

RHEOLOGY BULLETIN

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July 1995

THE SOCIETY OF RHEOLOGY EXECUTIVE COMMITTEE - 1993-95

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Nominating:

W.H. Tuminello, chair
A.W. Chow
E.S.G. Shaqfeh

Nominations for the 1996 Bingham Medal

Nominations should be submitted before **January 15, 1996**
to the next chair of the Bingham Award Committee:

Professor Robert L. Powell
Department of Chemical Engineering
and Materials Science
University of California at Davis
Davis, CA 95616
(916) 752-0400; Fax: (916) 752-1031
Email: rlpowell@ucdavis.edu

67th ANNUAL MEETING SACRAMENTO OCTOBER 8 - 12 1995

The annual meeting of the Society of Rheology will be held at the Hyatt Regency Hotel in Sacramento, California. The meeting organizers are:

Technical Program Chair:

Gerald G. Fuller
Department of Chemical Engineering
Stanford University
Stanford, CA 94305 - 5025
(415) 723-9243; Fax: (415) 725-7294
Email: ggf@rio.stanford.edu

Local Arrangements Chair:

Robert L. Powell
(before August 15)
National Science Foundation
Room 525 / CTS
Arlington, VA 22230
(703) 306-1371; Fax: (703) 306-0319
Email: rlpowell@ucdavis.edu
(for address after 8/15, see previous column)

RHEOLOGY SHORT COURSE A two-day short course will be taught in Sacramento, October 7-8. *Experimental Methods in Melt Rheology* will be presented by Prof. John M. Dealy from McGill University while *Utilization of Polymer Melt Rheological Measurements* will be taught by Dr. William H. Tuminello of the DuPont Company. A course description and registration information are enclosed.

POSTER SESSION A poster Session "Recent Research Communications" will be held in Sacramento. Abstracts should be submitted to the session chairs by August 15. For details see the enclosed flyer.

INSTRUMENT EXHIBIT Several companies will exhibit rheological instrumentation at the annual meeting.

DON PLAZEK 1995 BINGHAM MEDALIST

The Bingham Medal for 1995 will be awarded to Professor Don Plazek of the University of Pittsburgh. This award has been given in recognition of outstanding scientific contributions to the field of rheology, especially the measurement of polymer viscoelasticity and its relation to molecular structure.

RHEOLOGY BULLETIN
Rakesh K. Gupta, Editor
Department of Chemical Engineering
West Virginia University
P.O. Box 6102
Morgantown, WV 26506
(304) 293-2111 Ext. 427
Fax: (304) 293-4139
Email: gupta@faculty.coe.wvu.edu

Plazek received his Bachelors Degree in Chemistry and Ph.D. in Physical Chemistry from the University of Wisconsin. In 1967 he was appointed Associate Professor in the Metallurgical and Materials Engineering Department at the University of Pittsburgh. He attained the rank of Professor in 1975 and remained there until his retirement in 1994. From 1987 to 1994, he also served as an adjunct Professor in the Chemistry Department at Carnegie Mellon University.

Much of Professor Plazek's early experimental work dealt with the measurement of elongational and volume creep. This resulted in improved computer methods for converting the measured creep data to other viscoelastic functions, such as dynamic modulus, as well as useful new approximation calculations. In the early 1980's, he turned his attention to the viscoelasticity of polymers and organic glasses and made many important contributions.

Several of Plazek's accomplishments which exemplify his ingenuity and versatility are:

1. Accurate measurements of high reliability of viscoelastic and other physical properties of carefully characterized polymers and assembly of a mass of definitive standard viscoelastic data useful for many applications, especially for critical testing of theories of polymer dynamics.
2. Keen observation of important relationships, which might have gone unnoticed but for the accuracy of his measurements, and discerning analysis of these results to elucidate their physical and molecular origin.
3. Basic scientific analysis of rheological phenomena which have important applications to the processing and performance of polymer materials.
4. Lucid exposition of the basic principles of viscoelasticity and its relation to molecular structure, illustrated by his own measurements, in review articles and short courses.

Professor Plazek received the George Stafford Whitby Award of the American Chemical Society Rubber Division in 1993 and has over one hundred publications to his name.

1995 Journal of Rheology Publication Award

The 1995 Journal of Rheology Publication Award has gone to Tom Annable, Richard Buscall, Rammile Ettelaie and Diane Whittlestone of the ICI Corporate Colloid Science Group in the UK. The award has been given for their paper entitled, "The Rheology of Solutions of Associating Polymers: Comparison of Experimental Behavior with Transient Network Theory," and published in the Journal of Rheology, 37, 695-726 (1993). This paper gives a detailed and complete study of a very significant class of associative thickeners which function by forming transient 3-D networks. The publication presents experimental characterization of the dynamic network properties, the statist-

ical mechanical modeling of the polymer chain configurations and a Monte Carlo simulation of the same. According to one of the reviewers, "Some of the experimental data, including dynamic moduli of blends, are quite new and exciting. Their interpretation in the light of recent transient network theory is also very interesting and will create a new world in the study of associating polymers."

Comments from the President Bob Armstrong

I am pleased to announce that Mort Denn has agreed to serve as the next Editor of the Journal of Rheology. We are very fortunate that Mort is willing to take on this important role for the Society, as he brings to the position not only considerable stature as a rheologist with broad interests and high standards but also valuable experience as a past Editor of the AIChE Journal. Mort was the first choice of a Search Committee consisting of Bob Mendelson (chair), Bill Russel and Henning Winter, and was asked to serve as Editor by vote of the Executive Committee. I would like to take this opportunity to thank this Search Committee for a very careful and thoughtful job. Mort will serve as Interim Editor until the next election.

Of course, Mort replaces Art Metzner, who has served as Editor for the past eleven years. It is not possible adequately to express here my appreciation and high regards for the way Art handled the job as Editor. There is no doubt that he has put an incredible amount of personal energy and enthusiasm into making the Journal the premiere publication in the field of rheology, and the Society as a whole is the beneficiary of his hard work. During his tenure as Editor, the Journal has undergone great changes: we have switched publishers from Wiley to AIP in order to increase the size of the Journal, the turnaround on papers has become as short as possible consistent with quality reviewing, impartial ratings of the Journal put us ahead of or on par with the most prestigious publications, page charges have been dropped, and most importantly the quality of the papers in the Journal is exceptional. Finally, Art has worked very hard to ensure a smooth transition to the new Editor. I hope that you will all take the chance to thank Art for his enormous service to the Society. His insight and advice will also be missed by the Executive Committee.

I would like to thank Albert Co and Chris Petrie for volunteering to organize a home page on the World Wide Web for the Society of Rheology. We expect to have an initial version of the home page up and running by the end of the summer. Feel free to pass your suggestions on to Albert (albertco@maine.maine.edu) or Chris (chris.petrie@newcastle.ac.uk) or to me (rca@mit.edu).

MINUTES OF THE EXECUTIVE COMMITTEE MEETING March 19, 1995

The Executive Committee Meeting was called to order at 9:00 a.m. at the Metzner residence in Wilmington, Delaware. Executive Committee Members in attendance included: Bob Armstrong, Kurt Wissbrun, Art Metzner, Ed Collins, Joe Goddard, Ron Larson, Bill Russel and Andy Kraynik. Invited guests included: Rakesh Gupta, Robert Powell and Montgomery Shaw.

The Society of Rheology 67th Annual Meeting
October 8-12, 1994
Hyatt Regency
Sacramento, California

Location:

Technical sessions will be held at the Hyatt Regency Hotel, 1209 L St., Sacramento, California 95814 [Phone # (916) 443-1234]. The Hyatt Regency is located across from Capitol Park in downtown Sacramento.

Registration:

Registration fees include admission to all technical sessions, plenary lectures, Bingham Award Address, exhibits, Sunday evening reception, the Monday evening reception (to be held at the State Capitol), and the Wednesday evening Poster Session on "Recent Research Communications." The fees are outlined in the enclosed registration form. The Society Banquet will be held on Tuesday evening at the California State Railroad Museum; the cost of this event is \$35, which is not included in the registration fees. As the number of Banquet tickets is limited, please make your reservations at the time of meeting registration.

Please complete and return the enclosed registration form to: Campus Box Office (Rheology), University of California, Davis, CA 95616. The registration fee may be paid by check or money order made payable to the Regents of the University of California; participants paying via Mastercard, Visa or American Express may also do so via FAX to (916) 752-7177. Registrations received before September 1 will not incur a late charge. Phone registration using a credit card may be made by calling (916) 752-1915 (9 a.m. - 4 p.m.) Monday through Friday. Refunds will be granted if cancellation is received in writing by September 15 less a \$25 administrative fee; no refunds will be granted after that date. Substitutions will be accepted until September 22.

Welcoming Reception:

T. A. Instruments, Inc. will host a reception on Sunday evening from 7:00 - 10:00 P.M. in Busby Berkeley's, located on the fifteenth floor, atop the Hyatt, in conjunction with the meeting registration.

Society Reception:

Rheometrics, Inc. will host a reception to be held at the State Capitol, which is directly across the street from the Hyatt Regency, from 7:00 - 10:00 P.M. on Monday evening.

Bingham Award Banquet:

The Bingham Award Banquet will be held in the California State Railroad Museum on Tuesday, beginning at 7:30 P.M. Dinner will be served at 8:30 P.M. Tickets for the banquet may be purchased through the enclosed registration form, and should be purchased ahead of time as seating is limited. Bohlin Instruments will host a pre-banquet reception for those attending the banquet. Haake will provide sponsorship for the Banquet. Bus service to and from the hotel will be provided.

General Business Meeting:

The annual business meeting of The Society of Rheology will be held at the Hyatt Regency on Tuesday, October 10 from 6:00 - 7:00 P.M. All members are encouraged to attend.

Poster Session "Recent Research Communications":

A poster session will be held immediately following the technical session on Wednesday, October 11 in the Hyatt Regency. This event is sponsored by PAAR Physica USA, Inc. and will include refreshments. Those interested in presenting a poster are encouraged to submit an abstract to Professor Gerald Fuller, Department of Chemical Engineering, Stanford University, Stanford, California 94305. (See enclosed flyer.)

Transportation:

Sacramento's Metropolitan Airport is served by many airlines and is located approximately twelve miles from downtown Sacramento and the Hyatt Regency Hotel. Taxi service takes approximately twenty minutes and costs approximately \$25 each way. Airport shuttle service is available through Downtown Shuttle [(916) 567-6682]. The Shuttle picks up passengers every half hour beginning at 5:30 a.m. and ending at 9:30 p.m. on week days and ends at 8:30 p.m. on weekends. Passengers taking the Shuttle should exit the airport and cross the first street to the center island where the Shuttle Stands are located. Drivers coming to the Hyatt from the Airport on Interstate 5 exit at J St. Coming from San Francisco, take Business Interstate 80 and then take the Downtown Sacramento Exit. There is ample parking attached to the hotel or in daily parking lots within a few blocks. The hotel concierge can be reached at (916) 443-1234 for further directions.

Instrument Exhibits:

Several instrument vendors will demonstrate their products throughout the meeting in Ballroom C of the Hyatt.

Sightseeing:

Sacramento, California's capitol city, is one of the finest capitol cities in the United States. From the romantic and serene flow of two rivers to the picturesque beauty of the rolling foothills, Sacramento has something to offer everyone. Starting with the Gold Rush and continuing to the present, Sacramento defines over 150 years of California history. The hotel is within walking distance of the State Capitol, Sutter's Fort, the Crocker Art Museum and the Governor's Mansion. It is also located near Old Town Sacramento which is site for the California State Railroad Museum, Discovery Museum, the Delta King Riverboat and many unique shops and restaurants. The recently renovated Downtown Plaza houses over 100 stores. The University of California at Davis is located fifteen miles away. Sacramento is central to many activities that typify California. Outdoor buffs can visit to Lake Tahoe or other sites within the Sierra Nevada in less than two hours. Enophiles can drive to Napa Valley Wineries or their smaller Sierra Foothills counterparts in less than two hours. San Francisco is only a 90 minute drive to the west and offers world class shopping, restaurants, theater and museums. Visitor's guides will be available at the meeting, or may be obtained from the hotel at (916) 443-1234.

Hotel Accommodations:

The Hyatt Regency Sacramento is the primary location for this meeting. It is located directly across from the State Capitol in the downtown area. The Hyatt has beautifully appointed guest rooms, with all of the modern amenities for the travelers. Special guest room rates for the Society of Rheology Meeting are \$104 for either a single or double plus a 12% occupancy tax. Please advise when making your reservation that you are with the Society of Rheology Conference. Reservation at this special rate will be available until September 16, 1995. After this date, reservations can be made only on space and rate availability. Reservations can be made using the enclosed form, calling the hotel directly at (916) 443-1234 or by calling (800) 233-1234. The Hyatt boasts of Dawson's Restaurant, which is one of the best steak houses in the city. Ciao-Yama is the full services restaurant offering breakfast, lunch and dinner. Close by the Hyatt are excellent restaurants.

Other hotel accommodations are available in the general area. The Holiday Inn - Downtown Plaza is located at 300 J St [(916) 446-0100] and has rooms starting at \$95. The Clarion Inn at 700 16th St [(916) 444-8000] has singles starting at \$79 and doubles starting at \$89. Both of these hotels are approximately a fifteen minute walk from the Hyatt Regency.

Climate:

Characteristics for Sacramento in October are warm Indian summer days (in the upper 70's to low 80's) and cool evenings and nights (in the upper 50's to low 60's). While rain is possible in early October, the rainy season generally starts at least one month later.

The Society of Rheology 67th Annual Meeting
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Hyatt Regency
Sacramento, California

REGISTRATION FORM

Name _____
(Please type or print)

Name as you would like it to appear on badge if different from above _____

Affiliation _____

Address _____

City _____ State or Province _____

Zip or Postal Code _____ Country _____

Telephone _____ FAX _____

Electronic Mail Address _____

Full Conference Registration Prior to September 1:

Late Registration:

Member	\$ 90	_____	\$ 110
Non-Member with 1 Year Membership	\$ 150	_____	\$ 170
Non-Member	\$ 150	_____	\$ 170
Student	\$ 25	_____	\$ 30
Retired Member	\$ 25	_____	\$ 30
Banquet Ticket	\$ 35	_____	

Total Enclosed: _____

Please indicate your attendance at the Banquet on this form; the registration fee does not include this event. Note the number of Banquet tickets is limited, so please reserve your ticket at this time.

Please indicate whether you will bring along a person who might be interested in local activities .

Refunds: Cancellations received in writing by September 15 will be subject to a \$25 administrative charge. No refunds will be granted after that date; substitutions will be accepted until Friday, September 22.

Method of Payment: Check or Money Order made payable to the Regents of the University of California is enclosed.
Credit Card: Mastercard Visa or American Express (Please check correct card.)

Account Number _____

Expiration Date _____ Cardholder Name _____

Signature (Required for credit card transactions).

Your registration will be confirmed upon receipt. **Forms with credit card information may be faxed to (916) 752-7117.**
Return completed form and payment to:

Campus Box Office (Rheology)
University of California
Davis, CA 95616

Register by phone (credit card payments) through the Campus Box Office at 916-752-1915 (9 a.m. - 4 p.m. Monday through Friday).

*The Society of Rheology 67th Annual Meeting
October 8-12, 1995
Hyatt Regency
Sacramento, California*

HOTEL RESERVATION FORM

Name _____
(Please type or print)

Affiliation _____

Address _____

City _____ State or Province _____ Zip Code _____

Country _____ Telephone _____ FAX _____

Arrival Date/Time _____ AM/PM Departure Date/Time _____ AM/PM

Check-in time is 3:00 P.M. Check-out time is 11:00 A.M.. When sharing accommodations, please submit only one form to avoid duplication.

Your reservation will be held until 4:00 P.M. unless guaranteed by a deposit of one night's room and tax or by a major credit card. If you do not cancel your reservation by 4:00 P.M. on the day of arrival, you will forfeit your deposit or the first night's room and tax will be charged to your credit card.

- Single Room at \$104 per night. Double Room at \$104 per night.

Name of Persons Sharing Accommodations

- Check or Money Order payable to "Hyatt Regency"

- Credit card: Mastercard Visa American Express

Account Number: _____ Expiration Date: _____

Cardholder's Name _____

Authorized Signature

Return form by September 16, 1995 to: Hyatt Regency
1209 L St.
Sacramento, CA 95814
Attention: Reservations

Reservations may be made via telephone or FAX by calling: 916-443-1234 or 1-800-233-1234 or FAX: 916-321-6631. If paying by check, please send it directly to "Reservations".

In order to get the special rate, please mention that you will be attending the "Society of Rheology" Meeting when making your reservations.

You are encouraged to submit your reservation form early.

CALL FOR PAPERS

Poster Session

The Society of Rheology
67th Annual Meeting
Sacramento, California
October 8-12, 1995

Subject: All areas of interest in the field of rheology

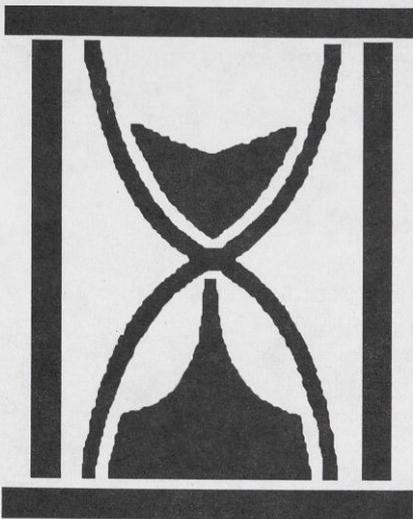
Submit abstracts by August 15, 1995
for poster presentation to:

Andrea W. Chow
Lockheed Martin Palo Alto Research Lab.
0/93-50, B/204
3251 Hanover Street
Palo Alto, CA 94304-1191
Ph: (415) 424-2015 Fax: (415) 354-5795
Email: chow_andrea@mm.rdd.lmsc.lockheed.com

or

Gerald G. Fuller
Department of Chemical Engineering
Stanford University
Stanford, CA 94305-5025
Ph: (415) 723-9243 Fax: (415) 725-7294
Email: ggf@rio.stanford.edu

ΠΑΝΤΑ



ΣΕΙ

The Society of Rheology

Presents

A Two-Day Short Course on

Experimental Methods in Melt Rheology

by

John M. Dealy
McGill University

Utilization of Polymer Melt Rheological Measurements

by

William H. Tuminello
The DuPont Company

October 7 and 8, 1995
Hyatt Regency
Sacramento, CA

Course Description

The first day of the course will consist of a review of those experimental methods that have proven most useful to academic and industrial rheologists. It will commence with a general description of the rheological behavior of molten polymers, and this will be followed by a discussion of the basic problems one faces in making a rheological measurement. The remainder of the course will examine specific types of apparatus, emphasizing their capabilities and limitations and showing how to get the most out of them. Examples of the data provided by each type will be presented. The instruments described will include capillary, rotational and sliding plate rheometers for measuring shear properties, and various types of extensional rheometer. The final section of the course will deal with on-line process rheometers.

Rheological measurements can be used to bridge the gap between polymer structure and processability. In terms of structure, many correlations have been made with molecular weight and distribution. In the last ten years a great deal of effort has focused on making quantitative predictions of

molecular weight distributions for linear polymers. In many cases it is desirable to shorten measurement times or lower temperatures due to polymer instability by plasticization; these effects will be discussed. The effects of phase separation for polymer blends as well as block and graft copolymers will also be addressed. Long-chain branching, gelation (e.g. chemical, crystallization, ionic), and liquid ordering (i.e. liquid crystals) are other structures that will be covered. Much less is known about how structures affect processing. We will talk about the limited literature in this area with specific reference to processes such as fiber spinning, blow molding, extrusion and flow through porous media.

1. DAY ONE

- Introduction to rheology
- Fundamentals of rheometry
 - Basics of rheological measurements
 - Experimental methods
- Capillary rheometers
 - Principles
 - Operational considerations
- Rotational rheometers
 - Principles
 - Controlled strain vs controlled stress
 - Accuracy and precision
- Sliding plate rheometers
 - Principles
 - Applications
- Extensional rheometers
 - Survey of experimental methods
 - Experimental results
- Process rheometers
 - Applications
 - Instruments
- Summary

2. DAY TWO

- Structure-Rheology relationships
 - Molecular weight and distribution
 - Correlations
 - Quantitative determinations
 - Long-chain branching
 - Gelation
 - Plasticization
 - Phase Separation
 - Liquid crystals
- Structure-Processing Relationships
 - Fiber spinning
 - Wire coating
 - Film casting/blowing
 - Blow molding
 - Extrusion
 - Pipe flow
 - Flow through porous media

Registration

The fee for the two-day course and lecture notes is \$350 prior to September 22, 1995. For registration after September 15, the fee will be \$400. Student rates are half of the base rate.

Checks should be made payable to The Society of Rheology and sent together with the registration form to

Professor Peter E. Clark
Department of Mineral Engineering
The University of Alabama
Box 870207
Tuscaloosa, AL 35487

Telephone (205) 348-1682
Fax (205) 348-9455

Reservations for lodging at the Hyatt Regency Hotel should be made by the participant (Fax (916) 321-6631). A block of rooms has been reserved so mention the Society of Rheology when making reservations.

REGISTRATION FORM

RHEOLOGY SHORT COURSE

Hyatt Regency Hotel
1209 L St.
Sacramento, CA 95814

Do you need confirmation? _____
Will you need a receipt? _____

(800) 233-1234
Fax (916) 321-6631

Date _____

Name _____

Company _____

Address _____

Business Telephone _____

FAX _____

Date of Arrival _____

Please make checks payable to The Society of Rheology

Return this registration form together with payment to:

Professor Peter E. Clark
Department of Mineral Engineering
The University of Alabama
Box 870207
Tuscaloosa, AL 35487
Telephone (205) 348-1682, Fax (205) 348-6579

NOTE: The course will begin at 8:30.

Date Received _____
Payment _____

**THE SOCIETY OF RHEOLOGY
STATEMENTS OF REVENUE AND EXPENSE
AS OF DECEMBER 1994**

	<u>1993 Budget</u>	<u>1993 Actual</u>	<u>1994 Budget</u>	<u>1994 Actual</u>	<u>1995 Budget</u>
REVENUES					
Dues	\$ 47,000	\$ 48,207	\$ 47,000	\$ 51,675	\$ 50,000
Interest	11,000	14,096	14,000	16,305	16,000
Journal of Rheology	224,023	216,871	208,266	218,477	201,690
Mailing list Sales	300	434	200	565	400
Annual Meetings	5,000	7,726	4,000	2,902	4,000
Short Courses	6,000	9,551	4,500	12,863	5,250
	<u>293,323</u>	<u>296,885</u>	<u>277,966</u>	<u>302,787</u>	<u>277,340</u>
TOTAL REVENUE					
EXPENSES					
AIP Administrative Service	6,000	6,000	7,000	7,000	7,000
AIP Member Society Dues	3,200	3,612	4,800	5,076	5,000
AIP Financial Handling	4,000	4,000	4,000	3,600	4,500
AIP Physics Olympiad	1,000	2,000	1,000	1,000	1,000
Renewal Billing	1,500	1,461	1,500	920	1,500
Journal of Rheology	175,440	168,481	207,274	249,998	201,625
Bulletins & Abstracts	6,000	9,791	6,500	11,344	7,000
Short Courses	6,000	5,418	4,500	4,592	5,000
Bingham Award	6,500	5,000	3,000	2,500	3,500
Executive Cmt. Meeting	8,000	5,373	6,500	4,780	6,500
Pres. Discretionary Fund	1,500	500	1,500	-	1,500
Trea. Discretionary Fund	1,500	494	1,500	802	1,500
Program Chm. Discre. Fund	2,000	-	2,000	-	2,000
Secretarial Services	1,000	575	1,000	-	1,000
Mailing	5,000	1,734	5,000	198	5,000
Office Expenses	2,500	1,286	1,500	1,408	1,500
Banking Services	25	10	25	26	100
Liability Insurance	200	182	182	169	200
Membership Directory	-	273	4,500	6,255	3,500
Membership Brochure	1,500	692	1,000	1,200	1,000
Accountant	1,500	1,095	1,500	1,100	1,500
Student Member Travel Grant	3,500	1,648	5,000	6,157	5,000
Advance Deposit For Future Mtg.	-	500	1,000	-	1,500
Miscellaneous *	500	-	500	4,900	5,500
	<u>238,365</u>	<u>220,125</u>	<u>272,281</u>	<u>313,025</u>	<u>273,425</u>
TOTAL EXPENSE					
NET INCOME	\$ <u>54,958</u>	\$ <u>76,760</u>	\$ <u>5,685</u>	<u>(10,238)</u>	<u>3,915</u>
NET ASSETS AT YEAR END		\$ <u>366,159</u>		\$ <u>355,921</u>	

* 1995 Budget includes \$4,900 computer hardware and software for Bulletin Editor.

Application for Membership in THE SOCIETY OF RHEOLOGY

I wish to apply for membership in THE SOCIETY OF RHEOLOGY dating from January 19 _____

(Family Name) _____ (Given Name) _____
(Please print)

Mail Address _____

Telephone Number _____ Fax Number _____

E-Mail Address _____

Please indicate in the boxes provided below the code letter from the list at the right, which best describes your areas of interest in order of decreasing importance.

- PRIMARY
- SECONDARY
- TERTIARY

Professional Affiliation

- Academic National Laboratory
- Industrial Other

INTEREST AREA	CODE
Biorheology	A
Experimental Methods	B
Foods	C
Inks, Paints, Coatings	D
Materials Science	E
Petroleum Production	F
Plastics Processing	G
Polymer Dilute Solutions	H
Polymer Melts and Conc. Solns.	I
Theoretical and Applied Mechanics	J
Rubbers and Elastomers	K
Solid Polymers	L
Suspensions	M
Theory of Viscoelasticity	N
Electrorheology	P
Composite Materials	Q
Other _____	O

I understand that my regular member's subscription to the **Journal of Rheology** is for my personal use, and not for library use.

 (Signature)

 (Date)

Enclose remittance in U.S. dollars (only) drawn on a U.S. bank and mail to: **THE SOCIETY OF RHEOLOGY**,
 c/o American Institute of Physics, 500 Sunnyside Boulevard, Woodbury, NY 11797-2999, (516) 576-2403.

- \$40 for Regular Annual Dues \$25 for Students

Complete if paying by credit card	CREDIT CARD NUMBER	EXP. DATE	SIGNATURE
<input type="checkbox"/> AMERICAN EXPRESS <input type="checkbox"/> VISA <input type="checkbox"/> MASTER CARD			

Executive Committee Minutes (Continued)

The minutes of the October 2, 1994 Executive Committee Meeting, which appeared in the January 1995 Rheology Bulletin, were approved as read.

Bob Armstrong announced that Professor Morton M. Denn, of the University of California at Berkeley, had accepted the offer of the Executive Committee to serve as interim Editor for the Journal of Rheology. Denn will be a candidate for Editor in the 1995 election. The Executive Committee had accepted the recommendation of the Editor Search Committee, which consisted of Bob Mendelson (chair), Bill Russel and Henning Winter. We thank them for a job well done.

The Executive Committee voted to accept the recommendation of the Bingham Award Committee by approving the selection of Professor Don Plazek of the University of Pittsburgh to receive the Bingham Medal in 1995.

We discussed the question of archiving records of the Society at AIP headquarters. Andy Kraynik summarized discussions from a workshop on electronic publishing, sponsored by the American Physical Society.

In the Treasurer's report, Ed Collins indicated that the Society had a fund balance of \$355,921 at the end of 1994, due to a net loss in annual income of \$10,238. The Journal of Rheology experienced a net loss of \$31,521 due to increases in: printed pages, production costs and membership subscriptions.

In the Editor's report, Art Metzner noted that the average time from receipt of a manuscript to the date the Journal appears on a U.S. member's desk is about nine months. He commented on manuscript flow and published pages, and indicated that four semifinalists were being considered for the 1995 Publication Award. Monty Shaw, in his new capacity as Associate Editor for Finance, reported on finance matters for the Journal. We voted to increase the non-member subscription fee for the Journal of Rheology to \$425 in 1996. Rakesh Gupta reported on his transition to Editor of the Rheology Bulletin.

Kurt Wissbrun discussed activities of the Meetings Policy Committee. Bob Powell reported on local arrangements for the upcoming annual meeting in Sacramento, California, where Gerry Fuller will serve as Technical Program Chair. The International Congress on Rheology will convene in Quebec City, Canada, August 18-23, 1996. Bill VanArsdale will chair local arrangements for the annual meeting in Galveston, Texas, February 16-20, 1997; Don Baird and Jay Schieber will coordinate the technical program. The regular annual meeting for 1997 will be arranged by Jack Zakin in Columbus, Ohio. Joe Goddard expressed interest in submitting a proposal to host the International Congress on Rheology for 2000 in San Diego.

Under AIP issues, we approved posting the Membership Directory in electronic form on PINET, with some restrictions.

Under new business, a proposal to reduce the registration fees for speakers at annual meetings was rejected.

The Executive Committee thanked Betty and Art Metzner for their warm hospitality while hosting this meeting.

The meeting was adjourned at 3:45 p.m.

Student-Member Travel Grants Available for Sacramento

The Society of Rheology is again offering grants to support the cost of public transportation to the annual meeting to any second or third year graduate student who is a member of the Society as of July 1, 1995, and whose faculty advisor is also a member as of that date. Each grant will be a maximum of \$350, available on a first-come, first-served basis, until available funds are exhausted. To apply, the student should write a letter requesting the grant. The student's faculty advisor should add a letter of support, certifying that both the advisor and the student are members of the Society of Rheology, and that the student is a second or third year graduate student. Only one application per faculty advisor will be accepted. The letters from the student and the advisor should be mailed in the same envelope **before September 1, 1995** to:

Ronald G. Larson
AT&T Bell-Laboratories, Rm GE-320
600 Mountain Avenue
Murray Hill, NJ 07974-0636
(908) 582-6158; Fax: (908) 582-5570
Email: rgl@likewise.att.com

Comments from the Treasurer Ed Collins

A close examination of the Journal of Rheology 1994 year end statement will reveal a net loss of \$31,521. This substantial loss was the result of the extra large number of pages (2017) printed in 1994, some 117 pages above our estimate used for preparation of the budget, together with the increased costs in Journal production. Examining the Society of Rheology year end statement will show that this loss in the Journal was off set, in part, by the successful short course in Philadelphia and the net proceeds of our annual meeting.

In short, our financial condition is healthy in spite of this large loss and justifies the publication reserves set aside specifically for such unexpected expenses. For further details, the Treasurer urges you to attend the next business meeting in Sacramento.

CHANGE OF ADDRESS

If you are moving, please inform: Janis Bennett, (516) 576-2403, Fax: 576-2223, or Carolyn Gehlbach, (516) 576-2404 at

THE SOCIETY OF RHEOLOGY
c/o American Institute of Physics
500 Sunnyside Boulevard
Woodbury, NY 11797

JOURNAL OF RHEOLOGY
STATEMENTS OF REVENUE AND EXPENSE
AS OF DECEMBER 1994

	<u>1993 Budget</u>	<u>1993 Actual</u>	<u>1994 Budget</u>	<u>1994 Actual</u>	<u>1995 Budget</u>
REVENUES					
SUBSCRIPTION, ADVERTISING AND SALES	\$ 208,800	\$ 201,615	\$ 200,191	\$ 199,468	\$ 199,375
PAGE CHARGES	8,000	7,678	-	995	-
PUBLICATION AWARD	-	-	-	1,300	1,000
MISCELLANEOUS	7,223	7,578	8,075	16,714	1,315
TOTAL REVENUE	<u>224,023</u>	<u>216,871</u>	<u>208,266</u>	<u>218,477</u>	<u>201,690</u>
EXPENSES					
ADVERTISING AND MARKETING	15,600	8,095	12,050	14,068	12,760
SINGLE COPY AND REPRINTS	7,954	7,457	8,825	10,830	3,240
AIP EDITORIAL	27,097	29,368	35,280	47,815	36,770
SOR EDITORIAL	34,500	29,483	33,000	30,052	37,000
PRODUCTION COSTS	43,431	48,191	57,309	79,443	56,830
PRINTING AND MAILING	36,129	35,135	49,503	54,929	42,240
SUBSCRIPTION FULFILLMENT	10,729	10,752	11,307	11,861	11,785
PUBLICATION AWARD	-	-	-	1,000	1,000
TOTAL EXPENSE	<u>175,440</u>	<u>168,481</u>	<u>207,274</u>	<u>249,998</u>	<u>201,625</u>
NET INCOME	<u>\$ 48,583</u>	<u>\$ 48,390</u>	<u>\$ 992</u>	<u>(31,521)</u>	<u>65</u>

Meeting Announcements

August 7-11, 1995: 20th Annual Short Course on Rheological Measurements: Application to Polymers, Suspensions and Processing. University of Minnesota. Contact: Susan Burke Professional Development and Conference Services, U of MN, 204 Nolte Center, 315 Pillsbury Dr. S.E., Minneapolis, MN 55455. (612) 625-3530; Fax: (612) 626-1632.

August 14-18, 1995: International Symposium on Advances in Structured and Heterogeneous Continua II, Moscow, Russia. Contact: Prof. D.A. Siginer, Dept. of Mechanical Engrg., Auburn University, Auburn, AL 36849. Tel: (334) 844-3331; Fax: (334) 844-3307.

August 21-24, 1995: Symposium on Composites Processing, Sponsored by International Community for Composites Engineering. Contact: Prof. R. Pitchumani, Mechanical Eng. Dept., U. of CT, Storrs, CT 06269. (203) 486-0683.

September 3-6, 1995: Polymer Melt Rheology Conference, University of Wales. Contact: Prof. K. Thomas, Dept. of Mathematics, U. of Wales, Penglairs, Aberystwyth, Dyfed, SY23 3BZ, UK. 44 1970-622768 Fax: 44 1970-622777

October 19-20, 1995: Society of Plastics Engineers RETEC on Polymer Alloys and Blends and NRC's Polyblends '95, Montreal, Canada. Contact: Dr. A. Ajji, NRC/IMI, 75 de Mortagne, Boucherville, QC, Canada J4B 6Y4. Tel. (514) 641-5244; Fax: (514) 641-5103.

November 12-17, 1995: ASME International Congress, San

Francisco, CA. Symposium on Electrorheological Fluids III and Symposium on Developments and Applications of Non-Newtonian Flows III. Contact: Prof. D.A. Siginer, Dept. of Mech. Engrg., Auburn Univ., Auburn, AL 36849 Tel: (205) 844-3331; Fax: (205) 844-3307.

November 13-17, 1995: University of Strathclyde intensive short course on Engineering Rheology. Contact: Professor J. Ferguson, Dept. of Pure and Applied Chemistry, 295 Cathedral St., Glasgow G1 1XL, Scotland, UK. Tel: 44 141-552-4400 ext 2161/2; Fax: 44 141-552-5664.

June 12-14, 1996: Symposium on Recent Developments in Elasticity, ASME summer AMD/MD meeting, Baltimore MD. Contact: Prof. R.C. Batra, Dept. of Engrg. Science & Mech., Virginia Tech., Blacksburg, VA 24061. Tel: (703) 231-6051; Fax: (703) 231-4574.

August 4-9, 1996: 36th IUPAC International Symposium on Macromolecules, Seoul, Korea. Contact: Dr. K.U. Kim, Division of Polymers, Korea Inst. of Science & Tech., P.O. Box 131, Cheongryang, Seoul 130-650, Korea. Tel: 82 2-957-6104; Fax: 82 2-957-6105.

August 18-23, 1996: XIIth International Congress on Rheology, Quebec City, Canada. Contact: Dr. M. Dumoulin, National Research Council-Canada, Ind. Mtls. Institute, 75, de Mortagne, Boucherville, Quebec, Canada J4B 6Y4 Fax: (514) 641-5103. Congress Chairman is Prof. D. De Kee. E-mail: ddekee@coupal.gcm.usherb.ca