

[Fwd: Re: ]

**Subject:** [Fwd: Re: ]  
**From:** "Lefteri H. Tsoukalas" <tsoukala@ecn.purdue.edu>  
**Date:** Wed, 19 Jan 2005 20:20:02 -0500  
**To:** "Dr. Richard T. Lahey" <laheyr@rpi.edu>, Rusi <Rusi@ecn.purdue.edu>

Colleagues,  
FYI, I am forwarding the response to Colin Murray.  
Best.  
Lefteri

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URL: <https://Engineering.Purdue.edu/NE/>  
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**Subject:** Re:  
**From:** "Lefteri H. Tsoukalas" <tsoukala@ecn.purdue.edu>  
**Date:** Wed, 19 Jan 2005 20:18:22 -0500  
**To:** Colin Murray-GW <colin.murray.01@bbc.co.uk>  
**CC:** "Lefteri Tsoukalas" <nehead@ecn.purdue.edu>

Dear Mr. Murray,

Sorry for the late response.

Purdue's sole work in sonofusion is done at Professor Taleyrkhan's laboratory.

Two years ago, a Purdue group under my guidance and with the assistance of Dr. Taleyrkhan initiated a series of scoping experiments to look for tritium production. The work was, therefore, not truly "independent" (since assistance from Dr. Taleyrkhan included design details and setup of the test cells used in the experiments) although operation and data gathering was conducted independently.

In addition, and for reasons beyond my control, we did not have the opportunity to complete it and publish results. Hence, I am not really in a position to offer much of substance to your inquiry, although informally, I could share that our raw unpublished results look promising and encouraging. When using a state-of-the-art sensitive tritium counter (Beckman LS6500) of the type used by Taleyrkhan et al. (Science, 2002), statistically significant tritium increase appears to be realized from neutron seeded cavitation tests with chilled deuterated acetone, whereas, corresponding tests with normal acetone and those with irradiation alone gave null results. As an aside, Monte Carlo nuclear simulations of the experimental setup conducted by our nuclear staff have confirmed that the neutron fluxes used for nucleation of clusters can simply not result in measurable changes in tritium - something borne out from the Tritium measurements.

I would like to stress that engineering-science details for conducting successful "bubble fusion" experiments should be considered a non-trivial undertaking, and need to be devised, set up and conducted with utmost care, diligence and perseverance.

[Fwd: Re: ]

Please do not hessitate to contact me if I can be of any further assistance.

Best.

Lefteri H. Tsoukalas

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<b>Re:</b>	<b>Content-Type:</b> message/rfc822 <b>Content-Encoding:</b> 7bit
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