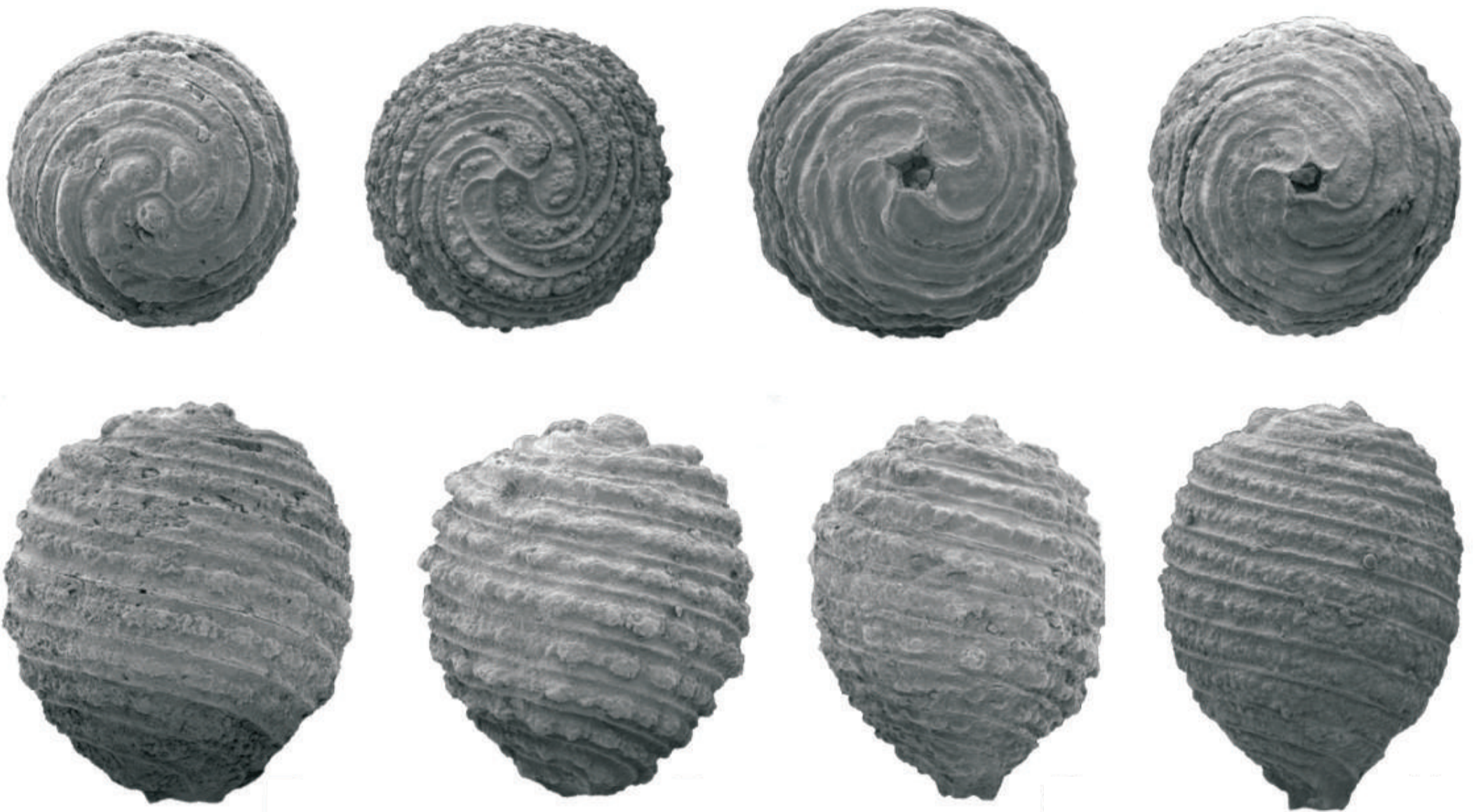


SOLID EARTH SEMINARS

FOSSIL CHAROPHYTES, A USEFUL TOOL IN CONTINENTAL BIOSTRATIGRAPHY AND PALAEOECOLOGY



WHAT'S THIS ABOUT?

Charophytes is a group of freshwater/brackishwater aquatic plants considered the ancestors of vascular plants. Their calcified fructifications (gyrogonites and utricles) generally fossilize representing common microfossils in non-marine sedimentary sequences worldwide as old as Silurian in age. Gyrogonites and utricles have been traditionally used as non-marine biostratigraphic markers due to their specific morphology and high evolutionary rates. A number of charophyte biozonations have been defined and correlated with other fossil biozones such as mammals and foraminifera, mainly in the Mesozoic (Cretaceous) and Paleogene. Parts of these biozonations have also been calibrated to the geomagnetic polarity time scale (GPTS). Fossil charophytes display a key role in palaeoenvironmental reconstructions of non-marine depositional setting. Moreover, recent fossil charophytes (Neogene) represent a valuable tool to infer the limnological characteristics of ancient lakes such as the trophic status, the palaeosalinity, water table fluctuations, or the water temperature.

ZOOM



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Wednesday: 13:00

IDL Meeting Room or PASS: 2021_RG234

<https://videoconf-colibri.zoom.us/j/89018419156>