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## Thermodynamic Inversion at the Origins of Life: A Comprehensive Approach

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Deadline for manuscript  
submissions:

**closed (30 November 2023)**

### Message from the Guest Editor

Dear Colleagues,

This Issue proposes to consider the processes that occur during the transition of prebiotic systems to life through a strong increase in the level of free energy in them. The topics considered include:

- Thermodynamic transformations during the origin of life;
- Hydrothermal and related systems, which create energy conditions conducive to the thermodynamic inversion necessary for the emergence of life;
- Energetics of life and a need for the establishment of an out-of-equilibrium (bifurcate) state when life emerges;
- Models for the emergence of life, which are amenable to the establishment of an out-of-equilibrium state;
- The known and hypothesized mechanisms by which the energy from the environment converts into chemical energy that life utilizes.



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# Special Issue



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## Message from the Editor-in-Chief

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