

EDUCATION ACTIVITY COMMITTEE ANNUAL REPORT
TO MCA BOARD OF DIRECTORS - January 8, 1974

Henry W. Rahn, Chairman

During the past 14 months since I last reported to you on the Education Activities Committee's growing concern for the industry's image, the Manufacturing Chemists Association has stepped up its efforts in this critical area. The Catalyst programs and the focus of our last Semiannual meeting of the associates betoken the efforts. In an era of credibility gap and energy crisis, we predict our image will deteriorate further especially among those who influence attitudes and opinions for many years to come, i.e., among young faculty and students.

The objectives of the committee are primarily related to the academic world but we also impinge directly or indirectly on public relations, recruitment and consumerism. Our close liaison with the MCA PR staff and Committee has been mutually beneficial. Consequently, we develop new contacts and forums of communication with a public whose leadership (and, we trust, it is only a minority of its leaders) would have it aloof from industry, government and, it would seem, from society itself.

We pursue three specific mandates as approved by the Board:

1. to promote through the educational system public understanding of the chemical industry
2. to assist young people in career guidance
3. to enhance the quality of instruction in chemistry and chemical engineering on a broad intellectual, cultural and social context.

Each mandate is assigned to a subcommittee which becomes responsible for executing programs approved by the committee at large. Our ability to function productively attests to the effectiveness of this committee substructure. We also believe this method of operation contributes to the evolution of a stronger EAC.

As to the first mandate, we have assigned the highest priority to combatting our negative image on campuses. Some faculty and student groups lobby for much more restrictive legislation to "curb" industry and demean the contributions of the chemical industry to mankind. In such an antagonistic climate, we believe many highly qualified young people have turned away from careers in chemistry and will continue to do so.

The second mandate, career guidance, seems anomalous at a time when chemists are unemployed. Yet, contrary to the popular press and rumor, many member companies will probably find it difficult to fill their current needs for qualified chemical engineers. In addition, some few companies cannot recruit suitable young and highly qualified B.S. level chemists. Barring an economic collapse, the shortages will be significantly more serious in the late 70s and early 80s. Education is a long and continuing process. It is essential to have students in the educational pipeline for the 4, 8 or 10 year period prior to their availability in the job market. Consequently, as we see it, if we are to continue the forward thrust and momentum of the chemical industry, we must motivate more junior and senior high school students to careers in chemistry and engineering than the current employment picture would warrant.

Concerning the third mandate, our efforts in the area of chemical instruction are twofold. We encourage the training of chemists and chemical engineers both in sound theory as well as in practical application. For the non-chemist, we recommend integration of chemistry into the fabric of the intellectual, cultural and social literacy required of responsive citizens for responsible decision making.

In the remainder of this report, I will discuss some of our ongoing activities with special emphasis on future directions of our programs.

Our Awards Program now honors nationally, high school as well as two and four year college chemistry teachers. No single MCA education program has accomplished more to establish effective and cordial liaison and cooperation with a number of teachers far exceeding the number of awards we conferred. Consequently, at a time when our image on campus is especially negative, we do have a nucleus of staunch allies in academia.

We now see a similar and possibly even more effective academic and public relations opportunity through an awards program for high school students. In our next budget proposal, we will seek funding for one to two hundred medals as well as five scholarships to be presented at graduation to outstanding high school students in the United States and Canada. The long range impact on attitudes toward industry and ultimate career decisions should justify the modest funding we will propose.

The committee and the American Chemical Society cooperate in publishing practical books on the inner workings of industrial chemistry and appealing stories of people in the industry. Intended as non-required reading for enrichment in high school and lower level college chemistry courses, the books are directed also to the general reading public. We are taking the liberty of sending you, the MCA Board Members, various copies of the books now in print. These books should be in your libraries. You might also wish to place them as a public service in the libraries of schools in areas of your offices and plants. The books have been well received by teachers seeking help to break down prejudice and misinformation

about the industry. However, we do find it difficult to recruit new authors from industry. As we identify appropriate authors, we will urge their managements to grant them some company time and secretarial help to prepare the manuscript. A modest royalty agreement with ACS, who undertook this venture on a non-profit basis, reimburses, at least in part, the company and/or individuals involved.

A manuscript prepared by our Career Guidance Subcommittee presenting a realistic appraisal of the job market for chemists and chemical engineers and the career pathways open to both and also for non chemists in the industry will be published during the current calendar year. In response to the MCA mandate more than three years ago, we invited ACS to cosponsor this and other career booklets. Such collaboration certainly could be an effective tool to help bridge credibility gaps. However, ACS declined the invitation at this time. We will, of course, continue to encourage collaboration with them or other associations in this critical area of career guidance.

Teachers and people in the industry constantly remind us that teachers, for the most part, are uninformed and misinformed about industry—yet, most of the students they train will be employed by industry. We sponsored four Catalyst interface seminars with faculty and students in 1973 as a grassroots operation to break down barriers of communication. The discussions were lively and informative but did not attract sufficient audience either from industry or academia to warrant our efforts and those of the cooperating industrial personnel who formed our panels. We learned a great deal from these seminars and have concluded that such activities initiated by industry and aimed at large non-participating audiences lack credibility. What is the correct formula to establish communication among and mutual education of people from both the industry and education?

As a partial answer, the committee believes there is developing an increasing need for people from industry to enter the schools and participate in the actual process of education. We will promote MCA college and high school award winners to organize lively gatherings of students with MCA staff members and representatives from member companies. In this way, we will make use of an MCA resource in which we have already invested funds, and will assure an audience interested in exchanging views even while gathering up a head of steam. In addition, educators and students need industrial experience and the perspective acquired through actual job experience in industry. We are confident that solutions to the problems of such interchange of personnel (i.e. salaries, travel expenses, fringe benefits, insurance, etc.) can be found to achieve the desired collaboration and constructive interdependence between these two branches of society.

The Yankelovich Report, Powell Memorandum and other more recent studies support our conclusion that the image problem for industry is serious among the young and could ultimately have a profound effect on the free enterprise system itself. Those of

you who attended the recent semiannual meeting heard these same conclusions confirmed by many of the panelists, drawn from various walks of life. We cannot ignore these signs. The task of improving the image of the business-industrial complex is too vast for the MCA alone and requires a well coordinated-well financed national effort. But pending the organization of such an overall program, we plan to increase our collaboration with other associations confronting this problem. Further, many of you already contribute to education far beyond the call of tokenism. The need for contributed industrial services will increase if the objectives of Career Education are to be realized. We foresee that FAC could serve member companies in supplying information and recommendations on successful programs of industry/education cooperation at the grassroots of education.

The next decade will likely bring significant changes in society, government-industrial relationships and our way of life. Many of these changes, some constructive, some restrictive, will result from activities on campuses. We are in a position to collaborate, in a small way, the process of change rather than being completely unwitting victims of it.

I thank you for your time and attention. If you have questions, I will try to respond now or informally later.