3rd Palaeontological Virtual Congress

Book of Abstracts

December 1–15th, 2021

Book of Abstracts

3rd Palaeontological Virtual Congress

Book of Abstracts

Palaeontology in the virtual era

From an original idea of Vicente D. Crespo

Published by Evangelos Vlachos, Penélope Cruzado-Caballero, Vicente D. Crespo, María Ríos Ibañez, Fernando Antonio M. Arnal, Jose Luis Herraiz, Francesc Gascó-Lluna, Rosalía Guerrero-Arenas and Humberto G. Ferrón.

Layout Evangelos Vlachos

Conference logo Hugo Salais

Contact palaeovc@gmail.com

ISBN xxx-xx-xx-xxxxx-x

How to cite this book: Vlachos, E. Penélope Cruzado-C., Crespo V. D. , Ríos Ibañez M., Arnal F. A. M., Herraiz J. L., Gascó-Lluna F., Guerrero-Arenas R., and Ferrón H. G. (eds) (2021) Book of Abstracts of the 3rd Palaeontological Virtual Congress, 307pp.

Contents

REDATING THE LOWER TALCHIR FORMATION (WARDHA BASIN, CENTRAL INDIA) TO THE UPPER PENNSYLVANIAN BY PALYNOMORPHS

M. Di Pasquo[1,*], P. S. Kavali[2], A. Roy[3], G. P. Gurumurthy[2] and L. Silvestri[1]

[1]Laboratorio de Palinoestratigrafía y Paleobotánica, CICYTTP (CONICET-ENTRE RIOS-UADER) and CONICET (Consejo Nacional de Investigaciones Científicas y Tecnológicas), Dr. Materi y España 149, Diamante (E3105BRA), Entre Ríos, Argentina
[2]Birbal Sahni Institute of Palaeosciences, 53 University Road Lucknow, 226 007 Uttar Pradesh State, India
[3]Department of Botany K.J. Somaiya College of Science and Commerce, University of Bombay, Mumbai, 400077 Maharashtra State, India

*medipa@cicyttp.org.ar

Keywords
Palynostratigraphy, Palynozonations, Late Paleozoic, Talchir Formation, India

The Talchir Formation corresponds to the Gondwana (Permian–Carboniferous) Sequence in India and its age assessed herein in the light of palynostratigraphic record associated with radiometric dating generated in Gondwana. The lower part of this formation in the Well 131 drilled at Penganga area of Wardha Valley Coalfield (Maharashtra State, central India) analysed. Two assemblages were demarcated based on the stratigraphic distribution of spores (23 taxa), pollen grains (35 taxa), and phytoplankton. Palynoassociation I (**PI**) recognized in the two basal core samples yielded few ***Punctatisporites*** spores and monosaccate pollen grains. Palynoassociation II (PII) delimited in the overlying three core samples characterized by more diversified and abundant spores and pollen grains than in the other two overlying samples. Several guide taxa such as, ***Concavissimisporites grumulus***, ***Converrucosisporites confluens***, ***Cyclogranisporites gondwanensis***, ***Verrucosisporites andersonii***, ***Latusipollenites quadrisaccatus***, ***Marsupipollenites striatus***, ***Pakhapites fusus***, ***Striatoabieites multistriatus***, ***Vittatina subsaccata***, ***Vittatina vittifera*** are consistent with palynozones radiometrically constrained to the latest Pennsylvanian–early Cisuralian in Argentina, Brazil, Africa, and Australia. Therefore, we propose a Kasimovian to Ghezelian–Asselian age for the PI and PII associations of the Talchir Formation. A correlation with the ***Potonieisporites neglectus*** and ***Plicatipollenites gondwanensis*** Zones of Tiwari & Tripathi, respectively significantly improves the stratigraphic correlations of the Indian palynozones in Gondwana.