# Nitrogen Third Chapter 1912-1954



In the fall of 1912, the idea of an organization for the women in chemistry was suggested to the girls of the chemistry department of the University of Nebraska by Mary L. Fossler, instructor, and Ruth Squires Winchester, student. During that winter the organization was accomplished, a short constitution was written and adopted and the name Iota Sigma Pi was chosen. The following year the entire membership was taken into the Chemistry Club and more fellowships were given to the girls and more of them made assistants in the department than had previously been the case. The first president was Edna Miller Gish, and the first secretary was Ruth O'Brien.

Knowing of a similar, though older organization, Chi Alpha Pi at the University of Washington, the group suggested in the fall of 1913 that the two chapters unite and declare Iota Sigma Pi a national organization. After much planning and correspondence with the chapter at the University of Washington, on December 18, 1913, Nebraska agreed to accept the pin and constitution of Chi Alpha Pi providing Washington would accept the name of Iota Sigma Pi. Nebraska also agreed that Washington might be considered the mother chapter.

There was rivalry between Iota Sigma Pi and Alchemia of California thereafter for some years, each hoping to acquire a sufficient majority of chapters to make them able to persuade the rival to join them. On January 21, 1916, Nebraska received a telegram from the chapter at Berkeley, saying that Oxygen chapter and they had agreed upon the pin that Alchemia had suggested and that, if Nitrogen agreed, the name and constitution of Iota Sigma Pi would be accepted by Alchemia. This telegram marks more than anything else the date of the actual founding of the present national Iota Sigma Pi. The charter members of Nitrogen chapter were

Edna Miller Gish Etta Carpenter Suzanne Parsons Mary Louise Fossler Ruth Squires Winchester Ruth O'Brien Beraldine Kauffman Nell Ward

The first national convention of Iota Sigma Pi was held in Lincoln, Nebraska, with Nitrogen chapter as hostess. At this time, Mary L. Fossler was elected national president.

Nitrogen members installed, or helped to install,



Members of Nitrogen Chapter University of Nebraska 1918

several other chapters: Phosphorus by Margaret Dye Foreman, Tungsten by Lila Sands, Aurum by Ruth O'Brien, Mercury by Enid W. Jaeger, Kalium by Lucille Bliss and Anne Davey. This is a record of extension which is not excelled by any other chapter.

National officers from Nitrogen have been Mary L. Fossler, president 1918 to 1921, and Mary L. Morse, editor 1927 to 1933.

During the years 1930 to 1944, the chapter remained active with regular meetings varying in number between eight and eighteen per year. Some of these meetings were of social character, some were open scientific programs, some were initiation banquets. Trips to scientific and industrial laboratories were often a part of the program. Some of the presidents of the chapter were Lucile Hac, Violet Wilder, Idella Jenkins, Eleanor Omer, Dorothy Jeane Minks, Mary J. Lauvetz, Irma Tingelhoff, Charlotte Venable. Maude Alice Cheuvront, who was a leader of the chapter and its historian, died suddenly in 1940, leaving a sad gap in the ranks.

In 1944 only one active member remained, Jean Whedon Ramenga, but in 1946, with the help of the sponsor, Emma N. Anderson and the alumnae, the chapter was reorganized, thirteen new members were initiated and meetings and programs were resumed. In 1947-48, fifteen new members were initiated and Ida Blore became the sponsor. In the following year there were fourteen initiates. The chapter was represented at the 1948 convention by Marilyn Chaloupka and the sponsor Ida Blore was also present. At the Denver convention in 1951, Elizabeth Johnson was the delegate. Pauline Doryland became the sponsor in 1952 and Ida Blore regional counselor for Section 2. The chapter became inactive in 1954.

In the face of the unprecedented chances which are now open to women chemists, many are tempted to forego their advanced studies and to cash in on the jobs now available.

Agnes Fay Morgan, Ph.D.

National Historian

The Iotan of Iota Sigma Pi Vol. 4 No. 1 March, 1944 pg. 7

# Osmium Twenty-ninth Chapter 1963-1975



Osmium Chapter located at Ohio State University, Columbus, Ohio was installed during the Fourteenth Triennial Convention at Cleveland, Ohio in 1963 by Hoylande Young Failey, National President, assisted by Anna Hoffman of Radium Chapter.

Sandra Thomas was the first president. There were eighteen members, fifteen initiates the first year. Other presidents have been

Jane Bibler Shirley Ehrhardt Sue Carol Cummings Alexandra Melnyk

Denna Berglund

During the year 1964-65 the chapter established a Freshman Award consisting of a gift certificate for the purchase of books at the University Bookstore. Some recipients of the Award were

Julia Huffman Bonita Boger Peggy Avery Dorothy Cichara

Roselyn Fu

Among several honors received by Carol Stanfield during the year 1965-1966 was her election to the American Chemical Society Merit Board. During the same year Shirley Ehrhardt was promoted to Associate Editor, Subject Indexes Division, Chemical Abstracts Service.

Barbara Maciejewski of Chemical Abstracts Service was the delegate to the 1966 Triennial Convention in Corvallis, Oregon and Donna Berglund was the delegate to the 1969 Triennial Convention in Boulder, Colorado.

Osmium Chapter had thirty-nine members listed in the 1969 Triennial Directory. Dr. William T. Lippincott was the Faculty Sponsor.

# Oxygen Second Chapter 1911-2001



A group of six women, majoring in chemistry at the University of Washington, and anxious to further the interest of all women in this field of theoretical and applied science, met at the home of Agnes Fay Morgan on October 7, 1911. Through her advice and suggestions, they organized Oxygen chapter of Chi Alpha Pi on this date, which later became Oxygen chapter of Iota Sigma Pi. The officers and charter members of Chi Alpha Pi were

Catalytic Agent, Agnes Fay Morgan, president Equivalent, Dorothy Drake, vice president Reducter, Janet Stevenson, treasurer Phlogiston, Sabra Godfrey Sweet, program chairman

Alcahest\*, Josephine Johnson, corresponding secretary

Mordant, Sara Kahan, recording secretary \*hypothetical universal solvent sought by alchemists

The objectives of the organization were stated as follows:

- 1. To promote interest and enthusiasm among women students in chemistry.
- 2. To foster mutual advancement in academic, business and social life.
- 3. To stimulate personal accomplishments in chemical fields.
- 4. To be by our earnest endeavor, an example of practical efficiency among women workers.

These ideas are still found in the constitution of the present day Iota Sigma Pi, and in almost the same phrases.

A constitution, ritual, seal, and by-laws were drawn up and adopted, and these are for the most part the basis of the present constitution and ritual of Iota Sigma Pi. A pin symbolic of alchemistry was adopted and these symbols are still on the pin of Iota Sigma Pi.

The beginning of extension to similar groups of women students in chemistry at other universities with similar aims and interests was made almost at once. Correspondence with the group called Iota Sigma Pi of the University of Nebraska resulted in union with Chi Alpha Pi on December 18, 1913. The Chi Alpha Pi constitution, ritual and seal, the name Iota Sigma Pi were adopted. Correspondence with similar groups at the universities of Illinois, Michigan, and Colorado was begun.

The date of the union with Alchemia of California, Stanford and Southern California, was April 12, 1916, when these chapters united with Nitrogen chapter of University of Nebraska, and Oxygen of Washington, taking the name of Iota Sigma Pi. This is taken as the actual date of founding of the national organization since all later chapters were admitted by charter.

Meetings have been held usually once a month with guest speakers as well as business of the chapter. The alumnae have been active, having yearly reunions.

Edith Hindman Johnson of Oxygen was the first national secretary of Iota Sigma Pi, and Zalia Jencks Gailey, also of this chapter, was national president from 1921 to 1927. E. Sanderson Radford of Oxygen was national secretary from 1936 to 1939 and Elizabeth Knapp Smith, transferred to Oxygen from Iridium, was elected national editor in 1951 and served until 1957 when she became national Vice President, serving until 1960. Marjorie M. Nelson was national treasurer from 1957 to 1962.

In July 1936 the chapter celebrated the twenty-fifth anniversary of its founding and at the same time served as hostess for the seventh triennial convention of Iota Sigma Pi. Four of the six charter members were present at the anniversary banquet. Oxygen at that time had about 160 members scattered over the country, at least thirty-one with the M.S. and fifteen with the Ph.D. Degrees.

In recent years meetings have been held once a month in Bagley Hall, the chemistry and chemical engineering building, which was built in 1936. Oxygen chapter was fortunate in having a room allotted to their exclusive use as a lounge and meeting place. There are two special annual events, the first being the initiation banquet, at which time the pledges traditionally read their autobiographies given in chemical terms. The spring picnic is sponsored jointly by Oxygen and the Phi Lambda Upsilon chapter, and is open to the entire department of Chemistry.

Among the means of raising money has been the selling of candy, bath salts, fireplace salts, cold cream and hand lotion, all of which were made by the members. However, the major source of income is the selling of laboratory aprons and safety goggles which has been carried on since 1924.

For a time, money was raised for a student loan fund, but in 1937 it was converted to an annual scholarship award of one hundred dollars. The award is given to a woman chemistry major, to aid her in advanced studies. The following girls have won the award:

won the award.	
Lois Smith	Mary Lou
	Zimmerman
Vera Hylton	Eva Peoples
Frances Thomas	Ellen I. Jan Chiang
Myrtice Hoyt	Adele Hopkins
Anna Mae Timbers	Barbara Bigley
Betty Deutsch	Suzanne Salt
Marian Boehr	Inez Winslow
Carol Green	Elizabeth Jones
Myrtle Logue	Linda Simmons
Klarese Lere	Myra Taylor
Marion Larsen	Naydene Charleson
Edna Hortenson	Gudrun Quenzler
Janet Lushcer	Marjorie Omori

In 1945 Scotty Amende initiated the Radford prize of a fifty dollar bond for the freshman woman chemistry major of highest standing. This prize was named in honor of our beloved teacher, Ethel Sanderson Radford. This prize was awarded until 1968 when it was discontinued because the large number of women enrolled in first year chemistry

made the selection of a winner impossible.

After several years of inactivity, Oxygen was rejuvenated in November, 1966, when a group of alumnae under the leadership of Dr. Elizabeth K. Smith and Dr. Bonnie Jean Schein, drafted a petition to change the status of the chapter from student to metropolitan. The petition was signed by thirteen members and sent to the National Vice President. On March 14, 1967, approval was received. Reactivation was celebrated with the initiation of fourteen new members from the Seattle area on May 24, 1967, at a dinner honoring Agnes Fay Morgan and Sarah Siegel, two of the original six women who had founded this chapter. The chapter was reinstated in 1968 as a recognized campus organization of the University of Washington, but the former meeting room was relinquished.

Since its incorporation, Oxygen has initiated over four hundred women, plus four honorary members. As a Metropolitan chapter, active membership has ranged from thirty to forty members, distributed among professional women chemists, graduate and undergraduate students of the universities of the area. The Education Committee has been active in promoting chemical education for women students in high schools and junior colleges.

Meetings are held four to six times each year. They include a mixture of scientific and social activities: for speakers from the University, joint meetings with the local section of the American Chemical Society, research reports by Iota members, tours of a local winery, spice manufacturing plant, or other industry, and picnics or Christmas parties at homes of members. These latter often include the initiation of new members.

During the decade of the 1980's the chapter was quite active with meetings that included reports of research by members, career nights, information "teas" at the University of Washington, potluck suppers at members' homes, dinner meetings at restaurants, annual summer picnics, joint meetings with the Puget Sound Section of the ACS, and field trips. Recent leaders have been Margaret "Kit" Ellis, Kathy Dugaw, Dorothy Gockel Stansel, Dr. Celia Scott, Eloise Crittendon, Margaret Pitts, Dr. Betty Smith, and Dr. Clarita Bhat. During the decade of the 1990's, the chapter was inactive. However the chapter is being rejuvenated, with special thanks to Oxygen Secretary Margaret Pitts.

Oxygen Chapter has three 50-year ACS members: Dr. Celia Scott, Margaret Pitts, and Golda "Millie" Christoffers. On the National Iota Sigma Pi level, Margaret "Kit" Ellis served as National Director from 1975 to 1981 and as National Secretary from 1981 to 1984. Elizabeth K. Smith and Celia Scott served as the Pacific Coast Regional Director.

The Iota Sigmi Pi honor society is a wonderful organization that offers support encouragement to so many women in a field that is still dominated by men.

Rebecca Holmberg

Graduate Student University of North Carolina- Chapel Hill "As great scientists have said and as all children know, it is above all by the imagination that we achieve perception, and compassion, and hope."

Ursula K. Le Guin

Thirty-two Catalysts, Presidents, have served Oxygen, since its inception in 1911 and sixteen since its reactivation as a Metropolitan chapter in 1968. These have been

Zelda Hindin E. Sanderson Radford Julia Haffki Caroline David Joan Doe Marjorie Nelson

Margaret Gano

Florence Harrison

Catherine Worsfold

Francis Greef

Marian Larsen

Irene Takahashi

Barbara Tews

1911-1968

Carol Green
Theodora Edwards
Ruth Schott
Anna Mae `
Timbers
Elsie Johnson
Lucile Liston
Anne Cedarquist
Marjorie Westfall
Evamarie Riegger
Adele Hopkins
Linda Simmons
Victoria Sutter
Marjorie Omori
Naydene Charleson

Vera Hylton Clara Storvick

Betty Rogle Myra Taylor Eloise Snyder

1968Ieva Lazdins
Ellis Goodrich
Celia Scott
Rae Foutz
Patricia Samuel
Louise Rose
Kathryn Dugaw
Cathleen Webb
Dorothy Gockel Stansel

Margaret Kit Lynn Brown Jeannette Lamhert Eloise Crittenden Joan Melcher Sandra Artoe Ruth Johnson Clarita Bhat

Oxygen Chapter, saddened by the death of Agnes Fay Morgan in July, 1968, renamed the Annual Senior Scholarship Award the Agnes Fay Morgan Memorial Award in honor of her outstanding contributions not only as a chemist, but also as a member of Iota Sigma Pi. The recipients of the award since 1966 have been

Patricis Loveland
Ieva Lazdins
Meredithe Applebury
Lynn Brown
Charlotte Ford
Lorna Williamson
Elsie Johnson
Lucile Liston
Anne Cedarquist
Marjorie Westfall
Evamarie Riegger

Nicky Lee Standord Terry Fasevich Belinda Shunk Sheila Norton Diane Quammen Adele Hopkins Linda Simmons Victoria Sutter Marjorie Omori Naydene Charleson Melissa A. Staryasnik

# Palladium Nineteenth Chapter 1930-2001



In 1926, a science club, Beta Chi Phi, was organized at the Pennsylvania State College. By 1930, its aims and ideals had become principally chemical, and the club petitioned for a charter from Iota Sigma Pi. On May 5, 1930, the Palladium chapter was installed by Elizabeth Hyde of Iodine. The charter members were

Sara Burt Hannah Honeywell
Elizabeth Clair Pauline Beery Mack
Winifred Forbes Nellie Roberts
Julia Haber Mary L. Willard

In 1932, on the annual college scholarship day an award was made for the first time by the chapter to the girl of the junior class classification who had achieved the highest scholarship in chemistry.

In 1948 Palladium had the pleasure and honor of serving as hostess for the ninth triennial convention.

In 1950 Palladium established a scholarship fund from which is paid a prize of twenty-five dollars each year to a senior woman with an outstanding record in chemistry. The first award was given jointly to Joan A. Schilk and Lorraine E. Dreisbach.

Mary L. Willard, charter member and past president of the chapter, served as Vice President of the National Council from 1930 to 1933, Pauline Beery Mack was President from 1945 to 1948, and Gladys Q. Dawson was Treasurer from 1954 to 1957.

Some of the Catalysts have been

Mary L. Willard Marion Fleming Pearl Hawkins Norma Lee Gruver B. Mae Yoder Dorothy Enright Ann Reimel Evelyn C. Marboe Dulcena E. Crabtree Lucille Jackson M. Catherine Hechler Lillian T. Brostek June Pfister Janice L. Green Harriet Harry Wilma Hickman Dorothy Lyle Janet Newman Isabel Oakwood Josephine DeLuis Maxine Miller Joyce Kimlim

A Golden Jubilee regional meeting of section V was held at Pennsylvania State University on December 5 and 6, 1952, with Palladium as hostess and H. Marjorie Crawford as regional director. The Marie Curie lecture was given on December 5 by Mildred Rebstock and the scroll and check for the 1952 national research award

were presented to Mary Louise Quaife who had been sponsored for the award by Palladium. Representatives of Radium, Manganese and Fluorine as well as several national officers took part in the meeting.

Palladium chapter inaugurated an important annual event in 1940 when the first Marie Curie lecture was given. A prominent woman chemist is invited each year to deliver this lecture. The lecturers have been

- 1940 Pauline Beery Mack "Evaluating Nutritional Status in Human Beings."
- 1941 Louise Kelley "Chemistry of Perfumes and Cosmetics."
- 1942 Emma P. Carr "Fingerprinting Molecules."
- 1943 Lois Woodford "Opportunities for Women in Chemistry."
- 1944 Virginia Bartow "The History of Alloys in Chemistry."
- 1946 Florence Seibert "Researches in the Chemistry of Tuberculosis."
- 1947 Cornelia T. Snell "Synthetic Detergents."
- 1948 Gerty T. Cori "The Enzymatic Synthesis and Breakdown of Polysaccharides."
- 1949 Evelyn C. Marboe "Cavitation, Gas Evolution from Supersaturated Liquids."
- 1950 Desiree Le Beau "Elastic Polymers -Science and Economics in Rubber."
- 1951 Gladys Emerson "Vitamin B<sub>12</sub>"
- 1952 Mildred Rebstock "Some Antibiotic Chemical Relationship."
- 1954 Wanda K. Farr "A Chemist Looks at Plant Cell Walls."
- 1954 Katharine Way "The Frontiers of Nuclear Science."
- 1955 Grace Medes "Cancer Research."
- 1959 Hertha Sponer -
- 1960 Mary L. Willard "Chemical Microscopy as I See It."

Following the Marie Curie lecture, a chapter banquet is held and at which time the lecturer is elected to honorary membership in the chapter and the scholarship award and engraved silver cup presented to a senior woman student. Recipients of the scholarship award have been Joan A. Schilk, Lorraine E. Dreisbach, Armine D. Paul, Dorothy Pfahler, Joy Fisher, Barbara Ann Troman, Dorothy Baker, Carolyn Barten.

The Marie Curie lecture of 1960 was the occasion of the celebration of the thirtieth anniversary of the founding of the chapter. Mary L. Willard, the lecturer, was the founder of the chapter and its beloved faculty sponsor until her retirement in 1961. Dr. Willard's avocation is "criminalistics" on which she has lectured extensively. She has acted as friend of the court on criminal cases in the Commonwealth of Pennsylvania.

# Phosphorus Sixth Chapter 1917-1954



A group of eight young women, specializing in chemistry at the University of Michigan, in 1917 organized a chemical society for women. A letter from Syracuse University requesting Michigan women to cooperate with them in forming an honorary chemical society was considered, as well as one from Oxygen chapter, Iota Sigma Pi, at the University of Washington, giving suggestions concerning organization and the preliminary steps for application to the honor society already established there. These Michigan women elected to throw their lot with the honor society already established. Prior to any application, however, a loose organization was established with a president and secretary. Meetings were held every two weeks and within the next three months four new members joined the group. Application was made for admission to Iota Sigma Pi, and on May 14, 1917, Phosphorus chapter was installed by Margaret Dye Foreman of Nitrogen. The following twelve charter members made up the group.

President:Florence Fenwick
Secretary: Dorothy Hall (Brophy)
Treasurer: Charlotte Kelsey
Selma Bandemer
Elizabeth Dunlap
Mabel Kebler
Marion Leonard (Laird)
Olga Shinkman
Margaret Hawxhurst
Justina Hill
Florence Wixson (Warrne)
Barbara Wild (Whittaker)

The delegate to the first national convention was Florence Wixson. Her interest in Iota Sigma Pi is shown by the fact that she offered at one time a prize of five dollars for the best essay on "Why Chemistry Should Interest Women." No record of its award exists, however.

At the time of the second national convention, Phosphorus registered a protest stating that it believed such events to be excessively expensive. Accordingly no delegate was sent. The third convention was attended by Margaret Woodwell (Johnston) and the fourth by Mable Miller. Malwina Lemmle represented Phosphorus at the convention in 1930, Katherine Wolcox Putnam in 1933, Jane Leichseuring (proxy) in 1936, and Marjorie Bishop in 1939.

In 1920 Phosphorus had fifteen members. During this year and the following, the organization was inactive. In 1923 reorganization was effected with

I wanted to be more like
Marie Curie, whose story
I had read in junior high.
I really admired her
because she was able to
work in the lab with her
husband, and one of her
daughters became a
nuclear physicist while
the other one was a wellknown war correspondent, author, and
accomplished pianist.

Darleane C. Hoffman

Chemical & Engineering
News

March 27, 2000 pg. 31

Chemistry delivers the foods, fuels, medicines and materials that are the hallmarks of modern life.

Elsa Reichmanis ACS President, 2003 nine members. The records of meetings prior to this time show interest almost exclusively in the field of pure chemistry. After the reorganization in 1923, the membership was made up almost entirely of women interested in medical and biochemical fields.

In June 1927, the chapter entertained several members of Iota Sigma Pi who were attending the Colloid Symposium held at the University of Michigan at that time. In April 1928, the chapter enjoyed meeting at luncheon a widely representative group of Iota Sigma Pi members who were in Ann Arbor attending the meetings of the Federation of American Societies for Experimental Biology.

Phosphorus sent a telegram of greeting to Madame Curie when she attended the Edison Jubilee in 1929 at Dearborn as the guest of Henry Ford. The chapter held regular meetings at which members reported on their research, and in addition, one or two open meetings each year for all women interested in chemistry. At these meetings distinguished faculty members or visitors were usually the speakers.

Phosphorus added sixty-five new members between 1930 and 1943, making the total 210. The

catalysts were Dorothy Hall Virginia Heard Mary Morse Kathryn Tompson Elizabeth Roberts Marion Slemons Lila Miller Monica Allen Marjory Bishop Jean Kyer Mabel Miller Vivian G. Behrman Katherine Wilcox Olive Searle Malwina Lemmle Charlys M. Lucht Ruth Eyles Alice Campbell

In 1944 the chapter became inactive. Dr. Lila Miller, Department of Biochemistry, University of Michigan, sponsor and alumnae secretary, retained the records.

## Platinum Fourteenth Chapter 1924-2001



At the third national convention of Iota Sigma Pi, held in Ames, Iowa, in June 1924, a charter was granted to a group of women interested in chemistry at the University of Denver. Under the auspices of Tungsten chapter, the installation took place August 23, 1924. The charter members were

President: Madeline Hyndman Vice President: Edna Wallace Secretary-Treasurer: Flora Hill
Corresponding Secretary: Gertrude Nelson
Zdenka Hurianek
Eleanor Marr
Margaret McConnell

From the original group of seven charter members the chapter grew to well over 300. Among the many professions represented by this group were doctors of medicine and specialists, doctors of philosophy, chemical engineers, chemists, laboratory technicians, nurses, teachers, secretaries, housewives and mothers.

The first name chosen by this chapter was Dysprosium, but the national council advised a change, explaining that Dysprosium was too uncommon an element and "would be difficult to remember." Platinum was the final choice.

Essie White Cohn represented the chapter at the fourth triennial convention at Cleveland in 1927, Blanche Bobbitt (proxy) at the convention in 1930, Hazel Fehlmann (proxy) in 1933, Mary Frances Hartman in 1939, Eunice Virtue in 1948, Anna Marie Duval in 1951, Patricia Olson in 1954, Sharon Tebow in 1957, and Patricia Nixon in 1960.

An outstanding event of the year in Platinum's program has been the award of a gold metal to the woman student at the University of Denver who has attained the highest grade in five laboratory courses in chemistry. This award was first made in 1934 and the first recipient was Vesta Bowden.

In May 1949 Platinum celebrated the twenty-fifth anniversary of its installation at a banquet attended by more than 150 members. Appropriate favors and souvenir programs commemorated this silver anniversary. The guest speaker was Dr. R. G. Gustavson, now at the University of Arizona. Essie White Cohn, national president 1948-1951 was Master of Ceremonies. Dr. Cohn has been a member of Platinum chapter since 1925 and is the first member of the chapter to be elected to a national office. Her untimely death in March 1963 was a severe loss to Platinum as to all women chemists.

Platinum was hostess to the tenth triennial convention held in Denver in 1951. Anna Marie Duval was the efficient general chairman of the arrangements and Essie White Cohn the presiding officer. The chief speaker at the formal banquet was Florence Rena Sabin, honored citizen of Colorado and national honorary member of Iota Sigma Pi.

In 1964 Platinum chapter celebrated the fiftieth anniversary of its founding. This was significant especially since 1964 marked the centennial celebration of the founding of the University of Denver.

# Plutonium Twenty-eighth Chapter 1963-2001



On May 16, 1962, the women of the Purdue Chemistry Department began the organization of the Plutonium chapter. Officers elected to effect the establishment of an Iota Sigma Pi chapter at Purdue were

Nina Matheny, Catalyst Margaret Schormuller, Equivalent Jean Mallan, Mordant Emma Stephens Larson, Reducer Karen L. Erickson, Historian

The official installation of the Plutonium chapter and initiation of its members was held on February 9, 1963, in the Wetherill Room of the Chemistry Building, Purdue. Dr. Hoylande Young was the installing officer.

The sponsor was Radium chapter, University of Cincinnati; the chapter adviser Dr. Nathan Kornblum, Professor of Organic Chemistry, Purdue University.

The meetings of Plutonium have been concerned with business matters, program meetings, and social gatherings. Programs have included social and political science, as well as scientific discussion by staff members and graduate students of Purdue University.

Marian College, Indianapolis, was affiliated with Plutonium until May, 1971. A new metropolitan chapter, Cobalt was installed in Indianapolis at that time.

Plutonium's service projects include assistance with the Lafayette Science Fair for high schools, the annual Christmas party held by the Chemistry Department, and the social tea after football games in the fall sponsored jointly by Plutonium, Phi Lambda Upsilon, and Alpha Chi. An outstanding event of the year has been the presentation of awards to the women students at Purdue University who have attained the highest grades in the chemistry laboratory courses. Recipients of the awards have been

Kendra Davenport Christy Lynne Kirchner Katherine Dammon Anderson Leslie Elaine Bauman Rosemary Duhon Marva L. Evans Pamela Jackson Eileen M. Hanna Mary Ann Chmielewski

Dr. Avanelle Kirksey was elected Coordinator of

Members-at-Large at the Seventeenth Triennial Convention in Cincinnati, June, 1972. Dr. Ching Siang Tang Yeh has served as the chapter advisor from 1968 to 1981. Other chapter advisors include Dr. Rachel Britton, Dr. Lanelle Geddes, Dr. Kay Conner and Dr. Jilian Buriak.

The Catalysts of Plutonium have been

Nina Matheny
Emma Stephens Larson
Nancy Jackobs
Carol Hooker (two years)
Eunice Kreider
Diana Darling (two years)
Martha Ownbey
Rita Reed
Rosemary Rader

Jean Huang

Jill Nelson GrangerAnne Meyers GullJanet ClarkMargaret WorkmanDenise CritesShelly DormadyAngela RaginSamantha Smith

Julia Hurst

Donna Nelson

Between 1982 and 1990, the Plutonium Chapter was an inactive chapter with very few members, and at present there is no information on the activities conducted by Plutonium Chapter members during this time span. In 1990, the interest and enthusiasm of Jean Huang and Karen Draths, the president and vice president from 1990-1991, brought the Plutonium Chapter back to life. With only eight total members, the only two student members, Jean and Karen, welcomed 12 new members in 1991 at their Initiation Ceremony. Dr. Anne Sherren, National Historian, was the invited speaker. Plutonium Chapter had 41 student members with a total of 69 members. Now in 2001 the Plutonium consists of student members and regular members. Growth continues.

The growth of the chapter can be attributed to the chapters activity and visibility of membership drives, public outreach, fundraising, departmental activities, and support and encouragement of others. On September 17, 1992, Plutonium chapter hosted its first departmental colloquium speaker, Dr. Cynthia Friend, and has continued this event annually since then. The colloquium speakers have been

1992 Dr. Cynthia Friend, Harvard University 1993 Dr. Vicki Wysocki, Virginia Commonwealth University

1994 Dr. Dorothy Gibson, University of

Louisville
1995 Dr. Geraldine Richmond, University of

Oregon 1996 Dr. Cynthia Burrows, University of Utah

1997 Dr. Nina M. Roscher, American University, Washington, D.C.

1998 Dr. Hilkka Kentamaa, Purdue University

1999 Dr. Jennifer Brodbelt, University of Texas, Austin

2000 Dr. Jane Ganske, Pepperdine University

2001 Dr. Barbara Imperiali, MIT (cancelled due to bad weather)

There were some women who were in Iota Sigma Pi and were chemists.

There weren't any women on the faculty at Purdue in those days.

Dr. Nina Roscher

The communication and support of other women is very important. The undergraduate awards are a special encouragement--I know I would have been especially thrilled to receive such an Award at that stage of my life.

Darleane C. Hoffman

Professor of the Graduate School, Dept. of Chemistry, University of California, Berkeley & Faculty Sr. Scientist, Heavy Element Nuclear & Radiochemistry Group, Nuclear Science Division, Lawrence Berkeley National Laboratory, Berkeley, CA

U.S. National Medal of Science, 1997 In addition to hosting one departmental colloquium speaker per year, the chapter also has seminar meetings in which guest speakers from industrial and academic professions are invited to give talks on resume writing, academic/industrial careers, family/career management, and other various subject matter to prepare chapter members for career decisions.

In 1991 the chapter hosted 12 young women from Girls Incorporated of Indianapolis for Operation SMART, which served as a foundation for the chapter's most involved service activity, Expanding Your Horizons in Science and Mathematics Conference (EYH). EYH consists of 34 hands-on workshops from a wide variety of professions that utilize math and science, as well as six career panels highlighting career in education, athletics, government, business, health and medicine, communications, and the environment. Organization of EYH started in 1992 when Dr. Kay Conner, faculty advisor, and Jennifer Ward attended the conference coordinator's meeting held at Mills College in California. Over the last eight years, the chapter has conducted EYH. The very first EYH at Purdue University consisted of 200 sixth through ninth grade girls and 40 professional women from Northern and Central Indiana and was held on May 1, 1993. EYH has since expanded to incorporate over 500 girls, parents/ teachers, workshop leaders, and panelists.

In addition to EYH, the chapter hosts National Chemistry Week (NCW) sponsored by ACS. National Chemistry Week was initiated in 1993 and has become not only a rewarding experience for the members, but also for the community. Chapter members and volunteers from the community visit local elementary schools to coordinate hands-on activities involving chemistry. Some NCW themes have been "Polymers of Life" and "Cooking with Chemistry". This activity involves approximately 130 volunteers/members and 3500 students between kindergarten and 6th grade.

The Plutonium Chapter has also been involved in various service projects since 1990. In 1994, the chapter expanded its activities to include a Departmental Open House at Purdue University. In 1998 the chapter hosted Hoosier Association for School Teachers in Indiana (HASTI) Conference in Indianapolis, IN and the Regional Science Olympiad at Klondike Elementary in West Lafayette, IN. HASTI is a conference that enables teachers to learn fun activities in science to share with their classes. The Regional Science Olympiad consisted of high school and middle school students competing in written and experimental science.

During the 1993 and 1996 National Conventions, Plutonium received the Outstanding Chapter of the Triennium Award due to their inspirational revival of the chapter, dedication to outreach activities, and member involvement. For their exceptional public outreach activities, the plutonium chapter was recognized in 1993 with the presentation of the ACS Phoenix Award. Also, in 1996 Plutonium Chapter's nominee, Nina Roscher, won the Distinguished Purdue Alumni Award. In addition, two Plutonium members, Cathy Cox and Michelle Renda, received national awards. In 2001, Professor Jean Chmielewski won the Agnes Fay Morgan research award. In celebration, the chapter hosted a party at her residence with several members in attendance.

In 1997, Plutonium initiated a local chapter award for the Iota Sigma Pi Outstanding Senior Woman. Recipients of this award have been

1997	Megan McMahon
1998	Karen South
1999	Mary O'Reilly
2000	Stormy Ratajczak

Two past Plutonium chapter members were elected to the 1999-2002 National Council at the 1999 National Convention. Dr. Janet Clark was elected Secretary, and Dr. Donna Nelson was elected Vice President.

Delegates and guests who have attended the National Conventions are

Delegate

Voor

rear	Delegate	Guests
1993	Marcy Hamby	Towns
1996	Margaret Works	man
		Kim Schrum
		Tina McNett
		Janet Clark
1999	Samantha Smith	Brandy Thomas

Cuarte

# Polonium Twenty-first Chapter 1937-1973



The chemical society, Chi Sigma Gamma, was founded at George Washington University in Washington, D.C. on April 30, 1923. It was an honor society, maintaining and stimulating interest of graduate and undergraduate women in chemistry. A petition was presented by members of this group to the National Council of Iota Sigma Pi at the convention in 1936.

The petition was granted and the charter authorized in July of that year. The name Polonium was chosen in honor of Marie S. Curie, our first honorary member, who was the discoverer of this element.

Polonium was installed by Vera Conard Patterson

of Iodine and Esther Peterson Daniel of Aurum on April 20, 1937. The charter members were

Catherine Shaw Bride
Anis Peterson Bradshaw
Dorothy Buck
Helen M. Dyer

Catherine Shaw Bride
Ellen Posnjak
Louise J. Stull
Anna Mannevillette
Sullivan

Elizabeath M. Hewston

Later local honorary members were Louise McDowell Browne, Virginia Hefty Knowles, and Margaret Lorimer Vanevera.

Monthly meetings were held at which papers were presented by members. Once a year there was an open meeting to which all women registered in any chemistry course were invited. At each of these meetings a woman prominent in chemistry in Washington was invited to deliver the principal paper, followed by papers by members of the society. One of the topics was usually a general summary of the most important events in the field of chemistry for the preceding year. Joint meetings with Alpha Chi Sigma and occasional laboratory suppers for women faculty members and students of chemistry varied the program of the chapter.

Polonium adopted the policy begun by Helium and Radium of offering associate membership to those not eligible for voting membership. Some of the catalysts were

Elizabeth Hewston Helen E. Ross Ellen Posnjak **Edith Davies** Patricia Frederico Jean Dunham Mary J. Shonk Lucille Anstine Mary M. McBurney Nancy Lee Rucker Shirley Mason Nancy Vesper Marjorie Loud Karen Kohler Marcia Boteler Norma Joyce Enherg June Cohen Anna N. de Konschin Lorraine S. Arkin Hazel Cartwright

Moore

Mary Olga Lougley

Polonium was inactive for a few years, but was reactivated in 1956 with eight members and in 1958 a new faculty sponsor, Dr. Robert C. Vincent.

In 1962 Helen M. Dyer, one of Polonium's distinguished founders was honored as the Garvan Medallist. Her research dealt with carcinogenesis. In 1972 she was honored as a National Honorary Member of Iota Sigma Pi. On March 23, 1962, Polonium members were hostesses at the Iota Sigma Pi breakfast during the American Chemical Society meeting at which Hoylande Young presided.

This chapter had become inactive before the establishment of Curium Chapter in 1973 at American University.

# Promethium Thirty-eighth Chapter 1979-2001



Promethium Chapter of Iota Sigma Pi was installed October 20, 1979, by National Director Margaret Ellis. Seven Iota Sigma Pi members had signed the Petition to Iota Sigma Pi for the establishment of a metropolitan chapter in Portland, Oregon.

June D. Boyett Uranium
Carole R. Gatz Aurum
Linda Sue Gabourel Niobium
Judith B. Glad Niobium
Joan P. Kilbourn Niobium
Elaine W. Lis Hydrogen
Patricia R. Starr Niobium

Joanne A. Nyiendo, Karin Rodland, Agnes Tenney and Patricia A. Stoddard were initiated at the installation. Sue Kohlhepp and Diane Yolton of Tellurium Chapter also affiliated with the Chapter.

A meeting was held in March to plan for an Initiation in May. Ten professional women in chemistry, four graduate students in chemistry at Portland State University and three undergraduate students were initiated into the Promethium Chapter of Iota Sigma Pi on May 5, 1980.

Since Promethium is a metropolitan chapter, the members decided to communicate through a monthly newsletter. Each month an article is written by a member and this article plus any additional information of interest is published and forwarded to the professional women in chemistry as well as all Promethium Chapter members in the Portland area.

The chapter was quite active with meetings that included reports of research by members and guests. Topics have ranged from university and industrial research to financial planning for professional women. Initiations, tours, picnics, planning meetings, and reports on member travel have rounded out the range of chapter meetings. Some of these meetings have been potluck suppers at member's homes, dinner meetings at restaurants, field trips, joint meetings with Niobium Chapter and other professional organizations. The first officers were

President: Joan P. (Perky) Kilbourn Vice-President: June Boyett Secretary-Treasurer: Judith Glad

The following persons have served Promethium Chapter as President: Joan P. (Perky) Kilbourn, Carole Gatz, Karin Rodland, Mary Ryan-Hotchkiss, Martha Thompson, Mary Frances The purpose of looking back is not, of cours, merely to obtain satisfaction from reflecting on past triumphs; rather, it is to discover as many clues as possible to the likely developments of the future.

Glenn T. Seaborg

Nobel Prize Winner

Chemical & Engineering

October 30, 2000, pg 34 (ACS ad) Nothing in life is to be feared. It is only to be understood.

Marie Curie

Zimmerman, and Patricia Stoddard. Leaders of this active chapter in addition to the chapter presidents include: Agnes Tenney, Judith Glad, Karen D'Arcy, Elaine Spencer, Sue Kohlhepp, Linda George, Bernice Gilmore, and Ellen Wedum.

Two Promethium members have served on National Council. Joan P. (Perky) Kilbourn served as Coordinator of Members-at-Large from 1981-1987. Martha Thompson served as National Director from 1987-1993, National President from 1993-1996, and Immediate Past President from 1993-1996.

From June 29-July 2, 1984, Promethium Chapter hosted the twenty-first National Convention with the theme "Under the Iota Sigma Pi Umbrella." The theme was chosen because Promethium Chapter members wanted to stress the commonality and diversity and to emphasize the importance of networking at this convention.

From June 24-27, 1999, Promethium Chapter hosted the twenty-sixth National Convention with the theme "Reach Out". The theme of "Reach Out" was chosen to be an extension of the 1984 theme of "Under the Iota Sigma Pi Umbrella." Besides Iota Sigma Pi, National Conventions for two other professional women's organizations were being held in the same hotel at the same time. The other organizations were Graduate Women in Science (SDE/GWIS), and Association for Women in Science (AWIS). The goal was to increase networking between the members of all three organizations.

In addition to hosting two National Conventions Promethium Chapter hosted luncheons with the Spring 1994 Regional Meeting of the ACS in Alaska and the Spring 1999 Regional Meeting of the ACS in Portland. Promethium Chapter members met with other Iota Sigma Pi members and Graduate Women in Science members at the annual meeting of AAAS in Seattle in 1996.

This active chapter has published two books to raise money for their chapter scholarship fund. The books are entitled "Promethium Chapter's Cartoon-Humor Book" and "The Book for Working Women - Is there any other kind?" For the publication of the second book, Promethium Chapter received a Chapter Mini-grant from National Council. Promethium Chapter gives annual scholarships funded by revenue from the books and donations. In addition awards are made at many Science Fairs. The first chapter scholarship award winner of a \$1000 scholarship was Laura Pressley in 1991. Other scholarship winners have been Laura Pressley (1992), Mary Schmidt (1993), Alyssa Franzen and Stacey Schiel (1994), Camchau Nguyen (1995), Kimberly Butterworth and Alison Bennett (1996), Kimberly Glasscock (1997), Allison Henry and Christie Kalamen (1998), Shayna Sung (1999), Shayna Sung and Rebecca Gannon (2000).

Promethium Chapter gives \$25, a certificate and a copy of their books to winners of the Promethium Chapter of Iota Sigma Pi Award for Excellence in Chemistry at the Northwest Science Exposition. (\$350 and 14 books and certificates have been given by 2001). More than 90 certificates and books have been given to other Promethium Chapter of Iota Sigma Pi Award for Excellence in Chemistry at other Science fairs. Promethium Chapter has provided financial support for the Saturday Academy annual lecture given by women scientists from Oregon and Washington.

# Radium Thirteenth Chapter 1923-2001



Radium Chapter of Iota Sigma Pi was installed on May 26, 1923, at the University of Cincinnati. It had been petitioned for by Sigma Kappa, an organization composed of women who were majoring in chemistry. The latter group held their first meeting in March 1922, more than a year before installation of Radium. They immediately adopted the standards of Iota Sigma Pi since they intended to petition the organization. Elizabeth Hyde of Iodine installed the Radium Chapter. The charter members were

President: Jessie Louise Cameron Vice-President: Mary Peyton Ballard

Treasurer: Elise Hauck Secretary: Helen Norris

Sergeant-at-arms: Anna L. Hoffman

Honorary Member:
Dr. Leonora Neuffer Bilger
Dorothy Allen
Elizabeth Leightly
Grace Mathews
Estelle Benton
Reland Mille
Dorothy Monro
Amy Diefenbach
Florence Ford
Estelle Ransdell
Elizabeth Gates

Else Schulze Helen Weitkarnp

The Cincinnati group chose Radium as its chapter name in honor of the discovery of that element by Madam Curie, who had the previous year become a national honorary member of Iota Sigma Pi. She was a special and greatly appreciated sponsor of the chapter.

The general policy of the chapter has been to encourage interest in chemistry and research by bringing together in both a professional and social

way those interested. Through the years the character of the membership has altered. Originally, except for one faculty member, the members were all students at the University of Cincinnati. Later professional women from hospitals, local industries and government, and students from neighboring colleges (Miami University and the College of Mt. St. Joseph) were elected. Thus the group had acquired greater variation in both ages and occupations. Although the chapter had operated in the spirit of a Metropolitan Chapter for many years, its status was not changed from an Academic to a Metropolitan Chapter until 1976.

From 1929 to 1953, an annual open house was held for all women taking chemistry at the University of Cincinnati. An effort was made to bring about a feeling of friendship among all these students and to call to their attention the ideals of Iota Sigma Pi. Members employed professionally spoke about opportunities for women in the various branches of chemistry and allied fields. The guests also had an opportunity to discuss their particular interests with a member familiar with that field.

In the mid-forties, several scientific lectures were sponsored in conjunction with Alpha Chi Sigma and Phi Lambda Upsilon for the general public. Meetings, about six to eight per year, have been varied. Besides meeting at the University of Cincinnati, Miami University, and the College of Mt. St. Joseph, homes of members, local hotels and restaurants, meetings have been held at places of employment of members. These have included trips to Procter and Gamble Miami Valley Laboratories, Ivorydale Technical Center Library, Kroger Food Foundation, Ohio Mechanics Institute, Cincinnati General Hospital, and the Robert A. Taft Sanitary Engineering Center. In the past twenty years, meetings (during the fall, winter and spring months) most often consist of a short social time followed by dinner (at a local restaurant) and a featured speaker. Speakers have usually been members and their professional associates and friends. A variety of scientific and travel talks have been heard. Speakers are chosen for the applicability of their topic to the interests of the membership. Topics have included information from such areas as environmental toxicology, patent information, molecular modeling, molecular cloning, polymer chemistry, improving the status of women in science, the drug development process, neurotransmitters and chemical education. Other annual events were a tea for prospective members, the initiation of new members, election and initiation of new officers, a summer family picnic gathering and joint meetings with the Cincinnati chapter of the American Chemical Society.

For a number of years, the chapter has sponsored a speaker at one of the regular departmental colloquia of the Department of Chemistry at the University of Cincinnati. Some of these have been Dr. Marcelle Morrison, Biochemistry Department, College of Medicine, University of Cincinnati, 1974; Dr. Audrey Companion, Illinois Institute of Technology, 1975; Dr. Janet E. Del Bene, Youngstown State University, 1976; Prof. Joyce Y. Corey, University of Missouri - St. Louis, 1978; Dr. Marcella York Darensbourg, Tulane University, 1980. Radium Chapter has also co-sponsored University of Cincinnati Chemistry Department seminars.

In May 1979 Radium Chapter sponsored a visit for a group of 40 high school juniors and seniors from a college preparatory school in Cincinnati to the Miami Valley Research Laboratory of Procter and Gamble. The students were assigned to groups of six or seven. After a short orientation meeting, each group visited three areas such as physical chemistry or electron microscopy. There were eight topics in all. All the speakers were women, although this was not pointed out to the students. The chapter felt that modeling of successful women chemists was one way to encourage women to enter the field of chemistry. The day following the trip, during a discussion, one of the boys exclaimed that all the professionals were women. The students enjoyed being able to ask questions and to see how their studies were used in real situations.

Beginning in 1940, the chapter has given an award to the outstanding sophomore woman enrolled in second-year chemistry at the University of Cincinnati. For many years the award was a copy of Lange's Handbook of Chemistry, but recently a twenty-five dollar check has been given.

In 1980, a new award was instituted and this was continued on an annual basis. The recipient is the undergraduate woman chemistry major at the University of Cincinnati who has the highest combined grade in Chemical Thermodynamics and Chemical Kinetics. The award consists of a one-year subscription to the American Chemical Society journal chosen by the awardee.

In 1930, Radium Chapter was hostess to Iota Sigma Pi's fifth national convention, and honored to be chosen in 1972 for the seventeenth triennial convention. The members of the chapter were particularly pleased that one of their members, Janet Del Bene, was the recipient of the Agnes Fay Morgan Research Award at the 1972 convention.

Presidents who have served the chapter from 1940 to 2003 are

Esther Marting Fabing
Mary L. Schafer
Elizabeth Badger Gibert
Jean Allen Donnelly
Mildred Pfister
Mary Catherine Schneider Blum

Write down your goals, review them often, and change them if necessary.

Helen M. Free

I let ...(my students) know that creative thinking is important and that they should not be afraid to try something because it night not work - failure can teach us many things.

Allison Campbell Affiliate associate professor, Bioengineering Department, University of Washington, Seattle

# Chemical & Engineering News

February 25, 2002, pg 31

Anna Bartruff Betty Detering Oehlschlaeger Clara Sesler Genther Imara Mencis Lucille Wade Rose Marie Blanchet Marilyn Mueller Van Vyven Barbara Barker Vera Hecht Lambert Jane Schell Yost Maxine Milan Smith Eleanor M. Behrmann Violet Diller Andrea White Eberle Alice Diehl Presnell Elizabeth Becker Shirley Wendel Josette Seibles Mary Gear Moore Joy Paulson Helen Keller Linda Fowler Gladys Oesper Fryer Diane Schmidt Jeanne Buccigross Nancy Meirose Cynthia Ditzel Jane Mueninghoff Yvonne Gagnon Lynn Papa Jane Gillmore Faye Rubinson Kathy Hansen Virginia Rush Nadine Harrison Lorrie Lin Joanne Willman Lisa Milstein Emel Yakali Diana Davis

Cindy Hassan

The chapter celebrated its silver anniversary on May 22, 1948. A reception and dinner were held on the University of Cincinnati campus with Pauline Beery Mack, the national president, as honored guest and speaker. Six of the charter members attended. In March, 1968, at its annual initiation ceremony, Radium recognized its fortyfifth anniversary. Three charter members were present and the guest speaker was Dr. Ralph E. Oesper, Professor Emeritus of Chemistry. In 1973, a luncheon program was arranged for the golden anniversary. Anna Hoffman and Else Schulze, charter members, and several life members were in attendance. Special guest was Dr. Oesper, who had been faculty advisor for many years and who had continued his deep interest in the progress of the chapter.

National officers from Radium Chapter have been 1927-1928 Elizabeth Gates, treasurer 1930-1938 Helen Norris Moore, secretary 1945-1948 Else Schulze, editor 1948-1954 Anna Hoffman, secretary
1948-1951 Mildred Pfister, regional director
1958-1964 Elizabeth L. Ludlum, affiliate from
Phosphorus, regional director
1964-1974 Anna Hoffman, regional director
1969-1975 Violet Diller, treasurer
1975-1978 Barbara Barker, secretary
1975-1978 Violet Diller, president
1978-1981 Violet Diller, past president
1993-1999 Jeanne Buccigross, national
director
1999-2002 Jeanne Buccigross, supplies
coordinator

1999-2002 Susan S. Marine, president 2002-2005 Susan S. Marine, past president In addition, the chapter was honored that one of its initiates, Sister Mary Rose Stockton was, national historian from 1972-1989. Sister Mary Rose Stockton was a founding member of Cobalt Chapter.

Leonora Neuffer Bilger, Radium's first (and only) honorary member and one of the founders, received the honorary Doctor of Laws degree from the University of Cincinnati in 1950 and was awarded the Garvan Medal by the American Chemical Society in 1953. She served for many years as Head of the Chemistry Department at the University of Hawaii. Elizabeth Welsburger received the Garvan Medal in 1981.

After her attendance as a delegate at the 1975 convention in Houston, Elizabeth Becker inspired the members of the chapter to present to the national council a suggestion for a national award to be given annually to a graduate student in recognition of outstanding research accomplishment in chemistry. This has been adopted and has been named the Anna Louise Hoffman Award, to commemorate Radium chapter's charter member, who served the chapter and the national organization faithfully until her death in August, 1974.

Radium Chapter often submits nominees for the National Iota Sigma Pi awards. Past successful nominees for these awards have been

Undergraduate Award for Excellence in Chemistry
Andrea DeLeat
Kristy Martin
Martha Reynolds
Agnes Fay Morgan Award:
Marcetta York Darensbourg
Jeanne Pemberton
National Honorary Member:
Jeanette Grasselli
Elizbeth Weisburger

Beginning in about 1993 Radium Chapter supplied judges at the Southwestern Ohio Science Fair and presented awards (a certificate and subscription to a scientific magazine) to middle and high school science fair project winners. After Dr. Violet Diller's death, the chapter has awarded the Dr.

Violet Diller Award to an outstanding undergraduate woman chemist at the University of Cincinnati. Radium chapter has encouraged local corporations to support women in science by the Chapter's Corporate Sponsorship Program. This chapter compiles and distributes a directory of local Iota Sigma Pi members and their scientific experience and interests.

# Ruthenium Thirty-fifth Chapter 1974-2001



Ruthenium was installed at Rutgers University on May 3, 1974, by Joan Lambros, National President.

Eighteen members were installed as the charter members. An additional nine members were also initiated into the chapter. The first officers were

President: Mary Ann Gawinowicz, Class of

1974, Douglass College

Vice-President: Meredith Clayton, Graduate Student, School of Chemistry, Rutgers

University

Secretary: Susan Groh, Class of 1974,

Douglass College

Treasure: Elizabeth Matthews, Class of 1974,

Douglass College

Historian: Nina M. Roscher, Assistant Professor of Chemistry, Douglass College

The members of the faculty of Rutgers University initiated at the installation included Nancy Ackerman, Paula Pimlott Brownlee, Dolores Gavin, Marian Kalkstein, Marcia Levine, Wilma Olson, and Joan Valentine. The Graduate Students from the School of Chemistry included Mary Chilton and Ann Marie Saab. The undergraduates from Douglass College, Class of '74 included Carol Jones, Karin Kalff, Anna Koo, Colleen McDonnel, Elisabeth Parisi, and Wendy Walton. The women from Douglass College Class of '75 were Maria Arnaboldi, Ann Curtis, Susan Edelstein, Barbara Lenk, Alice Quinn, and Joanne Smallheer. In addition, Phyllis Dunbar, formerly a member of Columbium, transferred her membership to the new chapter.

#### Samarium Thirty-seventh Chapter 1978-1998



The Saint Joseph Valley region of Indiana and Michigan, commonly known as Michiana, is the center of a thriving chemical industry and the site of some twenty institutions of higher learning, many with strong programs in chemistry. To meet the needs of the many women chemists in this area, a metropolitan chapter of Iota Sigma Pi was established in 1978.

Samarium chapter was installed on May 2, 1978. Officiating at the ceremonies was national president Violet M. Diller. The charter members of the chapter were

President: Margaret A. Cavanaugh Vice-President: Helen M. Free Treasurer: Geraldine M. Huitink Secretary: Alicia Zimmerman Historian: Dorothy M. Feigl Karen Mahakian

Alberta B. Ross Elena Rossi

Four additional members were initiated at the installation ceremonies, and Sister Maria Consolata Voss, C.S.C., was made the chapter's first honorary life member. Featured as speaker at the ceremonies was Helen M. Free, who had recently been named National Honorary Member for 1978.

In June 1978, Margaret Cavanaugh represented the chapter at the Nineteenth Triennial Convention held in Chicago, Illinois. It was at this meeting that Helen Free, a charter member of Samarium chapter was honored as the 1978 National Honorary Member.

During the 1978-1979 academic year, members of Samarium chapter attended a program dealing with the variety of careers open to women in chemistry and sponsored by the Aurum Iodide Chapter. On November 2, 1978, Samarium chapter sponsored a reception for Anna J. Harrison, first woman president of the American Chemical Society. The chapter also made a special effort to keep its members informed of events of interest to chemists in the area, including a talk by Rosalyn S. Yalow, 1977 Nobel Laureate in medicine and physiology, sponsored by the American Association of Clinical Chemistry.

The second new member initiation ceremony was held on April 19, 1979. Fifteen new initiates were welcomed into the chapter, and the current officers were elected for a second one-year term at this

Without a network of accomplished women in chemistry, I would probably succumb to my doubts about my own abilities.

Nicole R. Brinkmann

Graduate student

The best way to have a good idea is to have lots of ideas.

Linus Pauling Nobel Prize 1954 Chemistry 1962 Peace Prize meeting. One of the initiates, Martha Panfil, was also nominated by the chapter for the national undergraduate award for excellence in chemistry for 1979.

The 1979-1980 academic year saw an expansion in the range of the chapter's activities. A poster meeting, sponsored jointly by Samarium chapter, Aurum Iodide chapter (Chicago), and Plutonium chapter (Purdue University) was held on October 13, 1979. Samarium chapter played host for this first regional meeting on the Saint Mary's College campus in South Bend, Indiana. Members of Cobalt chapter (Indianapolis) were also in attendance. The two poster sessions, featuring eleven participants, were preceded by a luncheon. A total of about forty women attended this meeting. In addition to National President Anne Sherren, four chapter presidents were also present: Marijo Doody, Aurum Iodide; Carol Hooker, Cobalt; Rosemary Rader, Plutonium; Margaret Cavanaugh, Samarium.

By special arrangement with the South Bend Medical Foundation, the next meeting of the chapter was held at this facility. Chapter member Catherine Kozak organized the program which included a consideration of the special problems of the clinical chemist and a tour of the Foundation's laboratories.

The third meeting of the year took place on February 11, 1980 and featured a presentation by the Communications Group of Miles Laboratories, Inc. (Elkhart, Indiana). Helen Free, Director of Specialty Test Systems for the Ames Division of Miles, was responsible for the program, which emphasized the opportunities available to chemists outside of the laboratory.

The last meeting of the year was the initiation ceremony held on April 9, 1980. Sixteen new members were welcomed into the chapter. The following officers were elected

President: Margaret A. Cavanaugh Vice-President: Helen M. Free Secretary: Alberta B. Ross Treasurer: Jane A. Akai

Announced at this meeting was the nomination by the chapter of Kathleen Cleary, a student member, for the undergraduate award for excellence in chemistry sponsored by Iota Sigma Pi.

At the Spring 1980 national meeting of the American Chemical Society, Helen M. Free, a charter member of Samarium chapter, was awarded the Garvan Medal. In 1978 she had received National Honorary Membership in Iota Sigma Pi. Helen Free has held numerous leadership roles in the American Chemical Society including National President of ACS and Chairman of the Board of Directors of ACS.

Margaret Cavanaugh served as National Editor from 1981 to 1987, National Vice-President from 1987 to 1990 and National President from 1990 to 1993.

After 1990 chapter activity declined and this chapter was declared inactive in 1998.

# Scandium Forty-first Chapter 1989-1997



In October of 1987 a group of women in the northwestern section of South Carolina, led by Dr. Alice Fay, met informally to discuss the possibility of establishing a local chapter of Iota Sigma Pi. After some discussion, the group unanimously decided to contact the National Council of Iota Sigma Pi to obtain details for starting a chapter. Dr. Margaret Cavanaugh, National Vice President, assisted in the process. The group decided that Clemson University would be the logical center of activity for the chapter. The anticipated members were to be drawn from the Clemson community and from the other colleges and universities in the area. Members from the local industries were also included.

On May 31, 1989 Scandium Chapter was installed by Janice Barton, National Coordinator for Members-at-Large. The dinner meeting was held at the Textile Research Center at Clemson University. Christine Jarvis was the organizer. Twelve of the sixteen petitioners were present and initiated as charter members. The first officers were as follows:

President: Christine Jarvis, Clemson Univer sity Vice-President: Laura Wright, Furman University Secretary/Treasurer: Ann Baker Jenkins, Life Iota Sigma Pi member Historian: Melanie Cooper, Clemson University

Alice Fay had retired and moved to Georgia and was unable to be a part of the chapter. After several years this chapter became dormant to inactive and was declared inactive in 1997.

# Sulfur Fifth Chapter 1914-1997



On May 16, 1914, May Searls of the Alchemia Society of the University of California, and Ethel Jones, alumna and member of the same society and then head of the Chemistry department of Los Angeles Junior College, installed Trayah, the third chapter of Alchemia Honor Society in the University of Southern California. The charter members were

Etta Watkins Myrtle Tucker Ruth Eaton Hattie Hoenshell Grace Ashmore

In 1916, the three chapters of Alchemia united with the two chapters of Iota Sigma Pi of the Universities of Washington and Nebraska, under the name of Iota Sigma Pi. Sulfur chapter has been represented on the National Council by Blanche Bobbitt, National Secretary 1924-1927 and National Vice-President 1927-1930, by Imo Baughman, affiliate from Carbon and Hydrogen, National Vice President 1933-1936, Margaret G. Morehouse, Editor 1948-1951 and Vice-President 1951-1954, and by Gladys A. Emerson, National Vice President 1945-1951, President 1951-1957.

During the triennium 1927-1930, Blanche Bobbitt made an extensive survey of 169 colleges and universities of Class A institutions in the United States. As a result of this, three new chapters were added to Iota Sigma Pi, namely, Indium, Palladium and Tellurium; petitions were received from Hunter College of the City of New York, George Washington University, and the University of West Virginia. At the convention of 1936, Imo Baughman presented the petition which was granted for the establishment of a chapter at George Washington University. Sulfur chapter is proud to have assisted in the addition of four chapters to the roster of Iota Sigma Pi.

Sulfur has established a scholarship fund from contributions of alumnae and from amounts voted from the chapter treasury.

Some of Sulfur's annual events from 1930 to 1940 were the October tea given for women in chemistry, joint meetings with other science organizations, the Christmas party, the May house party at Imo Baughman's Lake Arrowhead cabin, and the June dinner at Blanche Bobbitt's home.

Catalysts during the years 1930 to 1940 were
Florence Shelby Virginia Weatherby
Blanche Bobbitt Sheila Murray
Margaret Airston Katherine Kirchner

The typical program for the years 1940 to 1952 added a luncheon in July for visiting faculty and students and a tea in October for all women in chemistry with the faculty wives as hostesses. Although through the years the wives of a number of the faculty have participated, the burden had been carried by two of the wives, Mrs. Hull and Mrs. Deuel, to whom the chapter is much indebted.

In 1941, Sulfur invited women in chemistry at the University of California at Los Angeles and at Occidental College to be initiated with the University of Southern California candidates. Four from U.C.L.A. were received that year, and one from Occidental. Sulfur chapter has appreciated having these women as members. During the period, 1941-1950, in cooperation with the National Council under the direction of Marjorie Crawford, one of the chapter sponsors, Margaret Airston, maintained an employment service clearinghouse which assisted Iota Sigma Pi members in obtaining positions. A survey of the work being done by women in chemical and allied fields was made, valuable information assembled, and a definite service rendered.

In December 1948, a luncheon was held in honor of the National President Essie White Cohn and in April 1949, National Vice President Gladys Emerson was similarly honored.

Sixteen candidates from University of Southern California, University of California Los Angeles, and Occidental were initiated in the spring of 1950. Three affiliates were received, and four more members were initiated in December of 1950. In April 1951, nine more members were welcomed. Since 1952 Immaculate Heart College has contributed members to Sulfur through the cooperation of Sister Agnes Ann. From 1955 to 1975 the membership has varied from twenty-two to thirty-nine active members and six to twenty-three alumnae members.

Sulfur took an active part in the Golden Jubilee regional convention of Iota Sigma Pi held in Berkeley in June 1952. Margaret Airston of Sulfur, regional director for region 1, presided and Marjorie Y. Vold, also of Sulfur, was the recipient of the Golden Jubilee Pacific Coast research award.

Initiates each year varied from five in 1955 to nineteen in 1959. During the 1960s the October tea was held in the new Young Women's Christian Association house at Southern California. Other teas have been held at Immaculate Heart by courtesy of Sister Agnes Ann, for many years an active worker and director of activities there. An outstanding meeting was that in honor of Evelyn L. McBain. Dr. McBain had also been guest speaker at one of the initiation banquets. At Westwood, University of California Los Angeles had hosted meetings with good speakers, most

Never stop learning.

Helen M. Free

I was the second woman to earn a Ph.D. in chemical engineering from the University of Illinois, so the faculty did not exactly have a lot of experience with women.

Michele Moisio Thomas

Technical Team Leader Exxon Mobil Upstream Research Co recently Marjorie Caserio of California Institute of Technology. Iota Sigma Pi national past president, Gladys Emerson of the Nutrition Department at University of California Los Angeles was the speaker on several occasions, as was Roslyn Alfin-Slater. Hoylande Young was guest speaker at the initiation banquet in 1961. Catherine Kirchner acted as adviser during 1959-1960. Margaret Morehouse, faculty adviser, was active in the national meetings and served as National Vice-President 1951-1957.

The alumnae group, organized in 1953 under the leadership of Dorothy Craig with Stella Alogdelis Chavos assisting, met several times at the home of Margaret Airston, and for a dinner and social evening (husbands invited) at the home of Mr. and Mrs. P. J. Muller. In 1959, the alumnae donated their Scholarship Fund to the Deuel Award at a luncheon meeting. This award was established in honor of the late Harry J. Deuel, Jr. and consisted of a cash award to a Ph.D. student. This is counted as one of the main chapter accomplishments. The aims of the chapter included helping students in chemistry and forming closer cooperation between the active chapter and the alumnae. Evelyn Savage was now chairman of the alumnae group. Sulfur has had the help of Evelyn Hull and Jean Grundlund as secretary and historian, respectively.

Some of the catalysts were
Margaret G. Morehouse
Doris Pabst
Ruth Fuhlrot
Stella Alogdelis
Joan Welker
Jean Grundlund
Millie A. Thompson

Roslyn Alfin-Slater
Glenne Christie
Hallie Bundy
Estella Mysels
Rosemary Shull
Erlinda Aragones

Sulfur Chapter was reactivated as a metropolitan chapter including the Orange County-Los Angeles area. Susan Kelley, National Coordinator of Members-at-Large, granted the charter to Mrs. Theodora Edwards, president, on December 12, 1978. In the next few years, membership grew to forty-six women with widely varying employment backgrounds.

Meetings have included tours of Jet Propulsion Laboratory, and City of Hope Medical Center, speakers, and panels. One especially interesting panel discussion was given by Nedra Utech, Anne Easton, Rebecca Sparling, Marie Scullie and Esther Leffler on their experiences as women in science before 1950.

Members have been active in other organizations. Sandye Weiner was secretary of the Orange County Section of the American Chemical Society, and Virginia Morris and Leah Mendelson chaired committees in American Chemical Society. Joyce Easton won the grand award of the National Academy of Suggestions Systems for her ideas on cost containment in hospitals. Teddi Edwards was

coordinator of a statewide forum series on solar energy. Virginia Morris also has published a paper, "Cleaning Agents and Techniques for Concentrating Solar Collectors."

In 1978 this chapter was reactivated from its dormant state. Dr. Susan Kelley, National Member-at-Large Coordinator guided the process. On December 12, 1978, the formal reactivation was held. Officers were elected as follows: President: Theodora "Teddi" Edwards: Vice-President: Joyce Easton; Secretary: Virginia Morris; Treasurer: Leah Mendelson; and Historian: Fran Mathews. There were three technical meetings the first year, and it ended with a member potluck which became a tradition. The group expanded its activities to include some tours of technical and scientific facilities in the area. In the first three years of this active period, the membership increased from 9 charter members to a membership of about 60 persons. The activities increased to include not only tours, speakers, but fund raisers, and social events. The meetings continued to be more varied and stimulating. In the next triennium this chapter, which was centered in Orange County, expanded its area to include all of Southern California. The membership included students, and the programs were of a technical, non-technical (such as stress management and job related topics), tours, and social meetings. Sulfur chapter also co-sponsored the Annual Women's Employment Opportunities Conference presented by the Career Planning Center. In the late 1980s the chapter activity began to decline with fewer meetings and activities. Then the chapter became inactive. Various attempts to revitalize this chapter have not been productive. The chapter was declared inactive in 1997.

#### Technetium Fortieth Chapter 1987-1997



National President Celia Menendez-Botet installed Technetium Chapter on May 1, 1987. Dr. Laura Ellen Tubbs and Ms. Michelle Ellett, both from the Rochester Institute of Technology, began discussing the possibility of forming a chapter of Iota Sigma Pi in the Rochester area during early 1985. Ms. Ellett organized a meeting in April at her home to determine if there was enough interest among other women chemists in the area to pursue the idea. Women from several area colleges and local industry were invited. From this meeting a core group of about ten women emerged who were interested in trying to form and promote a chapter. The group began to meet on a bi-monthly basis and rotated the meeting places between the area colleges. The initial meetings included films,

videos, or speakers on topics of interest to women professionals. Time for socializing was also included. Work was begun on gathering the necessary documentation for the petition to become an official chapter of Iota Sigma Pi. Occasionally meetings for pure socializing were held at restaurants. This continued until the fall of 1986. The petition for membership was submitted late in the summer of 1986. In December, National Council notified the chapter to plan for the installation ceremonies. At the May 1, 1987, installation, Dr. Menendez-Botet also initiated the first group of student and professional members. The nine charter members were joined by the two professional members and sixteen students initiated that day. The speaker was Dr. Patricia Gossel of the Science and Humanities Department of Rochester Institute of Technology who spoke of the history of women in chemistry in the United States. A reception followed the initiation and installation of officers.

President: Dr. Laura Ellen Tubbs, Vice-President: Michelle Ellett Treasurer: Dr. Carol Sack Secretary: Dr. Leslie Schwartz Historian: Ms. Debra Heckendorn Program Chairman: Dr. Cathy Lawton

This chapter continued to meet on a bi-monthly basis. The membership increased by encouraging current Members-at-Large to become active chapter members. This chapter also developed an effective mechanism for soliciting the names of potential members (both students and professional members). The response was good, and in the first three years of activity 37 new members were initiated. The annual initiation was in May each year. During the first three years of chapter activity the program topics revolved around issues for women not only in science but also in the work force. Interesting programs for women and stress management were also presented. In 1989 Harolyn Lynnette Hood, one of the Technetium members, received the Gladys Anderson Emerson Scholarship. The chapter goal was to encourage more participation of women in the Rochester area industry. In the next few years due to a series of circumstances, this chapter became inactive.

# Tellurium Twentieth Chapter 1930-2001



Tellurium chapter at the University of Texas had its beginning in the Halogen Club, a group organized with the definite aim of becoming affiliated with the national society of Iota Sigma Pi. Under the guidance of Helen Jo Collins, who was a member of Iota Sigma Pi at Iowa State College, Barbara Lee Lund from the University of Minnesota, and Jet Corinne Winters from Yale University, the organization was successful. The following were enrolled as members

Kathleen Simmons Ann Bryce
Marie B. Morrow Ivy May Parker
Louise Shofner Katie Hart
Eva Medaris Mohling Ma
Helen Spears Swanson Bessie Kilgore

In April 1930, this group petitioned Iota Sigma Pi and was granted a charter as Tellurium chapter. Members held meetings monthly with programs consisting chiefly of reports of research.

Tellurium was represented at the 1933 convention by Ivy Parker, in 1936 by Helen N. Moore (proxy), in 1939 by Margaret Brown, in 1948 by Jessie Ternberg, and in 1952 by Myra Lansford.

Activities of Tellurium chapter in the years from 1940 to 1956 centered around monthly dinner meetings held in local restaurants or at the homes of members.

The last meeting of the school year was generally a picnic and swimming party at Barton Springs, near Austin. The chapter cooperated each fall with Phi Lambda Upsilon in giving a reception honoring new graduate students in chemistry and chemical engineering, including an introduction and a brief description of the work of each faculty member in these departments.

A traditional event was a tea honoring women students in chemistry, held in Mallet Chemical Library each spring. All women chemistry students, graduate students, and faculty members and their wives were invited. Several hundred people usually attended.

A series of lectures on scientific subjects was sponsored by Tellurium in the school year 1942-1943. In 1943, extension chapters were established at Mary Harding Baylor College at Belton, Texas and at Texas State College for Women at Denton, Texas. In 1950, the chapter assisted Phi Lambda Upsilon in entertaining a group of underprivileged children with a "chemical magic" show and Christmas party.

In order to encourage scholastic achievement by women in chemistry, Tellurium annually gave two awards. These were presented at Swing Out, a university ceremony recognizing outstanding students in all fields. The Ivy M. Parker Award of either ten dollars or an engraved medal was given to the freshman girl making the highest grade in first year chemistry. Recipients of the prize were

Ruth Nicholson Myra Winfield
Carol Ruth McElroy Mary Graham Bell
Dorothy Causey Juanita Miller
Mildred Wilson Mary Jackson
Patricia Anne Brannan Colette Kohler

What I accomplished was taking this oxide and working in a vacuum line at high temperatures producing plutonium chloride.

Dr. Isabella Karle

Senior Scientist specializing in Crystallography Naval Research Laboratory, Manhattan Project Organizations such as Iota Sigma Pi are absolutely essential to the success and growth of the role of women in the scientific community. I intend to maintain my membership in Iota Sigma Pi.

Nicole R. Brinkmaim

Graduate student

Jane Kuykendall

The Junior Scholarship Award was given to the junior girl with the highest scholastic standing among those majoring in chemistry. The name of the recipient was engraved on the Iota Sigma Pi scholarship cup which is kept in the chemistry library. Those receiving the award were

Ruth Barker Margie May
Martha Kennard Frances Ronning
Evelyn Rae Powers Patricia Johnson
Dorothy Causey Myra Winfield
Joanne Macow Georgia Backus
Doris Stork Joanne Olivard

Peggy Mayfield Dunlap, editor of **THE IOTAN**, 1960-1963 was a member of Tellurium chapter.

The chapter became inactive in 1957, although some thirty members-at-large continued their association with the society. In 1962 Lorene L. Rogers, a former faculty sponsor, and other members now living in Austin promoted a reactivation program. Dr. L. O. Morgan, Professor of Chemistry and his wife Betty Boyd Morgan, an Iota Sigma Pi member, agreed to act as cosponsors.

Tellurium was reactivated on June 12, 1963, with nine former members and nineteen new members who were initiated at the meeting. Paula Able was elected president. Dr. and Mrs. L. O. Morgan were sponsors.

Succeeding presidents of the chapter have been

Julianne Dorsey Krause Lydia Melcher Carolyn Jeannette Weathersbee Maxine Jenks Emily Carol Bossert Linda Beth LaBaume Rose Ann Shorey Judy Varga

An annual initiation banquet was held in March. Late in April or early May the chapter gave a Spring Tea in the Mallet Library of the Chemistry Building, to which the graduate students and faculty of the chemistry department were invited.

Each year an award was given to the outstanding junior woman in chemistry. The recipient of this award was presented at the Chemistry Tea, and her name engraved on a plaque in the chemistry building. The recipients have been

Myra Osborn Linda Domel
Kathleen Shive Mary Christian
Kay Wilkerson Erin Christine
Raschke

Terry Blair Parsons Martha Upchurch
Alice Chen Therese Brendler

Other activities have included dinner and luncheon meetings with guest speakers, other purely social gatherings, including the cosponsoring with Phi Lambda Upsilon of welcome picnics and parties for new graduate students in chemistry. Several charter members have retired, Ivy Parker moved to Austin, Texas, Roberta Ma moved to Hyattsville, Maryland, and Amy Le Vesconte moved to a retirement home in 1980. Marie Morrow, also a charter member, was active on the faculty of the University of Texas until her death in 1972. She was always interested and helpful to Tellurium. Lorene Rogers, an early member of Tellurium, resigned in 1974 after serving three years as a Vice President of the University of Texas and returned to her previous position as a professor at the University. Katie Hart, a retired charter member who lived in Austin, Texas died in February, 1980.

Tellurium Chapter had several periods of dormancy and reactivation. In 1981, one such reactivation was held with monthly meetings, initiations, presentations by faculty members, plant tours, social gatherings and presentations of awards. This activity was maintained for several years before the chapter became dormant to inactive again.

In 1982 Diane E. Peebles received the Anna Louise Hoffman Award for Outstanding Achievement in Graduate Research. Agnes Fay Morgan Award Winners from Tellurium Chapter include Dr. Marye Anne Fox (1984) and Dr. Judith Brodbelt (1995). Dr. Marye Anne Fox also received the Garvan Medal in 1988 and received a Cope Scholar Award from the American Chemical Society.

In 1997 Julie Teetsov began a procedure of reactivation. The resurgence of interest in Iota Sigma Pi came from within Women in Chemistry (WIC), a group organized in the spring of 1998 at the University of Texas with the goal of carrying on the objectives of the Tellurium chapter of Iota Sigma Pi. On November 21, 1998, the chapter was officially reactivated with National Vice-President Susan Marine presiding. There were 16 new charter members and 2 faculty members. Several former Tellurium Chapter members living in the Austin area attended the ceremony, including Beverly Guirard, Jean Humphreys, Colleen Moore and Jo Ann Ravel (first woman to be a University of Texas chemistry faculty member). The new members enjoyed talking to the former members and learning about Tellurium Chapter in the past. The Mission Statement of this 1998 reactivation follows: To improve education and employment opportunities for women in chemistry and to provide a supportive environment for personal and professional development. The objectives follow: recognition and encouragement; networking; cross disciplinary exposure; mentoring; awareness of barriers facing women and minorities; issues related to balancing family and work; statistics of women in science careers and degree programs; history of women in science; and reactivation of local Tellurium Chapter of Iota Sigma Pi. The meetings of the chapter are monthly

and are open to women and men from academia or industry. This group collaborates with the Women in Physics (WIP) organization at the University of Texas. Tellurium chapter has helped to develop the curriculum for a graduate course entitled Women in Science. The course provided panel seminars for women scientists in industry, government and academic positions. Information on networking, mentoring, professional development and a little history of women in science were also included in the course. This group helps to select women speakers for the weekly Chemistry seminars and has participated in interviewing women faculty candidates. These meetings are welcomed by busy students and women faculty members who do not normally have opportunities to talk. This chapter communicates by e-mail and has a chapter web site. Local outreach to Brownie Scouts has also been a chapter project. Committees share the work of the chapter. The committees include Public Relations/Extension, Events, Website, Nominations/Elections, Outreach to Inactive Members, and Fundraising (audit/finance). This chapter functions by sharing responsibilities and keeping in contact with its members. With the level of energy of this reactivation, it will be one of the chapters to lead the organization into the next century of Iota Sigma Pi.

# Tungsten Seventh Chapter 1918-2001



In 1916 a group of women students at the University of Colorado founded the Women's Chemical Society with Dr. Harry A. Curtis, grand-president of Alpha Chi Sigma, head of the department of Chemical Engineering at Yale, as advisory member.

In 1917 the organization petitioned Iota Sigma Pi for a chapter, and Tungsten was installed March 29, 1918, by Lila Sands from Nitrogen chapter. The following members of the Women's Chemical Society were initiated

Hazel Andrews Sara Ginther Agnes Beckman Icie Macy

Eva Baum

Mrs. Paul Dean was initiated as honorary member. Ida Lloyd Swayne, who was out of town at the time, was initiated on her return in June. Dr. Swayne was the faculty sponsor of the chapter from its beginning until her retirement in 1957. Her death in 1960 was a sad blow to all Tungsten members. The new faculty sponsors were Professor and Mrs. Bert Tolbert. Icie Macy was the first president of Tungsten. At the first national convention of Iota Sigma Pi, held

in 1918, Tungsten was represented by Eva Baum. Icie Macy was national treasurer 1918-1924 and national secretary 1939-1942.

Tungsten installed Platinum at the University of Denver on August 29, 1924. Since that date, pleasant relationships have existed between the two chapters. A joint initiation is occasionally held in Denver or in Boulder, and other contacts are made to the mutual advantage of the chapters.

At the third national convention at Ames, Iowa, 1924, Tungsten's initiation ceremony, written by Mrs. Paul Dean, was adopted and incorporated into the general initiation.

Although Tungsten had a fairly small membership, it was one of the most active honorary organizations on the campus. Open meetings with interesting speakers that attract large audiences, papers on chemical and allied subjects, parties to promote interest in chemistry among high ranking freshman and upper-class women students taking chemistry, initiations and banquets, all made up chapter activities.

Hazel Andrews Fehlmann, a charter member of Tungsten, was national editor 1936-1945. She inaugurated the annual printed newsletter now called **THE IOTAN**, compiled and published a directory of all Iota Sigma Pi members in 1937 and again in 1946. The latter directory contained the names of members arranged alphabetically, by chapters, and by geographical location. Mrs. Fehlmann has rendered unusual service of great value to Iota Sigma Pi.

Honorary members of Tungsten in addition to Mrs. Paul Dean are the late Adelaide E. H. Ekely, John Bernard Ekeley, Robert C. Lewis, Charles Franklin Poe, Edna C. Gustavson and Reuben G. Gustavson. In 1944 the chapter established the John B. Ekeley Cup as an annual award by Tungsten to the freshman woman with the best record in first-year chemistry courses. The recipient holds the cup for a year and her name is engraved on the cup. Some recent winners are Jacqueline Owne, Karen Jean Wohlstrom, Charlesanne Elbon, Jane Rademacher and Alice Anderson.

Some of the catalysts have been

Marjorie Zeiger

Mary Alice Hitt Dorothea Klemme Patricia Schuyler Frances Poe Helen McAfferty Ada May Vandwerk Elizabeth Nalder Hester Purdy McNulty Marjorie Means Aileen Kelly Marjorie Seffl Helen Gibbon Aldula Johnson Leone Cockerell Sonia Gitlin Hazel Fehlmann Pauline Wagner Aileen Jewell Jean Couch Virginia Button Alice Adams Ruth Englund Sue E. Reid Jean McCauley Jones

Women earned 40% of 1971 masters degrees and reached parity for the first time in 1981. They had 59% in 2001 and are projected to have 59% in 2112. For Ph.D.s, the trend is the same.

Michael Heylin

Government & Policy -Hindsights

Chemical & Engineering News March 8, 2004, pg. 28 Exercise and eat right.

Helen M. Free

Tungsten has had the honor of sponsoring two of the national honorary members, Florence Rena Sabin and Icie Macy Hoobler. Tungsten also shared with Platinum the privilege of serving as hostess to the tenth triennial convention in Denver in 1951. Tungsten was hostess to the Sixteenth National Convention in 1969. Shortly after this convention the chapter became dormant to inactive.

#### Uranium Twenty-third Chapter 1947-2001



A group of chemistry students at Texas State College for Women in Denton, Texas, was organized in 1946. Helen A. Ludeman, Aurum, was the chapter sponsor and held that position for many years. A charter from Iota Sigma Pi was granted to Uranium on December 11, 1946, but the installation did not take place until February 27, 1947. President Pauline Beery Mack was the installing officer. Charter members of Uranium included

Drew Armstrong
Betty Berry
Mary Neale Bishop
Frances Burton
Sheila Barnes Emerson
Lila Gillen
Betty Ruth Johnson
Evelyn Thomas
Nancy Oldenburg
Elaine Walvoord

The chapter has had the privilege of having a distinguished Garvan medallist, Dr. Allene R. Jeanes, as a member.

The chapter celebrated its fifteenth anniversary in February 1962 with eighteen active members participating. From 1947 to 1980 the chapter initiated many new members, and in 1978 established a local associate membership category for first and second year science majors and those with an interest in chemistry. Meetings were held during the academic year and included a variety of activities. Often women scientists presented programs of interest. During the spring semester, an outstanding senior member was honored. As an ongoing project, the chapter maintained a complete collection of photographs of the Garvan medallists.

Several members who were Uranium Chapter members became officers at the National Level. Long time Faculty Sponsor Dr. Helen Ludeman was a Regional Director. National President and Historian, Anne Sherren was initiated into Uranium Chapter in 1961. Member-at-Large Coordinators Susan Graves Kelly and Janet Barton were also initiated into Uranium Chapter.

In the 1980s this chapter suffered because of changing face and mission of the Texas Woman's University. The result was a chapter that became dormant for a number of years. Dr. Jinfeng Ni was instrumental in some revitalization in 1995. During this period the chapter was involved in outreach activities. This chapter has worked closely with the KEM Club of the University, an American Chemical Society Student Affiliate Chapter. Field trips and acting as receptionists at the 29<sup>th</sup> Dallas-Fort Worth ACS Meeting in Miniature were also chapter projects. After Dr. Ni's move away from the Denton area in 2000, the chapter returned to its dormant state.

#### Vanadium Thirtieth Chapter 1965-1975



The Vanadium Chapter of Iota Sigma Pi was installed at Fordham University on January 16, 1965, by Gertrude Perlman, National Vice President, Emma Stecher, Gloria Toralballa, and Lizabeth Eister of Columbium Chapter. Great interest and enthusiasm marked the origins of the group due to the capable leadership of the founding officers.

At that, time, the male graduate students belonged to the honorary chemical society Phi Lambda Upsilon, which excluded women from membership. In 1968-1969, this society opened its doors to the opposite sex. Dr. Joan Stover, Convention delegate in 1969 and the president at that time, was confronted with a serious problem: "Should we maintain two honorary chemical societies at Fordham?"

The problem was put to both the graduate students and the alumnae members. The graduate students opted for membership in one honor society, Phi Lambda; the alumnae manifested an interest in maintaining the Vanadium Chapter, whether in the form of a Metropolitan Chapter for the Women Chemists of the City of New York, or as it had been originally conceived at Fordham. Partly because of this controversy, membership and interest on the part of the graduate students dropped considerably in the years 1970-1971.

Due to the efforts of the alumnae, 1971 did see a resurgence of interest. In May 1971, a meeting was held at the home of Dr. Paulette Didato. Here it was suggested that the Vanadium Chapter

request a change of status from an academic group to a metropolitan group. New members would be recruited and initiation ceremonies carried out at subsequent meetings. A new slate of officers was elected for 1971-1972 and monthly meetings were held with sixteen active members and eight new initiates.

At the 1972 fall meeting of the American Chemical Society in New York City, Vanadium Chapter hosted a tea for those members of Iota Sigma Pi attending the meeting.

#### Vanadium Metropolitan Chapter 1975-2001



On April 26, 1975 representatives from the Vanadium (Fordham University), Manganese (Hunter and Lehman Colleges) and Columbium (Columbia University) Chapters met with Joan Lambros, the presiding National President of Iota Sigma Pi, at the Roosevelt Library in New York City. At this meeting the three chapters decided to merge under the name of Vanadium Metropolitan. Upon approval by the Iota Sigma Pi National Council, the following officers were elected: Celia J. Menendez-Botet, President; Paulette Hamway Didato, Vice President; Veronica Boyle Dougherty, Secretary; Laura Bertani Dziedzic, Treasurer; and Gloria Toralballa, Faculty Advisor. Eighteen members from the three inactive chapters became charter members of the Metropolitan Vanadium Chapter.

Since 1975 Vanadium was very active with tour groups to industrial and clinical laboratories and sponsored many technical talks given by scientists from the metro New York area. Speakers included Mary L. Petermann, Emeritus Member of Sloan Kettering Institute and President of the Memorial Sloan Kettering Cancer Center Association of Professional Women, speaking on "Women in Science"; Mary J. Hamilton working on ribosome structure at Memorial Sloan Kettering Institute; Esther Breslow who spoke on "Properties of Neurophysin, Oxytocin, and Vasopressin"; Barbara Kebbekus from New Jersey Institute of Technology speaking on "Air Pollution Studies of Organic Carcinogens"; Jean Simmons from Upsala College speaking about "Women in Science from a Comparative International Point of View"; Joan Valentine of Rutgers University on "Copper-Zinc Superoxide Dismutase"; and Nuran Kumbaraci from Stevens Institute on "Caffeine and Skeletal Muscles."

In 1976 Vanadium also sponsored a wine and cheese party for all Iotans and guests attending the National American Chemical Society meeting in

New York City. A total of twenty-two members and guests attended and enjoyed a relaxing social meeting.

Between 1965 and 1980, the Vanadium Chapter initiated seventy-five new members with an active membership of thirty to forty distributed among professional women chemists and graduate and undergraduate students from a vast number of academic, industrial and medical institutes in the New York and North New Jersey area. Also initiated in 1979 was a National Honorary Member, Dr. Ines Mandl. This meeting was held jointly with the North New Jersey – New York Women Chemists Committee.

Celia Menendez-Botet served as president from 1976 until 1978 when she became a National Director of Iota Sigma Pi. Antoinette J. Hockman was elected as the second president and served from 1978 to 1980. The third president was Susan Haynes.

Vanadium Chapter is a metropolitan Chapter which draws its membership from the Greater New York City area. There have been two National Presidents from this chapter (Celia Menendez-Botet, 1984-1987, and Antoinette J. Hockman, 1987-1990). Celia Menendez-Botet and Antoinette J. Hockman both served as National Directors for six years preceding their presidency. Jean St. Germain served as National President from 1987 to 1993.

This chapter has met during the academic year at the Rockefeller University, Roosevelt University and at Memorial Sloan-Kettering Cancer Center, in Manhattan. The meetings usually fell into the following categories: research reports from both members and guests from industrial and research organizations; initiation meetings that allowed members to socialize and welcome new members; and meetings focused on the specific problems of women. Later meetings included topics from the history of women in science, problems of networking, and career goals for women. This chapter tends to draw heavily from the medical community. One chapter interest is in helping junior colleagues benefit from the experience of the senior colleagues. Each meeting includes a time to interact with members. When there is a National American Chemical Society Meeting in New York City, this chapter usually hosts a Wine and Cheese social.

Vanadium Chapter has nominated two National Honorary Members: Ines Mandl in 1979 and Edith Flanigen in 1986. Both presentations were done at Vanadium Chapter. In 1993 Edith Flanigen also received the Award for Professional Excellence Award and the ACS Garvan Medal.

Women earned 50% of 2002 chemistry bachelor's degrees.

Michael Heylin

Government & Policy -Hindsights

Chemical & Engineering News

March 8, 2004, pg. 28

Have fun!

Carol Crosthwaite

# Ytterbium Ninth Chapter 1920-1927



A preliminary organization of graduate women in chemistry was formed on January 24, 1920 at Yale University. This group held five meetings preceding the installation of Ytterbium chapter of Iota Sigma Pi. The charter was granted on May 30, 1920 and the installation was carried out by Icie Macy of Tungsten and Zalia Jencks Gailey, Elizabeth Vinsonhaler and Omega Hilton, all of Oxygen. The charter members were

Marion Bell M. Louisa Long
Laura Cannon Helen S. Mitchell
Dorothea Harrison Edith Nason
Marion Howe P. Mabel Nelson
Martha R. Jones Julia Paton
Margaret Justin Mary W. Patten

In addition Myrtle Aldrich, Hazel Gibbs and Mrs. W. T. Read were initiated almost immediately.

The first officers were

President: Zalia Jencks (formerly of Oxygen) Secretary-Treasurer: Marion Bell

This chapter was made up entirely of graduate students, since undergraduate women were not enrolled at Yale University. The average yearly number of meetings during the period of activity of Ytterbium was six, at most of which scientific papers were presented by members or guests.

Ytterbium was represented by Martha Jones at the second national convention in 1921, and by Ruth Watts at the third convention in 1924.

Members of Ytterbium were responsible for the honor done to Iota Sigma Pi by Madame Marie S. Curie who in 1921 accepted national honorary In April 1923, Ytterbium cooperated with the chemistry department of Yale University and the Yale chapter of Alpha Chi Sigma in maintaining an information bureau at headquarters during the meeting at New Haven of the American Chemical Society. Ytterbium gave a dinner during this meeting for women chemists and wives of visiting chemists. This help was much appreciated by the Yale Chemistry Department and the American Chemical Society.

At the fourth convention in 1927, the charter was returned. This was accepted with much regret by the national convention, the hope being expressed that activity might be renewed at some future time. The last officers were Helen Bennett, president, and Ava Josephine McAmis, secretary.

#### Members-at-Large

In the 1948-1951 triennium when the National Secretary (Anna Hoffman) was revising the membership file, she wrote to every member of Iota Sigma Pi to check her address. The National Council suggested that she ask each alumna to pay one dollar to the National Treasurer to be used for the Research Award and Convention Fund, both of which were major projects of Iota Sigma Pi. The response was very generous since more than one thousand alumnae contributed.

During the Tenth Triennial Convention (1951), the problem of distribution of the annual publication, THE IOTAN, was discussed. The delegates voted to mail a copy of THE IOTAN to each contributor, if she would continue to pay one dollar per year toward the Research Award and Convention Fund. This was the first suggestion of Membership-at-Large. During the Eleventh Triennial Convention the Membership-at-Large category was established, to be promoted by the Regional Directors. This procedure gave a mailing list of alumnae that kept in touch with National affairs through the annual IOTAN. The Editor mailed copies of THE IOTAN to a membership list kept up-to-date and active by the Coordinator of Regional Directors, a procedure that was continued through 1972.

At the Seventeenth Triennial Convention (1972), a new dues structure was approved and membership categories of regular members, emeritus members, life members, special members, and student members were established with a special dues arrangement for each category. During the 1972-1975 Triennium, National Council made a special study of Membership-at-Large with the result that these interested alumnae members became another membership group, paying the same dues as regular members having all privileges of membership. They have an elected member on the National Council, the Coordinator of Members-at-Large. They are represented at the National Conventions by elected delegates, receive all Iota Sigma Pi publications, have voting privileges, and may hold National Office.

At the Eighteenth National Convention (1975), four delegates represented the 270 Members-at-Large. This procedure was followed at the Nineteenth Convention with four delegates representing the Members-at-Large.

In the Triennium (1972-1975), plans were made for a Student-at-Large membership. A student may become a member at one school and then transfer to another where there is no Iota Sigma Pi Chapter. She may then become a Student-at-Large member paying regular student dues and having all privileges of student membership.

During the Triennium 1972-1975, a program

receiving Members-at-Large from areas without a chapter was begun. This program is available for both students and professional women who have the qualifications for membership in Iota Sigma Pi. Each year since 1975 about twenty persons have become members of Iota Sigma Pi by this program. The Senior National Director administers the program.

The 1978-1981 Triennium saw the MAL Newsletter continuing. MALs became critical in establishing and reactivating Iota Sigma Pi chapters. MAL Joan Payne Kilbourn founded Promethium Chapter in metropolitan Portland, OR area. MAL Coordinator Susan Kelly worked with members in Southern California to reactivate the Sulfur Chapter, and with members in East Central Illinois, to reactivate Iodine Chapter. All three of these chapters were Metropolitan Chapters.

During the 1981-1984 and 1984-1986 trienniums, the MAL Newsletters continued as the primary means of communication among the membership. A wide variety of articles were contributed from the membership.

By the 1987-1990 triennium, MALs began discussing the creation of a MAL Scholarship for a woman returning to college. A committee was established to create criteria for the award. The fund itself was established with \$2000 donations from membership and help of National Treasurer, Jean St. Germain and Membership Chair, Shannon Brown.

The 1990-1993 triennium brought the first bestowments for the MAL Educational Reentry Award of \$500 given yearly to a woman chemistry major who is returning to school after a significant interruption in her education. During this time, it was recommended that the MAL chapter establish a treasurer.

Newsletters continued to be the primary means of communications among MALs. The Scholarship fund reached a self-sustaining level in 1995. MAL volunteers served as Scholarship Chair (Brenda Sahli), Financial Manager (Susan Marine) and on the Scholarship Evaluation committee. Donna Iannotti began a quilt project. Members submitted blocks which Donna quilted together. The 1996-1999 and 1999-2002 trienniums continued the quilt project, the Educational Reentry award and the newsletters. The finished quilt was auctioned at the 2002 National Convention and netted about \$1000 for the MAL Awards Fund.

In 1999-2000 the MAL treasurer invested part of the funds in CDs. Solicitations for donations



Predecessor of Sulphur Chapter at University of Southern California, 1914. Ruth Eaton, Myrtle Tucker, Etta Watkins, Grace Ashmore, Seated, Hattie Hoenshell.

continued so that the Reentry award was raised to \$800. MAL volunteer Jodye Selco established a listsery to help communications among MALs. MALs are encouraged to recruit new members through incentives (e.g. a member who finds two new members may receive a piece of Iota Sigma Pi merchandise).

Before each triennial convention the National President, National Treasurer, Records Chair look at the membership of the metropolitan chapters and the MAL chapter. A formula is established so that the number of representatives from the MALs is equitable. Larger metropolitan chapters also may have more than one voting delegate. Every active chapter will have at least one voting delegate regardless of the chapter size.

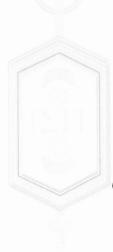
The MAL Scholarship Awardees ahve been

- 1991 Sabine Maas, Boone, NC
- 1992 Kalyani Banerjee, Evanston, IL
- 1993 Kristin McLain, Covington, VA
- 1994 Dalila Kovacs, East Lansing, MI
- 1995 Jancie Steckel, Morgantown, WV
- 1996 Michelle Cottingham-Sellers, Versailles, IN
- 1997 Martha Aguilar, Miami, FL
- 1998 Gabrielle Rum, El Paso, TX
- 1999 Cynthia D. Homer, University Heights, OH
- 2000 Ellen Ann Lorange, Grand Forks, ND
- 2002 Heather Marxen, Grand Forks, ND
- 2003 Corrine Kvamme, Grand Forks, ND
- 2004 Meredith Shetley, Joplin, MO

If there is one aspect which I would like to see enhanced, it would be the mentoring aspect of Iota Sigma Pi.

Jean Huang

Americas Technical Services Manager Lyondel Houston, TX



Members-at-Large History