## Lesson 14, Supplement — In the Reginning...

In Lesson 14 we saw that the Bible clearly teaches that God made the heavens, the earth, the sea, and everything in them in six literal days (Exodus 20:11). This explanation of the origin of the cosmos is referred to as Biblical creation or Creation Science. At the other end of the spectrum, the Big Bang Theory proposes that billions of years ago, the whole universe was contained within a volume the size of an atomic nucleus. Upon expanding, particles formed, dispersed, and have continuously evolved into the present state of the universe that we now know. Evolutionists believe this happened by chance, whereas theistic evolutionists believe God "created" the universe (including living beings) through this process.

Adherents of each camp generally agree on the <u>facts</u> related to scientific discoveries. Where disagreements arise is in the <u>interpretation of the facts</u>. Let's take a look now at a discussion between Ken (a Biblical creationist) and Charles (an evolutionist). Listen carefully as they speak in somewhat technical, yet understandable terms.

The Discussion

Charles

Ken, I just can't fathom that you believe that some "God" created the earth in six literal days, only a few thousand years ago!

Charles, why do you insist on fighting God? The foolishness of God is wiser than men (1 Corinthians 1:25)! According to Exodus 20:11, God created the world in 6 days. And the genealogies of Genesis and 1 Chronicles reflect an earth that is only a few thousand years old.

I've heard it all now! And it is always tied to some Bible verse(s). I wish you would leave that world of Bible make-believe and join the real world.

Charles, was anyone there to witness the Big Bang or when some onecelled organism eventually emerged from some swampy muck as an amphibian? If not, then what we both believe becomes an issue of faith, either way.

Of course, nobody was there, but scientists have long since proven that the earth is several billion years old. I don't have to have faith in anything, unless you want

to include science.

#### How do you suppose that the earth is several billion years old?

The earth was in a molten state and then cooled, crystallized, and hardened over millions of years. Later progressions of life could not begin until this process was complete.

# How do you know that this process occurred over millions or billions of years?

Simple! Geologists study rocks that contain samples of radioactive elements all the time. All that scientists need to do is apply some <u>radiometric dating</u> method to measure the percentage of (1) end-state elements to (2) parent elements in the rock. Let me give you an analogy. Suppose a faucet is dripping into a bucket. Any chemist could determine the volume of each drop of water and the frequency of the dripping. With some simple mathematics, it is easy to calculate how long it took to accumulate any given amount of water in the bucket.

The same is true for radiometric dating of rocks. For example, volcanic rocks are commonly aged using the potassium-argon (K-Ar) method. Radioactive potassium, present in the volcanic rocks when they hardened, eventually decays into the gas argon. Over time, the argon accumulates in the rock, since it can't escape. The older the rock, the less potassium and the more argon. Since the decay rate of potassium is constant, the same simple mathematics can be used to calculate when the volcanic rock formed. Radiometric dating of certain rocks in the billions of years has been performed in reputable, certified labs. It is but a tribute to our collective, ever-evolving brain trust.

But even if we know present decay rates, which I agree are scientific fact, that doesn't tell us anything about how old the rocks are unless the rate of potassium decay has been perfectly constant throughout history. How do you know that the decay rates have been constant since time began?

Ken, your questions are quite rudimentary. This is grounded upon the well-established <u>Uniformitarian Principle</u>. It's the glue that binds all evolutionary truths together. We can look to natural laws to explain everything, without needing any "miracles of God" that your understanding requires. This is taught in university physics courses from New York to New Zealand.

What if, in your analogy, someone turned the faucet on for some period of time, and then returned the flow of water to the same, steady

#### dripping you once had?

Theoretically, that would present a problem in establishing a dependable age for the rocks, but that would violate the Uniformitarian Principle.

If I showed you that things were not always the same in the distant past as we now know them, would you consider abandoning your allegiance to the Uniformitarian Principle?

I'm an open-minded guy. I would have to consider the evidence, but good luck trying to crack that impenetrable fortress.

(Praying: Thank you Lord, I have been waiting for this chance.)

Charles, are you familiar with the testing of recent lava flows from Mt. Ngauruhoe in New Zealand?

No.

Eleven samples were collected from 5 lava flows, which date as far back as 1949. The samples were sent to a respected commercial laboratory to date the rocks, but the dates were not given to the lab. Do you know how old the lab calculated the rocks to be?

How old?

Some of the samples were given an age of less than .27 million years old, but seven of the samples were deemed to be one million years old or more. One sample derived from a 1954 lava flow was shown to be 3.5 million years old. And all these rocks formed since 1949!

That is interesting. But I suppose that there might have been some level of argon already present in the rocks when the lava cooled. Thus, the lab technicians would be unable to differentiate between the "normal" argon and the argon derived from the potassium decay. This would skew the results and make them believe that the rocks were older than they really are. I suppose that could happen, but you'll have to do better than that. That just shows that they need to work out some bugs in the mechanics of potassium-argon dating.

Charles, it's not an issue of mechanics, but rather of assumptions used in the testing. Well, since that didn't convince you, let me give you another example. Since we're talking about rocks, let's turn our attention to the earth's foundation rocks. Have you ever heard of primordial granites?

Sure, they are the original or foundation rocks of the earth.

#### Do you know how they were formed?

I thought I already told you a few minutes ago that the earth was in a molten state and then cooled, crystallized, and hardened over millions of years. Are you trying to persuade me by being repetitive?

No, but perhaps a discussion of polonium will shed some light. Are you familiar with polonium?

Wowl That came totally out of left field! But to answer your question, of course. Polonium: the 84<sup>th</sup> element listed in the Periodic Table of the Elements, right after #83, Bismuth, and right before #85, Astatine.

Great! But you didn't mention where polonium comes from.

Well, of course, polonium exists in nature only as part of the uranium decay chain. I don't remember all the other elements that uranium decays into during its decay process, but I'm sure polonium is one of them. One polonium isotope lasts for only a few fleeting moments before it decays into another element, and I think the end product is lead.

Very good! According to the evolutionary framework, <u>polonium is supposed to exist in nature only as part of the uranium-238 (and actually, also, the thorium-232) decay chains</u>. Since you mentioned uranium, I'll focus on that decay chain.

Now here's my \$64 question: What if I told you that evidence has been found of polonium <u>independent of uranium decay</u>?

I'd have to see it to believe it, but what does all this have to do with attempting to tear down the Uniformitarian Principle or the fact that the earth is billions of years old?

You'll see! What you have been referring to is secondary polonium, but you have not mentioned primordial polonium, which has no parent uranium.

Like I said, I'll have to see it to believe it.

That's fair. Let me talk about it first and then I'll refer you to the hard evidence.

Amazing research has been conducted on over 100,000 halos (microspheres of coloration produced by the radioactive decay of primordial polonium), which were taken from basement granites from different continents. Each time the halos were examined, the research-

ers found abundant evidence of the polonium decay, but no evidence of the decay of "earlier elements" in the uranium decay chain. No evidence of uranium-238, uranium-234, thorium-230 (not to be confused with thorium-232), radium-226, or radon-222! In other words, this was not secondary polonium that originated from radioactivity derived from uranium, but primordial polonium, now extinct, that came into existence some other way!

I suppose it's possible that polonium could exist another way, but you're not shaking my evolutionary foundation with this tiny mystery.

I'm not done yet. You have stated twice that the earth was in a molten state and then cooled, crystallized, and hardened over millions of years, but you have also stated that a certain polonium isotope lasts for how long?

Only a few fleeting moments.

So then radioactivity produced by this polonium isotope would have decayed away long before the magma cooled and crystallized, but it's there in the granites!

Now it's my turn to use an analogy. A speck of primordial polonium in molten rock can be compared with an Alka-Seltzer dropped into a glass of water. The beginning of effervescence is equated to the moment that polonium atoms began to emit radioactive particles. In molten rock, the traces of those radioactive particles would disappear as quickly as the Alka-Seltzer bubbles in water. But if the water were instantly frozen, the bubbles would be preserved. Just as the frozen bubbles would be clear evidence of quick-freezing of water, so are polonium halos undeniable evidence that many rapidly "effervescing" specks of created polonium interacted with a sea of primordial matter which was directly "frozen" as solid granite. These polonium halos could have formed only if specks of primordial polonium had been instantly encased in solid rock. But instant formation, or crystallization, of the granites completely disproves the Uniformitarian Principle, which predicted that granites had to form by slow cooling over long ages. That's why these polonium halos simply should not be there according to evolutionary theory.

I have never heard about this in any science class. Is this something that was done in some makeshift, mom n' pop home laboratory?

On the contrary, this work required the use of expensive, highly spe-

National Laboratory in Tennessee. And yes, abundant documentation has been present in leading scientific journals such as Science, Nature, Geophysical Research Letters, and Annual Reviews of Nuclear Science. And for about a third of a century, attempts to contradict this "tiny mystery" have been meager. If this monumental discovery could be refuted, however, there would be volumes of materials doing so, for it is a major threat to the evolutionary framework!

You haven't heard about the polonium halos in granites, because it doesn't fit the evolutionary framework. So much for open scientific forums, where all evidence is given equal weight in arriving at a conclusion!

Charles, this is another example of how God's "David" is continuing to slay the proverbial "Goliath" throughout history. Simply put, polonium radiohalos and the Uniformitarian Principle cannot both exist in the same universe. It is rock-solid evidence that billions of years have collapsed to almost nothing.

Let's "evolve" your own words that "the Uniformitarian Principle is the glue that binds all evolutionary truths together," to their logical conclusion: The pieces of evolution have indeed become unglued, disintegrating evolution. The only plausible explanation remaining: God purposely left His fingerprints of creation in the rocks when He made them, in the form of polonium radiohalos.

Well what about all the other scientific evidence for evolution?

Charles, you have heard the "evidence" for evolution all your life, but you have not heard the arguments and evidences for the creation belief system. I think you will be amazed when you discover the superabundance of present-day, observable evidence that supports a recent creation, whether it deals with coal formation, dinosaurs, natural selection, mutations, different "races" of people, the origin of languages, cloning, and much, much more. Whether it's a 100 foot canyon that was formed in one day by one mud flow as the result of the Mount St. Helens eruption, or a fish fossilized so quickly that it didn't even finish eating its lunch, you will see a fresh new perspective, which is actually the most ancient perspective of all.

I think you will be amazed with the evidence, and that you will concur that the model for a recent creation far outweighs the belief system for evolution. At the end of the exercise, only you will decide which be-

lief system has the weight of evidence on its side, and which makes the most sense.

That's fair. Where do I go from here?

Since you're such a "tekkie", you would be fascinated with the article written by Robert V. Gentry in 1998 entitled, "Fingerprints of Creation", [Creation ex nihilo Technical Journal, Vol 12 (No 3), 287]. On the lighter side, you can start by checking out the following websites, book, video, and magazine:

(Bibliography) The polonium radiohalos discussion was derived from:

- ◊ (Book) Creation's Tiny Mystery: Dr. Robert V. Gentry, (Knoxville, TN: Earth Science Associates, 1992);
- ♦ (Website) www.halos.com; and
- ◊ (Video) Fingerprints of Creation, Mike Lee Beesley, Dr. Robert V. Gentry, Steven Mosley, (Alpha Productions, 1994).

Dating of volcanic rocks using the K-Ar method was derived from:

♦ (Magazine) Creation ex nihilo, 22(1):18-21, December 1999– February 2000, (Andrew Snelling).

These and many additional resources are available at:

- Address: Earth Science Associates; P.O. Box 12067; Knoxville, TN, 37912-0067, USA Website: www.halos.com
  Phone: 800-467-6380
- Address: Answers in Genesis; P.O. Box 6330; Florence, Kentucky 41022, USA Website: www.answersingenesis.org
  Phone: 800-350-3232 (information) or 800-778-3390 (orders).

### My Response to Lesson 14

 The hope of the resurrection becomes a reality only as we believe that God created this world by the word of His mouth, without depending on pre-existing matter. Do you accept this Biblical truth by faith?

Response:			
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