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All,

Dr. Tsoukalas has requested that I submit the following abstract to NURETH-11. The deadline for abstract submission was yesterday, so please make your comments ASAP. The paper is not due till January and the meeting is October 2005. For more info about the meeting check

<http://nureth11.com/Annoucement>

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Tritium Measurements in Acoustic Cavitation Nuclear Emission Experiments

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Abstract

Tritium measurements conducted in controlled experiments to investigate nuclear emissions during acoustic cavitation of the organic deuterated fluid – reported by Taleyarkhan, *et. al.*, in *Science*, 8 March 2002¹ – provide new tritium data (attributed to D-D nuclear fusion). The data was obtained for both deuterated and normal acetone subjected to cavitation and acoustic oscillation. Samples from pre-cavitation and post-cavitation deuterated acetone were measured for tritium content with a Packard and a Beckman scintillation detectors. The experiments were performed using isotropic neutron sources for initiating cavitation in properly degassed deuterated acetone. The results with the Beckman detector point to statistically **observable** tritium increases in post-cavitation deuterated acetone samples, suggesting the possibility of D-D fusion taking place. Samples of normal acetone and deuterated acetone not subjected to cavitation do not show statistically **observable** changes in tritium.

¹ Taleyarkhan, R. P., C. D. West, J. S. Cho, R. T. Lahey, Jr., R. I. Nigmatulin, R. C. Block, “Evidence of Nuclear Emissions During Acoustic Cavitation,” *Science*, 295, 1868-1873, 2002