

# RHEOLOGY BULLETIN

Publication of The Society of Rheology, Inc.

Vol. 49, No. 1

January, 1980



## 52nd ANNUAL MEETING

Williamsburg, Virginia  
February 22-26, 1981

This will be the official 1980 meeting in deference to the International Congress held this fall.

### Program Chairman

Costel D. Denson  
University of Delaware  
Department of Chemical Engineering  
Newark, Delaware 19711

### Local Arrangements Chairman

Greg McKenna  
National Bureau of Standards  
A-209, Bldg. 224  
Washington, DC 20234

## VIIIth INTERNATIONAL CONGRESS ON RHEOLOGY

A 4th circular will appear shortly. Registration fee: 100,000 Italian lire before April 30, 1980.

Date: September 1-6, 1980

Location: University of Naples,

Personnel involved:

Secretary of Organizing Committee  
L. Nicolais  
Montedison DIRS  
Via Nuova delle Brece  
150, Barra, Naples, Italy

Travel Arrangements:

Conference Travel Services of New York, Inc.  
551 Fifth Ave., Suite 1425  
New York, NY 10017;  
OR  
F. Ili Baldissara  
Piazza Bovio 22  
80100 Napoli, Italy

## 1981 ANNUAL MEETING

Louisville, Kentucky  
October, 1981

### Program Chairman

Lawrence R. Schmidt  
R & D Center  
General Electric Company  
P.O. Box 8  
Schenectady, New York 12301

### Local Arrangements Chairman

C. Eugene Miller  
202 Wildwood Lane  
Louisville, Kentucky 40223

## COMMITTEES

### Executive Committee

Edward B. Bagley (President)  
Alan N. Gent (Vice President)  
Montgomery T. Shaw (Secretary)  
Edward A. Collins (Treasurer)  
Raymond R. Myers (Editor)  
Elliot A. Kearsley (at large)  
Arthur S. Lodge (at large)  
Irvin M. Krieger (Past President)

### Bingham Awards Committee

Kurt Wissbrun (Chairman) (1980)  
R. Byron Bird (1980)  
Robert S. Moore (1981)

Larry V. McIntire (1981)

Donald C. Bogue (1982)

Chan I. Chung (1982)

### Committee on Site Selection and Topics

Edward A. Collins (Chairman)

### Committee on Education

Donald Hunston (Chairman)

Edward A. Collins

Christopher W. Macosko

### Representative to International Committee on Rheology

J. R. Knox

## FUTURE MEETING SITES

Suggestions for possible sites for future meetings are requested. Any member of The Society who wishes to suggest a location or to host a meeting from 1982 onward, please contact the chairman of the site selection committee, Edward A. Collins, Diamond Shamrock Corporation, Box 348, Painesville, Ohio 44077.

## 1980 BINGHAM MEDAL NOMINATIONS

The Committee requests that nominations be sent to chairman Kurt Wissbrun, Celanese Research Company, Box 100, Summit, New Jersey 07901, before March 15, 1980. Supporting documents should accompany the nominations.

## MINUTES OF THE EXECUTIVE COMMITTEE MEETING

The Society of Rheology  
Boston, Massachusetts  
October 28, 1979

The meeting was called to order by President I. M. Krieger at 2:10 pm at the Copley Plaza Hotel in Boston, MA. Attending were Executive Committee members E. B. Bagley, E. A. Collins, I. M. Krieger, J. R. Knox, A. B. Metzner, R. R. Myers, W. R. Schowalter and M. T. Shaw. Also present were R. E. Cohen, D. Hunston, J. Russell, C. L. Sieglaff, J. M. Starita, E. J. Tolle, and N. W. Tschoegl.

Knox reported as the Coordinator of the Fiftieth Anniversary Meeting Committee, citing estimated expenses of \$11,268 and income of \$13,606 for the Golden Jubilee Meeting. He felt that an income of \$1500 was possible and that the losses would not exceed \$1000 in the worse case. Cohen and Tolle of the Local Arrangements Committee reviewed the major events of the meeting. They reported that no unsolvable problems had been encountered.

The Secretary read the annual "Report of the Secretary" and it was approved by voice vote. The Secretary also read a letter, dated 11 April 1979, from Mr. Millman of AIP requesting approval of the new wording of Article VII, Section 2 of the AIP constitution. This article concerns the number of directors on the AIP Governing Board from each member society; The Society of Rheology would continue to have just one director. Approval of the new wording was granted by motion and voice vote.

Treasurer Collins presented his report on the financial condition of The Society. The balance in the account as of October, 1979, was \$34,554.89, while the projected balance for the end of 1979 is \$30,275. The Treasurer is making every effort to keep the interest earnings on the funds at a high level commensurate with safety.

At this point in the meeting a report by J. M. Starita was given on travel to the VIIIth International Congress on Rheology, scheduled for September 1-6, 1980, in Naples, Italy. Starita has chosen Conference Travel Services of New York to plan group travel to Italy. A representative of Conference Travel Services, Ms. J. Russell, described the tours and promotion literature they had prepared. After considerable discussion it was moved and passed that Conference Travel Services could bring the tours to the attention of the membership, but with the understanding that a highly flexible tour be included, that departure points other than New York be considered (if there is sufficient interest), and that the Executive Committee had not formed an



**RHEOLOGY BULLETIN**  
**Raymond R. Myers, Editor**  
**Department of Chemistry**  
**Kent State University**  
**Kent, Ohio 44242**

opinion on the quality or the economics of the proposed tours. Starita will continue to monitor the progress on these travel arrangements.

N. W. Tschoegl, the representative on the International Committee of Rheology, reported that two new societies, one in Mexico and the other in Israel, had been formed.

The report of the Committee on Education was read by its Chairman, D. Hunston who noted the favorable response of the members to all Society-sponsored short courses, as revealed by a recent survey. He proposed raising the instructor's fee to \$400, when two instructors taught a course, but it was felt that the present fee of \$300 was adequate.

President Krieger called attention to a change in the Certificate of Incorporation of The Society required by the IRS. This change will require The Society to distribute its assets to another 501-C-3 organization, chosen by the Executive Committee.

The Editor's report was reviewed by Editor Myers who pointed out that the publisher (John Wiley) has started a subject index for the Journal of Rheology and key words must henceforth be provided by the authors. Myers also discussed the policy for rebuttals to articles (the rebuttal and the author's closing remarks will be printed back-to-back) and his efforts to broaden the areas of interest represented on the Board of Editors. It was moved and passed unanimously to accept the Editor's report with a note of thanks to the Editor.

Chairman Sieglaff presented the report of the Membership Committee, noting that the regular membership is well over 1000 and the sustaining membership has risen dramatically to 31. In the discussion following the report, it was decided that the Membership Committee should look into ways for increasing the attractiveness of the sustaining membership.

The report of the Site Selection Committee was presented by its Chairman, E. A. Collins. Two meetings will be held in 1981, the 52nd and 53rd Annual Meetings. Motions were presented and passed to have the 52nd Annual Meeting in Williamsburg, VA., in late February, 1981, and the 53rd in Louisville, KY., in late October, 1981.

As a final piece of business, the Executive Committee voted to approve the payment of dues to the CSSP (Council of Scientific Society Presidents) if the incoming President (E. B. Bagley) so wishes.

The meeting was adjourned at 5:30 pm.

Respectfully submitted,  
M. T. Shaw,  
Secretary

## MINUTES OF ANNUAL BUSINESS MEETING

The Society of Rheology  
Boston, Massachusetts  
October 31, 1979

The Annual Business Meeting of The Society of Rheology was called to order at 5:25 pm by President I. M. Krieger.

The report of the Secretary was read by M. T. Shaw who announced the results of the recent election of officers. The new officers are: E. B. Bagley, President; A. N. Gent, Vice President; M. T. Shaw, Secretary; E. A. Collins, Treasurer; R. R. Myers, Editors; and E. A. Kearsley and A. J. Lodge, Executive Committee Members-at-Large. The report of the Secretary was accepted by motion, second and voice vote.

Treasurer E. A. Collins presented a report on the financial condition of The Society, noting a balance of \$34,554 as of October 20, 1979. A budget for 1980 was also presented, showing an estimated balance of \$30,275 for December 31, 1980. The report of Treasurer was approved by motion, second and voice vote. At this point, President Krieger explained the changes required in The Society's Certificate of Incorporation, where the disposal of the assets of The Society, should it dissolve, must be clearly specified.

The Editor's report was read for Editor R. R. Myers by W. R. Schowalter. Numbers 1-5 of Volume 22 of the Journal of Rheology have been published for a total of 31 papers in 1979, so far. Two Bulletins have also been issued.

A report by J. R. Knox on the Golden Jubilee Meeting followed. The latest attendance figure was 407, excluding spouses. The number of exhibitors was 30. Should everything work out favorably, receipts of \$1500 would be possible. The efforts of the Local Arrangements Committee, R. E. Cohen and E. J. Tolle, and the Program Chairman, R. S. Porter, were recognized. President Krieger extended his official

thanks to Knox, Porter, Cohen and Tolle in the form of motion, which was approved by a unanimous vote.

The Secretary reviewed the proceedings of the Executive Committee Meeting, held on October 28, 1979, noting particularly the travel arrangements for the International Congress. Conference Travel Services will be presenting group tours for the consideration of the members.

Chairman D. Hunston of the Committee on Education reported on the current short course, citing receipts of about \$1000, and on the recent survey of short courses, which disclosed significant interest in all previous course topics. The Committee on Education is well along on a file of educational tools, and Hunston requested suggestions on both the contents of the file and the format for its presentation.

The activities of the Site Selection Committee were reviewed by its Chairman, E. A. Collins. Sites and dates for the 52nd and 53rd Annual Meetings are, respectively, Williamsburg, VA, in February 1981; and Louisville, KY in October 1981. Collins noted that invitations for the 1984 International Congress are needed by March, 1980.

The meeting was adjourned at 6:10 pm.

Respectfully submitted,  
M. T. Shaw,  
Secretary

## EDITOR'S REPORT THE SOCIETY OF RHEOLOGY

Raymond R. Myers  
September 26, 1979

### *Publication Status*

Volume 22 has issued bimonthly; Issues 1 through 5 contained 31 papers, 5 notes, and abstracts from 48th and 49th annual meetings of The Society of Rheology, and abstracts from Volume 6, Issues 1, 2, 3 and 4, and Volume 7, Issue 1 of the Society of Rheology, Japan.

To date, 44 manuscripts were submitted in 1979. Forty-two papers have been accepted so far this year, coming from papers which had been submitted this year and last.

### *Bulletins*

The December 1978 Bulletin which was distributed in January 1979 contained the information needed for the April meeting in Hawaii. The Program and Abstracts for the April meeting were mailed last March.

A July Bulletin was prepared and mailed. This was the first time in my incumbency that the meeting Program and Abstracts were not processed through the Editor's office. The executive committee should discuss whether this practice, started this year on a trial basis, should be continued.

### *Indexing*

Wiley began indexing our articles last year. The editor's responsibility in this effort is to provide key words for the indexing. The assistant editors will be asked if this practice should continue until a means can be developed to assure that all authors provide key words.

### *Assistant Editor Acknowledgment*

The degree of success in any venture depends on the efforts of those involved. It has been my pleasure to work with a corps of assistant editors (E. Collins, S. Onogi, G. Savins, C. Sieglaff, A. Silberberg, and J. White; and L. McIntire on the Biorheology Symposium) who have rendered excellent service to The Society with no compensation. The executive committee has placed day-to-day policy matters in the hands of this group, and generally we keep things running smoothly. However, an issue has been raised by a reader on which Executive Committee advice is being sought: to what extent can the writer of a note take issue with an author of a published JOR paper?

For your edification, our policy is to allow the author of the paper to work out differences with the note writer, allowing the former to insist that the note be sent through the referee channels. After one exchange of correspondence the note and its rebuttal are published back-to-back. It is assumed that the writing of the rebuttal is an acknowledgment of acceptance of the policy.

## COMMITTEE ON EDUCATION REPORT

The short course at the Boston meeting was quite successful with 29 registrants including 4 from other countries. The income from registration fees was \$3010.00 and with expenses of \$2229.50 there was a net income to the society of \$780.50. The response from the evaluation form filled out by the attendees was favorable with almost everyone finding the course very useful.

The response to the short course questionnaire in last year's bulletin indicated an interest in many subjects and thus provided a large supply of future short course topics.

The collection of information on educational material has produced a large list of items but to avoid missing any important items, a questionnaire has been prepared for an upcoming bulletin.

Donald Hunston  
Chairman,  
Committee on Education



AMERICAN INSTITUTE OF PHYSICS INCORPORATED FOR  
THE SOCIETY OF RHEOLOGY

STATEMENT OF RECEIPTS & DISBURSEMENTS  
SIX MONTHS ENDED JUNE 30, 1979

Balance in Account December 31, 1978		\$28,984.15
<i>Receipts</i>	January 1 - June 30 1979 (AIP)	
	January 1 - October 1 1979 (Elyria Savings)	
Dues 1979		\$5,246.00
Interest, Savings certificate and Savings Account		1,086.28
Short course Houston		192.00
Houston and Hawaii Meetings		1,454.12
Page Charges (J of R)		4,005.00
		11,983.40
	Total Receipts	\$40,967.55
<i>Disbursements</i>	January 1 - June 30 1979 (AIP)	
	January 1 - October 1 1979 (Elyria Savings)	
Charges for Dues, Billing & Collection @ \$1.23/item		\$ 428.00
Charges for Prep. & Maintenance Member file @ \$1.50/Member		773.00
Financial Handling @ 5/8 of 1% of Business Handled		125.00
Member Society Dues		450.00
Journal of Rheology mailing Vol. 22 (1-6)		
	Vol. 23 (1-3)	1,058.00
Bulletin Mailing		318.00
Membership drive, brochures and mailing		744.00
Golden Jubilee Brochure mailing		645.00
Officer Nomination mailing		190.00
ICR mailing		206.00
Administration Services		600.00
Miscellaneous		382.76
Executive Mtg March 1979 expense		243.49
History of SOR		249.41
		6,412.66
	Balance in Account October 30, 1979	\$34,554.89

1980 TREASURER ESTIMATE

Estimated Balance In Account - January 1, 1980		\$28,000
<i>Receipts</i>		
Dues 1979 and 1980 and 1981		\$15,000
Interest, saving certificates and Savings Account		1,100
Income short course		2,500
Page charge Journal Rheology		4,500
Annual Meeting, Boston		1,500
		24,600
	Total Receipts	\$52,600
<i>Disbursements</i>		
Charges for dues, billing, & Collection \$1.23/item		\$ 1,400
Charges for prep & maintenance member file @ \$1.50/Member		1,575
Financial Handling 5/8 of 1% of Business handled		450
Member Society Dues \$1/member		1,050
Journal of Rheology		7,500
Subscription Expenses		2,000
Spring Bulletin		550
Summer Bulletin		550
Fall Bulletin		550
Editorial Expenses		2,400
Short course Expenses		2,000
Administration (AIP) Services		1,200
President's Discretionary Fund		500
New Roster		600
		\$22,325
	Estimated Balance December 31, 1980	\$30,275

Respectively Submitted,  
Edward A. Collins  
Treasurer  
October 30, 1979



## ANNOUNCEMENTS

"Round-robin" analysis of structural mobility data has been proceeding in the UK and France and may be extended to the U.S. Interested persons may contact Henry C. Pusey, Shock and Vibration Information Center, Code 8404, Naval Research Laboratory, Washington, DC 20375.

We have additional copies of reprints of Vol. 1, No. 1, of the first (1929) publication of the Transactions of The Society of Rheology. These are being offered to members at a nominal cost of \$2.50 on a first-come, first-served basis. Checks made payable to The Society of Rheology should be sent to R. C. Cohen, M.I.T. Dept. of Chemical Engineering, Cambridge, MA 02139. Only prepayment orders can be accepted. This service is being offered apart from the regular activities of The Society for which no provision has been made for billing.

J. F. Hutton of Shell Research, Thornton, has been presented with the Annual Award (1979) of the British Society of Rheology for "his contribution to Rheology in industry, for his services to the Society, and for developing cooperation between Industry and the Universities.

The Professional & Reference Book Div. of McGraw-Hill is beginning a new program with an emphasis on applications. Contact: Sonia Sheldon, McGraw Hill Book Company, 1221 Avenue of the Americas, New York, NY 10020.

### COURSE INFORMATION

Four short courses for specialists interested in coatings and polymers will be presented by the Rheology and Coatings Laboratory at Kent State University.

These courses are:

Coatings & Polymers Characterization,  
May 12-16, 1980;

Dispersion of Pigments & Resins in Fluid Media,  
May 19-23, 1980;  
Adhesion Principles & Practice for Coatings &  
Polymer Scientists,  
June 16-20, 1980;  
Applied Rheology for Industrial Chemists,  
June 23-27, 1980.

Contact: Carl J. Knauss, Chemistry Dept.,  
Kent State University, Kent, OH 44242.

Two concurrent short courses at the University of Minnesota will be held June 17-20, 1980. They are:

Structure/Mechanical Property Measurements in Polymer Solids; and Rheological Measurements in Polymer Liquids.

Contact: John S. Vollum, University of Minnesota, 222 Nolte Center, Minneapolis, MN 55455.

Rhegoniometry Course to be held May 14-16, 1980, at University of Strathclyde's Staff Educational & Recreational Centre, Ross Priory, Loch Lomond, Scotland, for users of the Weissenberg Rheogoniometer and similar instruments. Techniques for measurement in the field of elongational viscosity will be dealt with. Contact: J. Ferguson, Dept. of Fibre Science & Textile Technology, University of Strathclyde, Glasgow G1 1XW, Scotland.

Problems in Non-Linear Continuum Mechanics working seminar will take place in Dublin Institute for Advanced Studies from May 12-16, 1980. Contact: The Director, School of Theoretical Physics, Dublin Institute for Advanced Studies, 10 Burlington Rd., Dublin 4,

### Application for Membership in the SOCIETY OF RHEOLOGY

I hereby desire to apply for membership in THE SOCIETY OF RHEOLOGY dating from  
January 19.....

Name .....  
(Please print)

Mail Address .....

Professional Affiliation .....

Position .....

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

- PRIMARY
- SECONDARY
- TERTIARY

INTEREST AREA	CODE
Biological Materials .....	A
Foods and Natural Products .....	B
Inorganic Materials .....	C
Oils and Lubricants .....	D
Soils .....	E
Synthetic Polymers .....	F
Fluids (Including Solutions) .....	G
Solids .....	H
Suspension and Particulate Systems .....	J
Engineering .....	K
Experimental Techniques .....	L
Mechanics .....	M
Phenomenology .....	N
All of the above .....	Y
None of the above .....	Z

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 of \$15 for Regular Annual Dues or \$100 for Sustaining Annual Dues and mail to:

THE SOCIETY OF RHEOLOGY  
c/o American Institute of Physics  
335 East 45th Street  
New York, New York 10017