PURDUE UNIVERSITY

SCHOOL OF NUCLEAR ENGINEERING

January 13, 2006

Dear Dr. Ishii,

I am sending this letter to you because I don't think that Dr. Tsoukalas is taking sufficient action to address the matter about the bubble fusion experiment.
It is my sincere opinion that the time has come to take action to establish the veracity of the data that Dr. Taleyarkhan published, or at least, to publish our own negative result. I feel that by now we have enough grounds to determine sufficient doubt and to warrant such action based on our experiences during the confirmatory experiment that we carried out two years ago. A short list of the facts follows:
1) On one occasion Dr. Taleyarkhan encouraged us to publish a positive result by performing a count of our samples on his Beckman machine and doing an incorrect analysis of the data. When the analysis was corrected the result became negative.
2) On another occasion Dr. Taleyarkhan encouraged us to publish a positive result by performing another count of our samples on his Beckman machine and not even showing us the analysis.
3) Furthermore Dr. Taleyarkhan encouraged us to discard a data point that was negative based on a dubious criterion.
4) Finally, when Dr. Taleyarkhan realized that we would not publish the "positive" result he advocated, he enlisted Dr. Revankar to do it using our experimental facility. When I asked Dr. Revankar how their samples were counted he said that he didn't have anything to do with it but that he was only acting as a supervisor of the thermal-hydraulic aspects of the experiment. Then, either Dr. Revankar was assigning the responsibility of the positive count to the other two authors who were a post doc and a graduate student, which is ridiculous, or Dr. Taleyarkhan was behind the effort even though he did not appear as an author. Evidently, Dr. Taleyarkhan was trying to establish an "independent" confirmation with little regard for the future of Dr. Revankar, or the good name of our School.
All this puts our School in a rather bad situation, but the situation will get a lot worse in the likely case that Drs. Putterman (UCLA) and Suslick (Illinois) publish a negative result of their confirmatory experiment. If Purdue University begins an investigation of Dr. Taleyarkhan's experiments after that, and they learn what I just wrote, it will look like we tried to cover it up.
I apologize to importune you with this matter but you are the only member of the faculty that has the authority and the commitment to do something.
Sincerely,

Martin Lopez de Bertodano