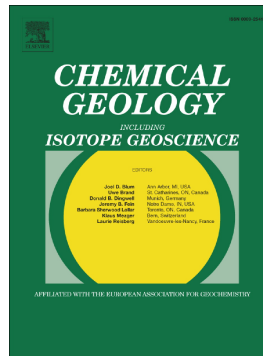


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Phosphorylation on the Early Earth

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Abstract

Phosphorus is an element critical to the formation of several biomolecules, including nucleic acids, the energy transfer molecule ATP, and phospholipids. It hence lies at the heart of several biomolecular functions. However, the formation of these key biomolecules is hindered by the geochemical properties of phosphorus, including its low solubility and poor reactivity. Here we review the approaches that have been taken to overcome some of these difficulties, and place them in the context of the geochemistry of the early earth. We find many

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