

RHEOLOGY BULLETIN

Publication of The Society of Rheology, Inc.

Volume 39, No. 1



April, 1970

41ST ANNUAL MEETING OF THE SOCIETY OF RHEOLOGY

Princeton University
Princeton, New Jersey
October 26, 27 and 28, 1970

Call for Contributed Papers

Authors wishing to present papers at the fall meeting should submit two copies of an abstract to a member of the Program Committee as soon as possible. Deadline for the submissions is August 1, 1970. The abstract should be limited to a maximum of 200 words and equations are to be used sparingly. The Program Committee will review the abstracts for originality, relevance to Society purposes and technical character as a basis for acceptance.

The papers to be presented will be scheduled for 30 minutes including discussion. Projection facilities will be available.

Program Committee

A. P. Metzger (Chairman) B.F. Goodrich Chemical Company, P.O. Box 122, Avon Lake, Ohio 44012.

B. Bernstein, Department of Mathematics, Illinois Institute of Technology, Chicago, Illinois 60618.

W. W. Graessley, Chemical Engineering Department, Northwestern University, Evanston, Illinois 60201.

H. P. Schreiber, Central Research Laboratory, Canadian Industries, Ltd., McMasterville, Quebec, Canada.

J. C. Halpin, (Symposium Chairman) Air Force Materials Laboratory, Research and Technology Division, Wright-Patterson Air Force Base, Dayton, Ohio 45433.

Local Arrangements

A. Cakmak (Chairman) Department of Civil & Geological Engineering, Princeton University, Princeton, New Jersey 08540.

Publication

Authors are urged, but not required, to publish their papers presented at the meeting in the Transactions of the Society of Rheology. Manuscripts should be submitted to the editor, R. R. Myers, Chemistry Department, Kent State University, Kent, Ohio 44240. Acceptance for publication will be decided by the editor, in consultation with assistant editors for Volume 15 and referees appointed by him for each manuscript.

NOTE:

The Princeton Inn is no longer open to the general public. It is being occupied by a new class of co-eds. The Nassau Inn and Holiday Inn are available.

SOCIETY OF RHEOLOGY EXECUTIVE COMMITTEE MEETING

October 19, 1969

St. Paul Hilton, St. Paul, Minnesota

Executive Committee Present: J. Miller, R. Myers, R. Marvin, T. Smith, H. Markovitz, S. Matsuoka.

Others Present: V. Kolpe, R. Coulehan, W. Shwalter, J. Elliot.

1. The meeting was called to order at 3:00 p.m.
2. Minutes of the preceding meeting were accepted as published in the Bulletin.
3. The Secretary's report was read.
4. The Budget for 1970 was presented. Considerable discussion about the accounting system used at AIP was generated by some bills not showing on our statements from AIP.
5. C. Sieglaff reported on the program for St. Paul meeting pointing out that program was complete by August 1.
6. R. Coulehan presented current information on the membership. A vote of thanks was given for Coulehan's work on membership.
7. V. Kolpe gave a summary of the local arrangements and described some of his difficulties with financial arrangements. Without outside help from contributions the finances would have not balanced.

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Raymond R. Myers, Editor
Department of Chemistry
Kent State University
Kent, Ohio 44240

8. R. S. Marvin reported that a majority of members of the International Committee had accepted the proposed By-Laws. The next International meeting will be held in Lyons, France in 1972.
9. W. R. Showalter gave a brief description of possible local arrangements at Princeton for the Fall 1970 meeting. A motion to allow the registration fee to be set to cover costs up to \$10 for members and \$15 for non-members was made, seconded and passed.
10. No decision on the Winter Meeting of the Society for 1971 was made. The success of the 1970 meeting will be the criterion for further winter meetings.
11. An invitation from the University of Tennessee was discussed and it was decided to present the invitation to the membership at the business meeting.
12. Deletions to the Constitution were discussed and it was moved, seconded and passed to submit the changes to the membership by letter ballot.
13. A motion was made, seconded and passed to write Senator Long about changes in H.R. 13270. This bill deals in changes in tax laws for private foundations.
14. The meeting was adjourned.

J. C. Miller
Secretary

SOCIETY OF RHEOLOGY ANNUAL BUSINESS MEETING

October 21, 1969

St. Paul Hilton, St. Paul, Minnesota

1. The meeting was called to order at 5:00 p.m. by President Thor Smith.
2. The minutes of the previous meeting were accepted as published in the Bulletin.
3. The report of the Secretary was presented and accepted as read.
4. The Budget for 1970 was presented by the Treasurer, S. Matsuoka and accepted.
5. President Smith announced that the Fall Meeting in 1970 would be held at Princeton University.
6. The Fall Meeting in 1971 was open for discussion because the previous business meeting had voted to return to Williamsburg. Since that time, we have had an invitation to the University of Tennessee in Knoxville. After some discussion, it was moved, seconded and passed that the Society meet in Knoxville for 1971.

7. R. R. Myers, the Editor, gave an optimistic report on papers being submitted for the Transactions.
8. President Smith read a few proposed deletions from the Constitution and asked for a motion to submit the deletions to the membership in a letter ballot. The motion was made, seconded and passed.
9. R. S. Marvin explained the new organization of the International Committee on Rheology and announced that the next Congress would be held in Lyons, France in 1972.
10. The President expressed the Society's appreciation for the help of 3M Corporation and introduced V. V. Kolpe who pointed out that thanks were also due to the members of the local arrangements committee Albert Martin, Carl Dahlquist, and William Sell.
11. The Meeting was adjourned at 5:35 p.m.

J. C. Miller
Secretary

SOCIETY OF RHEOLOGY

Report of the Secretary
1969

Publication Charges

The payment of page or publication charges by authors of technical articles in the Transactions is basic to the financial security of the Society. We now have records for Volumes 11, 12, which can be used to determine the success of the publication charge concept. For Volume 11, 74% of the pages were paid by authors. In Volume 12, 52% of the charges were paid. For both Volumes combined, 59% of the charges were paid for a loss on the Transactions of at least \$1,000. This is not a serious loss.

Membership

The membership of the Society has reached 780 as of June 1969. This figure represents a decrease from 800 reported last. The decrease probably represents members who joined for the flight to Japan and did not renew their membership.

Publications

Three issues of the Rheology Bulletin were published this year. Three issues of Volume 13, of the Transactions were published and sent to the membership. Volume 13, No. 4 should be sent before the end of the year.

Meetings

Two technical meetings were held during 1969. On January 13-15, a meeting was held in Williamsburg, Virginia with J. R. Knox responsible for the local arrangements and J. G. Brodynan as program chairman. A second meeting was held in St. Paul on October 20-22 with V. V. Kolpe as local arrangements chairman and C. L. Sieglaff responsible for the program.

Dear Society Member:

We are looking forward to an enjoyable and worthwhile meeting of the Society in Princeton, October 26-28, 1970. In order to insure that sufficient facilities are reserved for the meeting it is important that there be an early and accurate forecast of the Society's needs. Please help us by returning the attached card promptly. Thank you.

W. R. SCHOWALTER

Local Arrangements Committee

SOCIETY OF RHEOLOGY
41ST ANNUAL MEETING, OCTOBER 26-28, 1970
PRINCETON, N.J.

The probability that I shall attend the fall 1970 meeting is:

_____ 10%

_____ 10-40%

_____ 40-70%

_____ 70-90%

_____ 90%

Name

BUSINESS REPLY MAIL

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY

Society of Rheology
Fifth Floor, New South Bldg.
Princeton University
Princeton, N.J. 08540

FIRST CLASS
Permit No. 518
Princeton, N.J.



Executive Committee Meetings

Two meetings of the Committee were held this year. Page charges and meeting sites were main topics for discussion.

Relations with American Institute of Physics

All mailings, due collections and accounting of funds were made by AIP.

President T. Smith attended the Board of Governors meeting in March.

The American Institute of Physics has inaugurated a new system of charges. Starting with this year support of AIP will cost the Society a dollar per member plus .5% on all money handled.

Acknowledgements

The Secretary is grateful for the cooperation of Society officers, committees and the American Institute of Physics.

The Secretary is grateful for minor services and expenses supplied by Union Carbide Corporation necessary to the performance of his duties.

John C. Miller
Secretary

RULES CHANGES

The following changes in the Rules of the Society of Rheology were approved by a majority of those voting.

- 1) Deletion of Article VI, Section 3: The President shall appoint the Society's representative to the Council of the American Association for the Advancement of Science on the basis of its membership as an affiliated Society of Section B, Physics of AAAS.
Yes: 293 No: 34
- 2) Deletion of Article VII, Section 1: The Editor or Assistant Editor designated by him, shall assist authors of papers presented at the Annual Meeting in obtaining publication of their papers in appropriate journals.
Yes: 296 No: 16
- 3) Article VII, Section 2: Change to Section 1
Yes: 296 No: 10
- 4) Article VII, Section 3: Change to Section 1
Yes: 247 No: 7

A new Constitution and Rules will be printed and sent to the membership.

John C. Miller
Secretary

NEW OFFICERS:

Hershel Markovitz, *President*
Frederick R. Eirich, *Vice President*
John C. Miller, *Secretary*
Robert E. Coulehan, *Treasurer*
Raymond R. Myers, *Editor*
Thor L. Smith, *Immediate Past President*
Edward Collins, *Member at Large*
James L. White, *Member at Large*

INSTRUMENT EXHIBITION

An instrument exhibition is being planned to be held in conjunction with the 1971 Annual Society of Rheology Meeting in Knoxville, Tennessee from Sunday, October 24 through Wednesday, October 27. Those interested in participating in this exhibition should contact Prof. James Lindsay White, Department of Chemical and Metallurgical Engineering, University of Tennessee, Knoxville, 37816.

GERMAN RHEOLOGICAL SOCIETY

The German Rheological Society (Deutsche Rheologische Gesellschaft E.V.) has invited our members to attend their meeting in Berlin, May 11-12, 1970. Contact Program Chairman: K. Kirschke, 1 Berlin 45, Unter den Eichen 87.

Also, our attention has been drawn to a Documentation of Rheology which is issued by the Deutsche Rheologische Gesellschaft semiannually and covers all rheological publications, news from other societies, and meetings—at a subscription rate of \$3.00 annually.

RHEOLOGY IN INDUSTRY

1970 Autumn Conference of the
British Society of Rheology

Our British counterpart requests papers for their Autumn Conference to be held at the Royal Military College of Science, Shrivenham, Swindon, from September 7-11, 1970. Titles and abstracts are due in the hands of K. M. Beazley, 44 Brocksone Road, Boscoppa, St. Austell, Cornwall, England before May 1, 1970.

RHEOLOGY RESEARCH CONFERENCE

A Rheology Research Conference will be held at the Wisconsin Center, 702 Langdon Street, Madison, Wisconsin, April 12-14, 1970.

April 13 - Measurements—Fluid Flow
April 14 - Molecular Theories—Solid State

PROCEEDINGS OF INTERNATIONAL CONGRESS ON RHEOLOGY

Proceedings of the Fifth International Congress on Rheology, edited by S. Onogi, is being published in four volumes at \$30 each or \$100 per set by University Park Press, Baltimore, Maryland.

1970 BUDGET FOR SOCIETY OF RHEOLOGY

BALANCE: January 1, 1970 (estimate)	\$20,900
RECEIPTS	
Dues Collections	7,500
Income from Winter Meeting	300
Income from Fall Meeting	1,000
Total Receipts	\$29,700
DISBURSEMENTS	
Charge for Dues Billing & Collection	\$ 200
Charge for Maintenance of Society List	400
Contribution for Support of AIP	800
Winter Meeting Bulletin	400
Winter Meeting	300
Spring Bulletin	300
Fall Meeting Bulletin	400
Fall Meeting	1,000
Ballot Mailing	100
Transaction Subscription Charge (Wiley)	1,400
AIP Expenses Related to Transaction	350
Transaction Net Expense (Schedule A)	30
Editorial Expenses	900
Mrs. Wolf (AIP) Secretarial Duties	40
Other Expenses	200
	\$ 6,820
Estimated Balance: December 31, 1970	\$22,880

Shiro Matsuoka, *Treasurer*

SCHEDULE A ESTIMATE OF RECEIPTS AND DISBURSEMENTS for TRANSACTIONS OF SOCIETY OF RHEOLOGY FOR 1970

BASIS OF ESTIMATE

Number of Pages (4 issues)	500
Number of Membership Subscriptions	760
Number of Non-Membership Subscript.	340
Fraction of authors who will pay the page charges	70%

INCOME

Author's page charges, 70% of 500 pages at \$15 per page—	5200
Reprint Sales	400
	5600

EXPENSE

Interscience "per page" charge	
$\$15.00 \times \frac{760}{1100} \times 500 =$	5180
Printing Reprints	400
Order Handling	150
	5630
Net Expense	30