

RHEOLOGY BULLETIN

Publication of The Society of Rheology, Inc.

Volume 42, No. 2



September, 1973

THE SOCIETY OF RHEOLOGY

44th ANNUAL MEETING

OCTOBER 28-31, 1973

Sheraton-Mount Royal Hotel
Montreal, Quebec, Canada

Program Committee

B. D. Coleman, Mellon Institute, Carnegie-Mellon University, Pittsburgh, Pa. 15213.

J. M. Dealy, Department of Chemical Engineering, McGill University, P. O. Box 6070, Montreal 101, Quebec, Canada.

R. F. Landel, Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, Cal. 91103.

L. J. Zapas (Committee Chairman), Polymers Division, National Bureau of Standards, Washington, D.C. 20234.

Host Organization: Macromolecular Science Division, Chemical Institute of Canada

Honorary Host: S. G. Mason, McGill University

Organizing Committee: H. P. Schreiber, Chairman c/o Department of Chemistry, McGill University, P. O. Box 6070, Montreal 101, Quebec, Canada
D. R. Axelrad, P. Carreau, A. Eisenberg & M. R. Kamal

Reception

There will be a reception for those attending the meeting at the McGill Faculty Club, 3450 McTavish Street on Sunday evening, October 28. The Bingham Award Banquet will be held at the Hotel on Tuesday evening, October 30, and on Wednesday evening arrangements will be made for those attending the Meeting to dine out in small groups at one of the charming restaurants of the old quarter of Montreal.

Customs

Citizens or permanent residents of the U. S. do not need passports or visas to enter Canada, but immigration officials occasionally request some evidence of U. S. citizenship. Others must have valid passports. U. S. residents may take up to \$100 worth of merchandise back home if they have been in Canada over 48 hours. Airlines serving Montreal include Aer Lingus, Aeroflot, Air Canada, Air France, Alitalia, Allegheny, B.O.A.C., CP, Delta, Eastern, E.P.A., KLM, Lufthansa, Nordair and Quebecair.

BIOGRAPHICAL SKETCH, ROBERT SIMHA, BINGHAM MEDALIST 1973

Professor Simha received the Ph.D. degree from the University of Vienna in 1935. He has held positions at the University of Vienna, Columbia, Howard and New York University, the Polytechnic Institute of Brooklyn, Brooklyn College, the Graduate School of the National Bureau of Standards and the University of Michigan. From 1945 to 1951 he held the position of Coordinator and Consultant on Polymer Research at the National Bureau of Standards. In 1958 he was appointed Professor of Chemistry at the University of Southern California and in 1968 he joined Case Western Reserve as Professor of Polymer Science.

He has been a Faculty Fellow at Columbia University, a Lalor Foundation Fellow and a Fellow of the John F. Kennedy Memorial Foundation of the Weizmann Institute. Dr. Simha has received awards from the National Bureau of Standards, the U. S. Department of Commerce, the New York and the Washington Academy of Sciences. He is a Fellow of the AAAS, the American Institute of Chemists, the American Physical Society, the New York and the Washington Academy of Sciences and has been Vice Chairman of the Division of High Polymer Physics of the American Physical Society, Chairman of the Division of Polymer Chemistry of the American Chemical Society, and Chairman, first Winter Gordon Research Conferences.

His research interests have been in the areas of hydrodynamics of colloidal solutions, the physical and thermodynamic properties of macromolecular systems, and the kinetics and statistics of polymerization and depolymerization processes of polymers and biological macromolecules.

DOCUMENTATION SERVICE

The German Society of Rheology issues a bibliography of 4000-5000 references annually, with titles translated into English. The price quoted was \$14 but this figure undoubtedly has undergone a "translation" since June. Write to:

DEUTSCHE RHEOLOGISCHE GESELLSCHAFT e.V.
(DRG)

Unter den Eichen 87

D-1000 Berlin 45

Federal Republic of Germany

RHEOLOGY BULLETIN

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Department of Chemistry
Kent State University
Kent, Ohio 44242

1974 WINTER MEETING THE SOCIETY OF RHEOLOGY, INC.

ERAWAN GARDEN HOTEL
Indian Wells, California
January 28-30, 1974

The 1974 Winter Meeting will be held at the Erawan Garden Hotel in Indian Wells, California, on January 28-30, 1974. The program and local arrangements will be handled by:

N. W. Tschoegl (Chairman),
L. G. Leal and J. Aklonis

Professors Tschoegl and Leal are in the Chemical Engineering Department, at the California Institute of Technology, Pasadena, California 91109; Professor Aklonis is in the Department of Chemistry, at the University of Southern California, Los Angeles, California 90007. The Committee would appreciate hearing from anyone wishing to attend the meeting. Abstracts of contributed papers should be sent to any committee member by November 1.

Two sessions are planned on the rheology of heterogeneous materials, specifically suspensions and filled elastomers. The remainder of the meeting will be devoted to papers in other areas of rheology. Further information will be published in the Society Bulletin of December 1973 which will also contain the program and abstracts.

The Erawan Garden Hotel is an unusually pleasant location at rather reasonable rates. Rates will be \$23.50 (single) and \$27.50 (double), comparable with the ocean-side rooms at the Hotel Miramar in Santa Barbara where we have held Winter Meetings before. Considering the reputation of the California Low Desert in winter the program committee expects a good turnout.

PRESIDENT'S MESSAGE

The reconstituted Nomenclature Committee, with C. Sieglaff as chairman, has made substantial progress on agreeing on a nomenclature in dilute and moderately dilute systems. The proposals will be brought up for final discussion and approval before the Executive Committee meeting in Montreal. Anyone who feels strongly on certain points of nomenclature and wishes to communicate with this Committee is encouraged to do so. The importance of arriving at a consistent, acceptable and physically meaningful rheological nomenclature has increased greatly in recent years due to the need for broader interdisciplinary communication. The Committee

on Nomenclature of the Colloid Division of IUPAC will consider nomenclature proposals at the IUPAC meeting in Munich in August. Your president will contribute to that meeting in view of the many rheological terms that are employed by colloid and surface chemists, and vice versa.

Our delegate, R. Marvin, to the International Committee on Rheology was at their last meeting elected chairman for the next two years. Thanks are due for his efficient service in the past on this Committee.

R. Rivlin has been nominated to become a representative on the National Committee of Theoretical and Applied Mechanics. The Society's thanks are due to E. H. Lee, the outgoing representative.

The question of sites for the annual meetings of the Society has become a rather crucial one in view of general restricted travel funds and the need of this Society to make its annual meetings accessible to as wide a segment of its membership, and non-membership, as possible. The new committee for future site selection will prepare lists for several years in the future and the first suggestions will probably be made at the business meeting of our Annual Meeting in Montreal. Members with good ideas on meeting sites are invited to contact the chairman, E. Collins.

The executive Committee has encouraged preparations for a Winter meeting in 1974. N. Tschoegl has accepted to undertake the preparations for this meeting and an announcement will be found in this issue.

Alan C. Nixon, president of the American Chemical Society, has created a new organization, called Committee of Scientific Society Presidents, which will work for the development of a constructive national science policy. Thirteen scientific societies are initially represented, standing for a membership of about 200,000. This committee will make known the views of the scientific community on public issues involving science and technology. Another important aim of the Committee will be to establish effective interaction with governmental bodies and to increase the flow of information to the public about the goals and contributions of science. Your society will make every effort to contribute effectively to this important undertaking.

The last issue of the Bulletin contained a request by Michael Williams of Berkeley for polymer interested societies and groups to band together and work towards the establishment of a national polymer institute. Members will be interested, in this context, to read the above note on Alan Nixon's institution of a national science committee, one of the aims of which would be setting national priorities and recommending financing of specially needed research programs such as those recommended by Dr. Williams. Inasmuch, though, as progress along this road is sure to be very slow, Williams' separate plan is to be welcomed. Indeed, Max Williams and myself have for some time agitated for a similar project to be started on a modest scale by a concerted program of grants in priority areas of polymer science, by NSF, to be supplemented if possible by a policy partly on developing research into engineering properties of polymers and eventually maybe establishing a coherent research effort. The Workshop was held in Washington, D. C. on December 5 and 6, 1972 and a report on this

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AMERICAN INSTITUTE OF PHYSICS INCORPORATED
FOR SOCIETY OF RHEOLOGY

Statement of Receipts and Disbursements — Three Months Ended March 31, 1973

Balance in Account - January 1, 1973 \$22,578.57

RECEIPTS (January 1 - March 31, 1973)

Dues Collections:

1973 Dues	\$ 190.00	
1974 Dues	10.00	200.00

Miscellaneous Income:

Income from Winter Meeting		293.15

Total Receipts		\$23,071.72
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DISBURSEMENTS (January 1 - March 31, 1973)

Charge for Dues Billing and Collection	\$ 125.00*	
Charge for Preparation and Maintenance of Member Record File	225.00*	
Financial Handling Charge - Three Months-1973	40.00*	
Member Society Dues - Three Months-1973	200.00	
Editorial Expenses:		
Salaries, Telephone and Postage	300.00	
Transactions of the Society of Rheology (Schedule A)	5,473.11	
S of R Transactions:		
Mailing Expense	\$ 164.40	
Subscription Expense	1,879.02	2,043.42
Winter Meeting	484.01	
Miscellaneous	11.78	\$ 8,902.32

Balance in Account - March 31, 1973 \$14,169.40

TRANSACTIONS OF THE SOCIETY OF RHEOLOGY — SCHEDULE A

Statement of Income and Expense — Three Months Ended March 31, 1973

INCOME

Publication Charges		\$1,275.00
Reprint Sales		402.79
Total Income		\$1,677.79

EXPENSE

Publishing Expense	\$6,490.11	
Printing Reprints (Wiley)	402.79	
Printing Mailing Labels	8.00*	
Reprint Order Handling Charge	250.00*	
Total Expense		7,150.90
Net Income or (Expense)		(\$5,473.11)

*Estimated

Respectfully Submitted,
E. A. Collins, Treasurer

PRESIDENT'S MESSAGE

(Continued from Page 2)

has been completed and will soon appear in print, issued under contract from NSF by the Department of Engineering of the University of Utah. Members interested in this matter should get in touch either with Max Williams, Dean of Engineering at the University of Pittsburgh, or with me.

For some time there has been a feeling that our Society is not making sufficient propaganda for its aims and achievement among the rheologists as represented for instance by the Society of Physics Students. Conversations with their president and executive committee has ascertained that they would be very happy to see us familiarize physics students with rheological topics. They have a system of seminars with invited speakers and I have suggested that a regular contact be set up between our Society's Executive Committee members and those of the Society of Physics Students to make speakers available on suitable topics at suitable occasions. The early brunt of this will be carried by Society officers but we would be happy to learn of anyone willing to speak to a group of physics students in his vicinity on a topic of his selection or interest.

F. R. Eirich

Editor's Note: Apologies to Michael Williams for incorrectly identifying him in the earlier bulletin.

RHEOLOGY SURVEY

A rheology survey form was sent out to all members in a separate mailing. If you have not yet filled this form and returned it to E. A. Collins please take a few minutes and do so now.

**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
(Include Title, e.g., Mr., Dr., Prof., Miss, etc.) Please print.

Mail Address

Mail Address

Professional Connection

Position

Chief Interest

Highest Academic Degree

Date

Enclose Remittance of \$10 for Regular Annual Dues or \$100 for Sustaining Annual Dues
and Mail to:

SOCIETY OF RHEOLOGY
American Institute of Physics
335 East 45 Street
New York, New York 10017