An Editorial

As a senior you may be asking some of the questions below about graduate school. CEE in this issue as in the fall 1969 issue attempts to assist you in finding answers to them.

A LETTER TO CHEMICAL ENGINEERING SENIORS

Should you go to graduate school?

Through the papers in this special graduate education issue, *Chemical Engineering Education* invites you to consider graduate school as an opportunity to further your professional development. We believe that you will find that graduate work is an exciting and intellectually satisfying experience that greatly enhances your ability to obtain responsible and challenging positions in industry and teaching. We also feel that graduate study can provide you with insurance against the increasing danger of technical obsolescence. Furthermore, we believe that graduate research work under the guidance of an inspiring and interested faculty member will be important in your growth toward confidence, independence, and maturity. At the same time, we recognize that while a graduate degree may lead to either technical work or to management, some of you may wish to work directly toward careers in management. To acquaint you with this option, we invite you to read the article on this subject by AIChE President, Art Conn.

What is taught in graduate school?

In order to familiarize you with the content of some of the areas of graduate chemical engineering, we are continuing the practice we began last year of featuring articles on graduate courses as they are taught by scholars at various universities. Last year's issue included articles on applied mathematics, momentum and energy transfer, reactor design, fluid dynamics, particulate systems, optimal control, diffusional operations, and thermodynamics. This year we are eliminating some of these in order to emphasize certain specialized areas that were not included in last year's issue such as air pollution, biomedical and biochemical engineering. *We strongly suggest that you supplement your reading of this issue by also reading the articles published last year. If your department chairman or professors cannot supply you with the latter, we would be pleased to do so at no charge.* But before you read the articles **in these issues we wish to point out that (1) there is some variation in course content and course organization at different schools, (2) there are many areas of chemical engineering that we have not been able to cover, and (3) the professors who have written these articles are not the only authorities in these fields nor are their departments the only ones that emphasize that particular area of study.**

What is the nature of chemical engineering graduate research?

One way in which you can obtain an answer to this question is to read papers in the technical publications; but another way you may obtain insight into graduate research is to learn something about the people who are outstanding chemical engineering scholars. To assist you in doing so we are again this year including an article on one of the "Founders of Chemical Engineering," Dr. W. K. Lewis of the Massachusetts Institute of Technology. Dr. Lewis has not only made numerous significant contributions to the literature, but he has also had an enormous impact on his students — many of whom have themselves become leaders in the profession.

Where should you go to graduate school?

It is common for a student to broaden himself by doing graduate work at an institution other than the one from which he receives his bachelor's degree. Fortunately there are many very fine chemical engineering departments to choose among, each of these has its own "personality" with special emphases and distinctive strengths. For example, in choosing a graduate school you might first consider which school is most suitable for your own future plans to teach or to go into industry. Or if you have a specific research project in mind, you might want to attend a university which emphasizes that area and where a prominent specialist is a member of the faculty. On the other hand if you are unsure of your field of research, you might consider a department that has a large faculty with widely diversified interests so as to ensure for yourself a wide choice of projects. Or you might prefer the atmosphere of a department with a small enrollment of graduate students. In any case, we suggest that you begin by writing the schools that have provided information on their graduate programs in the back of this issue. You will probably also wish to seek advice from members of the faculty at your own school.

But wherever you decide to go, we hope that you explore the possibility of continuing your education in graduate school.

Sincerely,

RAY FAHIEN, Editor CEE
University of Florida
Gainesville, Florida 32601

DEPARTMENT CHAIRMEN: We regret we were unable to satisfy all requests for free copies. Please see p. 240.

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TO DEPARTMENT CHAIRMEN

The staff of CEE wishes to thank the 51 departments whose advertisements appear in this second graduate issue. We also appreciate the excellent response you gave to our request for names of prospective authors. We regret that, because of space limitations, we were not able to include some outstanding papers and that certain areas are not represented. In part our selection of papers was based on a desire to complement this issue with that of 1969, for we hope that seniors interested in graduate school will read both issues. As indicated in our letter of September 1, we are sending automatically to each department at least sufficient free copies of this issue for 1/5 the number of bachelor's degrees reported in "ChE Faculties". Because of the large number of requests you made for extra copies for seniors and graduate students, we were forced to limit the number of these to the total number of bachelor's degrees your department reported. However if you have definite need for more copies than you received, we may be able to furnish these upon request.

During the three years CEE has been published at the University of Florida its support has been derived primarily from industrial advertisers and donors. Unfortunately that source of support is now decreasing rapidly—due to economic reasons. For example, while CEE's income from industrial sources was $9,240 in 1969, it is expected to be only $7,300 in 1970 and recent trends indicate that our industrial support in 1971 may be as low as $2,000—or a drop of $7,240. Since the bulk of our support has come from industrial sources, it will be more important than ever for departments and faculty members to assist us through bulk and individual subscriptions. We are very appreciative that we have had the support of 123 departments in 1970, and we like to urge you not only to continue your support in 1971, but also to see if it can be increased by ordering additional copies, these may be used as follows:

1) **One copy to each faculty member**
2) **One copy each to your engineering deans, department chairmen, and other university faculty.**
3) **One copy each to student chapter officers.**
4) **Extra copies for graduate students interested in teaching, for local high school counselors and chemistry teachers, and for AIChE local section officers.**

Please keep in mind that payment for these bulk subscriptions (at $4.00 each with $25 minimum for 6 copies or fewer) may be made by any of the following means (or combination thereof): (1) Direct payment by check from departmental funds. (2) Payment by check after solicitation from the faculty of individual contributions and (3) Payment from university funds after being billed.

You may order your copies from Dr. R. B. Bennett, CEE Business Manager, Department of Chemical Engineering, University of Florida, Gainesville, Florida. 32601.

Ray Fahen, Editor

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