

## US scientists in possible cold fusion breakthrough

(Agencies)

Updated: 2009-03-25 16:53

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WASHINGTON -- Researchers at a US Navy laboratory have unveiled what they say is "significant" evidence of cold fusion, a potential energy source that has many skeptics in the scientific community.

The scientists on Monday described what they called the first clear visual evidence that low-energy nuclear reaction (LENR), or cold fusion devices can produce neutrons, subatomic particles that scientists say are indicative of nuclear reactions.



The US Department of the Navy logo hangs on the wall at the Pentagon in Washington, DC. [Agencies]

"Our finding is very significant," said analytical chemist Pamela Mosier-Boss of the US Navy's Space and Naval Warfare Systems Center (SPAWAR) in San Diego, California.

"To our knowledge, this is the first scientific report of the production of highly energetic neutrons from a LENR device," added the study's co-author in a statement.

The study's results were presented at the annual meeting of the American Chemical Society in Salt Lake City, Utah.

The city is also the site of an infamous presentation on cold fusion 20 years ago by Martin Fleishmann and Stanley Pons that sent shockwaves across the world.

Despite their claim to cold fusion discovery, the Fleishmann-Pons study soon fell into discredit after other researchers were unable to reproduce the results.

Scientists have been working for years to produce cold fusion reactions, a potentially cheap, limitless and environmentally-clean source of energy.

Paul Padley, a physicist at Rice University who reviewed Mosier-Boss's published work, said the study did not provide a plausible explanation of how cold fusion could take place in the conditions described.

"It fails to provide a theoretical rationale to explain how fusion could occur at room temperatures. And in its analysis, the research paper fails to exclude other sources for the production of neutrons," he told the Houston Chronicle.

"The whole point of fusion is, you're bringing things of like charge together. As we all know, like things repel, and you have to overcome that repulsion somehow."

But Steven Krivit, editor of the New Energy Times, said the study was "big" and could open a new scientific field.

The neutrons produced in the experiments "may not be caused by fusion but perhaps some new, unknown nuclear process," added Krivit, who has monitored cold fusion studies for the past 20 years.

"We're talking about a new field of science that's a hybrid between chemistry and physics."