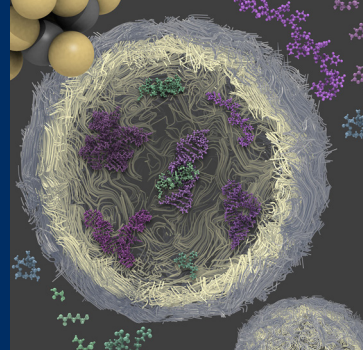


Elements

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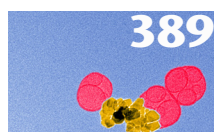
COVER IMAGE: Two protocells interacting with organic molecules and minerals in their environment.

Nucleotides and an unstructured RNA substrate (magenta); amino acids and peptides (green), an amino acid-nucleotide (alanine-adenylate) complex (blue), and pyrite (iron, gray; sulfur, yellow) are shown. Structured ribozymes and a RNA-peptide complex are present within the protocells as well as an iron/sulfur cluster-protein complex. IMAGE CREDITS:

PROTOCELLS PICTURES COURTESY OF MATTHIEU CHAVENT (WWW.MATTHIEUCHAVENT.COM/PHOTOS/) FROM SYMA KHALID'S LAB. COVER IMAGE DESIGNED AND ASSEMBLED BY FABRICE LECLERC. © FABRICE LECLERC

Origins of Life: Transition from Geochemistry to Biogeochemistry

Guest Editors: Nita Sahai and Hussein Kaddour



The Transition from Geochemistry to Biogeochemistry

Nita Sahai, Hussein Kaddour, and Punam Dalai



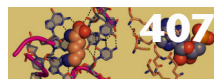
Staging Life in an Early Warm 'Seltzer' Ocean

Martin Schoonen and Alexander Smirnov



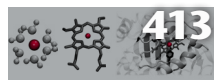
Incubating Life: Prebiotic Sources of Organics for the Origin of Life

Punam Dalai, Hussein Kaddour, and Nita Sahai



From Foundation Stones to Life: Concepts and Results

Marie-Christine Maurel and Fabrice Leclerc



Metal Catalysis and the Origin of Life

Luca Belmonte and Sheref S. Mansy



On the Emergence of a Proto-Metabolism and the Assembly of Early Protocells

Terence P. Kee and Pierre-Alain Monnard

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