

Overall Summary

The Committee finds that the weight of the evidence supports findings of research misconduct for Allegations A.2 and B.2. Our findings and conclusions for each individual allegation follow below.

A. Allegations relating to NED and NURETH-11 publications [IqC allegations C2, D2]

The Inquiry Committee forwarded several allegations regarding authorship of two closely related papers with Dr. Xu as lead author: Nuclear Engineering and Design **235**:1317-1324 (2005) [hereafter called NED] and the NURETH-11 Conference Proceedings in October, 2005.

1. **Allegation:** Dr. Taleyarkhan with falsifying intent caused his name not to be included in the author bylines of the NED and NURETH-11 papers to disguise the extent of his involvement in the execution of the work reported and in the writing and submission of the papers.

We make the following findings of fact regarding this allegation.

- FF1. Dr. Xu conducted the reported experiments from January to May 2004, with supplemental work later. According to Dr. Xu, he "became full-time under the direction of Taleyarkhan" once Dr. Xu completed his thesis defense in February 2004.¹
- FF2. Dr. Xu stated "the observations and analysis work were completely done by me and my colleagues, not by Dr. Taleyarkhan."² According to Dr. Xu, Dr. Taleyarkhan provided the test cell, provided instructions on its operation, gave advice on the experiment, and sometimes was "present during actual experimentation" for the data presented in the NED and NURETH manuscripts.³ According to Dr. Taleyarkhan, he helped Dr. Xu "clarify" what "operational aspects of the bubble dynamics may lead to null results."⁴ *See?*
- FF3. Dr. Revankar had minimal involvement in the experiment.⁵ Dr. Revankar checked the counting data and the analyses of the data, and ultimately presented the work at the NURETH-11 conference. His testimony was consistent with Dr. Xu's testimony that Dr. Xu was the person who did the data acquisition.⁶
- FF4. The manuscript that ultimately appeared in NED was initially submitted to the journal Science on or about October 15, 2004. This manuscript underwent numerous revisions over a period of months as the targeted journal changed from Science, to Physical Review Letters, until finally it