

ACTS & FACTS

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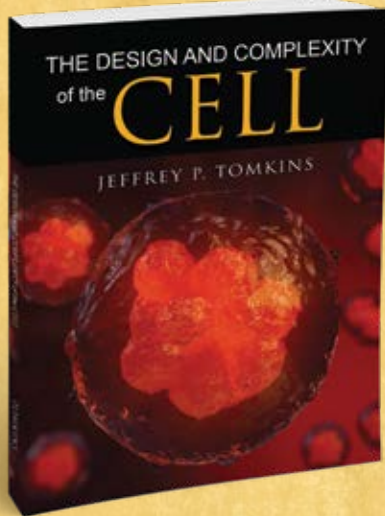
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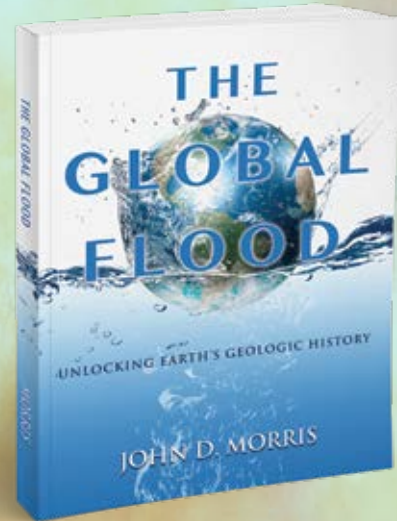
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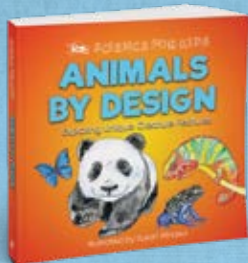
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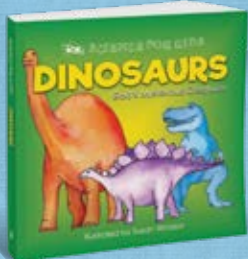


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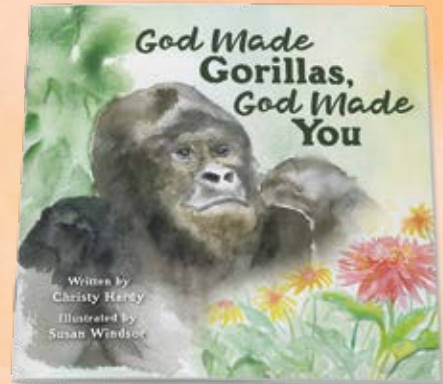
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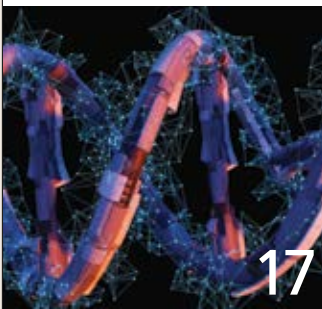
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More to Discover

January is a great time to reflect in gratitude on all God accomplished over the past year and to look forward to what He will do in the coming months. The Institute for Creation Research could not have had such a big year without you, our partners in ministry.

Throughout 2018, the ICR team developed and produced new resources to build faith and inspire worship of our Creator. We published two new booklets: *Creation Q & A* (ICR staff writers) and *Stand Fast* (Dr. Henry Morris III). We also released updated versions of *The Global Flood* (Dr. John Morris) and *The Design and Complexity of the Cell* (Dr. Jeffrey Tomkins).

ICR also introduced new children’s resources that have quickly become family favorites: Science for Kids *Animals by Design* (Communications Department writers), *Big Plans for Henry* (Dr. Tim Clarey and his wife, Reneé), and *God Made Gorillas, God Made You* (Christy Hardy, author, and Susan Windsor, illustrator).

Two new podcast programs, *Days of Praise Podcast* and *The Creation Podcast*, kicked off mid-year. You can find these in our media menu at ICR.org (ICR.org/podcasts). We also produced the new

That’s a Fact 2 DVD and five new Truth on Tour DVDs: *The Truth of the Genesis Flood* (Dr. Tim Clarey), *Replacing Darwin’s Sacred Imposter* and *Back to Genesis* (Dr. Randy Guliuzza), *Why We Need Creation Apologetics* (Dr. James J. S. Johnson), and *The Mighty, Wonderful Oceans* (Frank Sherwin).

The ICR events team worked tirelessly to provide unforgettable experiences with life-altering messages for your family, including scientist and scholar presentations, dinosaur fossil walks, animatronic dinosaurs, and other special activities like the Grand Canyon and Palo Duro Canyon tours. From Massachusetts to California and back home in Texas, ICR’s live events and conferences spread the truth of biblical creation across the country.

Our social media followers and friends connected with us on Facebook, Instagram, Twitter, and other platforms (ICR.org/followicr). Thousands of people have joined @ICRscience to stay up-to-date on the latest scientific evidence that confirms the Bible. Your engagement helped us spread the word about God’s wonderful work in creation!

We praise God for His blessing and provision for ICR’s ministry. Almost every day, we observe progress for the ICR Discovery Center for Science and Earth History in the construction, landscaping, planetarium shows, and exhibit development. We are so excited about what you will experience when you visit it later in 2019.

What else can you expect from ICR this year? Look for a new book series aimed toward the interests of our serious science readers. We’ll let you know when we get closer to the release of these resources that are designed to provide in-depth research to strengthen your understanding of creation and science.

We also hope to help you grow further in your relationship with the Lord this year as you see new ways that science and the Bible reveal the same truths. In our feature article this month, “True Worshipers” (pages 5-7), Dr. Henry Morris III says, “As the new year of 2019 begins its course, refocus your relationship with your heavenly Father.” Dr. Morris reminds us that this is a time to “cultivate the *spiritual* worship that engages heart and mind and soul and strength, loving the God of heaven and Earth.” Join us as we work together, grow together, and anticipate the things our Creator will reveal in this new year—there’s so much more to discover in 2019!

Jayme Durant

Jayme Durant
EXECUTIVE EDITOR



TRUE WORSHIPERS

HENRY M. MORRIS III, D. MIN.

“But the hour is coming, and now is, when the true worshipers will worship the Father in spirit and truth; for the Father is seeking such to worship Him.”

J O H N 4 : 2 3

The interchange between the Lord Jesus and the Samaritan woman is well known to most Christians. God’s gracious and patient dialogue with her is studied for the skilled technique in witnessing, the challenge to the disciples to see the “fields” ready to harvest (John 4:35), and the need Jesus felt to evangelize the socially outcast—all frequent subjects for ser-

mons and seminary lectures.

The intense search by the heavenly Father to find “true worshipers” is seldom addressed in Christian circles. The Lord Jesus delivered the most succinct summary of those whose worship meets the Father’s criteria when He told the Samaritan woman: “God is Spirit, and those who worship Him must worship in spirit and truth” (John 4:24).

article highlights

- God seeks worshipers who serve and love Him with all their heart, soul, mind, and strength.
- God looks inside our hearts and sees our true motives.
- We are new creations in Christ, and He’s given us a new heart and mind.
- God calls us to worship Him in spirit and in truth.

What Worship Is

Perhaps this is too obvious to say much about, but before we can worship at all, it would appear necessary to know what worship *is*. The most frequently used Hebrew and Greek words that are translated by the English word “worship” all have the inherent meaning “to fall down” or “to bow

down.” The context almost always conveys the idea that in the physical act of bowing or prostrating, the worshiper demonstrates submission and honor.

Another pair of Hebrew and Greek terms often connected with the act of worship are translated by the English word “serve.” A true worshiper *serves* the One worshiped.

- » Oh come, let us *worship* and bow down; let us kneel before the LORD our Maker (Psalm 95:6).
- » You shall fear the LORD your God and *serve* Him, and shall take oaths in His name (Deuteronomy 6:13).
- » And Jesus answered and said to him, “Get behind Me, Satan! For it is written, ‘You shall *worship* the LORD your God, and Him only you shall *serve*’” (Luke 4:8).
- » All the angels stood around the throne and the elders and the four living creatures, and fell on their faces before the throne and *worshiped* God (Revelation 7:11).

Worship in Spirit

Since God is Spirit, if we are to worship such a Being it must first of all be a spiritual worship. That is, while the body could be physically prostrate in demonstration of the heart attitude, it is the worshiper’s character that God is observing. The great commandment of the Old Testament Law was:

“Hear, O Israel: The LORD our God, the LORD is one! You shall love the LORD your God with all your heart, with all your soul, and with all your strength. And these words which I command you today shall be in your heart.” (Deuteronomy 6:4-6)

Jesus quoted those words when the lawyer asked, “Teacher, which is the great commandment in the law?” (Matthew

22:36). Three of the gospel books record the various occasions when the Lord Jesus referenced the necessity of a heart and mind and soul and strength that would love the God of heaven and Earth (Matthew 22:36-39; Mark 12:29-31; Luke 10:27). This approach is attested many times elsewhere in Scripture.

- » But the LORD said to Samuel, “Do not look at his appearance or at his physical stature, because I have refused him. For the LORD does not see as man sees; for man looks at the outward appearance, but the LORD looks at the heart” (1 Samuel 16:7).
- » For thus says the High and Lofty One who inhabits eternity, whose name is Holy: “I dwell in the high and holy place, with him who has a contrite and humble spirit, to revive the spirit of the humble, and to revive the heart of the contrite ones” (Isaiah 57:15).
- » Do not let your adornment be merely outward—arranging the hair, wearing gold, or putting on fine apparel—rather let it be the hidden person of the heart, with the incorruptible beauty of a gentle and quiet spirit, which is very precious in the sight of God (1 Peter 3:3-4).

The concept of a spiritual (i.e., non-physical) worship is clearly demanded by the first four commandments of the great Decalogue given on Mt. Sinai, starting with “You shall have no other gods before Me” (Exodus 20:3). This first command insists that no other “powerful being” should come between the Creator’s “face” and our face. The second command further clarifies that we must “not make for [ourselves] a carved image—any likeness of anything that is in heaven above, or that is in the earth beneath, or that is in the water under the earth; you shall not bow down to them nor serve them” (Exodus 20:4-5).

Nothing in the created universe could be directly compared to the Creator Himself. Any attempt at physical representation strikes at the heart’s core of rebellion, in that a person who does this has “changed the glory of the incorruptible God into an image made like corruptible man—and birds and four-footed animals and creeping things... who exchanged the truth of God for the lie, and worshiped and served the creature rather than the Creator, who is blessed forever. Amen” (Romans 1:23-25).

Furthermore, the third command makes clear that those who would dare to “take the name of the LORD...in vain” (Exodus 20:7) would be considered as attempting to relegate the Creator to the contempt of a “worthless” reference. Finally, the fourth commandment demands that humanity follow the design and process of the creation week. God “worked” six days and rested one (Exodus 20:11) and, therefore, demanded that man honor the “rest day” in a perpetual commemoration of what God had accomplished. Millennia later, the Lord Jesus noted that He had designed the six-day workweek into the fabric of creation itself: “The Sabbath was made for man, and not man for the Sabbath” (Mark 2:27).

God is interested in the integrity of our “inner man” (Ephesians 3:16). True worshipers who are



“bowing down” in their love to the heavenly Father will seek to allow the Holy Spirit to produce His fruit in their spirits. Please note that this fruit is all *spiritual*: “love, joy, peace, longsuffering, kindness, goodness, faithfulness, gentleness, self-control” (Galatians 5:22-23).

Worship in Truth

While God does demand “spiritual sacrifices” (1 Peter 2:5), He also most certainly expects us to “do” truth with our observable behavior (1 John 1:6). Jesus insisted that those who ran from the light of His message were easily spotted because they were “practicing evil” (John 3:20). But in contrast, “he who *does the truth* comes to the light, that his deeds may be clearly seen, that they have been done in God” (John 3:21).

The Old Testament Scriptures are replete with commands to “keep the commandments” of God (Deuteronomy 4:2; 6:17; 7:11; 8:6; etc.). Frequently these reminders include actions that express obedience far better than mere verbal acquiescence does.

- » “And now, Israel, what does the LORD your God require of you, but to *fear* the LORD your God, to *walk* in all His ways and to *love* Him, to *serve* the LORD your God with all your heart and with all your soul, and to *keep* the commandments of the LORD and His statutes which I command you today for your good?” (Deuteronomy 10:12-13).
- » “But take *careful heed* to *do* the commandment and the law which Moses the servant of the LORD commanded you, to *love* the LORD your God, to *walk* in all His ways, to *keep* His commandments, to *hold fast* to Him, and to *serve* Him with all your heart and with all your soul” (Joshua 22:5).

The shift from the nation of Israel in the Old Testament to the indwelling Holy Spirit in and among believers in the New Testament assembly brought about a renewed emphasis on godly behavior based on loving each other, expecting joy in obedience, and cultivating a growing delight in the exchange of earthly resources for Kingdom riches.

- » “He who has My commandments and keeps them, it is he who loves Me. And he who loves Me will be loved by My Father, and I will love him and manifest Myself to him” (John 14:21).
- » But this I say: He who sows sparingly will also reap sparingly, and he who sows bountifully will also reap bountifully. So let each one give as he purposes in his heart, not grudgingly or of necessity; for God loves a cheerful giver (2 Corinthians 9:6-7).
- » By this we know that we love the children of God, when we love God and keep His commandments. For this is the love of God, that we keep His commandments. And His commandments are not burdensome (1 John 5:2-3).

Under the old covenant, God demanded a theocratic-political-national relationship with Israel that could never be realized apart from God’s intervention. Identity as the people of God was a “mystery” that was “hidden in God” (Ephesians 3:9) until the glorious new covenant revealed through the Lord Jesus “to His saints” (Colossians 1:26). The old covenant was made “obsolete. Now what is becoming obsolete and growing old is ready to vanish away” (Hebrews 8:13). Now we are to become “the praise of the glory of His grace, by which He has made us accepted in the Beloved” (Ephesians 1:6).

True Worshipers

Perhaps the greatest endowment that the New Testament saint has been given is the “new creation” that God executes in us when we are twice-born. We are given “the mind of Christ” (1 Corinthians 2:16), the Spirit of truth (John 16:13), “the riches of His grace...in all wisdom and prudence” (Ephesians 1:7-8), and “an inheritance incorruptible and undefiled and that does not fade away, reserved in heaven for you, who are kept by the power of God through faith for salvation ready to be revealed in the last time” (1 Peter 1:4-5). We have been given “all things that pertain to life and godliness, through the knowledge of Him who called us by glory and virtue” (2 Peter 1:3), enabling us to become “true worshipers [who] will worship the Father in spirit and truth” (John 4:23).

As the new year of 2019 begins its course, refocus your relationship with your heavenly Father. Cultivate the *spiritual* worship that engages heart and mind and soul and strength, loving the God of heaven and Earth. Discipline yourself to *do* truth as you “work out your own salvation with fear and trembling; for it is God who works in you both to will and to do for His good pleasure” (Philippians 2:12-13). With our spiritual worship wholesome and our truthful worship active, we should find it “cheerful” to give, knowing that in return “it will be given to you: good measure, pressed down, shaken together, and running over will be put into your bosom. For with the same measure that you use, it will be measured back to you” (Luke 6:38). ✎

Dr. Morris is Chief Executive Officer of the Institute for Creation Research. He holds four earned degrees, including a D.Min. from Luther Rice Seminary and an MBA from Pepperdine University.



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Galaxy Redshift Research Update

A fundamental Big Bang assumption is that there are no special places or directions in the universe. However, even observations made by Big Bang scientists call this “cosmological principle” into question.¹⁻³

This assumption requires that neither our Milky Way galaxy nor Earth can be in any way special. According to Scripture, however, Earth is *very* special. God spent five days preparing Earth but only one day creating the heavenly bodies (Genesis 1:1-31). Earth is the place where the Lord Jesus Christ became a man, dwelt among us, bore our sins on the cross, and rose from the dead for our justification (Romans 4:25; 1 Corinthians 15:3-4). Given the centrality of Earth to God’s plan for the ages, it would not be surprising if, or at least our galaxy, were located in a special place in the cosmos.

For this reason, creation scientists have long been interested in observations that might confirm this. Both secular and creation scientists have claimed quantized redshift data show that the distribution of nearby galaxies is not random but that galaxies are preferentially located at discrete distances from Earth.⁴⁻⁷ This would imply our Milky Way galaxy is near the center of a series of spherical, concentric shells of galaxies. Because such a “chance” distribution of galaxies is extremely improbable, this phenomenon, if real, would be powerful evidence for special creation and against the Big Bang model.⁸

However, this is a stupendous claim, and we would prefer not to simply take

article highlights

- If the Big Bang really happened, there should be no “special” places in the universe.
- Past analyses of redshift data seemed to suggest our galaxy is at the center of concentric shells of galaxies, which would be consistent with special creation.
- ICR’s 2012 analysis of redshift data showed a shell-like pattern of galaxies, but the pattern was not clear enough to confirm the redshift argument.

published reports at face value. Unfortunately, some earlier creation studies that seemed to confirm this result failed to take into account “selection effects” that could bias the results.⁹ In 2012, ICR scientists began, in conjunction with other creation scientists, an effort to see if we could confirm this claim with our own analysis of the data. Although preliminary results did show an apparent series of concentric galaxy shells surrounding our Milky Way galaxy,¹⁰ this apparent pattern was not pronounced enough to rule out an illusion caused by selection effects.¹¹

However, this may not be the final word on the issue. Our work so far has given us a much better understanding of the pitfalls in this kind of research.¹¹⁻¹³ More data and a more sophisticated analysis might change this outcome, but for now we haven’t been able to confirm this result for ourselves.

So, although there are very good rea-

sons to question the cosmological principle, we caution our fellow creationists against making strong claims regarding quantized redshifts. This intriguing possibility is definitely worth further study, but for now it seems the only evidence for it lies in the original published secular reports. Hence, it would be prudent for creationists to hold this idea loosely, viewing it as a hypothesis rather than as a confirmed result. ☞

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Helium Retention in Zircons Demonstrates a Young Earth

article highlights

- Zircon crystals form from magma. When they cool they trap uranium, which gives off helium as it decays.
- Scientists routinely use the zircons in rocks to assign ages to them via various radioisotope dating methods.
- The Radioisotopes and the Age of the Earth (RATE) team studied helium in rock samples dated by secular scientists as over one billion years old.
- The RATE helium retention measurements showed the rock to be only thousands of years old—powerful evidence for recent creation.

Zircons are tiny crystals of zirconium silicate ($ZrSiO_4$) that originate in igneous rock, which forms when volcanic magma cools. It's a very stable mineral that melts at 2550 °C. Zircon is harder than quartz and almost as hard as diamond. Because of these characteristics, zircon is the mineral most frequently used in various radioisotope dating methods for dating rocks assumed to be at least a few hundred million years old. Its ability to retain impurities within its crystal lattice is very important in establishing the validity of these dating methods.

Zircon crystals usually contain trace amounts of uranium (U) and/or thorium (Th) when they cool. Once the zircons solidify, the

The creationist model agrees remarkably well with the actual data; the uniformitarian model predicts diffusivities more than 100,000 times lower than the actual data show.

Volcano in Masaya Volcano National Park, Masaya, Nicaragua

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uranium and/or thorium are trapped in the zircons' crystal lattice and begin to undergo radioactive decay. As they decay, they produce helium and cause defects in the crystal due to radiation damage.

Each uranium atom produces eight helium ions through its decay chain, and each thorium atom produces seven helium ions. These ions then pick up two electrons from the crystal lattice to form a helium atom. The trapped helium atoms then move from regions with large numbers of helium atoms to regions with fewer helium atoms via a process called *diffusion*. A minimum energy is required for diffusion to move helium through the crystal. This energy is called the *activation energy* (E), which depends upon the number of defects or

imperfections in the crystal. Figure 1 presents a visual schematic of how the helium atoms move through the zircon crystal.¹

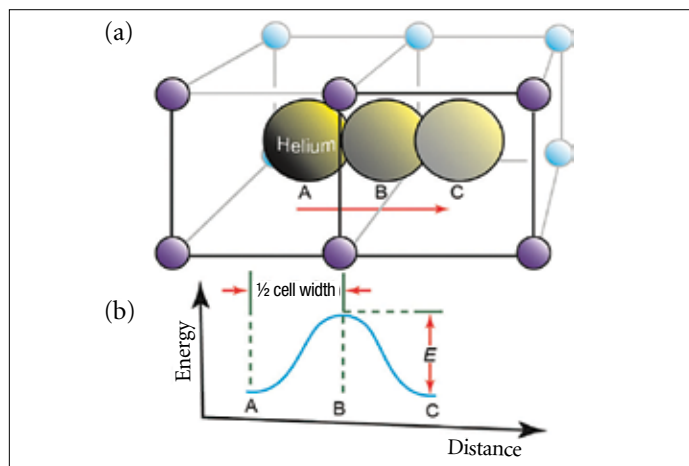


Figure 1. An illustration of a helium atom moving through a crystal lattice. Image (a) shows a helium atom's initial position within a crystal lattice (position A). Energy is added to the helium atom by collision with atoms making up the crystal lattice, the addition of phonons or heat to the crystal, or the addition of electromagnetic radiation. If enough energy is added (activation energy, E), then the helium atom is bumped toward the next unoccupied lattice site (B). It comes to rest at another lattice site (C) when its energy drops below the activation energy, E. This continues until the energy supply is exhausted or the helium atom leaves the crystal.

Experiments show that the rate at which the concentration (particles per unit volume) of an impurity such as a helium atom changes at any given location in a crystal lattice is in proportion to the divergence of the concentration gradient within the entire crystal, i.e.:

$$\frac{\partial C}{\partial t} = D \nabla^2 C$$

where C is the concentration of helium atoms in a given location and D is the diffusion coefficient or diffusivity. The Laplacian (∇^2) of a concentration, such as the concentration of helium atoms in a zircon crystal, represents the volume density of the outward flow of helium atoms from an infinitesimal volume around a given point in the crystal. In this case, the flow of helium atoms is positive or outward toward the lower concentrations outside the reference point in the zircon crystal. It has been experimentally determined that at high temperatures the diffusivity (D) depends exponentially on the absolute temperature, i.e.:

$$D = D_0 \exp\left[-\frac{E_0}{RT}\right]$$

where D_0 is a constant independent of temperature, E_0 is the intrinsic activation energy characteristic of the material in which diffusion is occurring (in this case a zircon crystal), and R is the universal gas constant. If the crystal has defects such as vacancies in the crystal lattice, dislocations, impurities, damage from radiation, or grain boundaries,

then the basic equation is modified to:

$$D = D_0 \exp\left\{-\frac{E_0}{RT}\right\} + D_1 \exp\left\{-\frac{E_1}{RT}\right\}$$

where D_1 and E_1 are the modified diffusion constant and activation energy for a damaged crystal. The defect parameters D_1 and E_1 are almost always smaller than the intrinsic parameters D_0 and E_0 . Due to this feature of diffusion, the slope of the defect line is almost always shallower than the slope of the intrinsic line. Figure 2 is a graphical representation of a typical diffusion curve.² Because defects are very common in naturally occurring crystals, especially crystals containing radioisotopes, the two-slope curve seen in Figure 2 is typical.

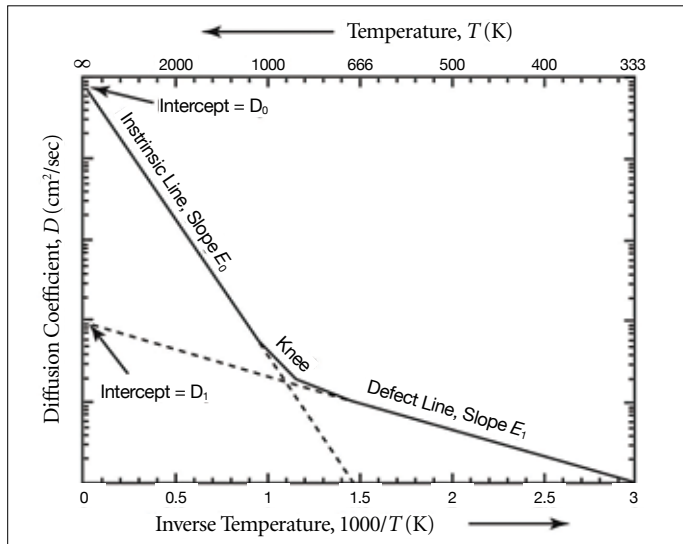


Figure 2. Typical plot for the diffusion coefficient in a natural mineral. It is generally known as an Arrhenius plot. Note the x-axis or abscissa has an inverse temperature scale so that the higher temperatures are to the left and the lower temperatures are to the right.

With these concepts in mind, we will look at the experimental investigation initiated by Dr. Russell Humphreys and his colleagues on the Radioisotopes and the Age of the Earth (RATE) team into retention of helium atoms in a supposedly 1.5 billion-year-old rock.³ The granitic rock from which the zircon crystals used in these studies came was classified as biotite granodiorite, an igneous rock.⁴

In the 1970s, geoscientists from Los Alamos National Laboratory drilled core samples at the Fenton Hill site in the Jemez Mountains of New Mexico. In borehole GT-2 they sampled the granitic Precambrian basement rock. This rock was assigned a radioisotope age of 1.5 ± 0.02 billion years as determined by various secular dating methods using U, Th, and lead (Pb) isotopes. The depth of the samples varied from near the surface to 4.3 kilometers in depth, with *in situ* temperatures ranging from 20 °C to 313 °C respectively. The Los Alamos team sent some of the core samples to Oak Ridge National Laboratory for isotopic analysis. Robert Gentry, an Oak Ridge physicist, analyzed zircons extracted from these samples for total helium content by heating them to 1000 °C in a mass spectrometer in

which the amount of ⁴He liberated was measured.

Table 1 summarizes the results of his measurements plus two additional samples (designated as 2002 and 2003) analyzed by Dr. Humphreys and colleagues as part of the RATE project.⁵ Column 1 is the sample designation, and columns 2 and 3 list the *in situ* depth and temperature for each sample respectively. Column 4 lists the volume of helium liberated (at standard temperature and pressure) in the laboratory per microgram of zircon (1 ncc = 10^{-9} cm³). Column 5 is the ratio of the observed quantity of helium in the crystal (Q) to the calculated quantity of helium that would have accumulated and been retained in the crystal (Q₀) had there been no diffusion of helium out of the crystal. Uncertainties in calculating Q₀ dominate the estimated errors listed in column 6.

Sample	Depth (m)	Temperature (°C)	Helium (ncc/μg)	Q/Q ₀	Error
0	0	20	8.2	—	—
2002	750	96	~12.1	~0.80	—
1	960	105	8.6	0.58	±0.17
2003	1490	124	6.3	0.42	±0.13
2	2170	151	3.6	0.27	±0.08
3	2900	197	2.8	0.17	±0.05
4	3502	239	0.16	0.012	±0.004
5	3930	277	~0.02	~0.001	—
6	4310	313	~0.02	~0.001	—

According to the dependence of diffusion on temperature outlined in earlier paragraphs, we would expect to observe that the hotter sample 6 would have much less helium than sample 5. The fact that the helium content didn't decrease suggests that some additional effect may have come into play above 277 °C. So, sample 6 wasn't included in the analysis of samples 1 through 5 by the RATE researchers.

Next, the RATE team needed to measure and study the diffusion characteristics of zircon and the surrounding biotite in order to understand what the data in Table 1 really meant. In 1999, they looked for any available data on helium diffusion in zircons and biotite. The only data they could find were from Sh. A. Magomedov, who had published data for radiogenic Pb and helium diffusion in highly radiation-damaged zircons from the Ural Mountains in Russia.⁶ Helium data only appeared as a graph. Then in 2001, the RATE team received a preprint for a paper by P. W. Reiners and colleagues listing new helium diffusion data in zircons from several sites in Nevada.⁷ A graphical summary of those data is presented in Figure 3.⁸

These data, combined with data for the diffusion constants in muscovite and biotite (two forms of mica), convinced the RATE team that the zircon rates for helium loss were more important than those for the surrounding medium. With these data in hand, the team acquired new samples from the GT-2 borehole and sent them off to a

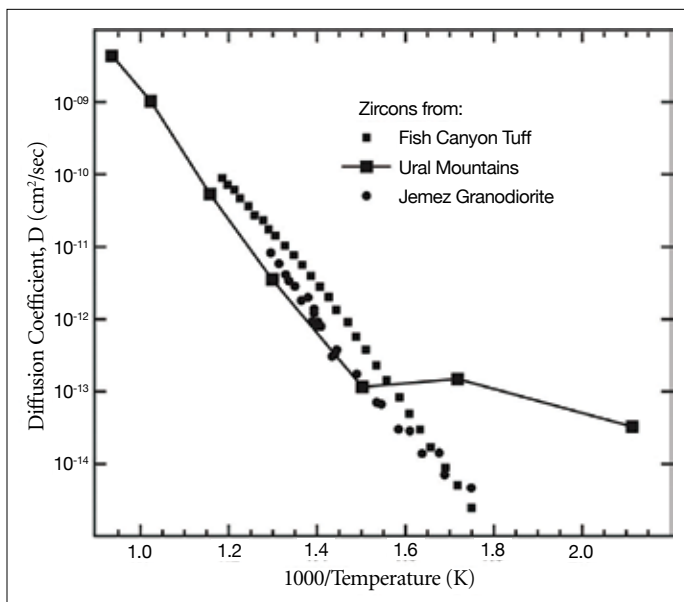


Figure 3. Diffusion coefficients observed in zircons from the Ural Mountains in Russia, the Jimenez granodiorite, and the Fish Canyon Tuff in Nevada. The “knee” in the data from the Ural Mountains is due to extreme radiation damage in those zircon crystals.

recognized expert in diffusion measurements for analysis.⁹ These constitute the data points (blue dots with error bars) in Figure 4.¹⁰

The RATE team was then faced with developing two models for the migration of helium out of the zircon and into the surrounding biotite. One model was based on a creationist view of history and the other was based on the billion-year uniformitarian view.¹¹ Figure 4 compares the data with the model predictions.

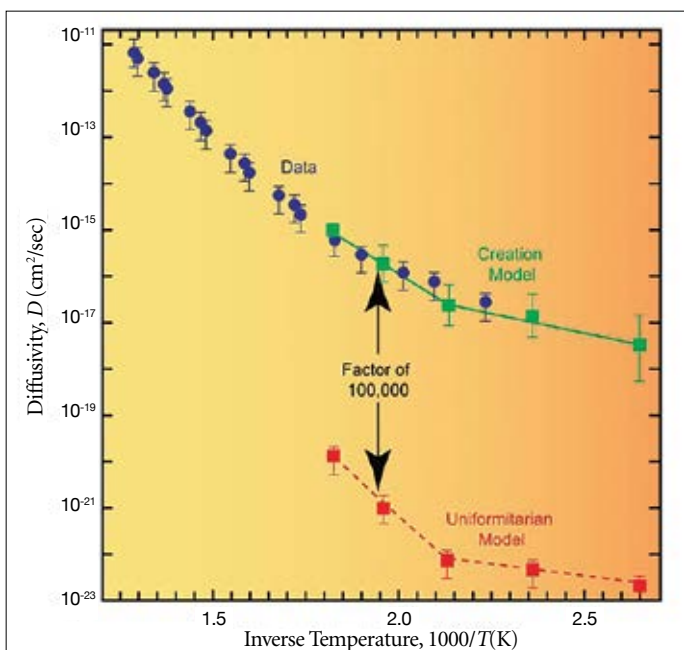


Figure 4. Early diffusion data from GT-2 borehole zircon samples (blue dots) compared with the creation model predictions (green squares) and the uniformitarian model predictions (red squares).

Clearly there is a considerable and irreconcilable difference between the two models. The creationist model agrees remarkably well with the actual data; the uniformitarian model predicts diffusivities more than 100,000 times lower than the actual data show. The data predict that within the uniformitarian model all zircon samples would retain much less helium than is observed. Rearranging the diffusion equation for the creation model, one obtains an approximate age for the GT-2 borehole rock of $5,680 \pm 2,000$ years—as compared to the assumed 1.5 billion-year age in the uniformitarian model. The RATE team concluded that although approximately 1.5 billion years of U/Th decay at *today's* decay rates occurred within the GT-2 borehole rock, helium generated by that decay had only been escaping for about 5,700 years, which is why large amounts of helium were still present in the zircons. This discrepancy can be resolved if there was a time in the past in which nuclear decay rates were much higher. This is strong observational evidence that at some time in the past, accelerated nuclear decay did occur.

Obviously these findings set the secular science community into a frenzy, so much so that all types of objections to the experimental data and its interpretation have arisen. These questions and objections have been more than adequately answered by the authors of this investigation.^{12,13} Ultimately it comes down to which version of history one believes: Do you prefer the naturalistic view of history or the extremely clear biblical narrative? The RATE zircon/helium measurements showing only thousands of years provide powerful evidence for recent creation. ☞

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ICR Discovery Center Update

ICR staff members recently enjoyed a sneak preview of the ICR Discovery Center for Science and Earth History's first planetarium show, *Creation in the Solar System*. With stunning visuals and faith-building facts, the show inspires praise to God for His majestic handiwork. We look forward to the Discovery Center's opening later this year when visitors from all over will learn about these wonders of creation from a biblical perspective.

When we toured the Discovery Center areas currently under construction, several experts were immersed in their various projects. Artists were painting the exterior of Christ's empty tomb and carving the rock face of the Grand Canyon exhibit. Other workers were building the post-Flood baobab tree.

Last October, we showed off the paddlefish fossil panel that will go on the building's exterior wall facing busy Royal Lane. This time we're showcasing the ammonite and trilobite panels we recently received, and six more should get here soon. For all who pass by the Discovery Center, these eye-catching displays will hint at the scientific evidence for biblical creation that awaits inside.

ICR also has great plans for the area surrounding the center. Our fountain will showcase a 25-foot stainless steel sculpture of a DNA double helix—a scenic place to take photos! In addition to expanded parking and new landscaping, we are installing a park with numerous trees and a picnic area. We hope your family will enjoy eating lunch and spending time together in the park during your visit.

Help Us Complete the Exhibits

We're developing the most educational and inspirational exhibits possible to point people to the truth of our Creator, the Lord Jesus Christ. Visit ICR.org/DiscoveryCenter to find out how you can partner with us in prayer and help us finish strong!



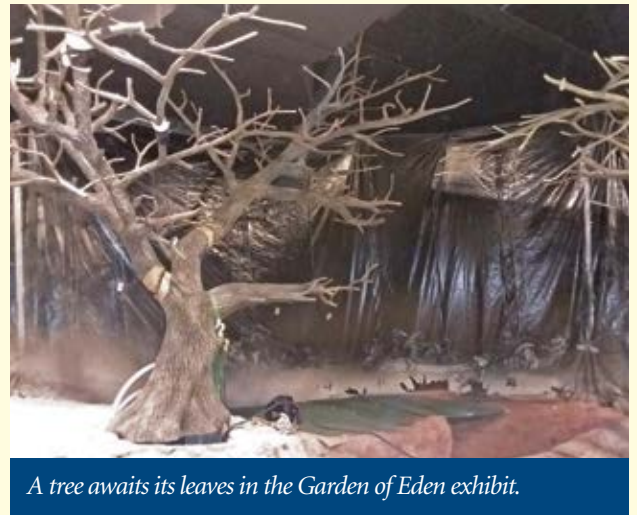
An artisan carves the rock face in the Grand Canyon exhibit.



The ammonite fossil wall panel.

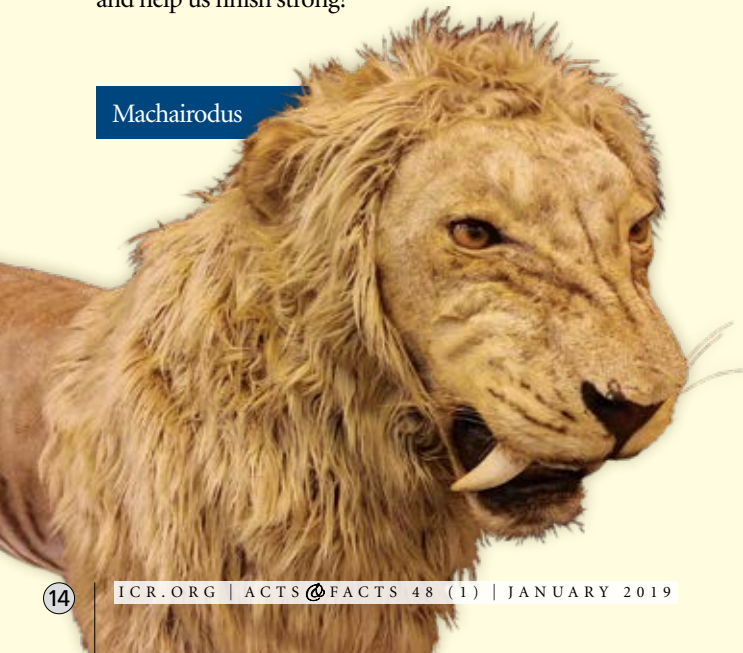


Another outside wall panel—a giant trilobite.



A tree awaits its leaves in the Garden of Eden exhibit.

Machairodus



Work continues in the parking and picnic areas.

GRACE

from the Ark and the Flood

How strange that we decorate children’s play areas with Noah’s Ark themes. While we paint cute animals on church walls, the real Flood event was horrific. “And all flesh died that moved on the earth.”¹ Peter wrote, “The world that then existed perished, being flooded with water.”² Scenes of such carnage would terrify toddlers.

The Flood was God’s judgment on a wicked world. It might seem a drastic action for a loving God to take, but much good came from it. It’s like having surgery. Nobody enjoys their body getting sliced and stitched, but a skillful operation can restore health and extend life. Let’s count some of the many graces that Earth’s ancient watery surgery extends to us.

We drive or ride to work, school, here and there. What fuels trains, planes, buses, and cars? Petroleum products, of course. And all that oil and gas came from Noah’s Flood. It buried massive amounts of algae beneath and within sediment layers. Algae bodies degraded under heat and pressure to form most oil and gas. So, every time we fill up the tank, we have God’s judgment to thank.

The same goes for coal. Pure coal deposits don’t form today. It took the Flood to dismember, sort, and bury whole forests across thousands of square miles, where the same heat and pressure that produced oil also darkened and compressed the plant ma-

article highlights

- Over 4,000 years ago, the Genesis Flood destroyed most of the world.
- But blessings came from it, like oil and Earth’s natural beauty.
- The Ark safeguarded creatures, the human race, and Jesus’ ancestors.
- Thank God for His grace through the Flood.

terial. Coal-burning power plants help make our electric gizmos go. So, we should thank God for His grace through judgment whenever we turn on the lights.

Next, everyone thrills at the sight of a rainbow. God placed it there to remind us He will never completely flood Earth again.³ He has kept that promise for over 4,000 years! Dramatic landscapes offer another grace from Noah’s Flood. Hordes flock to picturesque parks like Zion Canyon. What do we see when we visit? Water-laid sediments and striking valleys, both from Noah’s Flood.

In the Flood, God cleansed the world of violent creatures. Flood fossils show that flying reptiles and birds had teeth and claws; dinosaurs had teeth, claws, and giant jaws; and even mammalian monsters could have mangled mankind. By God’s grace, He reduced these threats so today we enjoy a calmer planet.

The Flood introduced mountain ranges and oceans between places where people live.

These buffer the spread of evil. When one nation gets so bad that it deserves destruction, the human race can thrive in another place all by God’s grace through the Flood.

God’s graces extend from Noah’s Ark, too. Americans keep more dogs and cats than children nowadays. The Ark kept them from going extinct! Two dogs and two cats went inside with eight people. Now we can enjoy pets. Have you ever savored an apple or bread made from grains? God was thinking of you when He commanded Noah, “And you shall take for yourself of all food that is eaten, and you shall gather it to yourself; and it shall be food for you and for them.”⁴

Finally, the Ark points to the Savior, Jesus. Just as the eight people escaped judgment by entering the Ark bodily, we can escape future judgment by entering (trusting) the Lord Jesus spiritually. He is God the Son as well as Eve’s promised Seed.⁵ Jesus descended from Shem, whom God preserved on Noah’s Ark.⁶ As a result, “this Man, after He had offered one sacrifice for sins forever, sat down at the right hand of God” for us, through the Flood, by His grace.⁷ ✉

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7. Hebrews 10:12.

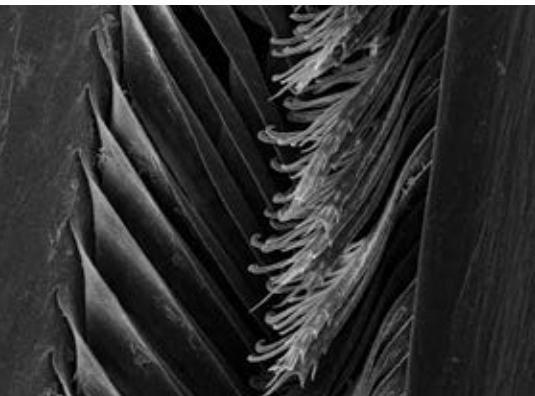
Mr. Thomas is Science Writer at the Institute for Creation Research and earned his M.S. in biotechnology from Stephen F. Austin State University.



Did Dinosaurs Come with or without Feathers?

Many secular scientists consider so-called “feathered dinosaurs” to be evidence of dinosaurs evolving into birds. Clearly defined anatomy-based categories exist for both “bird” and “dinosaur,” but evolution requires a bird-to-dinosaur transition.¹ In living creatures, only birds—not mammals or reptiles—have feathers. Furthermore, with a few controversial exceptions,² all extinct feathered animals are acknowledged as birds. Even bird-feather proteins called *keratins* are unique.³

The use of feathers to fly “affects virtually every aspect of feather design and construction.”⁴ A flight feather has a long, slender central shaft called a *rachis*. From this extend the barbs, and from these extend the even smaller barbules. The barbules on one side of the barb are smooth, but, like Velcro, they link to tiny hook-shaped barbules on the opposite side.



Scanning electron microscopy (SEM) image showing feather barbs with hooklets.

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Assuming hypothetical feathers on dinosaurs functioned as modern feathers do, they must consist of all the required working parts. Even the angle, thickness, shape, and construction of the parts must all exist and be assembled within narrow tolerances.⁵ So far, Darwinists have only impressions of “protofeathers” that they assume were struc-

tures on the way to becoming modern feathers. But until they became functional feathers, it appears they would have decreased a creature’s fitness, making them less likely to persist in future generations.⁶

Consequently, a biblical creation worldview rejects the supposition that protofeathers were structures on the way to evolving into flight feathers. So, what were they? Possibly skin collagen fibers, not feathers. Some resemble fossil preparation marks, which are caused by tools used to uncover and excavate fossils. For these reasons, many researchers are “skeptical of inferring feathers when there are no feathers preserved” with bona fide dinosaurs in the fossil record.⁷

The difficulties in determining whether or not a fossil is a feathered dinosaur are many. Most fossils consist only of fragmented skeletal parts. Others show only ambiguous impressions in stone. Unfamiliar creatures that demonstrate evidence of feather-like structures may have been unusual birds like today’s ostrich—not dinosaurs.

For these and other reasons, even some evolutionists have rejected the “feathered dinosaur” conclusion.⁸ Rather, they interpret the fibers not as protofeathers but as partly decayed integument, which is skin or hide.⁹ Theagarten Lingham-Soliar suggests that because the *Sinosauropteryx* fossil was found associated with lake biota, it was probably semiaquatic. Filaments that grew from its skin resembled the smooth, downy feathers used in pillows. They may have helped waterproof it like modern duck feathers.¹⁰

No evidence for feather evolution exists. Feathers in the fossil record are consistently fully formed.¹¹ Extensive study of one of the oldest known feathers—a 69-millimeter-long, well-preserved, claimed *Archaeopteryx* feather—reveals that all its major details match those of modern bird feathers.¹² Thus, one might expect to find

article highlights

- Evolutionists want to identify a bird-to-dinosaur transition.
- Despite evolutionary interpretations, feathered fossil creatures are birds.
- The development of protofeathers appears to be only speculation.
- Even the oldest true feather fossils are fully functional.

fully developed feathers on dinosaurs, but “protofeather” fibers don’t fill the bill.

Without the wishful evolutionary thinking, the current evidence suggests that protofeathers were not structures evolving into feathers but likely decayed skin with fossilized collagen fibers remaining. Further research may change the conclusion that feathered dinosaurs did not exist, but until then we must go with the existing evidence, which disputes the feathered dinosaur theory. This conclusion takes the wind out of the sails of an evolutionary link between dinosaurs and birds. ☒

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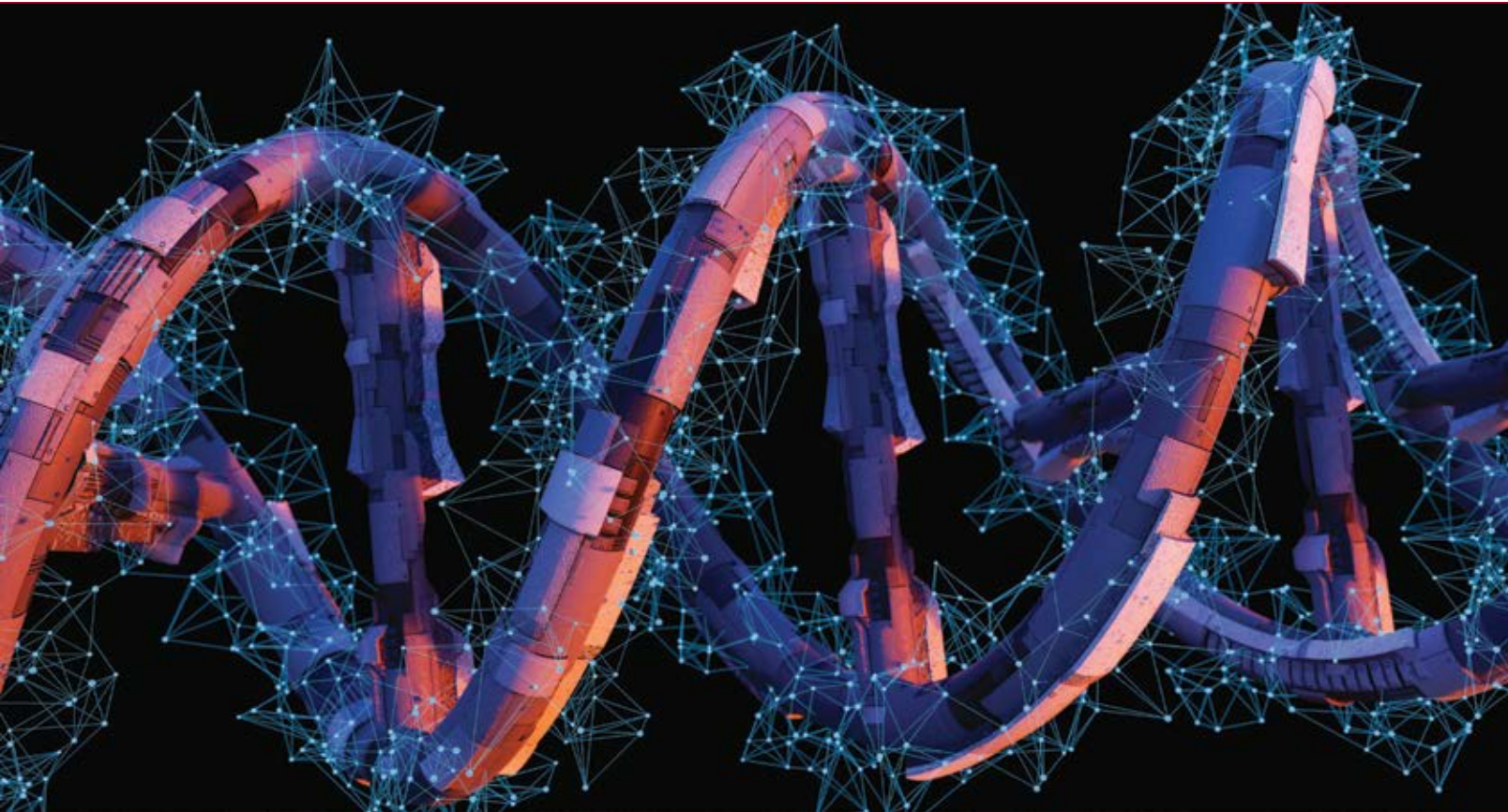
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Biological Networks Feature Finest Engineering Principles



R A N D Y J . G U L I U Z Z A , P . E . , M . D .

article highlights

- Living creatures have logic networks that regulate precisely targeted self-adjustments to environmental challenges.
- Complex biological systems seem to be constructed from a set of basic design principles.
- Specific mechanisms in cells optimize their genomes in response to the environment.
- Biological systems incorporate the best engineering principles known to mankind.

While I was chatting once with an inmate at a Pennsylvanian prison, he told me that upon his arrival a guard wryly said he was free to do whatever he wanted...so long as it was regulated. Regulations are a method of control using rules in lieu of physical handling. Since regulatory control over systems, processes, and behaviors is often essential, regulations are pervasive in organizations—and also in biology. If engineered control systems and biological regulatory systems are both based on rules, how similar are they?

Logic-Based Regulatory Systems

A previous article in this series discussed how living creatures adapt to changing conditions by using logic-based selection mechanisms that correspond to human logic.¹ A simple logical proposition goes something like “if (+) condition then perform one kind of response, and if (-) condition then do another.” In machines, that logic is controlled by a (+) on or (-) off switch. Experiments with *E. coli* bacteria discovered they contain certain proteins that operate like man-made on-off switches. Different

arrangements of these switches confer a type of gene logic. Biological systems usually operate like computer programs in which rules define different combinations of on-off settings as commands or conditional statements like “if,” “then,” “and,” “or,” and “not.”

Knowing the basics of logic-based regulatory control is necessary for understanding ICR’s adaptation model called *continuous environmental tracking* (CET). We hypothesize that if human engineers can use a tracking system to detect and maintain surveillance of a moving target, then creatures might use a similar strategy to track changing conditions.² We predict that creatures would use elements corresponding to those in man-made tracking systems: 1) input sensors, 2) programmed logic mechanisms to regulate an internal selection of adaptable responses, and 3) output “actuators” to execute responses.

Innate logic-based regulatory systems are perfectly suited for the mechanisms an organism uses to effect adaptive responses to the different challenges it detects. These systems imitate the conscious logical intentions of a designer’s mind, which enables the organism’s logical systems to *internally select* output responses from a group of potential solutions. When conscious organisms—or their unconscious cells—integrate sensory inputs, memory, and logical rules to make selections, they are said to express *cognition*. Creatures effectively use this type of programmed internal logic to self-adjust to changing conditions.

In this article, we’ll first consider new research that helps explain how logic-based modules are linked into extremely complicated biological regulatory networks. Next, we’ll survey examples of how those networks bring about remarkable self-adjustments that are precisely targeted to specific environmental challenges. Throughout, we’ll again see that biological systems incorporate the best engineering principles used in human-designed systems.¹

Design Principles Underlie Biochemical Regulatory Networks

Dr. Robyn Araujo of Queensland University of Technology (QUT) has worked extensively on the mathematics underlying the internal logic that enables creatures to “function and thrive amid changing and unfavorable environments.”³ In a study published in *Nature Communications*, she established that “all networks that exhibit robust perfect adaptation...are decomposable into well-defined modules.” Modularity is an important design principle that engineers incorporate into mechanisms to help them resist breaking down (i.e., make them “robust”). Remarkably, Dr. Araujo’s “unexpected result” identified “processes [that] are empowered by simple and scalable modular design principles that promote robust performance no matter how large or complex the underlying networks become.”³

A QUT news report on the results of Dr. Araujo’s study begins with this incisive question: “How does the ‘brain’ of a living cell work, allowing an organism to function and thrive in changing and unfavourable environments?”⁴ This question is exactly what ICR’s design-based CET model tries to explain. Dr. Araujo responds by saying:

Proteins form unfathomably complex networks of chemical reactions that allow cells to communicate and to “think”—essentially giving the cell a “cognitive” ability, or a “brain”....It has been a longstanding mystery in science how this cellular “brain” works.⁴

One characteristic of biological regulatory networks is their extreme exactness, an attribute that’s consistent with purposeful design as opposed to undirected, gradual evolution. Dr. Araujo “studied all the possible ways a network can be constructed and found that to be capable of this perfect adaptation in a robust way, a network has to satisfy an extremely rigid set of mathematical principles.” How rigid? Well, her studies represent “five years of relentless effort to solve this incredibly deep mathematical problem.”⁴



One theoretical assumption of the CET model is that biological functions (*not* consciousness or life itself) are explainable by engineering principles. Dr. Araujo’s conclusions seem to offer such support:

As we continue to amass ever larger quantities of data on the vast and complex networks of molecular interactions within living systems, a tantalizing question continues to be raised: could complex biological systems be constructible from just a limited set of simple design principles? Here we show conclusively that, for RPA [robust perfect adaptation]-capable networks at least, the answer is an unequivocal yes.⁵

After considering fundamental constraints on biological operation, she ponders “whether all biochemical networks, of any size, with a fundamental need to exhibit robust functionalities, are characterized by modular architectures.”⁵

Logic-Based Networks and Adaptation

Engineers face huge challenges in de-



veloping the rules and programming for good regulatory controls—particularly those related to adaptation. ICR’s Brian Thomas discussed a fascinating case of adaptation for octopuses living in polar or tropical waters. Temperature greatly affects the speed of their nerve signals, since “Antarctic [protein] channels would open about 14 times slower and close about 60 times slower than would tropical channels.”⁶ Researchers who studied this reported:

On the basis of conventional natural selection, we hypothesized that the channels’ genes would have evolved mutations to help tune them to their respective environments. Surprisingly, the primary sequences encoded by the two genes were virtually identical.⁷

In contrast, they found a regulatory network that modifies RNA molecules before they are translated into proteins. The result is that slightly different proteins are made for ion channels in the octopuses’ neurons that suit outside water temperatures. They observed that “although still maintain-

ing the basic K^+ channel plan, octopuses can make fast-closing versions, and the extent of their expression can be graded.”⁷ Graded adaptive responses? That itself is an engineering feat, and more research will refine how octopuses use RNA editing for rapid acclimation and long-term adaptation.

ICR geneticist Dr. Jeffrey Tomkins has discussed regulated RNA editing in corals that supposedly date back to “the earliest stages of life on Earth.” Far from being “simple,” he notes that “surprisingly, it was discovered that the RNA editing patterns in the corals resembled those found in mammals,” with researchers finding “over 500,000 sites in coral genes where the sequence had been altered with RNA editing.”⁸

Another example is regulatory mechanisms that amplify the number of repetitive DNA sequences associated with the genes encoding ribosomal proteins. Sensors on yeast are linked to logic mechanisms such that if (+) “external nutrient availability” then implement “rapid, directional” adjustments in the number of repetitive DNA sequences to ramp up the production of ribosomal proteins needed to metabolize the increased levels of nutrients.⁹ Differing sequence numbers control the expression of variable traits targeted to available nutrients. The researchers’ conclusion is consistent with continuous environmental tracking:

Here we show that signaling pathways that sense environmental nutrients control genome change at the ribosomal DNA. This demonstrates that not all genome changes occur at random and that cells possess specific mechanisms to optimize their genome in response to the environment.⁹

Conclusion

We’ve seen evidence that perhaps all intracellular logic-based networks can be modeled mathematically, be explained by engineering principles, and work to direct precisely targeted responses. These findings are what the design-based CET model

expects—and predicts will continue to be discovered—since it anticipates that the regulatory principles governing biological networks correspond to those in human-derived networks.

The Pennsylvanian inmate learned the hard way that regulatory controls naturally limit freedom. But when engineered into biological systems, they confer a flexibility to organisms that liberates them to explore new environments and potentially create new niches.

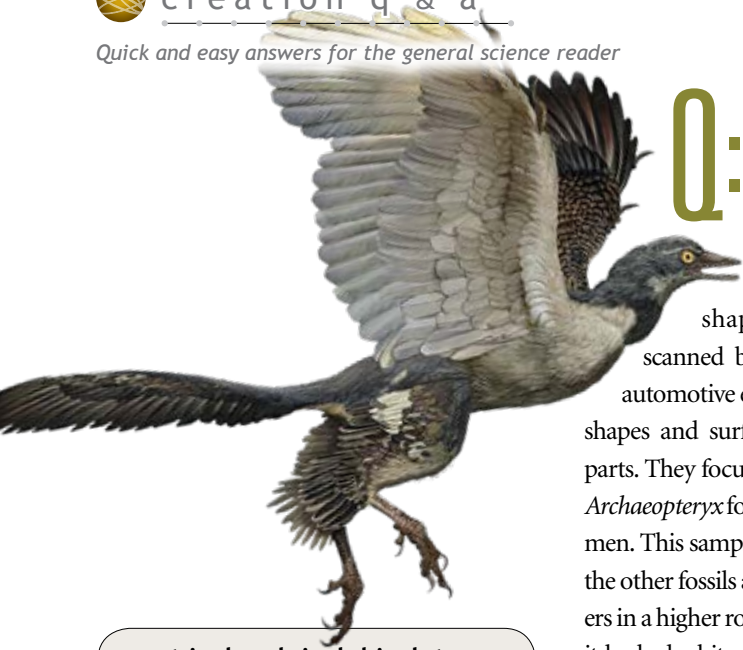
Interestingly, we can infer the nature of rule makers from the characteristics of their regulations. For instance, it’s possible a government regulation could be universally disliked because it’s needless, overly restrictive, redundant, unfair, or so illogical that it undermines its intended purpose. So far, there are no identifiable needless or foolish biological regulatory systems. Quite the opposite, in fact. Is this just a lucky outcome of a mindless, death-driven process like evolution? Or does it originate from the matchless wisdom of nature’s Creator, the Lord Jesus Christ? The answer is evident. ☞

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Dr. Guliuzza is ICR’s National Representative. He earned his M.D. from the University of Minnesota, his Master of Public Health from Harvard University, and served in the U.S. Air Force as 28th Bomb Wing Flight Surgeon and Chief of Aerospace Medicine. Dr. Guliuzza is also a registered Professional Engineer.





Q. Does *Archaeopteryx* Show Bird Evolution?

shapes and surfaces of every scanned bone similar to the way an automotive engineer compares the many shapes and surfaces of a race car's engine parts. They focused on one of the 12 known *Archaeopteryx* fossils called the Daiting specimen. This sample has small differences from the other fossils and was buried after the others in a higher rock layer. The researchers said it looked a bit more like modern birds than did other *Archaeopteryx* fossils.

Evolutionary scientists have long described *Archaeopteryx* as a bird.³ The research team wrote, "The [Daiting] character suite has clear parallels in modern flying birds."¹ In the big picture, this just means it was a bird. We already knew that. Why would the news again call an extinct bird a "missing link?"

Paleontologist and study coauthor Dr.

bird evolution.

Any problem with this argument? Yes! It ends with the answer it had already assumed.

All creatures have variations. For example, among the dog kind German shepherds have a stronger bite force than Labradors.⁴ Imagine 20 fossilized dog skull variations. Experts could line them up in order of weakest to strongest bite features, then call it evolution. But we know that these dog skull varieties belong to just one dog kind.⁵ They show variation within kind but not evolution between kinds. In the same way, subtle *Archaeopteryx* bone shape varieties could all belong to just one *Archaeopteryx* kind.

One last question about these new research results: Why would a better flyer make an extinct bird more like modern birds when many modern birds can't even fly? Penguins, kiwis, and kakapos live just fine without flying. Their features suit various modes of life, not various stages of some imagined evolution. Designed variations in the *Archaeopteryx* kind could have tuned its flight efficiency to enable it to move and live in different areas. That would mean it didn't evolve at all. God made *Archaeopteryx*, just as He made all other created kinds. ✂

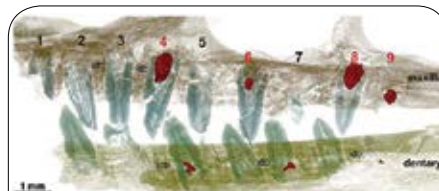
article highlights

- Some evolutionists think *Archaeopteryx* evolved from a reptile.
- Other scientists maintain it's like modern birds, and new 3-D tests confirm this.
- Researchers say a recently examined *Archaeopteryx* fossil shows bird evolution.
- The differences among this bird's fossils show variation, not evolution.

A *Archaeopteryx* is a big word that simply means "ancient wing." It refers to a set of fossils of a strange-looking extinct bird. Books promoting evolution often show pictures of *Archaeopteryx*. Its beak had small teeth, so many scientists see it as playing a lead role in an unthinkable long plot about reptiles evolving into birds. Others admit it was just a bird. New research places *Archaeopteryx* more firmly in the bird category than ever before.

A study published in *Historical Biology* showed how new technology helped produce 3-D images of *Archaeopteryx* bones.¹ News articles called *Archaeopteryx* a "missing link."² Either birds like this evolved from reptiles naturally, or God created reptiles and birds supernaturally. Can the 3-D scans help decide between these two options?

The research team compared the



Synchrotron X-ray microtomography scan of the Daiting *Archaeopteryx* jaw shows eight upper teeth. Other specimens had 11 or 12 teeth. Red areas show replacement teeth.

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John Nudds said in a University of Manchester news release, "In a nutshell we have discovered what *Archaeopteryx lithographica* evolved into – i.e. a more advanced bird, better adapted to flying."²

Let's track this logic. First, researchers assume *Archaeopteryx* was evolving. Then they find that the Daiting specimen could probably fly a little more smoothly than other *Archaeopteryx* variations. Finally, they conclude that the Daiting specimen shows

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Norway's Redchat Defies Evolutionary Speciation

When investigating true-vs.-false controversies, words are very important. Yet Christians sometimes unintentionally perpetuate false teachings by using misleading terms that accommodate evolutionary assumptions.^{1,2} This is what law courts call *confusion of issues*, a truth-interference problem so serious that trial judges, invoking Evidence Rule 403, ban such confusing terminology when admitting trial evidence.³

For example, the origin of species is a confusing topic. What exactly is a species? How can we properly analyze and discuss our origins if the words we use mean different things to different people? Consider this approach by Wikipedia, the multi-anonymous online encyclopedia that institutionally assumes evolution is scientific:

A species is often defined as the largest group of organisms in which any two individuals of the appropriate sexes or mating types can produce fertile offspring, typically by sexual reproduction.⁴

Members of a species breed within the same species. So far so good. But then Wikipedia gives it a Darwinian origin-of-species spin:

The evolutionary process by which biological populations evolve to become distinct or reproductively isolated as species is called speciation....Speciation depends on a measure of reproductive isolation, a reduced gene flow. This occurs most easily in allopatric speciation, where populations are separated geographically and can diverge gradually as mutations accumulate.⁴

So, the development of distinct, separate species is ground zero for the advancement of evolution. But this evolution-assuming speciation concept of gene pool split-offs due to geographic isolation, etc., has a recurring real-world problem—hybridization. Animals that are supposed



Common redstart-whinchat hybrid

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article highlights

- The definitions of “species” and “speciation” need to be clear when we discuss origins.
- Evolutionists define speciation as part of the evolutionary process.
- Each creature descended from an original created kind, and hybrids can only come from parents of the same kind.
- Speciation, as assumed by evolutionists, is refuted by hybrids.

edly traveling on different branches of the same evolutionary tree shouldn't be able to breed...but some do.

For example, in 2013, Norwegian bird-banders caught a surprise one day, a never-before-seen little bird now called a rødskvett (redchat, literally “red splash”). The name blends parts of the Norwegian words rødstjert (redstart, “red tail”) and buskskvett (whinchat, “bush splash”), which indicate its two parents.⁵ DNA testing confirmed this unlikely parentage.⁶

In English, that means a redchat bird is a hybrid, parented by a redstart with a whinchat. That also means that redstarts and whinchats are really the same species,⁷ according to Wikipedia's opening definition. If redstarts and whinchats were *different* species, they couldn't co-parent redchat hybrids.

The taxonomic surprise was not due

to the birds' genetics. The surprise was due to the evolution-assuming word “speciation” that ignored a simple fact. Namely, redstarts and whinchats do not represent an “evolutionary process by which biological populations evolve.”⁴ Instead, they are both descended from avian ancestors that God preserved in the Ark, and those came from a specially created kind that God invented on Day 5 of the creation week.⁸

God's truth is better conveyed with clarity; only falsehoods benefit from smoke-and-mirrors deceptions. Yet, sometimes a term's meaning, either its denotation or its connotation or both, changes so much that different terms need to be used to avoid distractions or other confusions.⁹

Bottom line: don't fall for the evolutionary “confusion of issues” vocabulary trap! ✂

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9. Consider Paul's statement in Galatians 1:13, KJV: “For ye have heard of my conversation in time past in the Jews' religion, how that beyond measure I persecuted the church of God, and wasted it.” The English noun “conversation” meant “behavior” 400 years ago, so Paul was referring to his walk, not his talk! To get Paul's meaning today, the word “behavior” should be used, not “conversation.”

Dr. Johnson is Associate Professor of Apologetics and Chief Academic Officer at the Institute for Creation Research.



A Season of Opportunity

We at the Institute for Creation Research, now in its 49th year, are thankful for God’s many blessings upon our ministry. Through it all, His providential hand has unmistakably guided our steps, supplied our needs, and enabled us to plan for the future. By God’s grace, ICR is reaching more people today than ever before with the scientific evidence that the Bible is right and its message is true. All glory to Him!



this is a unique opportunity from the Lord to sow farther and wider than ever before. If we don’t sow, we’ll never reap. Please consider how you could partner with us in this effort.

Even so, ICR is mindful of Christ’s admonition to “do business till I come” (Luke 19:13). This is no time to rest on our laurels. Rather, He expects us to keep busy using our abilities to sow, water, and reap in fruitful service to Him (1 Corinthians 3:7-8). There is still so much to do.

This year is especially full of new and exciting opportunities to proclaim the truth of our Creator and His great love for us. Below are ICR’s highest-priority initiatives, listed here in the hope you’ll be led to pray, and give as you are able, to help ICR “do business” for Christ.

■ **ICR Discovery Center for Science and Earth History.** Without a doubt, this facility is the greatest and most significant undertaking in our history. ICR has uncovered a wealth of scientific evidence that affirms the Bible, and it will be presented in innovative, entertaining, and dynamic ways. ICR has received roughly 90% of the funds needed to open completely debt-free (praise God!), so please prayerfully consider helping ICR close

article highlights

- For almost a half century, God has abundantly blessed ICR.
- The biggest opportunity to reach others is ahead of us.
- Please partner with us as we finish the ICR Discovery Center.

the remaining gap. For the latest updates, visit ICR.org/DiscoveryCenter.

■ **Marketing and Promotion.** ICR has been called “the best-kept secret in Dallas” due to our low-key promotional approach. The time for that is over. The ICR Discovery Center has outstanding potential to attract and reach a much wider audience of people who remain mired in evolutionary thinking because they’ve never seen the remarkable evidence for recent and special creation. The most effective way to get the word out is through strategic promotion on television and radio, billboards, and print ads. Such promotion is an expensive endeavor, but

of guests begin to arrive, it’s critical that we find, hire, and train the *right* ministry-minded people to operate this magnificent facility. This will be a significant addition to our payroll, so please make this a matter of prayer and help if you are able.

ICR is mindful of the financial sacrifices many of you make for our ministry, so thank you for your trust in us. Like Paul, ICR recognizes “a great and effective door has opened” (1 Corinthians 16:9) to reach many more people for Christ, and we invite your prayerful partnership with us to maximize these opportunities. If we remain faithful, it won’t be long before we see the fruit of our labor standing around the throne of God, “for in due season we shall reap if we do not lose heart” (Galatians 6:9). Until He comes, may God grant you a truly productive New Year in service to Him. ✉

Mr. Morris is Director of Operations at the Institute for Creation Research.



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GALATIANS 6:9-10

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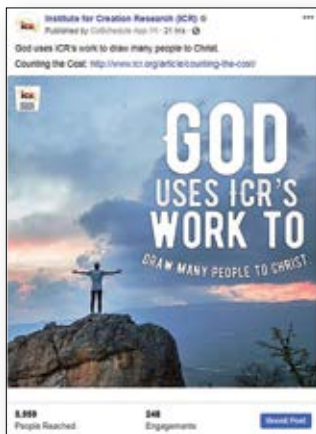
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Shalom. Thank God for your ministry. We need more fine ministries dedicated to the promulgation of the gospel of Christ. **Science is a very powerful tool to approach the believer and the unbeliever with the truth of the Bible.**

— S. R.



I was drawn to Christ via a woman who would always come in to where I worked. I believed in evolution at the time. She was a Christian and believed in creation. I would ask her questions. She would hand me a book and say, “Read this and then tell me what you think.” The books she handed me to read the most were Institute for Creation Research (ICR) books. **It was through God, my beloved sister-in-Christ, and**



ICR’s books that brought me to Christ and salvation.

— C. S.



I am amazed at how many Christians I have talked to who don’t know how much scientific evidence there is out there that supports the Bible and young Earth by a six-day creation. **ICR is the best source out there!** I have a lot of their resource materials and study them often—I’ve never been disappointed in any of the materials I ordered from them.

— D. D.



If you haven’t already, check out @ICRscience.

These guys are really making an impact on creation science. Many fantastic articles, papers, videos, etc.

— W. R.

Great biblical science and truths. God has revealed His creation and put the instinct in moral agents to seek that truth. A fundamental human desire is to know God through His creation.

— D. M.



I don’t know who’s handling your Instagram account, social media, but it’s encouraging and informative! Thank you... keep up the good work.

— B. B.

Your articles are very interesting and contribute much to science and truth. I’m very attracted to the design approach because I’m an architect. In recent years, God has been working in my life, and I began to understand [creation’s] magnificent glory from a designer’s perspective. I’m really passionate about it because architects don’t speak of relevant issues... from the perspective of a designer with biblical bases for the glory of God.

— A. L.

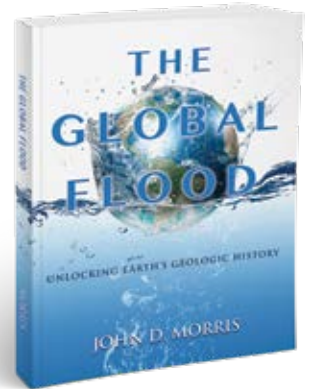
For years and years, ICR has given us, around the world, so much useful information about the origins! We are grateful for that. Warm greetings from El Salvador.

— M. A.



I have to commend your publication of Acts & Facts and especially your [updated] book The Global Flood by Dr. John Morris.

I [took] articles from *Acts & Facts* to help the pastor, deacons, and elders to see some solid evidence for the first chapters of the Bible. I was surprised by some who were still thinking that the earth had not changed since



way before the Flood or after the Flood. And so I decided to purchase *The Global Flood* because it pokes holes in all of the evolutionists’ lies that children are taught all the way through school. I am planning on buying more of these volumes to distribute to other Christians in my church so that they can see the actual evidence of Noah’s Flood.

— J. M.



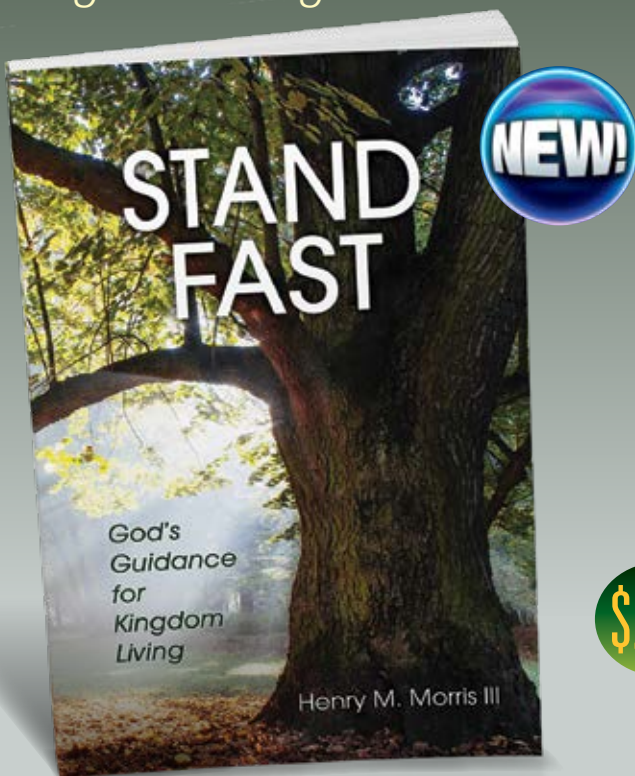
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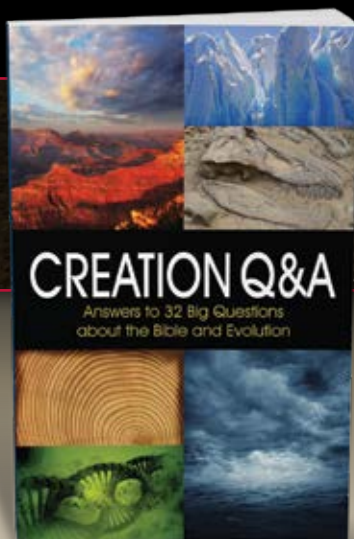
*"Therefore, my beloved and
longed-for brethren, my joy and
crown, so stand fast in the Lord."*

(PHILIPPIANS 4:1)

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