

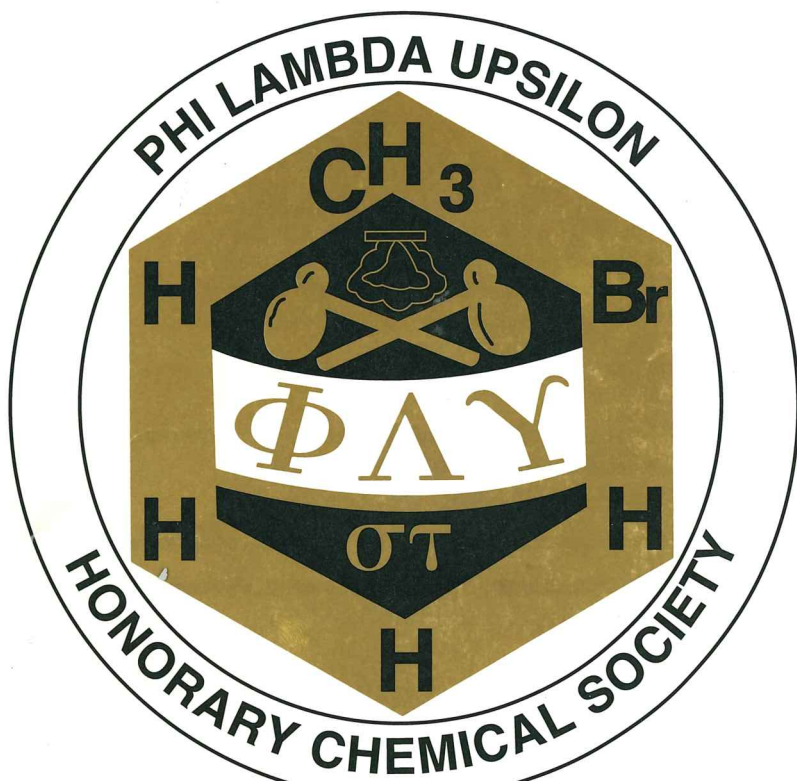
Vol. 78

1999

The
REGISTER

OF PHI LAMBDA UPSILON

HONORARY CHEMICAL SOCIETY



NATIONAL OFFICERS 1996-1999

President: Dr. Jack D. Graybeal, Department of Chemistry,
Virginia Tech, Blacksburg, VA 24060-0212
(540-231-8222), FAX-540-231-3255, jgraybeal@chemserver.chem.vt.edu

Vice President: Dr. Christine Pastorek, Department of Chemistry,
Oregon State University, Corvallis, OR 97331-4003
(541-737-6732), FAX-541-737-2062, pastorekc@chem.orst.edu

Secretary: Dr. James George,
DePauw University, Greencastle, IN 46135
(765-658-4604), FAX-765-658-4177, jamgeo@depauw.edu

Treasurer: Dr. T. Adrian George, Department of Chemistry,
University of Nebraska-Lincoln, Lincoln, NB 68588
(402-472-3513), FAX-402-472-9402, tageorge@unlinfo.unl.edu

Editor: Dr. Richard M. White,
CSB/SJU, 37 S. College Ave. St. Joseph, MN 56374-2099
(320-363-5994), FAX-320-363-5582, rwhite@csbsju.edu

Historian: Dr. Sheldon H. Cohen, Executive Director of Planning,
Washburn University of Topeka, Topeka, KS 66621
(913-231-1010, Ex. 1645), zzcohe@acc.wuacc.edu

First Past President: Dr. Frederick W. Wassmundt, Department of Chemistry,
University of Connecticut, Storrs, CT 06208
(203-486-2744), FAX-230-486-2981

Second Past President: Dr. Sheldon H. Cohen, Department of Chemistry,
Washburn University of Topeka, Topeka, KS 66621
(913-231-1010, Ex. 1645)

THE REGISTER

OF PHI LAMBDA UPSILON
HONORARY CHEMICAL SOCIETY

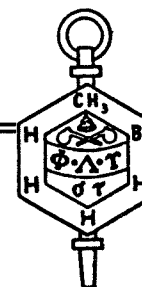
VOLUME 78

1999

CONTENTS

National Officers	Inside Front Cover
From the Retort	2
The National Fresenius Award	3
The 1997 Fresenius Award Recipient	4
Minutes of the Thirty-second National Congress	6
National Officer Reports	6
Committee Reports	15
Congress Photograph	25
Initiates for 1998	27
Nomination of Honorary Members	33
Travel Grant Program	34
Instructions for Authors	34
Register Renewal Form	36
Chapter Councilors	Inside Back Cover

Published for Phi Lambda Upsilon by Rengel Printing Company, St. Cloud, MN. Subscription rates: \$3.00 per annum, \$12.00 for 5 years, or \$30.00 for a life subscription. Remittances for subscriptions and all communications regarding editorial material should be addressed to the editor: Richard M. White, College of St. Benedict/St. John's University, 37 S. College Ave., St. Joseph, MN 56374-2099.



From The Retort

Welcome to the newest addition of the Register. I continue to solicit articles of general interest for publication. See some of the highlights in the Conference Proceedings and instructions for authors on p. 34. Congratulations to this year's Fresenius Award winner, Dr. Chad A. Mirkin.

The thirty-second Congress of Phi Lambda Upsilon met in Indianapolis, Indiana from March 26 through the 28. A good deal of this issue of **The Register** is devoted to the report of that gathering. Every member is urged to carefully read these minutes. The delegates to the meeting were hardworking, efficient, and willing to tackle the difficult problems facing our Society. Although we will end this triennium in excellent financial shape, the future could present some problems in terms of our tax status.

Some highlights from the meeting are: 1) the **Student Travel Grant Program** has been modified, see pp. 18 and 34; a **Writing Award** has been established, see pp. 18, 20 and 34; funds to **promote, initiate, recruit, or sustain a chapter in need** has been created, see p. 19; and finally the **Thirty-third Congress will convene in San Diego in 2001** immediately following the spring ACS meeting, see p. 21.

The officers and congress delegates would like to express their appreciation to Dr. James George, National Secretary, for making all the arrangements for the thirty-second congress. Because of his efforts the meeting was a great success. Even though the Congress delegates and the national officers have responsibility for the direction PLU grows, it is the individual members and chapters which govern the overall level of achievement of our Society. Therefore, we urge all our members to become active in the work of their local chapters.

Richard M. White
Editor

The National Fresenius Award

The National Constitution of Phi Lambda Upsilon states that "The object of this Society shall be the promotion of high scholarship and original investigation in all branches of pure and applied chemistry."

To fulfill this objective Phi Lambda Upsilon elects to membership those students who show exceptional promise in pure and applied chemistry. It also elects to Honorary Membership chemists who have made outstanding contributions to the science.

Phi Lambda Upsilon in keeping with its stated objectives also established an award for outstanding chemists early in their professional careers, since regular membership ordinarily goes to those at the beginning of a career and honorary membership to those at the height of or near the close of a career. This national award was established by the Society in 1965 and is known as the Phi Lambda Upsilon National Fresenius Award.

The program contains the following features: (1) The award consists of a plaque of suitable design and an honorarium, currently \$1,000.00; (2) The award recipient must be under 35 years of age at the time of nomination and to have made notable contributions to chemical research, education and/or administration; (3) Administration of the award is the responsibility of a five member committee of nationally prominent scientists who will select the recipient from nominees of the chapters and officers; (4) Not more than one award will be made each year.

The first Fresenius Award was made at the Detroit meeting of the American Chemical Society in April 1965. This award of Phi Lambda Upsilon continues and extends the traditions of the Society in recognizing and honoring excellence in chemistry. It has, as the names of its recipients testify, taken its place along with Honorary membership in the Society as an award of high merit in American chemistry.

Nominations for the Society's Fresenius Award must be submitted to the National Secretary no later than January 1. The nominating letter should include a discussion stating why the individual placed in nomination is regarded as particularly worthy of consideration for the Fresenius Award. In addition, it is also requested that a biographical sketch be furnished giving the following information:

- I. Full name
- II. Place and date of birth
- III. Educational career
- IV. Professional activities (since graduation)
- V. Publications
- VI. Honors and/or distinctions and/or noteworthy achievements

Three letters of recommendation from former teachers or professional associates shall also be submitted.

1998 Fresenius Award Recipient

Dr. Chad A. Mirkin

**Department of Chemistry
Northwestern University**

The recipient of the 1998 Fresenius Award was Dr. Chad Mirkin of the Department of Chemistry at Northwestern University. The award will be presented to Dr. Mirkin by Jack D. Graybeal, National President, in early March 1999.

Dr. Mirkin received his B.S. Degree in Chemistry from Dickinson College in 1986 and his Ph. D. Degree in Inorganic and Organic Chemistry from Pennsylvania State University in 1989. Immediately following receipt of the Ph. D. Degree he served as a NSF Postdoctoral Fellow until 1991 at MIT. In 1991 he began his career at Northwestern and in 1997 became the youngest chaired professor ever at Northwestern University's chemistry department.

His research group has been the source of one major breakthrough after the other in designing, manipulating, and understanding functional nanostructures. His success as a research scientist results from his ability to cross the boundaries in chemistry and science. He has created a "new and powerful direction in the synthesis of materials by combining the unique specificities of biology with chemical synthesis of cluster building blocks to assemble rationally exciting nanosystems."

Dr. Mirkin's most recent work has focused on establishing a new interdisciplinary field that uses complex macromolecules such as DNA to assemble inorganic nanoparticle building blocks into functional meso- and macroscopic structures. His strategy takes advantage of the molecular recognition properties of DNA linker molecules to direct the positioning of inorganic nanoparticles within two- and three-dimensional materials [*Nature*, 1996, 277, 1078]. Through choice of oligonucleotide and nanoparticle chemical composition and size, he can exquisitely control virtually all physical and chemical properties of the resulting bioinorganic material structures. This work could benefit scientists involved in mass screening for specific nucleotide sequences and medical doctors in diagnosing genetic and pathogenic diseases. Dr. Mirkin's letter of nomination states: "It is hard to imagine a more powerful and versatile method for assembling such nanostructured materials, and Mirkin and his colleagues around the world expect significant advances based on this approach in the areas of catalysis, artificial photosynthesis, and multicomponent photonic bandgap materials (colloidal crystals)."

In addition to this outstanding work he has produced significant results in several other areas. These include synthesis of classes of molecules that are interesting with regard to their chemical and electron transfer properties, developed the first methodology for chemically modifying the surfaces of cuprate-based high-temperature superconductors, and is currently developing a new class of ligands that provide electrochemical control over the steric and electronic environments of transition metal centers. Dr. Mirkin currently has 54 articles with nine more either submitted or in press.

In addition to the Fresenius Award he has received a Lubrizol Fellowship, a NSF Postdoctoral Fellowship, a Camille and Henry Dreyfus Foundation New Faculty Award; Beckman, Naval, and NSF Young Investigator Awards, a DuPont Young Professor Award, Alfred P. Sloan Foundation Award, Camille Dreyfus Teacher-Scholar Award, BF Goodrich Collegiate Inventors Award, and the 1998 E. Bright Wilson Prize from Harvard University. In the past nine years he has presented over 90 invited lectures which included 5 Gordon Conferences.

The Officers and Members of Phi Lambda Upsilon congratulate Dr. Mirkin on a highly successful beginning of what promises to be an outstanding career in the science of chemistry. His enthusiasm for many areas of chemistry and his ability to cross disciplinary boundaries should be an example to young faculty members everywhere.

**OFFICIAL MINUTES
OF THE
THIRTY-SECOND TRIENNIAL NATIONAL CONGRESS
OF
PHI LAMBDA Upsilon**

The Thirty-second Triennial National Congress of Phi Lambda Upsilon was held in Indianapolis, Indiana, at the University Place Conference Center on the campus of IUPUI from March 26 through March 28, 1998.

Executive Committee: Thursday March 26, 1998

The Executive Committee met at the University Place Conference Center to review the final arrangements for the Congress and to discuss important business items to be presented to the Congress.

First Session: Friday, March 27, 1998

President Graybeal called the opening session of the Thirty-second Triennial Congress to order at 9:10 a.m. He introduced the national officers and then presented the President's Report.

Dr. Jack Graybeal, President's Report

The present governance structure based on the triennial congress has been in place almost since the founding of Phi Lambda Upsilon. However, representation at the congress has been decreasing significantly. In 1950, there was 100% representation of the active chapters. At the two most recent congresses at Blacksburg we were barely able to establish a quorum - 50% representation of the active chapters. At the 31st Congress, the by-laws were changed so that the secretary automatically assumed the proxy vote of all of the active chapters which were not represented. The secretary was only empowered to vote in case of a tie among the delegates. We need to be considering some alternatives. This may mean changing the governance system or the time of meeting.

After several years of difficulties with *The Register*, its publication is now in the hands of a capable individual.

The induction of new members has been declining during the past decade. This may reflect a decrease in student interest in chemistry rather than a decrease in interest in our organization. For example, the number of chemistry majors at Virginia Tech has been decreasing steadily for the past several years. The finance committee will need to consider the impact which this will be having on our activities.

Phi Lambda Upsilon is approaching its 100th year. The past two congresses have discussed ways in which the 100th anniversary can be celebrated. One suggestion was that the Division of the History of Chemistry of the ACS could hold a special symposium on the role of honorary societies in the development of chemistry in the United States. Efforts to contact the officers of the Division of the History of Chemistry have been unsuccessful but will be redoubled following our meeting.

The Fresenius Award has been doing very well. The President has been sending a letter inviting nominations to all of the chemistry-related departments listed in the ACS Directory. The number of quality applications has increased from two or three a year to twelve or fifteen. All are very strong candidates. The award this year goes to Dr. Christopher Cummins of MIT. He received his Ph.D. at MIT in 1995 and was retained on their faculty. Last year he was promoted to full professor. The Fresenius Committee has been set up on a rotating basis. The present members are:

Richard Van Duyne, Northwestern (analytical)
Ian Rothwell, Purdue (inorganic)
David Kingston, Virginia Tech (natural products)
James Skinner, Wisconsin-Madison (physical)
Scott Rychnovsky, UC-Irvine (synthetic organic)

The plan is for two of the five members to be replaced each year.

The number of travel grants is down this year. Last year there were twelve requests (\$1400) but this year there have been only two. We probably need to increase our publicity about the grants and to consider increasing the amount of the award.

I wanted to complete my report by summarizing my association with Phi Lambda Upsilon. I was initiated as a junior at Virginia Tech in 1950 and attended the congress at Penn State that year. Since then I have served as the councilor at Virginia Tech (25 years), editor of *The Register* (6 years), national secretary (9 years), and national president (2 years). I retired from the faculty at Virginia Tech a year ago and have decided that the time has come, at the end of my term as president, to end my association as an officer at the national level, with Phi Lambda Upsilon. Family obligations will be making it increasingly difficult to serve in a meaningful way.

The president announced the following committee assignments:

Program and Credentials Committee
Scott Segal (Alpha Phi)
James George, Advisor

Nominations Committee
Dan Haines (Xi)
Sarah Dimick (Alpha Pi)
Christine Pastorek, Advisor

Jack Graybeal, Advisor

Constitution and By-Laws Committee

Reid Asbury (Chi)
Scott Segal (Alpha Phi)
Robyn Richards (Rho)
Richard White, Advisor
James George, Advisor

Finance Committee

John Lippert (Beta Theta)
Kerry Clark (Rho)
Adrian George, Advisor

President Graybeal pointed out to the delegates that the voting on motions was entirely a function of the delegates and that the national officers have no vote. The one exception is that the national secretary holds the right of all proxy votes but votes only when there is a tie vote among the delegates.

The minutes of the Thirty-first Triennial Congress, as they appeared in the 1996 Register, were distributed. Two minor corrections were made:

page 44: "The Report of the Congress Resolutions and Centennial Committee" was changed to "The Report of the Constitution and By-Laws Committee".

page 52: "Dr. T. Darrell Thomas" was changed to "Dr. T. Durrah Thomas

A motion to approve the minutes of the Thirty-first Triennial Congress was made (John Lippert) and seconded (Scott Segal). The motion passed unanimously.

The national officers outlined their responsibilities and reported on their activities since the last congress.

Dr. James George, Report of the National Secretary

The National Office of the Society resides with the National Secretary. The responsibilities of the National Secretary include:

1. receiving and answering correspondence,
2. processing chapter orders,
3. issuing Official Proceedings and Newsletters including announcements and minutes of the triennial congresses,
4. maintaining membership records and lists of chapter officers,

5. collecting materials for distribution to the archives and the National Editor,
6. updating and distributing the Activities/History booklet and other Society materials,
7. organizing the triennial congresses, and
8. coordinating the annual Fresenius Award.

Reports (Julv 1, 1995 - Dec. 31, 1997)

1. Membership:

Thanks to the previous National Secretary, Jack Graybeal, the membership records, through 1993, have been transferred to microfilm. During the past three years, 1978 new members have been initiated into the Society bringing the total membership, 1898 - 1998, to 69,464. A summary of the past three years follows:

<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>Total</u>
853	625	500	1978

2. Chapters:

During the three year period, information was received from 43 chapters. Three chapters which were reported as "inactive" (no new members for the three years) at the Thirty-first Congress [Gamma (Columbia), Alpha Nu (Renesselaer), and Alpha Sigma (Colorado)] have remained "inactive". However, two chapters, Alpha Delta (Oklahoma State) and Beta Eta (South Dakota State), have returned to "active" status. No chapters need to be added to the "inactive" list.

3. Publications and Materials:

The following publications are available from the National Secretary:

- a. "History/Activities Booklet". A copy is mailed to each new member. The booklet was recently revised and several copies will be mailed to each active chapter.
- b. "Invitations to membership". These are sold to chapters and may be ordered using the Official Society Order Form which is sent annually to each chapter.
- c. "The Officer's Manual". The most recent edition was prepared in 1981 and two copies were sent to each chapter. Updates are provided to each chapter as needed. Copies of the latest edition, with updates, are available to chapter upon request.
- d. "Decals". One PLU decal is included with the History/Activities booklet which is mailed to each new member. Additional copies are available at \$0.40 each.

4. Honorary Memberships:

Chapters may nominate individuals for Honorary Membership. There have been no nominations during the past three years.

5. Fresenius Awards:

The Fresenius Award is made annually to a research scientist under the age of 35 years. The three most recent awardees are:

1995 Robert Waymouth (Stanford)
1996 Erick Carreira (Cal Tech)
1997 Christopher Cummins (MIT)

Concerns of the National Secretary

The National Secretary has two major concerns, neither of which is new. First, the number of new initiates has continued to decline. During the past decade, the number has dropped from over a thousand per year to about six hundred. However, the number of active chapters has remained constant at about forty. No new chapters have been organized during that period. Secondly, since chapter reports are often incomplete, it is difficult for the National Secretary to maintain an accurate officer's list for all of the active chapters. It is often unclear where materials should be mailed. By default, materials are often mailed to the chapter councilor who is the person most likely to remain at the institution for an extended period of time.

Dr. Richard White, Report of the National Editor of *The Register*

I wasn't aware that I would be giving a formal report and so my comments will be short and rather general.

The Register was not published for about five years. Publication recommenced with the 1996 edition (Volume 75) with Jack Graybeal as redactor. When I took over as National Editor in 1996, the mailing list was in a state of disarray which was greatly exacerbated by the mobility of the younger members of the Society. Each new member is entitled to a two-year free subscription. I am seriously concerned that members aren't getting their copies of the *The Register*. I have no solution on how to address this problem. Because of the backlog resulting from the years when *The Register* wasn't published, 2,500 copies were mailed last year. This year the mailing list has been reduced to 740.

I am in need of "things" to put into *The Register*. I have never thought of an editor as also being the primary author. I would like to encourage everyone to submit contributions. The publication list is an important part of any resume. Articles published in *The Register* can be counted as legitimate publications since it has a rather extensive distribution. However, the articles should be of general interest, more broadly crafted, than articles submitted to a research journal. At present, any article which is submitted is almost guaranteed of publication. I would hope that the number of articles being submitted would increase to the point that it would become a "refereed" journal. In the current issue, the only student contributions are several abstracts which were submitted as part of travel grant requests.

I would hope that *The Register* Committee will consider how we can ensure that all eligible

members are receiving their copies of *The Register* and how we can increase student contributions. I need your help desperately.

Dr. Christine Pastorek, Report of the National Vice President

The vice president administers the at-large membership. In a sense, the at-large membership is like a special chapter of the society. The at-large members are from the ACS approved chemistry departments at schools which do not have PLU chapters. Each year a letter is sent to about 500 chemistry departments; the department chairs are invited to nominate those graduates who meet the PLU requirements. The list of possible nominees is sent to the vice president who extends a formal invitation to each of the candidates. Those students who wish to join as at-large members return the membership cards and the initiation fee to the vice president who forwards them to the national secretary. In 1996, 312 students were nominated and 62 were initiated. In 1997, 213 were nominated and, as of now, none have been initiated. Since many of the chemistry departments and nominated students don't respond, it has been suggested that multiple mailings might increase the number of at-large members.

The vice president also handles all inquiries about establishing new PLU chapters. When an inquiry is received, usually through another of the national officers, a letter is sent to the department. The letter outlines the requirement for membership and lists the steps which must be followed to establish a new chapter. During the 1995-1998 period, nine inquiries were received. Although several of the schools have begun the process, no new chapters have been established.

The vice president has started a simple web page which can be accessed at www.chem.orst.edu. At present the site contains mainly information which is useful to the vice president along with some pictures from the 1995 triennial congress.

Dr. T. Adrian George, Report of the National Treasurer

Copies of the triennial audit conducted by Harger and Magnuson, CPA, covering the period from July 1, 1993 to July 1, 1996 were distributed. (See Vol. 77 of the *Register*)

My duties as treasurer are simple. I deposit money in the our bank account and write checks.

Let us look at the results of the 1993-1996 audit. As you can see, income arises from four sources:

Initiation Fees	\$66,155
Register Subscriptions	45
Interest	20,700
Jewelry Sales	316
Total	\$87,216

Checks are written only with the authorization of the Secretary or the President. The disbursements of funds is quite varied:

Membership Certificates	\$9,146
Publishing Register	8,321
Congress	11,014
Administrative	7,668
Postage	5,031
Fresenius Award	4,540
Student Travel Grants	3,150
Secretarial	885
Jewelry & Decals	1,380
Total	\$51,135

The good news is that we have had more money at the end of each of the years than at the beginning. We can see that the fund balances grew from about \$170,000 to nearly \$205,000 during the three year period.

The balance has continued to grow during the past 18 months. As of December 31, 1997, we had:

First Bank (US Bank)	Checking	\$36,000
	CD	\$100,000
National Bank of Commerce	CD (4)	\$104,500

The treasurer also files income tax information. Each year we apply for an income tax exemption as a not-for-profit organization with the state of Illinois. We are in danger of losing that status if we are not careful. The tax code requires that we must receive more than 1/3 of our income from membership fees and not more than 1/3 from interest. We are getting close to these limits and need to be cautious during the next five years.

The treasurer reinvests the money which is held in CDs as they become due and must be careful that we stay within the \$100,000 insured limit of each financial institution.

The treasurer also works with the Triennial Congress Finance Committee to prepare a budget for the following three years.

It was moved (Scott Segal) and seconded (Kerry Clark) that the reports be accepted. The motion passed unanimously.

President Graybeal announced that:

1. Two laptop computers were available for preparing committee reports.
2. The delegates should turn in a listing of their flight times so arrangements for returning to the airport could be made.

(The session recessed for refreshments at 10:30 a.m. and reconvened at 10:45 a.m.)

Adrian George, representing the Executive Committee, recommended the following reimbursement schedule:

1. Driving Mileage: \$0.30 per mile
2. Meals: Breakfast - \$5.50, Lunch - \$11.00, Dinner - \$16.50
3. Airfare, Parking, and Limousine Service: at cost.

It was suggested that Reid Asbury be reimbursed for an extra night of lodging and that Robyn Richards, the only alternate, be treated in the same manner as the delegates. The motion to accept the recommendations was moved (Scott Segal) and seconded (Kerry Clark). The motion passed unanimously. Adrian George announced that the approval of the individual reimbursements would be made by the Finance Committee and the checks would be prepared before the congress adjourned.

Each of the delegates reviewed the recent activities of their chapter.

Alpha Pi (Sarah Dimick)

The Alpha Pi chapter at Duke University has a very full year. After initiation in early April, we offer a competitive college scholarship to area high school seniors and conduct a science demonstration day at an area elementary school. At the conclusion of the school year, we offer a Duke chemistry support staff award. During the spring and summer, Friday afternoons are spent on the PLU sand volleyball court. In August, we welcome the new graduate students with an evening at the Durham Bulls. We also demonstrate computers to the Raleigh public at the NC State Fair. In December we host a holiday party and in early March we facilitate the chemistry recruiting weekend. Throughout the year we sell study guides to undergraduates and we host several academic speakers.

Chi (Reid Asbury)

The Chi chapter at Washington State University in Pullman, WA, has three primary responsibilities. First, we organize and fund a fall picnic for the new graduate students. Secondly, we bring in an industrial speaker each semester. We attempt to locate speakers who are well-rounded and appealing to students having a wide range of chemical interests. Finally, each spring we have an initiation and awards banquet. At the banquet, new students are inducted and cash awards are presented to the top graduate and undergraduate students. In addition to these functions, a number of informal meetings with refreshments are held throughout the year. The chapter sells lab notebooks and goggles to the general chemistry students to raise funds.

Alpha Phi (Scott Segal)

During the past few years, the Alpha Phi chapter at the University of Connecticut has raised funds by selling goggles and exams to general chemistry students. Each year we have had a fall picnic for all students and faculty. In addition, each winter we sponsor a holiday party for the entire

chemistry department. This spring our chapter will be sponsoring a symposium for chemistry graduate students on how to prepare for job interviews, which will feature several guest speakers.

Rho (Robyn Richards)

The Rho chapter at the University of Nebraska-Lincoln is an active PLU branch. The chapter sponsors a picnic in August and a winter holiday party for faculty, staff, students, and their families. The chapter offers a semi-annual travel award, generously matched by the national organization, to promote graduate student scientific meeting participation. The 1996-97 PLU Rho Chapter Lectureship Award recipient was Dr. Ronald Breslow. The members are currently preparing for the 1998-99 Lectureship Award. Funds are raised through the sales of locks and model kits to undergraduates and soft drinks.

Beta Theta (John Lippert (III))

The Beta Theta chapter at Arizona State consists of both graduate and undergraduate students. Every April the chapter has a cook-out in conjunction with the annual initiation ceremony. Each fall Beta Theta helps sponsor a social event for faculty members and new graduate students. Plans for future activities include involvement in a community outreach program and group sporting events. The chapter is supported by the income generated from the initiation fees. Exploration for future fund raising events continues.

Xi (Dan Haines)

The Xi chapter at the University of Pittsburgh has been very active over the past year. Activities sponsored by the chapter include intramural softball, basketball, and volleyball as well as a resumption and extension of the popular "Happy Hours". Janet Asper organized a "Calculator for Kids" drive at Christmas in partnership with the Pittsburgh Volunteers and the Brashear Association. Attendance was up at the annual staff, student, and faculty Christmas party. Dr. Tobin Marks of Northwestern University has accepted our invitation to be the 43rd annual Francis Clifford Lecturer on April 14-15, 1998. This year will end with the induction of new members and election of new officers at the end of April.

It was moved (John Lippert) and seconded (Robyn Richards) that the reports of the delegates be accepted. The motion passed unanimously.

The first session adjourned for committee meetings at 11:15 a.m.

Second Session: Friday, March 27th, 1998

President Graybeal called the second session to order at 2:15 p.m. It was moved (Sarah Dimick) and seconded (Dan Haines) that the Congress meet as a committee of the whole for the purpose of discussing committee reports. The motion passed unanimously. The National Vice

President, Christine Pastorek, assumed the chair.

The second session was reconvened by President Graybeal at 3:45 p.m. The report of the Program and Credentials Committee was presented to the Congress by Scott Segal.

Report of the Program and Credentials Committee

The following national officers are present:

Dr. Jack Graybeal, President
Dr. Christine Pastorek, Vice President
Dr. James George, Secretary
Dr. T. Adrian George, Treasurer
Dr. Richard White, Editor

The following national officers are absent:

Dr. Frederick Wassmundt, Past President
Dr. Sheldon Cohen, Historian

The following delegates, alternates, and proxies are present:

Delegates

John Lippert, Beta Theta
Reid Asbury, Chi
Scott Segal, Alpha Phi
Dan Haines, Xi
Sarah Dimick, Alpha Pi
Kerry Clark, Rho

Alternate

Robyn Richards, Rho

Proxies

Dr. T. Adrian George, Beta Iota
Dr. James George, Beta Eta
Alpha Alpha
Alpha Mu
Alpha Beta

Respectfully submitted,
PROGRAM AND CREDENTIALS COMMITTEE

Scott Segal, Alpha Phi
James George, Advisor

It was moved (Sarah Dimick) and seconded (Robyn Richards) that the report be accepted. The motion passed unanimously. The second session adjourned for committee meetings at 4:00 p.m.

Third Session: Saturday, March 28th, 1998

President Graybeal called the third session to order at 9:00 a.m. and announced the following committee assignments:

Register Committee

Robyn Richards (Rho)
John Lippert (Beta Theta)
Reid Asbury (Chi)
Richard White, Advisor

Centennial Celebration

Sarah Dimick (Alpha Pi)
Scott Segal (Alpha Pi)
T. Adrian George, Advisor
Jack Graybeal, Advisor

Membership and Chapter Activities

Kerry Clark (Rho)
Dan Haines (Xi)
James George, Advisor
Christine Pastorek, Advisor

The third session was recessed for committee meetings at 9:15 a.m.

The session was reconvened by President Graybeal at 10:30 a.m. It was moved (Dan Haines) and seconded (John Lippert) that the Congress meet as a committee of the whole" for the purpose of discussing committee reports. The motion passed unanimously. The National Vice President, Christine Pastorek, assumed the chair.

The third session was reconvened by President Graybeal at 11:45 a.m. The "official" group photograph was taken and the session was adjourned for the purpose of preparing committee reports.

Fourth Session: Saturday, March 28th, 1998

The fourth session was called to order by President Graybeal at 4:30 p.m. Final reports of all committees were distributed to the delegates.

It was moved (Dan Haines) and seconded (Kerry Clark) that the National Secretary be given editorial privilege for the preparation of the Minutes. The motion passed unanimously.

The report of the Finance Committee was presented by John Lippert.

Report of the Finance Committee

The Finance Committee to the Thirty-second National Congress of Phi Lambda Upsilon recommends the following:

1. The financial records of the Office of the National Treasurer of Phi Lambda Upsilon for the period of 7/1/90 to 12/31/97 as kept by Dr. T. Adrian George, National Treasurer, were inspected by Harger and Magnussen, CPA. The records are, in the opinion of this committee, satisfactory and up to date. In accordance with article IV section 3-d of the National By-Laws, full audit for the triennium beginning 7/1/96 and terminating 6/30/99 should be made at the appropriate time.
2. TAX WARNING: Under the reasons for Non-Private Foundation status of the U.S. Tax Code, an organization must satisfy both of the following to remain an organization exempt from income tax:

An organization normally receives:

- a. *more than one-third of its support from membership fees, etc., and*
- b. *no more than one-third of its support from gross investment income over a two year period.*

We recommend that the National Treasurer check this financial status every three months.

3. It should be noted that the 7/1/96 to 6/30/99 budget does reflect a financial commitment to the Centennial Celebration. The thirty-third National Congress of PLU has the power to modify the budget for fiscal years 7/1/99 to 6/30/02 for the purpose of adjusting the finances.
4. The 1999-2002 triennial budget is as follows:

RECEIPTS

	<u>FY</u>	<u>Three Year</u>
Initiation Fees	\$24,300	\$72,900
Register Subscriptions	325	975
Interest		
General Fund	6,240	19,260
Fresenius Fund	5,880	17,640
Jewelry	125	375
Total	\$37,050	\$111,150

DISBURSEMENTS

Certificates	\$2,728	\$8,184
Register	3,000	9,000
Congress	6,667	70,000*
Administrative Expenses	4,240	12,720
Administrative Travel	0	0
Postage	2,500	7,500
PLU Fresenius Award	2,100	6,300
Student Travel Grants	4,000	12,000
Secretarial Aide	1,000	3,000
Student Register Award	0	1,000
Chapter Resurrection Project	0	2,000
Jewelry	150	450
Total	\$26,385	\$132,154*

*Includes \$50,000 for Centennial Celebration

Respectfully submitted,
FINANCE COMMITTEE

John Lippert (Beta Theta)
Kerry Clark (Rho)
T. Adrian George, Advisor

It was moved (Kerry Clark) and seconded (Scott Segal) that the report of the Congress Finance Committee be accepted. The motion passed unanimously.

The following four motions were made on behalf of the Finance Committee (John Lippert) and seconded (Reid Asbury):

1. The Finance Committee moves that the by-laws be changed to read: "A Fresenius Award Fund consisting of a certificate of deposit for \$44,000 and interest from that certificate of deposit will be established." (to be added to article IV sec 9)
2. The Finance Committee proposes a change to the Student Travel Grant Program in which local chapters will not have to contribute money and the national chapter will award \$250 each six month period for students presenting a poster or talk at a meeting. The same application procedure will apply as in the past.
3. The Finance Committee moves that an annual \$500 award be given for an outstanding paper

submitted to the Register by a student member of the Society. The details of the award will be proposed by the Congress Register Committee.

4. The Finance Committee moves that a one-time monetary award of \$200 be made available to each PLU chapter for the purpose of promoting, initiating, recruiting, or sustaining a chapter in need. The money will be allocated by the National President upon receipt of an application in which the chapter status and need are described in detail. A proposed budget is required.

All four motions passed unanimously.

The report of the Nominations Committee was presented by Sarah Dimick and Dan Haines.

The Report of the Nominations Committee

1. Nominations:

President	*
Vice President	Dr. James George
Secretary	*
Treasurer	*
Editor	Dr. Richard White
Historian	Dr. Sheldon Cohen

*No nominations were made at the time of the 32nd National Triennial Congress.

2. The Committee recommends that the 32nd Triennial Congress grant the National President, Jack Graybeal, and the current Nominating Committee the authority to pursue and accept nominations for the Offices of President, Secretary, and Treasurer for the 1999-2002 election. We recommend that the emphasis of this search be directed toward current PLU members serving as professors at primarily undergraduate institutions, former national PLU congressional delegates, and those members currently employed in industrial positions.
3. A strong recommendation was made that the future delegates be encouraged by the National Secretary to prepare suggestions and/or biographical sketches for consenting nominees for National Offices before the Triennial Congress convenes as stated in the By-Laws (Article VII, Section 2- 4).

Respectfully submitted,
NOMINATING COMMITTEE

Sarah Dimick (Alpha Pi)
Dan Haines (Xi)

Dr. Jack Graybeal, Advisor
Dr. Christine Pastorek, Advisor

It was moved (Kerry Clark) and seconded (Dan Haines) that the report of the Congress Nominating Committee be accepted. The motion passed unanimously.

It was moved on behalf of the Nominating Committee (Dan Haines) and seconded (Robyn Richards) that the 32nd Triennial Congress grant the National President, Jack Graybeal, and the current Nominating Committee the authority to pursue and accept nominations for the Offices of President, Secretary, and Treasurer for the 1999-2002 election. The motion passed unanimously.

Report of the Constitution and By-Laws Committee

1. The Constitution and By-Laws Committee recommends the following addition to By-Law Article VII, Section 1(e)(vii): "The National Editor shall prepare and maintain a web page".
2. The Committee recommends maintaining the current format of the Triennial Congress as a national decision making body. To improve the delegate attendance, it is suggested that the 33rd Triennial Congress convene immediately following the Spring ACS meeting in 2001.

Respectfully submitted,
CONSTITUTION AND BY-LAWS COMMITTEE

Reid Asbury (Chi)
Scott Segal (Alpha Phi)
Robyn Richards (Rho)
Richard White, Advisor
James George, Advisor

It was moved (Scott Segal) and seconded (Reid Asbury) that the recommendations of the Constitution and By-Laws Committee be accepted. The motion passed unanimously.

Report of the Register Committee

The Register Committee recommends the following items:

1. That five copies of the Register will be sent to each chapter for circulation among the chapter officers and members.
2. That an annual award be established recognizing an outstanding general interest paper

submitted to the Register by a student member of PLU. The submission deadline will be September 15th with publication in the following issue. The national Editor will contact five chapter presidents to constitute a peer voting panel. The chapter presidents will rank the top three papers.

Respectfully submitted,
REGISTER COMMITTEE

Reid Asbury (Chi)
Robyn Richards (Rho)
John Lippert (Beta Theta)
Richard White, Advisor

It was moved (Reid Asbury) and seconded (Dan Haines) that the recommendations of the Register Committee be accepted. The motion passed unanimously.

Report of the Resolutions and Centennial Committee

The Resolutions and Centennial Committee of the Thirty-second National Congress recommends the following:

1. The Thirty-second National Congress would like to reaffirm the resolutions set forth by the Thirty-first National Congress and encourage individual chapters to function with these ideals in mind.
2. Per the request of the Thirty-first National Congress, we have asked President Jack Graybeal to distribute the letter drafted by the Rituals and Archives Committee of the Thirtieth National Congress regarding the PLU centennial celebration. This can be found in the committee reports from the Thirtieth National Congress. It is recommended that it, in its final form, be sent to all individual chapters no later than one year prior to the Centennial Celebration.
3. The following recommendations are made regarding the Centennial Celebration:
 1. The Centennial Celebration will be held at the National ACS meeting in April, 2001, at San Diego. This celebration will occur on the eve of the convening of the Thirty-third Triennial Congress.
 2. The celebration will take the form of talks, exhibits, and a social cocktail hour.
 - a. The talks shall be three in number: an early Fresenius award winner, the most recent Fresenius award winner, and a distinguished PLU member recognizing the contribution of women to the society. The talks will be set up in conjunction with the ACS History of Chemistry Division.

- b. The exhibits will be materials drawn from the PLU Archives at the University of Illinois. Money will be approved for their transport.
 - c. The social cocktail hour will feature a cash bar with other refreshments provided by the PLU Centennial budget.
3. The requested budget for the Centennial Celebration will be \$70,000. This will cover the expenses of one member from each chapter to attend the Centennial Celebration and the meeting of the Thirty-third National Congress.
 4. A memo to the National officers will be made regarding possible speakers and an advertising strategy. The advertisement will likely be placed in Chemical and Engineering News and will include an article describing the history and progress of PLU.
 5. Invitations will be sent to distinguished PLU members and to all chapters, both active and inactive.

Respectfully submitted,
RESOLUTIONS AND CENTENNIAL COMMITTEE

Sarah Dimick (Alpha Pi)
Scott Segal (Alpha Phi)
T. Adrian George, Advisor
Jack Graybeal, Advisor

It was moved (Scott Segal) and seconded (Reid Asbury) that the recommendations of the Congress Resolution and Centennial Committee be accepted. The motion passed unanimously.

Report of the Membership and Chapter Activities Committee

1. The Committee recommends that the Thirty-third Triennial Congress form a Constitutional Review Committee for the purpose of updating and reviewing the PLU Constitution. During the Thirty-third Triennial Congress one committee will be constructed from all of the delegates who are present and separated into three or four subcommittees each of which will evaluate two or three Articles of the Constitution. An ongoing list of comments, suggestions, and motions to change the Constitution will be kept on file until the National Advisory Board decides the time to gather the decisions and votes from all of the active chapters.
2. The Committee recommends that the PLU web page contain both Article 2 (chapter formation) and Article 3 (membership qualifications) from the most current Constitution. In addition, E-mail addresses of current chapter officers and councilors from each active chapter, as well as an annual summary of recent activities from each active chapter, will be

required and posted on the web. We recommend that the web page be functional by January 1, 1999.

3. The Committee recommends a revival of the historical PLU brochure. The contents will contain the history of PLU, functions of PLU as a national organization, general membership information and qualifications, and the current world wide web address of the Society. The responsibility to complete this task is that of the National Secretary. We recommend that 25 brochures be sent annually to each active chapter of PLU by January 1st of each year for the purpose of recruitment and initiation. It will be the responsibility of each chapter to provide additional copies of the brochure.
4. The Committee recommends that the National Secretary send a letter to Department of Chemistry Chair of each institution where there is an established chapter of PLU. The letter will contain information concerning the student travel grants, the Centennial PLU Celebration, the student paper submitted Register award, the Chapter Resurrection Project, and the requirements that each entails. It will be the duty of the Thirty-third Congress to assess the status and success of this chapter motivation letter.
5. The Committee recommends the formation of an electronic alumni database. A change of status form will be posted on the PLU web page which would allow members to indicate changes in their mailing address, E-mail address, affiliation, and status. The posting of this form will be the job of the National Editor. The information received from the web will be collected and organized by the National Secretary. The National Editor will publish a similar form in the Register with the return address of the National Secretary provided. In addition, we recommend that the National Secretary announce the web address of PLU through an advertisement in Chemical and Engineering News as well as the Journal of Chemical Education for the purpose of increasing the alumni database.
6. The Committee recommends that the Finance Committee increase the Secretarial Aide Disbursement Fund to \$1000 each fiscal year and \$300 each triennium for the purpose of starting and maintaining the PLU web page.
7. The Committee recommends that each active chapter send an annual summary of their activities and accomplishments with the initiation forms and materials to the National Secretary. The purpose of this summary is for future verbatim publication in the Register.

Respectfully submitted,
MEMBERSHIP AND CHAPTER ACTIVITIES COMMITTEE

Kerry Clark (Rho)
Dan Haines (Xi)
James George, Advisor

Christine Pastorek, Advisor

It was moved (Kerry Clark) and seconded (Scott Segal) that the recommendations of the Membership and Chapter Activities Committee be accepted. The motion passed unanimously.

It was moved (Adrian George) and seconded (Richard White) that the students be applauded for their enthusiastic work at the congress. Passed unanimously by the national officers.

The fourth session, and the Thirty-second Triennial Congress, were adjourned by the National President, Jack Graybeal.

Notes from Chapters

ALPHA PI CHAPTER, DUKE UNIVERSITY

This was yet another busy year for the Alpha Pi Chapter of Phi Lambda Upsilon. The summer of 1996 began with the awarding of the "PLU Distinguished Service Award", created to recognize someone in the Chemistry Department who went above and beyond the call of duty to help make the lives of graduate students much easier. It was decided that the award should be presented to two individuals this year, Marvin Pring and Walter Jenkins, who run the Gross Chemistry Stockroom and always have time for a little friendly conversation with anyone who drops by. It was also decided that the presentation of the award should be delayed until their official retirement in June, 1997. We also updated a handbook for graduate students in the Chemistry Department titled "All the Important Stuff. . . Avoiding 4 (or more) years of Hell as a Chemistry Graduate Student". The booklet lists information, collected by recent surveys, ranging from "The Program" to "Housing" to "Triangle Area Activities". Throughout the summer we hosted departmental volleyball parties on the front lawn of P. M. Gross Chemical Laboratory, as well as began the wheels turning for building a permanent sand court next to the building. The summer closed with a picnic during a baseball game at the Durham Bulls Athletic Park, held at the end of August to welcome the matriculating graduate students.

During the fall semester our chapter officers met with the Chemistry Department Chairman and the Director of Graduate Studies, on behalf of the graduate students, to discuss graduate student issues and concerns. Some progress has been made in addressing some of these issues. Also during the fall, we began a Thursday evening seminar program, The PLU Student Seminar Series. During this program, graduate students and postdocs in the department could present a literature or research seminar in an informal setting to any members of the department (including faculty) who wished to attend. Attendance remained strong through out the year, and the series was well received by members of the department.

Chapter activities for the spring semester got off to a great start with the first annual Chemistry Department Superbowl Party. The turnout for this event was large, and it seemed to be very well received by members of the department. Next on the agenda was a welcoming party for prospective

Thirty-second National Congress Participants



Front Row (left to right)

Jack Graybeal, Christine Pastorek, Scott Segal, Kerry Clark, Sarah Dimick, Adrian George, Robyn Richards

Back Row

Reid Asbury, Richard White, James George, Dan Haines, John Lippert

graduate students during Duke Chemistry Open House Weekend, held March 1-3, 1996. This event, organized by a faculty committee, was open to students who had received an admission offer to the Duke chemistry graduate program. Our officers were involved with a portion of the planning that also included a Saturday morning poster session for the visiting students and members of the chemistry department, as well as their families. Many PLU members, including the officers, served as student hosts throughout the weekend events. The PLU sponsored Hill Lectureship was to be given by Dr. Robert Holms on April 9. Unfortunately, Dr. Holms injured his leg only days before the seminar, and it was rescheduled for the fall of 1997. At the end of the semester we presented the Duke University Phi Lambda Upsilon Scholarship Award to a deserving Durham senior who will be entering college in the fall with chemistry as their declared major.

This year also saw another first in PLU sponsored breakfast meetings with graduate students and speakers of the Student Hosted Duke Chemistry Department Seminar Series. Also throughout the year, study guides for freshman and organic chemistries were sold. The sale of study guides is a continuing tradition and serves as our major source of funds for all chapter activities.

Alpha Omicron Chapter, Michigan Technological University

The Alpha Omicron Chapter has continued the project which is revitalizing the group. The students have continued to present Chemistry Shows for fourth and fifth grade classes in our communities. The enthusiasm for this effort made by our students has been rewarded by more than equal enthusiasm from the grade school teachers and students. For many of our students this has become the high point in their spring term. In addition, we have added our Discover the Chemical Sciences Day for high school students in the area. We have been purchasing items from the Kids in Chemistry program sponsored by ACS. ACS has been helpful in this, but some of their products are somewhat pricey for our group. Can you give some advice on how we might be able to get materials at a lower cost?

We had set up a PLU homepage but have not maintained it as well as we should. Some of our new initiates who are expert in these activities are going to make a new attempt and hope to have an interactive page with a possible weekly problem for high school students.

The activities within the Alpha Omicron Chapter of PLU center around initiation of new members, presenting chemistry magic shows to fourth and fifth grade elementary students, and having a Discovering Chemical Sciences for chemistry students in senior high school. We have successfully presented the chemistry magic show for the past three years. This year was our first year with the Discovering Chemical Sciences. Our presentations were all given in the spring term of the year. The Chemistry Dept. and the Chemical Engineering Dept. helped to underwrite the cost of the lunch provided to the over 100 students that arrived on campus. The University Book Store provided a number of Tee shirts and sweat shirts for prizes in the drawing. The reviews by the students for this event were excellent. The event will be scheduled for the 1997-1998 year.

The annual grade school presentations have always been a delight for the student presenters and give us reason to believe that there are generations of students who have a genuine interest in the

sciences. Our chapter will continue to visit schools.

For a fundraiser we introduced the very popular P-Chem Mug. A member of PLU offered his face and some of his favorite classroom sayings to support the PLU ventures.

Initiates 1998

Alpha

University of Illinois

Antony, Ajitha - Blaumueller, Karen M. - Brooks, Rebecca A. - Chiu, Steve - Desai, Paras Y. - Doufas, Antonios - Furman, Kevin C. - Gleeson, Juliann - Goeckner, Bryna D. - Jin, Alan Q. - Johnson, Amy K. - Krejci, Elise - Lamont, Liana - Lebovitz, Andrew H. - Lim, Sung H. - Loweth, Jessica A. - Okamura, Charles M. - Omuetti, Katherine O. - Pa, Shun - Pippel, Daniel J. - Queeneville, Jason - Schultz, Laura G. - Shimmin, Robert G. - Sukel, Matthew E. - Walton, Thomas L. - Wei, Liqiang - Wolters, Andrew U.

Epsilon

University of Washington

Anderson, Christine - Johnson, Laura B. - Kennedy, Eileen J. - Pogosova, Era L. - Shin, Seung H. - Youngberg, Daron

Nu

Purdue University

Bejune, Stephanie A. - Donovan, William J. - Florio, Gina M. - Foltynowicz, Robert - Freel-Meyers, Caren L. - Hurst, Julia M. - Jennings, Michael P. - Li, Ruomei - Meyers, David J. - Stewart, Kevin W. - Wang, Shuishu

Xi

University of Pittsburgh

Badger, Paul D. - Beratan, David N. - Bom, David C. - Burland, Matthew C. - Christie, Richard A. - Ciano, Loyce M. - Decker, Jolene M. - Jordan, Kenneth D. - Keim, Jonathan P. - Kondru, Rama K. - Lin, Fu-Tyan - Michael, Adrian C. - Nguyen, Tri V. - Peddicord, Michael B. - Peters, Jennifer L. - Pratt, David W. - Priyadarshy, Satyam - Solimini, Cristina - Trout, Amy L. - Wilcox, Craig S. - Wood, John T. - Wyckoff, Kevin R.

Rho

University of Nebraska-Lincoln

Alexander, Jennifer M. - Bose, Mohua - Cho, Su C. - Choi, Sungjo - Ellis, Bradley C. - Engen, John R. - Hrvatin, Paul M. - Jahng, Wanjin - Kim, Hongwoo - Leonov, Alexei P. - McCaleb, Holly B. - Madinger, Catherine L. - Metz, Andrew W. - Narro, Efrain - Parra, Ruben D. - Rodriguez, Rafael - Rosenberg, David M. - Salud-Bea, Roberto D. - Smirnov, Valeriy V. - Suh, Young-Sung - Swanson, Benjamin J. - Vedder, Stacey L. - Velarde-Ortiz, Raffet - Wilson, Carrie G. - Wongsriratanakul, Jirawat - Woodbridge, Cynthia M. - Wu, Jiong

Chi

Washington State University

Amato, Paul R. - Dion, Heather M. - Fabry-Asztalos, Levente - Fernando, Dilini P. - Jiang, Guangfeng - Kirsch, Bradley L. - Lucchesi, Lisa D. - Maddison, Andrew P. - Markowski, Laura E. - Paulsen, Janet L. - Shaw, Bryan F.

Alpha Alpha

Rice University

Agarwal, Shonui M. - Baber, Usman - Barry, David - Bishop, Nicholas - Bohsali, Dalia - Carr, Jessie - Clear, Trustin - Dai, Eric - Doan, Lisa - Edwards, Nicola - Fialkowski, Elizabeth A. - Fu, Audrey - Godbey, William T. - Godin, Nelly A. - Grant, Julieann - Hentzen, Eric R. - Huang, Yanmei - Jamal, Karim - Kim, Billy - Lang, Susan - Laskowski, Christine - Lee, Carolyn M. - Lee, Linda N. - Lew, Elaine - Li, Benjamin W. - Martin, Dan - Mitchell, James - Naresh, Amber - Nason, Robert - Nurman, Lucia A. - Oh, Irene - Pandya, Aashish M. - Paster, Eden V. - Plowman, Sarah - Qutub, Amina A. - Sheth, Anandi - Stewart, Lynn - Strait, Megan - Thompson, Carrie A. - Tsui, Jennifer - Unton, Michael T. - Wang, David - Wong, Matthew S. - Wood, Stephen M. - Wu, Caroline A. - Wynn, Paula

Alpha Gamma

Northwestern University

Ambrosini, Andrea - Douglass, Michael R. - Ghering, Amy B. - Kelly, Kevin L. - Leesch, Valerie W. - Lukas, Aaron S. - Marin, Timothy W. - McLauchlan, Craig C. - Metz, Matthew V. - Norquist, Alexander J. - Ormonde, Anjeanette D. - Rechsteiner, Gregory A. - Steenberg, Kristen J. - Stinziano, Renee A. - Walter, Daniel G.

Alpha Delta

Oklahoma State University

Bacon, Sarah B. - Ballew, Jason J. - Bell-Eunice, Gianna N. - Coutant, Marie S. - Dark, Terry W. - Hamburger, Aaron D. - Hickey, Matthew R. - Howard, Robert D. - Johnson, Erin M. - King, Nicole - Koo, Pack K. - Loo, Ken M. - Ramsey, Joshua - Ray, Christopher D. - Sawatzky, Terra D. - Seet, Can I. - Setiawan, Andrew W. - Stocksen, Kelly M. - Turner, Jennifer A. - Underwood, April D. - Wakefield, Cynthia A. - Washburn, Kami K. - Wong, Kie-Hien - Woods, Justin S. -

Alpha Epsilon

Kansas State University

Audi, Ahmad A. - Baures, Paul W. - Chen, Yi - DeVerse, Richard A. - Hernandez, Jesus E. - Higgins, Daniel A. - Kilbane, Colin J. - Li, Yandong - Maata, Eric A. - Mei, Erwen - Padiyar, Jeevan P. - Simpson, Amanda E. - Tran, Ninh P. -

Alpha Theta

Virginia Tech

Bocock, Jeff P. - Bond, Deborah L. - Bryant, William S. - Chatreewongsin, Urai - Burts, Ellen - Duchovnay, Alan - Harned, Andrew M. - Helton, Jason K. - Hislop, Sean J. - Hunsucker, Steve W. - Leonard, Sarah K. - Lofthus, Owen W. - Metaferia, Belhu B. - Umayam, Lowell A. - Wang, Jianli - Yuan, Haiqing

Alpha Iota

Auburn University

Ammons, Kelly N. - Bagley, Joy E. - Bartlett, Jessica L. - Birge, Ryan A. - Blackwood, Justin K. - Britnell, Jessie A. - Davis, Kimberly D. - Fuller, Alegria B. - Goula, John D. - Gray, Steven J. - greynolds, Keely S. - Hayes, Michael C. - Hightoner, Kortney D. - Jones, Laura B. - Morrow, Melissa - Nettles, Bryan H. - Porter, Melissa A. - Rice, Randall B. - Smithers, Molly B. - Steele, Sabrina A. - Stockstill, Ana M. - Thorpe, Brian C. - Walton, Seth T. -

Alpha Lambda

New York University

Adjemian, Kevort - Fong, Robert - Forbes, Christopher - Gentry, Amy - Ginsburg, Lev - Grinberg, Diana - Gugev, Alexander - Laine, Florence - Nijher, Nandeep - Pua, Bradley - Rahi, Arash - So, man K. - Rabbah, Rodric -

Alpha Mu

Lousiana State University

Hunt, Clinton - Price, Loren M. - Waddell, Emanuel A.

Alpha Nu

Rensselear Polytechnic Institute

Annecharico, Aaron L. - Banks, Shereen M. - Blumenthal, Melissa J. - Brown, Michael R. - Discepolo, Keri - Enever, Paul A. - Gosselin, Keith N. - Hanniffy, Andrew A. - Hopkins, Michael J. - Huddleston, Joel H. - Lau, Theodora H. - Lavalley, Paul R. - Lee, Steven H. - Lewandowski, Michael - McAllister, Devin V. - McCloy, Todd M. - Morita, Kiyo - Nguyen, Phuong-Thuy T. - Noel, Brian S. - Prosser, Alissa J. - Qaqish, Rewad H. - Schlegel, Kimberley D. - Scott, Alic A. - Taylor, Catherine E. - Taylor, Jennifer C. - Taylor, Paul D. - Treutlein, Scott A. - Watts, Edwin M. - Wojcik, Michael D.

Alpha Omicron

Michigan Tech University

Aho, Holly A. - Bartholomew, Kyle M. - Beito, Valerie S. - Burtch, Jason A. - Duncan, Jeffrey W. - English, Jason M. - Everest, Barbara M. - Feak, Dana M. - Goetz, Robert J. - Gray, Nicole M. - Hartmann, Denise N. - Hofmeister, Michael D. - Kah, Laura N. - Koele, Matthew L. - Lents, Nicole M. - Mellen, Andrea J. - Moroni, Kathryn M. - Neveau, Timothy J. - Nugent, Sheryl M. - Olaughlin, Scott J. - Pavelski, Michelle L. - Phillips, Erin D. - Rogers Adrienne R. - Truscott, Scott B. - Vogt, Angela K.

Alpha Pi

Duke University

Abdelwahab, Nancy H. - Barroilhet, Lisa M. - Bliley, Jay - Byers, Anthony M. - Carlow, Samantha J. - Chaet, Marissa W. - Crowder, Terrence T. - Drake, Kirby B. - Fritock, Douglas H. - Glesener, Traci N. - Grynaviski, Nicole M. - Harris, Amanda L. - Hewitt, Joseph D. - Hutchison, Robin L. - Jacob, Miriam S. - Keller, Christopher R. - Kohar, Jimmy S. - Lin, Ihsiu - Lohr, Ginger J. - Martinez, Paloma - McIntosh, Sara L. - Nishioka, Amy E. - Nofsinger, John B. - Orr, Matthew D. - Paquette, Kevin P. - Perch, Nicholas S. - Quan, Lam C. - Rajan, Sriram - Robinette, Catherine D. - Smith, Gary A. - Stengone, Carmine W. - Sukenick, Scott A. - Thomas, J. Alex - Yang, Hui

Alpha Phi

University of Connecticut

Allard, Christopher W. - Bautista, James A. - Cao, Lixin - Chan, Pik-Yiu - Chen, Hongfeng - Gavini,

Bryan G. - Hashemzadeh, Mernoosh - Hugener, Theresa A. - Leblanc, Lisa G. - Luzietti, Richard P. - Mealy, Michael J. - Pardus, Jennifer L. - Purohit, Vandana - Sedich, David M. - Spiess, Franz-Josef - Tao, Yong - Teng, Lisa - Zhou, Hua

Alpha Psi

Wayne State University

Boparai, Herminder S. - Chowdhury, Saroj K. - Condon, Kristy D. - Cross, Jason B. - Fornicola, Richard S. - Grohar, Patrick J. - Hiebel, Anne-Cecile - Kirzhner, Maria - Mann, Larry W. - Markevitch, Alexei N. - Montgomery, John - Pfeiffer, Dirk - Prall, Bradley S.

Beta Eta

South Dakota State University

Anderson, Jared L. - Button, Jon J. - Gary, Trisha A. - Henrie, Sally A. - Huntimer, Eric D. - liudahl, Kyle B. - Santiago, Manuel F. - Yue, Chen

Beta Theta

Arizona State University

Brown, Christine C. - Fair, Geoff - Fisher, Ricky L. - Firestine, Jennifer A. - Fry, Jeremy A. - Haas, Paul D. - Hu, Chia-Yuan - Mauro, Christine R. - McGehee, Michael D. - Nguyen, Long - Ouyang, Anlong - Peraltz, Luis - Polsky, Cynthia H. - Robinson, Dale E. Jr. - Roth, Aaron J. - Smith, Susan M. - Smith, Todd R. - Spurling, Kent J. - Tatman, Dereck A. - Williams, Darrick J. - Williams, Teresa M. - Zhang, Qi

Beta Iota

University of Missouri-Columbia

Bellarde, David S. - Bermudez, Vladimir P. - Borgmeyer, Matthew R. - Carl, Thomas D. - Gassaway, Eric T. - Johnson, Laura C. - Leanna, Candice A. - McLain, April L. - Moore, Christopher W. - Piotrowski, Bryan D. - Rheinneck, Amy D. - Rouse, Christopher R. - Rubach, Heidi L. - Schmieder, Anne H. - Slaughter, Andrea L. - Tran, Phuong T. - Witherspoon, Scott R.

Beta Kappa

University of Scranton

Acharya, Milin R. - Bognet, Judy T. - Dixon, James M. - Eltz, Johanna C. - Green, Charisse - Hudak,

Tracy A. - Lewis, Shad J. - Lukasik, Stephen M. - Malosh, Thomas J. - Mills, Jeffrey H. - Petrie, Randall P. - Ripchinski, Michael R. - Rose, Christen F. - Roth, Katherine E. - Ryan, Joseph A. - Sico, Jason, J. - Stagliano, David R. - Summa, Luke - Tucker, Matthew J. - Walsh, Daniel P.

Beta Lambda

North Carolina State University

Boal, Andrew K. - Boyd, Jenny L. - Brooks, Clint A. - Cooper, Matthew T. - Edens, Suzanna B. - Farmer, Gary T. - Fule, Alan B. - Gordon, Amy M. - Greene, Reagan J. - Howard, Angela S. - Kesden, Evan L. - Linn, Andrew H. - Linossi, Marie C. - Newsom, Amy E. - Overton, Jerry M. - Thornton, Todd A. - Wack, Christopher R. - Wang, Wei - Weaver, Michael N. - Wolfe, Stephen H.

Beta Mu

Southern Methodist University

Adam, Gregory C. - Boyd, Andrew D. - Chari, Dheepa C. - Dunn, Joe D. - Fox, Amy N. - Holdeman, Terra C. - Horton, John D. - Qadri, Nabil - Oliver, Cari D. - McDermott, Terry L.

Beta Omicron

De Pauw-Wabash

Baldwin, Theodore W. - Belcher, Lewis J. - Hackett, Jennifer A. - Hamilton, Megan L. - Hayes, Colleen E. - Houchin, Timothy M. - Lamichhane, Gyanu - Mickelson, Matthew S. - Odonnell, Patrick W. - Patterson, Jonathan G. - Peters, Sara E. - Quick, Adam D. - Radnovich, Alexander - Rank, Allison A. - Roberts, David L. - Roberts, Jacqueline R. - Ronningen, Theodore J. - Stopperich, David M. - Turan, Valerie K. -

Beta Pi

St. Cloud State University

Bartell, Stephen - Bechtold, Kevin J. - Bruijhell, Carrie M. - Chong, Cheuk W. - Clouser, Christine L. - Evans, Amber L. - Huston, William - Lavallee, Richard J. - Metz, Melanie L. - Stob, Tamera M. - Thielman, Matthew M. - Vetsch, Angela A.

Beta Sigma

Valparaiso University

Baker, Mari B. - Boskovich, Stephen M. - Eicher, Alison L. - Heaton, Gregory M. - Juell, Andrew - Kasza, Jason R. - Kerins, Mark E. - Leonas, Amy E. - Makowski, Andrew - Mann, David J. - Matzke, Nicholas J. - Miller, John A. - Neef, Daniel W. - Pencek, Amanda - Peters, Brad D. - Saler, Amanda W. - Schering, Christine A. - Smutka, Tanya M. - Spoljoric, Jason J. - Vanteeckelenburgh, Sue - Vega, Adam T.

At-Large Members

Cox, Frederick - Crawford, Thomas D. - Engstrom, Kenneth M. - Erskine, Julie - Frisch, Kristan - Fulton, Zachary J. - Huggins, Robert - Janes, Rebecca - Michalowski, Brian A. - Murphy, Drew - Orlicki, Joshua A. - Plattner, Brian J. - Rastatler, Jeff - Schultz, Laura G. - Steinkamp, Joy E. - Templeton, Jeffrey N. - Todesco, Vicki - Tyler, Brent

Procedure for Nominating Honorary Members

All chapters are urged to participate in nominating honorary members. Remember that regular membership in the Society in no way precludes consideration for Honorary membership. The procedure used for nomination and selection is as follows:

- (a) Honorary members shall be nominated by local chapters.
- (b) Each chapter shall be limited to two nominations in any one year.
- (c) The nominating chapter shall submit a letter of nomination and a biographic sketch of their nominee including publications authored, positions held, honors received, and services rendered.
- (d) Fifty (50) copies of the nomination shall be forwarded to the national Secretary by November 15 of the year of submission.
- (e) The National Secretary shall distribute the information on the nominees to the chapters by December 15.
- (f) The chapters shall return their votes on each nominee to the National Secretary by February 15.
- (g) The award shall be presented by the nominating chapter in cooperation with the National Officers.

Travel Grant Program

At the 1980 Congress the representatives established a fund for the purpose of subsidizing travel expenses of student members presenting papers at scientific meetings. At the present time it has been observed that there has been minimal use of this fund. I would like to urge members who are in need of support for such travel to avail themselves of this opportunity. **To improve the use of this fund the 1998 Congress removed the match requirement by the chapters.** There are two allocation periods established, July 1 to December 31 and January 1 to June 30. Applications for travel grants will not be considered earlier than November 15 for the January to June period and May 15 for the July to December period. Applications must be received by the National President no later than one month before the meeting at which the paper is to be presented.

Applications should include the following information: applicant's name and chapter; name, date, and location of the meeting to be attended; abstract of the paper to be presented; funds requested; travel mode; and signature of the applicant's chapter counselor and chapter president.

Any given chapter is eligible to have any of its members receive a travel grant up to **\$250 semiannually**. Grant applications received by the president in the two week period following the November 15 and May 15 dates shall be considered and choices made on a random basis in the event that the total requests are more than the funding available for the allocation period. Chapters which have not received funds in the given year will be given preferential consideration. Requests received after the initial two week period will be considered on a first come first served basis. Eligibility for a travel request, based on the quality of the abstract and the nature of the meeting where the paper will be presented, is to be determined by the chapter and will not be performed by the national president.

Instructions For Authors

All members of the society are invited to submit articles for publication in **The Register**.

Articles submitted for consideration should not be highly technical ones which require meticulous reviewing but more general in nature such as: 1) Reviews of important areas of chemistry with the objective of looking at the progress which has been made and the future direction the area is likely to take. 2) General overviews of the nature of chemical research in various non-academic research institutes. 3) Articles which will acquaint the membership with the history and development of the society. 4) Articles dealing with the philosophies and politics of science.

Within the context of these four types of articles members are invited to both submit articles of their origin or encourage qualified chemists to contribute articles. The rules regarding the processing of articles for publication are minimum but include:

1. Submitting articles should be restricted to a length of 2000 words or less.(6-7 double spaced pages).
2. All articles should be typed, double spaced and submitted in duplicate.
3. The suitability of an article for publication will be determined by the Editor in consultation with members of **The Register** Committee and the Executive Committee.

4. The deadline for receipt of articles will be September 15.
5. Authors will be consulted regarding any possible revisions or changes in articles prior to publication.
6. Articles should be mailed to the Editor: Dr. Richard White, CSB/SJU, 37 S. College Ave., St. Joseph, MN 56374-2099.

The 1998 Congress established a \$500 per year award to be given to the outstanding paper presented to the Register by student PLU members. The purpose is to foster student publications. Papers must be submitted following the guidelines above. Submitted papers will be judged by five chapter presidents serving as peer reviewers.

STOP! Have You Renewed Your Subscription To The Register?

Our society is one of those rare organizations which requires only one initiation fee to become a lifetime member. When you join Phi Lambda Upsilon, a two year subscription to the official journal of our society, *The Register*, was also included. This was to help you become more familiar with the association and to maintain contact with our society after your college years.

Only with your aid can our publication grow and serve you better. Apart from reporting society business, we hope to continue to present to you articles of general scientific interest, items of historical interest, guest editorials, and activities of our members. Why not resubscribe now by filling out the form below and returning it with your remittance?

Name _____ Chapter _____
Street Address _____
City _____ State _____ Zip Code _____

- ☐ 1 year at \$3.00
☐ 5 years at \$12.00
☐ Life at \$30.00

Make checks payable to "Phi Lambda Upsilon." Return to: Dr. Richard White, Dept. Of Chemistry, CSB/SJU, 37 S. College Ave., St. Joseph, MN 56374-2099.

Change of Address:

Old Address:

Street _____
City _____ State _____ Zip Code _____



PHI LAMBDA UPSILON CHAPTER COUNCILORS

ALPHA: Dr. Don Secrest, Dept. Of Chemistry, 316 Noyes Lab, Box 50 m/c 712, 600 S. Mathews, Urbana, IL 61801
DELTA: Dr. Milton Tamares, Dept. Of Chemistry, H.H. Dow Building, Univ. Of Michigan, Ann Arbor, MI 48109
EPSILON: Dr. William Reinhardt, Department of Chemistry, University of Washington
NU: Dr. Shelly Reed, Chemistry Department, 1393 Brown Building #715, Purdue University, West Lafayette, IN 47907
RHO: Dr. T. Adrian George, Dept. Of Chemistry, University of Nebraska, 728 Hamilton Hall, Lincoln, NE 68588-0304
TAU: Dr. Jeffery L. Peterson, Dept. Of Chemistry, West Virginia University, Morgantown, WV 26506-6045
CHI: Dr. James Hurst, Dept. Of Chem., Washington State University, Pullman, WA 99164-4630
ALPHA ALPHA: Dr. Joseph Hightower, Chemical Engineering Department, MS-362, Rice University, 6100 Main St., P.O. Box 1892, Houston, TX 77251-1892
ALPHA BETA: Dr. Christine Pastorek, Dept. Of Chemistry, Oregon State University, Corvallis, OR 97331-4003
ALPHA GAMMA: Dr. Joyce Brockwell and Dr. Richard Van Dwyne, Dept. Of Chemistry, Northwester University, 2145 Sheridan Road, Evanston, IL 60208-3113
ALPHA DELTA: Dr. Andrew J. Mort, Department of Biochemistry, Oklahoma State University, Stillwater, OK 74078
ALPHA EPSILON: Dr. Robert Hammaker, Dept. of Chemistry, Willard Hall, Kansas State Univ., Manhattan, KS 66506
ALPHA THETA: Dr. Jack Graybeal, Department Of Chemistry, Virginia Tech, Blacksburg, VA 24061
ALPHA IOTA: Dr. Thomas R. Webb, Department of Chemistry, Auburn University, Auburn, AL 36849-5312
ALPHA LAMBDA: Dr. Yorke Rhodes, Department Of Chemistry, New York University, 4 Washington Place, Fifth Floor, New York, NY 10003
ALPHA MU: Dr. William Daly, 232 Choppin Hall, Dept. of Chem., Louisiana State University, Baton Rouge, LA 70803
ALPHA NU: Dr. Henry Hollinger, Department of Chemistry, Rensselaer Polytechnic Institute, Troy, NY 12180-3590
ALPHA OMICRON: Dr. David Liddy, Department of Chemistry, Michigan Technological University, 1400 Townsend Dr., Houghton, MI 49931
ALPHI PI: Dr. Peter Smith, P.M. Gross Chem. Lab, Duke University, P.O. Box 90348, Durham, NC 27708-0348
ALPHA RHO: Dr. Robert Bowman, Chemistry Department, Malott Hall, University of Kansas, Lawrence, KS 66045
ALPHA UPSILON: Dr. Daphne Kay Morzkin, 441 S. Woodbine, Penn-Valley, PA 19072
ALPHA PHI: Dr. F.W. Wassmundt, 215 Glenbrook Rd., UCONN U-60, Storrs, CT 06269-4060
ALPHA PSI: John Montgomery, 1612 N. Washington, Royal Oak, MI 48226
ALPHA OMEGA: Dr. Ann West, 208 Dept. of Chem., 620 Parrington Oval, University of Oklahoma, Norman, OK 73019
BETA BETA: Dr. Manuel Soriaga, Department of Chemistry, Texas A & M University, College Station, TX 77843-3255
BETA EPSILON: Dr. Robert Hutchins, Department of Chemistry, Drexel University, Philadelphia, PA 19104
BETA ZETA: Dr. Dave Dibiasio, Engineering Department, 100 Institute Road, Worcester, MA 01609
BETA ETA: Dr. Jeff Elbert, Department of Chemistry, South Dakota State Univesity, Brookings, SD 57006
BETA THETA: Dr. Theodore Brown, Dept. Of Chemistry, Arizona State University, Tempe, AZ 85287-1604
BETA IOTA: Dr. John Adams, 123 Chemistry Building, University of Missouri, Columbia, MO 65202
BETA KAPPA: Dr. Donna Narsavage-Heald, Department of Chemistry, University of Scranton, Scranton, PA 18510
BETA LAMBDA: Dr. Charles Boss, N. Carolina State Univ., P.O. Box 8204, Dept. Of Chem., Raleigh, NC 27695-8204
BETA MU: Dr. David Goodson, Department of Chemistry, Southern Methodist University, Dallas, TX 75275-0314
BETA NU: Dr. Robert Gawley, Department of Chemistry, University of Miami, Coral Gables FL 33124
BETA XI: Dr. John Sevenair, Dept. Of Chemistry, Xavier University, New Orleans, LA 70125
BETA OMICRON: Dr. Robert Olsen, Department of Chemistry, Wabash College, Crawfordsville, IN 47933
BETA PI: Dr. Melinda Lee, Chem. Dept., MS-370, St. Cloud State University, 720 4th Ave. S., St. Cloud, MN 56301-4498
BETA RHO: Dr. Venkatesh Shanbhag, PO Box 9573, Department of Chemistry, Mississippi State University, Mississippi State, MS 39762
BETA SIGMA: Dr. Warren Kosman, Department of Chemistry, Valparaiso University, Valparaiso, IN 46383