

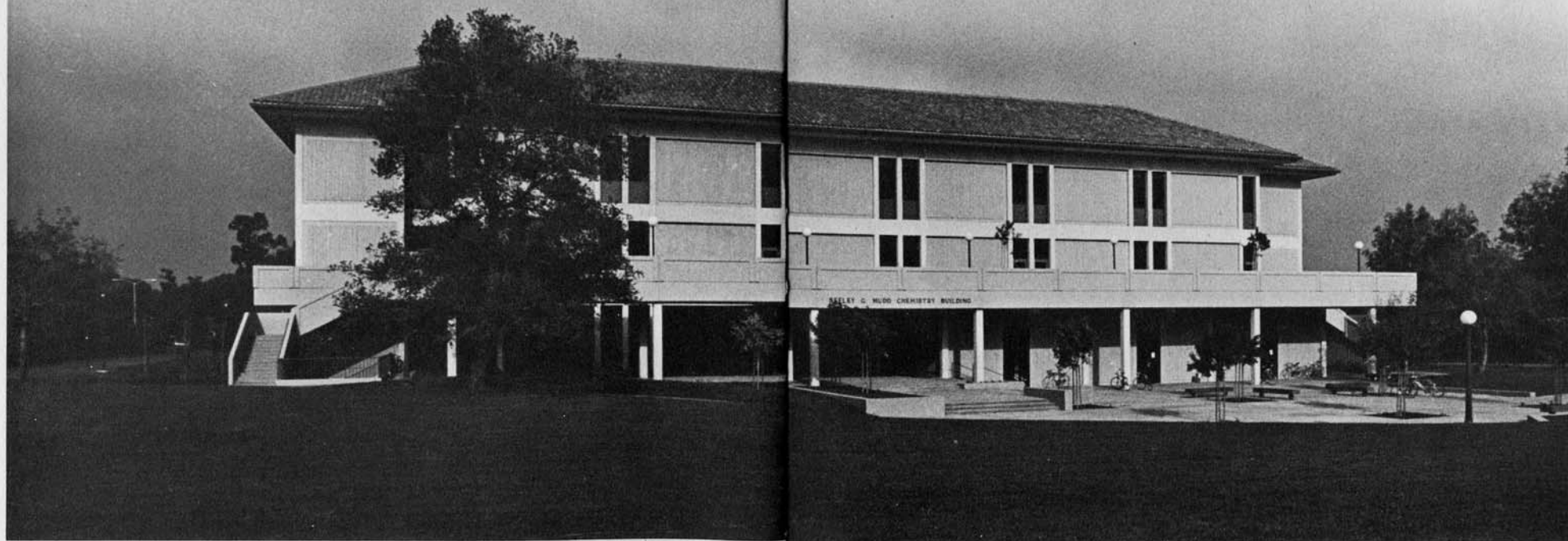
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Stanford University
1891-1976

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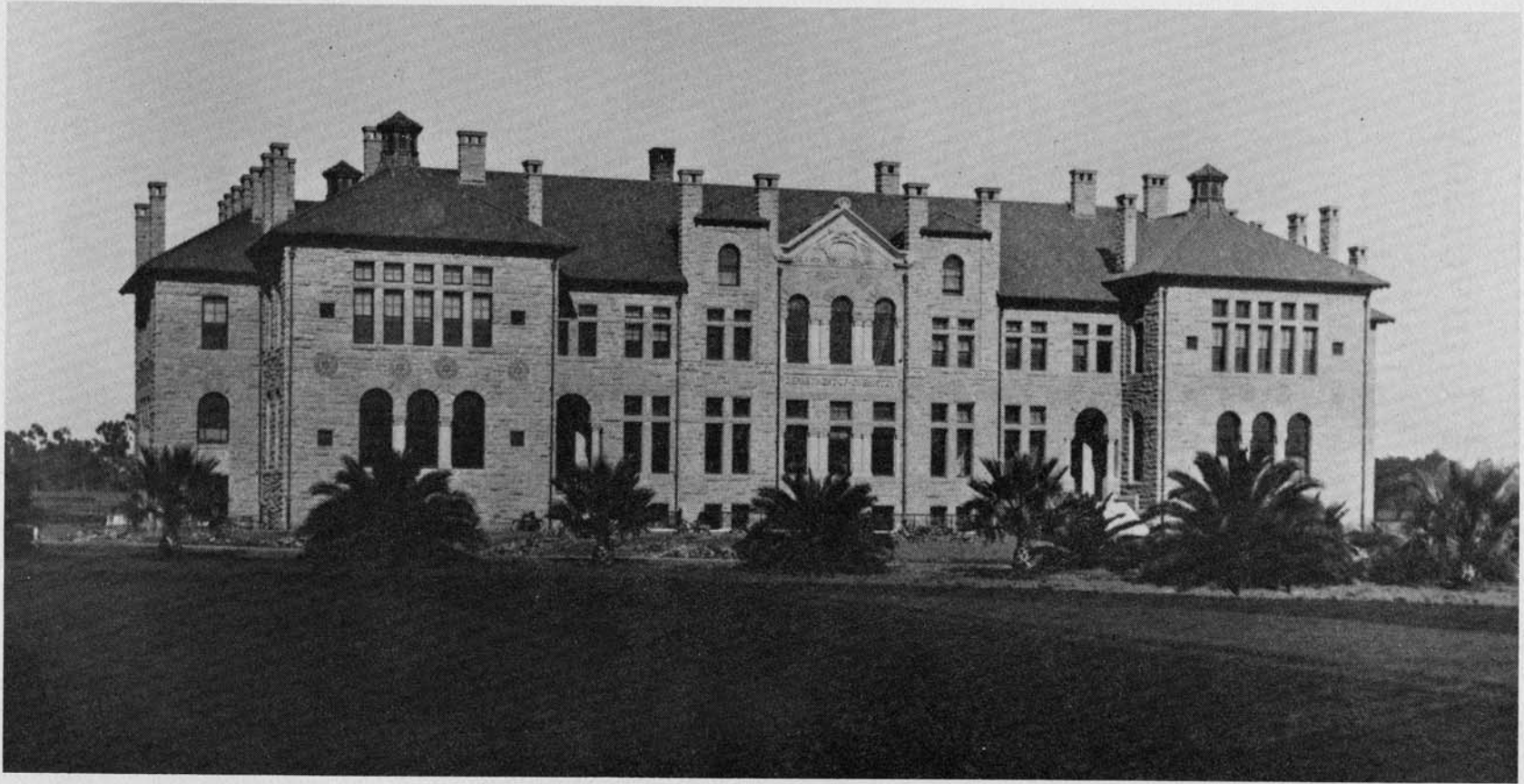
*A brief account
of the first eighty-five years*

*Department of Chemistry
Stanford University
Stanford, California
1977*

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The Seeley G. Mudd Chemistry Building.



Main Chemistry Building.

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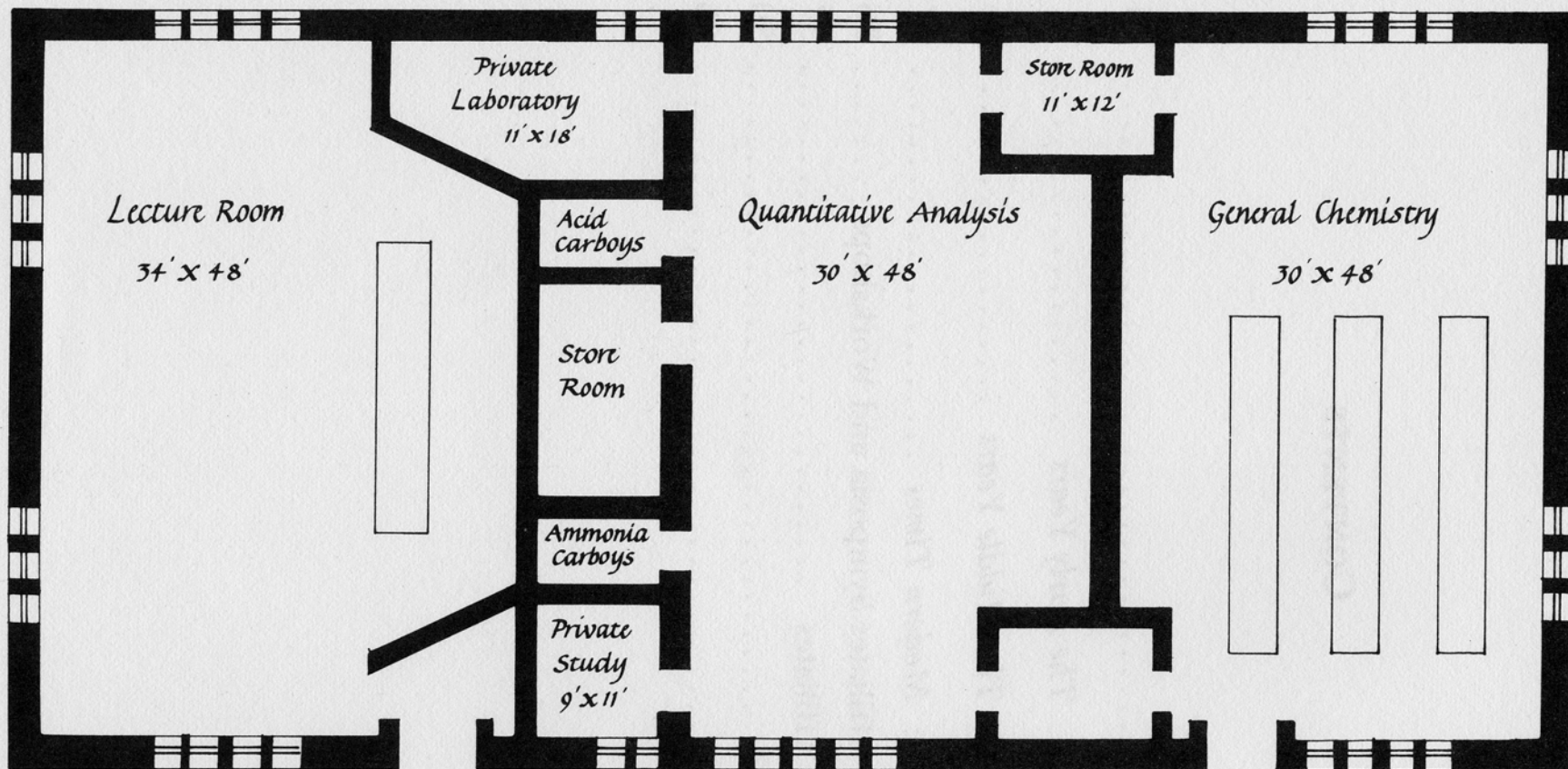


Fig. 1
 Plan of the original Chemistry Building
 on the Inner Quad—now Building 60.

FOREWORD

In 1975 Professor Eugene van Tamelen asked me whether I would be willing to write a brief history of the Department of Chemistry at Stanford. A number of events coincided so as to make it appropriate to record in some way a little of what has happened in chemistry at Stanford since the year 1891. First of all, it appeared that the Department would be taking leave of the old Main Building in the near future—save for maintaining a small portion for library, stockroom, and machine shop. Such leave-takings are always appropriate reasons, or pretexts, for some degree of stock-taking. Secondly, and perhaps most significantly, every member of the Department recently experienced a sense of pride and some measure of enhancement of his or her own stature, even though it represented basking in reflected glory, when our colleague Paul Flory was named sole winner of the Nobel Prize in Chemistry for 1974. As a lifelong believer in the efficacy of the apostolic laying-on of hands, I have equally believed, and taught my students, that to touch the great is to acquire a tiny portion of greatness for oneself. Lastly, in recent years I have been serving as Academic Secretary to the University and, consequently, found myself the custodian of many documents relating to the University since its first days. From the standpoint of convenience, therefore, if for no other reason, it appeared sensible to agree to Professor van Tamelen's request.

Now I find, after the event, that I have not written a history of the Department of Chemistry at Stanford, though I believe I have provided a skeletal framework around which someone may someday construct a history. It may be that I have been influenced, without explicitly recognizing it, by my researches of recent years into the history of science policy. For such historical work, covering unploughed soil, has a marked tendency to produce in the historian what I can best describe as the archival spirit, which drives one, as in laboratory work, to search out factual material. And just as laboratory work, even in the best cases, can only be transformed into science by contemplation, followed by its being woven into the fabric of preexisting science, so archival material is converted into real history only if it, too, is considered, rearranged, and fitted into the context of a larger whole. A schoolboy phrase comes back to me at this point: "Geography deals with maps; history deals with chaps".

A history of a department of chemistry ought, on that principle, to deal with chaps who are, or were, chemists. I have, however, been conscious of rather serious inhibitions against writing about chaps who are, or were, chemists, and I have been even more aware, not only of inhibitions, but also of what I regard as prohibitions against writing about the work of those people.

It seems to me to be palpably obvious that to attempt a history of living individuals is, on the one hand, presumptuous, in that no sound perspective can be gained of living persons; and hazardous, on the other hand, in that, with the best will in the world and with the most dispassionately

objective view, the writer is all too likely to give offense—if not to the individual, then at least to the members of his family. I was ever cautious in this regard, and see no reason to abolish the habits of a lifetime! With one exception, I have confined my remarks about the members of the Department *as people* to those who are no longer alive. The one exception, Philip Leighton, is one for whom my affectionate regard is strong enough to overcome my natural reluctance, secure in the knowledge that, of all people, he will surely be forgiving of any distortion.

The principle of writing only about those who are no longer living has imposed some rather severe restrictions on a writer of my age. Though I have been a member of the Department for nearly as long a time as any active member of the faculty, even *my* personal knowledge does not stretch back to the earliest years of the Department! Some years ago Dr. Swain gave me some scattered notes about the early members of the Department, but these proved to be too sketchy to be of much use in bringing out a lively sense of what men such as Lennox and Young were really like. To my regret I never knew that rare, engaging, and (if what I gather is true) infuriating person E. C. Franklin. If even half of the anecdotal material on Franklin is true, he must have been an extraordinary person. But since I cannot vouch for the authenticity of most of the Frankliniana, I have regretfully omitted it. My personal knowledge being limited to roughly the last thirty years, I have attempted vignettes of a few of the faculty whom I knew (or think I knew) well. Because the number of members of the Department still living is much larger than the number who are no longer with us, I hope that my younger colleagues might be persuaded to keep files of authentic anecdotes of current members of the Department. A future historian will be grateful for such material, and there are surely among the present faculty plenty of people possessed of interesting foibles worthy of record.

I have not, in general, attempted any detailed assessment of the value, or even interest, of the many researches carried out by members of the Department. In the case of the living such an assessment would be premature, and in the case of the dead, who is to decide what is important and what trivial? I share with Henry Taube the conviction, which may soon be judged to be antisocial in this utilitarian age, that the only important factor in research is that the scholar carrying out the research should enjoy and personally believe in what he is doing. If that, possibly selfish, condition is satisfied I believe that such verdicts as history may record about the lasting value of any given individual's work are of secondary importance.

The records of the Chemistry Department being relatively slender, the future historian may find it helpful to know from which sources this archival account has been drawn. I have found invaluable the annual publications known as the "Register", whose production, regrettably, ceased in 1946-47, to be replaced by the wretched Faculty/Staff Directory", which is often incorrect both as to name and telephone number. The Registers, lovingly and carefully assembled by such good servants of

the University as Miriam Remele, are a gold mine of short biographical information on the faculty, as well as providing accurate lists of degree candidates. The more recent "Commencement Programs" are less trustworthy as sources of information regarding degree candidates, and the careful historian will do well to use the Minutes of the Senate of the Academic Council. As a rule, the best short biographical material on members of the faculty is to be found (after their death) in the Memorial Resolutions offered to the Academic Council. These are printed in various campus publications, but a virtually complete file of Memorial Resolutions is maintained in the office of the Academic Secretary. In recent years the University Archives have been quite carefully organized, and future historians are likely to find good material and photographs in the archives, including, in some cases, laboratory notebooks and manuscripts. Obituary notices in journals provide another source of information, though these often prove to be rather compressed. In two cases, those of Stillman and Franklin, friends produced small memorial volumes containing useful personal, as well as scientific material; and it is to be hoped that, as future funds may permit, such biographies may be prepared, while memories are still sharp, of other members of the Department.

In looking at the record of the Department's graduates, one feature which stands out is the extraordinarily large number of students who were undergraduate majors in the years immediately following World War I. After World War II there was a large expansion of students — but this time at the graduate level. Many of those who returned for graduate work under the G. I. Bill worked for the M.S. degree rather than the Ph.D., an option which has largely disappeared at Stanford, not only in Chemistry but in most other departments, also.

Regarding illustrations, I am indebted to the Stanford News and Publications film service for photographs of recent faculty members and to Susan Rosenberg, University Archives, for photographs of faculty members in the early years of the Department. (I have, it should be noted, restricted the photographs to those of tenured members of the Department.) The floor plan of the original Chemistry Building in the Inner Quad is a tracing which I made over the blueprint exhibited in Professor Paul V. Turner's exhibition "The Founders and the Architects".

The writing of even an outline of a history recalls for the writer pleasant memories; it may, I hope, bring other pleasant memories to readers.

ERIC HUTCHINSON

February, 1977
Stanford University