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COMPUTATIONAL FLUID DYNAMICS AND ITS APPLICATIONS IN ECHINODERM PALEOBIOLOGY

Imran A. Rahman



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Computational fluid dynamics and its applications in echinoderm paleobiology

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Abstract: Computational fluid dynamics (CFD), which involves using computers to simulate fluid flow, is emerging as a powerful approach for elucidating the paleobiology of ancient organisms. Here, Imran A. Rahman describes its applications for studying fossil echinoderms. When properly configured, CFD simulations can be used to test functional hypotheses in extinct species, informing on aspects such as feeding and stability. They also show great promise for addressing ecological questions related to the interaction between organisms and their environment. Computational fluid dynamics has the potential to become an important tool in echinoderm paleobiology over the coming years.

Keywords: computational fluid dynamics, echinoderms, paleobiology, function, ecology

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