STABILITY CONSULTANTS

P. O. BOX 18062
CINCINNATI, OHIO 45218
AREA CODE 513
PHONE: 825-1756

November 11, 1963

Mr. R. F. Gaertner
AIChE Symposium Chairman
GE Research Lab
P. O. Box 1088
Schenectady, New York

Dear Mr. Gaertner:

Thank you for your letter of November 6, 1963 in which you request the title of my proposed paper by January 1. The title of the subject paper is

Nucleate Boiling--The Relationship Between Heat Flux and Thermal Driving Force; The Relationship Between Heat Flux and Surface Density of Nucleating Sites

I recognize that the above title is rather long, but I don't know of any way to make it shorter and still have it reflect the subject of the paper.

The subject of the proposed paper would seem to be well covered in the literature as you are no doubt well aware. There seems to be virtually universal agreement on both of the subject relationships. However, the purpose of the subject paper is to present the true relationship between these parameters and to demonstrate that there has been universal agreement on the wrong relationships. The paper attempts to prove there has never been a single experiment which verifies the universally accepted relationships. Of course, the only way the subject paper could prove there has never been such an experiment would be to present an analysis of each and every experiment performed which would be quite impossible. For this reason, I am requesting your help by the following somewhat unorthodox request:

> If you will send me a list of at least five runs taken from the literature which you feel agree with the universally accepted relationships, I will write the paper around these five runs and demonstrate that they do not agree with the universally accepted relationships. In addition, I will indicate what the true relationship is in the subject paper.

I am sorry to impose on you in this fashion, but it is the only way I can imagine to prove that I was not "judicious" in my selection of the runs to be analyzed. To have the symposium chairman state that he himself selected the runs with no prior knowledge of what would be done would seem to me to be overwhelming proof that the analysis does indeed reflect the generality of the results so obtained. The only requirements I would like to place on your selection are the following:

1. The suggested runs should include runs obtained by at least two separate investigators.

2. The data must be presented in digital form. (I have been going blind recently from picking points from tiny graphs.)

I recognize that you may be somewhat skeptical about what I claim the subject paper will prove. For this reason, I would like to tell you that I have known Walt Robb for some time and I believe he will tell you that I am a credible person and that I would not be likely to pull your leg in this matter. In order that Walt may be forewarned of my using him for a reference, I am sending him a copy of this letter.

Unfortunately, I have never had anything published in the literature which you might use to judge my qualifications. However, I am rectifying this as rapidly as I can which I hope will come as a pleasant surprise to Walt. As you may have guessed from the title of my company, my contribution will be primarily in the area of stability, since I have concluded that stability is virtually a virgin subject. However, since the subject of boiling is a lead-in to the subject of stability, I plan to present a large number of papers on boiling also.

I hope I have aroused your curiosity to the point that you will take me up on my offer and I look forward to your reply. I am also interested in Walt's reply--how about dropping me a line, Walt?

Sincerely yours,

Eugene F. Adiutori