

RHEOLOGY BULLETIN

Publication of The Society of Rheology, Inc.

Volume 38, No. 2



August, 1969

40th ANNUAL MEETING THE SOCIETY OF RHEOLOGY, INC.

St. Paul Minnesota

October 20-22, 1969

The St. Paul Hilton Hotel

Program Committee

C. L. Sieglauff (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.

V. V. Kolpe, (Local Arrangements Chairman), 3M Company, Central Research Laboratories, P. O. Box 3221, St. Paul, Minnesota 55101.

Accommodations

Pre-registration is urged, and directions for reaching St. Paul Hilton hotel will be sent by the Local Arrangements Chairman to those who send him the pre-registration form. Those who do not pre-register can get these directions by written request to the Local Arrangements Chairman. The registration desk at the St. Paul Hilton hotel will be open on Sunday from 2:00 to 6:00 p.m.; on Monday from 8 a.m. to noon, and on Tuesdays from 10:00 a.m. to noon.

The hotel reservation card and form for pre-registration will be mailed to each member. The hotel reservation cards are pre-paid and returned directly to the St. Paul Hilton hotel. Individual confirmations will be forwarded directly to each registrant.

Travel to St. Paul

By Air:

Minneapolis-St. Paul International airport is twelve miles south-west of St. Paul Hilton hotel. The Twin

Cities are served by Braniff, Eastern, North Central, Northwest, United, and Western airlines. Limousine service is available every thirty minutes to and from the hotel. Cab service from airport to the Hilton is readily available.

By Surface:

Railroad service is provided by Great Northern, Northern Pacific, Rock Island, Burlington, and Milwaukee railways. Bus service is available through Greyhound Bus Company. Bus and rail stations are a few short minutes from the hotel. The interstate highway system brings automobile travelers within five minutes of the hotel via Interstate #94. The Hilton hotel is about two blocks from the bus station or the St. Paul Union Depot railway terminal. Cab service is readily available.

Facilities

Speakers will be provided with a blackboard and 2 inch by 2 inch and 3¼ inch by 4¼ inch slide projectors. If other facilities are required, the Local Arrangements Chairman should be contacted as soon as possible.

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.

Instruction for Authors

Preparation of Manuscripts for Transactions

Three copies of the manuscript, of which one should contain glossy prints of the figures are required. All manuscripts should be sent to the editor who will select an assistant editor whose interests most closely coincide with that of the subject of the paper.

Any neat double-spaced copy with comfortable margins is considered acceptable form for the manu-

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

script. Although ribbon copy is preferred, there is no objection to legible duplicated copies; 8½" x 11" sheets are preferable but not mandatory. An abstract of the article should appear on the first page of the manuscript.

1969 BINGHAM MEDALIST

Dr. Stanley G. Mason

Stanley G. Mason, Director of the Applied Chemistry Division of the Pulp and Paper Research Institute of Canada, and Professor of Chemistry at McGill University, has been selected as the 1969 Bingham Medalist of the Society of Rheology. The medal will be awarded at the Fall Meeting of the Society in St. Paul, Minnesota, October 20-22, 1969.

He received both his B.E. in chemical engineering and his Ph.D. in physical chemistry from McGill. After teaching at Trinity College, Connecticut, for two years, he returned to Canada as a Research Engineer with the Department of National Defense and later joined the Atomic Energy Division of the National Research Council of Canada. He has been with the Pulp and Paper Research Institute of Canada and the Chemistry Department of McGill University for over twenty years.

Dr. Mason's research on the physics and chemistry of paper and cellulose has been recognized by his receiving the Anselme Payen Award of the Division of Cellulose, Wood and Fiber Chemistry of the American Chemical Society, and the Kendall Award in Colloid Chemistry.

He has been selected to receive the Bingham Medal in recognition of his brilliant experimental studies and their theoretical interpretation in the broad area of the microrheology of suspensions. As an example of our aspect of this work, he and his colleagues have pioneered in the development and construction of instruments to carry out these studies and in the imaginative use of motion picture techniques in recording and analyzing these experiments. These techniques for visually observing the behavior of suspended particles in flow fields have greatly clarified our ideas about the rheological properties of suspensions and have led to theoretical developments, many of which were carried out in Mason's laboratory.

His research, an integration of colloid science and rheology, has significant implications in many fields which range from paper making to the flow of blood in living organisms.

WINTER MEETING

California Institute of Technology
Pasadena, California 91109
February 2-4, 1970

Meetings are planned for Monday, Tuesday, and Wednesday, February 2, 3, and 4, 1970. Contributions are solicited for two symposia (to take place on two afternoons) on

THE RHEOLOGY OF FILLED POLYMERS and THE RHEOLOGY OF ADHESION AND TACK

The Symposia will be introduced by appropriate review lectures.

There will be a Special Topics Discussion on Monday evening on Rheology in Reacting System. The discussion will center on consideration of relaxation processes accompanied by bond rupture or formation caused by either chemical attack or mechanical stress.

On Tuesday evening there will be a Cocktail Hour (by courtesy of the Instron Company) and dinner in Caltech's Athenaeum Club. This will be followed by a tour of polymer laboratories at Caltech.

An optional tour of the Polymer Laboratories, the Spacecraft Control Center and the Spacecraft Museum at Caltech's Jet Propulsion Laboratory is planned for Thursday morning, February 4.

The Program Committee would appreciate hearing as soon as possible from those wishing to contribute, particularly to the planned symposia. This need be no more than a title; abstracts of papers are due on November 21, 1969. Titles or abstracts should be sent to the chairman:

N. W. Tschoegl
Department of Chemical Engineering
California Institute of Technology
1201 California Blvd.
Pasadena, California 91109

Program Committee:

W. G. Knauss
R. F. Landel
H. Leeming
N. W. Tschoegl

RHEOLOGY ON FILM

An eight page illustrated pamphlet "Film Notes for Rheological Behavior of Fluids" has been recently published by the Encyclopaedia Britannica Education Corporation. Copies in bulk may be ordered, as item number 21613, from Encyclopaedia Britannica Educational Corporation, Sales Service Department, 425 N. Michigan Avenue, Chicago, Illinois 60611 for five cents a copy. Single copies may be obtained gratis from Hershel Markovitz, Carnegie-Mellon University, Mellon Institute, 4400 Fifth Avenue, Pittsburgh, Pennsylvania 15213.

NEW JOURNAL

P. Sherman and A. S. Szczesniak, Editors, Technical Center, General Foods Corporation, White Plains, New York 10602 announce the publication of a new international quarterly, the *Journal of Texture Studies* dealing with rheology, psychorheology, physical and sensory testing of foods and pharmaceuticals.

PRE-REGISTRATION FOR 40th ANNUAL MEETING
OF THE
SOCIETY OF RHEOLOGY

October 19 to 22, 1969
St. Paul, Minnesota

NAME

ADDRESS

Member \$ 6.00
Non-Member \$10.00
Registration plus Membership \$16.00
Mail to:

V. V. Kolpe
3M Company
Central Research Laboratories
P. O. Box 3221
St. Paul, Minnesota 55101

Make checks payable to **Society of Rheology - St. Paul meeting.**

SOCIETY OF RHEOLOGY
STATEMENT OF RECEIPTS AND DISBURSEMENTS
CALENDAR YEAR 1968

BALANCE IN ACCOUNT - January 1, 1968		\$13,259.02
RECEIPTS (January 1 - December 31, 1968)		
Dues Collections:		
1967 Dues	\$ 10.00	
1968 Dues	2,039.15	
1969 Dues	<u>5,399.70</u>	7,448.85
Income from Winter Meeting:		
New Memberships - 8 @ \$10.00	\$ 80.00	
41 Registrations @ \$5.00	205.00	
6 Registrations @ \$10.00	60.00	
Contribution from INSTRON for Cocktail Party	<u>200.00</u>	545.00
Interest on U.S. Government Bond*		49.37
Transactions of the Society of Rheology - SCHEDULE A		<u>4,551.12</u>
Total Receipts		<u>\$25,853.36</u>
DISBURSEMENTS (January 1 - December 31, 1968)		
Charge for Dues Billing and Collection	\$ 317.43	
Charge for Maintenance of Society List	554.94	
Contribution for Support of AIP - 1968	752.64	
Winter Meeting Expenses:	295.52	
Winter Meeting Bulletin, Printing and Mailing:	501.93	
Transactions of the Society of Rheology, Mailing:	252.58	
Secretarial Duties - E. Wolf:	35.68	
Editorial Expenses - R. R. Myers, Secretarial Service and Communication:	898.60	
May Bulletin:	279.96	
November Bulletin:	651.04	
Membership Cards:	33.24	
Brochure:	62.84	
Charter Flight Expenses:	60.43	
Other:	<u>212.93</u>	
Total Disbursements		<u>4,909.76</u>
Balance in Account, December 31, 1968		<u>\$20,943.60</u>

*Bingham Fund: \$1,000.00 U.S. Government Bond (Reinvested) 6%-Due May 15, 1975

TRANSACTIONS OF THE SOCIETY OF RHEOLOGY
STATEMENT OF INCOME AND EXPENSE
CALENDAR YEAR 1968

INCOME		
Publication Charges (Vol. 11 Nos. 2 & 3, Vol. 12 Nos. 1, 2, & 3)		\$4,815.00
Reprint Sales (Vol. 11 No. 3, Vol. 12 Nos. 1, 2, & 3)		1,416.82
Total Income		<u>\$6,231.82</u>
EXPENSE		
Publishing Expense	\$ -	
Printing Reprints (Wiley)	1,416.82	
Order Handling Charge	263.88	
Total Expense		<u>\$1,680.70</u>
Net Income		<u>\$4,551.12</u>

