

LETTERS

Eulogy to Professor Jack Gerster

Sir: Professor Jack A. Gerster, Chairman of the Chemical Engineering Department, passed away January 20, 1970. His contributions to the University of Delaware were extensive, and his death creates a significant void in our department.

Jack Gerster was born in Pittsburgh in 1919 and received his education through the PhD at Ohio State. After teaching briefly at Tulane he spent the wartime days with the Manhattan project. He came to this university in 1946 to join the small department headed by A. P. Colburn. He rose to the rank of professor in 1955 and was appointed H. Fletcher Brown Professor in 1962. This was changed to the Allan P. Colburn professorship when he assumed the departmental chairmanship in 1966.

Jack immediately developed a reputation for effective teaching. His skills in exposition were recognized formally by the University with a teaching excellence award in 1964 and were a cause for wonderment by his colleagues. Jack always selected simple yet highly instructive problems illustrations. His homework problems provided challenging yet interesting clarification of subtle points of his arguments. His course material was well organized and his course goals were clearly defined; he met the personal needs of his students in detail. One of our current seniors dropped out of school in the 9th grade and was encouraged and motivated by Jack Gerster to complete his education on a part-time basis. We expect him to graduate this June with Honors.

Jack's primary research interest was distillation. Prior to his efforts it generally was risky to build a distillation tower without testing the system in pilot plant equipment. His work in the engineering sciences in fluid mechanics and mass transfer, as applied to tray efficiencies, has made the direct construction of commercial scale distillation towers upon untried systems routine. These efforts reflect Jack's penchant for developing practical solutions to real problems. The AIChE awarded

him the Professional Progress Award in 1962 for his contributions in the field of distillation.

The separation of many narrow boiling mixtures often can be accomplished by adding an extractive agent. Before Professor Gerster's efforts the selection of extractive agents was hit-or-miss. Jack developed, interpreted and organized the data on all extractive agents for hydrocarbon separations into a beautifully complete and simple representation. His lead paper in the September issue of *Chemical Engineering Progress* continued his efforts to develop clear insights into a complex problem.

Jack Gerster's easy-going and relaxed manner yielded many warm friendships. His graduate students were always treated as equals attacking problems of common interest. His faculty associates found him extraordinarily generous with his time.

Jack also was an excellent administrator, for he was most successful in developing agreement and acceptance of a common position on most policy decisions. However, he was no push over, for when he thought his associates were clearly wrong, he would reluctantly but firmly follow his sensitive instincts. His decisions were correct with uncanny regularity.

His administrative talent, along with his technical competence, were effectively employed in service to the profession. He organized the first research program developed, supported and carried forward by the AIChE. The "Bubble Tray Design Manual" was published by the AIChE in 1958 as a summary of the programs at Delaware, Michigan and North Carolina. Although the authors of the report are not cited, Jack was instrumental in the completion of the distillation research programs and contributed substantially to the final report.

Thus Jack Gerster was superb in teaching, research and administration. His professional life serves as a goal and inspiration to his associates.

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Morgen Replies

Sir: I was most interested to read Dr. George W. Roberts' letter in the Winter Issue commenting on my article in the Fall 1969 issue. Apparently the two trends that I had foreseen in the year 1966-67 have been moving much more rapidly than expected.

The article "The Chemistry-Chemical Engineering Merry-Go-Round" was written during the year 1966-67 for presentation at the Annual ASEE meeting in June 1967. The data therefore had to be from 1966-67 catalogs and in a few cases 1965-66 data were used.

The two trends that were noted and commented upon at the 1967 ASEE meeting were 1) A decrease in the total number of credit hours for graduation and 2) a tendency towards a general engineering degree at the BS level with specialization concentrated in the 5th year ending in the MS as the first professional designated degree.

At that time (1967) I predicted that by 1975 the majority of the engineering graduates would not specialize sufficiently at the BS level to justify a designated degree. The specialization would be concentrated in the 5th year resulting in a MS degree with designation.

The other trend that was occurring in the 60's was the decrease in total credits either on the semester or quarterly basis, required for the BS degree. The result was that many courses (like general chemistry) which were allowed 4 or 5 credits per semester were cut to 3 or 4 credits. However other courses than Chemistry were cut so that the percentage allotted to the various categories of Science, Engineering and Humanities was not affected materially. Thus where previously 144 to 148 semester credits were given for a BS degree many institutions cut back to 128-135 semester credits.