



# New Energy Times

Dec. 20, 2011

Mr. Curtis R. Carlson  
President and CEO  
SRI International  
333 Ravenswood Avenue  
Menlo Park, CA 94025-3493

Dear Mr. Carlson,

I have conducted an investigation of SRI International's experiment "M4" by Michael McKubre, and I published my findings. I also provided them to the federal intelligence community.

Are you willing to perform an investigation and release your conclusions, as well?

My conclusions are that, starting in 2000, McKubre began retroactively to manipulate and fabricate data that was associated with M4. He did so without presenting scientific support and without disclosing his changes to the public or to his sponsor, the Electric Power Research Institute. *New Energy Times* provided McKubre with multiple opportunities to respond to the investigation. Many questions remain unanswered. Please see the summary slides, questions and, where known, answers from McKubre below.

You may find our collection of our reports, research and records on this matter at this Web address:  
<http://newenergytimes.com/v2/sr/McKubreM4/McKubre-Experiment-M4.shtml>

Thank you,

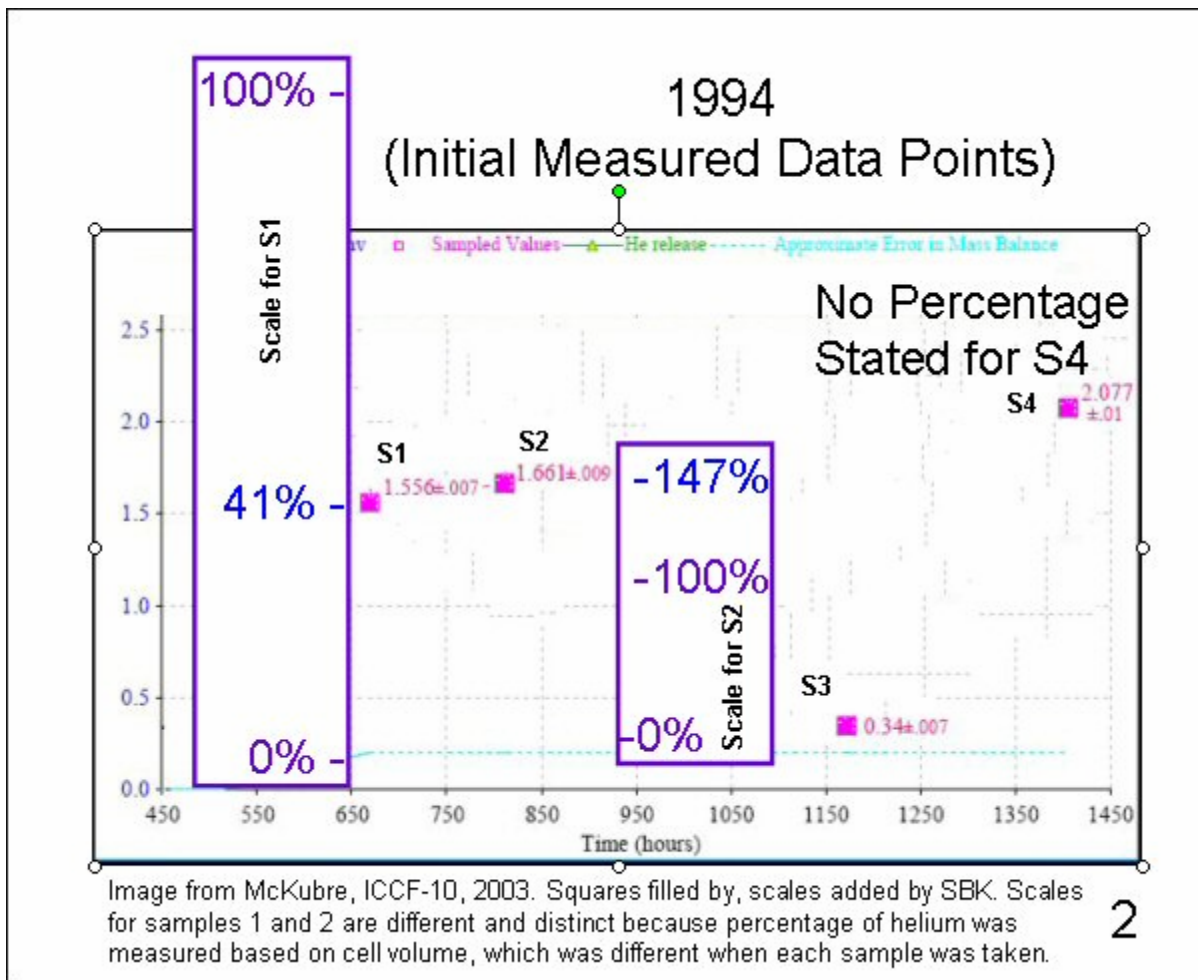
Steven Krivit  
Editor, *New Energy Times*

# ***SRI Experiment M4 Spanning Two Decades***

By Steven B. Krivit  
Senior Editor, New Energy Times  
Dec. 10, 2011

“I have had no reason to doubt or refine them [the data]  
in the past dozen years.” – Michael McKubre, Dec. 10, 2011

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Slide 2 shows four measured helium samples, S1: 1.556ppm, S2: 1.661ppm, S3: 0.34ppm, S4: 2.077ppm.

In 1994, the researchers calculated that the helium measured at S1, based on the cell volume at 669 hours, and the heat produced in the cell from 540 to 669 hours, was too little, only 41 percent of the predicted value.

The researchers calculated that the helium measured at S2, based on the remaining cell volume at 810 hours, and the heat produced in the cell from 540 to 669 hours, was too much, 147 percent of the predicted value. The cell volume was different here because of the volume the researchers had extracted for S1. Note that the period of heat referenced for S2 is the same period used for S1.

The researchers purged the cell and measured helium at S3 at 1172 hours.

The researchers observed a 76-minute heat burst between 1336 hours and 1362 hours. They took a helium sample at 1407 hours. They did not attempt to speculate on a relationship between heat and helium for this data point for a variety of reasons, as they stated in their 1998 report. Therefore, no heat/helium value appeared in the initial published report.

## 2000 (First Set of Changes)

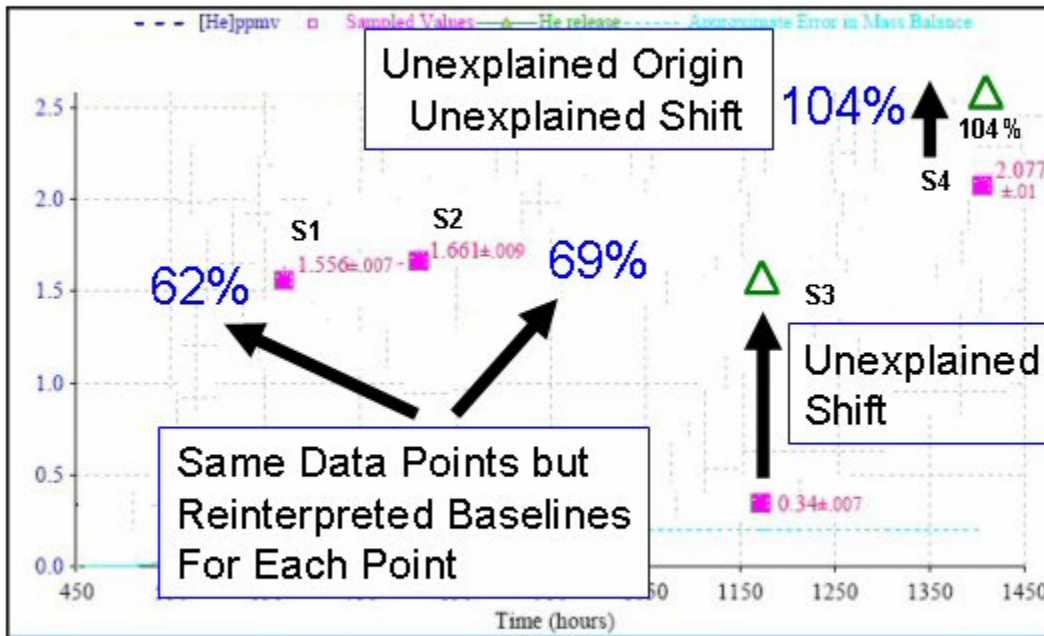


Image from McKubre, ICCF-10, 2003. Bold black arrows and text added by SBK. Green triangle (redrawn) and "104%" (re-written) come from McKubre, ICCF-10, 2003

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In 2000, McKubre reinterpreted the value for S1 from 41 percent to 62 percent. He has provided no explanation for this. He reinterpreted the value for S2 from 147 percent to 69 percent. He has provided no explanation for this, either. He placed triangles above S3 and S4 that suggest helium measurements.

**Question 1:** On what basis did McKubre reinterpret the value for S1 from 41 percent to 62 percent?

**Question 2:** On what basis did McKubre reinterpret the value for S2 from 147 percent to 69 percent?

**Question 3:** On what basis did McKubre interpret the helium at S3 at the higher level, represented by the triangle, considering that the cell was purged at S3?

**Question 4:** On what basis was McKubre able to speculate any ratio whatsoever for S4, considering that the researchers who performed the experiment in 1994 were unable to speculate a value for S4?

**Question 5:** On what basis did McKubre interpret the value, 104 percent, from the measured value of S4? The measured value, if a confident heat measurement could be compared against it, would have been 85%.

**Answer 5:** (Given on March 21, 2010): "When we recalibrated the volumes that were involved in determining that mass balance, the value became a more correct value."

**Question 6:** On what basis did McKubre interpret that the helium measured in S4 at 1407 hours, after the cell had been purged at 1172 hours, came from the heat produced before the purge, during 540 to 669 hours?

**Answer 6:** (Given in 2000 at ICCF-8): The helium got stuck inside the palladium. He used a "shake and bake" procedure to release it.

**Question 7:** Does any experimental or theoretical evidence exist to support McKubre's claim that helium can be forced inside intact and defect-free metal, as opposed to in and through grain boundaries, by way of any electrochemical process?

**Question 8:** Does any experimental or theoretical evidence exist to support McKubre's claim that helium, if trapped inside intact and defect-free metal, as opposed to in and through grain boundaries, can be released by way of any electrochemical process?

**Question 9:** Does any experimental or theoretical evidence exist to support McKubre's suggestion that that helium can load into and deload from a metal, like deuterium can load and deload from a metal?

## 2004 (Second Change)

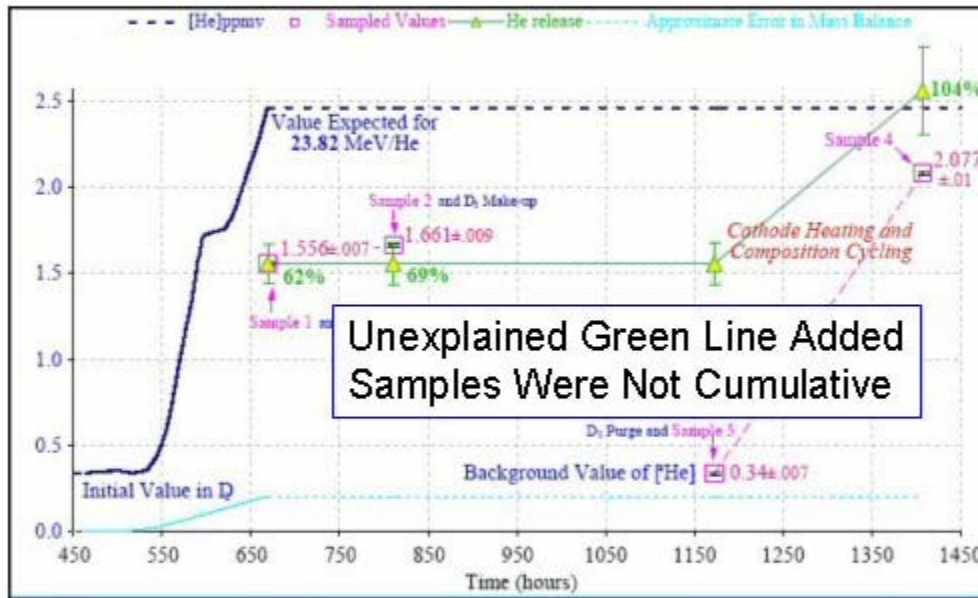


Image from Hagelstein, McKubre et al. Department of Energy Review, 2004

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**Question 10:** On what basis did McKubre represent, using the green line in the graph above, an accumulation of helium? The four helium samples were based on distinct cell volumes at different times. However, all helium measurements were compared to a single period of excess heat.

## 2007 (Third Set of Changes)

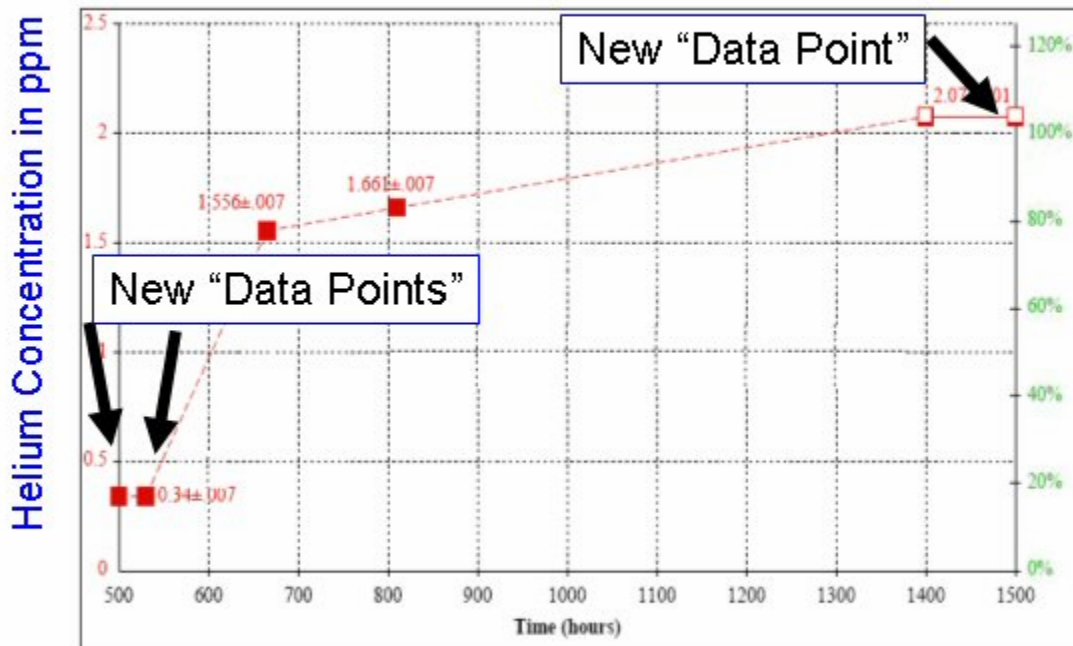


Image from McKubre, APS, 2007, Y-axis label and bold black arrows added by SBK.

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**Question 11:** On what basis did McKubre represent in 2007 three new "data points" at 500, 525 and 1500 hours, considering that, when the experiment was performed in 1994, no such measurements were recorded?

**Question 12:** On what basis did McKubre omit (or move) the data point for helium measurement S3?

# 2009 (Final Version)

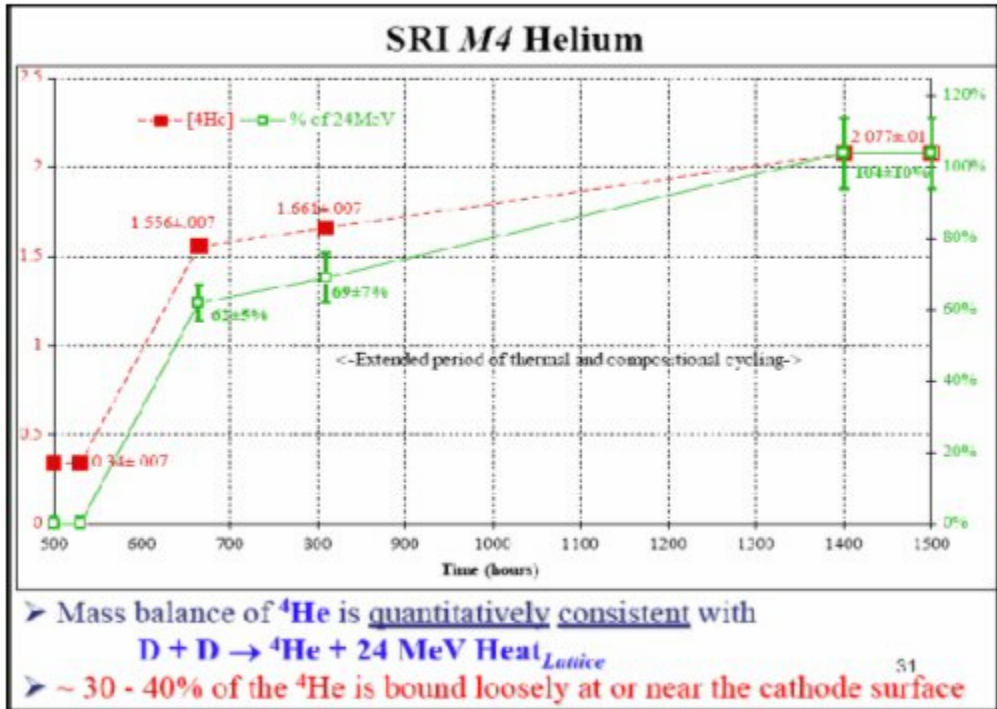


Image from McKubre, ICCF-15, 2009

**Question 13:** On what basis did McKubre change the 200-hour “shake and bake” period, added in 2004, to a 600-hour “extended period of thermal and compositional cycling” as shown beginning in 2007?

McKubre's American Chemical Society Presentation  
March 22, 2010

M4 "24 MeV" Heat/Helium Relationship Not Presented

McKubre's Army Research Labs LENR Workshop  
Presentation June 29, 2010

M4 "24 MeV" Heat/Helium Relationship Not Presented

McKubre's Café Scientifique Presentation  
Oct. 11, 2011

M4 "24 MeV" Heat/Helium Relationship Not Presented  
Case 31 MeV Heat/Helium Relationship Presented

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**Question 14:** Why did McKubre, after reporting M4 as the best evidence for "cold fusion" in every one of his presentations for the previous decade, suddenly and silently omit M4 completely on March 22, 2010, after I asked him questions about it during the American Chemical Society press conference the day before?

**Question 15:** Why did McKubre, in his presentation at the Army Research Labs LENR workshop on June 29, 2010, mention nothing about M4?

**Question 16:** Why did McKubre, in his presentation at Café Scientifique on Oct. 11, 2011, mention nothing about the M4 heat and helium relationship but discuss the heat and helium relationship from the Case replication experiment?

**Question 17:** What is the explanation for the inconsistency in the two statements below?

Michael McKubre, Dec. 10, 2011: "We had occasion to re-analyze those data, found an error in the EPRI report (a private document at that point), and communicated that promptly to the only person who was aware or cared (in the mid- to late-'90's): the EPRI program manager."

Brian Schimmoller of EPRI, March 30, 2010: "After checking, there is no record in our system of any corrections or errata published for those reports, and the retired project manager tells us that he's not aware of any corrections or errata, either."

The project manager was Thomas Passell. Schimmoller also contacted Albert Machiels, the other manager on that project. Machiels, too, was not aware of any corrections or errata.

