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## Cibola, Eldorado, & the Holy Grail . . .

Posted on July 22nd, 2008 by earlehollland

Part of human nature is to seek things beyond our grasp.

Such quests by modern men still persist, even in spite of all evidence against them. Perhaps the most common – **perpetual motion** machines – arise in the public's eye every few years as contraptions that seem to violate the basic laws of the conservation of energy, but which actually don't.

Fueling all such quests is the potential of great rewards for little effort. Such formulae seldom work.

Next year marks the 20th anniversary of one such crusade – the supposed discovery of "**cold fusion**," the dream of nuclear reactions producing more energy than they require, and doing so with the simplest of equipment and an absence of harmful radiation.

When **Stanley Pons** and **Martin Fleischmann** announced their purported success of achieving tabletop fusion with little more than an enhanced apparatus for the electrolysis of water, the world went mad. For days, the promise of cheap – if not free – energy glistened in the public's eyes and dependence on fossil fuels seemed as archaic as gathering firewood.



Announced at a surprise press conference, the research hadn't gained peer review and subsequent attempts at duplicating the duo's work eventually failed. The clamor arising in the weeks following reflected the public's discontent at having their hopes dashed and at feeling duped. The scientific community was less gracious and "cold fusion" has since become the descriptor for anything that seems scientifically shaky and questionably unorthodox.

That taint made **last week's announcement** that a Purdue University engineering researcher committed scientific misconduct seem even stronger. News reports said that **an investigation by outside experts** ruled against **Rusi Taleyarkhan** and found that his published journal papers about what he called "**bubble fusion**" were intentionally flawed. While different from Pons' and Fleischmann's work, it still centered on gaining energy from a simple reaction, in this case, the bursting of bubbles within a liquid.

The Taleyarkhan case has groaned along for nearly six years before this

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apparently final ruling. And it, along with the original "cold fusion" debacle, might seem to be the nail-in-the-coffin for this kind of work.

Not hardly.

Next month, organizers expect researchers from around the world to gather in Washington, DC for the [14th International Conference on Cold Fusion](#). Reporters are being wooed and bloggers are buzzing, and it's a safe bet that some news stories will tout supposed new progress in the field of cheap energy production. Starving people will always grasp for crumbs, and in the current energy environment, who can blame them for desperately seeking a magic solution.

Prudent readers shouldn't let their wishes exceed their wisdom. \_\_Earle Holland

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## 6 Responses to "Cibola, Eldorado, & the Holy Grail . . ."

[Michael Payday](#) // Jul 31, 2008 at 12:19 pm

But Cibola is real, haven't you seen National Treasure 2? 😊

Joking aside, I've heard that a pendulum is a perpetual motion machine. If it isn't, couldn't we use the premise of the pendulum to create a perpetual motion machine?

[earle holland](#) // Jul 31, 2008 at 12:43 pm

Nope, a pendulum is not a perpetual motion machine. With each swing, the speed of the pendulum slows slightly and it's weight is affected slightly by the pull of gravity. Eventually, a fixed pendulum will stop its movement and rest still in a vertical aspect. A perpetual motion machine would have to continue moving "perpetually" without any outside forces or energy applied to it. \_\_EH

[Michael Payday](#) // Jul 31, 2008 at 1:18 pm

Suppose that magnets line the rim that marks the diameter/circumference of the pendulums swing... could this theoretically stop the pendulum from slowing by always pulling in the direction the pendulum is swinging?

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[earleholland](#) // Jul 31, 2008 at 1:34 pm

Remember that it's not just a tug-of-war between gravity and electromagnetism — the resistance of the air as the pendulum weight moves through it also slows the apparatus. You might wonder what would happen in a vacuum where there's no atmospheric resistance — I'm no physicist so I can't provide an answer, but my guess is that it still would not continue moving indefinitely. \_\_EH

[Michael Payday](#) // Jul 31, 2008 at 1:41 pm

Hmm...that's interesting. This idea of perpetual motion machines is significant today with the energy crisis we're dealing with. Hopefully we can take advantage of nature's "perpetual machines", such as wind and solar power. Not to mention water current- waterfalls and waves and what not. Maybe someday we can find a way to harness that energy.

[Alex](#) // Aug 15, 2008 at 11:34 pm

Your blog is interesting!

Keep up the good work!

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