



# ASP NEWSLETTER

Volume 29, Number 4

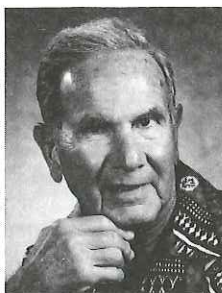
Winter, 1994

The American Society of Pharmacognosy

## PAUL J. SCHEUER AND JAMES E. ROBBERS TO BE HONORED AT 1994 MEETING IN HALIFAX

This year in Halifax, two of our members will be honored. Professor Paul J. Scheuer will be the 1994 recipient of the Research Achievement Award, and James E. Robbers will be inducted as an honorary member of the Society.

Paul J. Scheuer is Professor Emeritus of Chemistry at the University of Hawaii. Dr. Scheuer was born in Heilbronn, Germany, received a Ph.D. from Harvard and moved immediately to Honolulu. While he early on studied terrestrial plant products, Dr. Scheuer is best known in his role as grandfather of marine natural products chemistry in the United States.



Paul J. Scheuer

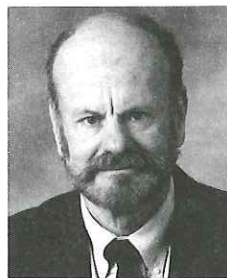
Scheuer's research on marine natural products began in 1960 with a paper on ciguatera toxin and marine toxins have remained a major interest, with contributions to the ciguatera, palytoxin, pahutoxin, and aplysiatoxin problems. Besides the toxins, Dr. Scheuer has studied marine pigments, sterols, anti-inflammatory agents, to name a few, working with compounds from a variety of sources--sponges, sea hares, tunicates, nudibranchs, acorn worms, gorgonians, molluscs, corals, etc. In addition to structural studies, he has provided leadership in the areas of biosynthesis, particularly as related to the origin of the isonitrile group, and marine ecology, dealing with the food chain. A hallmark of his work is his ability to recognize important problems and to stimulate others to join in their investigations.

As interest in marine natural products has grown over the past twenty years, so, too, has the influence of Dr. Scheuer in the field. In part this stems from the books he has written or edited--"Chemistry of Marine Natural Products" in 1973, which provided a comprehensive overview and was followed by five volumes titled "Marine Natural Products: Chemical and

Biological Perspectives," and most recently by the series "Bioorganic Marine Chemistry," which is currently at six volumes. In addition to influencing marine natural products studies through the books, Dr. Scheuer has trained a number of postdoctorates and graduate students in the field who have become leading marine scientists in their own right.

Dr. Scheuer has been the recipient of various other awards, including the 1994 Ernest Guenther Award in Essential Oils and Related Products, which is to be presented by the American Chemical Society at its annual meeting in San Diego in March, 1994.

James E. Robbers is Professor of Pharmacognosy at the School of Pharmacy and Pharmacal Sciences at Purdue University in West Lafayette, Indiana. Dr. Robbers was born in Everett, Washington, and received his Ph.D. from the University of Washington.



Dr. Robbers began his career in academia at the University of Houston as an Assistant Professor, then joined the faculty at Purdue University where he rose through the ranks to his current position.

Robbers' research interests include the Ergot alkaloids and related compounds. He has over 40 publications and has co-authored the textbook *Pharmacognosy* for the last three editions.

Robbers has been active in the American Society of Pharmacognosy for many years, serving as its President from 1979-1980, and having served on the executive committee from 1984-1993. He served as the Editor of the Society's journal, the *Journal of Natural Products*, from 1984 through 1993. The Society is grateful for Jim's many contributions.

Congratulations to Drs. Scheuer and Robbers.



# ASP AWARDS AND GRANTS PROGRAM

## Research Achievement Award

The American Society of Pharmacognosy selects a recipient for the ASP Research Award annually. Candidates must be members of the Society who have made significant contributions to natural products research. The award consists of an honorarium of \$2,500, and travel expenses to present the award lecture at an annual meeting of the Society.

Previous winners of the ASP Research Award are:

- 1985 - Koji Nakanishi
- 1988 - Heinz G. Floss
- 1989 - Kenneth L. Rinehart
- 1990 - Monroe E. Wall
- 1991 - S. William Pelletier
- 1992 - Henry Rapoport
- 1993 - A. Ian Scott

Nominations are due by May 1 to the Chairman of the Research Achievement Award Committee and should consist of a letter of recommendation, a curriculum vitae of the candidate, and letters from three individuals who are familiar with the candidate's accomplishments. Nomination documents should be submitted **in triplicate**. The current Chairman is S. William Pelletier, Institute for Natural Products Research, Chemistry Building, The University of Georgia, Athens, Georgia 30602-2556. Telephone: (706)542-5800; Fax: (706)542-5804.

## Student Awards and Grants

To stimulate interest in all phases of natural products research, the American Society of Pharmacognosy Foundation is offering the following awards and grants:

### 1. ASP Student Research Award.

The ASP Student Research Award is designed to recognize outstanding research in the general area of natural products. The competition is open to all graduate and undergraduate students working for a member of the ASP. Students should submit a research paper describing his/her own work in the area of natural products. The applications will be reviewed by the ASP Awards and Funds Committee in a blinded competition. The research paper should conform in general to the format of the Journal of Natural Products, except that there should be no identification of the student, faculty, or school from which the paper originated. The name and address of the contestant and his/her paper title should be provided in a separate letter accompanying the paper. Please include a self-addressed stamped postcard (no smaller than 3.25 by 5.5 inches) with the title of the proposal and name of the applicant. This postcard will serve as notification of receipt of the application. The award will consist of a \$500 cash gift and all expenses paid to present the paper at the annual meeting of the ASP (re-

stricted to meetings held in the continental U.S.).

The deadline for submission of the research paper is March 1.

### 2. Undergraduate Research Awards.

The ASP Undergraduate Research Awards consist of a stipend of \$2000 to the student and \$500 to the advisor to help defray the costs of the research. There are no limitations on the type of research to be conducted other than that it should be in the area of natural products. Persons interested in submitting an application for consideration should send the following before March 1.

a. An outline of the research to be conducted, written by the student submitting the application. This should include a statement of the problem and the goal(s) of the research, and a brief discussion of the methodology. This outline, with pertinent references, should not be longer than four double-spaced, typed pages.

b. A transcript of all college work attempted.

c. A letter of agreement by the faculty advisor (a member of the American Society of Pharmacognosy) for the project, indicating a willingness to supervise the project, and provide the facilities and equipment for the conduct of the project. The letter should also include a statement about the student's academic performance and suitability to perform the work proposed.

d. A self-addressed stamped postcard (no smaller than 3.25 by 5.5 inches) with the title of the proposal and name of the applicant. This postcard will serve as notification of receipt of the application.

Although not an absolute condition of the awards, students selected are highly encouraged to submit results of their research for presentation at an annual meeting of the ASP.

### 3. Lloyd Library and Museum Travel Grants.

This grant program was established in cooperation with the Lloyd Library and Museum. In keeping with the Lloyd Library's interest in promoting student activities, two \$500 travel awards to attend the national ASP meeting will be awarded. These awards will be made based on excellence in both scholastic and research activities in the field of natural products. Application can be made by submission of a short (2-3 pages) synopsis of the work to be presented and a letter of recommendation from the advisor. Applications are due April 1.

### 4. Travel Grants for Graduate Students.

Graduate students under the supervision of a Society member are eligible for a travel grant of \$300 to \$500 to en-

able them to attend a Society meeting and present a paper. Application can be made by submission of a short (2-3 pages) synopsis of the work to be presented and a letter of justification from the advisor. All awards are contingent on the acceptance of the paper for presentation by the Scientific Program Committee. Applications are due April 1.

## Awards and Grants for Active Members

### 1. Research Starter Grants.

ASP small research grants from \$2000 to \$5000 are available for active members in the first five years of their career. These are one-time awards and are not subject to indirect costs. Application can be made by submission of a research proposal of no more than four double-spaced, typed pages. A budget should accompany the proposal and the investigator should also provide a statement of his current funding. A curriculum vitae of the investigator should be included with the proposal and budget. The deadline for submission of application for these grants is March 1. Please include a self-addressed stamped postcard (no smaller than 3.25 by 5.5 inches) with the title of the proposal and the name of the applicant. This postcard will serve as notification of receipt of the application.

### 2. Travel Grants for Active Members.

Travel grants are available to enable active members who are in the first five years of their career to travel to an American Society of Pharmacognosy meeting and present the results of their research. These awards of \$300 to \$500 are made on a competitive basis. Application can be made by submission of a short (2-3 pages) synopsis of the work to be presented, a curriculum vitae and a letter of justification for the request. All awards are contingent on the acceptance of the paper for presentation by the Scientific Program Committee. The deadline for submission of applications is April 1. Please include a self-addressed stamped postcard (no smaller than 3.25 by 5.5 inches) with the title of the proposal and name of the applicant. This postcard will serve as notification of receipt of the application.

Applications for the student and member grants and awards can be sent to:

John Cardellina, II, Ph.D.  
Chairman, Awards Committee  
American Society of Pharmacognosy  
NCI, Frederick Cancer Research and  
Development Center  
Building 1052, Room 15  
Frederick, MD 21702-1291 U.S.A.  
Phone: (301)846-5431



## RECENT AWARDS

On January 20, 1994, **Professor Koji Nakanishi** received the **1994 Carol and Harry Mosher Award** presented by the Santa Clara Valley Section of ACS. Presentation of the award occurred at a banquet at the Stanford Research Institute.

In February of this year, **Professor Takeshi Yasumoto** of Tohoku University received the second **Paul J. Scheuer Award in Marine Natural Products Chemistry**. Presentation of the award took place at the Marine Natural Products Gordon Research Conference in Ventura, California.

### Did you see the article above?

We really like to publish news about your activities. Why don't you take a minute to let us know what you're doing so we can share the news.

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

News item: \_\_\_\_\_

Return to the editor (address on page 6) or send your news via Internet to: [BARHG@VM.TEMPLE.EDU](mailto:BARHG@VM.TEMPLE.EDU)

## EMPLOYMENT SERVICE AVAILABLE

The American Society of Pharmacognosy is offering a placement service to aid our members in seeking positions or employees. This service is available only to ASP members and is free to both the applicant and the prospective employer. Once an application is submitted, it will remain on file for one (1) year, at which time it will be destroyed. The applicant should realize that this is not a resume service and that the application will be submitted to the prospective employer exactly as submitted (i.e. the submitted form will be photocopied, then sent to the prospective employer). All information submitted will be held in the strictest confidentiality.

Forms and further information may be obtained from: Joseph M. Betz, Ph.D., Division of Natural Products, Food and Drug Administration (HFS-347), 200 'C' Street, S.W., Washington, DC 20204-0002 U.S.A. Fax: (202)205-4422, Phone: (202)205-2060, Bitnet: [JMB@FDACFSAN](mailto:JMB@FDACFSAN).

## REPORT OF THE TELLERS COMMITTEE 1993 ASP ELECTION

The Tellers Committee (Pankaj B. Desai, Diane S. Swaffar, and Robert D. Kee, Chairman), appointed by President John M. Cassidy, wishes to report the following results of the 1993 election:

Vice President (1994-1995)

**Kenneth L. Rinehart, Jr.**  
University of Illinois

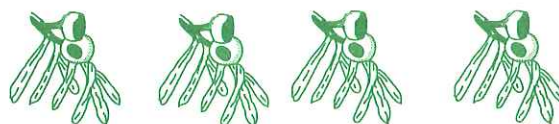
Executive Committee Member (1994-1997)

**John H. Cardellina, II**  
NCI, Frederick Cancer Research and  
Development Center

Secretary (1994-1997)

**William J. Keller**  
Northeast Louisiana University

A total of 850 ballots (480 USA and 370 non-USA) were mailed in November, 1993. Of this total, 244 ballots (178 USA and 66 non-USA) were returned and counted. Therefore, 29% of the qualified voting members of the ASP participated in this election.



### CALL FOR NOMINATIONS FOR HONORARY MEMBERSHIP

Nominations for Honorary Membership in the American Society of Pharmacognosy are now being accepted by the Honorary Membership Committee. If you would like to nominate a member for this distinguished honor, please forward your nomination as well as supporting biographical data to: Varro E. Tyler, Ph.D., Sc.D., Lilly Distinguished Professor of Pharmacognosy, Department of Medicinal Chemistry and Pharmacognosy, Purdue University, 1333 Robert E. Heine Pharmacy Building, West Lafayette, IN 47907-1333. Phone: (317) 494-7424. Fax: (317) 496-1139.



# 1994 INTERNATIONAL CONGRESS ON NATURAL PRODUCTS RESEARCH (35TH ASP ANNUAL MEETING) HALIFAX, N.S., CANADA

You are invited to Halifax, Nova Scotia, Canada, July 31 through August 4, 1994 to attend the 1994 International Congress on Natural Products Research. You are encouraged to come early and stay late to enjoy the beauty and history of the City of Halifax and the Province of Nova Scotia.

This is a joint meeting of the American Society of Pharmacognosy, the Association Francaise pour l'Enseignement et la Recherche en Pharmacognosie, the Gesellschaft fur Arzneipflanzenforschung, and the Phytochemical Society of Europe. It will be held in the spacious and modern World Trade and Conference Centre (WTCC) in downtown Halifax.

Attendance and participation are open to all interested individuals. ASP travel grants are available on a competitive basis for young Active Members and graduate students.

The Congress will start on Sunday, July 31, with registration from 14:00 to 20:00 hours. There will be the usual mixer/reception from 19:00 to 22:00 hours. The ASP Executive Committee will meet from 09:00 to 17:00 hours.

Other social events include a lobster fest on Tuesday evening and free time on Wednesday afternoon for art galleries, museums, shopping or island exploration.

## FOR HALIFAX INFORMATION:

Dr. Frank Chandler (Local and Scientific Program), College of Pharmacy, Dalhousie University, Halifax, N.S., Canada, B3H 3J5; (902-494-2097; Fax 902-494-1396).

Dr. Jeffrey Wright (Scientific Program), Institute for Marine Biosciences, Atlantic Regional Laboratories, National Research Council of Canada, 1411 Oxford Street, Halifax, N.S., Canada, B3H 3Z1 (902 426-8275; Fax 902-426-9413).

## TRAVEL INFORMATION

The Conference airline is Canadian Airlines. It offers daily flights from Boston, London, Paris, Manchester, Milan, Frankfurt, Munich, and all major Canadian cities. The Halifax International Airport is a thirty minute drive to downtown Halifax where the World Trade and Conference Centre (WTCC) is located. Transportation from the airport includes airport bus at \$11 per person, taxi at \$35 per car, limousine at \$37 per car and car rental.

The Conference hotels are all within a seven minute walk to the WTCC, have babysitting services, restaurants and fitness centres. Blocks of rooms have been reserved in each of the five hotels. In the Historic Properties area they are the Sheraton and the Delta Barrington, the Prince

George which is directly connected to the WTCC, the Citadel Inn and Cambridge Suites. Residence rooms will also be available at Dalhousie University. Room rates for single or double occupancy are expected to range from \$90 to \$145 Canadian. All have easy access to shops, restaurants, pubs, and attractions. More details will accompany the November announcement.

The weather is usually quite pleasant at this time of year with day highs of low to mid 20s and nights in the low teens.

Pre- and post-congress trips, including a walking tour of Victorian Halifax, a "Ghost Walk" among others are being arranged.

## Symposium I -- Toxins in Nature

**Thomas E. Cleveland**, U.S. Department of Agriculture

*Alfatoxins: Their biosynthesis, molecular recognition and possible role in Nature*

**Ronald D. Plattner**, U.S. Department of Agriculture

*The chemistry, biological Activity and significance of fumonisins and other mycotoxins produced by the fungus *Fusarium moniliforme*.*

**Jeffrey L.C. Wright**, C.M., Institute for Marine Biosciences, National Research Council of Canada

*Studies on marine Toxins; How they are made and why*

## Symposium II -- Natural Toxins as Research Tools

**Daniel G. Baden**, Director, National Institute of Environmental Health, Marine and Freshwater Biomedical Sciences Center

*The value-added role of toxin derivatives in medicine, mariculture and public health*

**John Daley**, National Institute of Diabetes

*Biologically active alkaloids from poison frogs*

**Fred Evans**, University of London

*Phorbol esters and their interactions with isotopes of protein kinase-C (Topic - title to follow)*

## Symposium III -- Natural Products as Potential or Current Drugs

**Gerhard Franz**, Institut für Pharmazeutische Biologie der Universität Regensburg

*Natural products with antineoplastic and immunomodulating activity (Topic - title to follow)*

**J.F. Verbist**, Faculty of Pharmacy, Nantes, FRANCE

*Cytotoxic substances of marine origin (Topic - title to follow)*

**James B. McAlpine**, Abbott Laboratories

*The emerging role of small cyclic peptides in cellular biology*

**David Phillipson**, University of London

*Antiprotozoal drugs from plants (Topic - title to follow)*

## Symposium IV -- Natural Products as Accidental or Intentional Poisons

**Peter de Smet**, Royal Dutch Association for the Advancement of Pharmacy

*Hazards of Natural products (Topic - title to follow)*

**Takeshi Yasumoto**, Tohoku University

*Polyether toxins*

**Anthony Tu**, Colorado State University

*Overview of snake venom chemistry*

Other lectures will be presented by the winners of the Phytochemical Society Medal, the Egon Stahl Award, the Rhone-Poulenc Rorer Award and the ASP Research Achievement Award. There will also be a young investigators symposium, with participants to be announced at a later time.



## FUTURE MEETINGS

### Future ASP Meetings

1994 - July 31- August 4, Halifax, Nova Scotia - International Research Congress on Natural Products: A joint meeting with the Gesellschaft für Arzneipflanzenforschung, the Association Française pour l'Enseignement et la Recherche en Pharmacognosie, and the Phytochemical Society of Europe.

1994 - October 20-22, Interim Meeting, San Jose, Costa Rica. See details on this page.

1995 - Univ. of Mississippi.

1996 - Santa Cruz, California.

### 1994 AACP Meeting

July 16-20, AACP Annual Meeting, Albuquerque, New Mexico. Details: AACP, Telephone: (703)739-2330.

### 1994 AAPS Meeting

November 6-10, 9th Annual Meeting, San Diego, California. For details contact: AAPS, Telephone: (703)548-3000; Fax: (703)684-7349.

### Other Meetings of Interest--1994

May 24-25, **Designer Foods, III - Phytochemicals in Garlic, Soy, and Licorice: Research Update and Implications**, Washington, D.C., For Details contact: Keith Wilson, Rutgers University. Telephone: (908)932-9271; Fax: (908)932-1187.

June 5-7, **VIth International Symposium on Luminescence Spectrometry in Biomedical Analysis - Detection Techniques and Applications in Chromatography and Capillary Electrophoresis**, Brugge - Bruges (BELGIUM). For details contact: Professor Dr. Willy R.G. BAERY-ENS, Symposium Chairman, University of Ghent, Pharmaceutical Institute, Department of Pharmaceutical Analysis, Laboratory of Drug Quality Control, Harelbekestraat 72, B-9000 Ghent (BELGIUM). Telephone: 32-9-221.89.51; Fax: 32-9-221.41.75.

September 5-7, **25th International Symposium on Essential Oils**, Grasse, France. Contact: Association des Ingénieurs et Techniques de la Parfumerie (A.I.T.P.), 48, avenue Riou-Blanquet, 06130 GRASSE, France, Fax: (33)93-36-54-26.

September 12-15, **108th AOAC International Annual Meeting and Exposition**, Portland, Oregon, U.S.A. Symposium on Analytical Methods for Herbal Products will be held on September 13, 1994. For more information please contact: AOAC Meetings Department, c/o AOAC International-EN, 2200 Wilson Blvd., Suite 400, Arlington, VA 22201-9077 U.S.A. Telephone: (703)522-3032; Fax: (703)522-5468.

November 15-17, **VIIIth International Symposium on Toxic Microorganisms: Molecular Approaches to Food Safety Issues Involving Toxic Microorganisms**, Peoria, Illinois, U.S.A. For Details Contact: Dr. Mary Ann Dombink-Kurtzman, National Center for Agricultural Utilization Research, 1815 N. University Street, Peoria, Illinois 61604 U.S.A. Telephone: (309)681-6254; Fax: (309)681-6686.

## COSTA RICA MEETING SET

The American Society of Pharmacognosy is pleased to announce its 1994 Interim Annual Meeting, to be held October 20-22 in San Jose, Costa Rica. The meeting will include both contributed scientific presentations and an international symposium entitled "Intellectual Property Rights, Naturally-Derived Bioactive Compounds and Resource Conservation." The goal of the symposium is to provide an open forum where both developed and developing nations can discuss their interests, concerns and policies on critical issues surrounding the question of how bioactive compounds from living creatures in tropical habitats can be developed in a practical, equitable and sustainable manner. Representatives of more than a dozen developing countries from around the globe will be invited to present updates on the regulations concerning intellectual property rights and collection of biological materials in their countries. Governmental, academic and industrial representatives from developed countries will also share their views.

The Meeting will be held at the Hotel Herradura, located in the scenic Central Plateau of Costa Rica, only a few minutes from Santamaria International Airport. The Hotel has full, air-conditioned facilities for international meetings, including simultaneous translation. The Hotel itself is a first-class venue which includes a casino, swimming pool, sauna, golf and tennis as well as three restaurants.

Costa Rica's population of three million lives in a highly diverse 20,000-square-mile area. This small country is a leader in biodiversity conservation, with 45 legally protected preserves, eleven forest reserves and twelve national parks: the protected area constitutes nearly 27% of the country's land area. Conference participants will be offered tours during and after the meeting to a variety of natural areas and locales of interest to those involved in natural products. In addition, tours of the facilities for natural products research at the Instituto Nacional de Biodiversidad (IN-Bio) and the University of Costa Rica's Centro Internacional de Productos Naturales (CIPRONA) will be available.

Costa Rica is a country with a strong democratic tradition and a high reputation in regional diplomacy in Latin America. It is rapidly becoming a center of commerce and of eco-tourism, although its agricultural base continues to be the foundation of its economy. San Jose boasts a mild, tropical-type climate: October is during the rainy season, so umbrellas and raincoats will be needed. The Caribbean coast, however, is dry during October, and can be reached in a few hours for eco-tours and recreation after the meeting. In San Jose itself, there are many opportunities to enjoy cultural events, restaurants, night life and shopping. English is widely spoken in the city and throughout the country.

Beginning on October 24, two days after the end of this meeting, is the "Down to Earth" conference of the International Society for Ecological Economics, also being held at the Hotel Herradura. This conference, which will provide an opportunity for discussions among those interested in the economics of such sustainable activities as natural resources management and eco-tourism, may be of interest to those attending the Interim Meeting.

The Meeting Pre-Registration fee is \$100 US, and must be submitted by July 1; late registrations will be charged at \$150 US. Abstracts of contributed papers must be submitted to Dr. Gerardo Mora, Chair of the Scientific Committee, by September 1, 1994. For further information and registration packets, please contact:

Dr. Mora  
CIPRONA  
School of Chemistry  
University of Costa Rica  
San Jose, Costa Rica.





Dr. E. John Staba  
College of Pharmacy  
University of Minnesota  
Minneapolis MN 55455

David J. Slatkin, Ph.D., Treasurer  
The American Society of Pharmacognosy  
P.O. Box 9558  
Downers Grove, Illinois 60515

## MEMBERSHIP

Membership in the American Society of Pharmacognosy is recognized in several categories:

### Full Membership

Full membership is open to any scientist interested in the study of natural products. Dues are \$75.00 per year. If overseas airmail is requested, the dues are \$150.00. These members receive the *Journal of Natural Products* and the *ASP Newsletter*.

### Associate Membership

Associate membership is open to students of pharmacognosy and allied fields. These members are not accorded voting privileges, and dues are \$50.00 per year. These members receive the *ASP Newsletter*.

### Emeritus Membership

Emeritus membership is open to retired members of the Society who maintained membership in the Society for at least five years. Dues are \$5.00 per year. These members receive the *ASP Newsletter*.

### Honorary Membership

Honorary members are selected by the Executive Committee of the American Society of Pharmacognosy on the basis of meritorious service to pharmacognosy.

Present Honorary Members are:

Dr. Jack L. Beal, Columbus, Ohio  
Dr. Arnold Brossi, National Institute of Health, MD  
Dr. David P. Carew, University of Iowa  
Dr. Norman R. Farnsworth, University of Illinois  
Dr. R. Hegnauer, Leiden, Netherlands  
Dr. Albert Hofmann, Switzerland  
Dr. Richard E. Schultes, Harvard Botanical Museum  
Dr. Arthur E. Schwarting, Florida  
Dr. Gordon H. Svoboda, Indianapolis, Indiana  
Dr. Varro E. Tyler, Purdue University  
Dr. Hildebert Wagner, University of Munich  
Dr. Monroe E. Wall, Research Triangle Institute, NC  
Dr. Heber W. Youngken, Jr., University of Rhode Island

Additional information about memberships may be obtained by writing to the Treasurer of the Society:

David J. Slatkin, Ph.D., Treasurer  
The Am. Society of Pharmacognosy  
Chicago College of Pharmacy  
555 31st Street  
Downers Grove, IL 60515

### ASP Newsletter

Joy B. Reighard, Ph.D., Editor

Barbara H. Grissani, Editorial Assistant

Deadlines for submission of information are as follows:

Spring Issue - March 1st  
Summer Issue - June 1st  
Fall Issue - September 1st  
Winter Issue - December 1st

Send information to:

Joy B. Reighard, Ph.D., Editor  
*ASP Newsletter*  
Temple University School of Pharmacy  
3307 N. Broad St.  
Philadelphia, PA 19140  
Phone: (215)221-4946  
FAX: (215)221-3678

