HYPOTETICAL ROLE OF AUTOCATALYTIC PROPERTIES OF NUCLEIC ACIDS IN BIOGENESIS

Summary

Ribozymes are catalytic RNA molecules. In this article their various types and activities in contrasts with corresponding DNA molecules are briefly characterized. The revolutionary discovery of the autocatalytic properties of nucleic acids by the Nobel Prize winners, Sidney Altman, Thomas R. CECH and their co-workers,

led to the hypothesis of RNA world and to speculation on the role of RNA in the origin of life and the early stages of its evolution on Earth. The possible role of the autocatalytic properties of nucleic acids in prebiotic evolution is, therefore, discussed.