

RHEOLOGY BULLETIN

Publication of The Society of Rheology, Inc.

Vol. 45, No. 1



April, 1976

VIIIth INTERNATIONAL CONGRESS ON RHEOLOGY

AUGUST 23-27, 1976

CHALMERS UNIVERSITY OF TECHNOLOGY
GOTHENBURG, SWEDEN

GROUP TOUR AND FLIGHT FARES

The price of the tour is \$688 based on 40 for the tour. It will be higher for fewer people and below 10-15 is hardly worth a tour.

If the charter flight doesn't go, Apex 22-45 is the best fare deal.

Starting Point	Charter (180) incl. US fare	Charter (120) incl. US fare	Apex Fare
New York	275.	412	464
Cleveland	379	516	532
Chicago	425	562	527
Los Angeles	655	792	615

Apex fares are individually arranged through a travel agent (or J. R. Knox can arrange). Departures and returns can be on any day (\$15 oneway additional for flights eastbound on Friday or Saturday or westbound on Saturday or Sunday). Reservation and payment for tickets must be 60 days prior to departure.

Any cancellation of any portion of the flight results in a penalty of \$50 or 10% of the total ticket price, whichever is larger. If cancellation is made in Europe, then a new return ticket will be needed at the regular rate (peak season). Stay must be a minimum of 22 days. Any questions about either the tour or flights should be addressed to J. R. Knox, 1564 Swallow Street, Naperville, Illinois 60540.

At present the number of seats reserved for the charter flights is small and the flight may of necessity be cancelled. If so, deposit monies will be refunded or applied to individual Apex tickets if requested. Group Affinity, 22-45 Excursion, and GIT fares are all higher than Apex, regardless of point of origin. Actually, using Apex allows those who can't utilize the date of the charter to still get a reasonable deal. Also, it allows us to put the tour before the Congress if we want, or to run two tours.

47th ANNUAL MEETING

February 27 - March 2, 1977

Biltmore Hotel
New York, N. Y.

CALL FOR PAPERS

Deadline for Submission - November 1, 1976

The submission of contributed papers for presentation at the Annual Meeting is open to both members and non-members of the Society. There will be four symposia: (1) Symposium on Suspension Rheology, (2) Symposium on the Rheology of Plastics Processing, (3) Symposium on the Rheology of Food Products, and (4) Symposium on Biorheology. In addition, there will be General Papers Sessions.

An Abstract of 250 words or less is required prior to November 1, 1976. Abstracts should be sent *directly* to the appropriate symposium chairman whose address is given below.

Symposium on Suspension Rheology

CHAIRMAN: Irvin M. Krieger
Chemistry Department
Case Western Reserve University
Cleveland, Ohio 44106

SCOPE: (a) micromechanics, (b) rheological properties of concentrated dispersions, (c) mixed-particle systems (e.g., large and small particles, and particles of different shapes), (d) suspensions in thickened media, (e) rheological dilatancy, and (f) contributions in other areas of suspension rheology.

Symposium on the Rheology of Plastics Processing

Co-CHAIRMAN: James L. White and D. C. Bogue
Department of Chemical Engineering
University of Tennessee
Knoxville, Tennessee 37916

SCOPE: Rheological phenomena occurring in plastic processing operations, such as injection molding, thermoforming, and flat and tubular film extrusion. Fundamental rheological properties (e.g., melt strength) of polymer melts in uniaxial and biaxial elongational flows.

Symposium on the Rheology of Food Products

CHAIRMAN: Alina S. Szczesniak
General Foods Corporation
Corporate Research
White Plains, New York 10625

SCOPE: Rheological problems encountered in food research. Relationships between food texture and rheology, and applications of the rheological approach to food texture research.

Symposium on Biorheology

CHAIRMAN: Larry V. McIntire
Department of Chemical Engineering
Rice University
Houston, Texas 77001

SCOPE: Red Cell Membrane Mechanics. Coagulation Mechanism-Clot Structure Formation. (a) Rheological models for red cell membranes, mechanics of flow of red cells in small capillaries, biochemical basis for observed red cell material properties, and alteration of erythrocyte rheology in disease and by prosthetic devices; (b) Use of rheological techniques to investigate fibrinogen cross-linking and structure of clots formed under different physicochemical conditions, platelet-fibrin-interaction and effect of platelet function alteration on this interaction, the effect of fibrinolytic agents and anticoagulants on clot structure formation and dissolution.

General Papers Session

CHAIRMAN: C. D. Han
Department of Chemical Engineering
Polytechnic Institute of New York
Brooklyn, New York 11201

SCOPE: Rheological models, rheological measurements, flow instabilities of rheologically complex fluids, and related topics.

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

The Program Committee consists of C. D. Han, Chairman, I. M. Krieger, L. V. McIntire, J. C. Miller, and J. L. White. Acceptance of submitted abstracts will be based on technical content and relevance to rheology.

Several invited lectures will be given on topics of broad general interest to the Society.

Local Arrangements Committee Chairman is John C. Miller, Union Carbide Corp., Bound Brook, New Jersey 08805.

TENTATIVE TECHNICAL PROGRAM
 for the February 27 - March 2, 1977
 (1976 Annual) Meeting of the
SOCIETY OF RHEOLOGY
 New York, N. Y.

	February 28, 1977 (Monday)	March 1, 1977 (Tuesday)	March 2, 1977 (Wednesday)
MORNING:	Suspension Rheology	Rheology of Plastics Processing	Rheology of Plastics Processing
	Rheology of Food Products	Rheology of Food Products	General Papers
AFTERNOON:	Suspension Rheology	Biorheology	Biorheology
	General Papers	General Papers	General Papers

48th ANNUAL MEETING

The 48th Annual Meeting of the Society is scheduled for Madison, Wisconsin, tentatively mid-to-late October 1977.

PROPOSED MEETING

April 1978 Joint meeting between the British Society and Society of Rheology in Plymouth, Devon, focusing on INTERACTIONS BETWEEN STRUCTURE AND RHEOLOGY. Local Arrangements by T. E. R. Jones.

Publication in the Transactions is to be encouraged. Further discussion regarding the actual meeting should develop at Gothenburg in September.

DUES INCREASE

TO: Members of the Society of Rheology

This is to certify that the recent ballot to amend the Rules of the Society by changing Article III, Section 1 to make Regular Member dues \$15 was passed by a vote of 406 affirmative to 36 negative. The new Article III, Section 1 is immediately effective according to Article VIII of the Rules. However, members who have already paid their 1976 dues will see no change until the 1977 billing.

R. A. Mendelson, Secretary

OTHER EVENTS

The week following the VIIth International Congress-30 August - 1 September, 1976, IUPAC is arranging a Symposium on "Long-Term Properties of Polymers and Polymeric Materials" in Stockholm. The scope covers chemically oriented problems, chemorheology and aging.

VIIIth International Congress on Cybernetics at Namur, Belgium from September 6 through September 11, 1976. One of the topics covered will be Cybernetics in Mechanical Systems. Contact: The Secretariat of the International Association of Cybernetics, Palais des Expositions, Place Andre Pijckmans, B-5000 Namur, Belgium.

14th International Congress of Theoretical and Applied Mechanics, Delft, Netherlands from August 30 through September 4, 1976.

Contact Richard Y. Dow, Staff Officer, USNC-TAM, National Research Council, 2101 Constitution Avenue, N. W., Washington, D.C. 20418.

The Second International Symposium on Polyvinylchloride is scheduled for Lyons, France on July 5-9, 1976.

A.I.Ch.E. ANNUAL MEETING
November 29 - December 2, 1976
Chicago, Illinois

CALL FOR PAPERS

Four technical sessions are being organized. Abstracts should be sent to the appropriate session chairman.

They are:

Rheology and Processing of Thermosetting Polymers
C. W. Macosko, Dept. of Chemical Engineering,
University of Minnesota, Minneapolis, Minn. 55455

Rheology and Processing of Elastomers
James L. White, Dept. of Chemical Engineering,
University of Tennessee, Knoxville, Tenn. 37235

Melt Processing of Polyolefins

C. D. Han, Dept. of Chemical Engineering, Poly-
technic Institute of New York, Brooklyn, NY 11201

Properties and Morphology in Various End Uses of Polyolefins

J. R. Collier, Dept. of Chemical Engineering, Ohio
University, Athens, Ohio 45701

SHORT COURSE ON RHEOLOGY

"Rheology: Principles and Application" will be offered at Kent State University June 20 through July 2, 1976. Eighteen lectures will be presented covering Rheology Kinematics and Dynamics, Dispersion, Interfacial and Polymer Rheology. Lectures will be equally divided between principles and application.

For additional details, contact C. J. Knauss, Department of Chemistry, Kent State University, Kent, Ohio 44242.

MESSAGE FROM THE PRESIDENT

In order to keep the membership informed, I plan to present at regular intervals in the Bulletin, the Society's plans, aims, and history.

The Society is managed by its Executive Committee, but to varying extents the direction the Society takes in any two year period is guided by its President. Therefore, as a start I will tell you my hopes and goals for the Society for my term of office.

1. For the last eight years, the membership of the Society has remained relatively constant. In part this has resulted from the increase in membership due to those working on polymers being counterbalanced by a loss in membership of those working in food rheology, biorheology, georheology, and behavior of solids. I would like to see a significant growth of the Society through a renewed attention to the aforementioned areas as well as through an increase in attention to the practical areas of polymer rheology. Toward that goal I have asked the Program Chairman for both the 1976 and 1977 Annual Meetings to make certain that Symposia in some or all of these areas can be included. However, the only sure way to bring workers in these fields into the Society is by a continuing effort to make certain that these areas are covered in each Annual Meeting and in Transactions as well. This is not to suggest that we decrease our attention to polymers—only to increase our attention to other areas.

2. If you, as a rheologist, were looking for a job, would you notify the Society offices? Or do you know where they are? Probably not, to one or both of the

questions. In fact, our offices at 335 East 45th Street, New York, New York 10017 have a Placement Service through the American Institute of Physics. Unfortunately not many employers of rheologists are aware of the Placement Service either. This was one of the reasons for asking the name of your current employer in the Survey. I would like to see the Society act in behalf of its members to notify all employers of rheologists that qualified, experienced rheologists can be found through our Placement Service.

3. Other than Physics Today, where outside the Bulletin do you see notices about Society of Rheology meetings or read about the Bingham Medalist? Notices of our meetings, and programs, too, in some cases, should be published in journals such as GeoNews, J. of Bio-rheology, J. of Texture Studies, SPE Journal, Polymer Division of ACS Bulletin, J. of A.I.Ch.E., J. of A.S.M.E., J. of Acoustical Society of America, J. of the American Association of Physicists in Medicine, and other places. Notices should also be sent to sister societies in other countries. To handle this job, I am appointing a Publicity and Public Relations Committee to set up procedures for publicizing our meetings. They will also take care of press releases to newspapers and technical news publications about our Bingham Medalist and other members of the Society who receive honors.

This is enough for now. Further plans and past history of the Society will appear in future Bulletins.

J. R. Knox

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 \$15 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
