

September 18, 1963

Dr. Harding Bliss
Chemical Eng'g. Dept.
Yale University
New Haven, Conn.

Dear Sir,

About a month ago, you were good enough to talk to me for some time by telephone. I would like to impose on you again, but this time in your capacity as a high-ranking official of the AIChE. I would like to humbly make a suggestion to the societies based on my recent experience with the literature.

Throughout my undergraduate days at Yale, the lesson I learned in every lab course was:

The most important part of any experiment or experimental report is the DATA. The DATA is what we measure and, provided reasonable care is taken, is not open to question. We may not understand the DATA, but the DATA completely transcends all the calculations and hypotheses and explanations etc. which we may offer "in support" of the DATA. The DATA does not require any "support"--the DATA is the DATA.

During my undergraduate days, I accepted the above as self-evident and of course I still do. However, either DATA is no longer in vogue, or Yale is the only school which teaches its importance. Even the briefest review of the literature will indicate that virtually no one "bothers" to present DATA--only results are presented--results which may be three or four generations removed from the DATA. To risk making a pun, no one seems to recognize that

The DATA will live after us,
Our calculations are oft interred with our bones.

The following is observed on a much wider scale:

Bury bury the DATA with the experiment,
Lest Lest it come back to haunt us.

I would like to recommend to the AIChE (and societies in general) that NO paper be published unless the supporting DATA is made generally available. This could be accomplished by presenting the data with the report or submitting it to a central facility from which the data would be available on request.

Sir, if you feel I exaggerate the present state of the literature, you have only to review any recent volume of the ASME Transactions on the subject of heat transfer. Many reports

present only the "measured" heat transfer coefficients and some comparison with predicted values, designed to demonstrate that the results are as expected and therefore the data must be good! Where does one purchase a heat transfer coefficient meter? or a heat flux meter? or a mass flow meter?

In closing, I would like to add that NO undergraduate lab instructor would accept a lab report without the DATA. It therefore seems inconceivable to me that the engineering societies would set lower standards than undergraduate lab instructors! There is not the slightest doubt in my mind that, had I submitted a lab report to Dr. Southworth without DATA, it would have been returned with a well deserved FLUNK! (I keep referring to undergraduate because I have found many PhD theses which do not present the measured DATA!)

I apologize that this letter is so long, and thank you for your indulgence (if you have gotten this far).

Sincerely yours,

Eugene F. Adiutori
Class of '54

P. S. My first significant contribution to the literature should appear in Nucleonics around the first of the year. Oddly enough, it is of a general nature and does not involve the presentation of experimental results.

I am taking your advice about joining the AIChE.