

## Life on Earth - Two Faiths - 7

The accidental origin of life is now generally taught as if it were known for certain to have occurred. In fact, it is only a hypothesis - a supposition which has been made as a starting point for further investigation. The acceptance of this idea depends on making a number of assumptions and ignoring many demonstrated scientific facts. Take first the assumed composition of earth's primitive atmosphere.

During a series of famous experiments in the 1950s by Stanley Miller and Harold C. Urey at the University of Chicago, atmospheric conditions believed to be predominating on Earth about 3.8 to 2.5 billion years ago were simulated. An electric spark, which substituted for lightning, was introduced to a mixture of methane, ammonia, water vapour and hydrogen, that reacted to form a few of the amino acids which are the basic building blocks of proteins.

A currently accepted view is that the early atmosphere consisted largely of nitrogen, with the remainder a mix of carbon dioxide and inert gases, e.g., *Earth's Earliest Atmospheres* (2010), Zahnle, Schaefer, Fegley. But this also has been contradicted by research reported in *Astrobiology Magazine*\* in a Dec.2, 2011 article, "Earth's Early Atmosphere". Scientists at Rensselaer Polytechnic Institute have discovered "the first direct evidence of what the ancient atmosphere of the planet was like soon after its formation and directly challenge years of research on the type of atmosphere out of which life arose on the planet. The scientists show that the atmosphere of Earth just 500 million years after its creation was not a methane-filled wasteland as previously proposed, but instead was much closer to the conditions of our current atmosphere."

\**Astrobiology Magazine* (publication ended Feb. 2019) was an American NASA sponsored online popular science magazine, reporting news on NASA missions and relevant research by various institutions.

The next concern is that even if there were the necessary ammonia and methane in the atmosphere and that by lightning or by heat from volcanic activity these were converted into the amino acids and the other building blocks of cell material, we are still a very long way. From these large molecules - since proteins consist of hundreds of these amino acids, joined in a particular (not random) sequence. Very short chains of amino acids do sometimes form under certain conditions, and from this it is assumed that long chains could equally well develop. But this is an unsupported assumption, and has never been observed to occur spontaneously.

Concerning the formation of the other important cell component, nucleic acid, *Chemical & Engineering News*, ran an article May 2, 2016, "How the first nucleotides might have formed on earth." The author commented, "An ongoing challenge for researchers who are studying the origins of life is figuring out how bipolymers such as DNA and RNA might have formed in the first place....demonstrating how those bases and sugars might have combined to form nucleotides under prebiotic conditions has been challenging."

The nucleic acid chains must have the ability to replicate themselves exactly. In the fully developed cell this is a very complex process involving many other compounds, especially proteins. Yet it is supposed that this randomly produced compound achieved this amazing ability spontaneously. "This creates a real problem, for at a time when life did not exist how did substances come into existence which today are absolutely essential to living systems, and yet can only be formed by those systems?" - H. F. Blum, *Time's Arrow and Evolution* p. 170.