

Exhibit 11

Reknown Expert Prof. W. Bugg Confirms Bubble Fusion in Public Demonstration

Subject: Visit of June 6-7 by Bill Bugg
From: William Bugg <bugg@slac.stanford.edu>
Date: Fri, 9 Jun 2006 07:02:06 -0700 (PDT)
To: Rusi Taleyarkhan <rusi@ecn.purdue.edu>

Rusi, attached is a rather hastily prepared report of my visit to Purdue. I did most of it on the drive back to Tennessee yesterday. I will send later a longer more detailed report with discussion of some suggestions I have for possible improvement. Thanks again for your hospitality and willingness to let me participate (and interfere) in your experiments
Bill Bugg
University of Tennessee

Report on Activities on June 6-7 Visit. William Bugg. University of Tennessee.

Thank you for your hospitality and that of your colleagues and students on my visit this week to your laboratory. This short note is intended to briefly summarize my activities and observations on my two-day visit to Purdue. I will send you at a later date a more detailed note..

I was interested in seeing operation of the acoustic cavitation apparatus and wished to see conduct of a full experimental cycle including a demonstration of bubble implosion and the production of neutrons in a deuterated liquid and comparison with a similar run on an undeuterated liquid sample. I was of course familiar with some of the controversy in the literature and press concerning your published papers on the subject and wished to observe and critique personally the procedures used. Since my schedule precluded a long visit I requested a limited demonstration using simple well-understood techniques. Since neutron identification is crucial to interpretation of the results I was interested in use of nuclear track detectors for counting neutrons. These avoid the mastery of rather complex analysis when electronic methods are employed. While I have some experience in such analysis I felt I would not be able in my limited time to conduct the necessary calibrations and cross-checks to fully understand the results. Plastic track detectors, where individual neutron tracks are recorded permanently by etching after exposure, are used routinely by health physicists to measure exposure of individuals to neutrons. They provide a permanent record of the exposure and can be examined microscopically on a track by track basis at any time. The key to their use is careful control of their history and exposure to neutrons during the experiment and I wished to be present to ensure that proper care was taken in this regard. A disadvantage of their use is that they become sensitive as soon as they are manufactured so use of a given batch in an experiment

requires subtraction of the accumulated background due to exposure prior to their time of use. This is normally done by measurement of a control detector from a given batch just prior to the experiment.

The experiment conducted on my visit utilized a benzene-acetone mixture with a dissolved uranium salt to initiate the implosions. This made it possible to keep external neutron sources completely away from the experiment as a source of possible background for the track detectors. Two cavitation runs of 2 hours duration were conducted, one with deuterated and one with normal liquid. For each run two nuclear track detectors were placed on the external walls of the cavitation chamber to detect neutrons from the chamber and a 3rd placed about 1 meter away to monitor backgrounds.

Since the major goal of the experiment is to look for the presence or absence of neutrons from the cavitation chamber in the 2 runs I adopted the as my primary role the following controls.

1) Control of the track detectors. At the beginning of each run I selected 3 numerically labeled detectors from a mailbox located far from the lab, recorded their ID and observed their installation on the chamber and background region just prior to the beginning of the run.

2) There are 2 neutron sources in the lab in a locked cabinet about 30 ft from the experiment in their shielded containers. I made sure that they remained in that location during the entire experiment and were not opened or moved.

3) I visually observed the cavitation conditions during both runs

4) On termination of the each run I observed the immediate removal of the detectors and their insertion into the etching bath.

5) Finally I personally scanned each of the 6 detectors for neutron tracks from the deuterated and undeuterated run and recorded my results.

I find a statistically significant excess of neutrons over the background in the 2 deuterated sample detectors located on the chamber and none in the undeuterated sample. I will send a more complete analysis at a later date.

I would like to make an important point with which I am sure you agree. If these runs are repeated several times with the track detectors in place the integrated neutron count should increase significantly with the background (due primarily to the prior exposure of the plastic since manufacture) remaining constant thus improving the signal to noise ratio markedly. I would therefore recommend such a series of extended runs. Unfortunately my short visit did not permit such an effort. One might also consider adding more detectors to improve statistics.