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The SAS Spectrum

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The Newsletter of the Society for Applied Spectroscopy, a supplement to *Applied Spectroscopy*, Vol 50, No 11

From the President



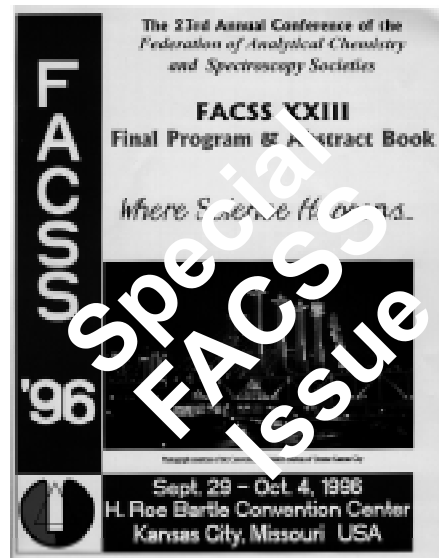
At the risk of being accused of being too philosophical, let me pose the question "Why should anyone be an SAS member?". Then, at the risk of being accused of being too opinionated, let me tell you why I

think any practicing analytical spectroscopist needs to be an SAS member.....

SAS was "formed for the purpose of advancing and disseminating the knowledge and information concerning the art and science of spectroscopy and other allied sciences, the advancing of the professional standing and growth of the Society and its members, coordinating cooperative endeavors of its individual members and sections and promoting and maintaining a close bond among its members". I believe that the analytical spectroscopic community is very strong and that SAS has played, and will continue to play, a prominent role in strengthening the profession. Many of the most well-respected senior spectroscopists affiliated with SAS early in their careers and were active in SAS-related activities. During their careers, scientists such as Jim Winefordner, Bruce Chase, Bill Fateley, Roy Koirtyohann, Arnold Beckman, Tomas Hirschfeld, Gerhard Herzberg, William Poehlman, John Dean and Jeanette Grasselli were involved with SAS and many even assumed leadership roles within the society. There are many more names you would recognize and SAS is proud

to have ALL practicing spectroscopists as members, because that is how the organization as a whole, can contribute to the art and science of spectroscopy. Significant contributions come from both basic and applied research and SAS is particularly pleased to be associated with researchers who are responsible for training the spectroscopists of the future. Every single member makes a difference to SAS!

How does an SAS membership help the individual? Affiliation with SAS provides members with many opportunities. All SAS members receive *Applied Spectroscopy* each month and this premier journal carries reports on state-of-the-art research. SAS members also have the opportunity to receive discounts on other high quality spectroscopic journals as well as discounts to important conferences such as FACSS. SAS members have the opportunity to network through local section meetings, special functions at FACSS, and the membership directory. SAS provides an excellent selection of speakers for the annual Tour Speaker Program which



local sections can participate in each Spring. SAS student members receive significant discounts and have the opportunity for scholarships for educational programs and recognition through student awards. In addition, SAS prepares a graduate student resume booklet to facilitate networking for student job seekers and employers. SAS has a web site which provides important information about the Society and which has links to other important spectroscopy-related sites. Finally, SAS has established ties with many companies who are so important in spectroscopy, and those companies provide support to the Society for important initiatives by serving as corporate sponsors.

With the realization that member benefits are of paramount importance to the membership of SAS, the Executive Committee is constantly evaluating potential new services and benefits with the assistance of our Executive Administrator, Bonnie Saylor and other SAS staff and committees. Several things have been evaluated on a trial basis: holding an SAS-sponsored poster session at FACSS 96; introduction of half-day mini-courses; special student promotions and recognition; putting abstracts and titles on-line; adding new columns in the journal; and providing a new format for the newsletter. Based on members requests, SAS is also evaluating the feasibility of establishing a program to assist members with employment searches. Another idea presented to the Executive Committee was the establishment of an exchange program with European Colleagues to assist in the identification of laboratories who might be willing to host a visiting scientist, graduate student, or post doctoral research associate. Maybe you have an idea about a member benefit you'd like SAS to provide. Please send it to the SAS office (SASOffice@aol.com; 301-694-6860 fax) or to me (Miller-Ihli@bhnrc.usda.gov; 301-504-8314 fax) and we'll be sure to discuss it at our upcoming strategic planning session early in 1997.

Remember....your membership is impor-

Announcement

from the Society for Applied Spectroscopy

Jim Holcombe recently communicated his intent to step down as journal editor after four years of service. The Executive Committee of the Society for Applied Spectroscopy is now seeking qualified applicants for the position of Editor-in-Chief of *Applied Spectroscopy*. The new editor will start in July, 1997 and will be responsible for the journal starting with the January, 1998 issue. In addition to being a scientist in any field of spectroscopy, the individual must be a member in good standing in the Society and must have served at least two years in one of the following capacities or one year each in two of the following capacities: delegate to the Governing Board; local section officer; and/or chair of a Society committee.

The position is a 3-year term and the Editor-in-Chief is responsible for the regular monthly publication of *Applied Spectroscopy* and serves as a non-voting member of the Society Executive Committee.

If you would like to submit a name for consideration, please send it with supporting documentation to: Dr. Vahid Majidi, Chair of the SAS Publications Committee; USDA, BHNRC, FCL; Bldg. 161 BARC-East; Beltsville, MD 20705 (301)-504-8314 fax. The deadline for receipt of applications or nominations is December 15, 1996.

tant to SAS and we want to make sure your SAS membership is important to you!

Society Home Office News



There are many irons in the fire at the Society Office. We recently returned from the 1996 Federation of Analytical Chemistry and Spectroscopy Societies

(FACSS) meeting in Kansas City, Missouri. As many of you know, SAS has been serving as the National Office for FACSS for several years, and we were pleased to see that all our planning for the meeting paid off. Not only was the meeting a success for FACSS, but SAS was pleased to recruit 63 new members for the Society at our booth. This is a recruitment record for the Society at this meeting, and everyone is hoping the trend will continue.

We are in the process of tying up the loose ends for FACSS since SAS will no longer be serving as the FACSS National Office. The split was an amicable one and the time that was spent on FACSS will now be spent beefing up our membership recruitment and member benefits programs.

The Society will be exhibiting at the Eastern Analytical Symposium in New Jersey in November. We are hoping for another record member sign-up there. Feel free to stop by and see us if you are at the meeting. We'll be at booth #110.

Membership renewal notices are being prepared and will be in the mail this month. Please be sure to return your renewal as soon as possible to ensure you don't miss any issues of *Applied Spectroscopy* in 1997. Members are the heart of the Society, so if you have a colleague who hasn't joined yet, be sure to point out all the great reasons to be an SAS member.

As always, if you have any questions about your membership, the Society Office is here to help. Give us a call at (301) 694-8122 or send us an e-mail at sasoffice@aol.com.

Chicago

SAS Section Plans Active Program



The SAS Chicago Section is one of the most active local sections in the Society. The 1996-1997 program features:

Sept 17 - Skip Palenik (Microtrace):

Microscopic Traces - The Overlooked Clues

Oct 8 - Sandy Asher (Univ of Pittsburgh):

Resonance Raman Spectroscopy of Diamonds and Meteorites

Nov 12 - Jon Carnahan (NIU):

AOTF Spectroscopy

Dec 10 - U.S. Secret Service Agent

Counterfeiting Currency

Jan 14, 1997 - Student Night

Feb 11, 1997 - Symposium 1:00 - 9:00 p.m.

Spectroscopic Characterization of Polymers
Keynote address by Jack Koenig (Case Western University)

March 11, 1997 - Joint Meeting with MCM and CCDG

April 8, 1997 - Tour Speaker

May 13, 1997 - Gary Martin (Upjohn and Pharmacia): *NMR*

For more information on the program, contact the Chicago Section Chairperson, Rina Dukor (630-271-7193). Meetings are usually held at either Sharko's or Wellington restaurants. For

reservations, call the SAS Voice Mail at 708-603-5579. *And I'm sure that well-done beef is on the menu.*



Awards at the SAS Banquet at the 1996 FACSS Meeting



Awards presented at the Wednesday evening Wine & Cheese Reception. See details of the awards on page 5.

Jeffery Kinzer, Ohio State University, receives the SAS Graduate Student Award



Steve Hobbs, a research scientist at Nellcor Puritan Bennett, receives the SAS Meggars Award (co-recipient with Gary Hieftje who was not present).

Rina Dukor accepts the SAS Poehlman Award on behalf of the Chicago Section of SAS.



Richard Keller, Los Alamos National Laboratory, receives the SAS Lester W. Strock Award.



S. Roy Koirtyohann receives the SAS Honorary Membership Award, and also his just desserts from former students. Roy was honored for his pioneering work in atomic spectroscopy.

Harry Rose receives the SAS Honorary Membership Award, and also *his* just desserts from SAS prez Nancy Miller-Ihli. Harry was honored for his pioneering work in X-ray spectroscopy



Abraham Savitzky receives the SAS Honorary Membership Award for his lifelong work in developing spectroscopic instrumentation, particularly in gas chromatography, infrared spectroscopy, and computer systems.



The recipient of the **SAS Graduate Student**



Award was **Jeffery A. Kinzer**, a Ph.D. candidate from the research group of Drs. Susan and John Olesik at Ohio State University. Jeffery's current research interests include understanding the fundamental processes of vaporization, atomization, ionization and excitation in ICPs using laser fluorescence images of individual atom/ion clouds from a single laser pulse.

S. Roy Koirtzohann received the **Honorary**

Membership Award of SAS. Roy was recognized for his fundamental work in the atom formation processes in flames, furnaces, and plasmas and his development of continuum source background correction for atomic absorption spectrometry. Roy has been a consistent example of an individual participating in all aspects of science education and the development of the profession. After his career at Oak Ridge National Laboratory and the University of Missouri, Roy retired in 1995 and is now a gentleman farmer and collector of old tractors and other agricultural tools.



Harry Rose received the **Honorary Membership Award** of SAS. Harry was recognized for his innovative work in major and minor elemental analysis of geological materials and his research and instrumentation development for the analysis of micro and macro geological samples. His work in the design of X-Ray equipment and development of analytical methods



has helped to further the field of spectroscopy. Harry worked for many years at the U.S. Geological Survey and held a visiting professorship at the University of Maryland. His students included two members of the current SAS executive committee (Nancy Miller-Ihli and Mike Epstein). After retiring from U.S.G.S., Harry formed his own company, Products International, which later merged with Diano Corporation. While currently retired, Harry still consults for Diano.

Abraham Savitzky received the **Honorary Membership Award** of SAS. Abe was recognized for



his innovative work in infrared process control, infrared dispersive systems, and long path cell infrared detection systems. His inventive use of computers for infrared applications and his development of important application programs helped propel the field into the future. He spent most of his career at Perkin-Elmer, and from 1975 until his retirement in 1985, he held the position of Principal Scientist, responsible for the development of infrared application programs. He is currently President of Silvermine Resources, Inc., providing consulting services in microprocessor based computing systems, primarily for analytical instrumentation.

Richard A. Keller received the **SAS Lester W. Strock Award** for his important

and ground breaking contributions to single-molecule detection and its application to sensitive DNA sequencing. Dick is currently a Laboratory Fellow in the Chemical Science and Technology Division at Los Alamos National Laboratory and was formerly on the faculty of the University of Oregon and a research scientist at the National Bureau of Standards.



Gary M. Hieftje and **Steve Hobbs** received the **SAS Megger's Award** for their paper

"Scintillator-Based Nanosecond Light Sources for Time-Resolved Fluorimetry" which appeared in *Applied Spectroscopy*, Volume 49, Number 1, pages 15-19, (1995). Gary is a Distinguished Professor of Chemistry at Indiana University. Steve is presently a



research scientist at Nellcor Puritan Bennett in Pleasanton, California, developing monitoring, diagnostic and therapeutic instruments for respiratory impaired patients.



On Wednesday afternoon of the FACSS meeting, the Society for Applied Spectroscopy presented four poster sessions celebrating 50 years of publishing excellence in the Applied Spectroscopy journal. The sessions were Atomic Spectroscopy; Atomic Emission and Mass Spectrometry; NIR, Raman, NMR, and Materials; and Chromatography, Microspectroscopy, IR and Raman. Students were invited to participate in the sessions and the best student papers in the sessions were presented with awards. Shown above are several of the student awardees: **Oleg V. Borisov**, Wayne State University, for *"Zero-Bias" Source as a Solid Sampling Device for the ICP-MS in Analysis of Automotive Catalytic Converters*; **Durmus Ozdemir**, Clemson University, for *The Application of Genetic Regression (GR) for Calibration Transfer in Near-IR Spectroscopy*; **Brian W. Pack**, Indiana University, for *Use of an Air/Argon Microwave Plasma Torch for the Monitoring of Environmental Containments*; **H. Trey Skinner**, University of South Carolina, for *Fluorescence and Raman Micro-Imaging Using a Coherent Optical Fiber Probe: Microscopy Without the Microscope*; and **Kurt E. Oldenburg**, University of Illinois at Urbana-Champaign, for *Fluorescence Detection of Peptides and Amino Acids in Capillary Electrophoresis*.

Former Applied Spectroscopy Editors honored at Awards Ceremony



Frederick C. Strong III



William Fateley

Special awards were presented to several former editors of the Applied Spectroscopy journal at the Tuesday night Awards Ceremony. Awards were presented to Frederick C. Strong III, William



James Holcombe

Fateley, and James Holcombe. Those editors who were unable to attend (Leopold May, James E. Patterson, and John R. Ferraro) will also be presented with awards.

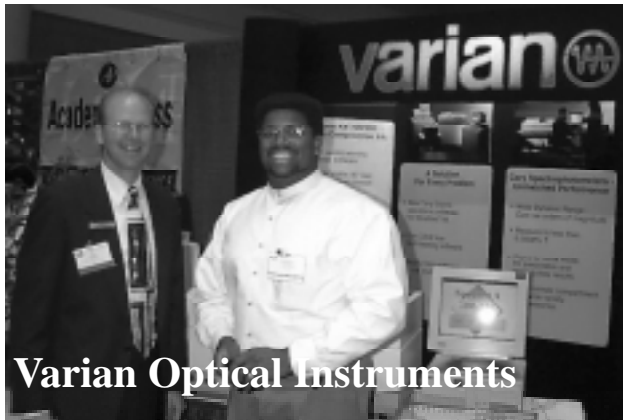
Photos from FACSS

Top to bottom, left to right: Harry Rose and Ivan Glaze; Prez Nancy Miller-Ihli and urban cowboy; David Coleman and Barbara Stull; Ted and Mavis Rains; Marvin Margoshes, Bonnie Saylor and Victor Hutcherson; Al and Deena Bober; Truman (Bud) and Wanda Waugh.



Photos from FACSS

Sustaining Corporate Sponsors of SAS at the FACSS Exhibit



Varian Optical Instruments



BIO-RAD Digilab Division



Perkin-Elmer



Nicolet



Analect Instruments

Photos from FACSS

Science Teacher's Workshop

On Wednesday of the FACSS meeting, **Dr. Michael J. DeKrey** and **Dr. Arnold R. Taylor** of the DuPont Corporate Center for Analytical Sciences, Ponca City Oklahoma Laboratories presented a workshop for science teachers. The focus of the workshop was on: (a) fun, easy, and effect science fair projects; (b) fun, easy and effective classroom demonstrations; and (c) resources, resources, resources ... where to get materials cheap, how to find materials on the Internet, how to tap into local professional and civic organizations, etc.

The workshop coordinators led a lively and informative session that covered a wide range of topics. I returned from the workshop with a folder full of resources and a head full of ideas that I could use both on my kids at home (5 and 9) and for my college undergraduate teaching assignments.

Hands-on experiments included demonstrating the principles of an electric motor with a cup, wire, magnets, and a pin, and then dissecting an electric motor; making a simple conductivity/electrolysis device and testing it out on different solutions; identifying a mystery powder using physical and chemical characteristics; and demonstrating the changes in pH indicator color using a microwell plate. Handouts were provided for a number of other useful experiments.

I've already tried out the electric motor experiment on my kids and it really worked well. And I'll be using the microwell plate on an overhead projector in class next spring to demonstrate indicator color changes.

The authors present this course a number of times each year. They can be contacted at (405) 767-2761 (MJD) or (405) 767-5563 (ART).



Science education using inexpensive and simple components.



Mike DeKrey demonstrates the construction of an electric motor.



Arnold Taylor demonstrates the proper design of a Science Fair project.

Governing Board Meeting, October 1, 1996

Kansas City, Missouri

I. CALL TO ORDER

A regular meeting of the Governing Board of the Society for Applied Spectroscopy was called to order by President Nancy Miller-Ihli at 8:12 PM on Tuesday, October 1, 1996 at the Marriott Hotel in Kansas City, Missouri.

II. ROLL CALL

A roll call indicated that delegates from 21 of 32 active local sections were present and therefore that a quorum was present.

The Local Section Delegates present were:

Section	Delegate(s)
Baltimore-Washington	Ray Vanhoven Bob Koons
Chicago	Jim Julian Fred Delles
Cincinnati	Joe Caruso
Cleveland	none
Delaware Valley	Sydney Fleming
Detroit	Patsy Coleman
Houston	none
Indiana	Radislav Potyrailo
Intermountain	Paul Farnsworth
Kansas City	Truman Waugh Cynthia Larive
Milwaukee	David Wynn
New England	Judith Koob
New York	none
Niagara Frontier	none
Northern California	none
Ohio Valley	none
Pacific Northwest	none
Penn-York	none
Pittsburgh	none
Rocky Mountain	Rick Packard
St. Louis	Dave McCurdy
S. California	Jerold Kacsir Warren Vidrine
Rio Grande	Francisca Franke
Minnesota	Allen Bohlke

Arizona
Piedmont

Louisiana
Mid Michigan
Nevada
Toledo
Reading
Snake River

Scott Saavedra
Jim De Haseth
Paul Bourassa
none
Mary Beth Seasholtz
Delyle Eastwood
none
Mary Barhinet
Peter Griffiths

III. INTRODUCTIONS

Nancy Miller-Ihli introduced the Executive Committee members and Society staff. The members of the Executive Committee present were:

Nancy Miller-Ihli, President
Kathy Kalasinsky, President Elect
David Coleman, Past President
John Koropchak, Secretary
Marvin Margoshes, Treasurer
Michael Epstein, Newsletter Editor
Rina Dukor, Parliamentarian
Bonnie Saylor, Executive Administrator
James Holcombe, Journal Editor
Jim de Haseth, Membership Education
Coordinator
Dave Styris, Membership Education
Coordinator-Elect

IV. MEETING RULES OF ORDER

The President stated that Roberts Rules of Order shall be the rules of order for the meeting.

V. APPROVAL OF THE MINUTES FOR THE PREVIOUS GOVERNING BOARD MEETING, MARCH 5, 1996

John Koropchak stated that the minutes of the last Governing Board meeting, as published in the August Newsletter 23 (2), 1996, indicated that a quorum was not achieved. Subsequent to the publication of the minutes, it was deter-

mined that delegates from a majority of the active local sections were indeed present, and therefore a quorum was achieved and the meeting should be considered official. He added that one particularly pertinent issue that this correction influences is the dues increase voted on at that time, which according to the Bylaws requires a two thirds majority vote of those present for passage. Since that vote was unanimous, that decision would also become official.

After discussion regarding rules of order related to quorum issues, a motion to declare that the meeting was official was seconded and approved unanimously.

A second motion to accept the minutes as published, with the correction regarding the quorum, was seconded and approved unanimously.

VI. EXECUTIVE COMMITTEE REPORTS.

- A. President's Report (Appended p. 13; see also Aug, 1996 Newsletter)
- B. Secretary's Report (See minutes)
- C. Treasurer's Report (Appended, p. 14)

Marvin Margoshes indicated that budget preparations were complicated by uncertainty over whether SAS would continue to provide administrative services for FACSS. All indications at present are that the budget will be in the black for 1996. A question was asked as to how the deficit of \$90k for 1995 would be counterbalanced; it was indicated that the Auditor's Report showed a substantial fund balance at the end of 1995, and that the '95 deficit did not jeopardize the overall financial security of the Society.

It was moved that the proposed budget, as outlined in the Treasurer's report, be accepted. The motion was seconded and approved unanimously.

- D. Executive Administrator's Report (Appended, p. 17)
- E. Journal Editor-In-Chief's Report (Appended, p. 16)

- F. Newsletter Report (Appended, p. 17)
- G. Membership Education Coordinator's Report (Appended, p. 18)

It was moved and seconded that the reports of the Executive Committee be accepted, and the motion was approved unanimously.

VII. SAS COMMITTEE REPORTS

- A. Awards (Appended, p. 18)
- B. Constitution And Bylaws
Kathy Kalasinsky indicated that the bylaws will be changed to reflect the dues increases to \$75 for regular members, \$25 for student members, and \$25 for retired members.
- C. Local Section Affairs (See Aug 96 newsletter, p. 4 - also appended, p. 19)
Rina Dukor encouraged local sections to contact her about needs and problems.

Calendar of Meetings

1997



March 16 - 21

48th PITTCON, Atlanta, GA
<http://www.pittcon.org/>



Sept 21-26

XXIXth CSI
Melbourne, Australia
<http://www.latrobe.edu.au/www/xxxcsl/>



Oct 25-31

FACSS XXIV, Providence, RI
<http://facss.org/info.html>

1998

March 1 - 6

49th PITTCON, New Orleans, LA

Oct 11 - 16

FACSS XXV, Austin, TX

1999

March 7 - 12

50th PITTCON, Orlando, FL

Oct 24-29

FACSS XXVI, Vancouver, BC

- D. Membership (Appended, p. 19)
- E. Nominating (No Report)
- F. Publications (Appended, p. 19)
- G. Publicity (No Report)
- H. Tour Speaker (Appended, p. 20)
- I. Meggers Award (Appended, p. 20)
- J. Strock Award (Appended, p. 20)
- K. Lippincott Award (Appended, p. 20)
- L. Tellers (Appended, p. 20)

It was moved and seconded that the reports of the SAS Committees be accepted, and the motion was approved unanimously.

VIII. AD-HOC REPORTS

- A. Museum (see Aug 96 newsletter, p. 18)
- B. World Wide Web

Don Anderson has asked to be replaced as Chair of the committee. Nancy Miller-Ihli indicated that the National Office will be investigating means for maintaining the web page.

It was moved and seconded that the reports of the Ad-hoc Committees be accepted, and the motion was approved unanimously.

IX. AFFILIATE'S REPORTS

- A. Coblenz (Report published in the journal, Appl. Spec.)
- B. ISA (No Report)

X. LIAISON REPRESENTATIVE'S REPORT

- A. FACSS (see Aug 96 newsletter, p. 18)

It was moved and seconded that the reports of the Affiliates and Liaison Representatives be accepted, and the motion was approved unanimously.

XI. OLD BUSINESS

- A. Dues Increase (see Section V)
 - B. Awards
- Nancy Miller-Ihli indicated that input for any of the Society awards is greatly appreciated.

XII. NEW BUSINESS

A. Nancy Miller-Ihli discussed aspects of the SAS Society Office administering FACSS and indicated that the previous administrative structure proved to be problematic. As a result, this structure will be changed, perhaps without direct involvement in FACSS administration by the SAS Society Office in the future.

B. Kathy Kalasinsky described a proposal from the Executive Committee whereby a new dues category, interim dues, be available for former students in the first year after graduation. The dues would be between the current student dues (\$25) and regular member dues (\$75) and at the level of \$45. A motion to approved the proposal was seconded and approved.

A motion to amend the interim dues decision to indicate that 15% of the interim dues would be returned to the local sections was seconded and approved.

C. John Koropchak indicated that in order for the Society to consider a dues increase for 1998, the bylaws require a vote at this meeting. As a result, it was moved and seconded that dues for 1998 be increased by \$5 for regular, student, interim, and retired members. The motion was approved unanimously.

It was moved, and seconded that the dues increase be reviewed again at the 1997 spring Governing Board meeting, at which time it could be determined if a dues increase is required. The motion was approved unanimously. It was requested that the history of dues increases over the years be available for inclusion in that discussion.

D. Jim de Haseth indicated that the listserver had almost no activity. It appears that the web page accomplishes some of the goals of the listserver. It was therefore decided to abandon the listserver.

E. Nancy Miller-Ihli thanked Jim de Haseth and Dave Coleman for their efforts as they will be leaving the SAS Executive Committee. She

also thanked Bonnie Saylor, Barbara Stull and Victor Hutchinson for their substantial efforts to restaff the Society Office. Further, Kathy Kalasinsky commended the efforts of Nancy Miller-Ihli as President in what turned out to be an extremely active year.

F. Debbie Bradshaw indicated that some members have spouses who would like to remain members, but at some reduced dues level which does not include an additional copy of the journal for the family. As Chair of the membership committee, the issue was referred back to her committee for consideration.

XIII. DATE AND TIME OF NEXT GOVERNING BOARD MEETING

The next Governing Board Meeting be held at Pittcon in Atlanta on March 18, 1996 at a location to be determined.

XIV. ADJOURNMENT

It was moved, seconded and approved that the meeting be adjourned at 10:00 P.M.

Submitted by John A. Koropchak, Secretary.

President's Report

SAS has experienced many changes in 1996. A lot has happened and there are several exciting initiatives underway which I'd like to tell you about in this brief report.

SAS has had personnel changes in the SAS office in Frederick this year. We are all appreciative of the contributions of the staff who are no longer employed by SAS. Kathy Kalasinsky chaired the search committee and we hired a new Executive Administrator, Bonnie Saylor, to provide administrative leadership. We also hired an Administrative Affairs Associate, Victor Hutcherson, to provide database and computer software and hardware expertise. These two join Barbara Stull who has served SAS for more than 12 years! All of the staff are committed to making SAS an even stronger society

than it presently is. You can learn more about the staff on the SAS homepage (<http://es-ther.la.asu.edu/sas/>).

In my last report, I highlighted initiatives which were the result of the SAS Executive Committee's (EC) January strategic planning retreat. Specific tasks which I have been involved with include:

- **Membership directory** - The membership directory was published this summer and arrived with the July issue of Applied Spectroscopy. I think it will prove to be a valuable resource to our members and an effective tool to facilitate networking.
- **Expansion of the program for journal discounts** - I appointed an ad hoc committee to evaluate what additional journals might be of interest to our members and we are currently negotiating with the publishers for discounts on: Analytical Chemistry, Talanta, SAB, SAA, Anal. Chim. Acta, JAAS, and the Analyst. At the present time it is unclear which journals will be available and what the discounted price will be.
- **Internationalization and regionalization** A special initiative regarding internationalization involves an overseas promotion targeting spectroscopists in Europe and in South America. With steadily decreasing membership numbers, it is critical for us to expand our membership base and with the ease of overseas communication via the World Wide Web, now is the time to think globally! Relative to regionalization, the recent Governing Board meeting at PittCon highlights the problem with our current governance structure. A regional governance structure could provide a division of 4-6 regions with delegates from each making the GB smaller, facilitate more in-depth discussions, and make it easier to get a quorum. Regional governance could also afford non-US members the opportunity for involvement in governance. This is an initiative which I hope we pursue in 1997.
- **SAS poster session at FACSS - 1996** marks the 50th anniversary of Applied

Spectroscopy. In honor of this event, SAS is hosting a Wednesday afternoon poster session at FACSS. Students have been invited to participate in a poster competition and 4 student winners will be recognized.

- **Evaluation of SAS's interaction with FACSS** - The project which has consumed a great deal of the EC's effort is planning the future interaction between SAS and FACSS. As most of you know, SAS has provided administrative support to FACSS on a contractual basis since 1991. Although that relationship has proven professionally satisfactory and given SAS the opportunity to have some involvement in the future direction of FACSS, which serves as the annual SAS conference, SAS has suffered some financial losses and experienced problems with conflict of interest, dilution of volunteer effort, diminished progress on important SAS initiatives, and divided staff loyalties. Leaders in SAS and FACSS are addressing this issue and while preparing this report, I do not have an indication of the future interaction. SAS presented FACSS with several options in the Spring with the most favorable being a proposal where SAS would become responsible for the FACSS conference (fiscally and administratively). We hope that proposal is being seriously considered. Again, I will update you at the GB meeting.

Like many professional societies, SAS has experienced a downward trend in membership overall in recent years, but I am happy to report that we had a total of 208 new members in 1996, which is almost double the number who joined in 1995. I am optimistic about the course that has been charted for SAS and I am excited about internationalization of SAS which I believe will be the key to the guaranteed future success of this prestigious society. I also think SAS leadership is more keenly aware than ever that we need to meet the needs of our membership, and leaders and staff are working hard to identify member benefits of value to you. I want to publicly acknowledge

the contributions of the members of the Executive Committee and the SAS staff, without whose hard work, SAS wouldn't be what it is (and I would have run away). As always, if you have suggestions relative to the Society, please send me or the one of the EC members an email or give us a call. You'll find our phone and fax numbers, and email addresses in the journal and newsletter. Thanks!!

Treasurer's Report

The Society's Balance Sheet, Statement of Income and Expenses, and the Proposed Budget for 1997 are on the pages that follow. I am pleased to report that the Society's finances are in good condition

SAS revenues are slightly larger than for the first eight months of 1995, and expenses are lower by about \$150,000. However, this comparison is misleading for two reasons. There are outstanding expenses for which bills have not yet been received. Our accounting system is a modified cash system, and bills not yet received are not included in Accounts Payable. Also, the Society incurred a net loss of nearly \$92,000 in 1995; if the 1996 expenses were not substantially less than for last year, we would be facing another loss.

I expect that the Society will end the year within budget and with a positive balance of income over expenses to begin rebuilding our reserve funds. We are doing this despite unbudgeted expenses related to the personnel changes in the National Office. Journal costs are much lower than was projected when the 1996 budget was approved. Allen Press reduced its charges, and the Editor has been diligent about controlling the number of pages in each issue. The National Office has been operating since mid-year with a smaller staff than in 1995.

Marvin Margoshes, Treasurer

Journal Editor's Report

	1995	1996	Variance
Assets			
Restricted Funds			
Cash/Investment	27771.84	9.80	-27762.04
Cash/Equival./Investment	27771.84	9.80	-27762.04
Total Restricted Funds	28108.38	9.80	-28098.58
General Funds			
Bank Accounts	520483.48	218257.19	-302226.29
T-Bills	43813.45	438831.75	-395018.30
Accounts Receivable	5043.37	43822.77	-38779.40
FACSS Reimb. Due	-467.35	535.97	-1003.32
Tax Refunds Receivable	0.00	-2829.68	2829.68
Est. Tax Payments	0.00	2813.00	-2813.00
Univ. of Texas Acct.	-1184.80	1322.71	-2507.51
Total General Fund Assets	567824.07	402821.71	-165002.36
Fund Assets			
Furniture & Equipment	32075.49	32003.85	-71.64
Accumulated Depreciation	-14950.35	-28210.35	13259.99
Fund Assets Net	18125.13	13793.49	-4331.64
Total Assets	511949.90	414614.20	-97335.70
Liabilities and Fund Balance			
Accounts Payable	480.01	0.00	480.01
Income Tax Payable	0.00	0.00	0.00
Due to Inactive Local Sections	11201.31	14037.43	-2836.12
Accrued Vacation	3333.94		3333.94
Payroll Tax Payable	873.88	2131.38	-1257.50
Deferred Membership Revenue	27425.00	28860.31	-1435.31
Deferred Subscription Revenue	4308.00	7783.00	-3475.00
Other Deferred Revenue	0.00	0.00	0.00
State Tax Payable	0.00	0.00	0.00
Total Liabilities	49480.94	52234.70	-2753.76
Fund Balance	132669.00	420129.90	-287460.90
Restricted Fund Bal./Investment	28108.38	9.80	-28098.58
Current Earnings	380845.49	912893.12	-532047.63
Total Liability & Fund Balance	511653.20	414464.20	-97189.00

Budget Notes

- 1 Based on 1996 membership numbers with \$3 dues increase
- 2 Based on lower journal advertising numbers for 1996
- 3 Based on 1996 subscription numbers
- 4 Based on decreasing incomes over the years for short courses
- 5 FACSS contract will no likely be renewed for 1997
- 6 Includes salary for one new employee
- 7 Based on increased costs for Executive Committee retreat
- 8 Projections are lower based on last year's numbers
- 9 The 1996 figure is so high because some postage for the journal was posted to this line item instead of to journal publication which is where it usually goes
- 10 New equipment will be needed when new journal editor takes over
- 11 Includes money for enhanced member services
- 12 1996 legal fees were higher than normal to secure office transition needs
- 13 Society Office will need new computers for 1997
- 14 Temp costs were higher in 1996 because of office transition
- 15 Money is needed to cover officer travel

	1997 Proposed Budget	Notes/See Page 2	1996 To Date 08/1/96	1996 Budget	Percent Used	1996 Actual
REVENUES						
Membership dues	\$271,794.00	1	\$759,094.50	\$759,495.00	89.70%	\$759,475.00
Jrnl Pub Sales/Adv	\$228,000.00	2	\$143,201.87	\$268,000.00	54.00%	\$279,152.87
Jrnl Subscriptions	\$486,000.00	3	\$601,804.80	\$679,645.00	121.21%	\$697,732.40
Membership Education	\$30,000.00	4	\$13,858.00	\$37,350.00	37.10%	\$36,912.00
FACSS Contract	\$0.00	5	\$0.00	\$51,000.00	0.00%	\$46,378.50
FACSS Reimbursement	\$0.00		\$0.00	\$0.00	0%	\$0.00
Univ/Texas Housing	\$29,500.00		\$15,397.71	\$29,500.00	52.19%	\$37,198.00
General Contributions	\$0.00		\$0.00	\$0.00	1.00%	\$345.00
Draw Year Income	\$0.00		\$0.00	\$0.00	0%	\$0.00
Other Revenue	\$2,000.00		\$200.00	\$2,000.00	10.00%	\$2,175.00
Refund to Member	\$0.00		\$0.00	\$0.00	0%	\$0.00
Deposit Error	\$0.00		\$0.00	\$0.00	0%	\$0.00
Total Revenue	\$894,894.00		\$200,048.94	\$898,630.00	81.00%	\$881,863.01
EXPENSES						
Salaries	\$178,218.00	6	\$70,284.78	\$704,808.00	52.18%	\$729,802.11
Payroll Tax Exp	\$18,138.00		\$9,518.04	\$10,807.00	60.24%	\$10,487.87
Gen Health/Activ/Ret	\$15,800.00		\$2,941.30	\$7,700.00	43.59%	\$9,021.58
Profit Share Expenses	\$0.00		\$0.00	\$0.00	0%	\$0.00
Ret. FACSS Cont	\$0.00		\$1,200.00	\$2,300.00	52.17%	\$1,800.00
Assoc/Ret/Retire	\$11,760.00		\$1,548.81	\$11,760.00	13.18%	\$10,888.88
Exec Comm Retreat	\$0.00	7	\$11,385.00	\$7,300.00	151.86%	\$4,941.00
Operating Board	\$0.00		\$967.73	\$0.00	128.05%	\$420.78
Membership Committee	\$5,000.00		\$1,476.31	\$5,000.00	29.53%	\$5,656.56
Management Committee	\$2,000.00		\$1,847.18	\$1,500.00	123.87%	\$1,878.39
Other Committees	\$2,000.00		\$2,000.00	\$2,000.00	76.39%	\$2,205.28
Journal Advertising	\$180,000.00	8	\$73,160.33	\$185,000.00	39.55%	\$198,888.34
Journal Publication	\$281,000.00		\$198,798.71	\$275,000.00	52.87%	\$281,913.00
Journal Postage	\$7,000.00	9	\$28,892.47	\$7,000.00	408.88%	\$4,838.12
Journal Editorial Board	\$1,500.00		\$1,500.00	\$1,500.00	99.37%	\$993.47
Journal Manuscript	\$6,000.00		\$0.00	\$6,000.00	0%	\$7,000.00
Journal Fundraising	\$4,000.00	10	\$480.00	\$0.00	98.00%	\$227.47
Journal Operating	\$8,800.00		\$5,354.00	\$9,800.00	54.54%	\$8,853.87
Journal Travel	\$8,800.00		\$1,128.72	\$8,000.00	12.30%	\$18,442.11
Journal Misc	\$1,500.00		\$0.00	\$2,500.00	0%	\$1,811.88
Journal U. of T Acct	\$22,843.00		\$19,640.00	\$19,640.00	87.88%	\$20,017.87
Journal Book Review	\$0.00		\$0.00	\$0.00	0%	\$0.00
Member Services	\$84,800.00	11	\$10,386.28	\$82,814.00	18.24%	\$31,680.00
Member Ex. Sec Council	\$9,800.00		\$0.00	\$9,800.00	0%	\$81.00
Intern Ex. Sec Council	\$32,500.00		\$25,257.04	\$32,500.00	77.58%	\$41,488.38
Newsletter	\$11,940.00		\$3,897.38	\$11,900.00	34.45%	\$11,488.11
SG Accounting Fees	\$1,000.00	12	\$1,118.11	\$7,000.00	215.67%	\$5,854.58
SG Conference Plans	\$4,000.00		\$3,123.34	\$4,000.00	78.08%	\$3,518.70
SG Employee Training	\$1,000.00		\$0.00	\$1,900.00	95.00%	\$801.10
SG Furniture/Equipment	\$8,800.00	13	\$818.00	\$2,700.00	30.29%	\$1,051.00
SG Insurance	\$2,200.00		\$732.66	\$1,200.00	166.67%	\$1,151.34
SG Postage	\$12,800.00		\$9,908.88	\$12,800.00	78.00%	\$11,105.70
SG Printing	\$8,000.00		\$1,407.36	\$8,000.00	55.89%	\$5,888.88
SG Supplies	\$8,000.00		\$1,118.44	\$9,000.00	63.41%	\$4,195.77
SG Temp Help	\$2,000.00	14	\$1,244.60	\$200.00	820.20%	\$188.70
SG Travel	\$10,000.00		\$10,283.48	\$10,000.00	102.83%	\$5,888.00
SG Operating	\$28,100.00		\$20,071.41	\$24,300.00	127.99%	\$17,381.81
SG Organization Data	\$0.00		\$0.00	\$0.00	0%	\$521.00
SG Miscellaneous	\$1,000.00		\$1,000.00	\$1,000.00	99.97%	\$999.77
Freight	\$0.00		\$0.00	\$0.00	0%	\$0.00
Officers Expenses	\$12,000.00	15	\$0,000.44	\$12,000.00	52.70%	\$9,030.67
Bank Charges/Int. Exp	\$8,800.00		\$2,162.42	\$8,800.00	33.31%	\$8,010.23
Constitution Expenses	\$0.00		\$0.00	\$0.00	0%	\$0,004.00
Total Expenses	\$881,060.00		\$521,818.87	\$888,213.00	84.42%	\$880,480.87
NET INCOME	\$13,834.00		\$20,048.94	\$10,417.00		(\$98,616.86)
INCOME TAX EXP	\$0.00		\$0.00	\$0.00		\$0.00
CHANGES ON STATE	\$0.00		\$0.00	\$0.00		(\$421.80)
NET AFTER TAXES	\$13,834.00		\$20,048.94	\$10,417.00		(\$98,616.86)

he year has passed well and special appreciation is due to Rob Lodder (University of Kentucky), Lary Nafie (Syracuse University) and Cecil Dybowski (University of Delaware) for serving as guest editors for special focus issues in 1996. The issues included the Focal Point article as well as selected state-of-the-art research in the respective areas. This concept of Focal Point with Focus Articles in

the same issue was initiated in hopes that the tutorial character of the Focal Point article might provide the non-expert with a “mental warm up” in the topic area and a glimpse at current research taking place in that same field. In particular, the general topics of these three authors were NIR in the biological/medicinal arena (R. Dempsey, D. Davis, R. Buice, R. Lodder), vibrational optical activity (L. Naffie) and 50th year anniversary of magnetic resonance (T. Becker and C. Dybowski). Additionally, I must acknowledge the Focal Point articles on single molecule fluorescence analysis (R. Keller, W. Ambrose, P. Goodwin, J. Jett, J. Martin, M. Wu), fiber optics in FT-IR (I. Lewis and P. Griffiths) and the excellent overview of IUPAC’s role in spectroscopy (T. Vo-Dinh and J. Bertie). Tentative Focal Point articles slated for 1997 include ICP-MS (G. Hieftje), single particle analysis (J. Olesik) and spectroscopy using synchrotron radiation (G. Brown).

I have received excellent feedback on the focal point series, and this success can be laid at the feet of Gary Hieftje, who has served as the Focal Point Editor since 1993. Gary will be stepping down from this role at the end of 1996. Although I contemplated refusing his resignation, those of you who know Gary realize that he is a feisty character and that my refusal would probably have been as little use as my attempt to get it to rain in my front yard by throwing sodium iodide crystals in the air. (Sorry for the bad analogy, but the concept was contemplated during this year’s drought in Texas.) I am pleased to announce that Vahid Majidi will step in and serve as the new Focal Point Editor. He brings with him the creativity and breadth that this position requires. Those of you who have the good fortune of knowing Vahid also realize that he possesses the personality to solicit articles from even the most reluctant of authors.

I also want to make mention of a change in my office where the journal administrative assistant, Penny Kile, has taken another job which provides her with more time for her creative activities in piano to flourish. Her bubbly personality and competence will be missed. Paul Willard will be capably stepping into this position from a similar position he has held for many years with the Journal of Chemical Education. I feel quite fortunate that we were able to secure Paul’s assistance for Applied Spectroscopy. Paul and I readily established a good working relationship once he realized my nu-

merous shortcomings and his need to mask these from the public.

Starting in 1997, the Student Corner will be added to the journal. In this section, a student member of SAS who is also an author on a paper will be highlighted giving brief mention of research activities and interests. Those of us in academia readily acknowledge the influx of new ideas and hard work that these individuals bring to the field. These few pages are the Society’s means of publicly noting their contribution as well as their involvement at the early stage of their career in a professional society like SAS.

Finally, Bruce Chase and I have decided to step down as editors of the journal after finishing the 1997 year. Bruce has made my job easier and — at times — fun. His ruthless, ax-wielding personality has also provided a good balance to my docile and quiet demeanor during these years of joint servitude. We both have thoroughly enjoyed working for SAS and felt honored to be able to serve for four years as editors for Applied Spectroscopy. The editorial board members, reviewers and authors have made our jobs much simpler, and our indebtedness to this group of individuals will likely be felt by both of us for years to come. Their professionalism and skill resulted in a continuously improving publication and allowed us to appear moderately competent to the readership of the Journal. We also want to acknowledge the support provided by the Society Office and the Society of officers (past and present) during our tenure. Last, but not least, we must acknowledge the professionalism of Sandy O’Neil (copy editor, Journal coordinator and our conscience) who has made our jobs considerably easier and much more enjoyable.

James A. Holcombe, Editor-in-Chief

Executive Administrator’s Report

Membership in the Society for 1996 currently stands at 3,204 with 2,852 USA members and 352 foreign members. There were 217 new members in 1996. There were a total of 1,136 journal subscriptions in 1996, with a breakdown of 811 USA and 525 foreign. Because of the change in Society office personnel and the chair of the membership committee, membership promotions have been at a virtual standstill. We will be doing a targeted cam-

paign aimed at attendees from the Winter Plasma Conference to try to attract a larger international member base. Renewal notices for both members and subscribers were also mailed, and we are hoping for a good return.

The **database** is the lifeblood of the Society because it should contain all of the information we need on our members. It is not in the best shape to do this, so we are looking at switching to a more user friendly system that can keep track of everything we need.

We were pleased to be able to complete the first **membership directory** for SAS since 1984. It is one more added benefit to our members and one we hope to continue yearly.

The office continues to work in accordance with the **FACSS** contract. Plans are underway for the 1997 meeting in Providence.

The **Student Resume Booklet** was compiled and sent out to our sponsors, advertisers, the students who contributed, and the SAS Executive Committee. It is a very positive resource and we have gotten numerous comments as to its use.

We **exhibited** at two meetings this summer, the Rocky Mountain Conference on analytical Chemistry and the International Conference on Raman Spectroscopy. Although the number of members recruited at these meetings were few, it provided an opportunity for SAS to show what it has to offer in the hope that those who did not join might consider it in the future.

We continue to work closely with the **local sections** to provide them with needed information. We hope to provide upgraded services to those who want more in the future.

In **summary**, the Society Office is working hard to provide member services and benefits that will not only attract new members, but keep old ones. We will be working closely in the future with committee chairs and the Executive Committee to determine what we can do to make the Society more international in scope, as well as to determine how we can improve our current services.

Bonnie A. Saylor, Executive Administrator

Newsletter Editor's Report

As of the date of this report (Aug 29), the second issue of the newsletter for 1996 has been sent to

the printer and should be available by the time of the FACSS conference. The third issue will be sent out with the November issue of Applied Spectroscopy, with a copy deadline of Friday, October 18. We appear to be well within budget this year, and I am attempting to limit the size of the newsletter to 24 pages (as compared to 32 pages for the first newsletter of 1996) to keep expenses to a minimum.

My major goal for 1997 will be to make personal contacts with the local sections to try to increase contributions. Currently, except for the New York Section, I have had no local section contributions to the newsletter.

I hope to continue the Spectroscopist Profile series as well as History of Spectroscopy, as there is an almost limitless wealth of information that I can draw on for these features, and there are a number of spectroscopists who deserve to be profiled. I welcome contributions from SAS members and hope that others that are as fascinated by scientific history as I am will take the time to write up their personal favorites for publication. The newsletter offers a unique forum for authorship on this topic.

The WWW version of the newsletter has not progressed as fast as I had hoped, partially because there is no direct conversion between the Microsoft Publisher 95 software used for preparing the newsletter and HTML, so that any posted text would have to be manually recoded in HTML. Hopefully, as time permits, I will be able to catch up on that part of the newsletter agenda. (Editor's note: this issue of the newsletter is being prepared with Microsoft Publisher 97, which supposedly will permit seamless transport to HTML ... we shall see).

Another project that I am working on in conjunction with the newsletter and the History of Spectroscopy feature is the identification of photos from the 1950s and 1960s that were contributed to the National Office by Carl Leistner. If anyone has old issues of Arcs and Sparks from that period that they would be willing to loan or donate to the National Office for that purpose, it would be greatly appreciated.

Finally, I want to acknowledge the excellent cooperation of the SAS EC and National Office in helping me to meet deadlines and produce a quality newsletter.

Membership Education Report

During the 1996 Fall season, the Society offered one short course and three minicourses (half day). These courses included Fourier Transform Infrared Spectrometry, Raman Infrared Imaging, Near-Field Scanning Microscopy, and Environmental Sample Speciation, respectively. Approximately two weeks before the FACSS meeting, the instructors of the Plasma Spectrochemical Analysis short course asked for it to be canceled. At that time, four minicourses had also been advertised by the Society; their enrollment totaled four registrants. Because of the potential value that the minicourse concept, and because this is an initial testing of a concept where membership evaluation is essential, it was decided that one of the four minicourses be canceled and that the three remaining minicourses be offered free-of-charge. This free offering may encourage membership participation and provided the feedback that is necessary to assess the merit of these courses. A minicourse titled Speciation of Trace elements by Capillary Electrophoresis was subsequently canceled by the Membership Education Committee

The Society will offer the following short courses at PITTCO '97 (Atlanta, March 17-21); Biological Infrared Spectroscopy (BIRS), and Plasma Spectrochemical Analysis. The BIRS course will also be offered at the Meeting of the Biophysical Society (New Orleans, March 2-7, 1997) as a one-day course.

It is recommended also that the Society provide a stronger show of appreciation to the course instructors. At the very least, formal letters of appreciation are imperative, even if a course has been canceled. If it is decided that minicourses should continue to be offered, greater financial enumeration must be offered to the prospective minicourse instructors. Finally, it is recommended that the Society enhance the marketing of Society sponsored courses. Every mailing from the SAS office should include announcements of available courses, and course advertisements should appear in the Journal as often as possible.

The Fourier Transform Infrared Spectrometry shortcourse will not be offered at PITTCO '97 at the request of the instructors.

The registration counts for the courses at FACSS '96, were as follows:

FT-IR Spectrometry	18
Raman & Infrared Imaging	6
Near-Field Scanning Microscopy	0
Environmental Sample Speciation	5

The FT-IR Spectrometry shortcourse brought 17 new members into the Society, that is, only one attendee was a current member. Such new member counts are not unusual for the shortcourses, and clearly they are excellent recruiting resources.

James A. de Haseth
Membership Education Coordinator
David Styris
Membership Education Coordinator-Elect

Awards Committee Report

The SAS Awards Committee would like to formally submit for consideration to next year's committee chair and members the names of Dr. John Dean to receive the SAS Honorary Membership Award and Ms. Connie Butler-Sobel for the SAS Distinguished Service Award.

Roy Koirtyohann, Chair

Local Section Affairs Committee Report

To date (January-August) the committee has complete two of its main goals: soliciting nominations for and selecting recipients of the SAS Student Award and the William J. Poehlman Award. To encourage nominations, personal letters were sent to all Local Section Chairpersons.

Five students were nominated for the SAS Graduate Student Award:

- Elizabeth Wade (University of California, Berkeley)
- Sanog Ekgasit (Case Western University)
- Gorm Yoder (University of Illinois, Chicago)
- Karl Kaufmann (Carnegie Mellon University)
- Jeffrey Kinzer (Ohio State University)

Jeffrey Kinzer was selected as the winner.

Two undergraduate students were awarded Undergraduate Awards in Applied Spectroscopy:

- Fassil Mesfin (SUNY, Old Westbury) by the New York Section
- Yu-Harn Chen (Argonne National Labs) by the Chicago Section

Four local sections were nominated for the Poehlman Award (Penn-York, Rocky Mountain, Northern California, Chicago). The Chicago Section was selected as the winner.

As noted above, personal letters were sent to all Local Section Chairpersons in April. In addition to soliciting nominations, Committee also asked for information on activities of the Sections, and to share ideas on what works in attracting attendance at meetings and what does not. We also wanted to know if anyone has experienced any problems that effect activities and/or suggestions on how to overcome them. Only TWO sections responded out of 31. The Committee will make an effort to contact more Sections and will compile responses in the next report.

Rina K. Dukor, chair

Membership Committee Report

During 1996, several special promotions aimed at increasing Society membership were launched:

- Discounts were given to the attendees at the Winter Plasma Conference, Ft. Lauderdale, FL in January.
- A promotion was held at PittCon which resulted in recruiting more than 70 new members. Unfortunately, many of the membership forms, with the potential members names and addresses, were lost so that the membership did not increase by this number. However, this promotion did point out the benefit of having active spectroscopists in the SAS booth helping to promote the Society. It is therefore recommended that this activity be continued.

To increase the number of student members, the following were done:

- SAS is having a special poster session at FACSS in Kansas City with a competition for SAS student members.
- Applied spectroscopy is adding a section for student authors to include a brief biography to provide some publicity and recognition for SAS student members.

In an effort to reach potential foreign members, a targeting mailing is being sent to approximately 250 non-US spectroscopists.

The present SAS membership is composed of 278 non-US members and 2899 US members. If the Society wants to retain its present members and gain new ones, it is clear that additional benefits must be developed and marketed.

Deborah Bradshaw, Chair

Publication Committee Report

During the past year, the publication committee was charged with two directives: 1) completing the two year review of the Journal editors (James Holcombe, editor-in-chief; and Bruce Chase, editor), and 2) assessing the possibility of establishing a peer reviewed methods/application newsletter. The first task (review of the editors) was completed prior to the Pittsburgh Conference and a comprehensive report was submitted.

To complete the second task, the Publication Committee considered: 1) whether or not to pursue launching an SAS newsletter publication, 2) to recommend whether the world wide web (WWW) is a reasonable forum for this newsletter; and 3) to suggest possible editors. Based on the membership survey, the committee recognizes the need for an application/methods newsletter to better serve the SAS membership.

There were several concerns with regard to using the WWW as the publication medium. The concerns included uncontrolled free access for non-SAS members; financial aspects of setting-up and maintaining a professional web page using hired personnel (not volunteers); charging web users for access to the SAS newsletter; possible limited web connection availability for members who will use this newsletter; and lastly, procuring advertising revenue to pay for some of the costs which may compete with Applied Spectroscopy. At the time of this report, the skills and hardware were not available at the National Office to support a web based publication. The WWW is a promising medium for publication of the SAS application/methods newsletter, but the above points must be addressed prior to establishing this service.

If the SAS is planning to establish a WWW based journal, the committee felt that the publication editor should be someone with a distinguished

industrial career. Furthermore, as evident by the membership survey, this position may be best served by an editor with background in molecular spectroscopy.

Vahid Majidi, Chair

Tour Speaker Committee Report

Due to personal and professional complications in the life of the committee chair, arrangements are months behind schedule. Nevertheless, we are on-track for an outstanding Tour Speaker Program this coming spring. Tour speakers have been identified:

- Christine Evans, University of Michigan
- Harvey Gold, E.I. duPont de Nemours and Co.
- Robert Koons, FBI Academy
- James D. Ingle, Jr., Oregon State University
- Kathryn Kalasinsky, Armed Forces Institute of Pathology
- Victor Kalasinsky, Armed Forces Institute of Pathology
- Anne Lengers, Dow Chemical Co.
- Jack M. Miller, Brock University
- Tom Niemczyk, University of New Mexico
- Karen Wolnik, FDA

Speakers were selected based on the expressed interests of the local sections. Selection accelerated once the new membership list became available. Sections were advised of this list late in August and have a deadline of the SAS Governing Board Meeting in Kansas City for requesting which speaker they want. Speakers and sections will be paired in time for meeting information to be published in the PittCon issue of the Newsletter.

Alex Scheeline, Chair

Meggers Award Report

The Meggers Award was presented to Gary M. Hieftje and Steven Hobbs for their paper "Scintillator-Based Nanosecond Light Sources for Time-Resolved Fluorimetry" which appeared in *Applied Spectroscopy*, volume 49, number 1, pages 15-19 (1995).

Lester W. Strock Award Report

The 1996 Lester W. Strock Award Committee selected Dr. Richard Keller of Los Alamos national Laboratory as the 1996 candidate for the award.

Dr. Keller is being honored for his important and ground breaking contributions to single-molecule detection and its application to sensitive DNA sequencing. Dr. Keller is responsible for a large body of work on single molecule detection, flow cytometry, spectroscopy of hydrodynamically focused fluids, and more recently, in DNA detection and sequencing.

Michael W. Blades

Judith Koob

Charles Wurrey

Lippincott Award Report

The 1996 Lippincott Award was presented to Giuseppe Zerbi at the 1996 International Conference on Raman Spectroscopy in Pittsburgh, PA this past July.

Tellers Committee Report

The Tellers Committee met on September 7, 1996 at the National SAS Office to count the ballots from the recent election. A total of 1024 ballots were returned of which 1016 were votes for either one of the two candidates, 3 were write-in votes, there was one abstention and 4 ballots were judged invalid. Joseph A. Caruso was elected to the post of President-Elect for the Society.

Kristine Patterson, Chairperson

Review of Corel ChemLab continued from page 24



supplies. A number of experiments can be performed in the laboratory, including acid-base titrations, as shown above. During a titration, for example, the indicator color changes (you have the choice of 5 pH indicators), the reading on the pH meter changes and a titration graph is generated. Safety is emphasized as well, with proper disposal of toxic waste, safety goggles, and a safety manual on the shelf. However, whoever designed the lab bench was not a chemist ... the distilled water tap has two handles ... perhaps for hot and cold running distilled water? But there is realism too. Glass beakers break when you drop them, and the nitroglycerin under the benchtop explodes if you are careless with it! You can also go next door to the gas lab, where you can study the effect of varying temperature, pressure, volume, and amount of mixtures of four gases.

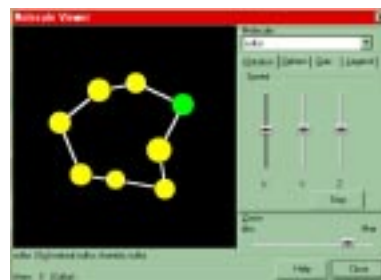
An interactive periodic table is also available on the wall of the main laboratory, in which you can find a short history and description of element properties, isotopes, formula information, and a rudimentary quiz. I've seen a number of better implementations of periodic tables, particularly in one program (Mentorm's ELEMENTS) that will be reviewed in a future issue of the SAS Newsletter.



The 3D molecular viewer is fun and useful,

allowing you to visualize the structure of a large number of different molecules.

There are 11 different videos of experiments that are difficult to carry out in the laboratory because of safety or materials availability considerations. These include hydrogen and chlorine cannon, paramagnetism of liquid oxygen, nitrogen triiodide reaction, oxidation and reduction of copper with hydrogen gas, crystallization of supersaturated sodium acetate, endothermic reaction of ammonium thiocyanate and barium hydroxide, an ice bomb, writing with white phosphorus, oxidation of glycerine with potassium permanganate, ammonium dichromate volcano, and the thermite reaction. The videos were well documented and are far, far better than blowing up your laboratory.



Perhaps the most exciting and at the same time the most disappointing part of this program is the online textbook. Besides the previously mentioned sluggishness on all but the fastest PC systems, the textbook, which I believe in its print edition is an excellent general chemistry textbook, is poorly converted to the digital regime. The program uses the Corel ENVOY viewer to access the textbook. The figures are low resolution and a number are missing. Some critical parts of the textbook, such as end of chapter problems and answers, were not converted, although the within-text problems are included in the chapters. But the biggest problem is that equations and figure text are presented at such low resolution that in many cases it is impossible to read them. This severely

Quantity	Definition of Quantity	SI Unit
Area	Length squared	m ²
Volume	Length cubed	m ³
Density	Mass per unit volume	kg/m ³
Speed	Distance traveled per unit time	m/s
Acceleration	Speed changed per unit time	m/s ²
Force	Mass times acceleration of object	kg · m/s ² (= newton, N)
Pressure	Force per unit area	kg/(m · s ²) (= pascal, Pa)
Energy	Force times distance traveled	kg · m ² /s ² (= joule, J)

continued on page 22

limits the utility of the textbook for educational purposes.

Summary: While Corel ChemLab leaves much to be desired, particularly in the implementation of the online textbook, it is an innovative and comprehensive software package at an unbelievable price (~\$60). This makes it available to everyone, and Corel is to be congratulated for their intelligent pricing. Educators will find it useful for some classroom applications, but also perhaps for an inexpensive glimpse at how to (and how not to) implement an interactive educational package with linked online text. This is the educational tool of the future and I look forward to a second edition, with (hopefully) a greatly improved textbook readability.

Review by Mike Epstein

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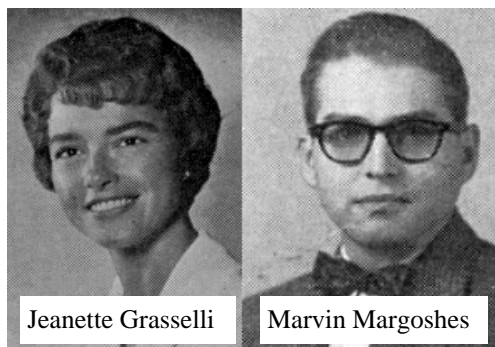
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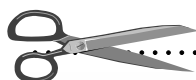
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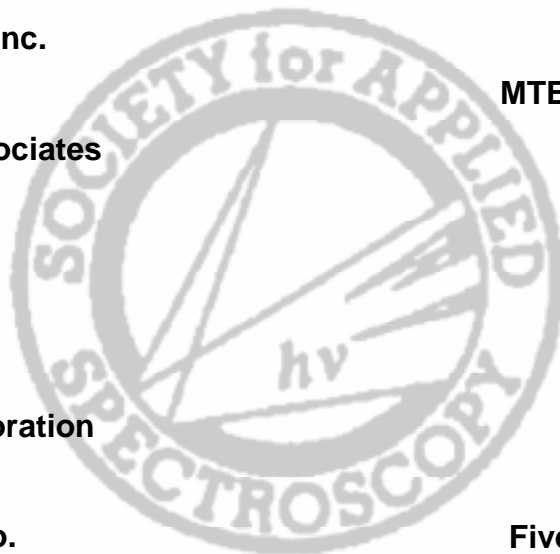
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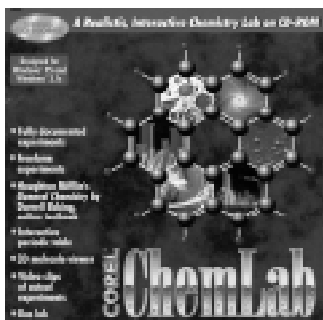
SOFTWARE FOR CHEMICAL EDUCATION



Editor's note: Software reviews represent the opinions of the authors and do not reflect the opinions of the Society for Applied Spectroscopy.

Software review ratings:

Don't waste your money	
Less than adequate	 
Average	  
Good product with a few drawbacks	   
Outstanding ... buy it!	    



Corel deserves an A for innovation and a C in implementation for its ChemLab software. This CD-ROM for Windows 3.1 and Windows 95 is described in the documentation as follows:

"Explore the wonders of chemistry with Corel ChemLab, an interactive laboratory on CD-ROM. Students, teachers and budding chemists can perform their own fascinating experiments or choose from a wide selection of preset experiments. The laboratory is equipped with realistic scientific equipment that is easy to use. Acids, bases, buffers, gas properties, kinetics, oxidation-reduction reactions and radioactivity are just a few of the scientific principles you can learn about. The 3D molecule viewer, gas lab, periodic table, extensive online help and *General Chemistry*, Fifth Edition, by Darrell D. Ebbing as published by Houghton Mifflin Company, online textbook make Corel ChemLab a powerful interactive learning tool. Corel ChemLab's amazing visual and sound effects make it so fun to use!" Features are listed as: "Fully documented experiments; freeform experiments; video clips of actual experiments; 3D molecule viewer; Houghton Mifflin's *General Chemistry* by Darrell Ebbing, online textbook; Interactive periodic table; four fun lab themes to choose from; log files to record experiment steps; and more."

Performance: Minimum requirements are an

IBM PC 486 DX33; 8MB RAM (12MB recommended); SVGA 640 x 480 (800 x 600 recommended); 256 colors (16-bit recommended); Double-speed CD-ROM drive; Windows compatible sound card; Mouse and speakers. I tested the product on three systems:

- Dell Dimension 200 MHz Pentium with 8x CD-ROM drive
- Compac Presario 75 MHz Pentium with 4x CD-ROM drive
- Zeos 486DX/100 with 3x CD-ROM drive

The software ran flawlessly on the 200 MHz Pentium system, with only slight delays when accessing pages from the textbook. The program initially ran unacceptably slow on the 75 MHz Pentium, but this problem was solved by changing the sound option from 16-bit to 8-bit. Access to the textbook on both the 75MHz Pentium and 100MHz 486 was still irritatingly slow, and the help file recommends copying sound and text files from the CD-ROM to the hard drive to eliminate this bottleneck. Other than the slow access to the textbook, all other segments of the program, including the video, ran at adequate speed.

Content: The center of the program is the main laboratory window. You have the choice of four different laboratory designs (Contemporary, Tropical, Futuristic, and Dungeon) with appropriate background music. On the shelves, under the cabinet, and on the benchtop you will find a working pH meter, geiger counter, burette and beakers containing various acids and bases (that you can specify), a balance, and other miscellaneous lab