

STATE OF INDIANA
COUNTY OF TIPPECANOE

) IN THE TIPPECANOE SUPERIOR COURT
) SS
) CAUSE NO.: 79D01-0803-CC-222

RUSI P. TALEYARKHAN, an individual,
Plaintiff,

v.

LEFTERI ISOUKALAS, an individual,
TATJANA JEVREMOVIC, an individual,
and DOES 1-50, inclusive
Defendants.

Case No :

CIVIL COMPLAINT

(DEMAND FOR JURY TRIAL)

Plaintiff RUSI P. TALEYARKHAN (“Taleyarkhan” or “Plaintiff”) alleges as follows pursuant to the Court’s Order of September 25, 2008:

NATURE OF THIS ACTION

1. This is an action involving certain faculty of Purdue University (“Purdue”) who made public statements to others including competitors, students, friends, and a worldwide magazine, *Nature Magazine* (“*Nature*”), through means that have falsely and maliciously defamed Taleyarkhan. What ensued was a successful campaign to ruin Taleyarkhan and his sonofusion research, research that would, and could have the potential to impact the world’s energy markets. These statements by the Defendants have caused in whole or in part to this day numerous investigations at Purdue (including a secret non-sanctioned committee), a congressional inquiry through the Office of Naval Research, harmful articles in worldwide magazines and newspapers, and a global attack on Taleyarkhan

PARTIES TO THIS DISPUTE

2. Plaintiff Taleyarkhan is, and at all times relevant hereto was, a citizen of, and an individual domiciled in the State of Indiana. He is a successful nuclear engineer with business

interests of national and international scope.

3. Plaintiff is informed and believes and based thereon alleges that Defendants Lefteri Tsoukalas (“Tsoukalas”) and Tatjana Jevremovic (“Jevremovic”) and at all times relevant hereto were, citizens or subject of, and individuals domiciled in the State of Indiana.

4. Plaintiff is ignorant of the true names and capacities of the Defendants sued herein as Does 1 through 50, inclusive, and therefore sues said defendants by such fictitious names. Plaintiff will amend this Complaint to allege the true names and capacities of such fictitiously named defendants when the same have been ascertained. Plaintiff is informed and believes and based thereon alleges that each of the fictitiously named defendants is responsible in some manner for the occurrences, acts and omissions alleged herein and that Plaintiff’s damages were proximately caused by their conduct. For convenience, each reference to the named defendant herein shall also refer to the Doe defendants and each of them (collectively, “Defendants”).

5. Plaintiff is informed and believes and based thereon alleges that at all material times Defendants, and each of them authorized, directed and/or ratified the wrongful acts of the other Defendant and are consequently liable to Plaintiff. Purdue’s responsibility and *Nature’s* consequences need be determined in other arenas.

JURISDICTION & VENUE

6. This Court has jurisdiction over the claims at issue for the reason that the facts forming the basis of Plaintiff’s claims occurred in Indiana or originated in Indiana and the Plaintiff suffered injury in Indiana.

VENUE

7. Venue is proper in Tippecanoe County for the reason that the majority of Defendants’ reside in Tippecanoe County and the wrongful acts and injuries occurred in Tippecanoe County.

FACTS

8. Taleyarkhan led a team of scientific researchers to make an astounding discovery

on or around 2002 which has lead to sonofusion a/k/a bubblefusion. Taleyarkhan has embarked upon a potentially amazing discovery, breaking the fusion barrier for the first time in world history. His results of experiments were published in the prestigious *Science* magazine. Taleyarkhan R. P., et al. *Science*, 295 1868 – 1873 (2002).

9. Later, on or around 2004, Taleyarkhan and his team further demonstrated the elements of the discovery with significantly enhanced and compelling evidence in a second paper to settle and clarify requests for such evidence from world-wide scientists; this paper was published in the March, 2004 issue of the prestigious *Physical Review E* journal. A third seminal publication presented the world with the first standalone acoustic thermonuclear fusion reactor system. Results of this landmark discovery were published in the prestigious Physical Review Letters journal. Taleyarkhan R. P., et al *PRL*, 96. 034301 (2006). It is pointed out that *Science*, *Phys.Rev E.* and *Phys.Rev.L* journals are the most intensely scrutinized peer reviewed journals in the world and which are the venues for Nobel Prize winning scientific works as well as paradigm shift developments such as the mapping of the human genome.

10. Taleyarkhan and his team have subjected their discoveries to the most intense public scrutiny leading to them having published their discoveries in some of the most reputable scientific journals in the world, including *Science*. Given the significance of his discovery, he has been the subject of many multi-media articles around the world. Taleyarkhan and his discovery received worldwide attention, with the *London Times* calling it “the most important development since the dawn of the nuclear age.” In August, 2005, the *Energy Times* described it as one of the “world’s top 10 must do R&D projects,” and put it at the top of their list.

11. To this day, the team members on work performed in these matters have maintained that Taleyarkhan acted appropriately under all circumstances and was never anything but honest to everyone involved.

12. Indeed, of the 34 official allegations made by Purdue, 24 of them were dismissed outright and 12 were ultimately dismissed through an investigation committee at Purdue where there was no research misconduct found.

13 Unfortunately, due to the *Nature* articles based on comments from the Defendants, Purdue was forced to do the investigation again. (Congressman Miller Letter, attached as Exhibit E). This meant that after years of investigation and complete exoneration, Purdue had to do something to save itself Purdue's treatment of Taleyarkhan was unfair and deprived him of his rights but those issues will have to be determined in another arena, even after a glowing press release by Purdue to the world announcing there was no misconduct, the statements of the Defendants would not go away but continued to harm Taleyarkhan.

14 Taleyarkhan worked as a researcher in the capacity of Distinguished R & D Staff at Oak Ridge National Laboratory ("ORNL") during the time of his discoveries, but was recruited heavily by Tsoukalas, and others at Purdue University in 2003 to join Purdue University as a professor for the purpose of teaching and expanding his sonofusion research.

15 Taleyarkhan joined Tsoukalas' team in October of 2003, and began setting up his experiments in various laboratories there.

16 Taleyarkhan instructed Tsoukalas how to perform the experiments on sonofusion while engaging in his own research at the same time.

17 Soon it became apparent that Tsoukalas after publicly admitting to sonofusion success as late as January of 2005, was gearing up in the later half of 2005 to malign Taleyarkhan due to vendetta issues related to promotion and tenure of Jevremovic and Taleyarkhan's support for individuals against whom Tsoukalas had developed a dislike for (Affidavit of Darla Mize, attached as Exhibit B, and Affidavit of Jere Jenkins, attached as Exhibit A), claiming that Taleyarkhan's experiments were fraudulent, and accusations of research misconduct against Taleyarkhan began to surface from Tsoukalas and his camp.

18 Tensions arose so high that Tsoukalas unilaterally conspired and organized a secret (Mize para. 33) committee unbeknownst to Taleyarkhan and to Purdue University authorities (thereby, blatantly violating the rules governing reporting and prosecution of research misconduct as given in the State of Indiana/Purdue University's Exhibit Memorandum C-22) to investigate "research misconduct" in February 2006 against Taleyarkhan. Furthermore, Mize's

and Lapinskas/Webster affidavit shows Tsoukalas manipulated student Adam Butt during the secret investigation

19. Tsoukalas, Jevremovic and others reported various allegations of research misconduct against Taleyarkhan to reporter Eugenie Reich from *Nature* and for a web-posting to the *New York Times* reporter Kenneth Chang. False statements were made by Tsoukalas, and by Jevremovic, to public media despite the very clear rules prohibiting such reporting and investigating of research misconduct as set forth in Executive Memorandum C-22.

20. On or about March 8, 2006, an article by Eugenie Reich quoting Tsoukalas and Jevremovic, falsely claimed that Taleyarkhan was prohibiting the progress of sonofusion research and understanding. See Reich, "Is bubble fusion simply hot air? Concerns gather momentum over claims for table-top energy production," *Nature*, published online 8 March 2006, doi:10.1038/news060306-2. The article goes on to state that professors at Purdue University (including Tsoukalas, Jevremovic, and "several" others at Purdue University or elsewhere others who did not wish to be named (Defendant Does 1-50)) called into question sonofusion and its validity due to Taleyarkhan's alleged acts to thwart sonofusion understanding

21. Among the many alleged acts called into question, Tsoukalas and Jevremovic claimed to *Nature* that Taleyarkhan stole laboratory equipment in an effort to hide, disrupt, or corrupt ongoing research. This was an outright lie, as Taleyarkhan was directed to move such equipment and was allowed to do so with the blessing of Tsoukalas himself in 2004.

22. This single article spawned additional articles by *Nature*, and in particular Reich, which falsely malign Taleyarkhan's character, reputation, and research into sonofusion to the world. See, following campaign by *Nature*:

- Reich, "Bubble bursts for table-top fusion, Data analysis calls bubble fusion into question," *Nature*, published online March 8, 2006, doi:10.1038/news060306-3;
- Reich, "Bubble fusion: silencing the hype, *Nature* reveals serious doubts over claims for fusion in collapsing bubbles," *Nature*, published online March 8, 2006, doi:10.1038/news060306-1;
- Reich, "A sound investment? Rejection leaves bubble-fusion patent high and dry," *Nature*, published online March 8, 2006, doi:10.1038/news060306-4;
- Reich, "Bubble-fusion group suffer setback, Team admits a mix-up with one of

their neutron detectors,” *Nature*, published online May 10, 2006, doi:10.1038/news060508-8;

- Reich, “Evidence for bubble fusion called into question,” *Nature*, Volume 440, March 9, 2006.
- Reich, “Concerns grow over secrecy of bubble-fusion inquiry,” and “Where Did the Money Go?” *Nature*, Vol. 442, July 20, 2006;
- Reich, “Purdue attacked over fusion inquiry,” *Nature*, Vol 444, December 7, 2006;
- Geoff Brumfiel, “Misconduct? It’s all academic . . .” *Nature*, Vol 445, January 18, 2007;
- Reich, “Disputed inquiry clears bubble-fusion engineer,” *Nature*, Vol. 445, February 15, 2007;
- Reich, “Congress requests bubble-fusion reports,” *Nature*, Vol. 446, March 29, 2007;
- Reich, “Purdue dogged by misconduct claims,” *Nature*, Vol 447, May 17, 2007.

23 Each of the articles by *Nature* were written and published to the world and falsely accused Taleyarkhan without factual support, or objective writing.

24. Indeed, the quotes in *Nature* by Tsoukalas and Jevremovic were very negative against Taleyarkhan. (Affidavit of Jere Jenkins, p.1, attached as Exhibit A)

25. All the while, Tsoukalas and others were conspiring to destroy Taleyarkhan and his reputation. This conspiracy against Taleyarkhan amounted to outright discrimination, with Tsoukalas discriminating against Taleyarkhan’s Indian ethnicity, claiming that Taleyarkhan would be sent back to India, and calling him and others of Indian descent “stupid,” “ignorant,” “idiot,” “liar,” “thief,” “fraud,” and “stupid Indian,” and “useless Indian.” (Affidavit of Darla Mize, p.6, attached as Exhibit B)

26 Tsoukalas made statements about Taleyarkhan committing fraud and fabricating experiments, (Affidavit of Darla Mize, p.6, attached as Exhibit B)

27. These comments by Tsoukalas and Jevremovic were set up, part of a concerted effort to ruin Taleyarkhan’s’ career and his credibility. (Affidavit of Jere Jenkins, p.1, attached as Exhibit A)

28. These comments by Tsoukalas were made to continuously malign Taleyarkhan and were made in front of staff at Purdue not involved in any employment matters regarding Taleyarkhan. (Affidavit of Darla Mize, p.6, attached as Exhibit B)

29. At some point, Tsoukalas in his capacity as senior Purdue administrator initiates

his own investigation staffed with his own investigation committee consisting of his chosen faculty to strive to find fault with Taleyarkhan and his team.

30. Tsoukalas furthermore, goes against all rules governing conduct of operations, takes the most unusual step of going public with allegations of research fraud, misconduct and also accuses Taleyarkhan of stealing his equipment.

31. Tsoukalas formed his secret committee to investigate Taleyarkhan, which eventually Purdue was made aware of and was disbanded because the committee was improper. (Affidavit of Darla Mize, p.7, attached as Exhibit B).

32. The U.S. Department of Defense requests meeting at Purdue; Taleyarkhan holds the meeting. Surprisingly, Taleyarkhan group detractors/competitors for the first time now allege fraud and fabrication. Several hours later on same day, Taleyarkhan gets call/email from *Nature* reporter asking for explanation on this charge. Taleyarkhan tells the reporter to have those making charges to take the time-honored route of communicating with journal editors.

33 Tsoukalas went so far as discussing the investigation with other personnel, (Affidavit of Erica Timmerman, attached as Exhibit C) and stating that Taleyarkhan would be forced to go back to India.

34 The comments about Indians made by Tsoukalas was upsetting to third parties in addition to showing his discriminatory character. (Affidavit of Erica Timmerman, p.3, attached as Exhibit C).

35. Defendants communicated specious claims to certain third parties, callously, or intending to frustrate or prevent Taleyarkhan in its efforts to proceed with his promising sonofusion research.

36. Indeed, in Purdue's December 15, 2006 letter to Taleyarkhan and Dean Jamieson, Tsoukalas was one of the two contributors to the allegations against Taleyarkhan. (Purdue Letter December 15, 2006, attached as Exhibit D) along with Dr. Martin Lopez and Dr. Bertodando who was involved with Tsoukalas.

37 Plaintiff is informed and believes and thereon alleges that the foregoing

misconduct by Defendants was intended to, and did in fact, harm Plaintiff in Indiana, where he works and resides, and adversely affected his reputation and character worldwide.

38. These allegations, coupled with the leaking of information by the Defendants to *Nature*, now caught the attention of Congressman Miller, who relied on the *Nature* article that relied on the Defendants to have another investigation done after Taleyarkhan was completely exonerated (Congressman Miller Letter, attached as Exhibit E)

FIRST CAUSE OF ACTION
(For Defamation Against All Defendants)

39 Plaintiff repeats, re-alleges and incorporates by reference Paragraphs 1 through 38, inclusive, of this Complaint as if fully set forth herein.

40. These allegations brought on by the Defendants were carried on by others who were competitors or defractors (List in Appendix B, attached as Exhibit F)

41 Indeed after the *Nature* leak, Jevremovic broke down and blamed Tsoukalas for forcing her to lie stating “I’m not really such a bitch. I only did what I was told by him [Tsoukalas] in taking with Nature.” (Affidavit of Darla Mize, p.6, attached as Exhibit B)

42 Defendants orally and in print disseminated, published or circulated, or caused to be printed, disseminated, published or circulated in Indiana, and elsewhere throughout the world, a number of false statements of and regarding Taleyarkhan, including but not limited to statements (a) that Taleyarkhan had engaged in research misconduct with respect to his sonofusion research and studies; (b) that Taleyarkhan misused research funding; and (c) that Taleyarkhan engaged in various means of fraudulent activity, including but not limited to theft of laboratory equipment in the guise of thwarting sonofusion research (the “Statements”).

43. These Statements, made by Defendants both orally and in writing, are untrue as a matter of fact.

44. Tsoukalas many times talked of fraud with regards to Taleyarkhan’s research and stated that Taleyarkhan was going to be deported back to India because of his fraudulent

research. (Affidavit of Jere Jenkins, p.3, attached as Exhibit A).

45 Plaintiff is informed and believes and thereon alleges that Defendants, and each of them, knew that the Statements were false and/or had no reasonable grounds for believing that they were true. Plaintiff further alleges on information and belief that Defendants, and each of them, recklessly and maliciously proceeded to make such Statements without properly investigating whether they were true or false and/or even after their investigation into their veracity failed to confirm that the Statements were true.

46 Persons who heard and read such Statements reasonably understood the references therein to pertain and refer to Plaintiff. As alleged herein, Defendants made fabricated, false, malicious and defamatory statements of facts of and concerning Plaintiff.

47 The Statements were intended by Defendants, and each of them, to be heard and read, and were heard and read, by persons in the State of Indiana, and throughout the United States and the world.

48. Defendants' false Statements expose Plaintiff to hatred, contempt, ridicule and obloquy, and have a tendency to injure Plaintiff in his occupation. Defendants' false Statements expose Plaintiff to hatred, contempt, ridicule and obloquy, and have thwarted research funding for Taleyarkhan's, and his team's, research into sonofusion with also adversely affected Taleyarkhan's health and well-being. Plaintiff is informed and believes and based thereon alleges that Defendants, and each of them, intentionally portrayed Plaintiff in this manner knowing that the depiction was false, or without any reasonable grounds for believing it to be true.

49. Defendants had no privilege in making those Statements and said Statements were made in bad faith for ulterior and illegal purposes. The Statements were intended by Defendants to directly injure Plaintiff in Indiana with respect to his reputation, goodwill, trade and business. Plaintiff is informed and believes and based thereon alleges that Defendants knew, or recklessly disregarded the fact that the Statements were likely to damage the reputation and goodwill of Plaintiff and cause damage to his standing in the scientific, research, academic, academic

funding, and scholarship community in Indiana and elsewhere throughout the world.

50. The statements are susceptible of a defamatory meaning on their face in that they have a direct tendency to injure Plaintiff with respect to his reputation, goodwill, trade and business.

51. As a direct and proximate result of the above-described conduct by Defendants, and each of them, Plaintiff has suffered general and special damages each in an amount not presently known to Plaintiff but which include but are not limited to damage to Plaintiff's reputation, goodwill and standing in the community. Although the full *Nature*, extent and amount of these damages are currently unknown, this Complaint will be amended at or before trial to insert such information if such amendment is deemed necessary by the Court.

52. Plaintiff is informed and believes and based thereon alleges that the aforesaid acts of Defendants, and each of them, were done intentionally or with a conscious disregard of Plaintiff's rights, and with an intent to vex, injure or annoy Plaintiff, such as to constitute oppression, fraud or malice thus entitling Plaintiff to exemplary and punitive damages in an amount appropriate to punish or set an example of Defendants, and each of them, and to deter such conduct in the future, which amount will be proved at trial.

SECOND CAUSE OF ACTION
(For Civil Harassment Against All Defendants)

53 Plaintiff repeats, realleges and incorporates by reference Paragraphs 1 through 52, inclusive, of this Complaint as if fully set forth herein.

54. By their conduct as alleged hereinabove, Defendants, and each of them, without lawful authority, knowingly harassed Taleyarkhan by, *inter alia*, threatening to do act(s) intended to substantially harm him and/or others.

55 By their words and/or conduct, Defendants placed Taleyarkhan in reasonable fear that Defendants' threat(s) to him and his reputation would be carried out

56. As a direct and proximate result of the above-described harassment by Defendants, and each of them, Plaintiff has suffered general and special damages each in an

amount not presently known to Plaintiff. Although the full nature, extent and amount of these damages are currently unknown, this Complaint will be amended at or before trial to insert such information if such amendment is deemed necessary by the Court.

57. Plaintiff is informed and believes and based thereon alleges that the aforesaid acts of Defendants, and each of them, were done intentionally or with a conscious disregard of Plaintiff's rights, and with an intent to vex, injure or annoy Plaintiff, such as to constitute oppression, fraud or malice thus entitling Plaintiff to exemplary and punitive damages in an amount appropriate to punish or set an example of Defendants, and each of them, and to deter such conduct in the future, which amount will be proved at trial.

THIRD CAUSE OF ACTION

(For Intentional Infliction of Emotional Distress Against All Defendants)

58. Plaintiff repeats, realleges and incorporates by reference Paragraphs 1 through 57, inclusive, of this Complaint as if fully set forth herein.

59. Defendant Tsoukalas, Jevremovic, and others intentionally provided to *Nature* and Reich information about research misconduct of Taleyarkhan. This information was provided in repeated interviews over a prolonged period of time with intentional or reckless disregard for the truth. *Nature* and Reich relied on this misinformation, and without it harm would not have occurred against Taleyarkhan and his sonofusion research. Defendants' conduct was extreme and outrageous and exceeded all bounds of decency tolerated by society. It was intended to and did cause mental anguish and severe emotional distress to the Plaintiff or was committed with reckless disregard for its foreseeable impact on the Plaintiff's emotional state.

60. Tsoukalas, Jevremovic and others proceeded with actions that were malicious, willful and wanton.

61. Personnel at Purdue involved in the situation would not be surprised that Taleyarkhan suffered a significant hardship and ill health given the wrongful, malicious acts of Tsoukalas and Jevremovic against Taleyarkhan (Affidavit of Darla Mize, p.8, attached as Exhibit B, and Affidavit of Jere Jenkins, attached as Exhibit A).

62. The above-named defendants intended to cause mental anguish and severe emotional distress to Plaintiff or acted in reckless disregard for the Plaintiff's emotional state. As a direct and foreseeable consequence of these actions, Plaintiff suffered mental anguish and severe emotional distress, as well as other injuries such as reputational harm, economic injuries, lost research funding and support, and other harms. Public humiliation by removal of Chair Professorship title, salary reduction, and restrictions on working with students who form the lifeblood of academia and research – the lifeblood of the trade and livelihood, and the ability to pursue business development with sonofusion technology, as well as major awards and recognitions.

FOURTH CAUSE OF ACTION

(For Negligent Infliction of Emotional Distress Against All Defendants)

63 Plaintiff repeats, realleges and incorporates by reference Paragraphs 1 through 62 inclusive, of this Complaint as if fully set forth herein.

64 The actions of the above-named defendants described in the Third Cause of Action were at least, grossly negligent and reckless with regard to the Plaintiff's emotional state. These defendants failed to exercise due care in discharging their duties.

65. The conduct of Tsoukalas, Jevremovic, and others was grossly negligent and reckless in breaching the duty of care and professional judgment. Among other things, Defendants did not exercise due care and recklessly disregarded standards of professional judgment in the investigation of Taleyarkhan and his sonofusion research, their misrepresentation of it and him, and in the deliberate and/or reckless mischaracterization of the true facts before them.

66. The actions of these individuals were performed and used to the advantage of Defendants and to the disadvantage of Taleyarkhan.

67. It was reasonably foreseeable that these negligent actions would cause the plaintiffs mental anguish and severe emotional distress.

68. The actions of the defendants made others aware of how Taleyarkhan was

suffering, including the employees of Purdue (Affidavit of Jere Jenkins, p 4, attached as Exhibit A.)

69 The negligence of these Defendants did, in fact, cause Plaintiff mental anguish and severe emotional distress, as well as other injuries such as reputational harm, economic injuries, lost research funding and support, and other harms

PRAYER FOR RELIEF

WHEREFORE, Plaintiff RUSI P TALEYARKHAN prays for judgment against Defendants, and each of them, as follows:

1 For general damages against Defendants, and each of them, in accordance with proof at trial in an amount which will justly compensate the Plaintiff for his injuries and damages;

2 For punitive damages in an amount appropriate to punish or set an example of Defendants, and each of them, and to deter such conduct in the future, the exact amount of such damages subject to proof at the time of trial;

3 For costs of suit incurred, including attorneys fees;

4 For interest at the statutory or legal rate; and

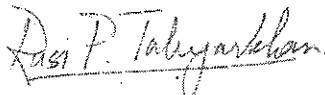
5 For such other and further relief as the Court may deem just and proper

DEMAND FOR JURY TRIAL

Plaintiff RUSI P TALEYARKHAN hereby demands a trial by jury as provided by Indiana Trial Rule 38

DAIED: October 9, 2008

By:



RUSI P TALEYARKHAN
Respectfully submitted,

LEWIS AND WILKINS LLP



John H. Lewis, Atty. No. 18285-49
Attorneys for Plaintiff

LEWIS AND WILKINS LLP
The Guaranty Building
20 North Meridian Street
Suite 400
Indianapolis, In 46204
Telephone: (317) 636-7460
Fax: (317) 636-7505

CERTIFICATE OF SERVICE

I certify that a copy of the foregoing has been duly served upon all counsel of record listed below by U S mail, first-class postage prepaid on this 9 day of October, 2008:

Roger William Bennett
James A. Gothard
BENNETT BOEHNING & CLARY LLP
P O. Box 469
Lafayette, IN 47902

Raymond T. Seach
RILEY BENNETT & EGLOFF LLP
141 E Washington Street, Fourth Floor
Indianapolis, IN 46204



Exhibit A

2/2/08

Affidavit of Jere Jenkins

I swear that if called to testify under oath that I can and would attest to the following:

1. I am the Director of Radiation Laboratories at Purdue University and have held that position from August 2004 to the present. I presently serve on the Purdue University Radiation Safety Committee, the College of Engineering Safety Committee, the Dean of Engineering's Staff Advisory Committee, and the Nuclear Engineering Safety Committee where I am a co-chair. I am also on the Executive Committee of the National Organization of Test, Research and Training Reactors, and I am the Chairman-elect of that organization for 2009-10.
2. In my position, I interact with the School of Nuclear Engineering faculty, staff, and students regularly.
3. I believe Lefteri Tsoukalas as former Head of the School of Nuclear Engineering is a very untrustworthy person in my experiences with him. In fact, I would describe him as a "snake oil salesman" given my interactions with him and his "gang of four": Professors Tsoukalas, Mamoru Ishii, Chan Choi, and Tatjana Jevremovic.
4. I find Dr. Rusi Taleyarkhan to be an honest and trustworthy person.
5. One of the reasons I took my job in my current position was because Tsoukalas promised that the NE was going to get a new reactor. I later found out that this was not going to happen despite what Tsoukalas told me. I felt I was misled from the very beginning. I soon learned that these types of false promises were common for Tsoukalas and his gang.
6. I am aware of the first *Nature* article that came out in March of 2006 that was very negative against Dr. Taleyarkhan and which quoted Tsoukalas and Jevremovic. In several discussions with Josh Walter (who worked with Tsoukalas on sonofusion studies) which he initiated, I asked Walter if Dr. Jevremovic really knew anything about what she was saying in that article against Taleyarkhan. Walter told me that she had no idea what she was talking about, given her lack of experience in experimentation and the sonofusion experiments. This confirmed my understanding and I did not believe her statements either because she told me on several occasions that she is not an experimentalist.
7. Based on what I know about Tsoukalas and his gang, I am convinced that the *Nature* article quotes by Tsoukalas and Jevremovic were a set up, part of a concerted effort to ruin Dr. Taleyarkhan's career, and his credibility.
8. Another example of fraud by Dr. Tsoukalas occurred when I went up to Argonne National Laboratory with a junior faculty member in the fall of 2005 when he was in the

middle of his tenure process. He was up for an associate professor with tenure position. This faculty member came from Argonne and had worked at Argonne since 1989 until 2003 at which time he came to Purdue. When we arrived there, his contacts at Argonne who were chosen to write letters of recommendation showed the faculty member letters from Tsoukalas requesting recommendations. This faculty member was upset to learn that the letters stated that he was up for a full professor, not associate professor with tenure. Also, the time deadline for submitting recommendations was dated before the date of the letter itself. I believe this was another concerted effort by Tsoukalas to suppress this faculty member's promotion to increase the chance of promotion of a different junior faculty member, at the expense of the faculty member from Argonne.

9. This behavior of malicious acts of oppression and vindictiveness against faculty was common by Tsoukalas and his gang.

10. Tsoukalas also abused students. If Tsoukalas was against faculty, he would not only try and hurt those faculty members, but also their students. I know that Professor Tom Downar was constantly harassed by Tsoukalas and his cohort, and one particular in on particular event that I know of Professor Choi verbally abused one of Downar's students in the hallway of NUCL, telling her she was going to flunk the Qualifying Exam (which she wasn't even supposed to take) whether or not she took it. Downar subsequently left the University for the University of California at Berkeley. After he left, Tsoukalas was still attacking Downar's credibility.

11. Tsoukalas lied to me and others all the time. In November of 2005, a student of Jevermovic's, Shaun Clarke, had decided to leave her research group and work for Downar. Clarke was supposed to be a Teaching Assistant (TA) for my NUCL 205 class in the Spring of 2006, and I had already discussed that with Tsoukalas. After Clarke had announced his resolution, Tsoukalas then would not let Clarke be the TA for the 205 class. When I asked Tsoukalas for an explanation, he stated that some questionable things had come up in Clarke's academic record, and he would not be allowed to be the TA. Since I was aware of the actual situation (as Clarke had previously told me his side do the story, I knew that Tsoukalas's statements were a lie and this was really Tsoukalas' vindictiveness.

12. Another occasion where I caught Tsoukalas in a lie was after he returned from the American Nuclear Society conference in November of 2005. I was already deeply involved in the conversion of the Purdue University nuclear reactor, PUR-1, from highly enriched uranium to low enriched uranium, an effort which I was leading with assistance from the Department of Energy (DOE), Idaho National Laboratory, and Argonne National Laboratory. Tsoukalas had been passing through the main office, and told me that the conversion project was going to be put on hold (something I knew was not true). He specifically stated that someone at the DOE had told him there was a problem with the fuel. When I pressed him on that issue, and asked if he was confusing our fuel with the fuel type needed for the high-performance reactors, he became very irritated that I would question him, and was yelling at me from inside his office, telling me that he would talk to me about it later. During the subsequent meeting (the first opportunity that

was available to me, Ed Merritt and Ben Revis of the reactor staff were also present) the week before Christmas, I explained that this project was going to happen whether we wanted to or not, and I had verified that up through the chain at INL, and DOE, he became more congenial. He then gave Ben, Ed and myself each a \$100 bill, which he placed into Christmas cards in front of us, stating that he was normally more prepared for these gifts, and asked our forgiveness that he hadn't had time to prepare something better. I asked Ed, who has worked at Nuclear Engineering since the mid-70s if he had ever received a gift from the department head, and he said no.

13 I know of several more instances of student abuse and manipulation at the hands of Tsoukalas and his group. I know in 2007 that Tsoukalas and Jevremovic told Godfree Gert, a graduate student who came to work under Tsoukalas, that if he left Jevremovic's group to work for Downar, that he would lose his Visa and would have to go back to South Africa where he was from. Gert was outright threatened in this fashion by Tsoukalas and Jevremovic.

14. In early fall semester of 2005, graduate student Daniel Mundy had also decided to leave Jevremovic's research group, but was intending to leave the university altogether and attend graduate school at the Mayo Clinic in Rochester, MN. Tsoukalas met with Mundy to try to convince him to stay, and asked if Dan was concerned with taking the Qualifying Exam for his doctoral work. He stated that Dan shouldn't be concerned with that, as his advisor (Jevremovic) was on the graduate committee, and would be able to give him the questions before the exam. Dan told me of this right after his meeting with Tsoukalas, because he thought that was pretty far out of bounds and wanted to ask my opinion.

15. Tsoukalas many times talked of fraud with regard to Taleyarkhan's research. He told me that Taleyarkhan was going to be deported back to India because of his fraudulent research. Others in Tsoukalas' gang told me similar stories about Taleyarkhan and fraudulent research, and Choi even claimed that DARPA would come and attempt to seal up Taleyarkhan's lab because of fraud in Taleyarkhan's research. This statement to me by Choi was in the presence of Robert Bean from Idaho National Laboratory, and Ed Merritt from Nuclear Engineering at Purdue.

16. In January of 2006, I was present at the State of the School of Nuclear Engineering address given by Tsoukalas to about 180 students and graduate students of the School. At that time Tsoukalas said there was a severe problem of "Academic Dishonesty" among members of the department and with members publishing research that is not correct. Everyone knew he was talking about Taleyarkhan. This was a very significant statement to be made to the entire School, especially to the graduate students and students. I remember the slide that had "Academic Dishonesty" in red letters on the Power Point slide of challenges which the school had to overcome, which Tsoukalas had on the screen for that address.

17. I also learned from Josh Walter that Tsoukalas was in direct contact with Seth Putterman and Ken Suslick, two of Taleyarkhan's known competitors. I knew this

because Walter would tell me details about it. For instance, Brian Naranjo worked under Putterman and was also a detractor of sonofusion. Walter would tell me that Naranjo's work criticizing Taleyarkhan was to be published a week before its actual publication, and would tell me that Taleyarkhan was going to be exposed when that publication came out. I also discovered that Tsoukalas was in direct contact with these competitors and would provide regular email updates to his gang and Putterman and Suslick on the status of efforts against Taleyarkhan. Putterman and Suslick and Walter were on this email distribution list as part of the concerted effort to destroy Taleyarkhan.

18. Because of the actions of Tsoukalas and his gang listed above, and because of other deceitful and malicious behavior too lengthy for inclusion here, my health has been impacted, as well as others in the School of Nuclear Engineering over the years. It is very stressful, and has often left me irritable in my dealings with others after being subjected to the vindictiveness and oppression fostered by Tsoukalas and his gang. I have particularly been disgusted by their treatment of the students of the school of Nuclear Engineering.

19. I believe Taleyarkhan has also suffered immensely because of Tsoukalas and his gang. I would not trust Tsoukalas or his gang.

This affidavit is truthful, and is provided willingly by me, without influence from any other individuals.

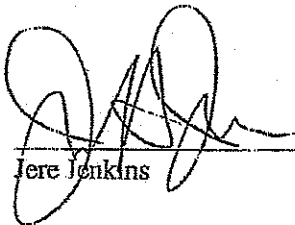
 3 FEB 08
Jere Jenkins

Exhibit B

2/2/2008

If called upon to testify under oath, I would testify as to the following:

Name: Darla J. Mize
Title: Administrative Assistant to the Head of
Nuclear Engineering
Employer: Purdue University
School of Nuclear Engineering
400 Central Drive
West Lafayette, IN 47907

I have held the position of Administrative Assistant to the Head of Nuclear Engineering since 12/02. I also act as the office manager for 5 staff and 13 faculty members.

1. After working directly with Lefteri Tsoukalas (former Head) for so many years, in my experience and in my opinion, the way he has handled himself and his position in the School of Nuclear Engineering ("SNE"), he is not trustworthy and he is not honest. I have many experiences that affirm this but this affidavit attempts to discuss a sampling of why I believe he is not to be trusted. On the other hand, in my experience, you cannot find a more trustworthy Professor in the SNE than Dr. Rusi Taleyarkhan. Dr. Taleyarkhan is honest, hard working, and is well-respected and liked by students, faculty and staff.
2. Given that I and others have suffered abuse from Dr. Tsoukalas as Head over the years, I have been eager to get this off of my chest. The information in this affidavit may be shocking to some, but it is all 100% true.
3. The standard joke around the SNE is "How do you know when Dr. Tsoukalas is lying?
Answer: When his lips are moving."
4. Dr. Tsoukalas' antics were so inappropriate, filled with lies, deceit, and unfair manipulation of fellow faculty, students, and staff that I felt compelled to keep my own detailed personal Journal of events that transpired over the years in the SNE (referred to herein as my "*Journal*" entries with dates and times). As can be seen by these facts, his antics are just too crazy for me to make up.
5. Shortly after coming to work in Nuclear Engineering, it became obvious that there was a very close relationship (an affair) between Dr. Tsoukalas and Dr. Jevremovic. She would come down to his office, close the door and spend 30 minutes to 1 hour, several times a day. When we would go out to department luncheons, other staff and I would witness them eating off of each others' plates. They would always sit next to each other and cozy up to each other. Students commented that they would see Dr. Tsoukalas and Dr.

Jevremovic at conferences walking arm and arm together. The students and we all knew that Dr. Tsoukalas was married and were shocked that they were so open about what was going on. It was at this point that the staff and students, as well as other faculty, began to lose respect for Dr. Tsoukalas.

6. It is important to note that two camps developed in the SNE. One, headed by Dr. Tsoukalas, included, of course his girlfriend with whom he was having an affair, Dr. Tatjana Jevremovic, but also Professors Chan Choi, Mamoru Ishii, Martin Bertodano, Frank Clikeman, Karl Ott, Takashi Hibiki, and even extended to former Dean Linda Katchi. Also a part of Dr. Tsoukalas' camp was Josh Walter and Anton Bougaev, his students. These faculty that continuously caused problems for the other faculty, staff and students, have been nicknamed the "Mafia" by the students, and some in the SNE also refer to them as the "Mafia." The students shared with the staff that 2 of the "Mafia", Dr. Choi and Dr. Jevremovic, have often spent an entire class time: "airing the department's dirty laundry", "speaking openly about Dr. Taleyarkhan being a fraud", and "maligning the staff". The students complained that they were very uncomfortable with such open malice. They complained to the staff that they paid a lot of money for an education that they thought they were not getting.
7. The other camp, and more trustworthy camp, includes Professors Shripad Revankar, Dr. Taleyarkhan, Tom Downar, Ahmed Hassanein, Alvin Solomon, Jean Paul Allain and Igor Jovanovic. These Professors often stand for what is right, for sound scientific research, and merit-based operation of the SNE. Unfortunately, I have witnessed first hand, day in and day out, how they have had to endure the malicious practices of the Mafia over the years.
8. It would be ironic if Dr. Tsoukalas discussed any misuse of funds by Dr. Taleyarkhan given Dr. Tsoukalas' rampant misuse of funds regularly as the Head of the SNE. Dr. Tsoukalas often was gone on personal travel on Purdue time and did not complete the appropriate/required travel documents. He would often be out of the country to Greece to visit his estranged wife and kids, for example, or in other countries, often claiming it was for a conference on Purdue time.
9. His misuse of funds in SNE was well known by me, and other staff of the SNE. For example, Dr. Tsoukalas often allowed Dr. Jevremovic to charge expenses to the department for herself (i.e. business travel, costs for publishing her book, \$1200 showcase for her and her students to use, etc.). This same privilege was not given to other faculty. His misuse of funds and abuse of power continued when he would always require his faculty to complete both personal and business travel documents 2 weeks in advance. He only enforced this rule on certain faculty members as an abuse of his power. Often Dr. Ishii and Dr. Jevremovic would complete the travel forms either days before they left on travel or when they returned. Dr. Tsoukalas often refused to sign travel documents for Dr. Downar, Dr. Taleyarkhan and a few of the other faculty when they did not turn them in 2 weeks prior to traveling. (*Journal 8/11/05 & 8/29/05*)
10. Dr. Tsoukalas often refused to review/sign-off proposals for certain faculty (i.e. Dr. Downar, Dr. Taleyarkhan and Dr. Revankar) risking their chances of obtaining funding. Other faculty (i.e. Dr. Ishii and Dr. Jevremovic) would submit proposals that Dr.

Tsoukalas would sign-off on and not even review them. Dr. Tsoukalas had a policy that all faculty were required to budget 5% of their academic salary on all proposals when allowed by the sponsor. Dr. Jevremovic would budget her salary but Dr. Tsoukalas would not always make her charge her time, allowing her to use the budgeted funds for other things. (*Journal 8/19/05*).

11. Perhaps the most blatant abuse of his power and misuse of funds came in 2005 when it came time for Dr. Tsoukalas to decide salary raises for SNE. For 2005, he withheld raises from several faculty members that he didn't like while giving an enormous 10% raise to Professor Dr. Jevremovic. Dr. Tsoukalas made some crazy story about why Dr. Jevremovic deserved a 10% raise, and Dean Katehi (also in his camp) approved the raise. Everyone in SNE was shocked to learn of the raise when faculty raises (unbeknownst to Dr. Tsoukalas) were reported in the Purdue paper for the first time that year. It was discovered that Dr. Jevremovic received the raise while others received no raise. Normal raises are approximately 2% - 3%. I know Dr. Taleyarkhan, Sean McDeavitt, and Solomon were just some of the faculty I remember that did not receive a raise. In my opinion, Dr. Jevremovic did not deserve that substantial of a raise, as she did not add that significantly to the SNE research funds, did not publish extensively, and did not perform any meaningful research for the SNE. On the other hand, if anyone should have received a raise it should have been Professor Karen Vierow who did all those things in spades. She received no raise. This was just one of many examples of blatant and unfair favoritism that Dr. Tsoukalas gave to Dr. Jevremovic over the years. Dr. Tsoukalas was caught red handed, however, because he did not know those raises would be published publicly that year.
12. The ultimate breakdown between Dr. Tsoukalas and Taleyarkhan occurred during Dr. Jevremovic's promotion meetings. Dr. Taleyarkhan, Downar, Solomon and others were most vocal against promotion of Dr. Jevremovic. Dr. Taleyarkhan always voted his conscience and he argued against her promotion around October of 2005. The primary committee, consisting of the top Professors in the department, would meet to discuss promotions and tenure of junior faculty. Dr. Taleyarkhan, Downar and Solomon were on that Primary Committee, along with others from Dr. Tsoukalas' camp. When Dr. Taleyarkhan voted against her promotion around October 2005, that's when Dr. Tsoukalas really got mad at Dr. Taleyarkhan: it was the beginning of the end of Dr. Taleyarkhan as far as Dr. Tsoukalas was concerned.
13. For example, Dr. Tsoukalas wrongfully and maliciously wrote up Dr. Taleyarkhan for breaching confidentiality in telling Solomon what transpired in a Primary Committee which Solomon missed because he was out of town. Solomon was angry that Dr. Tsoukalas had "stacked the Primary Committee" by holding a meeting purposely when Solomon was out of town. In fact, Dr. Tsoukalas would ask us when Professors were out of town or taking vacation and purposely schedule meetings so that they could not be present. Dr. Tsoukalas is so keen on telling us about confidentiality, but he is the worst one in the department about being confidential about anything.
14. When Dr. Tsoukalas heard it from Solomon, he retaliated against Dr. Taleyarkhan by writing him up for breaching confidentiality of a Primary Committee meeting when Dr. Taleyarkhan told Solomon, who missed the meeting, about events that had transpired at

the Dr. Jevremovic promotion meeting. I and others did not understand how this was a breach of confidentiality since Solomon was a Primary Committee member. Despite this, Dr. Tsoukalas wrote up Dr. Taleyarkhan and placed the write up in Dr. Taleyarkhan's file in an attempt to discredit Dr. Taleyarkhan and as retribution for voting against his girlfriend, Dr. Jevremovic. I was so disgusted that Dr. Tsoukalas did this, as he was just looking for something to blame on Dr. Taleyarkhan, no matter how ridiculous it was.

15. Dr. Tsoukalas often engages in fraudulent activity, especially when it came time for promoting Dr. Jevremovic. (*Journal 10/3/2005*). The normal process for a promotion document - prior to a Primary Committee (PC) meeting; the faculty member who is up for promotion is required to complete the President's Form 36 (promotion document). They would then forward the completed document to me via email, to review for completeness. I then make the necessary copies for each PC member to review during the meeting/discussion. In the case of Dr. Jevremovic and Dr. McDeavitt's promotion, Dr. Tsoukalas prepared the documents, not letting me review and later asked me to destroy documents. Because I knew he was out of line and acting unfairly, I still have those documents. (*Journal 10/3/05, 10/4/05 & 11/21/05*)
16. On October 3, 2005, Dr. Tsoukalas committed one of the most blatant acts of fraud I have seen. On that day, he asked me to destroy all copies of my version of the promotion documents and letters of support for Professors Dr. Jevremovic and McDeavitt who were up for promotion. He lied by telling me it was now required by Indiana law to destroy my records. I didn't believe that excuse and I knew he was lying when I saw what happened next.
17. He said he would handle sending out the letters for recommendation that were to be included in the promotion packages for Dr. Jevremovic and McDeavitt. This was highly unusual as I normally handled sending out those letters for the SNE. This was the first time I was asked to not handle these promotion packages, which is part of my job and to destroy my emails and records. (I kept them anyway).
18. I could not believe the fraudulent activity that happened next. I personally saw that Dr. Tsoukalas manipulated the letters for recommendation of McDeavitt by asking for recommendations for a promotion that McDeavitt was not up for. McDeavitt, an associate professor, was actually up for "associate professor with tenure". However, Dr. Tsoukalas maliciously altered the letters for recommendation I had made to state that McDeavitt was wrongly up for "full professor with tenure," a much higher promotion and a promotion that McDeavitt was sure to fail given his lack of experience and youth. The recommendations uniformly came back recommending that he not be promoted for that position. This led to McDeavitt not being promoted to the desired "associate professor with tenure" due to Dr. Tsoukalas' outright fraud in altering documents maliciously.
19. With regard to Dr. Jevremovic, not only did Dr. Tsoukalas stack the votes at the Primary Committee meetings, but he also deliberately removed adverse letters of recommendation from Dr. Jevremovic's promotion packet. He did not know that I knew this.

20. What's worse, after sending the promotion packet to Dean Katehi for Dr. Jevremovic on October 3, 2005, Dean Katehi sent the packet back to Dr. Tsoukalas. Dr. Tsoukalas then requested an extension to resubmit Dr. Jevremovic's promotion package and was given until noon to do so. Right away, Dr. Jevremovic was called into Dr. Tsoukalas' office and with the door open, was on a laptop at Dr. Tsoukalas' table, with her promotion package sitting next to her, making revisions to her own promotion package and with Dr. Tsoukalas helping her. Dr. Tsoukalas then, oddly, printed his own copies of the revised promotion package on a printer and placed them in an envelope. He asked Lori Flora, SNE secretary; to hand deliver the materials to Dean Katehi. It should be understood that Dr. Tsoukalas repeatedly told me, and ingrained this in me, that he demanded that candidates NEVER be allowed to see their own promotion packages as they are highly confidential. With Dr. Jevremovic, he made a special and unfair exception. This is another example of Dr. Tsoukalas breaching confidentiality yet again, while demanding others to be confidential.
21. The end result was Dr. Tsoukalas gaining the promotion of Dr. Jevremovic and completely tanking McDeavitt's promotion, all by his fraud.
22. I know that Dr. Tsoukalas improperly stacked the Primary Committee promotion votes for McDeavitt, Dr. Jevremovic, and Revankar by holding Primary Committee meetings on their promotion at times when he knew opposite-camp faculty members could not be present. I believe that Dr. Jevremovic did not deserve her promotion and that Dr. Taleyarkhan voiced his opposition for good reasons. I believe that McDeavitt and Revankar were also cheated by Dr. Tsoukalas out of their promotions. I believe Dr. Taleyarkhan spoke his mind because he is honest, and now is paying the price because he didn't go along with the "Mafia."
23. Dr. Tsoukalas would often meet with Dr. Ishii & Dr. Choi prior to a Primary Committee meeting to discuss how they would vote on a promotion case. (*Journal 9/21/05*) He once even met with Dean Katehi prior to an Engineering Area Promotion Committee ("EAPC") meeting and told her that they did not want Dr. McDeavitt or Dr. Revankar's case to go forward. This was highly unusual and wrong. He came back to the office and even bragged that neither case would go forward because the majority of the EAPC would follow Dr. Katehi's lead.
24. It would be surprising to me if Dr. Tsoukalas claimed that Dr. Taleyarkhan manipulated any of his students. That is not Dr. Taleyarkhan's nature at all and could not be more opposite. If anything, it is Dr. Tsoukalas that manipulates students. For example, two undergraduate students, John Hopkins and Felisa Limon, approached me after 5:00pm and told me that Dr. Tsoukalas, Dr. Jevremovic and Dr. Choi (separately) approached them and asked them to write a letter to Dean Jamieson because Nuclear was left off of the rankings in the US News and Report magazine. They said they felt uncomfortable about it, but that as students they felt they couldn't refuse them without somehow suffering. Their quote was, "What are we going to do, refuse? Yaw, right." (*Journal 8/23/06*)

25. During the time that Dr. Tsoukalas was causing extreme undo stress for Drs. Vierow, McDeavitt and Downar, he would often tell the secretary and I that he did not want to talk with any of the faculty, except Dr. Jevremovic and Dr. Ishii. They were always allowed to interrupt him at any time. I witnessed times when Dr. Ishii and Dr. Jevremovic would interrupt scheduled meetings between Dr. Tsoukalas and students. They would ask the students to excuse themselves while they spoke with Dr. Tsoukalas. Often the students would have to leave for a class before they were able to finish their meeting with Dr. Tsoukalas.
26. Dr. Tsoukalas continuously maligned some of the faculty (i.e., Professors Taleyarkhan, Downar, McDeavitt and Revankar) in discussions that he had with other staff and I. He would refer to them in a discriminatory fashion, using such words as, "stupid," "ignorant," "idiot," "liar," "thief," "fraud," "stupid Indian(s)," and "useless Indian(s)." Often he would talk about Dr. Revankar, Dr. Taleyarkhan and Dr. Gore (all of Indian descent) and would categorize them together, saying each was one of "them." On more than one occasion, he told me how he hated Gore and hated Indians.
27. If Dr. Tsoukalas has claimed that he never made statements to anyone that Dr. Taleyarkhan committed fraud or fabricated experiments, that would be a lie. I know of at least one occasion, at a departmental party that Dr. Tsoukalas was talking loudly and blatantly about Dr. Taleyarkhan and his alleged fraud in research. I remember I actually moved Dr. Tsoukalas away from the students to avoid the impropriety, and to keep Dr. Taleyarkhan from hearing, as he was standing near by.
28. Also, Dr. Tsoukalas would routinely bring up Dr. Taleyarkhan and fraud at faculty meetings where Dr. Taleyarkhan was present, and which I attend to take notes. It was obvious that Dr. Tsoukalas was trying to turn people against Dr. Taleyarkhan. At one point Revankar even jumped in and said such malignment should stop and that it was not appropriate to discuss in a faculty meeting.
29. With regard to Dr. Tsoukalas, he also talked directly to me and Lori Flora, the secretary, about Dr. Taleyarkhan's alleged research fraud. He would go so far as to tell us, "Don't get used to Dr. Taleyarkhan being around, he will be in a federal prison soon."
30. I know Dr. Tsoukalas spread rumors about Dr. Taleyarkhan and fraud in his research to *Nature*, *New York Times*, and *Journal and Courier*, the local paper. As usual, Dr. Tsoukalas is terrible about keeping things confidential. Many of us felt this was inappropriate and that he really did not care about the SNE. He was only concerned about his vindictiveness. Often when Dr. Tsoukalas would talk to reporters about fraud with Dr. Taleyarkhan's research, he would leave town (out of the country) to avoid calls from other reporters.
31. This happened especially with regard to the *Nature* article of 3/8/2006. The *Nature* article published on 3/8/2006 quotes Dr. Tsoukalas and Dr. Jevremovic in allegations against Dr. Taleyarkhan, his research, and his moral and ethical character. Shortly after the *Nature* article was published, we received a substantial amount of calls from reporters trying to ask questions about it. Dr. Tsoukalas was at that time out of the Country (his usual practice after talking to reporters about Dr. Taleyarkhan, so that he could avoid

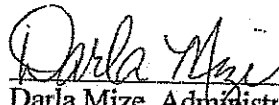
questions from the press. The calls were so great in number that it forced Dr. Jevremovic to come to the main office where I was. She came to talk with me and Lori Flora to get away from the calls. She turned to us, crying, stating "I'm really not such a bitch. I only did what I was told by him [Dr. Tsoukalas] in talking to *Nature*. Now I'm here all alone to deal with all this [reporter telephone calls] and it's not fair." This clearly signaled to me and Lori, who was present that Dr. Tsoukalas made Dr. Jevremovic say the things she said to *Nature*. I was not surprised that Dr. Tsoukalas would do that (it is his nature), but I was surprised because I had never seen Dr. Jevremovic cry.

32. We did not believe the allegations in the *Nature* article for many reasons. First, the claim that Dr. Taleyarkhan stole equipment from the lab is completely unbelievable. For Dr. Tsoukalas to say that Dr. Taleyarkhan stole the equipment must be false because Dr. Tsoukalas always knew what was going on in the department . . . always. I am sure he knew the equipment was to be moved from the lab and that Dr. Taleyarkhan did not "steal" it. Dr. Tsoukalas probably ordered the equipment to be moved. Also, it was unbelievable to me and strange that Dr. Tsoukalas would go to the press with this allegation. If someone really stole something, such an egregious act would cause Dr. Tsoukalas to tell everyone in the department. In this case, however, he told no one, and told the press first which was odd to us in the department who knew Dr. Tsoukalas. Plus, for Dr. Jevremovic to allege research fraud against Dr. Taleyarkhan in *Nature* made me and others laugh because we know Jevremovic is not an experimentalist, and that she has no right to criticize research when she herself does not know about experiments herself. Finally, it is just not in Dr. Taleyarkhan's nature to steal things. It is my opinion, that the entire *Nature* article was falsely concocted by Dr. Tsoukalas as an attempt to discredit Dr. Taleyarkhan.
33. I was aware that Dr. Tsoukalas formed a secret committee composed of Choi, Clikeman, Ott, Bertodano and Ishii who were assigned by Dr. Tsoukalas to investigate Dr. Taleyarkhan for research fraud. Dr. Tsoukalas attempted to keep himself separate from that committee, but often times he met with the committee and I remember him attending the committee meeting when they called in Adam Butt. As far as I know, it was Dr. Tsoukalas that called Adam Butt into his office to meet with the secret committee and Adam Butt did not approach Dr. Tsoukalas. Dr. Tsoukalas was heavily involved in forming and participating in that committee despite his efforts to tell us he was not involved.
34. I learned that the University told the secret committee to eventually disband because their committee was improper and such charges would have to be brought at the college or university level. A report of the committee was put in Dr. Taleyarkhan's file. As far as I know, that committee did not make itself known to Dr. Taleyarkhan it was all done behind Dr. Taleyarkhan's back.
35. Dr. Jevremovic and Dr. Tsoukalas would sometimes harass students that worked for Drs. Taleyarkhan, Downar and Revankar. Some of the students felt that their grades suffered because of the professor they worked for.
36. Prior to Dr. Vierow leaving her position at Purdue, Dr. Tsoukalas was talking with the secretary (Lori Flora) and me and started telling us a story about Dr. Downar and Dr.

Vierow having had an affair. He said that the real reason Dr. Vierow was leaving is that Dr. Downar dumped her and Dr. Vierow didn't want to continue working with Dr. Downar. After Dr. Tsoukalas left, I called the secretary into my office and told her that she was not to pass that information any further. We both agreed that we didn't believe the story. I felt it was just Dr. Tsoukalas trying to once again discredit Dr. Downar and Dr. Vierow's character.

37. Dr. Choi accused me of being a liar and a thief. The secretary Kellie told me that Dr. Choi came and told her (in front of his visitor) that one of the department projectors had come up missing. The department projectors are stored in my office (since I have a door that locks). Dr. Choi said that since I was the only person with a key to my office it seemed very suspicious. Kellie told him that I wasn't the only person who had a key to my office, but he and his visitor still proceeded to have a conversation in the front office about how it had to have been an inside job. (*Journal 7/16/07*)
38. Dr. Downar told me that Dr. Ishii asked him to join him for lunch at Heisei Restaurant. During lunch Dr. Ishii started telling Dr. Downar that he needed to drop the idea of speaking to the Dean about Dr. Tsoukalas and Dr. Jevremovic's inappropriate relationship. Dr. Ishii suggested that they just let Dr. Tsoukalas have his fun and that would give them something to hold over the Head so they could get what they wanted, when they wanted it. Dr. Downar said that since the students had started talking about it, he felt that it was in the best interest of the department/school to deal with the issue. Dr. Ishii became very angry with Dr. Downar and asked him to leave. Dr. Downar did not even have the opportunity to eat his lunch.
39. The antics of Tsoukalas and his camp have caused me great hardship and have even affected my health. It would not surprise me to learn that Dr. Taleyarkhan suffered more significant hardship and ill health given the wrongful, malicious acts Dr. Tsoukalas and his camp have taken against Dr. Taleyarkhan.

This affidavit is being completed and signed willingly and without influence or duress from any other individuals.



Darla Mize, Administrative Assistant
School of Nuclear Engineering
Purdue University

Exhibit C

Affidavit - February 2, 2008

My name is Erica Timmerman and if called upon under oath, I will testify that the following is completely true and accurate.

I came to Purdue in April 2002 as the Secretary to the Dean of Engineering for Linda Katehi. From there I went to Nuclear Engineering in November 2002 to work as the Secretary in the main office. During that time, I had built relationships with many of the faculty and even several students in Nuclear Engineering. I had a lot of respect for them. I spent 2 years in that position before moving to Electrical Engineering in November 2004 because I wanted to work more closely with the students. While I was in Electrical Engineering I kept in close contact with Darla Mize. In addition Dr. Choi actually came to me on one occasion and made it clear that he wanted me back in the Nuclear Engineering department. The Administrative Assistant for Student Services position became open in March 2006 and I applied and was offered the job in April 2006. I have continued to work in the same position.

Based on my experiences and what I have observed, I believe Dr. Lefteri Tsoukalas is deceitful and vindictive and in general a jerk. It tears me up because when I first came to Nuclear Engineering I really thought he was a great guy, but his true side was revealed on so many occasions that he is absolutely the most untrustworthy person I know.

I have never had any problems with Dr. Taleyarkhan. He has also been very kind and attentive and I know from dealing with students on a daily basis that he was also good with the students. While I cannot testify about his research I can testify about his character and I believe that Dr. Taleyarkhan is a great guy with morals and very respected by the staff and students as well as the faculty who are not in the Tsoukalas hate group. The Tsoukalas group or hate group is also referred sometimes by those of us that know them as the "Mafia." Tsoukalas' group truly operates like a mafia.

I lost a lot of respect for Dr. Tsoukalas about a year after I started in Nuclear in November 2002 in the main office. It became very clear that something was going on between he and Dr. Jevremovic. In my opinion, an affair, as it was obvious they were more than colleagues. In 2003, it became more clear as I would witness them coming in on multiple mornings together and leaving in the evenings together. They were constantly going to each other's office, mostly she was in the Head's (Tsoukalas') office in the main office.

I witnessed Dr. Tsoukalas abuse his power by manipulating students and faculty. For example, he supported many of Jevremovic's students on the department funds but declined supporting certain other professor's students for no good reason. The students (and even the janitors) caught on very quickly to their "relationship" as well and came to us (myself and Darla Mize) very concerned about the school's reputation, as were we. We thought this reflected horribly on the school and many students complained. They stated they (Tsoukalas & Jevremovic) would go to conferences together and be inseparable as well as eat off each other's plates. One of the student's even lived within

site of Dr. Jevremovic's house so several students made it a game to see how many nights Dr. Tsoukalas' car would be there all night. It was very embarrassing to staff, faculty and students.

I made the decision to return to Nuclear in April 2006 because it was a good career move for me. I thought I could ignore what was going on and do my job without worrying about what was going on within the department.

On July 18, 2006 I had my first experience that concerned me very much and made me question my decision on returning to Nuclear Engineering. I had a meeting with Darla & Dr. Tsoukalas about teaching assignments for the fall. After going over a few things Darla asked about adjunct professor positions for Drs. Vierow & McDeavitt because we needed to get them certified at the graduate school to serve on their student's advisory committees. Dr. Tsoukalas was very mad about it and made it clear we do not GIVE out adjunct positions, especially to faculty who are leaving us for better things. He also indicated there was no reason for McDeavitt to even be an adjunct because he doesn't have anything left here. He stated that adjunct positions are for people who want to help our school, almost honorable positions, and must be reviewed by the search committee.

I had previously worked with both Dr. McDeavitt and Dr. Vierow so I was floored by this. They were great professors and the students really liked them. I had never heard anything negative about them before.

It is absolutely untrue that Dr. Tsoukalas never spoke about Dr. Taleyarkhan and fraud to anyone. On August 15, 2006 Dr. Tsoukalas stopped by my office to discuss courses. He instructed me not to cancel any of the courses yet until we saw if 7 students registered, which he indicated he doubted. He said he would let the Dean make the decision to cancel Dr. Taleyarkhan's class because he (Tsoukalas) "didn't want to get involved in all of that mess with Taleyarkhan." Someone stood outside my office at this point who I believe was Dr. Jevremovic (due to the heels) so Dr. Tsoukalas shut my door. He told me about the Dr. Taleyarkhan investigation: that there was a group of 3 people who were top secret who were investigating. This group decided it should be investigated further so a group of 5 (or 7?) was pulled together and had 3 months to complete their investigation. He then went into detail about what they were investigating: that Dr. Taleyarkhan had used this device which he hid on a table to make neutrons show up in his experiment. Also, that Dr. Taleyarkhan had written papers in January that were independent studies supporting Dr. Taleyarkhan's findings and he put Yiban Xu and Adam Butt's name on the papers without their knowing. He said Adam found out and came to Dr. Tsoukalas about it. He also said Dr. Taleyarkhan would be investigated by the government because he used government money on all of the equipment and salaries, but didn't name them in the papers because he knew they were false. He said once they found him guilty he would never find a job here (meaning in the US) and would be forced to go back to India. But he wouldn't be able to show his face there either so he would have to live in the shadows far away from towns and the public. He also said Dr. Revankar put his name on one of Dr. Taleyarkhan's papers. He (Tsoukalas) wasn't sure why, but thought Dr. Taleyarkhan had bullied him because they were both from India and Dr. Taleyarkhan was

on the primary committee and could get him promoted. (That's not like Dr. Taleyarkhan at all, by the way). Dr. Tsoukalas went on to say that Dr. Revankar hasn't published a single paper since his last promotion & we don't promote someone who does that. He then went on to say that Dr. Taleyarkhan had convinced Dean Gore to do some things and Dean Gore was probably doing it because he was from India, too. Dr. Tsoukalas said he (Dean Gore) would eventually get in trouble, too. He said that no one realized how serious it was because the Provost didn't want any negative publicity because she wanted to become the next president. She is hoping Dr. Taleyarkhan would just leave and they could close the investigation without everyone knowing. Dr. Tsoukalas said they should have listened to him over the past two years. He said he had been trying to tell them about Dr. Taleyarkhan.

I was in shock and disbelief after he left my office. At this point I lost any respect I had left for Dr. Tsoukalas. It was one thing to tell me about the investigation, but to make comments about Indians, that really upset me. I realized at this point just how serious this was and that Dr. Tsoukalas would go to any distance to bring Dr. Taleyarkhan down no matter how he did it.

On August 23, 2006 Dr. Tsoukalas asked me to come to his office. He asked me about one of our past students and wanted the student's records. He said that this student had worked with Dr. Downar as a post doc after graduating, but something had happened between the two of them over PARCS (Downar's research) and the student left. However the student struggled to find a job because of Dr. Downar and that the student had committed suicide and Dr. Tsoukalas thought it was because of what happened with Downar. I think this was just another story by Tsoukalas to discredit another fellow faculty member. He has a repeated history of wrongfully discrediting other faculty in the Nuclear Engineering department.

On August 24, 2006 Dr. Choi requested that I switch two class times as he had cleared it with his class and Dr. Jevremovic was clearing with her class that afternoon. I informed him the class time he had requested was considered an "illegal time" according to the sheet I had for scheduling. He told me I was to do whatever I had to do to get it changed, "Tell them it is a seminar; lie if you have to,"

On September 5, 2006 Darla & I met with Dean Jamieson per our request. She expressed her concerns over what was going on in the department and was aware of the situations and apologized for what we were going through. She gave us her word that if we were pushed out of the school she would get us a position somewhere else in engineering so we should not worry about that. She also told us to come to her if we were asked to do anything uncomfortable.

On September 18, 2006 Kellie Reece (main office secretary) informed me that Dr. Choi had sent an email about a link on the NE website for Dr. Taleyarkhan's sonofusion lab. A student had brought it to Dr. Choi's attention and he responded that he would bring it to the attention of head and website specialist for immediate action.

On September 19, 2006 I talked to Kellie and she said she implied that it was to be removed, which was exactly what I thought. I talked to Darla about it and she suggested I forward it to the Dean to make the decision.

On September 20, 2006 the Dean responded and said to do as requested by Professor Choi and not to get in the middle of it. That she would look into it and communicate with Dr. Choi & Dr. Tsoukalas. I therefore removed the link from our website per her instruction. That afternoon I started to panic because Dr. Choi didn't specifically say to "Remove the link" even though it was implied. I talked to Darla and she told me to put the link back up and wait for Dr. Choi or directly tell me to remove it.

On September 21, 2006 Dr. Choi confronted Kellie & I about the situation. He said that somehow the Dean had got the email and was trying to "create a war in our department". He showed us the email he received from the Dean instructing them to not make any decisions about anything pertaining to Dr. Taleyarkhan before getting it cleared through her. Dr. Choi asked us if we knew anything about it and we both said no. He said he never directly said to remove the link even though the email implied it. I told him that I didn't know anything and didn't want to be involved in it. I did not want to lie, but I honestly feared for the retaliation if I said that I did send it to the Dean. I was trying to do the right thing for Dr. Taleyarkhan, whom we all respect and admire. We had seen Dr. Choi on numerous occasions be very hateful and mean and I did not want to go through it.

In the Fall 2006 we had an applicant, Thomas Adams who applied for graduate school to work under Dr. Taleyarkhan. I handle all of the applications personally. This student was from Crane Naval Surface Warfare. After the Graduate Committee reviewed his application, Dr. Choi looked at the overall comments and asked that Mr. Adams take the GRE, which he agreed to do. Mr. Adams emailed his un-official GRE scores to Dr. Taleyarkhan and the application was brought to the table at the Graduate Committee meeting on December 5, 2006. Dr. Taleyarkhan agreed that he might not be as strong, but he was coming already funded as well as the fact that we had admitted a similar student, Jack Fulton and that student would soon be receiving his PhD. The committee agreed to admit Mr. Adams with multiple conditions and as a MS seeking student.

I believe they didn't want to bring any question into Jack Fulton's file because Jack should never have received a PhD. It is very clear that you cannot obtain a graduate degree in NE on-line, however Jack worked with Dr. Tsoukalas who allowed him to do "Independent Studies" (NUCL 597 / 697) for 18 of his 30 credit hours for which he was not present on campus. I was told when I started that a student could only use 2 three-credit "Independent Study" courses on their plan of study. These courses were taken on his own under the direction of Dr. Tsoukalas with the exception of one, which was done under the direction of Dr. Jevremovic. Our graduate manual indicates a student must include at least three 600-level courses on their plan of study (Jack had 1 course at the 600-level, which was the 697 Independent Study). Also, according to our graduate manual PhD students are supposed to take 6 credits of mathematics or computer science, which Jack did not take any, nor is there any record indicating the Graduate Committee

waived this requirement. The Graduate School allows 12 credits to be transferred from non-degree, which Jack did before gaining admission into NE, however Dr. Tsoukalas requested a waiver of this requirement to allow Jack to use 18 credits of his non-degree work. Dr. Tsoukalas also requested the "B" or better requirement be waived as Jack received a "C" in Nuclear 551. Upon Jack defending his thesis Jack made several trips to meet Dr. Tsoukalas on campus to go over his final thesis. Jack commented several times that he was waiting on Dr. Tsoukalas to finish this or write that, indicating many times that Dr. Tsoukalas was actually writing his thesis for him. In my opinion we handed Jack Fulton a PhD for doing no work. I believe Dr. Tsoukalas wrote Fulton's thesis and wanted to get money and equipment from Crane by letting Jack slide under the radar getting his PhD as a "trade". I know for a fact that Jack organized some equipment be shipped to NE from Crane. This left me feeling very uneasy, and distrustful of Dr. Tsoukalas.

I have never seen Dr. Taleyarkhan manipulate or pressure anyone, much less a student. I cannot say the same for Tsoukalas and his group. Just yesterday (February 1, 2008), I spoke with a student who was betrayed and manipulated by Dr. Tsoukalas and Dr. Jevremovic. Godfree Gert was highly recruited by Dr. Tsoukalas and subsequently admitted into our graduate program to work under the direction of Dr. Tsoukalas according to his offer letter. Once Godfree came to Purdue he was immediately pushed into Dr. Jevremovic's group because she needed students. Godfree was very upset and torn because he had signed on to work with Dr. Tsoukalas but he tried to work with Dr. Jevremovic. In 2006 he even contemplated leaving Purdue without a degree because he didn't believe in her work or want to be associated with her whatsoever. However he didn't want to have wasted all of the time he put into getting his degree. The reason I spoke to him yesterday was because he defended his final examination this past fall and Dr. Jevremovic is refusing to sign his form. The Graduate School has requested it be submitted by Monday, February 4. Godfree called me to find out about switching advisors to complete his PhD because Dr. Jevremovic would not sign his form to let him graduate. He is the only one suffering in this situation. Godfree is just one of many students who have suffered in our department at the hands of Tsoukalas and his group.

When Tsoukalas stepped down as Head from the Nuclear Engineering department, we all knew that he was asked to step down. However, Tsoukalas tried to claim to everyone, and to this day, that the reason he stepped down is because he did not want to be involved with Taleyarkhan and his research under his direction. We all know this to be another one of Tsoukalas' stories.

This affidavit is completed willingly without any influence or duress by any other individuals.

Erica Timmerman

Erica Timmerman
Administrative Assistant for Student Services
Nuclear Engineering
Purdue University

Exhibit D

PURDUE

UNIVERSITY

OFFICE OF THE VICE PRESIDENT FOR RESEARCH
Office of Research Administration

Personal and Confidential

December 15, 2006

Prof. Rusi Taleyarkhan
c/o Mr. Larry Selander
Duane Morris LLP
227 West Monroe Street
Ste. 3400
Chicago, IL 60606

Leah H. Jamieson, Ph.D.
Dean
College of Engineering
ENAD
Purdue University

Re: Inquiry Committee Proceedings Under Executive Memorandum No. C-22

Dear Prof. Taleyarkhan and Dean Jamieson:

I write on behalf of the Inquiry Committee (IC) to provide the Committee's final conclusions regarding allegations of potential misconduct that have been made against Dr. Rusi Taleyarkhan.

The Inquiry Committee has considered the allegations set forth in the communications dated September 12, 2006 by Dr. Martin Lopez de Bertodano and September 5, 2006 by Dr. Lefteri Tsoukalas. The specific allegations considered by the IC were as follows:

- That the two publications ("Confirmatory Experiments for Nuclear Emissions During Acoustic Cavitation," *Journal of Nuclear Engineering and Design*, 235, pp 1317-1324, 2005, Xu, Y., Butt, A.; "Bubble Dynamics and Tritium Emission During Bubble Fusion Experiments," *Proceedings of the 11th International Tropical Meeting on Nuclear Reactor Thermal-Hydraulics (NURETH-11)*, Avignon, France, October 2-6, 2005) were "...nothing but a contrived and hurried attempt to stage the appearance of 'independent confirmation' of sonofusion claims."
- "... that Dr. Taleyarkhan participated in the Purdue confirmations reported in the two papers of his sonofusion experiment. The Purdue confirmations are not independent because the tritium measurements were performed with his tritium measuring instrument by a student working for him."

The Committee did not interpret these allegations as allegations of fabrication, falsification, or plagiarism.

Howe Hall of Administration, 3rd Floor • 610 Purdue Mall • West Lafayette, IN 47907-2040
(765) 494-6840 • (765) 495-2589 • psdunn@purdue.edu

12/15/2006 FRI 08:08 [TX/RX NO 8299] 002

Page 2, Prof. Rusi Taleyarkhan and Dean Leah H. Jamieson
December 15, 2006

The Committee determined that the Bertodano and Tsoukalas allegations undertake to allege a serious deviation from practices "that are commonly accepted within the scientific and academic community for . . . reporting research," within the meaning of the definition of "research misconduct" under Executive Memorandum C-22.

Drs. Bertodano and Tsoukalas submitted no documentary evidence in support of their allegations. The Committee requested and received evidence from Dr. Taleyarkhan, Dr. Xu, and the others named as authors on the referenced publications. The Committee also requested and received evidence from Information Technology at Purdue (ITaP) regarding e-mail communication between Dr. Xu and Dr. Taleyarkhan relating to the manuscripts that are the subject of the allegations. Upon consideration of the evidence received, by unanimous vote, the Committee has concluded that there is insufficient evidence to warrant further pursuit of the Bertodano and Tsoukalas allegations.

As to the first allegation, the IC found no evidence that the scientific process leading to the abovementioned publications was unduly hurried, in light of the potential impact of the work. The IC recognizes that the appearance of Dr. Taleyarkhan's name in the Acknowledgments section of the NED publication undercuts the claim of independence. However, there is no evidence to indicate that Dr. Taleyarkhan played a role in acquiring or analyzing the data. Furthermore, evidence based on computer records shows that the first version of the NED manuscript was indeed authored by Dr. Xu, as reported by the fact-finding committee of the School of Nuclear Engineering. The tritium measurements were made using the Beckman LS6500 system. During the time Dr. Xu made the tritium measurements, he was, in fact, paid by the School of Nuclear Engineering. It is true, however, that Xu received advice from Dr. Taleyarkhan (hence, the Acknowledgement). While these facts may undercut the claim of "independent confirmation," the IC does not believe that the evidence points towards intent to mislead the scientific community.

Having reached this conclusion, the Committee nevertheless desires to convey a number of concerns it has regarding the conduct of Dr. Taleyarkhan (RT) with respect to the Xu papers in question.

1. Dr. Taleyarkhan has displayed what might be characterized most favorably as severe lack of judgment regarding his involvement with the "independent confirmation" experiment performed by Dr. Y. Xu. The IC found no evidence that would contradict Dr. Taleyarkhan's claim that he (Dr. Taleyarkhan) played absolutely no part in setting up or running experiments, nor obtaining data and conducting analyses thereafter, for the experiments documented in the Xu et al. papers. However, his involvement did consist of suggestions for inclusion of various specific technical details, text used to communicate with journal editors, and rebuttal of points made by referees. While one might dismiss the first two examples as providing guidance to an inexperienced junior colleague, the last instance is what would be expected from a co-author. The sum total of this involvement, which goes far beyond Dr. Taleyarkhan's description of "stylistic edits" undermines the claim of independent confirmation. The acknowledgement in the NED paper ("...setup and design...") grossly understates the level of involvement practiced by Dr. Taleyarkhan in the process leading to the published work.

Page 3, Prof. Rusi Taleyarkhan and Dean Leah H. Jamieson
December 15, 2006

2. The Committee has difficulty reconciling the inclusion of Adam Butt as a co-author on the Xu publications in light of his contributions, especially when contrasted with the contributions of Dr. Taleyarkhan, which merited only an acknowledgement. This is an inconsistency that any experienced senior researcher would recognize. If Adam Butt deserved to be a co-author, so, too, did Dr. Taleyarkhan.
3. Although it appears that Dr. Taleyarkhan believes that the measurements by Dr. Xu constituted an independent confirmation of his earlier results, it is clear to the members of the committee that the great majority of the scientific community would disagree. Independent confirmation would have the following characteristics:
 - a. The experimental apparatus with which the experiment was performed would be significantly different from that used in the initial experiments. In particular, the critical gamma-ray detector (Beckman Instruments) would not be the very same one (with the same calibration curve) used in the earlier experiment.
 - b. The experiment would be performed by scientists who were not associated with Purdue University, and certainly not by individuals having close relationships to Dr. Taleyarkhan.
 - c. The involvement by Dr. Taleyarkhan would be minimal.

The fact that Dr. Taleyarkhan fails to acknowledge that these characteristics are essential to the credibility of the claim of independent confirmation is deeply troubling to the Committee. There is a clear danger that future such claims by Dr. Taleyarkhan will lack these same characteristics.

4. Dr. Taleyarkhan has placed junior scientists (postdocs, graduate students) in precarious positions in order to promote his research program. It is, of course, natural to mentor and assist junior people as they make the transition from inexperienced researcher to one able to lead an independent program. Dr. Taleyarkhan, however, has abused his privilege as senior scientist. He presented Adam Butt with a manuscript virtually hours before it would be sent to the editor of NED. Butt was told by Dr. Taleyarkhan, not Dr. Xu, that he would be an author. Being a junior researcher, Dr. Xu was in no position to contest this decision by Dr. Taleyarkhan. Such a decision is typically left to the primary author, not an individual named in the Acknowledgements.

The Committee has also taken note of other "independent" confirmatory research on sonofusion promoted by Dr. Taleyarkhan. Dr. Taleyarkhan apparently hosted an external group led by Edward R. Forringer, Assistant Professor of Physics, at Le Tourneau University to perform an experiment using Purdue facilities. A press release from Le Tourneau University dated November 17, 2006 states that "Two students and I went to Purdue University in May to conduct our own research, collecting, analyzing, and interpreting our own data that substantiated his previous work." Forringer published a paper in the Proceedings of the American Nuclear Society International Conference, Albuquerque, NM, Nov. 2006. It is highly doubtful that Forringer's results will be accepted by the scientific community as an independent test of previous results (as stated in the Introduction to their

Page 4, Prof. Rusi Taleyarkhan and Dean Leah H. Jamieson
December 15, 2006

manuscript). In the opinion of the IC, this is representative of poor judgment by Dr. Taleyarkhan and is unlikely to be accepted as confirmatory evidence by the scientific community.

Upon consideration of the evidence received, the Committee concludes that there is insufficient evidence to warrant the formation of an Investigation Committee to further pursue the allegations that have been made by Drs. Bertodano and Tsoukalas with respect to Dr. Xu's aforementioned publications.

Pursuant to Executive Memorandum C-22, this report will be securely stored in the office of the Research Integrity Officer for as long as required by federal regulations, and will then be destroyed. Evidence received and reviewed by the Inquiry Committee in addressing the Bertodano and Tsoukalas allegations will be maintained as an archive with this report and destroyed when the report is destroyed. In keeping with Executive Memorandum C-22, please keep your copy of this report and its contents confidential.

Sincerely,

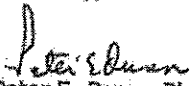

Peter E. Dunn, Ph.D.
Associate Vice President for Research
Research Integrity Officer

Exhibit E

U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON SCIENCE AND TECHNOLOGY

SUITE 2320 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6301
(202) 225-6375
TFY: (202) 226-4410
<http://science.house.gov>

March 21, 2007

Dr. Martin C. Jischke, President
Purdue University
1031 Hovde Hall, Room 200
West Lafayette, IN 47907-1031

Dear Dr. Jischke:

Pursuant to Rules X and XI of the United States House of Representatives, the Committee on Science and Technology is delegated "the function of reviewing and studying, on a continuing basis, all laws, programs, and Government activities dealing with or involving nonmilitary research and development." Committee Rule 3(a)(5) authorizes the Subcommittee on Investigations and Oversight to carry out "general and special investigative and oversight authority on all matters within the jurisdiction of the Committee on Science and Technology."

Since 1981, this Subcommittee has examined the processes used by universities to investigate allegations of misconduct by their professors, staff and students in the conduct or representation of their research. Under the terms of the Federal Policy on Research Misconduct, agencies providing federal research funds depend on the recipient institutions to deal with questions raised about the integrity of all institution-conducted research, whether or not it is funded by a federal agency.¹ The credibility and strength of the U.S. research enterprise depends on the willingness of participating universities to assure the maintenance of ethical conduct in all research activities carried out by the faculty, students and other researchers under their jurisdiction. Misconduct in non-funded research will invariably raise questions as to whether the federal government can rely on the results of the institution's federally funded research.

Purdue University has recently looked into a case of alleged research misconduct. Despite the University's statement that no misconduct had occurred, many disturbing questions remain about the scope and adequacy of the investigation. Accordingly, the Subcommittee is seeking information relating to Purdue University's inquiry and/or investigation into allegations concerning the research and publications of Dr. Rusi Taleyarkhan, Purdue's Arden L. Bement Jr. Professor of Nuclear Engineering, and others.

¹ 65 *Fed. Reg.* 76260, 63.

In March 2002, Dr. Taleyarkhan *et al.* reported in *Science* that research he conducted at the Oak Ridge National Laboratory (ORNL) demonstrated that using sound waves to compress bubbles in deuterated liquids until they collapsed produced fusion under laboratory conditions.² If accurate, this work could result in a source of energy free of many of the environmental problems produced by existing energy types. This particular paper was controversial from the start. From 2002 to 2004, teams at both ORNL and Purdue attempted to replicate the earlier research. Neither was successful.³ However, Purdue officials persuaded the Purdue team to postpone publishing its results for a year. Then, in the summer of 2005, two students working in Dr. Taleyarkhan's laboratory published an "independent" verification of Dr. Taleyarkhan's work.⁴

In early 2006, questions raised by other nuclear engineering professors about this work resulted in the head of Purdue's nuclear engineering department conducting an informal investigation about the independent verification publication. That inquiry resulted in one of the students saying that he had nothing to do with the research in the article he supposedly co-authored, and the second student refusing to state who had written the final article, saying it would jeopardize the "confirmatory" nature of the research. In March of 2006, allegations of misconduct became public in *Nature* magazine. These included claims that Dr. Taleyarkhan had refused to share data; removed critical equipment from the laboratory, thereby hampering efforts to replicate his work; blocked publication of negative results by colleagues at Purdue; and manipulated the development and publication of papers asserted to be "independent" verification of his work by papers that were, in fact, from members of his laboratory staff.⁵ Subsequently, a written allegation of fraudulent data was received.⁶

Responding to the concerns raised by other Purdue professors on the team that had been unable to confirm Dr. Taleyarkhan's work and the *Nature* articles, Purdue in March initiated an inquiry "to conduct a thorough review of the work and any concerns expressed about it," according to Provost Sally Mason.⁷ The inquiry committee submitted a report to the vice president for research in June 2006.⁸ In July, Provost Mason stated that a formal investigation would be initiated. Under Purdue's rules, an investigation is initiated only after the initial inquiry finds that "an allegation or apparent

² Taleyarkhan, West, Cho, Lahey, Nigmatulin, and Block, "The Analysis of Bubble Implosion Dynamics," *Science* 295, 1868 (2002).

³ Shapira and Saltmarsh, "Nuclear Fusion in Collapsing Bubbles - Is It There? An Attempt to Repeat the Observation of Nuclear Emissions from Sonoluminescence," *Phys. Rev. Lett.* 89, 10, 104302 (2002); Tsoukalas, Clikeman, Bertodano, Jevremovic, Walter, Bougaev and Merritt, "Tritium Measurements in Neutron-induced Cavitation of Deuterated Acetone," *Nuclear Technology*, Vol. 155, 248, August 2006.

⁴ Xu and Butt, "Confirmatory Experiments for Nuclear Emissions during Acoustic Cavitation," *Nuclear Engineering and Design*, 235, 1317-24 (2005)

⁵ "Is Bubble Fusion Simply Hot Air?" and "Bubble Bursts for Table-Top Fusion," *Nature*, March 6, 2006, doi 10.1038/news 060306-2-3.

⁶ Letter from Dr. Ken Suslick to Dr. Peter Dunn, June 1, 2006.

⁷ "Purdue initiates objective review of 'bubble' fusion," Purdue News Service, March 8, 2006

⁸ "Sonofusion research examination committee completes review," Purdue News Service, June 20, 2006.

Dr. Fischke
Page 3
March 21, 2007

instance of research misconduct warrants an investigation." The University has 90 days to complete such an investigation.⁹ An investigation also requires that the funding agency be informed of the action.¹⁰ But, inexplicably, in September – just as the 90 days were to expire – Charles Rutledge, Purdue's vice president for research, asked one of the complainants to provide a "written allegation of research misconduct" which apparently halted the on-going investigation and was used to trigger the procedures for a second inquiry into research misconduct.¹¹ On February 7, 2007, Purdue issued a statement that "[t]he committee determined that the evidence does not support the allegations of research misconduct and that no further investigation of the allegations is warranted."¹²

In a *Nature* article reporting on Purdue's release of the inquiry's results, Dr. Ken Suslick of the University of Illinois, Urbana-Champaign, criticized Purdue's inquiry for failing to address the concerns he had expressed in writing to your university on June 1, 2006. These included the apparent duplication of data sets in supposedly independent publications and possible manipulation of the neutron spectrum data reported by Dr. Taleyarkhan to avoid comparison to that produced by the standard radiation source californium-252. Dr. Suslick also stated he was never contacted or interviewed by those conducting Purdue's inquiry nor were others who had made allegations, including the author of the written allegations. Further, Dr. Peter Dunn, the associate Vice President for research, who oversaw the inquiry would not confirm that Dr. Suslick's allegations were addressed.¹³

Dr. Taleyarkhan's work has been supported by both the Department of Energy and, more recently, by the Defense Advanced Research Projects Agency (DARPA), according to Dr. Seth Putterman of the University of California at Los Angeles, the principal investigator. Dr. Suslick also worked on the DARPA grant. According to Department of Defense Instruction (DODI) 3210.7, the implementing authority for the Federal Research Policy for Misconduct at the Department of Defense and its component organizations, Purdue, "following an allegation of research misconduct made directly to it, whether related to an ongoing award . . . , the research institution is responsible for response to the allegation. This includes conducting the inquiry, investigation and, if applicable, adjudication of the application."¹⁴ Dr. Suslick's statements argue that Purdue has failed to meet these obligations.

Accordingly, by this letter the Subcommittee on Investigations and Oversight requests copies of any or all reports of inquiry or investigation prepared by any committee or equivalent organization constituted by Purdue University for the purpose of reviewing allegations of misconduct relating to bubble fusion research conducted by Dr. Rusi Taleyarkhan, his laboratory assistants, Purdue students, including post-doctoral

⁹ "Executive Memorandum C-22," Purdue University, Office of the President, Sept. 6, 1991, pp. 2-3.

¹⁰ 65 *Fed.Reg.* 76260, 63.

¹¹ Letter dated Sept. 5, 2006, from Charles Rutledge to Lefteri Tsoukalas.

¹² "Purdue integrity panel completes research inquiry," Purdue News Service, February 7, 2007.

¹³ "Disputed inquiry clears bubble-fusion engineer," *Nature*, February 15, 2007, pp. 690-91.

¹⁴ DODI 3210.7, Enclosure 4, Section E4.1.3, May 14, 2004 (emphasis added)

Dr. Jischke
Page 4
March 21, 2007

students, or any other Purdue faculty members. Please deliver two copies of the requested reports to the offices of the Committee on Science and Technology in Room B-374 of the Rayburn House Office Building by 5 p.m. on Friday, March 30, 2007. If your staff has any questions or needs further information, please contact Edith Holleman, Subcommittee counsel, at (202) 225-8459 or James Paul, Subcommittee professional staff member, at (202) 226-3639.

Thank you for your assistance in this matter.

Sincerely,



BRAD MILLER

Chairman

Investigations and Oversight Subcommittee

cc: Rep. James Sensenbrenner, Jr.
Ranking Member
Investigations and Oversight Subcommittee

Exhibit F

Appendix B – Tabulation of Allegations

The Inquiry Committee received original allegations from the following individuals and organizations:

- Office of Naval Research (ONR) (anonymous underlying source)
- Kenneth Suslick (University of Illinois)
- Lefteri Tsoukalas (Purdue University)
- Seth Putterman (UCLA)
- Brian Naranjo (UCLA)
- Joshua Walter (Purdue University)

Some persons also endorsed or adopted by reference allegations that originated from others. Several of the allegations were duplicative, overlapping, or open-ended. The Inquiry Committee organized the allegations according to the publication or event that was the primary focus of the allegation.

A. Publication: R. P. Taleyarkhan et al., Evidence for Nuclear Emissions During Acoustic Cavitation, *Science* 295, 1868 (2002)

1. Allegation: Taleyarkhan used ^{252}Cf to fabricate and/or falsify his bubble fusion replication results.
 - a. Source: ONR
2. Allegation: Taleyarkhan improperly omitted a negative sonofusion result by deleting the 5-18-01 draft's reference to tritium smear data that was consistent with background contamination.
 - a. Source: Suslick
3. Allegation: During the "initial refereeing process" for Taleyarkhan's *Science* publication, Taleyarkhan suppressed a null result obtained by Saltmarsh and Shapiro in Taleyarkhan's lab using Taleyarkhan's equipment.
 - a. Source: Suslick
4. Allegation: Taleyarkhan selectively processes his experimental data in order to create a misimpression of statistical significance.
 - a. Source: Suslick
5. Allegation: Figure 3 is replicated in later publications with subtle data movements.
 - a. Source: Suslick; ONR