Statement made to me by **Ygolonac** during debate (around 2001):

- "…we also know that it's very easy to create the building blocks of life by sending an electrical charge through a primordial ooze that can exists when a planet forms."

My Response

Nobel prize winner and co-discoverer of the double helix in DNA, Francis Crick, recognized the problem of getting life to form spontaneously on earth if oxygen were present. When he wrote the book *Life Itself* in 1981, evidence for oxygen in the earliest Precambrian rocks was just beginning to be discussed. He wrote:

> "If it turns out that the early atmosphere was not reducing but contained a fair amount of oxygen, then the picture is more complicated… If this were really true, it would support the idea of Directed Panspermia, because planets elsewhere in the universe may have had a more reducing atmosphere and thus have on them a more favorable prebiotic soup."

Professor Carl Sagan agrees with this, for in a lengthy discussion following a lecture by Luther Sunderland (author of *Darwin's Enigma - Ebbing the Tide of Naturalism*) at Cornell University on April 24, 1984, Sagan said:

> "If there were free oxygen in the early atmosphere of the earth before the development of green plants, we would have a serious contradiction."

As reported in *New Scientist*, May 13, 1982, *"Astronomers and geophysicists now seem to be reaching agreement on their interpretation of the early atmosphere."* This article also said that water vapor and carbon dioxide dominate the gases released by volcanoes today, and there is no reason to believe that the volatile products of earlier volcanic activity would have been substantially different. Since both Venus and Mars have atmospheres of carbon dioxide, why would the early earth likewise not have had an atmosphere containing carbon dioxide? The article said that this ridiculed the old idea of a reducing atmosphere (which the *Miller Experiment* required):

> "It use to be widely taught, and widely taught, that the original 'primitive' atmosphere of the early earth was a reducing atmosphere… The reasoning behind this assumption [key word] developed primarily from the belief [belief, faith] that such an atmosphere would be ideal, and might be essential, for the development of complex non-living molecules that preceded life… This picture captured the popular imagination [including yours John], and the story of life emerging in the seas or pools of a planet swathed in an atmosphere of methane and ammonia soon became part of the scientific folklore that 'every schoolchild knows.'"

This was still being taught in 1984 in most schools and universities (besides Millers own abandonment of it). The above article continued:

> "But now, this particular card house seems to have been demolished, and a new scientific edifice [key word] is arising in its place. In order to convince people that the earth started out with a reduced, not a reducing, atmosphere – that is, one with oxygen already locked up in gases such as carbon dioxide, and which cannot take up more oxygen – astronomers, geophysicists and, more recently, climotologists have had to explain how life could arise on a wet planet with carbon dioxide atmosphere laced with traces of ammonia. By such devious routes is scientific process made." [ouch]

As early as July 1980, *New Scientist* magazine printed an article on the subject. Again, the harsh words aren't mine:

> "Although biologists concerned with the origin of life often quote an early atmosphere consisting of reduced gases, this seems as much from ignorance [ouch] of recent advances as from active opposition to them… The time has come, it seems, to accept as the new orthodoxy the idea of early oxidized atmospheres on all three terrestrial planets, and the biological primers which still tell of life on earth starting out from a methane/ammonia atmosphere energized by electric storms and solar ultraviolet need to be rewritten."

Gradually scientific literature is grudgingly presenting articles that acknowledge the complete reversal on the consistency of the early atmosphere. The March 1982 issue of *Geology magazine* contained the following:

> "Geologic evidence often presented in favor of an early anoxic atmosphere is both contentious and ambiguous… Recent biological and interplanetary studies seem to favor an early-oxidized atmosphere rich in carbon dioxide and containing free molecular oxygen… It is suggested that from the time of the earliest dated rocks at 3.7 billion years ago, earth had an oxygenic atmosphere."

The April 1984 issue of *Scientific American* reported on an international conference of *The Precambrian Paleobiology Research Group* that reviewed the latest thinking on the Precambrian atmosphere. The report said, "It was not, however, oxygen free; the bands [oxidized iron] represent a large sink for the reactive oxygen." It goes on to say that oxidized iron bands appear at about the same time as the first bacterial cells. Also, at about the same time that the first life appeared, carbon dioxide was present, perhaps even abundant. So according to this group of Precambrian specialists, there is evidence of free oxygen back over 300 million years before there were living cells.

According to John Gribbon (from the book *Carbon Dioxide, Ammonia – and Life*): "All we have to do now is rewrite all those textbooks and ensure that 'every schoolchild knows' what the best theory [because it changes almost daily] of evolution of the earth's atmosphere and the origins of life is today."

MILLER-UREY

When Miller conducted his experiment, he presupposed that the earth's atmosphere was

composed of a mixture of what chemists call "*reducing gases*" such as methane, ammonia, and hydrogen. He also assumed that the earth's atmosphere contained virtually no free oxygen. In the years following Miller's experiment, however, new geochemical evidence made it clear that the assumptions that Oparin and Miller had made about the early atmosphere could not be justified.

Instead, evidence strongly suggested that neutral gases--not methane, ammonia, and hydrogen--predominated in the early atmosphere. Moreover, several geochemical studies showed that significant amounts of free oxygen were also present even before the advent of plant life, probably as the result of volcanic outgassing and the photodissociation of water vapor. In a chemically neutral atmosphere, reactions among atmospheric gases will not readily take place. Moreover, even a small amount of atmospheric oxygen will quench the production of biological building blocks and cause any biomolecules otherwise present to degrade rapidly.

MILLER-OPARIN

The most famous example is the 1953 experiment carried out by Stanley L. Miller and Harold C. Urey. Using a system of glass flasks, Miller and Urey attempted to simulate *"early atmospheric conditions."* They passed an electrical spark through a mixture of water, ammonia, methane, and hydrogen. However, their experiment was carried out in the absence of oxygen (something evolutionists now admit does not reflect the early Earth's atmosphere), because they knew that oxygen quickly would oxidize any amino acids that were formed. At the bottom of the apparatus was a trap to capture any molecules produced by the reaction. This trap prevented the newly formed chemicals from being destroyed by the next electrical discharge. On the first attempt, after a week of electrical discharges in the reaction chamber the sides of the chamber turned black and the liquid mixture turned a cloudy red. The predominant product was a sticky, black substance made up of countless carbon atoms strung together in what was essentially tar (a common nuisance in organic reactions). Miller was able to produce a mixture containing two simple amino acids—the building blocks of proteins. Yet the highly praised Miller-Urey experiment did not produce any of the fundamental building blocks of life itself. It produced 85% tar, 13% carbolic acid, 1.05% glycine, 0.85% alanine, and trace amounts of other chemicals.

One article on this subject in the respected *Encyclopedia Britannica* affirmed that modern findings *"pose grave difficulties"* for spontaneous generation theories once supported by the Miller-Urey experiment. The article went on to state:

> "…due to a rapid and efficient photochemical consumption of CH(4) and NH(3), a methane-ammonia atmosphere would have a maximum lifetime of about 1,000,000 years. This finding is of interest because it has been suggested that life originated from mixtures of organic compounds synthesized by non-biological reactions starting from methane and ammonia. Recognition of the short atmospheric lifetimes of these materials poses grave difficulties for such a theory" (see *Encyclopedia Britannica* "Outgassing of the solid planet").

Many scientists now believe that the Earth's early atmosphere would have made the synthesis of organic molecules virtually impossible under conditions simulated in the Miller-Urey

experiment. For example, NASA has reported that a *"reducing atmosphere"* never has existed, although the experiment assume one (Levine, J. [1983], *"New Ideas About the Early Atmosphere," NASA Special Report*, No. 225, Langley Research Center, August 11). Scientists also now realize that the ultraviolet radiation from sunlight is destructive to any developing life. Regarding the products of the Miller-Urey experiment, evolutionist Robert Shapiro stated:

> *"Let us sum up. The experiment performed by Miller yielded tar as its most abundant product. There are about fifty small organic compounds that are called 'building blocks.' Only two of these fifty occurred among the preferential Miller-Urey products"* (Shapiro, Robert [1986], *Origins—A Skeptics Guide to the Creation of Life on Earth* (New York: Summit), p. 105).

I have posted a paper I wrote many times showing that the earth did not have a reducing atmosphere **Ygolonac**, did you not understand that paper that I have posted, oh, say, 10 times in the past. I will be happy to post it an eleventh time, but only if you promise to read it!?

(The above two clips were from APOLOGETIC PRESS – just in case *you* want to go learn something **Ygolonac)**

This is a paraphrase of what the *American Spectator* had to say on the matter,

> "That the famous Miller/Urey experiment of 1953 supposedly produced the building blocks of life in a test tube. The truth: Miller/Urey had to have a hydrogen-rich atmosphere for their experiment. Yet for almost 30 years, scientists involved in this field of research have concluded that the early atmosphere of Earth was quite different from this. So while their experiment does not work at all, some texts (e.g. Molecular Biology of the Cell by Alberts) continue to inform students that the first step to creating life was overcome by Miller and Urey." (Leading US Magazine Exposes Evolution's Tall Tales!)

Another article that is worth reading can be found at this AiG article: "The Primitive Atmosphere."

However, I can, for the 11th time post my paper? I should update that paper though, because even if I grant, out of pity, the Miller-Urey / Miller-Oparin experiments (which he even disavowed! Miller that is) , the problem of chirality's still has to be overcome.

Oh, **Ygolonac**, after reading this info, I feel kind of bad your paper on the Miller-Urey experiment was such a flop, well, *to a professor who kept up with the latest pier reviewed journal articles that is*. See for instance the journal *Nature*:

> "But since then, research into the chemical origin of life has run into many hurdles. If anything, it now looks even harder than it did in 1953 to make even the most basic ingredients of a cell under conditions that mimic the 'prebiotic' Earth, before life existed. For it is now clear that the mixture of gases in the atmosphere of those early days was rather different from the blend used by Urey and Miller. They used a so-called 'reducing' mix of

> hydrogen-rich gases. Yet the prebiotic atmosphere is more likely to have been relatively 'oxidizing': abundant in compounds containing oxygen, or at least in compounds not containing hydrogen. Nitrogen would have been present as molecular nitrogen (as it is in today's atmosphere) rather than bound up with hydrogen in ammonia. Carbon would have been present as carbon monoxide or dioxide, not methane. It is far harder to make organic compounds like amino acids by electrifying or heating oxidizing mixtures of gases." ("Making Vinegar on The Early Earth," Science Update, *Nature*)