## Taleyarkhan Group Affirmation of Independence Fall 2008

Date: Fri, 7 Nov 2008 23:30:51 +0300 From: "Robert Nigmatulin" To: dan@aps.org Subject: Editorial Note Cc: "Rusi Taleyarkhan" <rusi@purdue.edu>

Dear Dr. Kulp,

Dr. Taleyarkhan sent me your letter where you are writing on your decision to publish the editorial note on our paper with 6 authors. You are going to state on our joint paper: " ... R.P. Taleyarkhan, acted to distort the research record by asserting ...". It is very strange note on the paper with 6 authors selecting only one author (R. Taleyarkhan). Not only R. Taleyarkhan but other 5 co-authors (C. West, R. Lahey, R. Nigmatulin, R. Block, Y. Xu) "acted" together "to distort the research record by asserting...". Only all coauthors can state what sentence does belong to one of the co-authors. None of us agree that only R. Taleyarkhan wrote the assertion on the independent confirmation.

Trying to be independent and not to be involved in Purdue scandal you are repeating the Purdue administration's statement which is out of logic and out of ethics. I hope that in spite of my non-perfect English you clarify the idea.

Sincerely yours,

Robert Nigmatulin

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Subject: PRL Editorial comment

Date: Mon, 10 Nov 2008 12:43:14 -0500 From: "Block, Robert" To: "Daniel Kulp" Cc: [co-author list]

Dear Dr. Kulp,

I received a copy of your 2nd revision of an editorial note that you are planning for publication in PRL. As one of the six co-authors of PRL 96,034301 (2006) I resent the implication (put out by Purdue) that Dr. Taleyarkhan was the sole individual who asserted that "these observations have been independently confirmed". We all assert that to the best of our collective knowledge they have been independently confirmed.

I testified at the last Purdue hearing and am convinced that Purdue had already decided to destroy Dr. Taleyarkhan for reasons that had little, if anything, to do with science. The only charge against Dr. Taleyarkhan that they finally used to discredit him was that a graduate student's name was added to the paper after it had been essentially written and that the graduate student did only a small amount of work on the research. As a former professor I applaud adding students to papers—it provides them with a publication as well as experience in scientific publication—and in my opinion Purdue has twisted this to discredit Dr. Taleyarkhan. I would be loath to believe that Physical Review would be part of this process.

Robert C. Block Professor Emeritus

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Date: Tue, 11 Nov 2008 17:29:42 -0500 To: dan@ridge.aps.org From: "Dr. Richard T. Lahey" <laheyr@rpi.edu> Subject: Rusi Taleyarkhan and our 2006 PRL paper Cc: [co-author list], sbenka@aip.org, jack.sandweiss@yale.edu, bglevi@msn.com

November 11, 2008

Dr. Kulp,

From the very beginning I have been an active member of the research team which discovered Sonofusion, and have co-authored many papers on this subject with Dr. Taleyarkhan. I can assure you that our research and the related publications have always been a team effort, and that we all stand behind the conclusions reached in these publications (including those in our 2006 PRL

paper that you are apparently concerned about). It is very unfair to single-out Professor Taleyarkhan for criticism of the conclusions reached or wording used in any of our papers on Sonofusion.

Our research team includes world-class researchers who have vast experience in energy-related research and have received numerous awards for their past achievements, have held senior staff/management positions in government, industry and academia and several are members of the NAE and the Russian Academy of Sciences. We are certainly not irresponsible, fly-by-night type researchers who would ever try to "pull something over" on the readership of the technical journals that we publish in. While certain words may mean different things to different people, there was never any intent on our part to mislead the readership of your journal (2006 PRL) concerning the independence of the confirmatory results of Xu et al.

Sonofusion experiments are very difficult to perform, and without some help from Professor Taleyarkhan it is doubtful that Dr. Xu et al. would have had a successful experiment (witness the problems that researchers at UCLA have had). Anyway, Dr. Xu has fully acknowledged Rusi's help in his 2005 NED publication and he has clearly stated on numerous occasions (and given a sworn deposition ) that the performance of his confirmatory sonofusion experiments, and the associated data analysis, were performed independently by him and Mr. Butt. Thus I believe that these results were indeed independent confirmation ( i.e., not performed by any members of our research team ) of our seminal discovery (Science , 2002 ).

As the former Dean of Engineering at Rensselaer Polytechnic Institute (RPI) I am quite familiar with how nasty campus politics can get, but even I was appalled by the lengthy "witch hunt" which was conducted at Purdue to try to discredit Professor Taleyarkhan and sonofusion technology. Nevertheless, it is significant that after numerous detailed investigations all charges related to research fraud were dismissed (i.e., there was no reason found not to believe that sonofusion was measured by us and later by Xu et al.) However, it appears that several new charges were made during the course of the last investigation, and these resulted in findings of research misconduct on the part of Dr. Taleyarkhan. One was related to his alleged role in making Mr. Butt (a graduate student at Purdue at the time) a co-author of Dr. Xu's subsequent NED paper, and the other, as noted above, with the use of the word independent in our 2006 PRL paper. In my mind these are relatively minor charges, ones that have no real basis, and by no means justify the severe punishments that Professor Talevarkhan has been subjected to by Purdue. Indeed, it seems that he has been made a "scapegoat" by the administration at Purdue, presumably to appease Congress. In short, this has nothing to do with Science....

Anyway, all this is not your fault, but I see no reason for you to worry about the basic validity of our 2006 PRL paper or how the readership might be misled by

our 2006 PRL paper. Indeed I see no pressing need for any Editorial Note associated with this paper.

Dr. Richard T. Lahey , Jr. The Edward E. Hood Professor Emeritus of Engineering Rensselaer Polytechnic Institute Troy , New York

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Dear Dr. Kulp,

Professor Block's comment to you today, "<u>I would be loath to believe that</u> <u>Physical Review would be part of this process</u>," reminds me to try yet again to alert you to the possible misfortune you and APS may be entering into.

You seem to be missing a fundamental point.

Your Sept. 25 version of your Editorial Note stated that Taleyarkhan (though not his coauthors) "acted to falsify the research record by asserting in the opening paragraph of the above mentioned Letter that 'these observations [referring to Science 295, 1868 (2002)] have now been independently confirmed.'

Your Nov. 6 "final version" stated "acted to distort the research record by asserting in the opening paragraph of the above mentioned Letter that 'these observations [referring to Science 295, 1868 (2002)] have now been independently confirmed.'

You are missing a key point. An act to "falsify" or even the less-legal term, "distort," assumes that there was some intent on the part of Taleyarkhan et al. to state that which was not so.

Would such intent have been the case, then yes, it might have been appropriate for Purdue to sanction Taleyarkhan for research misconduct, assuming that there was no legitimate basis for using the word "independent."

It's not even the point that Purdue fabricated the allegations as I already told you and Barbara Gross Levi - which she apparently decided to ignore. On that matter, you can judge for yourself to see if you think Purdue played a shell game with the allegations by watching this four-minute video: http://www.youtube.com/watch?v=kPZ0H4wZj04

Taleyarkhan and co-authors did use the word "independent." The minor problem is that "independence" is not a binary condition, there are degrees of independence. Taleyarkhan's rebuttal appeal to Purdue provides some of the relevant data (See excerpt in this attachment: *DRAFT Bubblegate Judging Independence.pdf*) [Now online as <u>Independence of Xu/Butt Replication</u>, also Included in "Purdue Knew."]

The major point that you seem to be missing is that Taleyarkhan et al. firmly and consistently believed that the work was independently confirmed.

Hence, there is not, and never was - based on all of my interviews with Taleyarkhan and coauthors and my reading of every public document that exists on the Purdue matter - any **intent to deceive**, **distort or falsify**.

At most, Taleyarkhan et al. are "guilty" of expressing their *opinion* - which may or may not be shared by others - that their work was independently replicated.

Steven B. Krivit Editor, New Energy Times