

Falsified Results to Hide Helium-4 Produced from Normal Hydrogen
Michael McKubre's Replication of the Leslie Case Experiment

LENR investigation performed by Steven B. Krivit

Source Document: 2000 ICCF-8 Paper Presented by Michael McKubre

McKubre, M.C.H., et al. *The Emergence of a Coherent Explanation for Anomalies Observed in D/Pd and H/Pd System: Evidence for ^4He and ^3He Production*. in 8th International Conference on Cold Fusion. 2000. Lerici (La Spezia), Italy: Italian Physical Society, Bologna, Italy.

The Emergence of a Coherent Explanation for Anomalies Observed in D/Pd and H/Pd Systems; *Evidence for ^4He and ^3He Production*

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1. Control experiments are not identified. Experiments performed with D_2 vs. H_2 are not distinguished.
2. Time scale is truncated at 45 days.
3. McKubre claimed that cells showed "no increase of 4He over long periods of time (including all cells operated with H_2 instead of D_2 ."

Experiments in category "2" in which Pd on C catalyst materials were exposed to D_2 and H_2 gases for prolonged periods, exhibited a range of behaviors. Figure 2 summarizes 6 of 16 results obtained in paired cells.

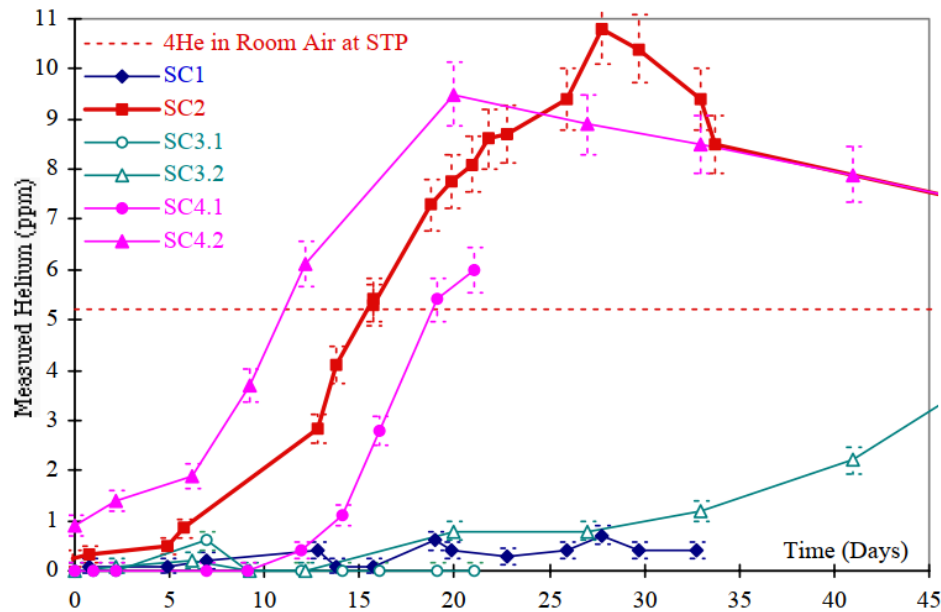


Figure 2 Helium increase in sealed cells containing Pd on C catalyst and D_2 (H_2) gas.

Using direct, on-line, high-resolution mass spectrometric measurement of $[^4He]$ we observed the following behaviors:

- (i) cells that show no increase of 4He over long periods of time (including all cells operated with H_2 instead of D_2);

McKubre made the same falsification in the summary paper presented to the Department of Energy for its 2004 review of LENRs.

NEW PHYSICAL EFFECTS IN METAL DEUTERIDES

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The experimental evidence for anomalies in metal deuterides, including excess heat and nuclear emissions, suggests the existence of new physical effects.

Same Graph; Same Claims

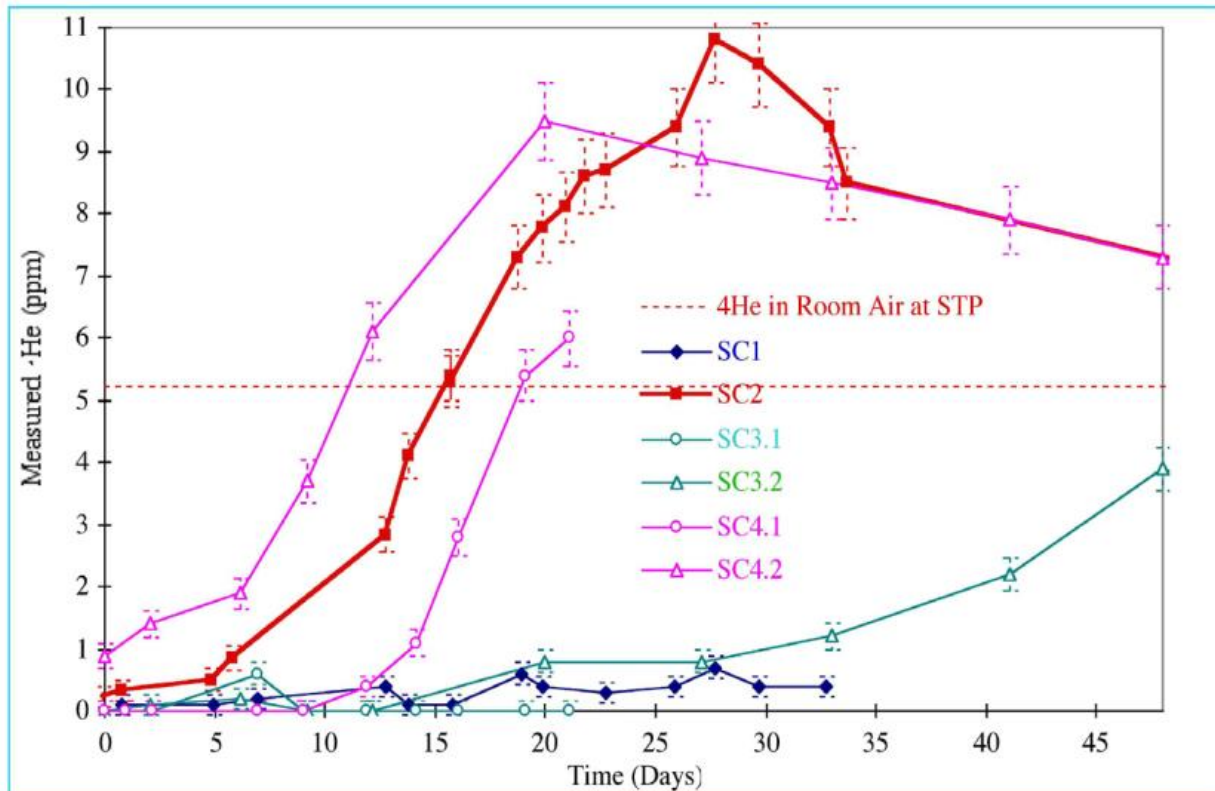


Figure 12. Results of ^4He measurements from the Case experiment at SRI.

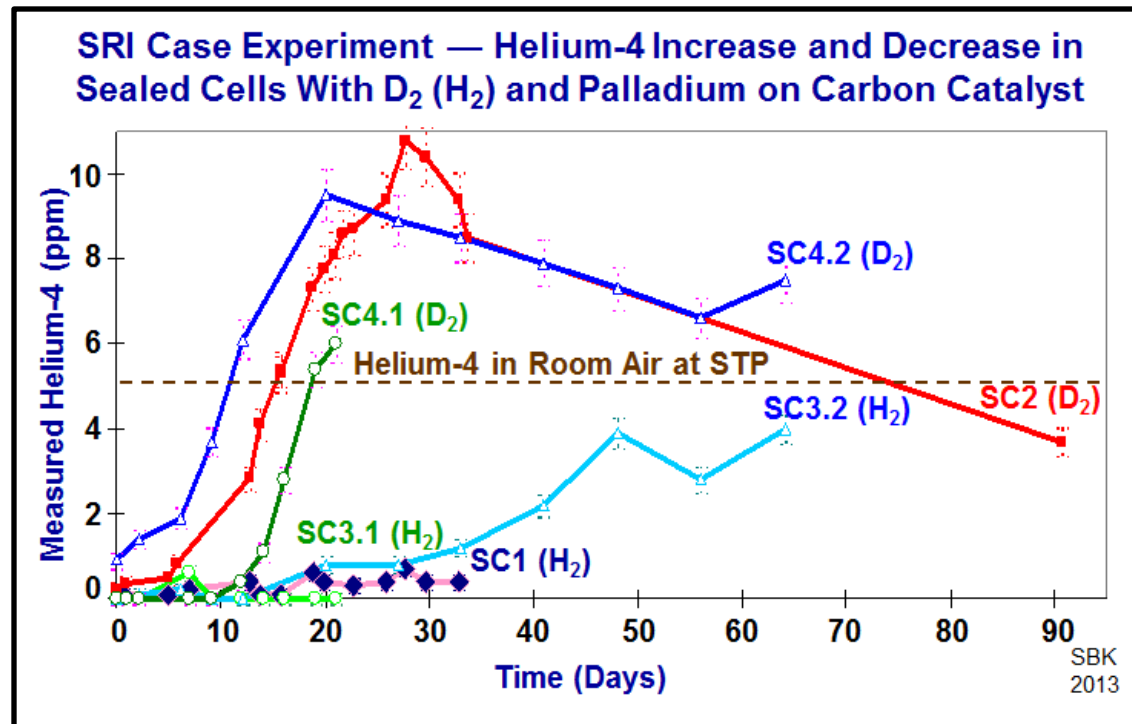
- (1) Cells that show no increase of ^4He over long periods of time (including all cells operated with H_2);

Graph: Generated by Steven Krivit

Data: Embedded Data in Michael McKubre's PowerPoint File

McKubre never publicly identified and distinguished which runs had been performed with heavy-hydrogen and which had been performed with light-hydrogen, as controls. The teal curve, SC3.2, was a run with normal hydrogen. McKubre falsely claimed that all the control cells produced no helium-4. Run SC3.2 contradicted the DD "cold fusion" hypothesis.

McKubre never published the full-time scale or the remaining 10 results and never labeled the control experiments as such.



Excerpt from [*Hacking the Atom*](#), by S.B. Krivit (2016)

McKubre's Hidden Helium

In the same 2000 paper in which McKubre first publicly reported experiment M4, he also publicly reported another helium-producing LENR experiment. He displayed helium measurements obtained from his group's replication of Leslie Case's 1998 deuterium-gas experiment. The paper contained a graph similar to the one below, with two major exceptions. McKubre and Peter Hagelstein also displayed the graph in their paper presented to DOE reviewers in 2004. (Hagelstein, 2004)

The first difference is that McKubre displayed the results only from Days 0-45. He did not inform readers that any of the experiments ran past Day 45. The second difference is that, although McKubre provided the labels for each run — for example, SC4.1 — he failed to identify which runs used deuterium gas and which ones used hydrogen gas. I know of no document in which McKubre has ever publicly distinguished the deuterium from the hydrogen runs.

In the text of his paper, McKubre wrote that the experiments "show no increase of helium-4 over long periods of time (including all cells operated with H_2 instead of D_2)." This is not true. I learned the truth by examining the data embedded in McKubre's slides.

In 2004, while I was writing *The Rebirth of Cold Fusion*, I told McKubre that I wanted to publish his helium results in my book but that I needed to adjust the aspect ratio of the image so it would fit. He sent me his PowerPoint slide with the graph. A few years later, I became curious about the poorly identified curves, and to my great surprise, I found that the raw experimental data were embedded in the slide. With a few clicks, I was able to modify the graph to see the data out to Day 90. The embedded data also clearly showed which runs had been performed with deuterium gas and which ones had been performed with normal hydrogen gas. I learned not only that the deuterium runs — the three curves that rise steeply — produced helium-4 but that one of the normal hydrogen gas runs (SC3.2) also produced helium-4. McKubre had concealed the data because it invalidated the D+D fusion idea.

Falsified Data Given to DOE

May 2004 was an historic time for the field of low-energy nuclear reaction research. That year, the Department of Energy agreed to take a second look at LENRs.

The review was a response to a request from David Nagel, Peter Hagelstein, Michael McKubre, and Randall Hekman. The DOE asked the proposers to write a single review paper that would "provide a summary of the status of the field which articulates what are considered to be the most recent significant experimental observations and publications, and identifies those areas where additional work would appear to be warranted based upon what has been learned from progress in this area."

Hekman later explained to *New Energy Times* his view of how Hagelstein and McKubre responded to the opportunity. See [U.S. Department of Energy 2004 LENR Review — The Inside Story](#)

McKubre included his results from the Case replication, as described in the previous pages of this document.

Additionally, he presented a falsification of the [M4 experiment](#).

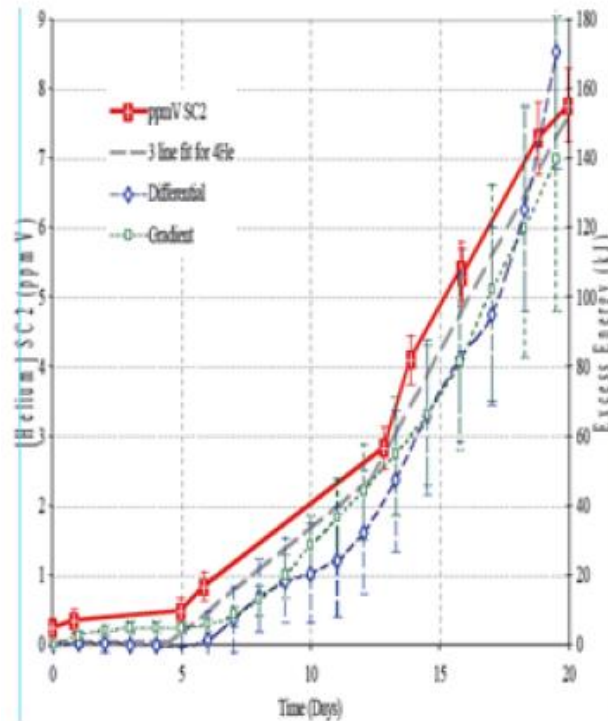
Both falsifications were intended to provide support for the theory of D-D "cold fusion."

David Nagel's Publication of the SRI "Case" Replication

After Krivit exposed the M4 falsification in 2010, McKubre and his colleagues stopped displaying it as their proof of "cold fusion." Instead, they displayed the SRI replication of Leslie Case's experiment. Here's a version published by David Nagel in a 2018 LENR review paper.

The red curve is run #SC2, truncated at Day 20. That's the only part of the curve that matches their hypothesis. The shaded area on the next page shows where this graph comes from.

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Shaded Section Shows What Nagel Published

The full set of available data, as below, tell a much more complex story.

