

Knjiga je plod dolgoletnega dela obeh avtorjev na področju biostratigrafije in paleontologije, zlasti raziskav konodontov, ki jo dopolnjuje obsežno terensko delo in poznavanje geoloških razmer v Sloveniji in širšem prostoru. Delo je znanstvena monografija, ki ni zanimiva le za ozek krog specialistov, temveč je pomemben doprinos k poznavanju in razumevanju geološkega razvoja slovenskega prostora in njegove vpetosti v svetovne razmere.

Prof. dr. Nina Zupančič, Univerza v Ljubljani

The book *Conodonts of Slovenia* is a fundamental scientific work in the field of paleontology and biostratigraphy. It contains a comprehensive and critical overview of previous conodont studies, and at the same time proposes and delivers a new biostratigraphic zonation of conodont assemblages found and identified in Slovenia, which represents an important scientific contribution to the conodont science in the world.

Prof. Dr. Blanka Cvetko Tešović, University of Zagreb

V knjigi avtorja s kritičnim prikazom vseh dosedanjih konodontnih raziskav predstavi rezultate lastnih štiridesetletnih raziskav konodontov iz paleozojskih in triasnih plasti Slovenije. Med njimi velja izpostaviti s konodonti dokazano permsko-triasno mejo na ozemlju Dinaridov po mednarodno določenih kriterijih. Delo je dopolnjeno z izvirnimi geotektonskimi in paleogeografskimi risbami, preglednimi stratigrafskimi stolpci in bogato paleontološko dokumentacijo.

Akademik prof. dr. Ivan Gušić, Hrvatska akademija znanosti in umetnosti

This remarkable monograph is one of the most important synthetic paleontological and biostratigraphical works on the territory of Slovenia. Based on an excellent knowledge of the geology of Slovenia, the authors ranged all strata with conodonts precisely into geotectonic, paleogeographic and lithostratigraphic units. The book is certainly also useful to other researchers of conodonts in the world, as conodontology in recent decades represents one of the most important methods for determination the relative geological age of Paleozoic and Triassic strata.

Academician Prof. Dr. Milan Sudar, Serbian Academy of Sciences and Arts

Cena: 33 €



9 789616 498661



**GeoZS**  
Geološki zavod  
Slovenije

|                                                                                    |     |
|------------------------------------------------------------------------------------|-----|
| <b>ABSTRACT</b>                                                                    | 7   |
| <b>1. INTRODUCTION</b>                                                             | 9   |
| <b>2. CONODONTS</b>                                                                | 12  |
| <b>3. GEOLOGICAL, BIOLOGICAL AND CLIMATIC EVENTS IN THE PALEOZOIC AND TRIASSIC</b> | 19  |
| FROM THE CAMBRIAN EXPLOSION TO THE GREAT ORDOVICIAN EXTINCTION                     | 19  |
| TRANSITION TO LAND                                                                 | 24  |
| THE AGE OF FISH AND THE EXPLOSION OF DEVONIAN FLORA                                | 25  |
| AGE OF EXTENSIVE SWAMPS                                                            | 27  |
| THE THRESHOLD OF THE LARGEST EXTINCTION OF ALL TIME                                | 29  |
| LIFE AFTER CATASTROPHE                                                             | 34  |
| THE END-TRIASSIC EXTINCTION                                                        | 37  |
| <b>4. REVIEW OF CONODONT RESEARCH IN SLOVENIA</b>                                  | 40  |
| <b>4.1. PALEOZOIC AND LOWER TRIASSIC</b>                                           | 46  |
| DEVONIAN, CARBONIFEROUS, AND LOWER PERMIAN                                         | 46  |
| MIDDLE PERMIAN                                                                     | 51  |
| UPPER PERMIAN AND LOWER TRIASSIC                                                   | 52  |
| <b>4.2. MIDDLE AND UPPER TRIASSIC</b>                                              | 69  |
| EASTERN ALPS                                                                       | 69  |
| SOUTHERN ALPS                                                                      | 75  |
| EXTERNAL DINARIDES                                                                 | 97  |
| TRANSITIONAL AREA BETWEEN THE EXTERNAL AND INTERNAL DINARIDES                      | 103 |
| DISCUSSION ON THE PSEUDOSILURIAN AND AMPHICLINIA FORMATIONS                        | 113 |
| <b>5. PALEONTOLOGIC PART</b>                                                       | 116 |
| <b>6. CONCLUSIONS</b>                                                              | 149 |
| <b>7. ACKNOWLEDGMENTS</b>                                                          | 153 |
| <b>8. REFERENCES</b>                                                               | 155 |
| <b>9. PLATES</b>                                                                   | 171 |

|                                                                               |            |
|-------------------------------------------------------------------------------|------------|
| <b>IZVLEČEK .....</b>                                                         | <b>7</b>   |
| <b>1. UVOD .....</b>                                                          | <b>9</b>   |
| <b>2. KONODONTI.....</b>                                                      | <b>12</b>  |
| <b>3. GEOLOŠKI, BIOLOŠKI IN KLIMATSKI DOGODKI V PALEOZOIKU IN TRIASU.....</b> | <b>19</b>  |
| OD KAMBRIJSKE EKSPLOZIJE DO VELIKEGA ORDOVICIJSKEGA IZUMIRANJA .....          | 19         |
| PREHOD NA KOPNO.....                                                          | 24         |
| DOBA RIB IN DEVONSKA RASTLINSKA EKSPLOZIJA.....                               | 25         |
| ČAS VELIKIH PREMOŠKIH MOČVIRIJ .....                                          | 27         |
| NA PRAGU NAJVEČJEGA IZUMIRANJA VSEH ČASOV.....                                | 29         |
| ŽIVLJENJE PO KATASTROFI .....                                                 | 34         |
| IZUMIRANJE OB KONCU TRIASA .....                                              | 37         |
| <b>4. PREGLED KONODONTNIH RAZISKAV V SLOVENIJI .....</b>                      | <b>40</b>  |
| <b>4.1. PALEOZOIK IN SPODNJI TRIAS.....</b>                                   | <b>46</b>  |
| DEVON, KARBON IN SPODNJI PERM.....                                            | 46         |
| SREDNJI PERM .....                                                            | 51         |
| ZGORNJI PERM IN SPODNJI TRIAS.....                                            | 52         |
| <b>4.2. SREDNJI IN ZGORNJI TRIAS .....</b>                                    | <b>69</b>  |
| VZHODNE ALPE.....                                                             | 69         |
| JUŽNE ALPE .....                                                              | 75         |
| ZUNANJI DINARIDI .....                                                        | 97         |
| PREHODNO OBMOČJE MED ZUNANJIMI IN NOTRANJIMI DINARIDI .....                   | 103        |
| RAZMISLEK O PSEVDOZILJSKI IN AMFIKLINSKI FORMACIJI .....                      | 113        |
| <b>5. PALEONTOLOŠKI DEL.....</b>                                              | <b>116</b> |
| <b>6. ZAKLJUČKI .....</b>                                                     | <b>149</b> |
| <b>7. ZAHVALA.....</b>                                                        | <b>153</b> |
| <b>8. LITERATURA .....</b>                                                    | <b>155</b> |
| <b>9. TABLE .....</b>                                                         | <b>171</b> |