A.I.Ch.E. JOURNAL

Research and Scholarship

The young professor of chemical engineering faces a problem which should concern the entire profession. Consciously or subconsciously, he must elect to devote his principal energies to teaching, research, or scholarship.

If he elects to concentrate on teaching he suffers in the competition for professional recognition. All faculty members recommended for promotion are alleged to be wonderful teachers—a difficult claim to document—and the best-intentioned budget committees must rely on the man's publication record as the principal discriminating test.

If he elects research, though accepting teaching assignments, he must seek out graduate students and research grants. He may publish three or four papers each year, and the library periodical shelves will continue to expand twofold every thirteen years, as they are doing at present. His influence upon a very few students will be great, and his professional stature will slowly grow. But fifteen years later these publications may not seem to have been very important.

The neglected and difficult choice is scholarship. We owe most to the scholars, the great men of the past who found time to master a subject well enough to generalize and to correlate the results of research efforts. Such men contribute enormously to the profession, and many become known as great teachers. The principal contributions of W. K. Lewis have been in the interpretation of science for application to engineering. The scholar needs the results of research, but the libraries seem to be bulging with undigested and uncorrelated products of research.

Several research papers can be turned out in the time it takes to write a book or a critical review of a field, yet neither reviews nor books are rated highly by the budget committees or by the young professor's peers at other institutions. Many research journals refuse to publish review articles. The Washington bureaus which support academic research want research publications, not scholarship.

Let us encourage scholarship, even at the sacrifice of some of the less important research. Could not the National Science Foundation support more scholarly studies as well as research projects? Could not our professional journals publish more first-class reviews? Perhaps budget committees could be persuaded to consider not only the number but the merits of a man's publications. Research activities definitely enhance teaching, but true scholarship is not only more important to the profession but more effective in strengthening education.

Thomas K. Sherwood