

# The Creation Debate: Oxygen—The Deathblow to Life?

Dr. John Ankerberg, Dr. Steve Austin, Dr. Duane Gish, Dr. Kurt Wise

*[Editor's note: In June 1990 The John Ankerberg Show taped a series of interviews with men from several branches of the sciences regarding the evidence for creation. For technical reasons we were unable to air these interviews. Nevertheless, we have decided to release portions of these interviews in a series of articles so you could read the arguments that were being made at that time—more than a decade ago.]*

*Considerable effort has been made to quote the gentlemen correctly. We have attempted to find the correct spelling of the scientific terms used. However, the reader should keep in mind that this is a transcription of oral interviews. Mistakes in spelling and in the technical language should be laid at the feet of the editor.]*

**Dr. John Ankerberg:** In the origin of life experiments that the scientists have tried, what have they concluded? Where do we stand at the present moment?

**Dr. Kurt Wise<sup>1</sup>:** My answer to that would be that the evolutionary theory of biogenesis\*, the origin of life, can be potentially substantiated from three areas: evidence; secondly, from experiment; thirdly, from theory. In other words, can they show that it happened by evidence? Can they show that it happened by experiment? Can they show that it happened by theory? It's in those three areas that they have failed, every one of them. There is no evidence. There are no rocks that exist from that period of time. Secondly, there is no successful experiment which has even gone through two steps in a row along that necessary path. The experiments to produce life have not been successful. Thirdly, theoretically, there seem to be some significant barriers to even imagining how life could come about. We have the Second Law of Thermodynamics which seems to represent an insurmountable barrier. The evolutionary theory of abiogenesis has failed on all three counts to explain the origin of life.

**Ankerberg:** So what do the scientists say now, then? Are they postulating anything further? What are they going to try next?

**Dr. Duane Gish<sup>2</sup>:** Let me answer to that. Some of these people are becoming very discouraged. Many years ago, 35 years ago, I read some of their books, some of their material. At that time they were very optimistic; they felt it would be just a matter of time before these problems would be solved, they would be seeing their way through to very significant advances in this problem of biogenesis. Now I'm seeing that these same authors, some of them at least, are becoming quite discouraged and they are saying that these experiments either have turned out to be totally irrelevant or they have led into a blind alley. And so I find that they're actually, at least some of them, are becoming quite discouraged.

**Ankerberg:** Let's turn to the geologist for a moment. What is it that you have found in the rocks concerning the reducing atmosphere that the scientists said that they needed?

**Dr. Steve Austin<sup>3</sup>:** Geologists have followed this abiogenesis theory for a number of years. Initially, geologists were very optimistic that we would find buried in those lowest rock layers of

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\*Editor's note: Several times it appears that the terms "biogenesis" and "abiogenesis" are used almost interchangeably. I have checked the video tape for this section and can state with certainty that the gentlemen are quoted correctly, which does not discount the possibility that they may have misspoken.

the earth—this bathtub ring, if you will, from this reducing atmosphere—this very much different atmosphere. And even as much as 20 years ago, geologists were claiming that those rocks really did prove the absence of oxygen in this very unusual condition.

Over the last 20 years though, geologists have more carefully studied those lower rock layers of the earth called the Precambrian strata and they have concluded generally that those oldest rocks are very rich in oxygen. For example, one of the oldest sedimentary rocks described and discovered by geologists on the earth has banded iron formation, and the major element in this rock is not iron, but is oxygen. And there are very many oxygen-rich rocks buried in the earth.

In fact, geologists have recently discovered sulfate deposits, sulfur and oxygen combined together and not sulfur combined with a metal such as lead or zinc. And geologists have discovered these oxidized iron deposits. Evidences of oxidation like soil development and many things are causing the evolutionists to question the whole reducing atmosphere scenario.

**Ankerberg:** Again, review for our folks, why is it so devastating that you found oxygen? So what? And what is the theory that the evolutionist wanted to find?

**Austin:** Well, oxygen is very devastating to the origin of life experiments. For example, that Stanley Miller experiment where he had methane, ammonia, hydrogen and a spark in that chamber, if you introduced some oxygen in there with that spark, it would combine with the hydrogen and you would have a great explosion. You would not make the final product. In other words, in the presence of oxygen, these organic molecules do not form.

**Ankerberg:** They're simply saying chemical evolution would be impossible if you had oxygen in that atmosphere.

**Austin:** Yes. And many evolutionists realize that and quote their books, Leslie Orgel, Stanley Miller's book on the origin of life. They fully grant that. So that's very important to them. The biochemists say you must have an atmosphere devoid of oxygen for life to first appear. Yet, the geologists, and we're looking at the rocks, we're saying that we don't see any evidence of that. Maybe life had to appear before there were any rocks, or before there was any evidence of this atmosphere. There is a great transition going on right now in geologist's minds, thinking about those Precambrian strata.

**Wise:** Steve, is there not evidence for a lower amount of oxygen in the Precambrian atmosphere? I mean, you've been talking about evidence for oxygen, but I think that many would maintain that the oxygen levels were lower; you have urananite and various other anoxic chemicals.

**Austin:** Many geologists who study the sedimentary deposits deep in the earth are pretty much agreeing that the atmospheric level of oxygen is pretty much the same as today. Even those urananite deposits in South Africa, for example, were thought to show a lower oxygen level have now been interpreted in terms of pretty much standard modern atmosphere.

**Wise:** Also, this doesn't eliminate the possibility that there were places on the earth where anoxic environments occurred. Is that not true?

**Austin:** That's true. But the general characteristic that we see in the strata, the lowest strata layers, what are called the Archaean strata of the Precambrian, show generally abundant oxygen. We don't see the bathtub ring left over from the reducing atmosphere. We don't see sulfides of lead, of zinc, we see sulfates of barium and calcium. And we don't see carbonates of iron, we see oxides of iron. Just looking at the strata generally, we have to marvel at the general oxidized nature of the geological strata.

**Wise:** So what we're saying is that there are very few places when you could have an anoxic environment. Doesn't mean that it is impossible, geologists can't say that, but what it does say is that trying to find a place where life could have evolved is very difficult. There are a very limited number of places where it could occur.

**Gish:** Even if you had a few of these anoxic places, you would not have the other conditions necessary for the origin of life. You would not have any energy there, you see. You wouldn't have these other processes at work.

**Ankerberg:** What happened about the wind? I mean, you would have that oxygen some way circulating. Are you talking about pockets inside the earth?

**Wise:** We have places on the earth right now which are anoxic. There are anoxic conditions at the bottom of some fresh water lakes that don't turn over in the fall and the spring. There are anoxic conditions in places in the bottom of the ocean. And you get down so far in the soil, you also get into anoxic conditions.

**Ankerberg:** Also in this area, what is geology telling us today about the pre-biotic soup. If there was this massive chemical lake out there or things that were supposed to help us build the building blocks, do we find evidence of those chemicals in the rocks any place on earth?

**Austin:** Those chemicals would be hydrocarbons and they might be fossilized in the shaley strata, especially of the earth, the clay-rich layers and if that was the case we should have an abundant supply of those rocks, yet those rocks are generally recognized by geologists to be missing. And if there was this hydrocarbon-rich soup on the primordial earth, we would think that oil companies would have found it, they would be drilling into that as a source of energy, and yet it's not there. Geologists generally recognize that the rock strata layers from the earliest geologic ages of the earth where life supposedly evolved, they are missing. Here we have a case. No physical evidence for the abiogenesis of life.

**Wise:** Put it another way, the oldest rock on the earth that is not metamorphosed, that could possibly preserve life or chemicals in their original form contains organisms we believe to be cyanobacteria. That's the oldest rock that could preserve. It's the oldest rock seems to have, at least as we now understand the dating of things, seems to have life in it. If that's the oldest rock, we obviously don't have any evidence, any geological evidence of anything that occurred before the first cell.

**Ankerberg:** What conclusion can you draw from the information we've talked about so far in this discussion?

**Wise:** As a creationist, the things that we've talked about convince me that there was a Creator. And the reason for that is, if we look at the level of the DNA and the RNA, the complexity, the information content seems to demand an intelligent cause. And then when we place that DNA into the context which it finds itself, in even the simplest of organisms, in other words namely the context of replication, transcription, translation, it again—that complexity and apparent information—demands a designer. And then when you place that within the context of the cell, the cell in turn has a complexity that seems to demand a designer. And that's why I believe the evidence in the origin of life area indicates a Creator.

<sup>1</sup> Dr Wise's doctoral degree in paleontology was completed at Harvard.

<sup>2</sup> Dr. Gish received his Ph.D. from the University of California, Berkeley in 1953.

<sup>3</sup> Dr. Steve Austin, received his B.S. (Geology), University of Washington, Seattle, WA, 1970; M.S. (Geology), San Jose State University, San Jose, CA, 1971; Ph.D. (Geology), Pennsylvania State University, University Park, PA, 1979.