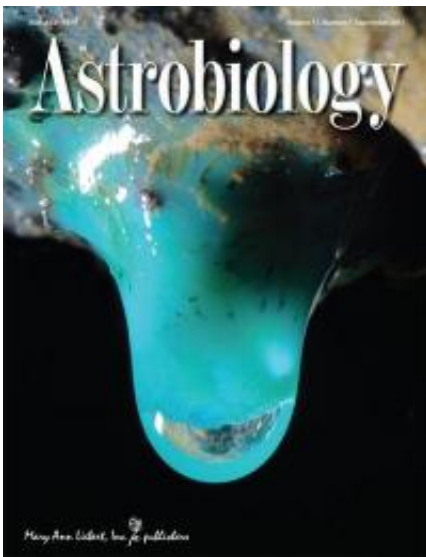


Pumice proposed as home to the first life forms: A new hypothesis in *Astrobiology* journal

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Astrobiology, led by Professor Cady and a prominent international editorial board comprised of leading scientists in the field, is the authoritative resource for the most up-to-date information and perspectives on exciting new research findings and discoveries emanating from interplanetary exploration and terrestrial field and laboratory research programs. The journal is published 10 times a year in print and online, and is the official journal of the Astrobiology Society. Credit: © Mary Ann Liebert Inc., publishers

The glassy, porous, and once gas-rich rock called pumice may have given rise to early life forms, according to a provocative new hypothesis

on the origin of life published in *Astrobiology*, a peer-reviewed journal from Mary Ann Liebert, Inc..

Martin Brasier, Richard Matthewman, and Sean McMahon, University of Oxford (U.K.), and David Wacey, University of Western Australia (Crawley), contend that pumice has "four remarkable properties" that would enable it to have had "a significant role in the origin of life and provided an important habitat for the earliest communities of microorganisms." They describe those four properties in detail in the article "Pumice as a Remarkable Substrate for the [Origin of Life](#)."

To validate their hypothesis, the authors call for laboratory research to test the ability of pumice rock to adsorb [organic compounds](#) from water and create catalysts and new compounds by simulating the thermal cycles, UV light, and other conditions that existed when the first [organic polymers](#) and microbes co-existed.

"The hypothesis that pumice provided a unique physical substrate in which life got its start is exciting and testable," says Sherry L. Cady, PhD, Editor-in-Chief of *Astrobiology* and Professor in the Department of Geology at Portland State University. "Key for astrobiology is whether such rock types preserved evidence of pre-biotic reactions or ancient life forms in the rock record."

More information: The article is available free online at www.liebertpub.com/ast for the next week.

Provided by Mary Ann Liebert, Inc.

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