



2nd Palaeontological **Virtual** Congress

May 1st–15th, 2020

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Book of Abstracts

Palaeontology in the virtual era

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A new way to make science

2nd Palaeontological Virtual Congress

Book of Abstracts

Palaeontology in the virtual era

From an original idea of Vicente D. Crespo

Published by Evangelos Vlachos, Esther Manzanares, Vicente D. Crespo, Carlos Martínez-Pérez, Humberto G. Ferrón, José Luis Herráiz, Arturo Gamonal, Fernando Antonio M. Arnal, Francesc Gascó, and Paolo Citton

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Presentation

After the great success of the 1st **Palaeontological Virtual Congress (PVC)** organised in December 2018, we are back with the 2nd edition of the first Palaeontological meeting completely developed in a virtual environment. The original idea of implementing this format in our discipline was the natural consequence of the emergence of new technologies, which allow the wider range of communication possibilities. The importance of this kind of initiatives, that allow communication among peers without being physically present, is even more evident with the dramatic changes and exceptional situation that our society has been experiencing in the last few months. Within this context, the origin of the PVC represented the first attempt in palaeontology to take advantage of these new possibilities, becoming nowadays the most important international palaeontological congress developed in the net. This online meeting offers an exclusively virtual-developed environment to researchers all around the globe. The novelty of this project is its simplicity, and one of our main goals is to give international projection to the palaeontological research carried out by groups with limited economic resources; allowing to save expensive registration fees, travel, accommodation and maintenance expenses.

The soul of our congress has not changed, and that is trying to combine the benefits of traditional meetings (i.e., providing a forum for discussion, including guest lectures, field trips or the production of an abstract book) with the advantages of online platforms. These allow reaching a high number of researchers along the world, promoting the participation of palaeontologists from developing countries and providing a comprehensive forum for the exchange of ideas and discussion with specialists in the target field. This abstract book is the best evidence of the success of the initiative, whose figures are increasing edition after edition.

At the moment of publishing this abstract book, more than **363** researchers on palaeontology from **44** different nationalities, and **six** continents (Europe, Africa, North and Central America, South America, Asia, and Oceania), have taken part in this initiative. It is important to highlight the numerous contributions from South America, Africa, Asia, Middle East and Eastern European Countries strengthening our main goal of a palaeontological congress without barriers.

The 2nd **PVC** is organised in four general theme sessions (**Palaeozoic, Mesozoic, Cenozoic and General Palaeontology**), trying to span the whole variety of potential contributions. However, taking advantage of the flexibility that virtual platforms offer, **five** specific thematic sessions, encompassing topics such as **evolution and palaeobiodiversity in islands, fossil insects, palynology, outreach** and an specific session for palaeontologists in their **early career Stage** to present their works in an completely friendly environment. In total, **161** contributions are compiled in this Abstract Book, including **four key-notes** presented by Dr. **Michael J. Benton** "*Identifying the drivers of macroevolution – methods and pitfalls*"; Dr. **Anne-Laure Decombeix** "*Reconstructing the biology of Palaeozoic trees*"; Dr. **James Kirkland** and Dr. **Don DeBlieux** "*Constraining the Jurassic – Cretaceous terrestrial biota: new data from Utah helps close the gap across the atlantic basin*" and Dr. **Jesús Lozano-Fernández** "*The conquest of land by arthropods*". All those contributions presented in this volume, somehow, summarize the good health and multidisciplinary nature of our science.

Finally, we would like to thank all our colleagues for organising and coordinating the different workshops. We also want to thank all the authors for submitting their contributions and the numerous reviewers that have made this volume and congress possible. We would also like to give special thanks to all Palaeontological and Geological Societies, Editorials, Museums, and Universities, that have supported this initiative.

Thank you all,



PalaeoVC

The Organising Committee of the 2nd PVC

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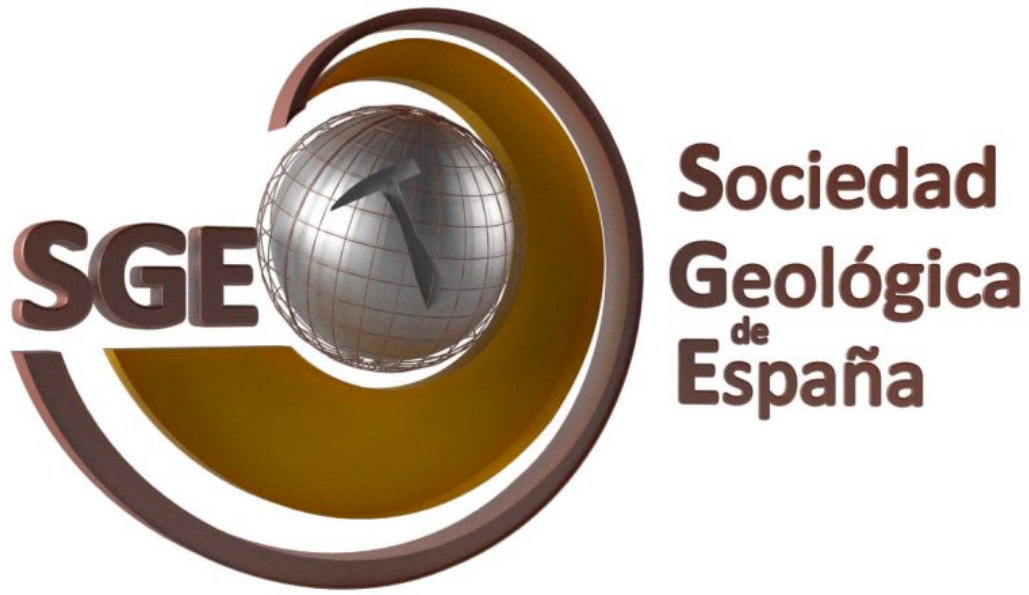
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Contributions



Agglutinated encrusting foraminifers from the Agua de la Mula member (Agrido Formation, Neuquén Basin - Argentina): paleoecological and paleoenvironmental implications

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A new fauna consisting of agglutinated encrusting foraminifers has been collected from several nodular levels in the upper Hauterivian-lower Barremian Agua de la Mula Member of the Agrido Formation (Patagonia, Argentina). The study foraminifers come from two stratigraphic sections in the Neuquén Basin and show affinities with the genera *Haddonia* Chapman, 1898, *Alpinophragmium* Flügel, 1967, *Bdelloidina* Carter, 1877 and *Coscinophragma* Thalmann, 1951. Provisionally, the new specimens are considered to differ from the above-mentioned genera, but they remain in open nomenclature. One or more specimens are clustered around bioclastic nuclei of cerebroidal sub-spherical nodules, forming columnar and circum-granular 'microbuildups'. The nodules occur both separated from each other in a fine-grained siliciclastic matrix as well as forming larger mound-like accumulations of up to 2 meters in thickness. The encrusting foraminifers-bearing deposits consist of bioclastic sandstone, allochemic mudrock and micritic rudstone, and are embedded into an alternation of condensed bioclastic sandstone and grey/dark marly clay. The latter has been earlier interpreted as alternating couplets of sixth-order Milankovitch precession-driven cycles, named starvation/dilution sequences. These couplets are characterised by a switch from very low to high sedimentation rates, as recorded by deposition of condensed beds and siliciclastic intervals respectively. Semiquantitative analysis by Scanning Electron Microscope (SEM) was performed in order to characterise the morphology and test mineralogy of the specimens. A preliminary study on the type of growth of the 'microbuildups' allows us to corroborate previous interpretations of low oxygen conditions and of a lowered rate of terrigenous input for the analysed interval.

W

Agglutinated encrusting foraminifera
Agua de la Mula
Neuquén Basin



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