RNA catalysis in heterogeneous reaction environments - In search of a suitable habitat for primitive life on early Earth

Summary

Polynucleic acids are considered to have played a central role in the origin of life on Earth. Similar to modern biology, replication and recombination of sequence information were most likely crucial for the evolution of simple life forms. However, it remains unclear what environmental conditions were necessary to enable these reactions. Using ribozyme-based model systems, we investigate the suitability of plausible microenvironments to foster the first steps of a primitive biology.