

# RHEOLOGY BULLETIN

Publication of The Society of Rheology, Inc.

Vol. 50, No. 1

May, 1981



## 52nd ANNUAL MEETING

The success of the 52nd Annual Meeting of The Society of Rheology held in Williamsburg, Virginia, was helped by the generosity of three corporations interested in the Science of Rheology. Celanese Research Co. of Summit, NJ; IMASS, Inc. of Accord, MA; and Instron Corp. of Canton, MA, each donated \$500 to help support the Williamsburg meeting. The Society and its membership appreciate this support of an important forum for exchange of scientific information.

## 53rd ANNUAL MEETING

October 11-15, 1981  
Louisville Inn  
(Formerly Stouffers Inn)  
Louisville, Kentucky

### Program Committee:

L. R. Schmidt (Chairman), General Electric Company, Research & Development Center, P.O. Box 8, Schenectady, NY 12301; L. W. Kleiner, Diamond Shamrock Corp., T. R. Evans Research Center, P.O. Box 348, Painesville, OH 44077; D. P. Thomas, General Electric Co., Appliance Park, Bldg. 35, Louisville, KY; and symposia chairmen listed below.

### Local Arrangements Committee:

C. E. Miller (Chairman), Department of Civil Engineering, University of Louisville, Louisville, KY 40208.

## LAST CALL FOR PAPERS

Deadline for Abstracts: July 1, 1981

An abstract of 250 words or less is required NO LATER THAN JULY 1, 1981. Abstracts should be single-spaced, have 1½" margins, on 8½ x 11" paper, and be sent directly to the appropriate symposium chairman whose address is listed below:

### Biorheology

C. E. Miller  
University of Louisville

### Numerical Simulation of Materials Processes

B. Caswell  
Division of Engineering  
Brown University  
Providence, RI 02912

### Non-Traditional Experimental Techniques for Determining Viscometric Functions

J. J. Ulbrecht  
Dept. of Chemical Engineering  
SUNY at Buffalo  
Amherst, NY 14260

### Novel Polymer Processing Techniques:

#### Solid Phase Processing, Co-Injection, Co-Extrusion

L. A. Utracki  
NRC  
750 Bel-Air  
Montreal, H4C 2K3  
Quebec, Canada  
and  
M. R. Kamal  
Department of Chemical Engineering  
McGill University  
Monreal PQ H3A 2A7 CANADA

### Rheology of Suspensions & Two-Phase Flows

J. D. Goddard  
Department of Chemical Engineering  
University of Southern California  
University Park, CA 90007

### Rheo-Optics

D. G. LeGrand  
General Electric Company  
Research & Development Center  
P.O. Box 8  
Schenectady, NY 12301

### General Papers Sessions

H. H. Winter  
Dept. of Chemical Engineering  
University of Massachusetts  
Amherst, MA 01003

## RHEOLOGY SHORT COURSE

A short course on the practical aspects of polymer rheology in processing will be offered in conjunction with the annual fall Rheology Society meeting. The course will be taught by C. McKelvey and C. Sieglauff on October 10-11, 1981. Additional details can be obtained from Donald Hunton, National Bureau of Standards, Polymer Science & Standards Division, Washington, D.C. 20234.

## MINUTES OF EXECUTIVE COMMITTEE MEETING

Williamsburg, Virginia  
February 22, 1981

The meeting was called to order by President E. B. Bagley at 2:35 pm. In attendance were Executive Committee members Bagley, Collins, Kearsley, Myers, and Shaw. Also present were D. Hunton, J. Knox, E. Miller and L. Schmidt.

The Secretary read the minutes of the last Executive Committee meeting, the Report of the Secretary, and the report of the Membership Committee (C. Sieglauff, Chairman). All were approved by motion, second and voice vote. The Secretary also described changes in the AIP constitution which The Society has been asked to ratify. The Executive Committee voted to approve these changes and the Secretary will so inform AIP. It was also suggested, discussed and agreed that the Secretary would look into the matter of scrolls for presentation to Bingham Awardees along with the medal.

Treasurer Collins presented a thorough review of the finances of The Society from 1972 to 1981 which illustrated the slow deterioration of our financial reserves due to inflation. The balance as of September 30, 1980 was \$26,691.04, with an estimated balance for December 31, 1980 of \$19,000 and \$19,375 for December 31, 1981. In 1972 the balance was \$22,578.00 so that our position, due to inflationary pressures, is relatively weaker in 1981 than in 1972. In addition, the Treasurer reviewed the cost/benefit ratio of Society membership. Currently, \$17.50 in benefits are received for an annual membership dues of \$15. The \$2.50 deficit is made up by interest on savings, page charges and proceeds from meetings. Consideration of a dues increase will therefore be necessary in the foreseeable future.

The report of the Treasurer was unanimously accepted with a note of thanks to the Treasurer for the thoroughness of his accounting. A discretionary fund of \$500 per year was allotted to the Treasurer by unanimous consent of the Executive Committee to cover expenses of his office.



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

The Society's representative to the International Committee on Rheology, J. R. Knox, reported on the activities of that committee. The International Committee is working on a report on rheology facilities and it was felt that this should be coordinated with I. Krieger's survey of graduate programs in rheology. To augment cooperation with foreign societies, it was decided that announcements of foreign meetings should be sent to *Physics Today* as well as the *Bulletin*.

R. R. Myers, Editor, read the report of his office with the main item being the overrun on the page limit of 800 per year. Wiley will be instructed to hold to 800, but no two tier system of publication (preference given to those honoring the page charges) will be instituted at this time. Several committee members were strongly against the two tier system on the grounds that scientific merit should take precedence over ability to pay. The use of SI units for the *Journal of Rheology* was discussed and it was decided to leave this matter to the Editorial Committee. It was also noted that J. Dealy has expressed concern over the need for nomenclature clarification in extensional flow. It was agreed that Dealy should be appointed chairman of a nomenclature committee and should present a proposal to the Executive Committee on the objectives to be achieved, with proper regard for the prior work done under the Chairmanship of C. Sieglauff.

Member-at-Large Kearsley reported briefly on the AIP Committee for Public Policy. The consensus was to continue our presence on this committee.

The report of the Education Committee was reviewed by its chairman, D. Hunston, who discussed plans for a short course at the 1981 Annual Meeting and for publicizing a list of educational materials. The existence of this list will be announced in the *Bulletin*.

At this time the concern of the Committee was focused on the plans for the Fall 1981 meeting in Louisville, Kentucky. The meeting will be from October 11-15 and will feature six symposia as well as general papers and invited lectures, according to Program Chairman L. Schmidt. Local arrangements were discussed by the Local Arrangements Committee Chairman, E. Miller, who will be given any necessary advice and support by Site Selection Committee Chairman E. Collins and local Society members. A spouses' program will be arranged if there is sufficient interest.

Progress of the Site Selection Committee was reported by its chairman E. Collins, who discussed a number of possible sites for 1982. Invitations will be solicited at the Business Meeting. For the present meeting in Williamsburg, no problems had been noted (local arrangements had been handled by G. McKenna and colleagues at NBS, program by C. Denson, Chair) and a vote of thanks was given to Celanese, Imass and Instron for their financial support. The President will convey this vote of thanks in writing to these firms.

At this point (6:15 pm) an adjournment was called and the meeting scheduled to continue at 9:00 pm.

The problems with the Naples travel arrangements were discussed at great length and methods for avoiding similar difficulties in the future were resolved. E. Kearsley was assigned the task of investigating methods for getting legal help at less expense than that oriented through AIP. The President was authorized to write a formal complaint to AIP regarding the high legal costs.

There was agreement that Dealy should address the open business meeting on the subject of formation of a Canadian Division within The Society. There should be no vote at this time but the matter could be considered at the next Executive Committee meeting if the membership expressed interest.

The meeting was adjourned at 11:00 pm with the next meeting scheduled for April 25, 1981, in Cleveland, Ohio.

Respectfully submitted,  
M. T. Shaw, Secretary

**EDITOR'S REPORT**

Raymond R. Myers  
February 11, 1981

Growth of The Journal of Rheology  
Size

The Journal started in 1957 with a single issue. It became a biannual in 1965 and a quarterly in 1967. With increasing growth and with Wiley's excellent cooperation, our change of name in 1978 was followed that same year by bimonthly publication starting with Volume 22. See Table I.

TABLE I. Journal Growth

Volume	Year	Papers	Pages
1	1957	15	222
2	1958	15	314
3	1959	14	216
4	1960	24	368
5	1961	31	382
6	1962	27	394
7	1963	28	425
8	1964	9	147
9	1965	54	888
10	1966	35	689
11	1967	22	400
12	1968	36	585
13	1969	28	546
14	1970	38	622
15	1971	43	800
16	1972	46	776
17	1973	38	669
18	1974	34	646
19	1975	38	656
20	1976	34	654
21	1977	28	604
22	1978	29	682
23	1979	38	788
24	1980	41	975

*Circulation*

The Journal of Rheology circulation rose to an all-time high of 1757 for 1980. Member copies rose from 1055 to 1079, and Wiley was able to raise the regular subscription level from 654 to 678. There is an incredible 97% renewal rate, the highest of any of Wiley's journals.

*Manuscript Flow*

Attempts have been made to reduce the time between acceptance of a manuscript and its publication. Last year's Issue 6 was especially large and carried the pagination for Volume 24 to 988, considerably above the 800-page target. This year we have the option of making the June issue heavy or light, depending on the number of manuscripts in process. Expecting an influx of papers from the Williamsburg meeting we have requested a full June issue and expect to lean a bit on session chairmen to secure submissions to the Journal.

The assistant editors have 22 manuscripts in process.

Volume 24 Issues 1-6 contained 41 papers, 8 notes, abstracts from the Golden Jubilee meeting in Boston, the 2nd Joint Meeting of the U.S. and Japan Societies of Rheology, and from Volume 7, Numbers 2 and 4, 1979, Journal of the Society of Rheology, Japan.

Fifty-one submissions to the Journal were made in 1980; 55 papers were accepted coming from submissions in 1980 and 1979, 7 papers were either withdrawn or rejected.

*Bulletins*

Bulletins were issued in January, July, and December. The January 1980 issue contained information relating to the October 1979 business meeting in Boston. The July 1980 issue called for papers for the February 1981 meeting in Williamsburg. The December 1980 bulletin was mailed via bulk mail on January 12, 1981. This mailing also contained the program and abstracts for the February meeting.

Receipt by the Editor of abstracts need to arrive earlier than they have been if the program and abstracts are to be retyped, printed, and mailed to the membership with enough time left for them to decide whether or not to attend the annual meeting. Improving the rate of delivery of this material would involve establishing a general form for abstracts and mailing the program and abstracts via first class mail. Using a general form would not completely eliminate secretarial work in the Editor's office, but it would limit it to arranging abstracts in proper times, dates and symposia format. The Society cannot afford first-class mailing of bulky items.

This year's programs and abstracts were received in the Editor's office by December 22, 1980. They arrived at the printer on December 29 (in reality, in two working days). Printer's delivery was January 9 (a Friday) and the mailing date was the following Monday. Separate first-class mailing was sent to session chairmen.

*Incidental Matters*

The Society has been requested to mandate the use of the S.I. system and also to insist that a list of symbols accompany each paper. These are good ideas and therefore a directive will be written following the annual meeting of the editorial board.

Other matters to be discussed with the editorial board are the size of the Journal, the two-track system for publishing based on whether page charges have been paid, and the handling of obituaries. We also wish to reinstate the policy of publishing invited papers.

*Acknowledgment*

The Editor acknowledges the excellent help, advice, and cooperation of the corps of assistant editors: Robert C. Armstrong, Edward A. Collins, Shigeharu Onogi, J. George Savins, Charles L. Sieglauff, Alex Silberberg, and James L. White.



The 1979 year end Treasurer's report had to be modified to include the price variance adjustment provided by the AIP which was received August 25, 1980. The adjusted balance in account year end 1979 is \$20,290. The statement of receipts and disbursements for the nine months ending September 30, 1980, amounted to a balance in the account of \$26,691. It was pointed out that this figure did not include the payment to Wiley for Volume 24, 1 through 6, which will be approximately \$12,000.00. The anticipated 1980 year end balance will be approximately \$20,000. This balance has remained approximately that amount for the past 8 to 10 years. Thus, in terms of real dollars, our balance is diminishing.

## AMERICAN INSTITUTE OF PHYSICS INCORPORATED FOR THE SOCIETY OF RHEOLOGY

Statement of Receipts and Disbursements - Year Ended December 31, 1979

Balance in Account - December 31, 1978*		\$26,606.15
<i>Receipts (January 1 - December 31, 1979)</i>		
Dues	\$15,788.00	
Sales of Mailing Lists	92.00	
Interest on Savings account and certificates	1,994.77	
Page charges Journal of Rheology	6,190.00	
Short course - Houston 1978	100.00	
Net receipts Annual Mtg. - Houston	1,007.12	
Net receipts Spring Mtg. - Hawaii	447.00	
Short Course - Boston 1979	2,990.00	
Sustaining membership	100.00	
	28,708.89	
	TOTAL RECEIPTS	\$55,315.04
<i>Disbursements (January 1 - December 31, 1979)</i>		
Charge for Dues billing and collection	\$ 856.00	
Charge for prep. and maintenance of member record file	1,622.00	
Financial handling charge - 1979	250.00	
Member Society Dues - 1979	900.00	
Editorial Expenses	2,400.00	
Journal of Rheology	8,363.00	
Bulletin, Program and Abstracts mailing	318.00	
Membership Drive printing and mailing	565.00	
Golden Jubilee circular mailing	645.00	
Golden Jubilee July announcement printing and mailing	645.00	
AIP Press letter and releases	293.00	
Golden Jubilee abstracts composition, printing and mailing	2,716.00	
Enclosures printing and mailing	341.00	
	3,057.00	
<i>Less: Reimbursement from SOR</i>	(2,563.00)	494.00
Election Ballot mailing	242.00	
Officer Nomination mailing	190.00	
Sieglaiff letter mailing	185.00	
International Congress mailing	205.00	
Renewal Billings	523.00	
New Society letterhead and brochure	396.00	
Administrative Services	1,200.00	
Printing and Postage	290.00	
Bingham Medal	46.00	
Office communication service	154.00	
Executive Meeting - March 1979	243.49	
Telephone and Xerox charges - CWRU	96.76	
ICR Brochure shipping	31.00	
History of SOR Preparation	249.41	
Bingham Medal	47.71	
Short Course - Boston, expenses	2,516.15	
<i>Final Disbursements Variance for 1979</i>		
Charges for Dues billing and collection	645.00	
Charges for preparation & maintenance records	104.00	
Financial Handling	(13.00)	
Member Society Dues year 1979	(50.00)	
The Journal of Rheology, Vol. 23 #1-6	9,789.00	
Printing Mailing labels and mailing	184.00	9,973.00
Golden Jubilee Brochure AIP Editorial Mechanics and negatives	369.00	
Miscellaneous	31.00	
	TOTAL	\$35,025.52
	DISBURSEMENTS	20,289.52 +
Balance in account December 31, 1979		

Dr. Edward A. Collins  
Treasurer  
February 22, 1981

\* Adjusted to include 1978 Price Variance  
+ Adjusted to include 1979 Price Variance, August 25, 1980



## 1981 Treasurer Estimate

Estimated Bal. in Account Jan. 1, 1981	\$20,000
<i>Receipts</i>	
Dues 1980, 1981 & 1982	\$15,000
Interest Savings Certificate & Savings	3,500
Income Short Course (Fall)	2,500
Page charges J. Rheology	4,500
Annual Meeting (Louisville)	1,000
	\$26,500
<b>TOTAL RECEIPTS</b>	<b>\$46,500</b>
<i>Disbursements</i>	
Charges for Dues Billing & Collection 1.40/item	1,400
Charges for Preparation & Maintenance member file @ \$1.50/member	1,575
Financial Handling 5/8 of 1%	400
Member Society Dues \$1/Member	1,050
J. of Rheology	12,000
Editorial Expenses	2,400
Subscription Expenses	2,000
Bulletins (3)	1,500
Short Course Expenses	2,000
Administration AIP	1,800
Presidents Discretionary Fund	500
Miscellaneous	500
	\$27,125
Estimated Balance December 31, 1981	\$19,375
Respectively submitted Dr. Edward A. Collins Treasurer February 22, 1981	

### 1980 REPORT OF THE SECRETARY TO THE ANNUAL BUSINESS MEETING OF SOCIETY OF RHEOLOGY

Williamsburg, VA, February 23, 1981  
Williamsburg, Virginia  
February 23, 1981

Being the year of the International Congress on Rheology, much of the attention of The Society in 1980 was focused abroad on the VIIIth International Congress in Naples, Italy. Despite some difficulties with manuscript deadlines and travel arrangements, our members were much in evidence at the Congress, presenting about 25% of the some 300 papers and lectures. In keeping with tradition, the 1980 Annual Meeting of The Society was postponed until February 1981. At this meeting 56 lectures and papers are scheduled.

Howard Brenner was named the recipient of the Bingham Medal for 1980.

When the official tally was made on June 30, 1980, the membership of The Society stood at 1036, a 4% increase over the 998 of a year ago. In response to the large increase in membership in 1979, a new directory was published in 1980 and sent to all members.

Looking forward to 1981, an Annual Meeting is planned for Louisville, Kentucky, and the biennial election of officers is scheduled.

The Secretary wishes to acknowledge and thank Mrs. Margaret Nightingale of AIP for her help this year and the Institute of Materials Science of the University of Connecticut for providing necessary services to this office.

Respectfully submitted,  
M. T. Shaw, Secretary

### MINUTES OF THE ANNUAL BUSINESS MEETING THE SOCIETY OF RHEOLOGY, INC.

Williamsburg, Virginia  
February 23, 1981

The Annual Business Meeting of The Society of Rheology was called to order at 4:46 by President E. B. Bagley.

The minutes of the 1979 Annual Business Meeting and the 1980 Report of the Secretary were read by Secretary M. T. Shaw. Both of these reports were approved by motion, second, and unanimous vote.

The Treasurer, E. A. Collins, presented the Report of the Treasurer, which cited a balance for September 30, 1980 of \$26,691.04; an estimated balance of \$19,000 for December 31, 1980; and \$19,375 by year's end 1981. Collins then noted that the late reporting of "variances" by AIP, running over from one fiscal year to the next, complicate the Treasurer's task. These late disbursements, however, act to the benefit of The Society, but serve also to make the year-end balance appear better than it truly is.

The Treasurer then gave a historical analysis of the financial position of The Society from 1972 to the present. Two points stood out. First, over this period the benefits accruing to members have tended to exceed the cost to the members. Currently, for the \$15 annual dues paid by Society members, benefits conservatively estimated at \$17.50 are received. This \$2.50 deficit per member is covered by interest, page charges and proceeds from meetings.

The second point made very clear by this historical survey is that The Society reserves have held steady at about \$20,000 over the past nine years. Taking the decline of the value of the dollar over this period into account, it is clear that our reserves have declined significantly and our ability to meet financial emergencies, such as might occur in meeting cost overrun, has been significantly reduced.

This analysis thus showed that, although our financial position is sound and no increase in dues is recommended at the present time, members should be aware of the potential need in the foreseeable future for such a recommendation.

The report of the Treasurer was accepted unanimously by voice vote after motion and second.

The report of the Editor (R. R. Myers) was read by D. Hunston, who noted that pages in *Journal of Rheology* were running well over the desired target level of 800 per year. In 1980, for example, 975 pages were published by the Journal. The report also disclosed that three *Bulletins* were published in 1980. Methods of speeding abstract distribution were discussed and a clarification of the publication time in the *Journal* was requested. The Editor's report was accepted by motion, second and voice vote.

D. Hunston, Chairman of the Education Committee, continued with a report of the work of that committee. A short course at Louisville (October 1981) on "Fluid Mechanics" is planned. On other activities Hunston reported that I. Krieger is gathering a list of graduate programs and courses on rheology and that a questionnaire will issue shortly. It was pointed out that the International Committee on Rheology is involved in a similar endeavor and that the two should be coordinated.

At 5:30 pm the Secretary presented to the membership, as announced by a mailing, an addition to the Certificate of Incorporation of The Society. This addition, Article 8, describes the distribution of the assets of The Society should it dissolve. The vote for this addition was 56 in favor, 0 opposed. The Secretary voted, by proxy, 126 votes in favor, 6 opposed and 1 abstention. The addition was then considered approved and the Secretary was directed to inform the lawyers of this change.

President Bagley at this point reviewed the circumstances of the bankruptcy of Conference Travel Services, noting that The Society had taken all reasonable steps to help the involved members recover their losses. It was emphasized that any group travel arrangements are subject to extreme uncertainties and that The Society should probably avoid such involvement in the future in spite of their facilitation of attendance by members at foreign meetings.



## REPORT OF THE MEETING OF THE INTERNATIONAL COMMITTEE ON RHEOLOGY

Naples, Italy  
September 2, 1980

The Report of the Site Selection Committee was presented, with several possibilities for the 1982 meeting being reviewed. Invitations by members are solicited and should be forwarded to Chairman E. A. Collins.

L. R. Schmidt, Program Chairman for the Louisville meeting, reviewed the plans formulated by his Committee. Several symposia are planned (see the December, 1980 Bulletin) as well as lectures and a beer session.

To wrap up the meeting, a discussion of the feelings of the Canadian members concerning the formation of a Canadian Division of The Society was presented by J. M. Dealy. A petition to this effect had been signed by 78% of the Canadian members. After some discussion of this plan, Dealy read a motion describing an addition to Article VIII of the Constitution which would permit a Canadian Division. This motion was seconded and passed, but some concern about the wording resulted in a motion for rescission and reconsideration. After passing, a motion was presented and passed that obligated The Society to present a clearly written constitutional amendment to the members and statements for and against the amendment. Dealy agreed to write the amendment, after discussion with the Executive Committee, and the pro statement, while E. A. Kearsley agreed to phrase the con statement. These are to appear in the July Bulletin and the amendment will be brought before the members at the October 1981 Annual Meeting.

The meeting was adjourned at 6:50 p.m.

Respectfully submitted,  
M. T. Shaw, Secretary

### REPORT OF THE COMMITTEE ON EDUCATION

We hope to hold Short Courses at both the Fall 81 and Fall 82 Society of Rheology meetings and the planning for these Courses is now underway. The topics we would like to cover are; Fluid Mechanics Applied to Solving Engineering Problems (Solution, Suspension, and Melt Processing, etc.) and Applications of Rheology in Composites. The Short Course at the Louisville meeting looks particularly promising in terms of local support.

The Educational Committee has compiled a collection of information on educational materials in rheology (films, short courses, etc.) and is now seeking suggestions regarding the use of this material. In this connection Irv Krieger has pointed out that the AIP list of graduate programs in Physics and related areas does not include many of the rheology programs that are known to exist. Irv has undertaken the task of compiling a complete and up-to-date list of such programs for inclusion in the next AIP listing. He has prepared a questionnaire for distribution in the next Bulletin. Any information for this list of other suggestions for the use of our collection of educational material would be appreciated.

Donald Hunston  
Chairman, Committee on Education

1. The Israel Society of Rheology was elected unanimously to the ICR and the representative, Dov Katz, joined the meeting.
2. After some discussion, Acapulco, Mexico was approved for the 9th International Congress in 1984. Some concern was expressed by a few members of the committee that the Mexico Society was too small to host the meeting successfully in the sense of having a broad background in a wide range of rheological areas, but Dr. Mena convinced the committee that there was no problem in either staff or in outside funds. (Outside the committee meeting it was agreed and understood that The Society of Rheology would help in any possible way in furnishing technical expertise in program arrangement or in any other way.)
3. Section 2 of the ByLaws was amended to allow representatives of national or international organizations which are not ICR members to attend the ICR meetings as associate members without vote. Also proposed for Section 2 was an amendment allowing the granting of Life Membership without vote to certain individuals. Ratification is requested from the member societies.  
In anticipation of ratification, Ziabicki (Poland) and Meissner (Switzerland) were granted Associate Membership. Previously Scott Blair and Burgess had been granted Life Membership and at this meeting Marvin was granted Life Member status.
4. A European Committee of Rheology has been proposed to be composed of members from the European Societies. It was suggested that this European Committee have a representative on ICR. It was agreed that there should be an ad hoc meeting of the European Representatives to decide what sort of committee they were considering and to report back to the ICR before the end of the Congress. No action was taken.
5. It was agreed to sponsor the compilation of a trilingual dictionary of rheological terms. N. Tschoegl will handle the English part.
6. A directory of rheological laboratories will be compiled. Further details along with a questionnaire will be sent to the member Societies.
7. It was suggested that "Rheological Documentation," a publication of the German Society, should bear an imprint showing it was sponsored by ICR. The question then arose of "What about Rheology Abstracts?" ICR decided to do nothing until the British Society took a position on this point.
8. Officers elected were:

Chairman: G. Astarita  
Secretary: N. W. Tschoegl

Past Chairman is automatically J. Kubat. It was decided that at present no separate office of Treasurer is needed.

9. A vote of thanks was expressed to the Italian Organizing Committee for a fine Congress and the meeting was adjourned.

Respectfully submitted,  
Jack R. Knox

### ANNOUNCEMENTS

The Education Committee of The Society maintains a list of educational materials on rheology such as films, books, etc. Interested individuals can obtain this list by contacting Donald Hunston, National Bureau of Standards, Polymer Science & Standards Division, Washington, D.C. 20234.

There are available now a few Cross pens and pencils with The Society of Rheology logo attached. The cost is:

	Pen or Pencil	Pen and Pencil Set
Silver	\$15	\$25
Gold	25	45

There are only a limited number available. Send your order with check made payable to Jack R. Knox, Amoco Chemicals Corp., P.O. Box 400, Naperville, IL 60565.

The Society of Rheology logo is available as a lapel pen at each annual meeting. Current price is \$1.50.

28th International Union of Pure & Applied Chemistry Macromolecular Symposium will be held July 12-16, 1982 in Amherst, MA. Microsymposia on Viscoelasticity, Rheology, and Molecular Dynamics are planned. If interested in participating contact James C. W. Chien, Graduate Research Center, Room 820, University of Massachusetts, Amherst, MA 01003: Deadline July 31, 1981.

The University of Minnesota announces two short courses in rheology, July 28-31, 1981.

Structure Mechanical Property Measurements in Polymer Solids  
Rheological Measurements in Polymer Liquids

Enrollment in each course is limited to thirty participants. Contact: John S. Vollum, Program Director, 222 Nolte Center, 315 Pillsbury Dr., SE., Minneapolis, MN 55455 (615/373-3157).

52nd Shock & Vibration Symposium will be held October 27-29, 1981 in New Orleans, Louisiana, hosted by The Defense Nuclear Agency with the cooperation of the U.S. Army Waterways Experiment Station. Contact: The Shock and Vibration Information Center, Code 5804, Naval Research Laboratory, Washington, D.C. 20375 (202/767-2220).

The 21st Canadian High Polymer Forum will be held at Queen's University, Kingston, Ontario, August 12-14, 1981. The forum will include sessions on conducting polymers and deformation of polymers and composites. The latter will be presented in collaboration with Case Western Reserve University. Contact: J. Roovers, National Research Council of Canada, Div. of Chemistry, Ottawa, Ontario, Canada K1A 0R9 (613/993-2097).

A Symposium on Advances and Trends in Structural and Solid Mechanics will be held October 4-7, 1982 at the Sheraton National Motor Hotel, Washington, D.C. It is co-sponsored by George Washington University and NASA Langley Research Center. Contact: Ahmed K. Noor, Mail Stop 246, George Washington University, NASA Langley Research Center, Hampton, VA 23665 & 804/827-2897.



**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 \$15 for Regular Annual Dues or \$100 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