/10.1016/S0070-4571(09)06203-7)

Durn, G., Ottner, F., Tišljarić, J., Mindszenty, A. and Barudžija, U. 2003. Regional subaerial unconformities in shallow-marine carbonate sequences of Istria: sedimentology, mineralogy, geochemistry and micromorphology of associated bauxites, palaeosols and pedo-sedimentary complexes. In: Vlahović, I. and Tišljarić, J. (Eds), Evolution of depositional environments from the Paleozoic to the Quaternary in the karst Dinarides and the Pannonian Basin. 22nd IAS Meeting of Sedimentology, Opatija 2003. Field Trip Guidebook, pp. 207–256. Zagreb.

Vlahović, I., Tišljarić, J., Velić, I. and Matičec, D. 2005. Evolution of the Adriatic Carbonate Platform: palaeogeography, main events and depositional dynamics. Palaeogeography, Palaeoclimatology, Palaeoecology, 220, 333–360. <https://doi.org/10.1016/j.palaeo.2005.01.011>

ALBIAN–CENOMANIAN FAUNAL DIVERSITY OF THE EL MIZAB FORMATION (TALERHZA BASIN, NORTH-WESTERN MOROCCO)

Mohamed Benzaggagh^{1*} | Mariusz A. Salamon² | Mohamed Oumhamed¹ | Benjamin Musavu-Moussavou³ | Bruno Ferré⁴

1| University of Moulay Ismail, Faculty of Sciences, Morocco;
*benzaggagh@gmail.com

2| University of Silesia, Faculty of Natural Sciences, Sosnowiec, Poland

3| Université of Sciences and Techniques of Masuku, Department of Geology, Franceville, Gabon

4| Dame du Lac 213, 3 rue Henri Barbusse, 76300 Sotteville-les-Rouen, France

The Talerhza Basin is a small Cretaceous basin located in the eastern part of the South Riffian Ridges. Its stratigraphical sequence (Albian–Paleogene,