

Evolutionary origin of life even more difficult

Michael J. Oard

Both evolutionists and creationists concede that the naturalistic origin of life is extremely difficult to fathom. Our understanding of life has come a long way since Stanley Miller's simplistic exploration in 1953, which used the wrong chemicals and achieved only simple amino acids. Using what is believed to be a more realistic primitive atmosphere, little if any amino acids have been formed.¹ Since Miller's experiment, DNA has been discovered and all the myriad machine-like components of the cell have shown the extreme complexity of even the 'simplest' looking life. Back in 1988, Professor Klaus Dose summarized the state of origin of life research:

'More than 30 years of experimentation on the origin of life in the fields of chemical and molecular evolution have led to a better perception of the immensity of the problem of the origin of life on Earth rather than to its solution. At present all discussion on principal theories and experiments in the field either end in stalemate or in a confession of ignorance.'²

I like to compare the naturalistic progress made so far with climbing the first micron of Mount Everest.

However, the evolutionary naturalists are ever the optimists, and so they continue to pursue hypotheses and experiments trying to show that the origin of life occurred naturalistically. Lately they have been turning to other planets for some clues.

But, the more we know scientifically, the worse it looks for a naturalistic origin of life, just like the trend that Dose saw in 1988. Back home on Earth, evolutionary deductions of the early Earth during the Precambrian are becoming more

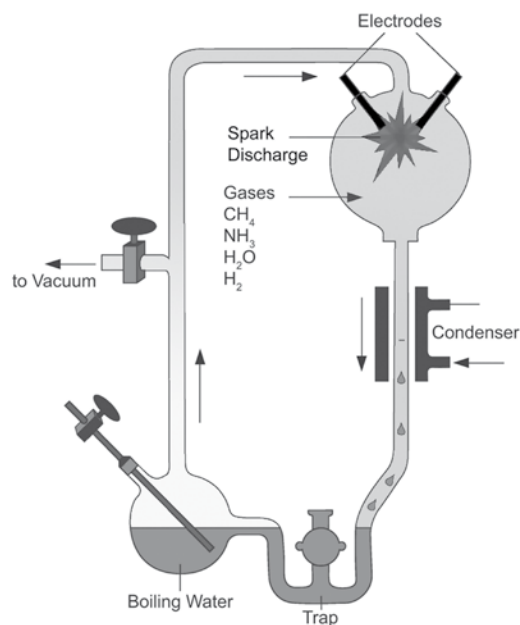
incompatible to the origin of life. The Precambrian was supposedly the time when life was evolving from chemicals to a single celled organism and from single-celled organisms to metazoans or multicelled organisms.

The water was very hot back then

Life is supposed to have evolved over 3.5 Ga ago. Prokaryotes, cells that lack a membrane for the nucleus and organelles, supposedly arose about 3.8 Ga ago, and eukaryotes, those with a membrane-bound nucleus and much more complex organelles, supposedly evolved from prokaryotes around 2.7 Ga ago.^{3,4} Based on oxygen isotope ratios, geochemists have determined that the ocean in the Archaean, the evolutionary time in Earth's history older than 2.5 Ga ago, was probably hot.³ Temperatures were supposed to be 55–85°C! Such hot water would indeed be a challenge for the evolution from chemicals to the first cell in a soupy sea. Such hot temperatures would cause more rapid break down of any organic-chemical wannabes and even result in fatal stress for most bacteria. But, evolutionists are confident that cyanobacteria could handle such temperatures—once they originated.

The water was very salty back then

But hot water is not the only problem. Evolutionists deduce that the water must have been quite saline back then. They reason that all the salt 'evaporites' (salt deposits) must still have been in the Archean and even the Proterozoic Ocean. Then when you add all the brine in current sedimentary rocks, they end up with almost twice the salt content of the current ocean.⁵ Observations show that in restricted lagoons of the Persian Gulf where the



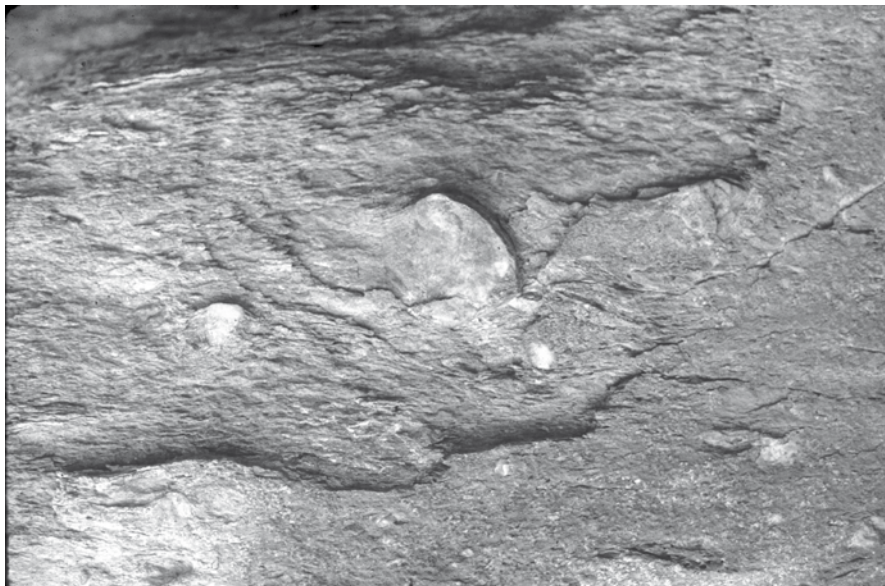
The famous Miller-Urey experiment resulted only in a dirty mixture of very simple amino acids, and is actually compelling evidence against an evolutionary origin of life.

salt content is double normal seawater, there is very little life. These areas are called 'faunal deserts.' So, now we add high salinity as a barrier to the origin of life.

Hot, saline, anaerobic Archean water reinforced

Many evolutionists could not bring themselves to believe in such extreme Archean oceanic conditions: 'There has long been scepticism about the geochemical evidence that the ancient ocean was markedly warm.'⁶ And there are reasons to be sceptical because the oxygen isotope measurements were made in chert, a form of silicon dioxide that was precipitated from sea water. There are possible fractionation effects (processes that favour one isotope over another) and other variables that affect the oxygen isotope ratios. The oxygen isotope ratio of the Archean sea water could have been much different because of isotopic exchange with low ¹⁸O (the heavier isotope) ground water.⁷

But now researchers have measured silicon isotope ratios of chert that also *reinforce* the oxygen isotope



Close up of an outcrop from the supposed Neoproterozoic 'ice age', 8 km (5 miles) east of Pocatello, Idaho.¹³ Notice the larger rocks 'floating' in a fine-grained matrix.

deductions of hot Archean water.⁸ There are no temperature fractionation effects between silicon and water in the precipitation of chert. So, silicon isotope ratios should accurately reflect Precambrian temperatures. Now evolutionists apparently are forced to live with the origin and evolution of life within hot, salty water. Furthermore, the result affects not only the origin of 'simple' prokaryotes, but also the development of more complex eukaryotes in the Archean. Although temperatures are supposed to gradually cool during the Proterozoic, they probably are still too warm and would likely impede the development of metazoans.^{9,10}

On the other hand, evolutionists use the new information to claim such unwelcome environmental conditions as the reason why more complex organisms failed to evolve for 3 Ga from one-celled organisms. It therefore gives them an excuse of why evolution was so slow in the Precambrian. However, they have not yet factored in the now early rise of eukaryotes.

What about the global Precambrian glaciations?

Evolutionary/uniformitarian scientists are now claiming that in

the Precambrian there were two long glacial periods on Earth.¹¹ One was just younger than the Archean, between 2.2 and 2.4 Ga ago, and the other was in the Late Neoproterozoic, between about 550 and 950 Ma ago. During these times the *whole* earth was supposedly covered by ice and snow.^{12,13} It is unlikely that this ever happened otherwise the earth would still be covered in ice. The reflection of sunlight off the ice and snow would have prevented the ice from ever melting. Such ice-age scenarios are reinforced by the faint young sun idea that sunlight was significantly less during the Precambrian than today, especially during the Archean. So, such warm temperatures in the Precambrian are a big problem for the supposed global ice ages and the faint young sun. They naturally end up causing controversy:

'But given these points [problems for the origin of life], and the existence of glacial deposits within the Precambrian, it will probably take more than $\delta^{18}\text{O}$ [oxygen isotope ratio] and $\delta^{30}\text{Si}$ [silicon isotope ratio] together to convince sceptics of a hot-tub Precambrian sea.'⁹

The big picture

While evolutionists get themselves in hot water over the origin of life and the contradictory Precambrian environments, creationists can sit back and watch the fireworks. I wonder whether any of these origin of life researchers will ever wake up and look at what has been learnt after 50 years of origin-of-life research. The big picture is more and more proclaiming that life was created.

References

1. Wells, J., *Icons of Evolution: Science or Myth? Why Much of What We Teach about Evolution Is Wrong*, Regnery Publishing, Washington, D.C., pp. 9–27, 2000.
2. Dose, K., The origin of life: more questions than answers, *Interdisciplinary Science Reviews* **13**(4):348–356, 1988; p. 348.
3. Knauth, L.P., Temperature and salinity history of the Precambrian ocean: implications for the course of microbial evolution, *Palaeogeography, Palaeoclimatology, and Palaeoecology* **219**:53–69, 2005.
4. Oard, M.J., Supposed eukaryote evolution pushed back one billion years, *Journal of Creation* **15**(1):4, 2001; <www.creationontheweb.com/content/view/1811>.
5. Knauth, ref. 3, pp. 60–61.
6. De La Rocha, C.L., In hot water, *Nature* **443**:920–921, 2006.
7. Knauth, ref. 3, p. 57.
8. Robert, F. and Chaussidon, M., A palaeotemperature curve for the Precambrian oceans based on silicon isotopes in cherts, *Nature* **443**:969–972, 2006.
9. De La Rocha, ref. 7, p. 921.
10. Knauth, ref. 3, p. 64.
11. Oard, M.J., *Ancient Ice Ages or Gigantic Submarine Landslides?* Creation Research Society Monograph Series No. 6, Creation Research Society, Chino Valley, AZ, 1997.
12. Oard, M.J., Another tropical ice age? *Journal of Creation* **11**(3):259–261, 1997.
13. Oard, M.J., 'Snowball Earth'—a problem for the supposed origin of multicellular animals, *Journal of Creation* **16**(1):6–9, 2002; <www.creationontheweb.com/content/view/1610>.