

RHEOLOGY BULLETIN

Publication of The Society of Rheology, Inc.

Volume 38, No. 1



April, 1969

40th ANNUAL MEETING THE SOCIETY OF RHEOLOGY, INC.

St. Paul, Minnesota

October, 20-22, 1969

Program Committee

C. L. Sieglaff (Chairman), T. R. Evans Research Center, Diamond Shamrock Corporation, P. O. Box 348, Painesville, Ohio 44077.

A. P. Metzger, Chemical Development Center, B. F. Goodrich Company, P. O. Box 122, Avon Lake, Ohio 44012.

D. B. Cox, Battelle Memorial Institute, 505 King Avenue, Columbus, Ohio 43201.

A. S. Cakmak (Symposium Chairman), Civil Engineering Department, 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 13 and referees appointed by him for each manuscript.

Instructions for Authors—

Preparation of Abstracts

Abstracts which are to appear in the Bulletin shall be no longer than 500 words. Equations are to be used sparingly.

Type the following information, double spaced, on a heavy white bond paper 8½" x 11", using a fresh ribbon: Title, your name, and the name (only) of your

institution. The abstract is to appear alone on the sheet, never as part of a letter, and preferably in duplicate.

Abstracts are to be sent to the Chairman of the program Committee no later than August 1, 1969. They will be mailed as separates by September 1, as a pre-program to all members of the Society.

BINGHAM AWARD COMMITTEE

J. H. Elliott (Chairman), Hercules Research Center, Wilmington, Delaware 19899

L. E. Nielsen, Monsanto Company, 800 N. Lindberg Blvd., St. Louis, Missouri

N. W. Tschoegl, California Institute of Technology, Pasadena, California 91109

K. C. Valanis, Science Center, North American Rockwell Corp., Thousand Oaks, California 91360

D. J. Plazek, School of Engineering, University of Pittsburgh, Pittsburgh, Pennsylvania 15213

S. S. Sternstein, Rensselaer Polytechnic Institute, Troy, N. Y. 12181

In keeping with current policy, Drs. Plazek and Sternstein were recently appointed to serve a three-year term. Drs. Elliott and Nielsen are now serving for the third consecutive year; and Drs. Tschoegl and Valanis are serving their second year.

NOMINATIONS

The nominating committee, comprising the following members of the Society:

R. S. Marvin, *Chairman*, National Bureau of Standards

R. F. Kratz, Koppers Company, Inc.

R. A. Mendelson, Monsanto Company and appointed by President Smith, has offered the following slate of officers for 1970-72:

RHEOLOGY BULLETIN

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

President: H. Markovitz, Carnegie-Mellon University

Vice President: F. R. Eirich, Polytechnic Institute of Brooklyn

Secretary: J. C. Miller, Union Carbide Corporation

Treasurer: R. E. Coulehan, Geigy Chemical Corporation

Editor: R. R. Myers, Kent State University

Executive Committee: E. A. Collins, B. F. Goodrich Chemical Co., J. R. Knox, Avisun Corporation, N. W. Tschoegl, California Institute of Technology, J. L. White, The University of Tennessee.

WINTER MEETING FEBRUARY 2-4, 1970

The 1970 Winter Meeting will be held at the California Institute of Technology, Pasadena, California, on February 2-4, 1970. The program and local arrangements will be handled by: N. W. Tschoegl (Chairman), R. F. Landel, H. Leeming, and W. G. Knauss (arrangements). Professors Tschoegl and Knauss are at Cal Tech, Pasadena, California 91109. Dr. Landel is at the Jet Propulsion Laboratory of Cal Tech and Dr. Leeming is at the Lockheed Propulsion Company, Redlands, California. Further information will be published at a later date.

PROCEEDINGS OF THE FIFTH INTERNATIONAL CONGRESS ON RHEOLOGY

Kyoto, Japan, October, 1968

The University of Tokyo Press will publish about 180 manuscripts from the Fifth International Congress on Rheology. Each registered active member of the Congress can expect to receive this 2,000-page publication in late 1969 or early 1970. A U. S. publisher has not yet been selected, nor has the price been ascertained for non-registrants. Your editor will collect inquiries on the publication details providing that those of you who request information are willing to wait until we have further correspondence with Professor M. Horio of the Department of Polymer Chemistry at Tokyo University.

SOCIETY OF RHEOLOGY EXECUTIVE COMMITTEE MEETING

Williamsburg, Virginia

January 19, 1969

Executive Committee Present: T. L. Smith, H. Markovitz, R. Porter, J. Ericksen, R. S. Marvin, and J. C. Miller.

Others Present: R. Coulehan, J. R. Knox, and C. Sieglaff.

1. The meeting was called to order at 7:30 p.m. by President T. L. Smith. The minutes of the last meeting were approved as circulated by mail. The Secretary's report was accepted as read. The Treasurer's budget for 1969 given by the Secretary was accepted as amended in the costs of the Transactions. (A new budget must be submitted by the Treasurer.) Editor Myers' written report was given by T. L. Smith. Six hundred pages are to be published in Volume 12.

2. The Secretary reported on a contact from Interscience about back issues of the Transactions which are for sale. After some discussion about how the Society might handle the sale of back issues, the Secretary was instructed to find out costs and numbers of back issues.

3. The importance of an early mailing of the program for the Annual Meeting was pointed out and it was decided that the Program Chairman is responsible to issue a program to the membership by September 1.

4. Membership Chairman R. E. Coulehan reported the Society had 800 members and that he was interested in where the new members were coming from, i.e. industry, universities, etc.

5. The operation of the Bingham Committee was reviewed and with the current membership of six, there is the possibility of a tie. Presumably, the President of the Society could break the tie.

6. Local arrangements Chairman J. R. Knox was thanked by the Executive Committee for his work on the Williamsburg Meeting.

7. The Fall 1969 Meeting will be held in St. Paul, Minnesota at the St. Paul Hilton, October 20-22. The Program Chairman is C. Sieglaff who will be allowed to seek out papers in experimental fields. Some effort will be made to get papers in all fields of rheology.

8. The fall meeting in 1969 will be the fortieth meeting since the founding of the Society in 1928. Some suggestions were made to invite all past presidents and Bingham Medalists.

9. Future meeting sites were discussed and a number of invitations had been received. A vote to determine where the fall 1970 meeting should be held picked Princeton University. The Winter meeting will be held at Cal Tech in January-February of 1970. The actual date to be determined later.

10. R. E. Coulehan reported on the success of the charter flight to Japan. It was moved and seconded that the Society owes Dr. Coulehan a vote of thanks for his efforts.

11. The Executive Committee Meeting will be held in St. Paul, October 19, 1969.

12. The meeting was adjourned at 10:10 p.m.

John C. Miller
Secretary

SOCIETY OF RHEOLOGY BUSINESS MEETING

Williamsburg, Virginia
January 21, 1969

The meeting was called to order by President T. L. Smith at 4:30 p.m. with 50 members present. The minutes of the previous meeting in Washington, D. C. were approved as published in the Bulletin. The Secretary's report was read and approved. The budget for 1969 was explained and approved.

The Editor's report was read. The Editor, R. R. Myers, issued a plea to send in manuscripts if they were presented at the Annual Meeting or if they were not presented. A shortage of papers for the Transactions is expected for 1969.

The next Annual Meeting will be held October 20-22 in St. Paul, Minnesota at the St. Paul Hilton. C. Sieglaff is the Program Chairman and expects to make some changes in the program content.

President Smith explained the format and tenure system in the Bingham Award Committee operation. Basically the committee is a 6-man committee with two members appointed each year. The purpose of this system is to insure continuity in the committee.

Meeting sites were the next subject for discussion. A show of hands for Atlantic City versus a university site gave preference for the university site. In the discussion that followed it was pointed out that the program was most important in determining attendance with good facilities for technical sessions also a consideration. A good suggestion to increase the number of invited lecturers was made and the importance of getting the program to the membership early was emphasized. A motion to return to Williamsburg in 1971 was seconded and approved.

A motion was made and seconded to express the members appreciation and thanks to R. E. Coulehan for his efforts in the Charter Flight to Japan for the Fifth International Congress in Japan. The motion was approved unanimously.

The meeting was adjourned at 5:10 p.m.

John C. Miller
Secretary

SOCIETY OF RHEOLOGY

Report of the Secretary for 1968

Membership:

After a year of essentially no growth in 1967, the Society membership has grown to 800, an increase of 60 members. Dr. R. E. Coulehan is the Membership Committee Chairman.

Meetings:

Only one technical meeting was held in 1968 in San Diego, California arranged by Mr. R. Gosnell. Dr. Julian Johnson was the Program Chairman. The Executive Committee met on March 22 and discussed the service contract with AIP, Williamsburg meeting and charter flight to Japan.

Publications:

Four issues of the Rheology Bulletin were printed and sent to the membership. One issue of Transactions 11, was sent to the membership and three issues of Volume 12. Some interesting numbers about the Transactions are that the number of manuscripts received for publication doubled in 1968. A 100% increase in pages was gained. We have promises that 75% of the page charges will be paid for 1968.

Charter Flight to Japan:

A charter flight to the Fifth International Congress on Rheology in Japan was organized by Dr. R. E. Coulehan. All who participated in that flight should thank Dr. Coulehan.

Relations with American Institute of Physics:

All mailing, dues collections, and accounting of funds were made by AIP.

President T. Smith attended the Board of Governor's Meeting in March. J. C. Miller attended the meeting of Society Officers and the Board of Governor's meeting in September.

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 supplied by Union Carbide Corporation necessary to the performance of his duties.

J. C. Miller
Secretary

REVISED ESTIMATE OF RECEIPTS AND DISBURSEMENTS
FOR
TRANSACTIONS OF SOCIETY OF RHEOLOGY FOR 1969

BASIS OF ESTIMATE

Number of Pages (4 issues)	600
Number of Membership Subscriptions	760
Number of Non-Membership Subscriptions	340
Total Subscriptions	1,100
Fraction of authors who will pay the page charges—70%	

INCOME

Author's page charges, 70% of 6000 pages at \$15 per page	\$6,300
Reprint Sales	400
	\$6,700

EXPENSE

Interscience "per page" charge \$15.00 x 760 x 600 =	\$6,220
<u>1100</u>	
Printing Reprints	400
Order Handling	150
	\$6,770
Net Expense	70

REVISED 1969 BUDGET FOR SOCIETY OF RHEOLOGY

BALANCE: January 1, 1969 (estimate) \$ 13,000

RECEIPTS

Dues Collections	9,000
Income from Winter Meeting	1,200
Income from Fall Meeting	1,200
	\$24,400

DISBURSEMENTS

Charge for Dues Billing & Collection	330
Charge for Maintenance of Society List	600
Contribution for Support of AIP	800
Winter Meeting Bulletin	400
Winter Meeting	1,200
Spring Bulletin	280
Fall Meeting Bulletin	400
Fall Meeting	1,200
Ballot Mailing	100
Transaction Subscription Charge (Wiley)	1,400
AIP Expenses Related to Transaction	350
Transaction Net Expenses (Schedule A)	70
Editorial Expenses	900
Mrs. E. Wolf (AIP) Secretarial Duties	40
Other Expenses	200
	\$ 8,270

Estimated Balance, December 31, 1969 \$16,130

S. Matsuoka, Treasurer