Posters will be on Display for the Entire Week.

Presenters are Requested to be Present at Their Poster the Last Half-Hour Break of the Evening.

## POSTER SESSION: ENVIRONMENTAL CONDITIONS FOR THE ORIGIN OF LIFE ON THE EARLY EARTH Price Center Ballroom East

Laneuville M. Kameya M. Cleaves H. J. II

Earth Without Life: A Systems Model of a Global Abiotic Nitrogen Cycle [#4155]

N is the major component of the atmosphere and plays important roles in biochemistry. Presently, the surface N-cycle is dominated by biology. However, before the origin of life, abiotic N-cycling would have set the stage for the origin of life.

Westall F. Hickman-Lewis K. Hinman N. Gautret P. Campbell K. A. Breheret J. Foucher F. Hubert A. Sorieul S. Dass A. V. Kee T. Georgelin T. Brack A. A Hydrothermal-Sedimentary Origin of Life Scenario [#4098]

The Hadean, carbon-containing volcanic sediments represented a global reservoir of mini reactors characterised by porosity, reactive mineral surfaces, physical and chemical disequilibria, and flushed by hydrothermal fluids.