



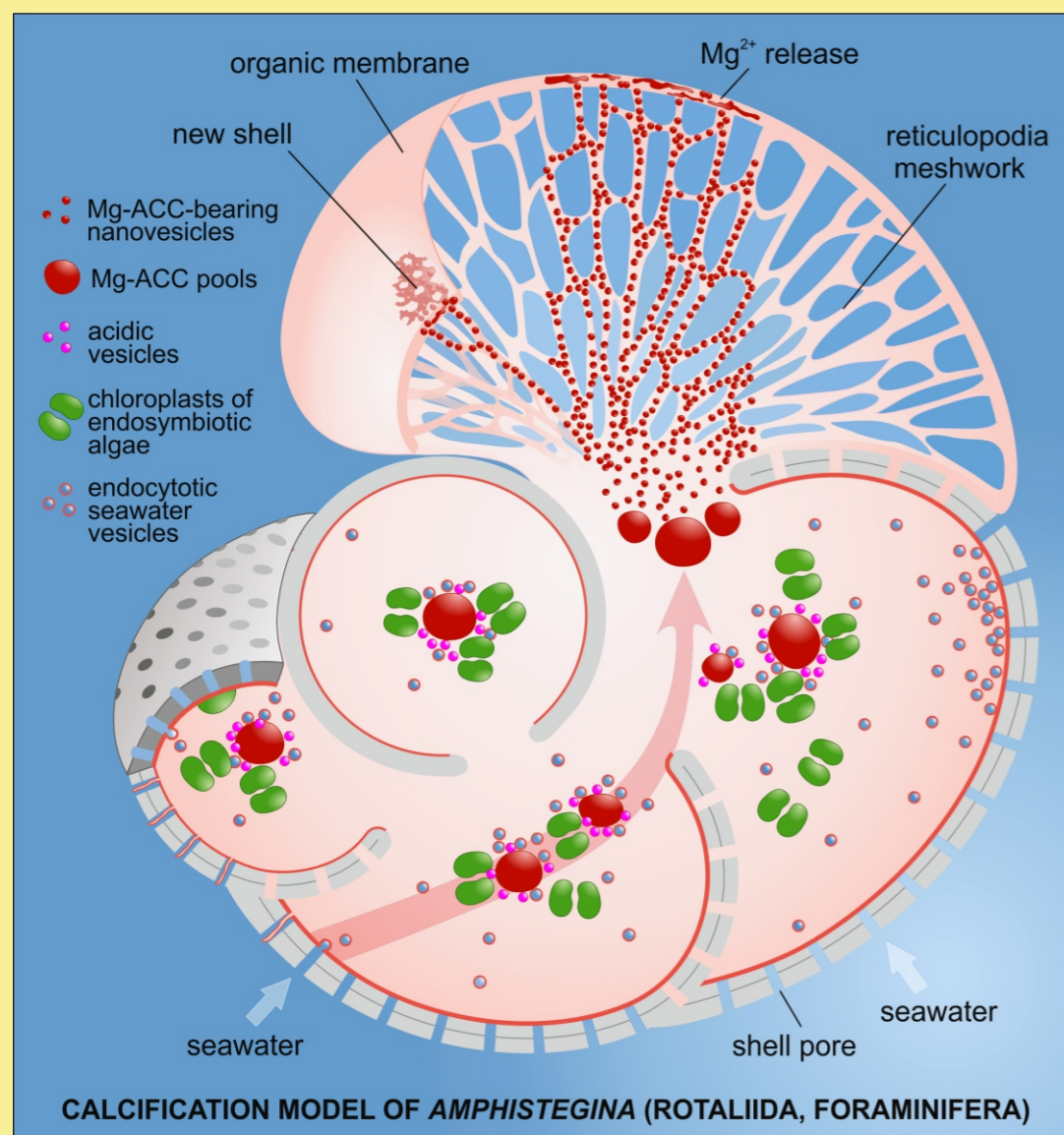
si vás dovoluje pozvat na paleontologický seminář, který se koná  
ve středu 4. prosince 2024 od 14:50 ve Velké paleontologické posluchárně

a na [meet.google.com/hqc-mjbt-bty](https://meet.google.com/hqc-mjbt-bty)

# Marine biocalcification: a case study of Foraminifera

## Zofia Dubicka

(University of Warsaw)



Biogenic calcium carbonate production has influenced the lithosphere, hydrosphere, atmosphere, and global carbon cycle for at least the past ~540 Myr, and the resulting calcium carbonate minerals constitute the most common biomineralized products on Earth.

Foraminifera are an enormous group of shelled organisms that lie within the Rhizaria clade of the SAR eukaryotic supergroup. They are primarily marine creatures that use seawater ions to produce protective carbonate shells, and are among the most productive calcifying microorganisms – and, by extension, important carbonate rock-forming organisms. Furthermore, foraminifera have excellent fossil records throughout the Phanerozoic, and thus have been the subject of extensive studies using the geochemical compositions of foraminiferal biocalcite to reconstruct past environmental and climatic conditions and as a tool to establish the relative ages of rocks. Therefore, understanding foraminiferal calcification is a precondition for proper interpretation of the vital effect of foraminifera on the geochemical signals archived in their shells, in order to apply correctly these proxies to palaeoceanographic studies and climate modelling.