
THE BRITISH SOCIETY OF RHEOLOGY



BSR BULLETIN Incorporating THE 4th NEWSLETTER OF THE EUROPEAN SOCIETY OF RHEOLOGY

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THE BRITISH SOCIETY OF RHEOLOGY

OFFICERS & MEMBERS OF COUNCIL - 1998/99

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The British Society of Rheology is registered as a Charity - Number 249967

EDITORIAL

Welcome once more to our European Society of Rheology colleagues. Thanks again to Manfred Wagner for corralling the local reports together, and also to the contributors from the local societies. I would urge all of you to consider submitting items for publication to this Bulletin, especially at European edition time when circulation is massively increased...

Despite being a European issue, there is a large BSR business section, with reports on December's EGM, together with notice of this year's AGM. Please read the Announcements carefully – there are proposed changes to our Constitution that will affect EVERYBODY!

More conference reports from Portoroz, Monterey, and (arguably less exotic – or will I be thumped next time I venture westwards) Miskin Manor! The first two are from BSR-sponsored students. It is encouraging to see the BSR fulfilling its pledge to support the early careers of young rheologists, and this is a suitable point to remind all of you that the BSR is always glad to consider requests for support.

Sad new once again as this issue contains the obituary of another eminent rheologist – Dick Whorlow – who died on 31st December last year. From the perspective of a relative newcomer to the field of rheology, the passing away of the more-established Elders always causes a pause for thought. John Benbow has written a very comprehensive and thoughtful obituary.

I am constantly trying to innovate with the layout and features contained within the pages of this erstwhile publication and I would enjoy hearing the views of any of our readers – BSR, ESR, or non-members. Remember, with the flexibility we now have with regards to electronic word-processing and publishing, there is no reason why we cannot experiment a little more. I might even get around to publishing a Bulletin on time one day!

With that, as always, slightly tardy thought I must now leave you once more. Remember – all contributions gratefully received!

Paul Doody

SUBMISSIONS TO THE BULLETIN

Submissions to the Bulletin may be made by any practical means – post, email, disk, fax, pigeon, donkey, *et cetera* but electronically is preferred (saves typing...). Most packages supported (Word, WordPerfect, ASCII, RTF, PDF) but always provide a contact name, address, eMail, or telephone number in case of problems.

Copy date for next (British) Bulletin is 15 August 1999. Copy date for next European edition is 15 November 1999. Please add those dates to your diaries!

Late copy can sometimes be accommodated however the facilities of the BSR and ESR web sites may also be appropriate. Please contact Editor for details.

COVER ILLUSTRATION

Although we have our European cover on this time, I'd like to remind everyone that suggestions for Black & White or colour pictures (preferably of a rheological nature!) are welcomed by myself (Bulletin Editor) or Nick Hudson (Abstracts Editor). Suggestions are always welcome!

BSR NEWS

EXTRAORDINARY GENERAL MEETING Ilkley, West Yorkshire, December 16th 1998

Members will have been aware of this meeting which was called in response to concerns expressed by members at the Annual General Meeting in September 1998. The President, Dr Richard Buscall, wrote to all members in October 1998 explaining the background to the meeting and the minutes are reproduced below. Members will be contacted by the Membership Secretary in the near future to update their membership subscription arrangements.

Minutes of an Extraordinary General Meeting held at the Craiglands Hotel, Ilkley, West Yorkshire on Wednesday, December 16th, 1998, starting at 6.10 pm.

1. Present

The President, The Hon. Secretary and 20 members.

2. Apologies

Received from D.Bell, R.H.Colby, M.P.Escudier, R.A.J.Pearson, G.H.Tattersall, M.F.Wagner, K.Walters, P.R.Williams.

3. Background

The President, Dr. R. Buscall, welcomed members and introduced the background to this Extraordinary General Meeting. He explained that the present level of benefits to members was not sustainable on the income currently being received and that action needed to be taken to prevent insolvency. In outline the action proposed was to change the Society's business methods somewhat and to charge an explicit fee to receipt of Rheology Abstracts.

4. The Business Plan

Drs. N.E.Hudson and M.F.Webster described the financial situation over the past six years which showed a worsening deficit on Rheology Abstracts arising from the time when production of this, our flagship journal, was taken back from Elsevier. The journal has been improved enormously, with much wider coverage amounting to about 1000 pages a year and is now perceived as a valuable service, but this level can only be sustained by cross-subsidy from other activities or by charging members a contribution to the costs of production. Accordingly a business plan was proposed in which the finances of the Society would be considered under four cost centres which are expected to be self supporting:

- (i) Administration, where the running of the Society (Council meetings, membership lists, secretarial expenses, stationery) will be covered by the members' subscription and interest on investments.
- (ii) Scientific meetings, where BSR events are expected to cover their costs with any shortfall made up by later profits with the overall aim of generating enough income to continue our present policy of making awards to enable student members to attend conferences in the field.
- (iii) The BSR Bulletin, where advertising and sales are expected to cover production and distribution costs.
- (iv) Rheology Abstracts, where advertising, institutional sales and reduced rate sales to members are expected to cover production and distribution costs.

5. Resolutions

After discussion and questions from the floor the business plan and the following six specific resolutions were formally put to the meeting:

- (i) That the current concession offered to members who pay by credit card or direct debit be terminated, with the effect that all members pay an annual subscription of £15;

- (ii) That the entrance fee for new members be raised to £5;
- (iii) That all members of the Society receive the Bulletin of the British Society of Rheology;
- (iv) That members of the Society may receive Rheology Abstracts on payment of an additional annual subscription of £15;
- (v) That individual non-members of the Society may receive Rheology Abstracts on payment of an annual subscription of £30;
- (vi) That institutions may subscribe to Rheology Abstracts at the subscription rate set from time to time by Council.

The business plan and the resolutions were all carried unanimously.

There being no other business allowed under rule 7(c) the meeting closed at 7 pm.

PFG Banfill
Hon Secretary

R Buscall
President

December 29th 1998

NOTICE OF THE 59th ANNUAL GENERAL MEETING

The 59th Annual General Meeting of the British Society of Rheology will be held on Monday September 20th 1999 at the Novartis Foundation, 41 Portland Place, London, W1, starting at 16:00. The AGM will follow the meeting on rheology of bio-systems.

Members are reminded that, under rule 7(b), the business of the meeting includes:

- (a) Election of Officers and Council members for the year 1999-2000.
- (b) Receipt of a report and accounts from Council.
- (c) Dealing with matters raised by Council or by any member and receiving suggestions from members for consideration by Council.

Matters raised by Council

(A) Proposed changes to the Constitution

Summary

Changes to the Constitution are required both because of recent decisions resulting from the business plan agreed at the Extraordinary General Meeting held in Ilkley on December 16th 1998 (minutes of which will appear in Bulletin 42(1)) and to reflect the changes in the law affecting charities. Specific items affecting the Constitution and which require formal approval by the AGM are:

- (i) The entrance fee of one pound sterling shall be increased to five pounds.
- (ii) The membership year shall be changed to run from January 1st each year, instead of from October 1st, to facilitate budgeting under the new cost centre based accounting procedures.
- (iii) The number of times Council shall meet each year shall be reduced from at least four to at least three to reflect the universal availability of electronic communication for routine decision making and to allow reductions in the cost of running the Society.
- (iv) Under the provisions of the Charities Act 1993, it is no longer necessary for the Society's accounts to be audited: independent scrutiny is sufficient. Similarly, the Act makes clear the duties of "trustees" who, in the Society's case, are the Officers and Council members. The Constitution needs to be reworded to reflect these changes.
- (v) Since both the Bulletin and Rheology Abstracts are now available to anyone on subscription, the duties of the Editor (Abstracts) and the Editor (Bulletin) do not need to refer to private circulation to the members.
- (vi) Finally, Council proposes to introduce postal voting at General Meetings to overcome the difficulties caused by a lack of a quorum. Resolutions formally notified to members in the notice

convening the AGM will be decided upon by a simple majority of the votes cast, including those received by the Secretary on a signed voting slip by noon seven days before the AGM. This does not prevent matters being raised by members at the AGM itself.

Proposals

The full constitution complete with the proposed changes is printed in this issue of the Bulletin. The proposed new text appears in *italics* and the text to be deleted is ~~struck through~~.

(B) Council's nominations for Officers and Council members are as follows.

(President

Dr R. Buscall continues in office)

Hon. Secretary

Prof P.F.G. Banfill

Hon. Treasurer

Dr P.R. Williams

Membership Secretary

Mr T. Dovey

Bulletin Editor

Dr P. Doody

Abstracts Editor

Dr N.E. Hudson

Ordinary members of Council

Mr D. Bell

Dr G.J. Brownsey

Mr J.E. Gearing

Dr M.R. Mackley

Prof M.F. Webster

Vacancy Dr O.G. Harlen

Further nominations for Council or for any of the Offices are invited. Nominations should be sent to the Secretary or made at the meeting (rule 5b).

The Secretary would be pleased to receive notice of any matter that any member wishes to raise at the AGM.

Professor P.F.G. Banfill,
Honorary Secretary
Department of Building Engineering and Surveying,
Heriot-Watt University,
Riccarton,
Edinburgh,
EH14 4AS.

June 1999

British Society of Rheology Constitution¹

[Proposed new text in *italics*, deletions ~~struck through~~]

Name

1. The Society (formerly known as The British Rheologists Club) shall be called The British Society of Rheology².

Objects

2. (a) The objects of the Society shall be the promotion of scientific inquiry and the diffusion to the public of knowledge connected with the advancement of pure and applied rheology defined as the science of the deformation and flow of matter.
- (b) In furtherance of the objects herein before defined the Society may
- (i) purchase or otherwise acquire or procure to be written and print copies, issue and circulate gratuitously or otherwise any reports of periodicals books pamphlets or other documents provided that any sums received from sales under this sub-section shall be applied solely for the charitable purposes of the Society.
- (ii) arrange and provide for or join in arranging and providing for the holding of exhibitions meetings lectures and classes.
- (iii) assess promote encourage undertake or organise research.
- (iv) affiliate or become affiliated to any body having similar objects to those here before defined and acquire and undertake all or any part of the assets liabilities and engagements of any such body which the Society may lawfully acquire.

Membership

3. (a) Any person interested in rheology shall be eligible to apply for membership of the Society but no application for group membership will be entertained.
- (b) Application for membership of the Society shall be made in writing and supported in writing by a member of the Society in a manner to be approved from time to time by Council (see 5 (a)). The Entrance Fee (see below) shall be sent with the application for membership. Council shall consider any such application and if a majority of Council members present at a meeting approve the application then notice shall be given to the applicant of his election and he shall be requested to pay his first subscription. Having paid his first subscription he shall be enrolled as a member and be entitled to all the benefits and privileges of membership and be bound by these rules.
- (c) If an applicant elected as aforesaid shall not have paid his subscription within one month of being notified of his election then Council may at its absolute discretion declare the election of such applicant to be void.
- (d) Council shall have power to elect to honorary membership any person who has attained distinction through scientific attainment or by reason of service to the Society. A member retiring from normal employment after more than 20 years membership is eligible to become an honorary member.
- (e) Any member may resign his membership by giving to the Membership Secretary notice in writing to that effect. Every such notice shall, unless otherwise expressed, be deemed to take effect as from 1st ~~October~~ *January* next following receipt thereof and the member shall cease to be a member from that date.
- (f) Council may if at any time it shall be of the opinion that the interests of the Society so require by letter invite any member to resign from the Society within a time specified in such letter. Notwithstanding the provisions of the preceding sub-clauses hereof the resignation of a member so resigning shall be deemed to take effect immediately it is received. If the member does not resign within the time specified then Council shall consider his expulsion. The member shall be given an opportunity to offer an explanation of his conduct verbally or in writing and if thereupon Council shall by a two-thirds majority of those present and voting decide to expel him he shall thereupon cease to be a member of the Society.
- (g) Any person shall upon ceasing to be a member of the Society forfeit all right to and claim upon the Society and its property and funds.

Subscription

4. (a) An Entrance Fee of ~~£4~~ £5 shall be paid by anyone applying for membership.
- (b) An annual subscription of such amount as the Annual General Meeting may decide shall be paid by each member.
- (c) All subscriptions (except the first subscription of a new member as provided by rule 3) shall ~~be payable on October 1st~~ *become due on January 1st* in each year.
- (d) If the subscription of any member shall be three months in arrears, notice shall be sent to him calling his attention thereto and if he does not pay the amount within 21 days of such notice the Society may forthwith cease to send him any of the Society's publications. If the annual subscription of a member shall still be unpaid at the expiration of 12 months from the date it was due, then a further notice shall be sent calling his attention thereto and if the subscription be not

¹ *Last amended 1971.*

² *The Society was registered as a charity in September 1966.*

paid within one month of the posting of such further notice then he shall be removed from the list of members. Any person who ceases to be a member under this rule may be re-elected to membership, but only after re-application and payment of a further Entrance Fee.

Council and Executive Officers

5. (a) The affairs of the Society shall be managed by a Council of 12 members which shall include the President and five executive officers of the Society, namely a Secretary, a Treasurer, a Membership Secretary, an Editor (Abstracts), an Editor (Bulletin). *The members of Council are deemed to be "Trustees" as defined by The Charities Act 1993 and shall manage the affairs of the Society in accordance with the requirements of that Act.*

(b) A President shall be elected at an Annual General Meeting to serve in that office for two years and all other members of Council shall be elected at each Annual General Meeting to serve for one year. Candidates for the Presidency or for any executive office or as ordinary membership of Council may be proposed and seconded (i) by two members of the Society giving the Secretary written notice at least three days before the Annual General Meeting or (ii) by two members verbally at the Annual General Meeting before the election takes place. Any member of the Society shall be eligible to be elected as President or as an officer or as an ordinary member of Council, and any officer or Council member shall be eligible for re-election except that (i) a member shall not be eligible to fill the office of President for more than two years successively (ii) a member shall not be eligible to fill the same office for more than four years successively and (iii) a member shall not be eligible to serve on Council for more than four years successively without filling an executive office. The election of the President, the executive officers and the other members of Council shall be by those present at the Annual General Meeting and in the event of a contested election shall be by each member of the Society present having one vote for each position to be filled. The candidate who receives the most votes for a particular office shall be declared elected to that office. The vacancies on Council shall be filled by the candidates up to the number of vacancies who shall receive most votes and they shall be declared elected. If two or more candidates receive an equal number of votes either for an office or for a vacancy on Council the election to such office or vacancy shall be decided by drawing lots.

(c) Council shall have power to appoint any member of the Society to fill any casual vacancy among the executive or on the Council until the next Annual General Meeting. Any member so appointed shall retire at the next Annual General Meeting but shall be eligible for election at that meeting.

Auditors

~~6. The accounts of the Society shall be audited by professional accountants. The appointment of auditors and the fixing of their remuneration shall be made at the Annual General Meeting.~~

Accounts

6. *The accounts of the Society shall be subjected to financial scrutiny in accordance with the requirements of The Charities Act 1993.*

Meetings

7. (a) Council shall meet at least ~~four~~ *three* times during the year. Four members of Council shall form a quorum except that a quorum of eight members of Council shall be required when Council is considering the expulsion of a member who has not resigned at Council's request. Council shall elect each year a Chairman from among its own members (excluding the President) who may take the chair if the President is absent or does not wish to do so. In the event of an equality of votes the Chairman of the meeting shall have a second or casting vote.

(b) The Annual General Meeting of the Society shall be held in the month of September or thereabouts in each year upon a date and at a time to be fixed by Council. The business at such meeting shall include the following:

- (i) The election of officers and other members of Council.
- (ii) To receive a report and ~~audited~~ accounts from Council.
- (iii) To deal with any resolution or special matter which Council desire to bring before the members or any member wishes to raise and receive suggestions from the members for consideration by Council.

Notice convening the annual General Meeting shall be sent to the members not less than three weeks before the meeting. The notice shall specify any proposed change in the rules and where possible it shall also specify the other matters to be dealt with provided that nothing in this rule shall prevent matters (other than a change in the rules the winding up of Society or the severance of the Society's connection with a Branch) from being considered by the Annual General Meeting solely because notice of such matters has not been circulated to the members.

(c) At the request of four members of Council or of twenty members of the Society, the Secretary shall call an Extraordinary General Meeting within two months of receiving such request. Such an Extraordinary General Meeting shall have the full authority of an Annual General Meeting to consider only the business for which the meeting was called. Notice convening an Extraordinary General Meeting shall be sent to all the members not less than ten days before the meeting and shall specify the matters to be dealt with.

(d) The quorum at all General Meetings shall be 20 or 8% of the total membership of the Society whichever shall be the less, *including votes cast by post on any resolutions which have been formally notified to members by means of the notice referred to in clause 7(b). Postal votes will only be valid if they have been received by the Secretary before noon seven days before the date of the General Meeting in the form of a voting slip signed by the member. In the following the word "voting" is taken to mean both "voting in person" and "voting by post".* All decisions at General Meetings shall be made by a simple majority of the members voting except that a change in the rules shall require a two-thirds majority of the members ~~present and~~ voting provided that the members voting in favour of such a change must number at least 20 or 8% of the total membership of the society whichever shall be the less.

- (e) The President shall take the Chair at Annual and Extraordinary General Meetings of the Society and at meetings of Council. If the President is absent or does not wish to take the Chair at any of these meetings then the Chairman of Council or failing him, another member elected at any such meeting shall take the chair.

Powers and Duties of Executive Officers and Council

8. (a) Council shall manage the funds and affairs of the Society *in accordance with the requirements of the Charities Act 1993* and shall do all such acts as may appear to them necessary or desirable for carrying into effect the objects and views of the Society.
- (b) Council may engage remunerate and dismiss any servants as may be deemed necessary or expedient.
- (c) Council may appoint any sub-Committee which it may think necessary or expedient for carrying out its business. Any number not exceeding one-third of the members of any sub-Committee may be persons who are not members of Council. Council may delegate any of its powers to a sub-Committee and may give general or particular directions as to the exercise of such powers to which directions the sub-Committee shall conform. Council may at any time add any member to or remove any member from any sub-Committee but need not in any such case assign a reason for such action.
- (d) Subject to the provisions of this constitution, Council may regulate its own procedure.
- (e) The Secretary shall be responsible for the general conduct of the Society's correspondence and other day to day business. He shall prepare the Agenda for each meeting of the Society and of Council and shall give notice of meetings and invite nominations for any elections on the Agenda. He shall take the minutes at all meetings of the Society and at meetings of Council and enter them in a Minute Book.
- (f) The Membership Secretary shall be responsible for all matters relating to membership of the Society, other than the receipt of subscriptions.
- (g) The Treasurer shall receive all sums of money due to the Society transact all its pecuniary affairs and keep a proper account of receipts and payments. The financial year of the Society shall end on June 30th.
- (h) The Editor (Abstracts) shall be responsible for the *preparation and circulation of the Society's publication entitled Rheology Abstracts* and the Editor (Bulletin) shall be responsible for the *preparation and circulation of the Society's Bulletin for private circulation to the members*.
- (i) Council shall present to each Annual General Meeting a written report and ~~audited~~ accounts of the Society for the preceding year.

Conferences

9. (a) Non-members may be admitted to any of the Society's Conferences at the discretion of Council. Council shall have the power to charge a fee for such admission if it considers this desirable.
- (b) Representatives of the Society on other bodies or at Conferences of other organisations shall be elected from among the members of the Society by Council.

Branches

10. (a) A Branch of the Society may be formed in any area outside the United Kingdom subject to the approval of Council. The activities of a Branch shall be governed by the rules of the Society and by the rules of the Branch.
- (c) The rules of a Branch shall be approved by Council. Such rules shall provide for the election of a Chairman, Secretary, Treasurer, and Committee and when the rules have been approved the officers and the Committee shall be elected and the Branch shall commence to function.
- (d) The Committee of a Branch of the Society shall be subject to any directions given to it by council but so that neither Council nor the members of the Society (other than members of the Branch) shall be responsible for any action taken by the Branch Committee.
- (e) An application for membership of the Branch shall if approved by the Branch Committee in accordance with the rules of the Branch be treated also as an application for membership of the Society and shall be sent to the Membership Secretary of the Society for consideration in the normal way by the Council. If the applicant is elected to membership of the Society he shall be given notice of his election and shall be requested to pay his first subscription in accordance with the next following rule to the Treasurer of the Branch. Upon payment of his subscription he shall be enrolled as a member of the Society and of the Branch and be entitled to all the privileges of membership of the Society and the Branch and shall be bound by these rules and by the rules of the Branch.
- (f) The subscription payable by the Branch Member shall be decided from time to time by the Branch Committee and shall be due on the first day of October in each year, a Branch Member shall not be called upon to pay any subscription in respect of his membership of the Society apart from his Branch subscription. Part of the subscription of each Branch Member shall be sent with a list of names of paid up Branch Members to the Treasurer of the Society before the last day of December of each year. This part of the subscription shall be decided from time to time by Council.
- (g) The Council may sever any connection between itself and a Branch if such severance is supported by two-thirds majority of the members present at a General Meeting of the Society. The Branch shall be notified forthwith of any such decision and shall thereupon cease to be a Branch of the Society but the members of the Branch may at the discretion of Council remain members of the Society.

General

11. (a) The Society shall not be liable for any damage or loss to the persons or the property of members howsoever caused whether the Society has been negligent or not. Provided nevertheless that Council may in its

absolute discretion make an ex gratia payment out of the Society's funds in respect of any such damage or loss if it thinks that such a payment is appropriate.

(b) Every member of the Society shall from time to time communicate to the Membership Secretary his address and all notices posted to such address shall be considered as having been given on the day following the date of posting,

Alteration to Rules

12. These rules may be added to repealed or amended by resolution at any Annual or Extraordinary General Meeting provided that no such resolution shall be deemed to have been passed unless

- (a) it be carried by a majority of at least two thirds of the members voting thereon; and
- (b) the votes in support of the change number at least 20 or 8% of the total membership of the Society, whichever is the less. *In this clause "voting" has the meaning defined in clause 7(d).*

Dissolution

13. A resolution for the dissolution of the Society may be proposed at any General Meeting where at least four weeks' notice has been given to the members of the intention to propose such a resolution. If the resolution for the dissolution of the Society shall be passed at such a General Meeting by a majority of two thirds of the members voting thereon (*including postal votes*) and the members voting in favour of the resolution number at least 20 or 8% of the total membership of the Society whichever is the less Council shall thereupon or at such future date as shall be specified in such resolution, proceed to realise the property of the Society and after the discharge of all liabilities shall apply the same for charitable purposes approved by the Secretary of State for Education and Science and upon the completion of such application the Society shall be dissolved.

Interpretation

14. Council shall be the sole authority for the interpretation of these rules and the decision of Council upon any question of interpretation or upon any matter affecting the Society and not provided for by these rules shall be final and binding on the members.

PETER ANDERSON
Special Award, 1999

Peter Anderson joined the Council of the British Society of Rheology at a time when new technology was causing a revolution. In fact the first time I met him was at a conference in Imperial College about 1983 when, as Membership Secretary, he was implementing the introduction of new technology in the form of a computerised membership records database. There was this Apple II microcomputer on the screen of which was my membership record for checking. I seem to remember that all the records were on about four 5.25 inch floppy discs and the whole memory of the machine was no greater than the space occupied by the document I am now typing. It was also about this time that the Bulletin changed its appearance from a traditional typeset document to one that was prepared by word-processing and the wheel turned full circle for Peter in this respect because his last Council post was as Bulletin Editor, and I will return to this later.

Peter was a scientist at the BP Research Centre in Sunbury on Thames for many years, but never really talked about the work he did although I knew from my visits to people there who were working on cements and drilling fluids that there was a sizeable population of scientists and engineers on the site. This all changed when financial problems in BP caused them to shed the majority of staff over the age of 55 at the Research Centre and the site turned into a ghostly shadow of its former self. Peter was caught up in this maelstrom and duly took early retirement in the early 1990s. However, his commitment to the Society was evident all along, turning his hand to the organisation of meetings (I particularly remember one at Royal Holloway College, Egham) and to those other jobs which help to keep the Society running.

My other recollection of Peter at that time was an occasion when a group of delegates from the Imperial College conference were returning by bus along Oxford Street from a free evening in town when he suddenly said: "Those people are speaking Afrikaans" and got up and introduced himself to them in Afrikaans and proceeded to chat all the way back to Knightsbridge. I subsequently learnt that he had spent much of his early life in South Africa.

A major task which he undertook for the Society was a busy four year period as Treasurer over the time when the Golden Jubilee meeting was being held, which involved first registering and then de-registering for VAT and the associated paperwork and record keeping. In fact all the Society's financial records were meticulously kept with budgetary projections presented at each Council Meeting so we all knew that the finances were in safe hands. I might go so far as to say that the job of Treasurer is Peter's *metier*, since he told me recently that he fills that role for half a dozen societies, including the art society of which his wife, Freda, is a keen member. Sometimes they would both come to a Council meeting and she would spend the time locally sketching while we were discussing Society business.

Peter's 16 year career on Council finished with a short stint as Bulletin Editor. This was a job he inherited from me, somewhat against his better judgement because he realised that a retired member without access to scientific libraries for regular contact with the scientific world would be heavily reliant on the help of others. As no one else was available to do the job it was typical of his generosity that he offered his services to help the Society. However, situations can change and once it became important to develop the links with the newly formed European Society of Rheology the position became untenable and by mutual agreement he stood down in favour of someone nearer the mainstream of rheological activity, leaving the Council at the same time.

In conclusion, therefore, it is a great pleasure to announce that a special award was made to Peter Anderson in recognition of his services over 16 years as Council Member and Officer of the British Society of Rheology. Dr Richard Buscall made the presentation at a lunch on March 9th 1999.

Phil Banfill

Statement of Accounts 1997/1998

THE BRITISH SOCIETY OF RHEOLOGY

REVENUE ACCOUNT FOR THE YEAR ENDING 30TH JUNE 1998

	1998		1997	
	£	£	£	£
INCOME				
Annual Subscriptions and Entrance Fees		3,850.45		5,741.48
Publisher-Rheology Abstracts		19,637.99		23,887.36
Advertising		3,005.00		5,851.23
Bulletin Subscriptions		2,126.10		668.40
Book Royalties		-		-
Sale of Ties/Miscellany.		383.22		20.00
Bank Interest		3,884.65		2,651.76
Unclaimed Liabilities 96/7		748.00		
	£	33,635.41	£	38,820.23
EXPENDITURE				
Council Expenses		4,438.32		5,620.67
Bulletin Production Costs		7,327.00		2,135.88
Rheology Abstracts Production Costs		17,983.35		10,580.78
Expenditure by Officers:				
Bulletin Editor	27.25		47.69	
Pub. Manager	55.58		110.28	
Treasurer (94/5)	185.66		28.64	
Membership Secretary & Circul.	11,467.18		5,282.03	
		11,735.67		5,468.64
Professional Fees		-		-
Insurance		183.04		164.00
Awards		-		75.00
Miscellaneous		502.38		2,287.60
Europ. Rheol. Soc. donation*		297.03		1,000.00
Conferences (see below)		8,237.74		6,336.85
Student Grants		-		1,608.00
Working Groups		623.54		1,671.70
CardNet Charges		200.00		200.00
Bank Charges		16.00		8.00
M'ship Subscriptions Refund		40.00		40.00
Tax paid on interest (reclaimable)		-		-
Depreciation:				
Printer 5/1/95		96.00		96.00
Printer 17/7/96		78.00		78.00
	£	51,758.07	£	37,371.12
EXCESS OF INCOME OVER EXPENDITURE		33,635.41		38,820.23
		-51,758.07		-37,371.12
	-£	18,122.66	£	1,449.11

CONFERENCES ACCOUNT

Surplus (deficit) after expenses:

BSR/INNFM One-Day Conf. Swansea	-	1,088.50	-	-
Young Rheologist Day Conference Coventry		-	-	1,336.85
Leeds BSR Conf	-	2,000.00		
Rheology 2000 Cambridge - advance	-	5,149.24	-	5,000.00
	-£	8,237.74	-£	6,336.85

THE BRITISH SOCIETY OF RHEOLOGY
BALANCE SHEET AT

	29/06/98		1998			1,997.00
	£	£	£	£	£	£
FIXED ASSETS						
Printer at cost 5/1/95	640.00		640.00			
Depreciation to date	- 384.00		- 288.00			
		£ 256.00		£ 352.00		
Printer at cost 17/7/96	513.00		513.00			
Depreciation to date	- 195.00		- 117.00			
		£ 318.00		£ 396.00		
CURRENT ASSETS						
Cash at bank:						
Premier Interest Account	43,473.04		66,512.89			
Current Accounts	16,681.39		7,752.63			
22.34 16,659.05		£ 60,154.43		£ 74,265.52		
Sundry Debtors and prepaid expenses: (*)		493.57		445.00		
		£ 61,222.00		£ 75,458.52		
CURRENT LIABILITIES						
Sundry creditors		-10,392.25		-6,506.11		
(**)		£ 50,829.75		£ 68,952.41		
SCOTT BLAIR LEGACY FUND ASSETS						
Premier Interest Account	10,493.97		10,295.40			
Owed to General Account	- 493.57		- 295.00			
		10,000.40		10,000.40		
		£ 60,830.15		£ 78,952.81		
GENERAL fund						
At 1st July 1997	68,952.41		67,503.30			
Excess of income over expenditure in the year	- 18,122.66		1,449.11			
		£ 50,829.75		£ 68,952.41		
SCOTT BLAIR LEGACY FUND						
Balance at 1st July 1997	10,000.40		10,636.66			
Bank interest	493.57		358.74			
Transfer to General Fund	-		- 1,700.00			
Transfer from M'ship Fund	-		1,000.00			
	10,493.97		10,295.40			
Expenses:	- 493.57		- 295.00			
(409) for 97/8 taken under Working Groups		10,000.40		10,000.40		
		£ 60,830.15		£ 78,952.81		

..... Hon. Treasurer

I have examined the books of account of the British Society of Rheology and report that to the best of my knowledge the above Revenue Account and Balance Sheet is in agreement therewith.

..... Chartered Accountant

COMMENTARY

296th Council Meeting

March 9th 1999 was always going to be more than an average Tuesday. After all it was Budget day (what surprises would Gordon have for us this time?), the 296th Council meeting was scheduled for the Hotel Ibis at Luton airport, and just for once it wasn't raining. As Council members arrived at the hotel reception, with its panoramic views over the airport car park, hospitality signs proudly directed British Society of Rheology (sic) visitors to the Woburn room, with its less panoramic views of the hotel car park. As new arrivals were being instructed in the intricacies of the coffee machine, our irate President Richard Buscall appeared. It transpired that he had courageously attempted to complete the final stage of his journey using the local bus. This had proved rather problematic as the bus ran to a timetable known only to the locals and bearing little resemblance to published information. As a grand finale the bus driver had then refused to stop anywhere near the hotel.

With most members present the initial agenda items were rapidly dispatched as the final travellers arrived. Richard, his blood pressure now restored to normal, raised the question of whether we should produce a new BSR tie, as the year 2000, the BSR diamond jubilee and the International Congress would soon be upon us. He then proceeded to give an excellent sales promotion on the laundering benefits of polyester/silk ties versus silk-only ties and followed this by removing his own tie (polyester/silk of course) for inspection by Council. The question was raised as to what items could be produced for the ladies of the BSR, pins and silk scarves had been offered previously. A suggestion of BSR silk lingerie was rapidly dismissed as politically incorrect. The question of whether purchases should be restricted to BSR members, or whether items should be freely available was raised. It was agreed that including them as part of the Rheology 2000 package might be possible to promote the BSR's diamond jubilee. The President agreed to obtain some costings before debate proceeded further.

Next on the agenda was the EGM held at Ilkley in December. It was noted that even at a BSR meeting with nearly 100 delegates the EGM had only just been quorate (more on this topic later). Membership secretary Russell Davies reported that new membership application forms incorporating the Ilkley changes had already been prepared and Chris Petrie our WebMaster had been asked to update the web site. However, we now had to decide how the new subscription system would work, would members pay their Abstracts subscription to the membership secretary?. During subsequent discussions Russell provided an insight into the problems facing the membership secretary. Although subscriptions are due for payment in October they actually arrive throughout the year. The fee enclosed is often incorrect, sometimes members pay for several years in one go to save on charges and cheques drawn on foreign banks cost the BSR money to cash. After further deliberation Council concluded that the changes agreed at Ilkley provided an opportunity to clear the decks on subscriptions and to implement an improved system. Accordingly it was decided that members should be invoiced yearly for both membership and Abstracts, and payment methods would be clearly defined. To reflect our European stance prices would also be quoted in Euros. Secretary Phil Banfill again raised the problem of achieving quorate AGM's - should we reduce the numbers required to be quorate? Alternative proposals were that proxy, postal or E-mail voting should be permitted. This was felt to be acceptable and Phil was requested to draft a revised version of the constitution for further discussion.

At this point proceedings were briefly interrupted by the fire alarm. Some members of Council had been told that there would be a test, however, as it was now 15 minutes past the allocated time, there was some doubt as to whether it was a test or real. With a clear run to the car park in sight, it was decided to press on with Officers Reports.

Richard informed us that the re-founded Italian Society of Rheology had applied to join the ESR, Council were unanimous in supporting the application. The changes introduced at Ilkley had also been conveyed to the ESR. Treasurer Mike Webster then supplied two different balance sheets covering the last seven years. Was it one real one and one for the taxman? No, Mike was presenting data in the old style and in the new cost centre format outlined at Ilkley. Council agreed that the new format was extremely helpful in tracking costs. Good news, so far 1999 appeared to be going according to plan but Council costs were again discussed. Mike informed us that on average it cost ~£100 for each Council member to attend a meeting. Bearing in mind the members geographical locations this appeared reasonable. Last years accounts had been forwarded to the Charity Commission and a further advance had been made for Rheology 2000, bringing the total to £15K.

Phil reported that as Secretary he would be attending a seminar on how learned societies should be run in the 1990's. Council expressed the hope that he would not return with too many new ideas. Russell introduced

applications from eight new prospective members and one resignation. He also reported on his initial investigations into unpaid membership fees. This was difficult due to the problems discussed earlier but it appeared some £1100 was overdue since October. A further report was promised for the next meeting, but Council felt that this was further justification for changes in subscription procedures.

Bulletin Editor Paul Doody apologised for the delay in issue 41(3) but reported that 42(1) was on schedule. Problems had arisen due to Paul trying to be in three places at once, two of which did not have the necessary facilities. Council agreed that if obtaining minor software would speed up the process it should be purchased, it was left to the editors to discuss the issue. Abstracts Editor and Publications Manager Nick Hudson reported that institutional subscriptions were coming in at a reasonable pace, at about the same level as last year. Following the changes agreed at Ilkley, issue 42(4) would be the first for which members would have to subscribe. Production of the CD-ROM of Abstracts was progressing well with ~60% of the past issues scanned into electronic format, completion was expected by mid 1999. Richard enquired whether scanning the old documents was proving difficult, as he had recently obtained a scanner which did not obey the first law of copiers (i.e. they always jam). Nick reported no problems and concluded by tabling a letter and donation to the Society from a long established member. Council expressed a wish that the donation should not be "lost" in some account, but that something tangible should be done. After some debate it was decided that a suitably inscribed chair should be provided in the new home of the Scott Blair collection at Aberystwyth. To the best of Councils recollection this was the first time that the BSR had awarded a chair at any University.

The next agenda item was Scientific Meetings and it was pleasing to see no less than eight meetings listed for discussion. However, with a rather special lunch rapidly approaching there was just time to briefly review the Partners in Rheology meeting at Ilkley. All those who had attended agreed that this had been a very successful and enjoyable affair, and that Tom McLeish and his team were to be heartily congratulated for their efforts agreed it.

Council then adjourned to meet luncheon guest Peter Anderson. Peter needs no introduction to most BSR members as he has served as Treasurer, Membership Secretary, Bulletin Editor and ordinary Council member. To recognise this long term service Council had invited Peter along to receive a special award over lunch. As local delicacies, including fish, chips and carrots and meat (sic) lasagna, were served Peter recalled his years on Council. It was pleasing to hear that he is still using some of the skills honed with the BSR to assist other societies. After an all too short luncheon Council then reconvened to the topic of Scientific Meetings.

Although planning meetings is usually an enjoyable, albeit demanding, experience there was a noticeable sadness around the room as Nick Hudson outlined plans for the Jim Ferguson memorial meeting in Glasgow. The widespread popularity of our former President meant that one problem may be finding a large enough venue. A format of reception, lecture and dinner was agreed. Discussion then moved onto the Rheology of Biosystems meeting in London in September 1999. Should we try to include items on GM foods? (evil tomatoes Richard was heard to mutter) or was this too hot to handle. Could we get industrial speakers? - are there any left? chanted several voices. Progress on all the proposed meetings was discussed and a further item added when Russell raised the possibility of the BSR sponsoring a meeting at Lake Vyrnwy in April 2000.

As the time for the Scottish based members to depart rapidly approached (time and EasyJet wait for no-one) items on the ESR Weissenberg award and the BSR annual award were covered before discussion moved onto ESR matters. Malcolm Mackley, who had stepped in at short notice as the BSR representative at the ESR Committee meeting at Portoroz offered to continue in the role and this was accepted by Council. A brief debate on the legality of passing on the BSR membership database to other parties such as the ESR followed, and the potential benefits of links with commercial publications via the ESR were briefly raised. The meeting finished with new Council member Rhodri Williams offering to shadow the post of Treasurer. On this note Richard declared the meeting closed and the remaining members began to drift away from the hotel to the accompanying roar of jets from the adjacent airport.

Tom Dovey

CONFERENCE REPORTS

70TH ANNUAL MEETING OF THE SOCIETY OF RHEOLOGY Monterey, California, USA, 1998

I was incredibly excited about attending this conference, which ran from the 4th to the 8th of October 1998. The reason, apart from seeing the famous scientists who work in my field of polymer melt rheology, was that I had never before left Europe and was eager to see the sights of the U S of A. The conference was held at the Monterey Marriot Hotel which is located in downtown Monterey, within walking distance of Fisherman's Wharf (the location of Steinbeck's novel, Cannery Row) and the famous Monterey Bay Aquarium. The town itself is at the heart of the celebrated Monterey peninsula, just two hours drive from the San Francisco Bay Area. Monterey itself is a very pretty and wealthy town surrounded by staggering natural beauty of coastline which was inhabited by sea lions, sea otters, and many types of sea birds. The temperature was about 30°C+, which was much warmer than it was in Britain that Summer! Despite the distractions I managed to pay attention to the conference:

The opening lecture was presented by Prof. Giuseppe Marrucci who talked about constraint release in fast flows of entangled polymer melts, a hot topic in polymer physics theory at the moment. He introduced Doi and Edwards tube model and maintained its importance in polymer theory. This fascinating talk led on to many others in a conference that was really dominated by polymer rheology. The talks were arranged in four simultaneous sessions at a time, including: Novel polymers, extensional and elongational flow, suspensions and emulsions and analytical and numerical solutions, among others. The conference really was rather large, about two hundred papers were presented. John Dealy gave an interesting plenary lecture on non-linear oscillatory shear experiments on molten polymers using a sliding plate rheometer. Including a very nice video of the experiment. Steve Granick told us how very thin films of even simple liquids like water can have strongly non-linear and viscoelastic properties. A lot of the other talks were very good but I cannot really go into detail on them here. Most of the research groups were American in origin but there was a good European attendance as I recognised a few friendly faces from the European conference in Slovenia.

On the second day of the conference I attended the awards reception and banquet. There was a very funny account of the Bingham medal winner John Dealy. Ron Larson awarded Susan J Muller with the publications award [for M J MacDonald and S J Muller, "Experimental study of shear-induced migration of polymers in dilute solutions", *J Rheol*, **40**, 259 – 283]. With everyone in good spirits we all enjoyed the Banquet.

The next day I presented a (very colourful) poster in the poster session. As this was my second large conference I started to get the hang of explaining my work to many people and enjoyed it. The social side was good. I ate at good restaurants and experienced some live jazz with Oliver Harlen, Susan Muller and Ron Larson! One highlight of the conference for me was meeting Lynden Archer whose group has actually synthesised the pom-pom molecules that Tom McLeish and I spend our time theorising about. We had very detailed discussions and I felt a union between the experimentalist and the theorist was taking place!

I had a wonderful time at this conference and found the lectures I attended beneficial to my work. I'd like to thank the British Society of Rheology who subsidised the travel costs for me.

Nathaniel Inkson
University of Leeds

5th European Rheology Conference Portoroz, Slovenia, 6 – 11 September 1998

I attended this conference where I presented a talk thanks to the support of a grant of the British Society of Rheology for young rheologists. So it was my very first international meeting on Rheology. Arriving at Ljubljana airport with heavy rain falls did not wash away my optimism of a youngster in Rheology at all as I was so eager not only to present a piece of work at this international meeting but also to discover this young independent Republic of Slovenia. My ignorance and naiveté about geopolitical issues in this part of Europe was blown away when I had a first sight during the transfer by bus from the airport to the site of the conference. We were finally welcome by bright sunshine on the way down to the coast toward the conference centre, a nice hotel on the sea shore.

The conference took place in Portoroz, a Slovenian city lying on the Adriatic coast. The conference was superbly organised (from my point of view) by Igor Emri and Robert Cvelbar and we had also the opportunity to have a “glimpse” of Slovenian culture, history, and natural sites through the social programme and Banquet. I will certainly retain for a long time in my mind the excursion to the Postojna caves and to Bled and Ljubljana the capital of Slovenia. There is a lot to see and to visit in this beautiful country.

After the opening ceremony, G Marrucci was awarded the Weissenberg Plenary Lecture and it was a good introduction for my own interest is related to the theory of polymer dynamics. This gave the start bell for the 5 simultaneous sessions that were running during all the conference week. The conference rooms were close together – except for one room nicknamed “Nautilus” that was literally standing by the beach ten floors away from the others. So in general it was easy to skip from one session to another to arrive in time for the talk you had selected, provided that the chairmen of the session had kept the right rhythm. This system – the parallel sessions – has the great advantage of allowing a large number of talks (see below) but it was sometimes difficult to make a choice between 2 simultaneous talks. The second day was opened by a plenary lecture given by N W Tschoegl about time-dependence in materials. M H Wagner followed for the plenary lecture of the third day on linear and branched polyethylene melts in extension but disappointingly the case of branched melts was not covered.

The proceedings of the conference – a 622 pages book – was of great quality, published by Springer, and contains all the abstracts of the oral and poster presentations. It was seconded by the programme that was clearly presented and easy to use with an author index.

These simultaneous sessions have permitted to cover the wide range of rheological subjects: *bioreology, blends, constitutive equations and theories, electro- and magnetorheology, fluid mechanics, food rheology, industrial rheology, liquid crystals, material characterisation, molecular dynamics and theories, numerical simulations, polymer melts and polymer processing, polymer solutions, rheology of solids and composites, rheometry – experimental methods and instrumentation, surfactants, suspensions – emulsions – dispersions – gels, and time-dependant phenomenon*. All these sessions gathered about 300 oral and poster contributions that came not only from European countries but also from India, Canada, Russia, Ukraine, USA, Belarus, Israel, Mexico, Latvia, Hong Kong, Australia, Algeria, Korea, Japan, and Brazil.

It was also finally an opportunity to match faces with the names I had gone through some of my literature review. I thank again the organisers of the conference and the BSR for its support.

Benoît Blottiere
University of Leeds

RHEOMETRY AT MISKIN MANOR Wales, 12-14 April 1999

The University of Wales Institute of Non-Newtonian Fluid Mechanics held its 1999 Annual Meeting at a country retreat known as Miskin Manor which is situated just outside Cardiff. The meeting took place on 12 - 14 April 1999, one day after Wales had snatched victory from the English in the Rugby Five Nations Cup and of course the Welsh were particularly pleased to see English visitors at their meeting to share their celebration! The programme was a very full one and it was surprising to see just how much activity there is in relation to rheometer development. Martin Laun started proceedings by talking about his work on constant pressure capillary rheometry and this configuration appears particularly useful if wall slip is being investigated. The international flavour of the meeting was then sustained by a presentation from Professor Gareth McKinley who spoke on extensional flow measurements currently being carried out at MIT.

A wide ranging selection of lectures followed from both Welsh and guest rheologists. The Welsh were represented by David Binding and Russell Davies from Aberystwyth and two different Rhodri Williams from Swansea!

In terms of new rheometers, Professor Van Arsdale from Houston, USA gave an interesting talk on the application of how a simple compressional probe can be used to obtain viscoelastic data by allowing the probe to penetrate the surface of a liquid. Ralph Oliver from Birmingham showed that the squeeze film geometry appears well situated for measurement of paste rheology and Martin Rides from the NPL described their recent work on a newly developed extensional rheometer.

The whole meeting was very well organised by Rhodri Williams (the elder) and it is clear that Rheology in Wales, remains in very good shape and that rheologists have still not run out of ideas in relation to inventing new and possibly useful rheometers to add to our existing armament of machines.

Dr Malcolm Mackley
University of Cambridge

Annual Meeting of the Nordic Rheology Society (NRS) Lyngby, June 9 – 11, 1999

The annual meeting of the Nordic Rheology Society (NRS) was held within the Technical University of Denmark (DTU), situated in Lyngby, a northern suburb of Copenhagen. This was the 8th meeting of the NRS and the special theme this year was “Process Rheology and measurements”, although papers from a wider aspect of rheology were also presented. The conference was organised by a committee headed by P. Szabo, of DTU, with other members being A. Friis and M. Norsker, both of DTU, R. Ipsen of the Royal Veterinary and Agricultural University (KVL), B. Unni Marr, Copenhagen Pectin A/S and H. Kragh, formerly of the Biotechnological Institute in Kolding but now of Danisco Ingredients.

A rheological course, entitled “Interpretation of Rheological Measurements” was run a day before the conference proper began. Around 40 participants were treated to a wide ranging journey through the subject, by the 4 invited lecturers; M. Larsson, K. Almdal, M. Stading and O. Hassager. Topics dealt with included: Interpretation and control of measurements and results from rheometers; Dynamical mechanical spectroscopy and viscosity measurements; Structural rheology in biopolymer and colloidal systems; and Rheology-Chain structure relationships in polymers. In addition to the commonly understood techniques discussed, a vision of the future for rheology was offered. This talked of the potential to access meaningful data from the non-linear portion of the oscillatory stress or strain curves by way of Fourier transform. Currently, this is beyond the reach of all but a handful of rheologists,

but it was speculated that in the coming years more work would be done to unlock this, as yet, underdeveloped sub field.

The conference itself, attended by some 90 delegates, featured two key-note lectures and a session devoted to the main theme, process rheology. Over the course of the two days, delegates heard 19 presentations which also included sessions on, experimental techniques, food rheology, general rheology, polymers and a poster session. The conference was opened by some welcoming words from the NRS secretary, P. Szabo, before the first key-note lecture.

This was delivered by Prof. L. Choplin of GEMICO-ENSIC, Nancy, France. The title of his lecture, "Rheo-reactor for *in situ* rheological recording during chemical and / or physical processes.", was merely the springboard from which to launch the delegates into the mechanisms for rheological data being extracted from real processes. The subtleties of the technique were demonstrated by introducing the Metzner-Otto average shear rate concept, which for steady state and laminar regimes allows a process rheogram to be obtained. Two different impellers were used as examples, a helical ribbon and horseshoe anchor types, where the viscosity data obtained from the Metzner-Otto rheogram and a conventional rheometer showed excellent agreement. Data was also presented to demonstrate the rheo-reactors capability to extract viscoelastic parameters provided the oscillatory motion of the impellers were small enough to remain within the linear viscoelastic region. Again good correlation was found between the rheo-reactor and the conventional rheometers. These types of rheo-reactors are interesting because they offer the opportunity to gain rigorous rheological data directly from the process line in either batch or semi-batch conditions without the 'down time' of waiting for conventional analysis to be performed. Also the integrity of the sample is preserved.

The first day also took in the sessions on food rheology, of large interest within the Scandinavian countries. The delegates heard presentations on potato starch gels, (A.M. Bay-Smidt, Denmark); rheology of biscuit dough, (L. Pedersen, Denmark); food crispiness - meringues (R. Ipsen, Denmark); liquorice functionality, (M. Norsker, Denmark) and non-fat yoghurts, (B. Unni Marr, Denmark). Within the poster session, food was also well represented with potato tissue, (M. Nielsen, Denmark) and β -lactoglobulin / potato amylopectin gels, (C. Olsson, Sweden) being examined. Other contributions included gelation of triblock copolymers, (H.L. Bagger, Denmark) and electrically conducting network structures of polyaniline, (M. Tiitu, Finland).

The second key-note lecture opened the last day of the conference and was presented by Dr. N.E. Hudson of Strathclyde University, Glasgow, entitled, "The rheological audit of the process.". This took a practical look at the problems facing the rheologist with respect to developing and optimising a new or existing product. The first problem to face the rheologist was whether they should use in- or on-line instruments to check the materials progress through the process. A number of advantages and disadvantages were presented for both types, but the ultimate rheometer for process control should possess three main characteristics; *robustness*, be *relatable* (to results from research rheometers) and provide results *representative* of the sample - in the process! With these ground rules laid out, examples of the coatings industry (printing inks) were given where a knowledge of the extensional viscosity proved vital to the production of a good coating agent. The esoteric variances of extensional flow for strain hardening and thinning fluids were presented and it was shown that after exceeding a critical strain rate, a strain hardening fluid could be expected to fail cohesively resulting in the undesirable phenomenon known as 'ink fly' whereas a strain thinning fluid would give a uniform covering. Other properties of the printing ink discussed included shear thinning, thixotropy, yield value, relaxation time, Deborah number and elasticity. Through sample knowledge and process conditions an audit was built up and the underlying trend presented was that for most processes, it was large deformation measurements that were of prime importance. The speaker was questioned on this apparent omission of dynamic parameters, to which the response was that whilst important, if not vital, to characterise the material, they did not represent very important parameters within the process itself - presumably due to the non-linearity of the conditions therein.

The more theoretical lectures were presented on the second day with a number of talks dealing with numerical simulation and modeling. Two presentations dealt with (1) viscoelastic instability in polymeric filaments (H.K. Rasmussen, Denmark), where surface tension was shown to delay the instability. (2) Capillary thinning of polymeric filaments, (P. Szabo, Denmark), where the simple theory of Newtonian fluids failed to predict filament thinning and although in the correct order of magnitude, the largest relaxation times were not predicted accurately by the simple theory of viscoelastic flow. Away from the more theoretical aspects, a presentation of ionic and acid gel formation in epimerised alginates (K.I. Draget, Norway), was given. This demonstrated the link between rheology and ^{13}C nmr as a technique for following the gelation process.

The social arrangements, always a highlight of the NRS meetings, were no different this year. They included a reception at the Town Hall of Lyngby with a welcome speech from the mayor. This preceeded a sail on Lakes Lyngby and Bagsværd which included a meal. However, the main event was a guided tour of Frilandsmuseet, an open air museum in Copenhagen featuring old houses and farms from throughout Denmark, which was followed by the conference dinner. During the dinner the Carl Klason Rheology award of the Society was presented to Dr. S. Hvidt of Roskilde University for his long and appreciated work in rheology not only in academia but also industry within the Scandanavia. He has been responsible for the considerable development of rheology within the Nordic countries and is now also one of the first points of contact people approach for help, in attempting to solve their rheological problems. The award was gratefully received and during his short acceptance speech he paid tribute to another of the society's members, Prof. O. Kramer, for his long standing help and support.

The next meeting will take place in Helsinki (2000). The exact date of the meeting is yet to be fixed but further details for this will be found in due course on the NRS web page: www.sik.se/nrs/

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N.B. This article will also appear in Applied Rheology.

JIM FERGUSON MEMORIAL LECTURE

The above lecture was held at the University of Strathclyde on Thursday, 17th June 1999. The principal lecturer was Professor Claude Wolff, Chair of Macromolecular Materials at CNAM in Paris. Other eminent rheologists who spoke were Professor Ken Walters, FRS, of the University of Wales, Aberystwyth, and Professor Howard Barnes, OBE, of Unilever plc. The lectures were followed by a short reception. Mrs Jean Ferguson and family, the speakers, and some representatives of the University were then the guests of the BSR at dinner.

A full report of this meeting will be in the next issue of the *Bulletin*.

Paul Doody

ANNOUNCEMENTS

ROYAL SOCIETY OF CHEMISTRY - FARADAY DIVISION

Colloid and Interface Science Group

AND

BRITISH SOCIETY OF RHEOLOGY

Joint Conference Incorporating BSR AGM

THE RHEOLOGICAL ASPECTS OF SURFACTANT BASED SYSTEMS

Arrival for lunch on Monday 18th September 2000

Depart late on Tuesday , 19st September

at Collingwood College, University of Durham, Durham, UK

CALL FOR PAPERS

In September 2000 the CISG and BSR are holding a joint research conference to discuss all aspects of rheological behaviour of surfactant based systems, both of scientific and industrial interest. Experimental and theoretical contributions relating to the rheological properties of many mesoscopic phases of the surfactants, both in binary and tertiary systems, in emulsions, the interfacial rheology of surfactant based systems and their influence on the rheology of more complex systems, such as associating polymers, will all be welcomed.

Anyone wishing to attend the conference and present a paper should complete the tear-off slip below (photocopy acceptable) and return it as soon as possible to:

Dr. R. Ettelaie, Colloid, Interface and Rheology Group, ICI Wilton Centre

P. O. Box 90, Wilton, Middlesbrough, Cleveland, TS90 8JE

Tel: +(44) 1642 437882, Fax: +(44) 1642 437344, E-mail: rammile_ettelaie@ici.com

Name:

Address:

.....

Tel: Fax: E-mail:

I am interested in attending the conference

I Would like to present a Paper/Poster entitled

The RSC is registered charity number 207890

The BSR is registered charity number 249967

BRITISH SOCIETY OF RHEOLOGY

THE RHEOLOGY OF BIOSYSTEMS

Monday 20 September 1999

at the Novartis Foundation, London.

A one day meeting dedicated to the rheology of biosystems.

Programme.

11.00 am. **Dr Jeff Odell.** H H Wills Physics Laboratory. University of Bristol.
"The Microrheology of Hyaluron Gels and the relief of Osteoarthritis".

11.30 am **Dr Mike Rampling.** Imperial College London.
"The rheology of human blood and its therapeutic implications".

12.00 pm. **Dr Malcolm Fraers.** AgrEvo. Chesterford Park. Essex.
"Application of rheological measurements for the probing sedimentation of agricultural suspension concentrates".

12.30 - 2.00pm **Lunch**

2.00 pm **Prof Simon Ross-Murphy.** Kings College London.
"Cold and heat set biopolymer gels".

2.30 pm **Prof John Trinick.** School of Biomedical Sciences, University of Leeds.
"The mechanical properties of the giant protein Titin and its relation to muscle elasticity".

3.00 pm **Dr Imad Farhat.** Division of Food Sciences. University of Nottingham.
"The relevance of water partitioning to the rheological properties of low water content biopolymer mixtures".

3.30pm discussion.

(tick boxes)

☐ I would like to give a poster presentation of my work on
(title) _____

☐ I would like to attend the meeting -

Name _____

Affiliation _____

Address _____

Email _____

Veg ? Yes / No

Cost of meeting, including lunch £40.00. Cheques made payable to "The University of Cambridge".
Send this completed form to: **Dr Malcolm Mackley by Monday 13th September 1999 at University of Cambridge, Department of Chemical Engineering, Pembroke Street, Cambridge, CB2 3RA, UK.**

**ANNOUNCEMENTS OF
THE EUROPEAN SOCIETY OF RHEOLOGY (ESR)**

WEISSENBERG MEDAL

It is my great pleasure to inform you that the (second) Weissenberg Award of the European Society of Rheology (ESR) has been awarded to:

Dr. H.M. Laun, BASF AG

The award ceremony will take place at the XIIIth International Congress on Rheology, Cambridge, UK, 20-25th Aug 2000.

Manfred Wagner

**XIIIth International Congress on Rheology
20-25th August, 2000
Cambridge, UK**

Rheology 2000 is being organized by the British Society of Rheology on behalf of the European Society of Rheology. It will be held in the city of Cambridge, one of the most beautiful cities in the United Kingdom. The Congress will be located in the University of Cambridge and the Congress Office will be based at Robinson College.

The opening ceremony will include the award of the ESR Weissenberg Medal as well as the award of the BSR Gold Medal and the announcement of the recipient of the Society of Rheology Bingham Medal.

The scientific program will comprise four plenary lectures, a number of keynote lectures, technical presentations and poster sessions. An equipment exhibition is also planned. The bulk of the scientific programme will take the form of a series of minisymposia. Prospective contributors to the Congress



Rheology 2000

are invited to send their contributions directly to the relevant minisymposium organisers (names and addresses may be found at the congress web site). Alternatively, contributions can be sent to the Congress Administrator, Dr D M Binding.

Full social and accompanying persons programmes have been arranged. Details of these and extensive additional information, updated regularly, is to be found on the Congress Web site:

<http://abbey4.swan.ac.uk/rheology2000/>

CALL FOR PAPERS

Authors are invited to submit an abstract (not exceeding 300 words) to one of the minisymposium organisers or to the Congress Administrator, to arrive not later than September 30th, 1999. Authors will be notified of acceptance by January 31st, 2000. The camera-ready manuscript will be due by April 30th, 2000.

Congress Administrator:

Dr D M Binding

Department of Mathematics, University of Wales

Aberystwyth SY23 3BZ UK

Tel: 44 (0) 1970 622775

Fax: 44 (0) 1970 622777

E-mail: rheology2000@aber.ac.uk or dmb@aber.ac.uk

BULLETIN OF THE EUROPEAN SOCIETY OF RHEOLOGY
ANNOUNCEMENTS OF THE LOCAL EUROPEAN SOCIETIES

GERMAN SOCIETY OF RHEOLOGY (DRG)

A Joint Meeting of the German Society of Rheology (DRG) and the Section Polymerphysics of the German Physical Society (DPG) was held at Leipzig, March 1-3, 1999, organized by F. Kremer, H.M. Laun, R. Schnabel and M.H. Wagner. The Meeting featured on the 1st day plenary and keynote lectures on polymer rheology and polymer physics by S. Hess, TU Berlin, J. Meissner, ETH Zurich, I. Alig, DKI Darmstadt, G. Eder, Johannes-Kepler-Universitaet Linz, T. Fischer, Universitaet Leipzig, Ch. Friedrich, Universitaet Freiburg, R. Vogel, IPF Dresden, and M. Wilhelm, MPI fuer Polymerforschung Mainz. Of special interest were two plenary lectures given by J. Klein, Rehovot, Israel, on "Rheology of Polymer Brushes", and L. Leger, Paris, France, on "Onset of Flow with Slip Boundary Conditions". On day 2 and 3, following plenary lectures by W. Pechhold, Universität Ulm, and J. Springer, TU Berlin, oral and poster contributions from all aspects of rheology were presented, including a symposium on Food Rheology organized by W.-M. Kulicke.

Prof. J. Kubat, Göteborg, received the Honorary Membership of the DRG for his devoted services to European rheology. His connection with the DRG dates back to the 2nd meeting of the DRG (Berlin 1952), when he presented a paper "Über rheologische Relaxationsprozesse". He is only the third recipient of this honour, after L. Prandtl and K. Kirschke.

A first was the presentation of the Young Rheologists Award of the DRG for the best publication in 1997/98, which was jointly given to C. Gabriel, Universität Erlangen, and D. Maier, formerly Universität Freiburg.

The more than 300 participants of the meeting enjoyed an organ and vocal concert in St. Thomas Church of Leipzig, famous from the days when J.S. Bach was Thomas-Cantor there. Historic Auerbachs Keller, where Faust and Mephisto disputed with the students in J.W. Goethe's classic play "Faust", was a particularly suitable place for the conference dinner.

The next meeting of the DRG will celebrate the Golden Jubilee of the German Society of Rheology, and will take place from May 14 to 16, 2001, at Berlin, where the DRG was founded in 1951.

M.H. Wagner

BULLETIN OF THE EUROPEAN SOCIETY OF RHEOLOGY
ANNOUNCEMENTS OF THE LOCAL EUROPEAN SOCIETIES

HELLENIC SOCIETY OF RHEOLOGY (HSR)

The membership of HSR has reached 42 including the two honorary members, Professor A. Acrivos and Dr. L. Zapas.

The HSR is co-organizing the South European Rheology Conference (with the Italian, Portuguese and Spanish Societies) to be held in Sangineto, Italy, September 7-11, 1999.

Future scientific events organized by the HSR include:

- The 5th National Polymer Meeting (jointly organized with the Hellenic Polymer Society), tentatively scheduled for September 2000 in Crete.
- The 3rd HSR Meeting and International Symposium, tentatively scheduled by September 2001 in Patras.

Further information can be found in the ESR or HSR web sites: <http://www.ncl.ac.uk/rheology/esr>
or

<http://luce.iesl.forth.gr/~hsr/HSRwebpage.html>

BULLETIN OF THE EUROPEAN SOCIETY OF RHEOLOGY
ANNOUNCEMENTS OF THE LOCAL EUROPEAN SOCIETIES

GROUPE FRANÇAIS DE RHEOLOGIE (GFR)

Prof. Claude Wolff from CNAM (Paris) organised with M. R. Favier, Director of the ESP (Oyonnax) the second edition of the «Meeting of Young Rheologists» on May 26 and 27 in Oyonnax. Sixteen young rheologists had the opportunity to exchange on their work during these 2 days. The next session is planned for the year 2000. It will be organised by the CEMEF. For more information contact: vergues@cemef.cma.fr.

Prof. Gérard Marin (Université des Pays de l'Adour) and Prof. Antxon Santamaria (Universidad del Pais Vasco) organised the 33rd Annual General Meeting of the GFR, jointly with the 16th Annual General Meeting of the «Grupo Español de Reologia». The meeting was held over 3 days from October 12 to 14, in Biarritz. The topic was «Rheology in multiphase systems: role of interfaces and interphases» brought 190 participants together coming from 8 different countries. It was also interesting to note that among the participants 55 came from industrial laboratories. One hundred papers have been presented and have been edited as a special 600 pages issue of «*Les Cahiers de Rhéologie*» (Volume XVI, Numéro1). «Les Cahiers de Rhéologie» is a scientific publication of the GFR, in French language, which is published about 3 times a year and may be made available to non-members of the GFR.

The annual award of the GFR, co-sponsored this year by Rheometric Scientific has been attributed to Prof. Jean-François AGASSANT from CEMEF (Sophia Antipolis). Clarisse LUAP from Max-Planck-Institute of Colloids and Interfaces (Berlin) won the prize attributed by the scientific committee to the best Poster for her work: «Rheologie de monocouches de polymères ancrés à l'interface air/eau».

In 1999 our 34th Annual General Meeting will be held in Paris from 18 to 20 October. Prof. Patrice Flaud (Université Paris VI) is taking care of the organisation. The topic is «Rhéologie des Matériaux du Vivant» (Rheology in Life Sciences and Technologies). The official language is French, papers in English are accepted. For more information contact: flaud@lbhp.jussieu.fr or <http://www.lbhp.jussieu.fr>.

Sadly, we report that Prof. Bernard PERSOZ had passed away on the 15th of November 1998 at the age of 85. He had a very important contribution to the development of rheology. He was a founding member of our Group in 1964, and it is under his presidency that the VIth International Congress on Rheology was held in Lyon in 1972.

Jacques Bouton

CONFERENCE ANNOUNCEMENTS

XI International Workshop on Numerical Methods in Viscoelastic Flows

to be held at Vaals, The Netherlands, August 25-28, 1999

We have planned a 4 day meeting, beginning at noon on Wednesday, August 25th, with a lunch, and ending at noon on Saturday 28th, with a lunch. The format will be 6 half day lectures, in the usual workshop format.

The meeting location is a historic castle in the south of the Netherlands: Hotel Vaalsbroek. Registration cost includes housing, all breakfasts, lunches and dinners (including conference dinner) and a visit to downtown Maastricht on Friday evening. Hotel Vaalsbroek is located in a scenic region of the Netherlands close to Maastricht. Maastricht can be conveniently reached by train from Schiphol airport, Amsterdam.

Registration fees, due before April 1, 1999:

Single Room	Dfl. 1200
Double Room	Dfl. 1100
Accompanying Person	Dfl. 750

The number of participants is limited, therefore it is critical to respond early. Registration and submission of abstracts will be via our web-site.

Further information about the workshop can be found on the web page:

<http://www.mate.tue.nl>

or direct

<http://www.mate.tue.nl/workshop>

We are confident that the meeting will be of equal quality as prior meetings in this series and would like to stimulate as much as possible active interchange of results and ideas, and ample time will be reserved to achieve this.

Over the past few years we have witnessed a strong development of numerical methods for viscoelastic flow simulations, and emphasis is shifting towards confrontation with experimental results, enhanced constitutive modelling, stochastic simulations, molecular modelling and multi-dimensional, time-dependent simulations. A continued evolution along these lines is expected and encouraged for the 1999 International Workshop on Numerical Methods in Viscoelastic Flows.

FRC 2000 - Composites for the Millennium

Eighth International Conference on Fibre Reinforced Composites

13th - 15th September 2000 - University of Newcastle upon Tyne

Details of the First Announcement and Call for Papers for FRC 2000 are now available on the Centre for Composite Materials Engineering website:

<http://www.ncl.ac.uk/~nccme>

Please contact me if you would like to receive further information.

Louise Blackburn

Conference Organiser

Conference Design Consultants

Tel: +44-191-284-7590 Fax: +44-191-285-6993

BULLETIN OF THE EUROPEAN SOCIETY OF RHEOLOGY

CONFERENCE ANNOUNCEMENTS

First Southern Europe Conference on Rheology

Hotel Cinquestelle in Sangineto (CS) Italy, September 7 to 11, 1999

This Conference is essentially devoted to bring together academic and industrial researchers from different fields of recognized relevance with the expectation that they will learn from one another and discover ways to work together synergistically.

The Conference goal is to favour the scientific exchange and to encourage the cooperation among Italian, Greek, Portuguese, Slovenian and Spanish rheologists, and to consolidate the international experience and the role of the National Groups, in accordance with the spirit of the European Society of Rheology. The technical program will include oral and poster presentations on various topics of fundamental and practical interest and an equipment exhibition will be held. English will be the official language and no translation will be provided.

The Scientific Committee will decide for allocation of the paper in the oral or poster sessions taking into account the preference of the author(s) and the technical organization of the Conference as well.

The registration fees are:

Delegates

(members of the National Societies) 400.000 Italian lire

(non members) 500.000 Italian lire

(registration covers attendance at the technical sessions as well as reception cocktail, coffee breaks and lunches, gala dinner, and a copy of the Proceedings)

Students

200.000 Italian lire

(registration covers attendance at the technical sessions as well as reception cocktail, coffee breaks and lunches)

The hotel, right on the sea-front, is surrounded by a park and offers about 150 bedrooms at very interesting prices. Hotel facilities: swimming pool, roof garden, tennis courts, five-a-side court, evergreen garden, children's corner.

I hope that you will plan to attend the Conference and my colleagues of the Organizing Committee and I look forward to welcoming you in Sangineto in 1999.

Bruno de Cindio, Chairman.

For further information, please contact us by e-mail:

rheol.conference@unical.it;

bruno.decindio@unical.it

Organizing and Scientific Committee

Antonio Correia Diogo, PorSocRheol; Paolo D'Antona, EniTecnologie; Bruno de Cindio, ItSocRheol; Crispulo Gallegos, SpSocRheol; Romano Lapasin, ItSocRheol; Claudio Maria Pollini, Pavan; Dimitris Vlassopoulos, HelSocRheol ;Miha Zumer, SloSocRheol

Local Organizing Committee

Bruno de Cindio, Chairman; Vincenza Calabro'; Stefano Curcio; Domenico Gabriele

Southern Europe Conference on Rheology

Dept. of Chemical Engineering and Materials

University of Calabria

I-87036 Arcavacata di Rende(CS) - Italy

Tel. +39-0984-492080 Fax +39-0984-492058 email: rheol.conference@unical.it

CONFERENCE ANNOUNCEMENTS

2nd International Symposium on Food Rheology and Structure

ETH Zurich, Switzerland, March 12-16, 2000

Co-sponsored by

Institute of Food Science ETH Zurich; Swiss Committee to the International Union of Food Science and Technology IUFoST; Swiss Polymer Group PGS / Rheology Group; Swiss F.I.T. Rheocenter; and Applied Rheology

We are pleased to announce the 2nd International Symposium on Food Rheology and Structure which will be held at the Federal Institute of Technology (ETH) in Zurich, March 12-16, 2000. Three plenary lectures and ten keynote lectures will be presented by well known scientists from the fields of structure and food rheology. In addition, contributed papers will be presented, and poster sessions as well as an exhibition on equipment and additives will be held. All papers will be published in the conference proceedings, which will be available at the opening of the Symposium. We hope that scientists and interested experts from industry from all over the world will endeavour to meet in Zurich, and make this 2nd International Symposium on Food Rheology and Structure a success from a scientific and industrial point of view.

Chairman:

E. J. Windhab, Zurich

Members:

F. E. Escher, Zurich; H. C. Ottinger, Zurich; J. Meissner, Zurich; B. Conde-Petit, Zurich; P. Fischer, Zurich

1. Call for Papers

Authors are asked to submit - submission via e-mail is preferred - an abstract (not exceeding 300 words) to the secretary of the congress, to arrive no later than April 30, 1999. Authors will be notified by July 31, 1999 of acceptance. The camera ready manuscript is required by October 31, 1999

2. Symposium Topics

Rheology of Food Systems (Theory and Experiment): a. Biopolymer solutions, colloidal dispersions and gels; b. Multiphase food systems; c. Semi-solid foods; d. Food rheology; e. Rheological modelling

Food Structure: a. Macromolecular structures, networks; b. Interfaces; c. Disperse structures; d. Techniques for structure analysis

Relationships between Processing - Structure - Rheology and Food Quality: a. Structure - rheological relationships; b. Structure, rheology, and sensory evaluation; c. Influence of processing on structure and rheology; d. Structure and rheology related food quality; e. Numerical methods

3. Invited Speakers

3a. Plenary Lectures:

A. M. Hermansson (Goteborg, S); M. Kulicke (Hamburg, D); E. J. Windhab (Zurich, CH)

3b. Opening Lecture:

E. Dickinson (Cambridge, UK)

3c. Keynote Speakers:

W. Buchheim (Kiel, D); L. Choplin (Nancy, F); F. Escher (Zurich, CH); C. Gallegos (Sevilla, E); J. Hardy (Nancy, F); J. Kokkini (New Brunswick, USA); P. Lillford (Bedford, UK); J. Meissner (Zurich, CH); H. C. Ottinger (Zurich, CH); P. Schurtenberger (Zurich, CH); P. Tanguy (Montreal, CDN); T. van Vliet (Wageningen, NL); H. Watzke (Lausanne, CH)

4. Registration

BULLETIN OF THE EUROPEAN SOCIETY OF RHEOLOGY

CONFERENCE ANNOUNCEMENTS

We kindly ask you to complete the registration form at: <http://www.isfrs.ethz.ch/>
If the registration via WWW is not possible please email or fax the following form.

5. Registration fees

Delegates

before December 1, 1999 CHF 700,-

after December 1, 1999 CHF 750,-

Students/Graduates:

before December 1, 1999 CHF 200,-

after December 1, 1999 CHF 250,-

Full registration covers attendance at the technical session as well as the Conference Proceedings, banquet and coffee breaks. Students registration covers attendance at the technical sessions, Conference Proceedings and coffee breaks.

Accompanying persons: CHF 200,-

Covers a banquet, Zurich City Tour, visit to a museum in Zurich.

Cancellations

In the case of cancellation, an amount of CHF 150,- (for students CHF 100,-) will be retained before reimbursement. There will be no refunds after February 1, 2000.

- + - FAX - + -

Institute of Food Science,
Laboratory of Food Engineering
ISFRS 2000,
LFO E19, ETH Zurich,
8092 Zurich, Switzerland
FAX +41 1 632 11 55
e-mail: secretary@isfrs.ethz.ch

I plan to attend the 2nd International Symposium on Food Rheology and Structure, March 12 -16, 2000 in Zurich:

Name: Organisation:
Title: Address:

Tel: City:
Fax: ZIP Code:
EMail: Country:

I wish to present a Paper
Poster

in the Symposium on the topic (see under symposium topics):

with the title

CONFERENCE ANNOUNCEMENTS

**The EUROPEAN SOCIETY OF RHEOLOGY
and the BELGIAN GROUP OF RHEOLOGY**

announce the :

6th European School Of Rheology
Hosted by the KU Leuven, Belgium
September 6th-10th, 1999

Following the successful previous two editions in Leuven the course format will be a short course on

**"RHEOLOGICAL MEASUREMENTS:
APPLICATIONS TO POLYMERS, SUSPENSIONS AND PROCESSING"**

Location

The course is hosted by the Lab of Applied Rheology and Polymer Processing of the Department of Chemical Engineering of the K.U. Leuven. The lectures will be held at the Arenberg Castle of the Campus Toegepaste Wetenschappen, Kardinaal Mercierlaan 46, B-3001 Leuven. The four two hour lab sessions will take place in the Department of Chemical Engineering.

Aim

The aim of the course is to give practising engineers and chemists, as well as young PhD students an understanding of :

- the fundamentals of rheology
- principles of measurements
- practical experience
- fundamentals of molecular modelling
- introduction of computational rheology
- applications to problem solving

Faculty

Prof. Gerald G. Fuller, Stanford University (USA)
Prof. R. Keunings, Universitat Catholique de Louvain (B)
Prof. C.W. Macosko, University of Minnesota (USA)
Prof. G. Marrucci, University of Naples (I)
Prof. J. Mewis, K.U. Leuven (B)
Prof. P. Moldenaers, K.U. Leuven (B)
Dr. J. Vermant, K.U. Leuven (B)
Prof. M. Wagner, Stuttgart University (G)

For more information on the course or to request a detailed program brochure, see the web-page at:

<http://www.cit.kuleuven.ac.be/cit/ltrk/course.html>

Or contact Jan Vermant - E-Mail: jan.vermant@cit.kuleuven.ac.be

BULLETIN OF THE EUROPEAN SOCIETY OF RHEOLOGY

CONFERENCE ANNOUNCEMENTS

Rheologie des Materiaux du Vivant

Rheology in life sciences and technologies

34th Annual General Meeting of the French Group of Rheology GFR

Paris October 18-20, 1999

Subjects covered will include :

- Biorheology (fluids and soft tissues)
- Rheology of biopolymers
- Rheology of biocompatible materials
- Rheology of powders
- Rheology of controlled release systems

The scope of the meeting is to bring together academic and industrial scientists especially those speaking french, papers in english will be also accepted.

Scientific Committee :

Chairman : P.G. de Gennes

M. Baquet, L. Dubertret, G. Couarraze, B. Launay, J-L. Morancais,

C. Oddou, D. Quemada, J-F Stoltz.

The meeting will be held at the

CONSERVATOIRE NATIONAL DES ARTS ET METIERS

292 rue Saint Martin

PARIS

Registration fees :

The registration fee will cover attendance at the technical sessions,
the Conference Proceedings, a banquet, the lunches and coffe breaks.

Members of the GFR and the ESR affiliated societies : 1300FF

Students : 900FF

Others: 1600FF

Dead line for submission of abstracts : April 7th 1999

Dead line for inscription: September 7th 1999

All correspondance should be addressed to :

Pr. Patrice Flaud

Secretariat du 34eme Colloque du GFR

Universite Paris 7 - Denis Diderot

LBHP - case 7056

2 place Jussieu

75 251 PARIS cedex 05

FRANCE

Tel : +33 01 44 27 40 07

FAX : +33 01 44 27 43 35

Email : gfr@lbhp.jussieu.fr

More details : <http://www.lbhp.jussieu.fr>

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BSR MEMBERSHIP NEWS

OBITUARY

R W WHORLOW, A.R.C.S., BSc., F.Inst.P., C. Phys.

Dick Whorlow died on December 31st 1998 at the age of 75. In the fifty-one years that he was a member of our Society he was outstanding as teacher of rheology and a diligent worker on Council. He graduated from Imperial College of Science and Technology with first class honours in Physics in 1943. In 1949 he also obtained a first class honours degree, by private study, in Mathematics while working for the Ministry of Supply and the Research Association of British Rubber Manufacturers. In 1951 he began a long (35 years) and distinguished academic career in the Physics Dept at Battersea Polytechnic, subsequently moving to Surrey University in Guildford where he became Deputy Head of the Physics Department.

In the immediate post-war period the rapid growth of the polymer industry led to the involvement in rheology of a large number of scientists from a wide range of disciplines. Dick saw the need for basic tuition in the subject and for many years he ran a series of post-graduate evening lectures on experimental aspects of rheology. In a letter to the Bulletin he wrote "I was astonished to find that people were prepared to travel to Battersea on November evenings, crossing London in the rush hour, from as far afield as Maidstone, Welwyn and even Manningtree." Many leading rheologists praise the value of these courses.

Dick joined the British Rheologists' Club in 1948 and served on Council in several capacities from 1958 to 1974 including Treasurer from 1969 to 1973. He was Editor of Abstracts from 1961 to 1965 a time when most abstracts were written by hand and then typed in a standard layout, in this case the typing was done by the Editors wife, Daphne.

Another British Society of Rheology activity he was involved in was helping to organise a conference on "Polymer Systems, Deformation and Flow" at Loughborough and he was joint author with R.W.Wetton of the Conference Proceedings.

In 1978 the Society introduced its Annual Award, and Dick was selected as its first recipient. It was given "in recognition of his outstanding service to the Society and for his work in the teaching and science of rheology." In 1980 he wrote a book entitled "Rheological Techniques" based on his lecture course. This proved such a popular introduction to rheology that a second edition was published in 1992.

Dick's own research papers were mostly concerned with the rheological behaviour of dispersions of particles in polymer solutions and polymer melts. In the last months of his life Dick sorted out his rheological books and literature in preparation for offering them to the Scott Blair collection.

For twelve years Dick was a Chief Examiner for Physics A-levels for the London Board. He was also a founder member and treasurer of the Friday Club, a charitable organisation for mentally handicapped children in Cranleigh.

His long-held passion for sailing was replaced by a similar one for caravanning and when he moved to Gloucestershire in typical fashion he took up several new interests. These included being a voluntary Cotswold Warden and treasurer of the Cheltenham Horticultural Society, weaving and researching local history. An article by him, adding to Joyce Barber's work, "The Story of Trinity Mill-Bagendon" is published in Gloucester History No 12, 1998

Domestically he was always keen on D.I.Y; his expertise being that of a skilled craftsman rather than of an amateur.

At a celebration of his life held in Cheltenham on January 12th 1999, eight speakers from different aspects of his life bore witness to the high respect in which Dick was held. Common themes were his thoroughness, kindness to others, scientific ability, sense of humour and self-effacing nature.

He leaves a widow, Daphne, a son Colin and stepson Nigel to whom we extend our heartfelt sympathy.

John Benbow

NEW MEMBERS

Here are the details of new members elected on 18 June 1999.

UNITED KINGDOM	
Mr Reginald Freeman Boulter's Farm, Castlemorton Common, Welland, Malvern, WORCESTERSHIRE WR13 6LE <i>fea FGHL</i> rfreeman@wyenet.co.uk	Mr Tim Green Carl Stuart Ltd, Unit 20, Town Yard Business Park, Leek, STAFFORDSHIRE <i>fea A-O</i>
Ms Karen Lee Department of Chemical Engineering, University of Cambridge, Pembroke Street, CAMBRIDGE CB2 3RA <i>fetsa D</i> kl220@cus.cam.ac.uk	Mr Jan Engman Department of Chemical Engineering, University of Cambridge, Pembroke Street, CAMBRIDGE CB2 3RA <i>fetsaGHLO</i> je224@cam.ac.uk
Mrs Susan Williams Linx Printing Technologies plc, Burrell Road, St Ives, CAMBRIDGESHIRE PE17 4LE <i>peta GI</i> swilliam@linx.co.uk	Mr Graham Salters Elementis Specialities, Nettlehill Road, Houston Industrial Estate, LIVINGSTON EH54 5DL <i>feta BCE-KO</i> graham.salters@nli-usa.com
OVERSEAS	
Dr Gunsendorj Magsarjavyn Mongolian Academy of Sciences, Ulaanbaatar – 11, Sukhbaatar Square 3, MONGOLIA <i>fetsa GLN</i> mas@magicnet.mn	Mr Nigel Goldup Davis Lynn & Partners, PO Box 586, Kloof 3640 SOUTH AFRICA <i>fetsaGH</i> goldupsa@iafrica.com

OTHER MEMBERSHIP NEWS

Mike Phillips has been for the last 30 odd years, a member of the BSR. He has recently retired from service with the Shell Group of Companies. He will continue to live in Amsterdam and remain active in rheology, in particular in the field of polymer and bitumen products and their performance, and as member of the council of the Dutch Society of Rheology.

Please note that his new email, telephone, and postal address as of 1 April 1999 is:

Email: M.PHILLIPS@cable.a2000.nl
Tel. +31/ (0) 20 625 7180
Address: Brouwersgracht 204-B, 1013 HD Amsterdam, The Netherlands

INDUSTRY NEWS

TA Instruments UK have announced a 5 day rheology course to be held at the White Horse hotel in Dorking, Surrey from 18th-22nd October, 1999.

The course is modular and any combination of days may be attended.

Fully inclusive costs are GBP 200/day (residential), GBP 100/day (non-residential).

Brief details of individual days below :

18/10 - Introduction to Rheology - basics for those with little or no experience.

19&20/10 - Practical Rheology - combination of lectures and practical sessions with incorporating useful advice to get the most out of your rheometer.

21/10 - Advanced Techniques - eg. frequency multiplexing, parallel superposition, relaxation spectra, normal forces, TTS etc.

22/10 - Rheology of Solids - solids in torsion, use of DMA, DEA etc.

For further information call TA Instruments Ltd on +44 1372 360363 or alternatively by fax on +44 1372 360135 or email sgoodyer@taeurope.co.uk

Camtel Ltd announce their SCHOOL OF INDUSTRIAL RHEOLOGY AND SCHOOL OF INDUSTRIAL SURFACE CHEMISTRY 1999

25 Oct Back to Basics - Rheology (B2B) *

26-27 Oct School of Industrial Rheology (SIR 99) *

28-29 Oct School of Industrial Surface Chemistry (SISC 99)

* sponsored by BOHLIN INSTRUMENTS

For further information please contact:

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5 Carrington House,
37 Upper King Street,
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T: +44 1763 244280
F: +44 (0)1763 244298
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Info: www.camtel.co.uk

CONFERENCES

You are also advised to visit the BSR home pages where an extensive list of conferences is maintained by Chris Petrie: <http://www.ncl.ac.uk/rheology/conferences/index.html>

1999	
27-30 Jun Zielona Góra PL	INTERNATIONAL CONFERENCE ON ENGINEERING RHEOLOGY - ICER 99 Prof Edward Walicki, Conference Co-ordinator, ICER 99, Dept of Mathematics, Technical University of Zielona Góra, ul. Szafrana 2, PO Box 47, 65-516 Zielona Góra, Poland T: +48 68 325 48 31 x 472 f: +48 68 324 55 97 E: e.walicki@wm.pz.zgora.pl
27-30 Jun Blacksburg, VI USA	VISCOPLASTICITY AND ITS CURRENT APPLICATIONS at the 1999 ASME JOINT APPLIED MECHANICS AND MATERIALS SUMMER CONFERENCE Tomasz Lodygowski, Poznan, Poland, or the local organizers at Virginia Polytechnic Institute and State University E: lodygowski@put.poznan.pl Info: www.esm.vt.edu/mmconf/
12-14 Jul Plymouth UK	FIFTH INTERNATIONAL CONFERENCE ON FLOW PROCESSES IN COMPOSITE MATERIALS Mrs Denise Horne E: dhorne@plymouth.ac.uk
July Prague CZ	RHEOLOGY OF POLYMER SYSTEMS - PRAGUE MEETINGS ON MACROMOLECULES Info: sympo@imc.cas.cz
25-28 Aug Vaals NL	XI INTERNATIONAL WORKSHOP ON NUMERICAL METHODS IN VISCOELASTIC FLOWS Info: www.mate.tue.nl
6-10 Sep Leuven BE	6TH EUROPEAN SCHOOL OF RHEOLOGY E: jan.vermant@cit.kuleuven.ac.be Info: www.cit.kuleuven.ac.be/cit/ltrk/course.html
7-11 Sep Sangineto (CS) IT	FIRST SOUTHERN EUROPE CONFERENCE ON RHEOLOGY Southern European Conference on Rheology, Dept of Chemical Engineering and Materials, University of Calabria, I-87036 Arcavac di Rende (CS) - Italy T: +39 984 492080 F: +39 984 492058 E: rheol.conference@unical.it
13 – 14 Oct Shrewsbury UK	POLYMER RHEOLOGY CONFERENCE '99 Janine Kitson, Conference Producer, Rapra Technology, Shawbury, Shrewsbury, Shropshire SY4 4NR, UK T: +44 (0)1939 250383 F: +44 (0)1939 251118 E: conferences@rapra.net
17-21 Oct Madison, WI USA	71ST ANNUAL MEETING OF THE SOCIETY OF RHEOLOGY Prof A Jeffrey Giacomin, Chair, Rheology Research Center, University of Wisconsin, 309 Mechanical Engineering Building, 1513 University Avenue, Madison, WI 53706-1572 T: +1 608 262-7473 F: +1 608 265-2316 E: giacomin@engr.wisc.edu
18-20 Oct Paris FR	RHEOLOGIE DES MATERIAUX DU VIVANT (RHEOLOGY IN LIFE SCIENCES AND TECHNOLOGIES) Pr Patrice Flaud, Secretariat du 34 ^{eme} Colloque du GFR, Universite Paris 7 - Denis Diderot, LBHP - case 7056, 2place Jussieu, 75 251 Paris cedex 05, France T: +33 1 44 27 40 07 F: +33 1 44 27 43 35 E: gfr@lbhp.jussieu.fr Info: www.lbhp.jussieu.fr
2000	
12-16 Mar Zurich CH	2ND INTERNATIONAL SYMPOSIUM ON FOOD RHEOLOGY AND STRUCTURE Institute of Food Science, Laboratory of Food Engineering, LFO E19, ETH Zurich, 8092 Zurich, Switzerland F: +46 1 632 11 55 E: secretary@isfrs.ethz.ch
21-26 Aug Cambridge UK	RHEOLOGY 2000 - XIIITH INTERNATIONAL CONGRESS ON RHEOLOGY Organised by the BSR with the assistance of the European Society of Rheology. Chairman of the Executive Committee: Prof K Walters FRS, University of Wales, Dept of Mathematics, Penglais, Aberystwyth, Dyfed, SY23 3BZ, Wales, UK T: +44 (0)1970 622750 F: +44 (0)1970 622777 Info: http://abbey4.swan.ac.uk/rheology2000/
13-15 Sep Newcastle UK	FRC 2000 - COMPOSITES FOR THE MILLENNIUM: EIGHTH INTERNATIONAL CONFERENCE ON FIBRE REINFORCED COMPOSITES Louise Blackburn, Conference Organiser, Conference Design Consultants T: +44 191 284 7590 F: +44 191 285 6993 Info: www.ncl.ac.uk/~nccme
T: Telephone; F: Facsimile; E: Email; Info: WWW URL	

COURSES

1999	
15 Jul Leatherhead UK	INTRODUCTION TO RHEOLOGY Dr Bernard Costello, TA Instruments Ltd, Europe House, Bilton Centre, Cleeve Road, Leatherhead, Surrey, KT22 7UQ, UK T UK: 0800 0180363 T (other): +44 1372 360363 F: +44 1372 360135 E: bcostello@taeurope.co.uk
13 – 17 Sep Udine IT	MATERIAL INSTABILITIES IN ELASTIC AND PLASTIC SOLIDS H Petryk, CISM, Palazzo del Torso, Piazza Garibaldi 18, 33100 Udine, Italy T: +39 0432248511 F: +39 0432248550 E: cism@uniud.it Info: http://www.uniud.it/cism/homepage.htm
16 Sep Leatherhead UK	INTRODUCTION TO RHEOLOGY Dr Bernard Costello, TA Instruments Ltd, Europe House, Bilton Centre, Cleeve Road, Leatherhead, Surrey, KT22 7UQ, UK T UK: 0800 0180363 T (other): +44 1372 360363 F: +44 1372 360135 E: bcostello@taeurope.co.uk
11-15 Oct Leatherhead UK	APPLIED RHEOLOGY SCHOOL 11 Oct Introduction to Rheology 12-13 Oct Practical Rheology 14 Oct Advanced Techniques 15 Oct Rheology of Solids Steve Goodyer, TA Instruments Ltd, Europe House, Bilton Centre, Cleeve Road, Leatherhead, Surrey, KT22 7UQ, UK T: +44 1372 360363 F: +44 1372 360135 E: sgoodyer@taeurope.co.uk
25-29 Oct Newbury UK	SCHOOL OF INDUSTRIAL RHEOLOGY AND SCHOOL OF INDUSTRIAL SURFACE CHEMISTRY 1999 25 Oct Back to Basics - Rheology (B2B) * 26-27 Oct School of Industrial Rheology (SIR 99) * 28-29 Oct School of Industrial Surface Chemistry (SISC 99) * sponsored by BOHLIN INSTRUMENTS Mrs Bernadette Franklin, Camtel Ltd, 5 Carrington House, 37 Upper King Street, Royston, Herts SG8 9AZ, UK T: +44 1763 244280 F: +44 (0)1763 244298 E: info@camtel.co.uk Info: www.camtel.co.uk
1-5 Nov Glasgow UK	COURSE ON PROCESS RHEOLOGY Dr N E Hudson, Dept of Pure & Applied Chemistry, University of Strathclyde, 295 Cathedral St, Glasgow G1 1XL, UK T: +44 141 548 2162 F: +44 141 548 4822 E: n.e.hudson@strath.ac.uk
18 Nov Leatherhead UK	INTRODUCTION TO RHEOLOGY Dr Bernard Costello, TA Instruments Ltd, Europe House, Bilton Centre, Cleeve Road, Leatherhead, Surrey, KT22 7UQ, UK T UK: 0800 0180363 T (other): +44 1372 360363 F: +44 1372 360135 E: bcostello@taeurope.co.uk
T: Telephone; F: Facsimile; E: Email; Info: WWW URL	

AIMS OF THE SOCIETY

The way liquids flow and solids deform affects all aspects of life.

Extraction and processing of crude oil, moulding of plastics, use of toothpaste, spreading of margarine, painting and the lubrication of joints in the human body are all examples of processes depending upon rheological behaviour. Rheology is defined as the science of the deformation and flow of matter.

If your work is concerned with rheology in any way, then you have much to gain by joining the British Society of Rheology - publications, conferences and access to fellow members who, while working in a different discipline or industry, may be facing similar problems to yours.

The Society is non-profit making and is registered as a charity.