RHEOLOGY BULLETIN

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THE SOCIETY OF RHEOLOGY
EXECUTIVE COMMITTEE - 2001-2003

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75th ANNUAL MEETING
PITTSBURGH, PA
OCTOBER 12 – 16, 2003

The 75th Annual Meeting of the Society of Rheology will be held in Pittsburgh, PA, from October 12 to 16, 2003; the associated optional Short Course will be offered on October 11 and 12. Plan to attend to make this 75th a meeting to remember until we reach the 100th! All sessions will be held at the Sheraton Station Square Hotel, a recently renovated, modern full-service hotel located in Station Square, opposite the confluence of the Ohio, Allegheny and Monongahela rivers and the central "Golden Triangle" of Pittsburgh.

As usual, the Meeting will begin with a reception in the Hotel on Sunday evening, with presentation of the Bingham Award at a dinner later in the week. The Technical Program will include sessions on Biorheology, Entangled polymers and analytical rheology, Suspensions and multiphase fluids, Liquid crystalline polymers, self-assembling fluids, and nanomaterials, Viscoelastic flows and instabilities, and the Rheology of solids and near-solids. Additional details are available in this issue of the Bulletin while registration and housing forms may be found on the web site of the Society at www.rheology.org.

The conference site at Station Square (about 15 miles from the Airport) may be reached by direct limousine service from the airport operating hourly, by limousine service to downtown Pittsburgh operating more frequently, coupled with a short taxi ride to Station Square, or by taxi from the airport. Pittsburgh is served by the Pittsburgh International Airport, which offers direct flights to most major locations in the USA and Canada, as well as direct flights to several locations in Europe.

A block of rooms will be available in the Sheraton Station Square Hotel for the participants of the meeting. Attractions in the Pittsburgh area, many easily reached from the hotel, may be found on the web site at www.Pittsburgh.net.

The meeting organizers are:

Technical Program:
Ronald Larson
(734) 936-0772; Fax: (734) 763-0459
e-mail: rlarson@umich.edu

Local Arrangements:
Guy C. Berry
(412) 268-3131; Fax: (412) 268-6897
e-mail: geberry@andrew.cmu.edu

Rakesh K. Gupta
(304) 293-2111 ext 2427; Fax: (304) 293-4139
e-mail: rakesh.gupta@mail.wvu.edu

Lynn Walker
(412) 268-3020; Fax: (412) 268-7139
e-mail: lwalker@andrew.cmu.edu
REPORT FROM THE PRESIDENT

SoR Dues and JoR Subscription Rates

Last summer John Dealy, a distinguished member and former President of the Society, questioned our policies with regard to dues for members and the subscription rates charged to libraries for the Journal. The concern expressed was “with the fact that the Society is making a substantial profit from its library subscriptions and using this profit to subsidize the members’ dues”. Members have long received the Journal with no additional charge beyond the dues. He feels this to be unethical, “in fact, doing the very thing (for which) we condemn the commercial publishers”, and noted that surpluses from the Journal have increased our reserves such “that no reasonable person would believe that we need to make it larger”. He proposed that the Society
- reduce the library subscription rate to bring it closer to the actual cost of publishing the library issues and
- change the dues structure to have a base rate and an optional extra charge for those subscribing to the Journal.

Presentation of these issues at the Business Meeting in Minneapolis generated a very lively discussion, leading to a motion instructing the Executive Committee to develop a proposal for changes in the dues structure. That proposal failed, but the narrow margin leads me to conclude that the Executive Committee should review both the financial reserves of the Society and the dues and subscription structure to gauge whether our current practices are appropriate. To begin this process I report here on some aspects of the finances that led us to disagree with John at the meeting. Your comments and input are welcome.

Cost of JoR

The actual cost of the Journal is roughly $250,000/1550 pages = $160/page, whereas the incremental or marginal cost of supplying the Journal is $27. The latter includes the member fulfillment charge and pro rata amounts for printing, binding, postage, storage and fees, normalized to 1600 pages to facilitate comparisons with other years. For members and libraries to bear equally the cost would mean fees of $250,000/(1700 member subscriptions+387 library subscriptions) = $119/subscriber, assuming retention of all current members.

For 2001 the Treasurer closed the books for the JoR with a shortfall of about $4000, based on the current library subscription rate of $550. This number varies from year to year according to unpredictable items such as advertising volume and the number of pages printed. The trend, however, suggests that the members will need to carry more of the load in the future. Our reserves have been increasing slightly in recent years, but still are the smallest per capita of the small AIP societies. The Treasurer always takes the prudent course of aiming for a balance of current income and costs, rather than spending down the reserves.

Early last Fall I gathered data from the web in order to compare our costs to libraries with a variety of other journals published by or associated with professional societies. These data are given below.

<table>
<thead>
<tr>
<th>journal</th>
<th>pages year</th>
<th>print + web subscription</th>
<th>subscription cost/page</th>
<th>member subscription</th>
<th>lib subs. member subs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rheologica Acta</td>
<td>600</td>
<td>$1,239</td>
<td>$2.07</td>
<td>$1,037</td>
<td>1.2</td>
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<tr>
<td>AIChE Journal (no web)</td>
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<td>$950</td>
<td>$0.33</td>
<td>$105</td>
<td>9.0</td>
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<tr>
<td>Langmuir</td>
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<td>$4,294</td>
<td>$0.51</td>
<td>$201</td>
<td>21.4</td>
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<tr>
<td>Macromolecules</td>
<td>9208</td>
<td>$3,851</td>
<td>$0.42</td>
<td>$194</td>
<td>19.9</td>
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<td>I&amp;EC Research</td>
<td>6250</td>
<td>$2,514</td>
<td>$0.40</td>
<td>$135</td>
<td>18.6</td>
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<tr>
<td>JoR</td>
<td>1500</td>
<td>$550</td>
<td>$0.37</td>
<td>$40</td>
<td>13.8</td>
</tr>
</tbody>
</table>
By any measure we are not presently more expensive per page than other journals offering similar value. Admittedly my comparison in the last column of cost to SoR members relative to the cost to libraries attributes all of our dues to JoR, which is specious. On the other hand, if one took a difference instead of a ratio, the SoR would be well ahead even with zero cost for member subscriptions.

We could reduce the cost to libraries a bit by charging the members the marginal cost of $27. However, delivering 75% of the subscriptions at the marginal cost rate is illogical and the potential loss in members even with that modest change would run counter to the primary objective of the Society to advance the understanding and appreciation of rheology. Instead, we could set the library subscription rate/member subscription rate = 20 in accord with Langmuir, Macromolecules, and I&EC Research. My estimate of the charges to break is $250,000/ (20x387+1700) = $26 to members and $400 to libraries. Alternatively, the Executive Committee has discussed the possibility of including electronic access in the dues and charging extra for paper copies. Whatever the approach, we need to take into account the value added by members who write and review papers, perhaps by imposing a substantial overhead charge against the Journal budget for services provided by the Society. We should also recognize the library subscriptions are probably quite insensitive to the rate, i.e. inelastic, while the member subscriptions could be very sensitive.

Your thoughts on any or all of these issues are welcome as guidance to our future discussions.

William B. Russel

2002 JOURNAL OF RHEOLOGY PUBLICATION AWARD


MINUTES OF THE EXECUTIVE COMMITTEE MEETING
October 13, 2002

Bill Russel called the meeting to order at 8:30 a.m. in the President’s Room of the Radisson Hotel Metrodome on the campus of the University of Minnesota in Minneapolis. Committee members in attendance were Susan Muller, Lisa Mondy, Monty Shaw, Jeffrey Giacomin, Gerry Fuller, Mort Denn, Don Baird, Bill Russel, and Bob Powell. Invited guests were Andy Kraynik, Chris Macosko, Timothy Lodge, Janis Bennett, Gareth McKinley, Barbara Douglas, Albert Co, Pat Mather, Norm Wagner, Lynn Walker, Guy Berry, Jules Magda and Faith Morrison. The minutes of the previous meeting were read and approved.

Faith Morrison, Chair of the Membership Committee, reports that as of September 30, 2002, we had 1622 members (1328 regular, 216 student, 38 retired, 12 of record and 28 Society of Physics Students (Undergraduates)). With members joining at the Minneapolis meeting registration, we still might exceed our end of 2001 total of 1703. Morrison led a discussion on efforts to augment membership, including student membership.

Mort Denn, Editor, reported that the Journal of Rheology is healthy. A study of its impact factor reveals it to be the most cited journal amongst its peer journals. Regarding our library subscription rate, our institutional subscribers pay only $0.37 per page. Articles over the period October 1, 2001 – September 30, 2002 number 133 submitted, 27 accepted, 45 rejected, and 60 pending. Mean time for review was 80 days; mean time for publication was 276 days.

Monty Shaw then presented the Statement of Revenues and Expenses for The Society of Rheology and for its Journal of Rheology. The financial position of the Society is sound. The Executive Committee passed a motion to accept these reports. Giacomin, Editor for Business, reported that as of August 31, 2002, library subscriptions are up to 385 (2002 year to date) from 379 (year end 2001) and from 401 (year end 2000). This is our first increase in institutional subscriptions in over a decade, with still over two more months to work on new sales and subscription recovery.

Albert Co, SOR Webmaster (www.rheology.org), reports that the website is healthy. Electronic mail messages to the general membership now go through Albert, and no longer through Jeffrey Giacomin. Albert also reported on improvements to the online voting system for our next Society election and trends in paper submissions for our annual meetings, most of which are now submitted on the deadline. Co reported that for the Minneapolis meeting, very few presenters opted for slide projectors or for video tape. A motion then passed that abstract submission of future meetings will no longer include "Slide Projector" and "VHS" as options for visual aids, and will only include “Overhead” and “LCD” projectors.

A motion was passed to welcome advertising for rheology jobs into our Rheology Bulletin, even from those who do not advertise products in the Journal of Rheology.

Janis Bennett led a discussion on the Society’s liaison with AIP. AIP archivists are seeking a donation of 3 very special volumes (Volumes 4, 5 and 6) of the Journal of Rheology published in the years 1933-1935. Just after the great depression, these appeared in a journal then simply named Physics (now called the Journal of Applied Physics). We want to add these volumes to our Journal of Rheology On-Line, an
Rotational rheometers

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- Torque rebalance transducer
- Digital sampling technology
- Entry Level & Research Grade instruments
- Stress relaxation
- Solids and fluids testing

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- PVT measurement
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imaging process that will destroy the donated volumes. AIP
calls this project “Jurassic JOR”. These very special volumes,
edited by Bingham himself, are not to be confused with the
Transactions of The Society of Rheology which began in 1957.

Bob Powell, Member-At-Large, reported on a successful
student travel grants program for the Minneapolis meeting; 12
were awarded to students coming from Denmark, USA,
Canada, England, and Japan.

Norm Wagner, Education Committee Chair, reported that
the Minneapolis short course “Microfluidics and
Micro rheometry” attracted 39 students from USA, Australia,
Canada, Netherlands, Korea, United Kingdom, and Norway.
Short courses on Food Rheology, Biorheology, Interfacial
Rheology, Rheology of Granular Materials, Molecular
Simulation of Rheology, Microrheology, and other subjects
are being considered for upcoming meetings. Prospective
participants should contact Norm Wagner with suggestions.
Norm Wagner then reported on his role as our representative
on the AIP Liaison Committee Meeting on Physics Education.

Andy Kraynik, Chair of the Ad-Hoc Committee on the ICR
2008, reported on plans for the 2008 International Congress on
Rheology. By the new ICR rules, this meeting must take place
in North America. Kraynik presented a list of the main
criteria for ICR site selection. Bob Powell, Jeffrey Giacomin
and Gareth McKinley proposed to host the 2008 ICR in
Monterey, Madison, and Boston, respectively.

Chris Macosko, Chair of Local Arrangements, reported on
the Minneapolis meeting, held in the Radisson Hotel
Metrodome (surrounded by the University of Minnesota
Campus). He reports 316 pre-registrants with 9 exhibitors. A
surplus is anticipated.

Guy Berry, Chair of Local Arrangements, reported on the
Pittsburgh meeting, to be held in the Sheraton Station Square
Hotel (October 12-16, 2003). Everything is going
swimmingly.

On behalf of Local Arrangements Chair, Savvas
Hatzikiriakos, Monty Shaw led a discussion about the October
16-20, 2005, meeting of The Society of Rheology in
Vancouver, Canada.

Ron Larson proposed to host the October 2006 meeting in
Ann Arbor, Michigan. Albert Co proposed to host this
meeting in Portland, Maine. Jules Magda proposed to host
this meeting in Salt Lake City, Utah.

Susan Muller proposed guidelines and policy for preparing
proposals to host Annual Meetings of the Society. Historical
data on meeting attendance and budgets will be made

The meeting was adjourned at 4:20 p.m. In the subsequent
Executive Session, A motion then passed unanimously for
Albert Co to host the 78th Annual meeting of The Society of
Rheology in Portland, Maine on October 8-12, 2006. The
Executive Session was adjourned at 5:45 p.m.

MINUTES OF THE BUSINESS MEETING
October 15, 2002

Bill Russel called the business meeting to order at 5:30 p.m.
in Ballroom A of the Radisson Hotel Metrodome in
Minneapolis. Read by the Secretary, a motion was passed to
accept the minutes of the previous business meeting in
Bethesda. Each officer report and each committee report
presented at the Executive Committee meeting (see above)
was presented and accepted at the business meeting. Bill
Russel announced that, as of the start of this business meeting,
our Minneapolis meeting had already attracted 350 registrants.

New NSF Program Director, Professor Michael Plesniak,
introduced himself to the Society.

Former President, John Dealy, addressed the business
meeting about the library subscriptions revenues and
memberships dues. Dealy moved that the members here
assembled request the Executive Committee to consider
revising the structure of the dues and library subscription fees
so that members no longer profit individually from the library
subscriptions. Seconded by Greg McKenna, the motion
stimulated vigorous discussion. The motion failed narrowly,
by a vote of 21-22-6 (For-Against-Abstentions). The meeting
was adjourned at 6:30 p.m.

FUTURE MEETINGS OF THE SOCIETY

<table>
<thead>
<tr>
<th>Annual Meeting</th>
<th>Date, Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>75th</td>
<td>October 12-16, 2003, Pittsburgh, Pennsylvania</td>
</tr>
<tr>
<td>76th</td>
<td>February 13-17, 2005, Lubbock, Texas</td>
</tr>
<tr>
<td>77th</td>
<td>October 16-20, 2005, Vancouver, BC, Canada</td>
</tr>
<tr>
<td>78th</td>
<td>October 8-12, 2006, Portland, Maine</td>
</tr>
</tbody>
</table>

CHANGE OF ADDRESS

If you are moving, please inform Janis Bennett by phone at
(516) 576-2403 or by fax at (516) 576-2223. You may also
write to her at:

THE SOCIETY OF RHEOLOGY
c/o American Institute of Physics
Suite 1N01, 2 Huntington Quadrangle
Melville, NY 11747
The Society of Rheology
Presents
A Two-Day Short Course on

Rheology and Micro-rheological Measurements of Associating Complex Fluids

By

Instructors:  Prof. Robert Prud'homme (RKP, prudhomme@Princeton.edu)
Prof. William Russel (WBR, wbrussel@Princeton.edu)
Prof. James Harden (JH, harden@jhu.edu)

Dates:  Saturday & Sunday, October 11 & 12, 2003. The short course is held in conjunction with the 75th Annual Meeting of the Society of Rheology, October 12-16, 2003 in Pittsburgh PA. The course will begin at 8:30am, Saturday, October 11, 2003.

Location:  Sheraton Station Square Hotel in Pittsburgh, PA. This is also the site of the Annual Society of Rheology Meeting.

Course Description

Saturday:  Self Assembly

I. Introduction and overview (RKP)
II. Forces (0.75 hr, WBR)
   LDV, hydrophobic, h-bonds, Coulombic, ionic, depletion
III. Surfactants (1.5 hrs, RKP)
   Micelle shapes, tuning structures, Rheology of spheres, rods, sheets
IV. Hydrophobically modified polymers (2 hrs, WBR)
V. Biological systems (1.5 hrs, JH)
   Gels, sheets, vesicles, tubules
VI. Colloidal fluids and glasses and gels (1.5 hr. WBR)
V. Discussion and Questions

Sunday:  Rheological and Structural Measurements

I. Classical Rheological Measurements (2.5 hrs, RKP)
   A. Definitions of material functions and flow fields
   B. Measurements and instruments: constant strain and constant stress, Elongational measurements
C. Material behavior:
   Solutions, Gels and gelation
   Relaxation times
   Steady, unsteady and dynamic measurements (Cox-Mertz rules)

II. Microscale Rheological Measurements (2.5 hrs, JH)
   A. Diffusion Wave Spectroscopy
   B. Particle Tracking Measurements
   C. Magnetic and Optical Tweezers

III. Structural Measurements (briefly!)
   A. Scattering (JH) : Light, x-ray, and neutron (2 hr, JH)
   B. Fluorescence (0.75 hr, RKP)

IV. Discussion and Questions

NOTES:
1) A questionnaire would be sent to participants when they enroll. They would be asked to respond by email to: czanreck@princeton.edu (Ginny Czarnecki, secretary to RKP and WBR). The survey would attempt to let us emphasize aspects of the course that are of most interest to the students. The following questions would be asked:
   a) What is your current position and experience in the areas covered by the course?
   b) What are your expectations for the course?
   c) What particular problem(s) in the areas of complex fluids, rheological measurements, and micro-rheological measurements would you like help on?
   d) Are there any research papers that you would like us to try to address or explain?
From there is no guarantee that we will be able to address each question that you have, if you give us this advanced notice we have a better chance of being able to make a contribution during the lectures or the discussion session at the end of each day. Our goal is not to lecture, but to help you learn. We look forward to your participation, and we will see you in Pittsburgh!

Registration forms and complete registration information will be available at the Society of Rheology website, at:

   http://www.rheology.org/sor

Questions can be directed to Professor Norman Wagner, University of Delaware, current chair of the SOR education committee, at Wagner@che.udel.edu.
TECHNICAL PROGRAM FOR PITTSBURGH

Authors should submit an abstract after March 15, 2003, but before May 9, 2003, through the World Wide Web using the SoR abstract submission page at www.rheology.org. However, the deadline for receipt of abstracts for the poster session is August 8, 2003. Note that plenary lectures will be given by Art Metzner, Bob Bird, and the 2003 Bingham Medalist. The planned symposia and the corresponding chairs are given below:

1. BIORHEOLOGY

Robert Armstrong
Department of Chemical Engineering, Room 66-350
Massachusetts Institute of Technology
Cambridge, MA 02139-4307
(617) 253-4581; Fax: (617) 253-8992
rca@mit.edu

Patrick Doyle
Department of Chemical Engineering, Room 66-456
Massachusetts Institute of Technology
Cambridge, MA 02139-4307
(617) 253-4534; Fax: (617) 258-5042
pdoyle@mit.edu

2. ENTANGLED POLYMERS AND ANALYTICAL RHEOLOGY

Monty Shaw
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(860) 486-3980; Fax: (860) 486-4745
shawmt@uconnvm.uconn.edu

James P. Oberhauser
Department of Chemical Engineering
University of Virginia
P.O. Box 400741
Charlottesville, VA 22904-4741
(434) 924-7974; Fax: (434) 982-2658
oberhauser@virginia

3. SUSPENSIONS AND MULTIPHASE FLUIDS

Andy Kraynik
Dept. 9112, MS0834
Sandia National Laboratories
Albuquerque, NM 87185-0834
(505) 844-9696; Fax: (505) 844-8251
amkrayn@engsci.sandia.gov

Michael Solomon
Dept of Chemical Engineering
University of Michigan
Ann Arbor, MI 48109-2136
(734) 764-3119; Fax: (734) 763-0459
mjsolo@umich.edu

4. LIQUID CRYSTALLINE POLYMERS, SELF-ASSEMBLING FLUIDS & NANOMATERIALS

Karen Winey
Department of Materials Science and Engineering
University of Pennsylvania
Philadelphia, PA 19104-6272
(215) 898-0593; Fax: (215) 573-2128
winey@lsm.upenn.edu

Peter Olmsted
Department of Physics & Astronomy
Room 9.305, University of Leeds
Leeds LS2 9JT, UK
44 113 343 3830; Fax: 44 113 343 3846
p.d.olmsted@leeds.ac.uk

5. VISCOELASTIC FLOWS AND INSTABILITIES

Jonathan Rothstein
Engineering Labs Building, Rm. 219
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Amherst, MA 01003
(413) 577-0110; Fax: (413) 545-1027
rothstein@ecs.umass.edu

Bamin Khomami
Department of Chemical Engineering
Washington University
St. Louis, Missouri 63130
(314) 935-6065; Fax: (314) 935-7211
bam@poly1.che.wustl.edu

6. RHEOLOGY OF SOLIDS AND NEAR-SOLIDS

Greg McKenna
Department of Chemical Engineering
Texas Tech University
Lubbock, TX 79409-3121
(806) 742-3553; Fax: (806) 742-3552
greg.mckenna@coe.ttu.edu

Tony McHugh
Department of Chemical Engineering
Lehigh University
Bethlehem, PA 18015
(610) 758-4470; Fax: (610) 758-6245
ajm8@Lehigh.edu
IN MEMORIAM
JOHN DOUGLASS FERRY

John Douglass Ferry, Emeritus Professor of Chemistry at the University of Wisconsin-Madison, died October 18, 2002, in Madison, at the age of 90. He was born on May 4, 1912, in Dawson, Yukon Territory, Canada and was undoubtedly the most widely recognized research pioneer in the study of motional dynamics in macromolecular systems via viscoelastic techniques, and thus played a definitive role in polymer rheology. From the very beginning, he realized that the unique physical properties of polymeric materials are intimately linked to the motions and configurations available to these large, flexible macromolecules, and he made an extensive and concentrated effort to determine experimentally the relation between the chemical structure of well characterized samples and their viscoelastic properties.

John attended Stanford University, receiving the A.B. degree in 1932 at age 19. Following graduate study at the University of London, together with research at the National Institute for Medical Research, he returned to Stanford and completed the Ph.D. degree in 1935. He subsequently conducted research at the Hopkins Marine Station of Stanford University and then served as instructor and tutor in biochemical sciences at Harvard University.

During the second world war, he held a joint appointment at Woods Hole Oceanographic Institute and the Harvard Medical School. In 1946, John joined the faculty of the Department of Chemistry of the University of Wisconsin as an Assistant Professor; by 1947 he had been promoted to full Professor. He served as Department Chairman from 1959 to 1967 and was appointed Farrington Daniels Research Professor in 1973. He was a founding member of the Rheology Research Center at Wisconsin, serving on its Executive Committee until 1984.

Bohlin introduces Gemini™ Rheometer

Bohlin Instruments has introduced Gemini™, a rheometer system incorporating a new Rotonetic™ drive. The use of adaptive control technology allows for both strain controlled and stress controlled operation. The torque range is broad and goes up to 200 mNm. The instrument is also capable of creep, stress relaxation and oscillatory testing.
To the Membership:

The tables below summarize the financial standing of the Journal of Rheology and the Society of Rheology at the time of the 74th Annual Meeting in October, 2002. The budget for 2003 is as approved by the Membership at that meeting.

For the Journal of Rheology, we are experiencing what appears to be a welcome increase of subscription income, which corresponds to an increase in the number of institutional subscriptions. While real, this is likely to be temporary because the increase is attributable to the result of two legal settlements with consolidators.

The balance sheet is as of August 2002, as we were unable to obtain more recent information on the deferred income for the Journal of Rheology and from Membership dues by press time. The important item on the balance sheet is the Unrestricted Net Assets, which represents the unencumbered financial position of The Society.

Respectfully submitted,
Montgomery T. Shaw, Treasurer

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<th></th>
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<tbody>
<tr>
<td><strong>RECEIPTS</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Subscriptions</td>
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<td>195,250</td>
<td>211,351</td>
<td>211,750</td>
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<tr>
<td>Reprint Sales</td>
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<td>6,687</td>
<td>7,000</td>
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<td>Ad Sales</td>
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<td>32,537</td>
<td>21,000</td>
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<td>JORO revenue</td>
<td>4,300</td>
<td>4,879</td>
<td>4,300</td>
<td>2,922</td>
<td>200</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>500</td>
<td>1,002</td>
<td>1,500</td>
<td>615</td>
<td>2,350</td>
</tr>
<tr>
<td>TOTAL RECEIPTS</td>
<td>255,300</td>
<td>266,385</td>
<td>233,050</td>
<td>253,938</td>
<td>242,700</td>
</tr>
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<td><strong>DISBURSEMENTS</strong></td>
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<tr>
<td>Ads</td>
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<td>10,491</td>
<td>9,000</td>
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<tr>
<td>Reprints, Single Copy</td>
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<td>9,000</td>
<td>6,656</td>
<td>12,700</td>
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The Society of Rheology
Receipts and Disbursements

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| **DISBURSEMENTS**    |             |                 |             |             |             |
| AIP Dues Bill & Collect. | 6,000     | 8,400           | 8,500       | 5,660       | 9,800       |
| AIP Adm. Services     | 9,500       | 9,500           | 9,500       | 9,144       | 9,000       |
| AIP Mem. Soc. Dues    | 7,500       | 7,528           | 7,500       | 7,431       | 8,200       |
| AIP Phys. Olympiad    | 1,500       | 1,500           | 1,500       | 1,500       | 1,500       |
| Misc. Contributions & Prizes | 3,000   | 1,955           | 0           | 5,152       | 1,000       |
| Contributions and Prizes | 0           | 0               | 4,500       | 0           | 5,200       |
| Renewal Billing       | 0           | 0               | 0           | 0           | 5,200       |
| Journal of Rheology   | 259,847     | 261,057         | 256,500     | 256,386     | 258,000     |
| Bulletins and Abstracts | 7,000     | 5,874           | 7,000       | 18,880      | 12,000      |
| Bingham Award         | 7,500       | 5,100           | 5,500       | 2,540       | 11,000      |
| Executive Cmt. Meetings | 7,500     | 9,200           | 7,500       | 2,979       | 7,900       |
| Pres. Discretionary Fund | 1,500     | 0               | 1,500       | 0           | 1,500       |
| Treas. Discr. Fund    | 1,500       | 100             | 1,500       | 176         | 1,500       |
| Progr. Chm. Discr. Fund | 2,000     | 2,000           | 2,000       | 1,000       | 4,000       |
| Secretarial Services  | 500         | 500             | 500         | 500         | 1,500       |
| Mailing               | 1,000       | 4,000           |             |             |             |
| Office Expense, misc  | 200         | 1,500           |             |             |             |
| Office Expense        | 2,000       | 1,364           |             | 560         |             |
| Banking Services      | 100         | 99              | 200         | 88          | 250         |
| Liability Insurance   | 4,000       | 3,656           | 3,500       | 3,656       | 3,500       |
| Membership Directory  | 0           | 0               | 0           | 0           | 0           |
| Membership Broch. & Appl. | 200       | 0               | 200         | 0           | 0           |
| Accountant            | 2,200       | 2,000           | 1,900       | 1,900       | 1,900       |
| Student member travel | 5,000       | 5,000           | 4,000       | 8,404       | 9,000       |
| Annual meetings, future | 3,000     | 3,000           | 3,000       | 2,665       | 3,000       |
| Website               | 1,000       | 500             | 126         |             |             |
| Miscellaneous         | 1,500       | 500             | 1,500       | 700         | 1,500       |
| **TOTAL DISBURSEMENTS** | 331,847   | 326,833         | 330,000     | 325,307     | 355,750     |

<p>| Net                   | 953         | 14,034          | 6,050       | 40,474      | 3,050       |</p>
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<tr>
<td><strong>Liabilities</strong></td>
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<td>Deferred subscription revenue</td>
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<td><strong>Total liabilities and net assets</strong></td>
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<td>852,525</td>
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