



4th Palaeontological Virtual Congress

Book of Abstracts

May 8–22nd, 2023



This is an interactive document



Click this button to return to the beginning of the session.



Click this button to return to the Main Menu ([here](#))

4th Palaeontological Virtual Congress

Book of Abstracts

Palaeontology in the virtual era

From an original idea of Vicente D. Crespo

Published by Evangelos Vlachos, Vicente D. Crespo, María Ríos Ibañez, Fernando Antonio M. Arnal, Arturo Gamonal, Penélope Cruzado-Caballero, Javier González-Dionis, Rosalía Guerrero-Arenas, and Alba Sánchez-García.

Layout Evangelos Vlachos

Conference logo Hugo Salais

Contact palaeovc@gmail.com

ISBN 978-84-09-51470-0

Copyright © 2023 Palaeontological Virtual Congress

Date of Publication May 17, 2023

How to cite this book: Vlachos, E. Crespo V. D., Ríos Ibañez M., Arnal F. A. M., Gamonal A., Cruzado-Caballero, P., González-Dionis, J., Guerrero-Arenas R., and Sánchez-García, A. (eds) (2023) Book of Abstracts of the 4th Palaeontological Virtual Congress, 378 pp.

Preface

Support

Organizing
Committee

Scientific
Committee

Keynote
Presentations

Amber-bearing
organisms

Palaeontological
Heritage

Palaeobotany

Ordovician
Palaeontology

Paraná basin

West Pacific

Chondrichthyans

Conservation
Paleobiology

Small
Mammals

Vertebrate
Ichnology

Prehistoric
Archaeology

Small
Herpetofauna

Neogene
Ungulates

Palaeozoic

Mesozoic

Cenozoic

General
Palaeontology

Virtual
Field Trips

Main
Menu



Following the three previous and successful editions of the Palaeontological Virtual Congress (PVC), organized in December 2018, May 2020, and in 2021 during the COVID19 pandemic, the 4th Palaeontological Virtual Congress continues to demonstrate the necessity for virtual meetings in palaeontology.

PVC shows a steady growth compared to previous years, in both participants and contributions. In the 4th PVC, more than **400 scientists** from **72 different countries** gathered virtually to watch more than **365 contributions**, an absolute record in terms of different countries (56 last time) and number of contributions.

Following the sharp increase in the number of contributions, the 4th PVC hosts an even greater diversity of topics. Besides the traditional Sessions of the Paleozoic, Mesozoic, Cenozoic and General Palaeontology, the 4th PVC also hosts 8 Keynote presentations, 12 Thematic Sessions, and 3 Virtual Field Trips.

The mission of this Palaeontological Virtual Congress was communitied by 7 Ambassadors and Ambassadors who helped attracting interest and spread our news. Thanks to them, we have been able to enjoy thre greatest national diversity reaching nearly half of the countries on Earth!

We continued to add virtual activities, including a Photography and Palaeoart contest. You can find the wonderful prized photographs and artwork herein.

Also, selected papers coming from this year's communication will feature on a Special Volume of the high-quality peer-reviewed journal *Geobios*, that publishes bimonthly in English original peer-reviewed articles of international interest in any area of palaeontology, palaeobiology, palaeoecology, palaeobiogeography, biostratigraphy, stratigraphy and biogeochemistry.

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.





A Morning Surprise (*Megaloceros, Homo*)
Nickolaus Peter
Palaeoart Competition (Special Mention)

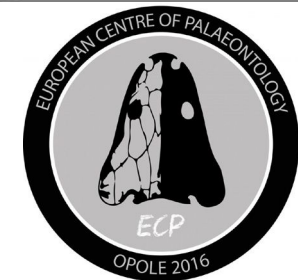
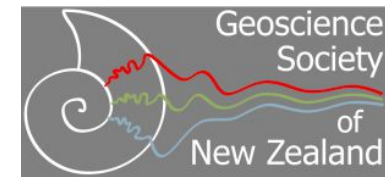
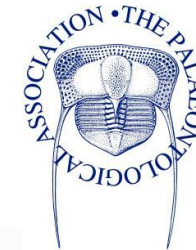




Sponsors



Supporters





Organizing Committee

Chair

Dr. Vicente D. Crespo

Department of Earth Sciences, GeoBioTec. NOVA School of Science and Technology | FCT NOVA. Universidade NOVA de Lisboa and Museu da Lourinhã, Portugal; Museo Valencià d'Història Natural and Museo Paleontológico de Alpuente, Spain. vidacres@gmail.com

Secretary

Dr. María Ríos Ibañez

Department of Earth Sciences, GeoBioTec. NOVA School of Science and Technology | FCT NOVA. Universidade NOVA de Lisboa and Museu da Lourinhã, Portugal. maria.rios.iba@fct.unl.pt

Webmaster and Discord

Mr. Fernando Antonio Martín Arnal

Milner Centre for Evolution, Department of Biology and Biochemistry, University of Bath, UK. fama25@bath.ac.uk

Mr. Arturo Gamoral

Museo Paleontológico de Alpuente, Alpuente, Valencia, Spain. arturo-gamonal@hotmail.es

Bursar

Dr. Penélope Cruzado-Caballero

Área de Paleontología, Departamento de Biología Animal, Edafología y Geología, Universidad de La Laguna, Spain; Group Aragosaurus-IUCA, Paleontology, University of Zaragoza, Spain. pcruzado@ull.edu.es

Social network and communication

Mr. Javier González-Dionis

Instituto Patagónico de Geología y Paleontología (IPGP CCT CONICET-CENPAT), Argentina. jagondi1@gmail.com

Circulars and Abstract Volume

Dr. Evangelos Vlachos

CONICET and Museo Paleontológico Egidio Feruglio, Argentina. evlacho@mef.org.ar

Institutional Outreach

Dr. Rosalía Guerrero-Arenas

Universidad del Mar, Puerto Escondido, Oaxaca, México. rosaliaga@zicatela.umar.mx

Dr. Alba Sánchez García

CN, Instituto Geológico y Minero de España-CSIC, València, Spain. alba.sanchez@igme.es



Ambassadors/Ambassadors



Elena Cuesta

Elena Cuesta was born in the Canary Island (Spain). She is a geologist by the Complutense University of Madrid and PhD in Biology by the Autonomous University of Madrid. She has been working during her postdoctoral stage at the Fukui Prefectural University (Japan) and Paleontological Museum of Munich (Germany). Her research is focused in the Paleobiology of theropod dinosaurs, studying their anatomy and evolutionary relationships.

Panagiotis D. Sianis

My name is Panagiotis D. Sianis, but people usually call me Panos. I'm a PhD student from the University of Patras (Greece), specializing in Early Pleistocene large mammal assemblages. I have completed my Bachelor's degree in Geology at the University of Patras and then received a MSc from the same institute. Currently, I reside in Portugal collaborating with Universidade NOVA de Lisboa.

Gastón A. Martini

My name is Gastón A. Martini, alias Tato. I am an Argentinian biologist (from UNRC), doing a Ph.D. in Biological Sciences (at UNC) in my home country. My place of work is located in southern Argentina (CIEMEP-CONICET). I am currently studying a group of glyptodonts from the Santa Cruz Formation (Early Miocene) of Patagonia (Argentina). My research is focused on anatomical, taxonomic, phylogenetic, and paleobiology aspects of them with an emphasis on cranial characters. Last but not least, I am a plant and dog lover and a human of two puppies (Franky and Rufi).

Diana Osipova

My name is Diana Osipova. I obtained my Master's in Kyiv (Ukraine), and had started my research career as a Junior Research Scientist at Institute of Zoology (Ukraine). Starting from that moment I have been interested in and mostly focusing on the study of the evolution of hinge in Bivalvia, and its abnormalities. For the present moment, I continue my project in Academia Sinica (Taiwan), and work with fossil Mollusca specimens, mostly specializing on Pliocene-Pleistocene taxa.

Dominique Mediodia

My name is Dominique P. Mediodia from the Philippines. I am a faculty member of the Institute of Marine Fisheries and Oceanology, College of Fisheries and Ocean Sciences, University of the Philippines Visayas. I am a Ph.D. student at the National Taiwan Normal University. I am a recipient of the Taiwan International Graduate Program (TIGP) offered by Academia Sinica. My study will focus on understanding the relationship between phylogeny, morphology, and biodiversity in fish fossil otoliths using 3D imaging.

Sofía Urzagasti-Torres

My name is Sofía Urzagasti-Torres, I am 25 years old (Bolivian/Argentinian) and I hold a Bachelor's degree in Paleontology from the Universidad Nacional de Río Negro (UNRN) in the city of General Roca, Argentina. Currently, I am pursuing my Ph.D. at the same university and my workplace is the Instituto de Investigación en Paleobiología y Geología (IIPG). I am specializing in Vertebrate and Invertebrate Ichnology and my research topic focuses on Avian Footprints from the Upper Cretaceous of Argentina from an icnotaxonomic, paleobiological, paleoecological and paleoenvironmental perspective.

Sara Akboub

I am Sara AKBOUB, a 25 years old Moroccan Geologist, currently pursuing my PhD in Paleontology and sedimentology at university of Chouaib Doukkali in Morocco. A very passionate, and enthusiast about anything related to fossils, trace fossils and Evolution of environments and species. My current research focuses on the study of vertebrates, invertebrates and insects; living around the end of the Carboniferous and Permian Period. Field work is one of my favorite parts of geology, it's a time traveling journey and that's why I started research in Geology.





A. Mariel Andrada
Adele Bertini
Adriana Oliver
Alba Sánchez García
Alberto Collareta
Aldo Raúl Prieto
Alexander Assemat
Alexandra Van Der Geer
Alfredo A. Carlini
Alfredo Eduardo Zurita
Alice Clement
Allan Gil S. Fernando
Ana García Vázquez
Ana Laura Ibáñez Aguirre
Ana Pascual
Ana Paula Linhares
Andrea Beatriz Arcucci
Andrea Vila
Andrew A. Farke
Andrey Yu. Puzachenko
Anek R Sankhyan
Angela Fraguas
Anneke H. Van Heteren
Antonio Lopez Serrano
Antonio Rodríguez-Hidalgo
Antonio Toscano Grande
Arden Bashforth
Arden Bashforth
Ari Iglesias
Ariana Paulina Carbajal
Arnau Bolet
Artai Santos
Arturo Heredia
Athanasios Athanassiou

Ausonio Ronchi
Bernard Lathuilière
Bernat Vila
Bienvenido Diez
Birendra P. Singh
Blanca Figuerola
Blanca Moncunill-Sole
Blanca Toro
Candela Blanco Moreno
Carlos A. Góis-Marques
Carlos Castañeda Posadas
Carlos Conforti Ferreira Guedes
Carlos Martinez Perez
Carlos Neto De Carvalho
Carmen Alvarez-Vazquez
Carmen Nuñez-Lahuerta
Carolina Danielski Aquino
Carolina Náñez
Carrie E. Schweitzer
Céline Robinet
Charles W. Helm
Chenyang Cai
Chien-Hsiang Lin
Christian Kammerer
Christian Klug
Christopher Berry
Claudia Marsicano
Clint A. Boyd
Consuelo Sendino Lara
Corentin Jouault
Cristianini Trescastro Bergue
Cristina Sequero
Cristina Silveira Vega
Cyrille Prestianni

Scientific Committee

Daniel Barasoain
Daniel De Miguel
Daniel García Lopez
Daniel Hembree
Daniel Marty
Dany Azar
Darin Croft
David G. De Mar Jr.
David J. Ward
David M. Alba
Dean Lomax
Deming Wang
Dhiego Cunchada Silva
Diana G. Cuadrado
Diego Castanera Andrés
Diego Garcia-Bellido
Diego H. Verzi
Diego J. Álvarez-Lao
Dimila Mothé
Dimitris S. Kostopoulos
Dionisios Youlatos
Eduardo Jimenez Hidalgo
Eduardo Puertolas-Pascual
Ekaterina Larina
Eliott Capel
Elise Nardin
Emese Bordy
Emma Dunne
Enrique Peñalver
Erin M. Dillon
Erin Saupe
Eudald Mujal Grané
Evangelos Vlachos
Evelyn Kustatscher





Peter Falkingham
Felipe Lima Pinheiro
Ferhat Kaya
Fernando Farias Vesely
Fernando Lavié
Fernando Sedor
Flavia Strani
Frances Gascó
Francesc Perez Peris
Francine Kurzawe
Francisco Cuadrelli
Francisco Sour-Tovar
Gabriel Ferreira
Gabriela Arreguín Rodríguez
George Koufos
Gerardo F. Carbot Chanona
Giuseppe Leonardi
Graciela Piñeiro
Guenter Schweigert
Guiomar Garrido Álvarez-Coto
Heitor Francischini
Hermínio Ismael De Araújo Júnior
Hugo Corbí
Hugo Javier Martin Abad
Hugues-Alexandre Blain
Humberto Astibia
Humberto Ferron
Ioannis X. Giaourtsakis
Ismar De Souza Carvalho
Iwona Kania-Kłosok
Jaime Villafraña Navea
Jamel Touir
Jan Van Der Made
Jara Parrilla Bel

Jean-David Moreau
Jean-Noël Martinez
Jeanninny Comniskey
Jeremy Tissier
Jesús Alberto Diaz-Cruz
Jih-Pai Lin
Jinzhuang Xue
João Henrique Dobler De Lima
Jorge Colas
Jorge Colmenar Lallena
Jorge F. Genise
Jorge Guillem Martínez
Jorge Herrera-Flores
Jorge Mondéjar Fernández
José Bienvenido Diez Ferrer
José Ignacio Canudo
José Luis Sanchidrián
Joshua K. Moyer
Joshua X. Samuels
Jowita Drohojowska
Julia Galan
Julia Schap
Julia Türtcher
Julien Benoit
Jun Ebersole
Jürgen Kriwet
Katia Adriana González Rodríguez
Kleyton M. Cantalice
Kyra Nancie Smith
László Kocsis
Laura Sarzetti
Lionel Cavin
Lisa L. Herzog
Lorenzo Marchetti

Scientific Committee

Lorenzo Rook
Luca Pandolfi
Lucas Del Mouro
Luis Alejandro Blanco Calvo
Luis Baoutois
Luis Duarte
Luis Mampel
Luis Miguel Sender
Lukáš Laibl
M. Victoria Sánchez
Maeva Orliac
Malton Carvalho Fraga
Manuel Amadori
Manuel Casas Gallego
Marcela Cichowolski
Margaret M. Yacobucci
María Amelia Calonge García
María Dolores Martin-Montfort
María Elena Previtera
María Esperanza Cerdeño
María Esperanza Cerdeño Serrano
María Gabriela Fernández Pepi
María José Salas
María Ríos
María Soledad Domingo
María Virginia Bianchinotti
Maria Viteri
Marie K. Hörnig
Marie-Béatrice Forel
Mariel Andrada
Mário A.t. Dantas
Martin Qvarnström
Martina Caratelli
Massimo Delfino





Matteo Belvedere
Matus Hyzny
Maxime Lasseron
Michael Buchwitz
Michael Engel
Michał Kowalewski
Michał Zatoń
Miguel Moreno-Azanza
Milan Chroust
Miquel Àngel Vicens I Siquier
Mitsuru Arai
Mónica M. Solórzano-Kraemer
Mr. Patrick L. Jambura
Mr. Russell K. Engelman
Mrs. Julia Türyscher
Nasrollah Abbassi
Natasha Barbolini
Neil Kelley
Neil Landman
Nicholas A. Famoso
Ninon Robin
Oleksandr Kovalchuk
Olev Vinn
Olivier Maridet
Orangel Antonio Aguilera Socorro
Paloma Sevilla
Paolo Citton
Patricia H. Kelley
Patricio Guillermo Villafañe
Paul Philipp Stewens
Paul Selden
Paula Diz Ferreira
Pedro Correia
Pedro García Barrera

Pedro Piñero
Philippe Fosse
Piero Gianolla
Pierre-Olivier Antoine
Rafa Marquina
Rafael Labarca Encina
Rafael Lindoso
Rafal Nawrot
Rebecca Hunt-Foster
Rémi Lefebvre
Renata Guimaraes Netto
Richard Vachula
Roberto Barbieri
Robson Tadeu Bolzon
Roger W. Portell
Romain Garrouste
Romain Vullo
Roman Croitor
Salvador Moyà-Solà
Samuel Zamora
Sebastian Stumpf
Serjoscha Evers
Séverine Fauquette
Silvério Domingues Figueiredo
Silvia Danise
Sonia Ros Franch
Spencer Lucas
Sreepat Jain
Steffen Kiel
Stéphane Ducrocq
Sulman Rahmat
Susana Gutarra
Sven Sachs
Thomas Hegna

Scientific Committee

Thomas Lehmann
Tito Aureliano
Tom Guensburg
Tomas Prikryl
Torsten Wappler
Tze Tshen Lim
Verónica Díez Dfáz
Vicente D. Crespo
Victor Adrian Perez Crespo
Victor Manuel Bravo Cuevas
Vincent Perrichot
Vincent Perrier
Vladimir J. Alarcon
Voltaire Dutra Paes Neto
Walter Joyce
Willemien De Kock
Xabier Murelaga
Xabier Pereda Suberbiola
Xinantecatl Antonio Nava Fernández
Yanina Herrera





Morning in the forest
Ferrutxo
Palaeoart Competition (Special Mention)



Mesozoic



General Session



HERITAGE OF JURASSIC PROGONOCIMICIDAE FROM EUROPE (HEMIPTERA: COLEORRHYNCHA)

B. Bieszczad*

Laboratory of Evolutionary Entomology and Museum of Amber Inclusions, Department of Invertebrate Zoology and Parasitology, Faculty of Biology, University of Gdańsk, Gdańsk, Poland

*beata.bieszczad@phdstud.ug.edu.pl

Keywords

Palaeoecology, Palaeoentomology, Palaeodiversity, Moss Bugs, Classification, Fossil Record

Coleorrhyncha, also known as moss bugs, are nowadays represented by a single family Peloridiidae confined to Patagonia, New Zealand, Australia and New Caledonia. The remaining families of the suborder have gone extinct, *i.e.*, the Hoploridiidae (Aptian; Transbaikalia), Karabasiidae (Toaracian–Aptian; Kazakhstan, Kyrgyzstan, Russia, Mongolia, China), and Progonocimicidae. The most diverse Progonocimicidae comprise 26 genera, from Australia, Asia and Europe, from Permian (Changhsingian) to the Cretaceous (Cenomanian). It is traditionally subdivided into two subfamilies, including Progonocimicinae and Cicadocorinae, but some taxa included within them are in need of revision. The condition of the known fossils varies from vestigial (represented by isolated wings) to completely preserved specimens. So far, only two taxa are reported from fossil resins. For this reason, many diagnoses are based on wing features exclusively and numerous former descriptions of taxa were given briefly, being insufficiently illustrated. Systematic placement of the recently described Permoriidae from Germany is very controversial, and it is probably outside of the Hemiptera. European fossil record of Progonocimicidae is scarce, covering *Archicercopis* from the terminal Triassic, *Eocercopis*, *Indutionomarus*, and *Procercopis* (Progonocimicinae) from the Jurassic, and *Ildavia*, *Valdiscytina*, and *Yuripopovia* (Cicadocorinae) from the Lower Cretaceous. I report new specimens from the Jurassic of Germany and Luxembourg, which represent new genera and species belonging to Progonocimicidae. My discovery illuminates taxonomic diversity of progonocimicids, revealing new and unique features, and deepening our understanding of morphological disparity of moss bugs in the Mesozoic. The new data enable me to present a new interpretation of palaeoecology and taphonomy of these insects.

