More Petrified Young Earth Claims By Greg Neyman © Answers In Creation



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Once again, young earth creationists, specifically, The Institute for Creation Research is reporting misleading claims about the process of petrifaction. In their Impact Article No. 379, dated January 2005, Andrew Snelling reports on an article that appeared in the journal Sedimentary Geology, titled "Rapid wood silicification in hot spring water: An explanation of silicification of wood during the Earth's history," which appeared in the journal's July 2004 issue.

In summary, the article tells of an experiment in which wood was submersed in a hot spring in Japan, and removed and examined after 1, 2, 4, 5, and 7 years. The article describes the varying degree of silicification of the wood. In addition, these wood samples are compared to Miocene petrified wood samples from nearby in Japan. Snelling uses this to claim that it does not take a long time for wood to petrify, thus lending support to his claim that the earth is young.

It is important to note the definitions involved in this process:¹

Permineralization - a preservation type in which mineral matter has infilled intercellular and intracellular spaces, but has not replaced the cell walls

Petrifaction - a type of preservation in which mineral matter infills intercellular spaces and replaces the cell walls

Silicification - a type of fossilization in which silica (SiO2) infills intercellular spaces (permineralization) or replaces the cell walls (petrifaction)

Note that in silicification, you can have either permineralization or petrifaction. In the study by the Japanese scientists, we have a case of permineralization, where the silica spheres were adhering to the surfaces of the wood tissue. The wood itself was still present. Note that the process resulting in petrifaction (petrifaction) results in the cell walls being replaced. In this case, the cell walls are not replaced, therefore the samples are not petrified as the title leads the reader to believe.

In the conclusion, Snelling states "Although there had been a different rate of silicification within each piece of wood studied, at 7 to less than 36 years the silicification of the wood had been very rapid, compared with claims of several millions of years, which occurs quite rapidly."

Yes, there are claims out there that silicification of wood takes millions of years, but most of these are 30 years old and older. In recent times it is known that silicification is a rapid process. It was reported as early as 1975 in a PhD Thesis at Harvard University,

twenty years before Snelling's claim in his article in Creation.² Therefore, old earth geologists, both Christian and secular, know that silicification can occur rapidly.

What's the "Rest of the Story?"

The key phrase to this article by Snelling is "Furthermore, in the Miocene petrified wood, not only were the same silica spheres found similarly deposited onto cell and vessel walls and in fibers and cells, but aggregations of silica spheres had replicated the structure of the vessel walls." No further explanation is given, so the reader does not know if the cell walls were completely replaced (complete petrifaction), or if only part of them had been replicated. The most important feature to note is the term "Miocene." The Miocene Epoch ended 5.3 million years ago (it began 23.8 million years ago (see Geologic Time Scale, at http://www.geosociety.org/science/timescl.htm).

Although Snelling omits further information about the Miocene petrified wood, we will fill in "the rest of the story. A quick check of the Sedimentary Geology article that Snelling quotes reveals the source of his Miocene claim:

Investigation of silicified wood from the Miocene Formations of terrestrial clastic and pyroclastic rocks of the Noto Peninsula in central Japan revealed that silica spheres deposited onto the cell or vessel wall and occupied cell lumina of vessels and fibers. Aggregations of silica spheres replicate the structure of the vessel wall at the end of deposition These textures of wood tissue are the same as those of silicified naturally fallen and experimental wood from the Tateyama Hot Spring. In other words, the formation mechanism of silicified wood from the Noto Peninsula is considered the same as that of naturally fallen and experimental silicified wood associated with the hot spring water of this study.³

In the Miocene samples, some of the vessel walls were replaced with silica, however, there was none of this replacement noted in the experiment, thus there was no "petrifaction." The Sedimentary Geology article is unclear on the amount of replacement noted in the Miocene samples, therefore I contacted one of the authors of the article. "The end of deposition" means that once you broke the rock open, this is the point at which when you go from the outside of the rock to the inside, the deposition stopped at this point. In other words, the petrified wood was not completely petrified...since the Miocene, at least a period of 5.3 million years.⁴

In addition, he stated that silicification of the vessel wall itself is not clear. The photo in the article shows the flat aggregation clinging to the wall, but not replacing the wall. Therefore yes, you can prove silicification through permineralization in a short period, but as you can see, even after 5.3 million years, the Miocene samples have not undergone complete petrifaction.

Conclusion

Once again, young earth theorists have proven that silicification (through the process of permineralization) can occur rapidly, something we have known for at least 30 years. However, they have offered no proof that petrifaction can occur rapidly.

¹ Glossary, UC Berkeley (<u>http://www.ucmp.berkeley.edu/IB181/VPL/Glossary.html</u>)

http://www.arach.net.au/~brooks/thoth/thoth-vi-5.html
"Rapid wood silicification in hot spring water: An explanation of silicification of wood during the Earth's history, Sedimentary Geology, Volume 169, pages 219-228
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