THE CENTENNIAL HISTORY OF IOTA SIGMA PI

National Honor Society for Women In Chemistry Founded 1902

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The Centennial History of Iota Sigma Pi records the activities and awards of the Honor Society for Women in Chemistry since its founding in 1902. Each page also includes quotations from modern women chemists and others, relating to the role of women chemists in society.

IOTA SIGMA PI

National Honor Society for Women in Chemistry



Rosalind E. Franklin National Honorary Member 1982



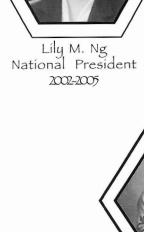
Founded 1902



Susan S. Marine National President 1999-2002



Nellie M. Naylor National Vice President 1942-1945





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FOREWORD

Concerning the Publications of Histories and Directories

At the first national convention of Iota Sigma Pi in 1918, it was suggested that the national president authorize the publication of a directory and history of Iota Sigma Pi, a copy of which should be sent to each member. Accordingly in 1919, M. Helen Keith, the national editor in the first Executive Council, issued the first Directory containing the names of 164 members. This 32-page document contained the chapter roll, the list of national officers, and the names and addresses of all members. Neither historical data nor a copy of the constitution was included.

At the second national convention in 1921, a committee report on publications was adopted. This involved a plan for the publication of the new Directory by the editor and business editor every third year; a printed news Quarterly also to be issued by the editor and business editor; and a mimeographed history to be prepared by a committee of three by the close of the year 1922.

This history thus authorized was compiled by Agnes Fay Morgan and circulated to all chapters in 1923. Supplements to this history were compiled by the new editor, Esther Hudson Branch, in 1924 and 1927. The second edition of the new Directory was produced by M. Helen Keith in 1922 and contained excerpts from the constitution as well as the directory material with names of the 585 members. Ester Hudson Branch, national editor, brought out the third Directory, authorized by the third national convention in 1924. This contained names and addresses of chapters, officers, and 950 members.

At the fourth national convention in 1927 it was voted that Agnes Fay Morgan be asked to assume the duties of permanent historian and that the national secretary assist the business editor in compiling the Directory to be mimeographed every three years with copies to be sent to all new members with the membership certificates.

Early in 1928, it was voted by the National Council to omit the preparation of the Directory during that triennium and instead to issue a printed history of the organization from its beginning. The historian brought together all the historical data she could collect and printed a connected story of the national activities of Iota Sigma Pi. In addition, with the assistance of the chapter historians, she wrote a brief history of each chapter.

The first printed edition of the History was published in March 1930. Five hundred copies were made and during the following seven years most of these were sold to the chapters. The revision of the constitution, adopted in 1930, and short histories of the three chapters admitted in that year were added later as inserts. The 1936 convention authorized the second printing of the History and Constitution which appeared in 1937.

In 1937 the national editor, Hazel A. Fehlmann, issued a Directory of all Iota Sigma Pi members numbering by that time more than 2000. In 1946 she published a Directory of the members of Iota Sigma Pi, listed alphabetically and geographically as well as by chapters. The names of 3721 members appeared in this comprehensive document.

In 1940 an addendum to the History was printed and used as an insert in the remaining copies. The third printed edition of the History was authorized in 1948 which carried the record forward from 1940 through 1952. The fourth edition of the History was edited by Agnes Fay Morgan which brought the account up to 1963. In 1975, the national historian, Sister Mary Rose Stockton, edited a supplement to the history, covering the years from 1963 to 1975.

In addition to the publications listed above, the **IOTAN**, a printed journal of about twenty-four pages, was published annually from 1941 to 1971. Since 1972 the **IOTAN NEWSLETTER**, a printed eight-page publication, has been issued quarterly. In addition, from 1977 to 1987 the National President distributed a mimeographed **OPERATION GUIDE** for Chapter Officers with varying frequency.

The nineteenth convention in Chicago in 1978 authorized the preparation and printing of a new, revised, and updated history. In 1980, national historian Sister Mary Rose Stockton brought the account up to 1980 and edited the fifth edition of the history.

The twenty-sixth convention in Portland in 1999 authorized the preparation and printing of a new, revised, and updated history. The assistance of chapter historians and the History Committee is gratefully acknowledged. Editor Sharon Vercellotti applied to the Camille and Henry Dreyfus Foundation Special Grant Program in Chemical Science to print and distribute the Centennial History of Iota Sigma Pi. Iota Sigma Pi was awarded \$20,000 for this project. The National Council decided to include the years to 2004 because of editing and printing delays. Special thanks are given to Susan A. Eleew and Ellen T. Vercellotti for their contributions to the publication.

Outstanding Iotans

Francis P. Garvan John M. Olin **Medal Recipients**

1937 Emma Perry Carr, Aurum*

1940 Mary E. Pennington, Magnesium*

1942 Florence B. Seibert, Ytterbium*

1946 Icie Macy Hoobler, Tungsten*

1948 Gerti T. Cori, Hydrogen*

1949 Agnes Fay Morgan, Oxygen*

1950 Pauline Beery Mack, Palladium*

1952 Gladys A. Emerson, Carbon*

1953 Leonora Neuffler Bilger, Radium*

1954 Betty Sullivan, Mercury*

1955 Grace Medes, Mercury*

1956 Allene R. Jeanes, Uranium*

1957 Lucy W. Pickett, Iodine*

1958 Arda Allen Green, Hydrogen*

1960 Mary L. Caldwell, Columbium

1961 Sarah Ratner, Columbium

1962 Helen M. Dyer, Polonium*

1965 Gertrude Perlmann, Columbium*

1967 Marjorie J. Vold, Hydrogen*

1970 Ruth R. Benerito, Columbium

1972 Jean'ne M. Shreve, Mercury

1973 Mary L. Good, Chlorine

1977 Marjorie G. Horning, Neptunium

1980 Helen M. Free, Samarium

1981 Elizabeth Weisburger, Curium

1983 Ines Mandl, Vanadium

1986 Jeanette G. Grasselli, Fluorine

1987 Janet G. Osteryoung, Member at Large

1988 Marye Anne Fox, Tellurium

1990 Darleane C. Hoffman, Hydrogen

1991 Cynthia M. Friend, Member at Large

1992 Jacqueline K. Barton, Sulfur

1993 Edith M. Flanigen, Vanadium

1995 Angelica M. Stacy, Hydrogen

1996 Geraldine L. Richmond, Member-at-Large

1997 Karen W. Morse, Oxygen

2000 F. Ann Walker, Member-at-Large

2002 Marion C. Thurnauer, Aurum Iodide

Priestly Medal Recipients

1997 Mary L. Good, Member-at-Large 2000 Darleane Hoffman, Hydrogen

Encouraging Women into Careers in the Chemical Sciences Recipients

1995 Margaret C. Cavanaugh

1996 Nina M. Roscher

1997 Mary E. Thompson

2002 Barbara Sawrey

Nobel Prize

1903 Marie Sklowdowska Curie

1911 Marie Sklowdowska Curie

1947 Gerti T. Cori

1964 Dorothy Crowfoot Hodgkin

Stanford University



L to R, back row Ruth Oppenheimer, Bernice Jameson, Louisetta Aubert, front row Hazel M. White, Marjorie Foster, Ruth Seeley

National Presidents of Iota Sigma Pi

1915-1918 Josephine Graves, Nitrogen*

1918-1921 Mary L. Fossler, Nitrogen*

1921-1924 Zalia J. Gailey, Oxygen*

1924-1927 Zalia J. Gailey, Oxygen*

1927-1930 Sybil Woodruff, Kalium* 1930-1933 Virginia Bartow, Iodine*

1933-1936 Genevieve Stearns, Iridium*

1936-1939 Genevieve Stearns, Iridium*

1939-1942 Evelyn Laing McBain, Carbon*

1942-1945 Evelyn Laing McBain, Carbon*

1945-1948 Pauline Beery Mack, Palladium*

1948-1951 Essie White Cohn, Platinum*

1951-1954 Gladys A. Emerson, Carbon, Hydrogen, Aurum*

1954-1957 Gladys A. Emerson, Carbon, Hydrogen, Aurum*

1957-1960 Hoylande D. Young, Aurum Iodide*

1960-1963 Hoylande D. Young, Aurum Iodide*

1963-1966 Jane Fraenkel-Conrat, Hydrogen

1966-1969 Clara A. Storvick, Niobium

1969-1972 Jane Fraenkel-Conrat, Hydrogen

1972-1975 Joan P. Lambros, Fluorine

1975-1978 Violet Diller, Radium*

1978-1981 Anne T. Sherren, Uranium, Aurum Iodide

1981-1984 Doris Warren, Neptunium

1984-1987 Celia Mendez-Botet, Vanadium

1987-1990 Antoinette Hockman, Vanadium

1990-1993 Margaret Cavanaugh, Samarium, Curium

1993-1996 Martha Thompson, Promethium,

1996-1999 Linda Brazdil, Fluorine

1999-2002 Susan Marine, Fluorine, Member-at-Large, Radium

2002-2005 Lily Ng, Fluorine

* Deceased



In Loving Memory

Agnes Fay Morgan

Loyal and Devoted Iotan 1884 - 1968



Agnes Fay Morgan was one of the founders of Oxygen Chapter and played an important role in the organization of IOTA SIGMA PI, the National Honor Society for Women in Chemistry.

At the Fourth National Convention in 1927, at Cleveland, Ohio, she was nominated the first National Permanent Historian, an office she held until her death in 1968.

During her years in office she published four editions of the HISTORY OF IOTA SIGMA PI, the first, a limited edition of five hundred copies, in 1930, the second in 1937, the third in 1952, and the fourth in 1963.

After much study and thought it was decided that the Centennial History should be a revision and up-dating of the 1963 edition as edited by Agnes Fay Morgan. Thus our beloved Agnes Fay Morgan lived on in the 1980 edition of the HISTORY OF IOTA SIGMA PI, and she continues to live on in this Centennial History as she continues to inspire each of us with her loyalty, devotion, and dediction.

"On the evening that Dr. Morgan gave her research paper upon the reception of the Garvan Award of the American Chemical Society in Atlantic City in 1949, I remember she was wearing her famous "fur-piece." Her topic was her work on pantothenic acid, a deficiency of which can cause gray hair. Her fur-piece was made of the skins of two silver foxes, shiny, dark control and dull gray experimental (deficient) animals in her research. She was terrific!"...Jane Fraenkel-Conrat, The Iotan Newsletter, November 1983, No 34.

The photograph is with permission from the University Archives, Agnes Fay Morgan Collections, Order number 033059, Bancroft Library, University of California, Berkeley, CA.

Celebrating Centennials

Agnes G. S. Riley and Iota Sigma Pi

Agnes Graham Sanders Riley, like Iota Sigma Pi, celebrated her centennial in 2002. Agnes Riley's story is a chronicle of the history of women in chemistry and a story of broad coincidence. We can see how important we are to each other, and how important Iota Sigma Pi has been in the lives of these women. In 2002, as Editor of the Iotan, I had requested anecdotes and quotations from members for our centennial history. I was touched when I received the handwritten letter below.

I read with eager interest the wonderful plans for the Centennial Celebration. I wish I could be there, but my travel days are over. I share the birth year with Iota Sima Pi, since I was born February 13, 1902 so I am now 100. I am wondering how many living members also are the same age as our beloved organization.

I note your address. I grew to love Louisiana where I taught chemistry at Newcomb College of Tulane University. Please forgive my bad handwriting as my eyes are very bad.

After receiving this letter, I met with ISP President Susan Marine in New Orleans. She arranged for ISP members in Kentucky, Jennifer Muzyka and Allison Strange Soult, to contact Mrs. Riley. They tried to convince Agnes to let them treat her to lunch, but she would have none of that. On May 22, 2002, they went to lunch with Agnes Riley at the University of Kentucky Faculty Club. They presented Agnes with a medallion with the inscription "ISP 100 years" on one side and "Agnes Riley 100 years 1902-2002". Agnes writes,

My dear Jennifer,

Not once in my long life have I had such a day filled with emotion as today. I was so excited being with chemists again after years - both so attractive and both PhDs! And that darling little three year old was a pure delight.

....Then I was completely overcome by the prized medal. I was honored beyond my power to describe, by the recognition that I share a 100 year birthyear with our beloved Iota Sigma Pi. I could only cry when you presented it to me, as you saw. I slept with it on last night!

You of course are the giver and I am forever



grateful! I can only use Shakespeare to express this gratitude — "thanks and thanks and thanks again."

Jennifer Muzyka writes about Agnes Riley after their lunch together.

"Agnes was the valedictorian of her high school class in Max Meadows, Virginia (1920), earned her bachelor's degree in chemistry with high honor from Hollins College (1924) and her master's degree in physical chemistry from the University of Chicago (1925). When asked whether she were the first woman in her family to attend college, Agnes smiled and pointed to the portrait of her grandmother and namesake, sharing that she had also attended college. Agnes related about her time at Chicago, "It wasn't funny that I was a woman, it was funny that I was a southerner."

Agnes regrets that she did not continue her graduate work and obtain a Ph.D. When she finished her master's in the late 1920's, her father had Agnes' four brothers and one sister for whom to pay tuition; he could not afford to continue paying Agnes' tuition in the midst of the depression. Agnes' advisor helped her to find a job at the nearby hospital, but the offered salary was less than tuition; Agnes chose to take another position as an Instructor and then an Assistant Professor of Chemistry at Hollins from 1925 to 1932. Agnes was an Instructor at Newcomb College, Tulane

University, from 1932 to 1936 and then a Research Assistant at Tulane from 1936 to 1938. Agnes met her future husband Herbert Parkes Riley while she was at Tulane.

After a faculty position for Herbert at the University of Washington, Agnes and her husband settled in Lexington, Kentucky. H. P. Riley was a botanist who served as chair of his department at the University of Kentucky. Agnes was not allowed to teach at the university because of the rule against spouses working at the same institution.

Agnes proudly told us about her son, who attended Phillips Exeter Academy, earned his bachelor's at Harvard, and his Ph.D. at Berkeley. Agnes had a chuckle when she revealed her son and his wife are professors in the same department... political science.

Agnes has been active through the years in a variety of organizations, ranging from the American Cancer Society to a variety of historical societies. She has many publications in history but her initial publication was in chemistry, in the Journal of the American Chemical Society in 1938."

At our Centennial Convention in Berkeley, in June 2002, some of our members wrote birthday greetings to Agnes Riley. She replies:

(Now) I can write some important letters. Of course the first one will be to you. Sixteen notes with the most of them containing several messages. I think more in all if my poor eyes could be trusted. All of them from wonderful chemists, some of whom I know by reputation. I was deeply moved and honored by such attention in my old age. I have missed chemistry. I heard that the head of the department at Newcomb College of Tulane said that she could replace me, of course, when I married Herbert and moved

to the University of Washington. However, she said that she could find no one who loved chemistry as I did. Therefore I can know how much this medal from Iota Sigma Pi means to me. I'll love it, and cherish it all my life with gratitude.

In April, 2002, I met a chemist friend, Annette Doskey at a local concert in Lousiana, and she was going to a 50th year celebration of her graduation from Newcomb College in New Orleans. I told her all about Agnes Riley. In June, 2002, Ruth Benerito, (Iota Sigma Pi Honorary Member), received the 2002 Lemelson - Massachusetts Institute of Technology Lifetime Achievement Award for her role in the invention of permanent press cotton at the Southern Regional Research Center in New Orleans. Benerito was a chemistry professor of Annette Doskey at Newcomb College, and Doskey called to congratulate Benerito. She related to Annette, "Agnes Riley was the best teacher I ever had". Doskey told Benerito all about Anges Riley and the centennial. Benerito called Agnes Riley in Kentucky and renewed their acquaintance. Incidentally, Benerito earned her Ph.D. in Physical Chemistry (1948) from the University of Chicago, Riley's alma

We should consider that Agnes Riley's career in chemistry ended with her marriage. She, however, maintained her memberhsip in Iota Sigma Pi for more than sixty years. Her excitement at being honored with the centennial medallion and her notes reflect her enthusiasm for a career not fulfilled. Should we not contemplate the loss to society of Agnes Riley's teaching skills, love and knowledge of chemistry? Certainly, she was not alone.

Sharon V. Vercellotti, Editor Iota Sigma Pi Covington, Louisiana 2002

"Such antinepotism rules were for many decades a common administrative device used by universities to protect themselves from having to consider employing qualified wives and perhaps to protect the employed husbands from the legitimate professional competition from them as well. What the loss of the professional opportunity meant to these women or to science as a whole, which by this wasteful and systematic disqualification lost the contribution of many highly talented persons, was apparently of little consequence to anyone but the married women, who found themselves blamed first for marrying and leaving science and then for trying to get back into it!"

Margaret W. Rossiter, Women Scientists in America Struggles and Strategies to 1940, Johns Hopkins University Press (1982) p. 196.