

Mr. Taleyarkhan,

My name is Andrea Thomas, campus editor of the Purdue Exponent. I am trying to put together an article for tomorrow's paper about the most recent development in the bubble fusion controversy. My questions are below, and any insight you could give me would be greatly appreciated.

Thanks for your time.

1. I understand that a subcommittee, or panel, has been formed to investigate Purdue's inquiry into allegations of research misconduct. Has the committee released any results or findings? Have you been questioned by the committee?
2. What are some of the questions that remain for critics of your research, and how do you respond to those questions?
3. Do you feel that the controversy has hurt your reputation as a scientist?
4. If the committee hasn't come to a conclusion yet, what do you expect the conclusion will be?
5. Do you have any plans to further pursue bubble fusion research?
6. Is there anything you would like to add?

Thank you again for your time. Please feel free to keep the Exponent updated with any new developments.

Andrea Thomas

Date: Tue, 10 Apr 2007 17:30:21 -0400
From: Rusi Taleyarkhan <rusi@ecn.purdue.edu>
To: Exponent Campus Desk <campus@purdueexponent.org>
Subject: Re: bubble fusion (rpt->Exponent;4.10.07)

Dear Andrea:

I believe the subcommittee you are referring to is the US Congress S&T committee that recently requested clarifications from President Jischke, for which I've cooperated and for which Purdue has transmitted relevant papers to Chairman Miller's committee just a few days ago. In my opinion Purdue conducted an exhaustive, tedious review last year (lasting for most of 2006 and into 2007) and announced it's findings about a month ago and once Rep. Miller

reviews the submissions he will come to the same conclusions that Purdue has the required process in place and it was duly followed.

Let us all keep in mind, Purdue had no reason to side with either the accuser nor the accused.

Obviously, the outcome announced in the Press Release (2/7/07) was not what was being sought by our well-worn/known competitors and detractors with their own conflicts of interest. Up until then, our detractors had gone on record stating effectively "Let's await Purdue's announcement whichever way it went."

Why change the status now and question the credibility of Purdue's administration and process and also go against the rules/laws requiring confidentiality and transmit internal confidential documents to the Press ? Is this fair to me and to my team? To live in a society one accepts certain rules governing conduct for all. I am trusting that Purdue will do the right thing.

While I and my team of researchers from around the world can and indeed have, using time-honored and tested scientific route despite temporary setbacks addressed the technical questions on acoustic (aka bubble) fusion, one can not readily address the non-technical issues related to being all too human and frailties (competition in a field that could impact a multi trillion dollar energy market, priority of claims, fame, office politicking and the like).

Thank you for your service to the Purdue community.

(PS: Given below is a set of responses you will find useful.)

1) How do I feel about the inquiry and its outcome?

Purdue's 2006 inquiry offers vindication for what we've stood for and have stated all along about the science, our research, and the integrity with which we conduct, report and stand by our results and findings - despite the intense attacks from detractors. While I and my co-authors/collaborators (worldwide) can answer to the technical soundness of our research, I can't say the same about "human" issues related to competition, priority and other human frailties such as jealousy.

During the past several months two important and independent confirmation reports have been announced. In order to settle issues related to allegations of falsifying of data and also importantly on reproducibility of experimentation, I intentionally opened up my laboratory to two independent physicists/groups. The first one was based on a request by someone I had never met before and who had never performed work in sonofusion, but one who appeared to be genuinely interested in addressing the issues brought up in the 3/2006 allegations cited in Nature and which initiated the Purdue inquiries.

It was led by Professor Forringer (PhD physicist by training from Michigan) and his students from LeTourneau University who used my lab and equipment as a user-facility (something quite common in the world today) to perform their own experiments, use their own detectors, obtain data, analyze the same, write archival quality manuscripts, have them peer-reviewed and invited for presentation and publication to the world body. I am happy to state that Professor Forringer's papers were invited for presentation to the November, 2006 Intl. Conference of the American Nuclear Society and also the Intl. Conf. on Nuclear Fusion Energy. The press release from LeTourneau University is attached.

A similar event took place when a stalwart physicist with over 50y expertise in nuclear physics and experimentation (not in any way part of my group) from a Stanford University research professor and ex-Head of Physics at UTK / ORNL, William Bugg, also visited during mid-2006 and conducted a series of independent successful experiments and his report was also transmitted to Purdue University and me.

The fact that two unaffiliated groups successfully proclaimed to the world and confirmed my group's bubble fusion published results while taking deliberate pains and actions to confirm and verify the absence of any alleged extraneous fusion source constitutes the proverbial "smoking gun evidence", in lay terms, total and ready dismissal of the ridiculous charges made by our detractors. In the recent past year itself there have been 4 announcements on successful replication of bubble fusion by people not affiliated with my group. Usually, one successful replication is considered sufficient to prove it "can be done."

Why were these facts omitted in the letter from Rep. Miller to Pres. Jischke? Could it be that my group's detractors helped write his letter which was full of speculations and provided inaccurate/insufficient information to cause slander and in effect, raise a "red-herring" issue?

It is indeed true that the experimentation for successful bubble fusion is a non-trivial undertaking and complex. Those that trivialize the process guided by innocent press reporter stories, do so at their own peril. It is easy to get null results. It requires far less skill to make it not work than to make it work.

2) Do I feel I was unfairly accused?

Absolutely. As Mark Twain once remarked "Bad news can travel half-way around the world before the truth gets to tie it's shoe laces."

3) Is there anything I would like readers of Exponent to know about me, my research, the inquiry or ancillary matters?

This line of research we have undertaken has a multitude of facets, both with deep scientific inquiry, but also practical commercial applications for the short-and-medium term; of-course the potential to offer a paradigm shift scale impact on the world for limitless energy which will take several years before we can possibly get there, but in the short-term also for addressing many pressing scientific/engineering/human issues of the present: on the sub-nano scale issues covering materials science, health (cancer therapy), materials synthesis (e.g., converting carbon states to diamond states), national security (e.g., using the products of sonofusion like neutrons for explosive detection kits at airports at significantly reduced costs).

The research work in this area has suffered very significant setbacks this past year due to the enormous cloud of distrust that resulted from the initial negative comments made in the Press and the very notion that an inquiry on research misconduct was to be undertaken based on statements made by various individuals. One can only imagine how it must have felt for heroes and giants in the field of past fame (viz., Galileo, Newton, Tesla and even Einstein,...) that have set an example for us to stand firm on our beliefs and the truth as we know and have "realized" it but detractors gave them a truly brutal time. Sponsors who were greatly enthused until last year became skittish as to be expected (although some believers pressed on with their support), but now after the vindication and press releases by Purdue, they are now reassessing their positions - but it takes time to turn around mindsets since not everyone gets to realize news at the same time (some still recall events of a year ago and have not yet seen the vindication news).

This past year and inquiry (allegations made) has played on health and other personal aspects also. But, Purdue's conclusion of the inquiry and the statements made therein, are a vindication of truth in a general sense and it's time to move on for the benefit of mankind in general.

It is my hope and faith that now the discovery has seen it's seminal confirmations announced to the world at large, the tide will start to turn.

I would be completely lacking if I did not mention the personal part of such ordeals. My humble gratitude goes to my family who stood by every step.

Campus faculty were deeply shaken at first, but now had embraced the new paradigm. Importantly, also my own students and close associates at Purdue who have seen experiments conducted first-hand and know the truth that have stood by me and for their faith despite the tribulations. Their unwavering support has helped pull me along.

Hope the above is helpful.

Rusi Taleyarkhan