

STANFORD CHEMISTRY DEPARTMENT

1977-2000



OLD MAIN CHEMISTRY, 1999

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PREFACE

In 1999 my husband began writing a history of the Chemistry Department at Stanford for the years 1977-2000. He felt that the excellent history of the Department that Professor Eric Hutchinson had written covering the earlier years (1891-1976) should be continued. Unfortunately, he was not quite able to complete the work before he became ill. After his death in March 2001, I undertook to complete the lists of degrees granted and to edit, in a minor way, the text that he had written. I trust that the readers, especially his colleagues, will therefore understand and excuse any errors that they may detect.

Carol W. Mosher

October 2001

As the first Harry S. Mosher Professor, I have had the privilege and honor of helping Carol Mosher assemble this document for publication on our departmental web site. We have prepared the document as Harry finished it, with Carol's completions. I am deeply indebted our Head Librarian, Grace Baysinger, for her skillful assistance in checking and correcting facts, and to the Chemistry Administrative Services Group for scanning photographs.

W. E. Moerner

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FOREWORD

I am deeply indebted to Prof. Eric Hutchinson who compiled the chronicle of the Stanford Chemistry Department from 1891-1976, preserving the records of the early days of the Department, beginning with the founding by the first executive head, Prof. John Stillman. Twenty-four years have passed since this earlier account was written. Collective memories are short and are notoriously poor at preserving records. It seemed to me appropriate, and even urgent, that these chronicles be continued. The pace of developments in the science of Chemistry and its teaching during the last twenty-five years has resulted in changes in the faculty, buildings, curricula and students almost equaling the changes during the first eighty-five years in the life of the department. Accordingly I have undertaken the present project bringing the chronicle up to the twenty-first century.

In the Foreword to his chronicles, Prof. Hutchinson made the point that he had not written a *History* of the Chemistry Department. He stated that a history should deal with people, their actions, decisions, contributions and consequences. He felt that it would be impossible for him to give a balanced, objective evaluation of the colleagues with whom he had worked over the years. He wrote: "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 fully agree with these sentiments and have followed this same self-imposed injunction in the present account.

Soon after the founding of the University, President David Starr Jordan in a lecture about Stanford was quoted as saying "It is not buildings that make a university but professors and students." I have used his statement to organize this chronicle of Stanford's Chemistry Department, 1977-2000, into four major subjects---Faculty, Undergraduate Curricula, Buildings and Students. These are all interrelated, but it seems more logical to treat them separately than to try to weave them together in strictly chronological order.

It is easy to see how, in the beginning days of Stanford University, the observer would be preoccupied with the growing physical structures and not consider the real nature of the astounding transformation happening on Stanford's farm. This is still true; it is much easier to think of the development of Stanford's Chemistry Department in terms of the buildings added over the years than the happenings with the faculty and students. However, since the growth of the facilities was designed to keep pace with the development of the curricula and with the growth of the faculty and number of students, these categories are obviously part of the same whole.

We begin with a consideration of the faculty members, but it is not our intention to undertake a full biographical account of the individual accomplishments of each. The precedent set by Professor Eric Hutchinson will be followed. For those who would like more detailed accounts of the faculty, some accounts do exist. For our three Nobel Laureates, Professors Flory, Pauling and Taube, there are biographies in the book, Nobel Laureates in Chemistry, 1901-1992 published by the American Chemical Society. Professor J. Murray Luck has written an autobiography Reminiscences published by Annual Reviews, Inc. 1999. Autobiographies of Professors Carl Djerassi and W. S. Johnson were published by the American Chemical Society in the series Profiles, Pathways, and Dreams edited by Jeffrey T. Seeman. For anyone interested in the detailed research interests of a particular professor or his students, we recommend the ACS Directory of Graduate Research, published every two years since 1953 by the American Chemical Society, which gives a list of all the research publications by each professor for the preceding two year period. A copy of every faculty publication in the Chemistry Department is available in the Swain Library for 1927-1963, and for 1976 onward. An abbreviated biographical outline, in the format used in the American Men and Women of Science, is included here for each of the professors, arranged in the order of their joining the department. Photographs of tenured professors were taken by Albert Dadian.

/Harry S. Mosher