

RHEOLOGY BULLETIN

Publication of The Society of Rheology, Inc.

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January, 1985

56th ANNUAL MEETING 1984 SOCIETY OF RHEOLOGY MEETING

Virginia Polytechnic Institute
and State University
Blacksburg, Virginia
February 24-27, 1985

Registration forms and housing information were mailed separately to members in December. Contact Local Arrangements Chairman: Donald G. Baird, Dept. of Chemical Engineering, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. Phone: 703/961-5998.

The program organized by William B. Russel and his committee appears as a separate enclosure, along with the abstracts of the papers. Contact Program Chairman: W. B. Russel, Dept. of Chemical Engineering, Princeton University, Princeton, NJ 08544. Phone: 609/452-4590.

SOR SHORT COURSE INFORMATION

February 23 and 24, 1985

A course on "Molecular Theory and Polymer Rheology" will be given in conjunction with the Annual Meeting. Lecturers will be Robert B. Bird and Chuck F. Curtiss, University of Wisconsin-Madison. As noted in a separate mailing to members in December, the fee for the course, lecture notes, and book is \$200 prior to January 31, 1985. A late registration fee of \$225 is acceptable thereafter. Student rates are one-half of the above. Checks should be made payable to "Society of Rheology" and sent with registration form to E. A. Collins, Mitech Corporation, 4399 Hamann Parkway, Willoughby, OH 44094. Phone: 216/946-3130.

1984 BINGHAM MEDALIST

As detailed in the August SOR Bulletin, Professor Bernard D. Coleman of the Carnegie-Mellon University has been named the 1984 Bingham Medalist of The Society of Rheology.

1985 BINGHAM MEDAL NOMINATIONS

Nominations for the 1985 Bingham Medal are due in the hands of the chairman of the committee before February 15, 1985. Send nominations and supporting materials to Ward O. Winer, School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, GA 30332.

Committee members are: L. L. Blyler, Jr., J. N. Dealy, L.A. Goettler, L. G. Leal, D.D. Marsh, and L. R. Schmidt.

57th ANNUAL MEETING 1985 SOCIETY OF RHEOLOGY MEETING

Ann Arbor Inn
Ann Arbor, Michigan
October 14-17, 1985

The 1985 Annual Meeting of The Society of Rheology will be held October 14-17 at the Ann Arbor Inn, Ann Arbor, Michigan. Phone: 313/769-9500.

Local Arrangements

A. S. Wineman (Chairman)
Dept. of Mechanical Engineering & Applied Mechanics
University of Michigan
Ann Arbor, MI 48109
313/764-4254

F. Filisko (Co-Chairman)
Dept. of Materials & Metallurgical Eng.
University of Michigan, Ann Arbor
313/763-2240

Program Committee

Stuart J. Kurtz (Chairman)
Union Carbide Corporation
P.O. Box 670
Bound Brook, NJ 08805
201/356-8000, Ext. 2471

Frank Filisko (Co-Chairman)
address and phone listed above

A short course on Liquid Crystals, with Kurt Wissbrun and Roger Porter as lecturers, will be given at the 1985 annual meeting in Ann Arbor.

CALL FOR PAPERS

An abstract form is enclosed which should be used when submitting abstracts. These are to be sent to the session chairman with a copy to the program chairman by May 1, 1985. In order to facilitate organizing the meeting, please send the intended title of your paper to the session chairman by March 1, 1985. No paper to be offered should have been presented elsewhere, nor should it be in press or published.

INDUSTRIAL APPLICATIONS SYMPOSIUM SESSIONS:

Polymer Processing - Confined Flow

Chi Kai Shih
E.I. Du Pont de Nemours & Co.
Polymer Products R&D
Experimental Station
Wilmington, DE 19898
302/772-4436

Polymer Processing - External Flows

John Dealy
Dept. of Chemical Engineering
McGill University
3480 University St.
Montreal, PQ, Canada H3A 2A7
514/392-5442

RHEOLOGY BULLETIN

Raymond R. Myers, Editor
Department of Chemistry
Kent State University
Kent, Ohio 44242
216/672-2034

Numerical Simulation of Processing Flows

Lawrence Schmidt
General Electric Company
Chem & Eng Bldg, Room 421
P.O. Box 8
Schenectady, NY 12301
518/385-8459

Applied Rheology in RIM and SMC

Howard Cox
General Motors Technical Center
30500 Mound Road
Warren, MI 48090-9056
313/575-3313

OTHER SPECIAL SESSIONS:

Application of Equations of State in Rheology

Bruce Hartmann
Polymer Physics Group
Naval Surface Weapons Center
Silver Spring, MD 20910
202/394-2629

Applications of Rheology to Solid Composites Materials

Sanford Sternstein
Materials Research Center
Rensselaer Polytechnic Institute
Troy, NY 12181
518/266-6459

Non-Orthodox Measurement Devices and Rheologically Unusual Materials

Jaromir J. Ulbrecht
Metrology Division
National Bureau of Standards
Washington, DC 20234
301/921-3509

Suspensions, Solutions and Emulsions

Francis Gadala-Maria
Dept. of Chemical Engineering
University of South Carolina
Columbia, SC 29208
803/777-3182

Numerical Methods and Constitutive Equations

Bruce Caswell
Division of Engineering
Brown University
Providence, RI 02912
401/863-1448

GENERAL SESSION

Henning Winter
Dept. of Chemical Engineering
University of Massachusetts
Amherst, MA 01003
413/545-0922

GUIDELINES FOR THE BINGHAM AWARD COMMITTEE

The previous issue of the Bulletin inadvertently contained a draft form of the guidelines. The present form is the one adopted by the Executive Committee.

1. A call for nominations shall be published in the regular Bulletin of The Society of Rheology prior to normal Fall date of the annual meeting stating a February 15 deadline nomination.
2. Nominations shall include the following information about the nominee.
 - a. A brief scientific biography.
 - b. A review of those accomplishments upon which the nomination is based.
3. The following item, if submitted, must be appended to the nomination.
 - a. A list of publications.
 - b. Reprints (no more than 3).
 - c. Supporting letters from other rheologists which address the nominee's contributions.
4. The Bingham Award Committee should meet at least once, in person or by teleconference, prior to its final decision.
5. Except in special circumstances, the contributions for which the award is granted shall have been made during the ten years preceding the award.
6. Decision of the Bingham Award Committee must be by majority agreement of its members (including its chairman).
7. The chairman of the Bingham Award Committee should communicate the recorded results to the committee members.
8. The decision of the Bingham Award Committee shall be submitted to the president and the secretary at least by April 1 of the year preceding the normal Fall annual meeting time. It shall be accompanied by a summary of the information specified in guideline 2 above.
9. If the Bingham Award Committee is unable to arrive at a majority decision, its chairman shall submit to the Executive Committee for its decision the dossiers of those nominees receiving the most support.
10. If the Executive Committee fails to ratify a decision of the Bingham Award Committee, or fails to choose from the dossiers forwarded, then no award shall be given for that year.
11. After its final decision The Bingham Award Committee shall classify the rejected nominations into three categories.
 - a. Those to be reconsidered for the next Bingham Award.
 - b. Those to be returned to the nominators for revision and updating.
 - c. Those to be retired from consideration.The chairman shall notify each nominator of the classification given his, or her, nomination.

RULES TO GOVERN THE BINGHAM MEDAL AWARD

The E. C. Bingham Medal shall be awarded, usually annually but in any event not oftener, at the Annual Meeting of The Society of Rheology. The medal may be awarded to any individual who has made outstanding contributions to the science of rheology, provided that he, or she, has not previously received the award and is a resident of one of the countries of North America. It is not necessary that the recipient be a citizen of his or her country of residence or a member of The Society of Rheology. There is no restriction as to the age of the recipient.

The Bingham Medalist shall be chosen in the following manner. A Bingham Award Committee shall be appointed by the president in conformity with the Rules of The Society. The committee will consist of seven members, each serving a three-year term and they will be appointed in a 2,2,3-person-per-year cycle. The Bingham Award Committee shall consider, in any manner consistent with procedures established by the Executive Committee, all nominations submitted by any member of The Society. At a designated time, usually by April 1 prior to the Spring Executive Committee Meeting, the chairman of The Bingham Award Committee shall convey its decision to the president and the secretary of The Society. The president in turn shall transmit the decision to the Executive Committee for action. The official announcement of the award shall be made by the secretary in advance of actual presentation, preferably in the summer Bulletin.

REPORT FROM THE MEETING OF THE
INTERNATIONAL COMMITTEE ON RHEOLOGY AT
THE IXth INTERNATIONAL CONGRESS,
ACAPULCO, MEXICO

The International Committee met on October 9, 1984 with the undersigned representing the United States in the stead of Dr. Knox, who was unable to attend. Chief results of the meeting are the following:

1. Professor B. Mena was elected to succeed Professor Gianni Astarita as the new Chairman of the International Committee.
2. Professor Nicholas Tschoegl was reelected as Secretary of the International Committee.
3. After considerable discussion, it was voted that the Xth International Congress on Rheology will be held in Sydney, Australia. Present plans are to hold the Congress in late August of 1988 at the University of Sydney, with, if possible, the opening session at the Sydney Opera House.
4. Each delegate has been asked to report within two years on the position of his own society regarding the following principle: "An International Congress shall not be held in a country which has already hosted a Congress if there are viable offers from other countries."

W. R. Schowalter

ANNOUNCEMENTS

General Physics Advance Abstracts (GPAA) is a new American Institute of Physics (AIP) abstract journal to begin January 1985. It will be a companion publication to *Physical Review Abstracts*, to be issued twice a month in similar format. GPAA will include advance abstracts from archival journals of AIP and of member societies (*American Journal of Physics*, *Applied Physics Letters*, *Astronomical Journal*, *Journal of Applied Physics*, *Journal of the Acoustical Society of America*, *Journal of Chemical Physics*, *Journal of Mathematical Physics*, *Medical Physics*, *Physics of Fluids*, *Review of Scientific Instruments*, *Journal of Vacuum Science and Technology*, and *Journal of Physical and Chemical Reference Data*) except those journals covered in *Physical Review Abstracts*. It will also include abstracts of translation journals published by AIP. More complete information about GPAA is given in *Physics Today*, September 1984.

GPAA is available to Society of Rheology members for \$12 per year. Send your remittance to: Abstract Journals, c/o The American Physical Society, 335 East 45th St., New York, NY 10017.

Kent State University will present three short courses for Polymer and Coatings Specialists:

"Dispersion of Pigments & Resins in Fluid Media," May 6-10, 1985,

"Adhesion Principles & Practice for Coatings & Polymer Scientists," May 20-24, 1985,

"Applied Rheology for Industrial Chemists," June 3-7, 1985.

Contact Carl J. Knauss, Chemistry Dept., Kent State University, Kent, OH 44242. Phone: 216/672-2327.

As part of the 57th Annual Meeting of The Society of Rheology, Ann Arbor, Michigan, 14-16 October 1985, there will be a symposium entitled "Applications of Equations of State in Rheology." The theme of this symposium will be the use of PVT equations of state in the determination of the pressure and temperature dependence of rheological properties. Of particular interest in this symposium is the pressure dependence of rheological properties in contrast to temperature dependence.

A plenary lecture will be presented by Robert Simha of Case Western Reserve University. The symposium will also feature a round table discussion moderated by Robert F. Landel of the Jet Propulsion Laboratory. It is planned to publish the proceedings of the symposium in a special issue of the *Journal of Rheology*.

Abstracts of the papers for this symposium should be sent, by 1 May 1985, to the symposium organizer, Bruce Hartmann, Naval Surface Weapons Center, Silver Spring, MD 20910.

The 2nd Conference of European Rheologists shall take place in Prague, Czechoslovakia June 17-20, 1986. Contact:
2nd EURO-RHEO Conference
Institute of Hydrodynamics
Czechoslovak Academy of Sciences
Podbabska 13, 166 12 Prague
Czechoslovakia

A Call for Papers has been issued for the 16th Annual Meeting of the Fine Particle Society to be held April 22-26, 1985 in Miami Beach, Florida. Theme: International Symposium-Workshop on Particulate and Multi-Phase Processes." Contact:

Ms. Sheila Puryear
Coordinator, Clean Energy Research Inst.
University of Miami, P.O. Box 248294
Coral Gables, FL 33124.

A Call for Papers is made for a symposium on "Recent Developments in Structured Continua," to be held at the University of Windsor, Windsor, Ontario, Canada on May 29-31, 1985. Contact: Co-chairpersons D. De Kee or P. N. Kaloni, Fluid Dynamics Research Institute, University of Windsor, Windsor, Ontario, N9B 3P4, Canada.

Annual Meeting of the German Society of Rheology will take place at the Federal Institute for Materials Testing in May 15-17, 1985. Contact:

Deutsche Rheologische
Gesellschaft DRG e.V.
Geschäftsstelle
Unter den Eichen 87
D-1000 Berlin 45, West Germany

The 4th National Conference with International Participation on Mechanics and Technology of Composite Materials will be held 2-4 October, 1985 at Varna, Bulgaria. Contact:

Y. Simeonov
Bulgarian Academy of Sciences
Central Laboratory of Physio-Chemical Mechanics
"Acad. G. Bontchev" St. Bl. I
1113 Sofia, Bulgaria

Officers and Members of Council of The British Society of Rheology are:

President - J. F. Hutton
Secretary - J. J. Benbow, Dept. of Chemical Engineering,
University of Birmingham, P.O. Box 363,
Birmingham, B15 2TT, England

Treasurer - T. A. Strivens
Membership Secretary - P. C. Anderson
Abstracts Editor - D. R. Oliver
Bulletin Editor - H. A. Barnes
Ordinary Members - S.T.E. Adlehouse, F. S. Baker, D.C-H. Cheng,
A. Evans, C.J.S. Petrie, and H. Schimanski.

A bibliography of current titles on rheological properties and rheometry of liquids, solids, gases and dispersed and granular systems, showing the rheological behavior of materials in flow and transport processes, processing and machine components has been published. Contact:

Bundesanstalt für Materialprüfung (BAM)
Fachgruppe Rheologie und Tribologie, and
Deutsche Rheologische Gesellschaft (DRG)
Unter den Eichen 87.
D-1000 Berlin 45, West Germany

BASE RHEO is a bibliographic database of titles covering the worldwide literature on deformation and flow of both materials and biological systems with special emphases to those that do not react the way the Hookean body or a Newtonian fluid does. The database corresponds to the Documentation Rheology. Contact:

Bundesanstalt für Materialprüfung (BAM)
(address listed in previous paragraph)

Member Societies of the International Committee on Rheology
(with foundation date and approximate membership in 1984)

Society of Rheology (USA) (1929)	1150
The British Society of Rheology (1940)	600
Nederlandse Reologische Vereniging (1950)	120
Deutsche Rheologische Gesellschaft (1951)	260
Swedish Society of Rheology (1956)	150
The Australian Society of Rheology (1959)	75
Arbeitsgruppe Rheologie im Verein Oesterreichischer Chemiker (1959)	70
Groupe Francaise de Rheologie (1964)	300
Rheology Group of the Czechoslovak Chemical Society (1968)	105
Societa Italiana di Reologia (1971)	100
The Society of Rheology, Japan (1973)	610
Belgian Group of Rheology (1974)	100
Sociedad Mexicana de Reologia (1975)	80
Israel Society of Rheology (1981)	65
Spanish Group of Rheology (1981)	50
Canadian Rheology Group (1982)	85
Asociacion Argentina de Reologia (1983)	100
Indian Society of Rheology (1984)	35

Officers and Committee Members of the 1984 Council of the
Australian Society of Rheology are:

President - P.U.A. Grossman
 Vice Pres - S. N. Bhattacharya
 Secretary - P.H.T. Uhlherr, Dept. of Chemical Engineering,
 Monash University, Clayton 3168, Australia
 Treasurer - A. L. Halmos
 Past Pres - K. R. Hall
 Committee Members - A. Pritchard, R. I. Tanner, C. Tiu,
 and J. B. Watkins.

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
(Please print)

Mail Address

Professional Affiliation

Position

Please indicate in the boxes
provided below the code letter
from the list to the right, which
best describes your areas of
interest in order of decreasing
importance.

- PRIMARY
- SECONDARY
- TERTIARY

INTEREST AREA	CODE
Biological Materials	A
Foods and Natural Products	B
Inorganic Materials	C
Oils and Lubricants	D
Soils	E
Synthetic Polymers	F
Fluids (Including Solutions)	G
Solids	H
Suspension and Particulate Systems	J
Engineering	K
Experimental Techniques	L
Mechanics	M
Phenomenology	N
All of the above	Y
None of the above	Z

I understand that my regular member's subscription to the **Journal of Rheology** is for my
personal use, and not for library use.

Signature _____

Date _____

Enclose remittance of \$20 for Regular Annual Dues or \$150 for Sustaining Annual Dues and
mail to:
THE SOCIETY OF RHEOLOGY
c/o American Institute of Physics
335 East 45th Street
New York, New York 10017