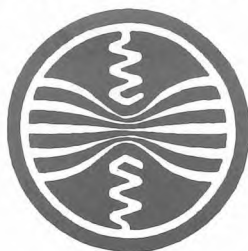


THE BRITISH SOCIETY OF RHEOLOGY

BULLETIN



December 1995

1995, Vol. 38, No. 4

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THE BRITISH SOCIETY OF RHEOLOGY

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EDITORIAL

May I start by wishing all our members a very prosperous 1996. This year we plan to celebrate the launch of the European Society of Rheology. The agreement of individual European Societies and Groups to form this Society is reported elsewhere in these pages. There is much other news from Europe here, and I thank the Societies who were kind enough to send it to me.

I have also taken the liberty of extracting information from a number of documents, which I think is of interest to members. If I have made any errors of omission or accuracy, my apologies to the original authors. These extracts include those on the Scott-Blair working party; the proposals for a World wide web page; and on the European Federation of Chemical Engineering working party on Industrial Rheology.

I hope that you will read the appeal by Gerry Meeten, our Editor of the Rheology Abstracts, and help him to make this valuable journal even more useful to our members and subscribers by volunteering to be an abstractor.

The final copy date for the next issue, Volume 39 number 1, which should reach members by mid-May 1996, is March 25th, 1996.

COMMENTARY ON BSR COUNCIL MEETING, 12 DECEMBER 1995

Several members travelled to Chester on Monday night and assembled in the bar prior to a "working dinner" (Steve Robinson had dined on route, mommas apple pie etc., and so was excused this ritual). Crackers were pulled, paper hats donned and plastic toys examined then and only then did dining commence. The gastronomic extravaganza continued on Tuesday morning, but with no paper hats to brighten up the breakfast proceedings.

Our meeting started promptly, Howard Barnes and Phil Banfill having made valiant sacrifices to grace us with their presence. Phil had taken a break from a major house move, "just as the heavy lifting started" and Howard braved the miserable weather with little regard to its effect on his cold.

Absentee's apologies were given and accepted and the first item of the agenda approached eagerly. Phil Banfill offered to continue as "stand by" chairman for meetings to which Howard was unable to attend. This position was approved by Council on the understanding that like Clinton & Gore, they would not fly on the same presidential jet in the future.

The minutes of the previous meeting were discussed and approved and no matters arose. Our President offered the first of the officers' reports, detailing responses from within continental Europe to the invitation to join a European-wide rheological society. The invitation included a proposal for the formation of the ESR and details of the level of commitment required from each contributing society. All responses so far had been positive (six interested parties including the UK; to date no negative replies received). A greater understanding of the total picture will be gained following the forthcoming society meetings in these, as yet, silent countries. Whom, from the BSR, would we propose for inclusion on the ESR was the subject of long discussion. The BSR's campaign manager (self appointed) Russell Davies approached this issue with a level of thought and tenacity that would serve the Tories well at the next general election. (Some members of council were visibly moved).

Our recently appointed treasurer is still collating our financial accounts from Roy Carter so a full report was not offered. It appears that Mike has a contact "on the inside" of Swansea's Lloyds Bank and as a result of this we look forward to an improvement in the Society's financial services.

No problems are anticipated following the end of our Rheology Abstracts collaboration with Elsevier. Nick is taking on the responsibility of co-ordinating, collating and printing etc. It is foreseen that the production of this publication will be added to the work load of Glasgow's Hudson Sweat Shop.

The prospects for the UK's rheologists to surf the Internet in their quest for information on the BSR etc. are improving all the time. Chris Petrie's efforts were well received and he will be asked to work further on these along with the Council.

In his absence, Paul Doody's "Young Rheologists Day" was transformed into a two day meeting to include the next BSR AGM and a "Controlled Stress Rheometry" day. Nice one Paul!! Carole promised to break the news to him and offer assistance as required.

Nick Hudson offered the council a somewhat bleary eyed report from the recent Bordeaux meeting. There were close to 150 delegates present to sample some quality presentations and posters etc. together with generous quantities of local refreshment. A full report is promised for the next Bulletin, or when Nick "dries out".

The meeting closed shortly after 1.00 pm and the Council members dispersed into the fog.

Steve Robinson.

BSR SCOTT-BLAIR COLLECTION WORKING PARTY

The following news is extracted from the minutes of meetings of the Collection Working Group held in 1995. The composition of the working group was Dr W.M.Jones (Chairman), Dr J.J.Benbow (BSR Archivist), Mr W.D.Hines for Mrs Ghosal (Hugh Owen Library) and Dr A.Evans (Secretary). Prof. Russell Davies has replaced Roy Carter as the BSR Council representative on the Working Group.

Mr Hines reported that the books and bound volumes of journals which made up the public part of the Collection have been moved from the original subterranean computer terminal area to dedicated shelving in the large Seminar Room two floors higher up in the Hugh Owen building. It is hoped that this will provide a more agreeable ambiance for users. Mr Hines agreed to try and produce a hard copy of the complete collection catalogue. Dr Benbow suggested that this should be made available to all BSR members in a choice of printed or electronic form.

There had still been no progress on getting the collected published papers of G.W. Scott-Blair, bound.

On accessions, items recommended by the BSR Council had been approved and obtained. Dr Benbow also donated further items. It was agreed that they would verify that the Collection had a complete set of the Proceedings from the various international rheological conferences. A check of computerised on-line catalogs had shown only twelve rheological titles new since September 1994, whilst the world OCLC catalogue yielded 1674 hits with the word Rheology in the title, of which only 223 were only in the Aberystwyth catalogue (which includes the SB Collection). The extracts from the Hugh Owen Library on-line catalogue had been prepared and sorted into class-mark and title order.

There had been some discussion on the future role of the collection and as to whether it should attempt to keep up to date with all new publications, or retain its current more historical role. This decision was referred to the BSR Council for its comments.

RHEOLOGY ABSTRACTS NEEDS YOU!

As from January 1996, Rheology Abstracts will be published by the British Society of Rheology. It was previously published by Elsevier, whose annual page budget was 400. This restricted the annual number of published abstracts to about 900. We now have the opportunity to expand our page and number output, which in turn requires abstracts to be discovered and delivered to the Editor. In this article I plead for more Honorary Abstractors, and describe what sort of abstracts appear to be most needed from them.

Two important questions are:

- From where in the vast field of rheology are abstracts most needed?
- Accepting that R.A. cannot abstract *every* publication in the world, what then should it strive to do?

I should like to receive members' views on these questions, but propose *pro tem* the following. That we should:

- capture as many abstracts as realistically possible
- strike a satisfactory balance across several areas of rheology.

Discerning readers of the Bulletin will have seen discussion in many past issues regarding industrial rheology. This is an important, enormous but ill-defined area. The general tenor of past discussions has been whether the BSR adequately serves the industrialist. The 'Case of the Missing Industrialist' springs to mind. The present Editor's own view (he welcomes discussion, preferably in these pages) is that the R.A. would benefit from more abstracts in certain of the industrial or applied rheology areas. To be specific without being exhaustive, materials not greatly covered at present are:

- paints/coverings
- glues/adhesives
- inks
- soils/rocks
- bitumens/pitches
- building materials
- metals
- pharmaceuticals
- biomaterials
- foodstuffs.

In terms of processes or phenomena, there are rheological aspects to friction, wear, tribology, filtration, permeation, mixing; to name a few topics which could provide industrial or applied abstracts.

So what can Abstractors (aspiring) do to become Abstractors (actual)? Three very simple steps are required.

1. Contact the Hon. Ed. regarding what journal(s) you can abstract from.
2. When (1) is agreed, look at the journal(s) regularly and find abstracts.
3. Photocopy the title page of the article (inclusive of abstract) onto A4 paper and send it to the Hon. Ed. of Rheology Abstracts.

Those steps are all you need to make; nothing else. Even a dozen abstracts a year are well worth the effort.

What do *Abstractors* gain from this? Your name will be gratefully registered in the R.A.'s list of Abstractors. More importantly, you will render sterling service for your Society and for our subject.

Gerry Meeten,
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British Society of Rheology Awards, Call for Nominations

The Secretary would be pleased to receive nominations for the BSR's Annual Award, 1996 as soon as possible, and in any event, not later than June 1st, 1996. The Annual Award is either designed to reflect contributions made over a prolonged period or to be used in appreciation of a particular contribution to the field including the publication of a single meritorious paper. Council would particularly welcome nominations of younger members whose contributions are judged to be of especial merit or promise.

PROPOSAL FOR A WWW PAGE

The following text was extracted from material prepared by Dr Chris Petrie, Dept of Engineering Mathematics, University of Newcastle upon Tyne, and submitted to the BSR Council for its consideration. We would welcome any comments or contributions you wish to make.

I believe that it would be useful to members and to the Society to have a presence on the Internet in the form of pages on the World-Wide-Web (WWW). The Society of Rheology is actively considering this (and as a member of the Society I am involved in helping to get this under way). It would be good if several societies, and the international bodies with which we are involved, worked together on this and helped to publicise our subject.

The idea of the WWW is very much based on 'hypertext', which one views on a computer screen a page at a time, with the option of selecting certain words, phrases or sub-headings and choosing to view a page of text which, in effect, gives more detail on the topic selected. The only requirements for viewing a WWW document are a computer (PC, Macintosh or other) connected to the Internet (by cable or telephone line and modem), software such as Netscape, Mosaic, Lynx, ... (a WWW 'browser') and, thirdly, the 'address' of a page from which to start browsing. The address of my Department, for example, is the URL (uniform resource locator - *I think*)

<http://www.ncl.ac.uk/-nengm/>

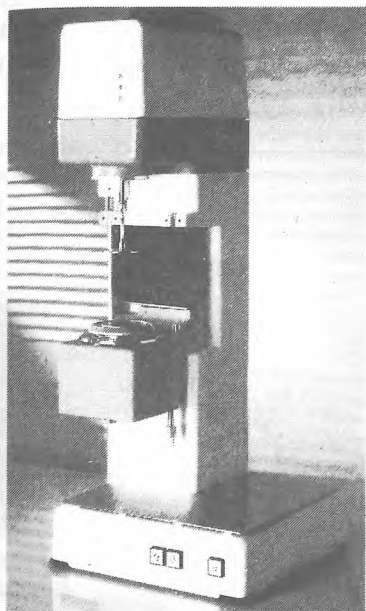
and from there you can reach a page on rheology, all sorts of information about the Department, its courses and its research activities, and pages all over the world (one can access lists of University pages, mathematician pages, and so on).

As well as academics, publishers, like Elsevier, and institutions, like the Institute of Physics, are setting up WWW pages, as are individuals, commercial enterprises and many popular journals and newspapers are doing likewise. It is very easy to do this badly, and I don't claim that the example of my Department is anywhere near perfect. However I do think it is worth putting rheology on the map as far as the Internet is concerned, and I think it can be done reasonably well.

I ask that Council approves the idea in principle and sets up a small group (two or three; e-mail users preferably). I am willing to put some effort into getting this moving (and I hope to do the same at the European level).

Chris Petrie

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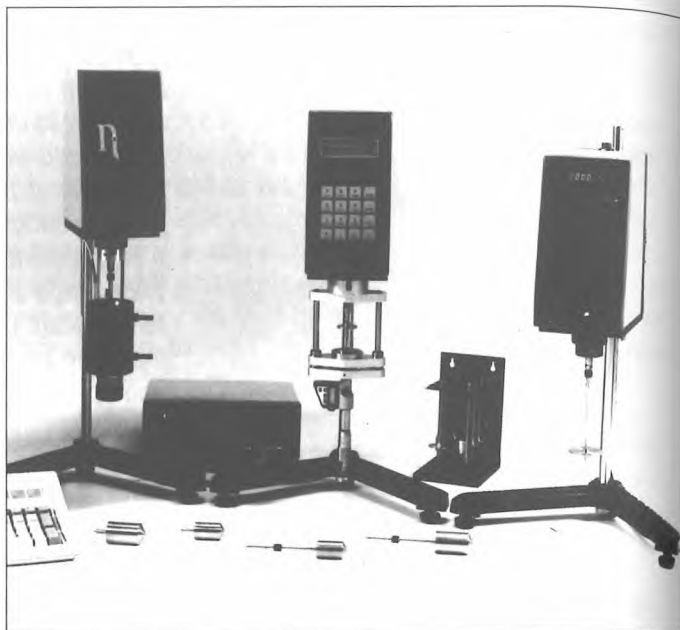
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CONFERENCE REPORT

Les Developpements Recents En Rhéologie, Bordeaux
13th to 15th September 1995

The date was Tuesday 12th September 1995 and nearly 150 participants from eight European countries arrived in Bordeaux for the 30th Annual Colloquium of the Groupe Français de Rhéologie held at l'ENSAM (École Nationale Supérieure des Arts et Métiers) on the campus of the University of Bordeaux at Talence. This year the meeting was held in association with the British Society of Rheology.

The meeting began on the Wednesday morning with the welcoming addresses from the Chairman of the Organising Committee (Professor Gaudu), from the Director of l'ENSAM, and from Professor Piau (the President of the GFR). The meeting then commenced, and because of the large number of presentations (52), it was split into two parallel sessions. The majority of the talks were naturally delivered in French, with a number being in English. By some almost superhuman feats of persuasion, the organisers had managed to extract from participants full versions of nearly all the contributed papers; not only that, but there had also still been time to produce them in printed form before the start of the meeting. Thus on arrival we were all presented with two handsome blue volumes, which doubtless provided good bedtime reading during the conference (and heavy luggage for the return journey). They were most valuable, particularly for your correspondent, who can read several languages, but has problems with the speed of the spoken word!! It is not my intention to go into detail about any of the lectures, but should any reader require any more information, I would be happy to supply it.

On the first day, the sessions were on Rheology of Suspensions and Industrial Rheology in the morning, and on Rheology of Food Materials and Rheology of Polymers in the afternoon. Then came the first poster session, covering the topics of the first day, in which 12 offerings stimulated much lively and voluble discussion, exchange of cards, and swapping of e-mail addresses.

In the evening, we were all invited to l'Hôtel de Ville (the Town Hall) for the Reception, and were greeted by the Mayor, who described the beauties of Bordeaux (the architecture, the rivers, the green spaces!), and the local industry - obviously dominated by the viniculture. This being the conference season, she then had to hurry to the salon next door, to do exactly the same with a gathering of medical people. The wine and small eats provided, ensured that the atmosphere was convivial as we renewed old friendships, and cultivated new ones.

On the Thursday, the sessions were on the Effects of Interfaces, and the Rheology of Solutions and Mousses in the morning, which was followed by the second poster session, of 16 offerings, covering the topics of the rest of the colloquium. This was also the Day of the Excursion. In the middle of the afternoon we set off in coaches from our hotels heading for St Emilion. On arrival, we were given a talk on the history of one of the most famous wine areas of the world, and then given a conducted tour of the ancient church and catacombs. After a short break to sample the atmosphere of the old town - from the table of a pavement café - it was back into the coaches for a short tour of the district and on to one of the many châteaux in the area. There we learnt, in part, about how their wine is made, and were able to sample some of their best vintages.

In the evening, we moved on to the châteaux of Castegens à Belvès de Castillon for the Banquet, and the presentations and awards of the GFR. As would be expected in this part of Europe, the menu was superb and the wine exquisite. This was a splendid evening, much enjoyed by all who attended. Fraternal greetings were expressed by the President of the GFR to all the other Societies and Groups in Europe, particularly in regard to the formation of the European Society.

The final day, Friday, was devoted to the Rheology and Mechanics of Wood, Numerical Simulation, and Gels in the morning, and Rheophysics and Construction Materials in the afternoon. The final lecture finished at 16h, and the participants departed in many directions. Air, road, rail and sea connections are plentiful in this part of France, and the majority would have been home in a few hours.

It will be clear from this account that rheology is thriving in France, and that any conference which attempts to give a state-of-the-art snapshot of all its aspects faces a difficult task. This implies that the organisers had a hard job in categorising the submitted papers, and indeed some of them could have been placed equally well in other sessions. Overall, this was a very good meeting, bringing together 104 academic and 43 industrial rheologists from around Europe. Thanks in large part to the careful planning and organisation of the Chairman, Professor Remi Gaudu, and the members of his Organising Committee, the Colloquium more than met our expectations, both scientifically and socially.

WORKING PARTY ON INDUSTRIAL RHEOLOGY EUROPEAN FEDERATION OF CHEMICAL ENGINEERING

This Working Party has been resurrected by Prof. Gianni Astarita of the University of Naples who had been requested to take the initiative. He contacted a number of people likely to be interested, obtained suggestions from them towards defining a philosophy and a program of work, and drew up a draft position paper. A preliminary meeting was held on Capri in June 1995 to discuss how they should proceed in the future and what activities would be of interest in each of the countries.

Suggestions considered included that the working party should establish a database of the Academic research being done in Europe; commission a survey of industries to establish their needs; and use their influence to bring these two together with the emphasis on achieving a strong integration with industrial needs. Some of the suggestions about research areas of interest included non-polymeric multiphase materials (suspensions, emulsions, foams); systems with evolving rheology; chemical processes where rheologically complex media play a role; granular materials with low viscosity, low density interstitial fluid.

Prof Astarita believes that the working party will only be successful if it attracts the attention of industrial people, but not if it is a purely academic initiative. The WP name of 'Industrial Rheology' has been chosen to emphasise that their activities must be focussed on today's real industrial needs. It should be particularly useful for small and medium sized industries, which may have difficulties in developing the appropriate level of in-house rheological research. The WP should be a focus where industrial rheological problems can be presented to the academic community on a European wide basis and which allows the industries to have access to good research of direct industrial interest.

Following the preliminary Capri meeting, Prof. Howard Barnes has agreed to arrange the first real meeting of the WP in England in March 1996. The goal is to have one industrial and one academic representative from each of the EEC countries. The Society of Rheology in North America has shown considerable interest in this initiative and would like to have an observer at the WP meetings and would like to have a European representative at the meetings of their Executive Council. Prof Astarita has also arranged with the organisers of the International Congress on Rheology in Quebec City, August 1996, that a slot be reserved in the program for a presentation on the progress of the WP activities.

If you have any suggestions on any aspects of this working party, Prof. Astarita or Prof. Barnes would be very pleased to hear from you.

EUROPEAN SOCIETY NEWS

In our Bulletin Volume 38, No. 2, on pages 52/53 a draft constitution of the proposed European Society of Rheology (ESR) was published. This draft constitution was to be put to the members of Rheology Societies or Groups in Europe for their approval. At the time of going to print, we have heard that six Societies have accepted the constitution as it stands and have agreed to join the ESR as founder members. These are the Societies in Austria, Britain, France, Germany, the Netherlands and Spain. We still hope to hear of favourable replies from Belgium, Italy, Portugal and the Nordic countries. To date no Society has rejected the proposal.

The formation committee is now in the process of organising a signing ceremony, likely to be fairly soon and in Brussels.

Extracts from Letters to the Editor from European Societies

From the **Vinogradov Rheological Society, Russia**, 3rd November, 1995

Dear Sir,

Thank you for your interest in the life of Russian Rheologists. I must inform you that the official title of our Society is the 'Vinogradov Rheological Society' and it tries to unite rheologists, not only from Russia, but from several other countries of the former USSR (Ukraine, Belorussia, Uzbekistan and so on).

The President of the Society is Prof. Dr. Valerii G. Kulichikhin, Institute of Petrochemical Synthesis of the Russian Academy of Sciences, Russia, 117071, Moscow, Leninskii Prospect 29.

I continue to be the Delegate of the Society at all international meetings. My address is: Russia 111024, Moscow, Petrovskii pr. 35, Research Institute for Plastics. Fax: (095) 181 3439 or 5319. email: npast@infrserv.msk.ru.

We are going to organise the next meeting of our Society next year nearby Moscow. Prof. Kulichikhin will send you the detailed information when it has been finalised.

With best regards,
Yours Sincerely
Alex Malkin (Prof. Dr. Sc.)

From the Dutch Society of Rheology, 3rd November, 1995

Dear Dr Barnes,

Referring to your letter dated 26.9.1995, concerning the formation of the European Society of Rheology (ESR), I can confirm that at the recent Annual meeting of the Dutch Society of Rheology (NRV) on 25.10.1995, at Akzo-Nobel in Arnhem, it was unanimously decided that the NRV should become a founding member of the proposed ESR.

It goes without saying that we accept the lead of the BSR in the formation of the ESR. In response to the request for an increase in the exchange of information about the Society's activities, I have enclosed details of the members of the Council of the NRV (see below - Ed.). At the Annual meeting of the NRV in Arnhem, the following papers were presented:

- 'Modelling of Glassy Polymers.' T.A.Tervoort
- 'Berekening van Netwerkparameters' K. te Nijenhuis
- 'Een Model voor de Spanning-rek Kromme van een Polymeervezel.' M.G.Northolt
- 'Molecular Changes of PET Yarns During Stretching, Measured with Rheo-Optical Infrared Spectroscopy and other Techniques.' C.J.M.van den Heuvel
- 'Homogenisatie van het Deformatiegedrag van Materialen met Microschadde.' P.H.J.Vosbeek
- 'Een Constitutie Vergelijking voor het Viscoelastische en Yield Gedrag van een Polymeervezel in de Glastoestand.' J.J.M.Baltussen.

The next meeting of the NRV will be held on April 24th, 1996 at the University of Twente. The topic will be: 'Rheology of Colloidal Solutions.' For your information: Last year we decided to initiate a new award: the Golden Medal of the Dutch Society of Rheology, that will be presented once every five years to a person who had substantial contributions and benefits to the NRV. It is our pleasure to inform you that the first Golden Medal was presented at the Annual Meeting of the NRV at Arnhem to Ir. W.S.Overdiep, who was secretary and treasurer of the NRV during the past 17 years and who has now retired.

I hope to keep you informed about the current situation in the Netherlands and I wish you a lot of success in founding the ESR.

Sincerely,

Prof. Dr. Ir. H.E.H.Meijer (Chairman, NRV)

Technische Universiteit Eindhoven

P.O.Box 513, 5600 MB Eindhoven, The Netherlands

From the **Belgian Society of Rheology**, 6th November, 1995

Dear Mr Anderson,

Thank you for the copy of the most recent Bulletin of the BSR. I will try to keep you updated on the activities of the BGR. We have a Council meeting coming up, amongst other things to plan our future activities.

Yours sincerely,

Jan Vermant.

Secretary of the 'Belgian Group of Rheology'

Katholieke Universiteit Leuven, Dept. Chemische Ingenieurtechnieken,
de Croylaan 46, B-3001 Heverlee (Leuven)

From the **German Society of Rheology**, 10th November, 1995

Dear Mr Anderson,

Thank you for your efforts to foster exchange of information relevant to rheologists throughout Europe. I enclose a short note on an upcoming meeting joint French/ German meeting. I also enclose addresses of Officers of the Swiss and Austrian Rheology Groups (see below).

Yours sincerely,

Manfred Wagner

President, DRG

**Joint Meeting of French and German Rheologists, Metz, October 28 to 30,
1996**

Following the success of the joint French/British meeting in Bordeaux, September 13 - 15, 1995, the French Rheology Group (Groupe Français de Rhéologie, GFR) has decided to invite the German Rheological Society (Deutsche Rheologische Gesellschaft, DRG) for a joint meeting in Metz, October 28 - 30, 1996. The topic of this 31^{ème} Colloque Annuel du GFR, is 'Rheology and Structure'. For information contact: Prof R.Gressely, L.P.L.1., Groupe Physique des Colloïdes, 1bd Arago, F-57078, Metz Cedex 03, France.

or

Dr M.Kröger, Technische Universität Berlin, Institut für Theoretische Physik, Hardenbergstr. 36, Sekr. PN 107, D-10623, Berlin, Germany

From the **Italian Society of Rheology**, 27th November, 1995

Dear Mr Anderson,

I am sorry for the delay in replying to your letter which had to be rerouted from Italy to the University of Delaware. The Italian Society has been legally resurrected by now, but it has still to start any significant activity. In any event, I'll keep you posted of what happens in Italy. I shall be back at my Naples address after the 14th December, 1995.

Best Regards,
Prof. Gianni Astarita

Council Members of Rheology Societies/ Groups in Europe.

Austrian Rheology Group.

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Dr. Ir. T. van Vliet,
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Levensmiddelentechnologie,
Postbus 8129, 6700 EV Wageningen,
Tel: 0317-483223 Fax: 0317-483669

Swiss Rheology Group

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CONFERENCE ANNOUNCEMENT & CALL FOR PAPERS**ANNUAL MEETING OF THE BSR AND AGM****YOUNG RHEOLOGISTS DAY & CONTROLLED STRESS RHEOMETRY****4- 5th September, 1996**

Following the success of the last 'Young Rheologists Day' in September 1994, the British Society of Rheology intends to hold a second meeting devoted to short presentations on all aspects of rheology. Contributions are invited from research students, industrialists and other young rheologists. We anticipate that talks will be given by recipients of travel and study grants and holders of Scott-Blair Fellowships. There will be awards for the best presentations as judged by a panel. The presentations will be followed in the evening of the 4th September by the Society's AGM and a Conference dinner. The following day there will be a one day meeting on 'Controlled Stress Rheometry' with short lectures, demonstrations and exhibitions from a number of key manufacturers. This meeting was arranged following feedback from a number of members who thought that an introduction to this important set of techniques would be invaluable. Details of venue, together with costs and a booking form for this event are enclosed separately.

For those wishing to present a paper at the 'Young Rheologists Day', please contact

Dr Paul Doody,
National Starch & Chemical Ltd,
Galvin Rd., Slough, Berkshire, SL1 4DF
Tel: 01753-533494 Fax: 01753-577704
email: paul.doody@nssgb.co.uk

For those wishing to present a paper at the 'Controlled Stress Rheometry' meeting, please contact

Mrs Carole Moules,
Camtel Sciences,
5 Carrington House,
37 Upper King Street,
Royston,
Herts, SG8 9AZ
Tel: 01763 244280 Fax: 01763 244298

CONFERENCE DIARY

DATE	PLACE	DETAILS
8/1-22/6/96	Cambridge, UK	6 month Workshop on 'Dynamics in Complex Fluids' . For further details, see page 35, Vol. 38, No.1
5-6/3/96	Manchester, UK	'Industrial Water-Soluble Polymers Symposium' British Association for Chemical Specialities, RSC.SCI MacroGroup, UMIST Contact: Dr N.H.P.Smith, Dept of Chemistry, UMIST, PO Box 88, Manchester, M60 1QD, UK Tel: +44 (0) 161 200 4491 Fax: +44 (0) 161 228 1250
20/3/96	London, UK	'Extrusion, Forming & Shaping' Food Engineering Group, Society of Chemical Industry, 14/15 Belgrave Square, London, SW1X 8PS Contact: Mr G.P.Byars. Tel: 01536 722181 Fax: 01536 420343
26-8/3/96	Cambridge, UK	'Colloidal Aspects of Complex Fluids' Colloid & Surface Chem. Group, Society of Chemical Industry, Contact: Dr A.R.Rennie, Univ. of Cambridge, Tel: 01223 337012 Fax: 01223 337000 Email: arr1@phy.cam.ac.uk
25/3 - 4/4/96	Cambridge, UK	'Theoretical Challenges in Complex Fluid Dynamics' NATO Advanced Study Institute. Isaac Newton Institute for Mathematical Sciences. Further information: Michael Sekulla at Newton Institute. email: m.sekulla@newton.cam.ac.uk
24/4/96	St Albans, Herts UK	Full Day 'Seminar for Viscometer Users' Contact: Mark Finch, Rheology UK Ltd., 6 Livingstone Circus, Gillingham, Kent, ME7 4HA Tel: 01634 575488 Fax: 01634 280531
24/4/96	Univ. Twente Enschede The Netherlands	Dutch Society of Rheology (NRV) meeting 'Rheology of Colloidal Solutions'
14 - 15/5/96	Cambridge, UK	'Rheology/Chain Structure Relationships in Polymers' Isaac Newton Institute. DSM Research Symposium Contact: Ms Anne Cartwright Isaac Newton Institute for Mathematical Sciences. 20 Clarkson Rd., Cambridge, CB3 0EH Tel: +44 (0) 1233 335981 Fax: +44 (0) 1233 330508 email: a.cartwright@newton.cam.ac.uk

- 15/5/96 Manchester UK Full Day **'Seminar for Viscometer Users'**
Contact: Mark Finch, Rheology UK Ltd.,
6 Livingstone Circus, Gillingham, Kent, ME7 4HA
Tel: 01634 575488 Fax: 01634 280531
- 27-31/5/96 Sorrento, Italy **The Polymer Processing Society, 12th Annual Meeting**
Contact: Prof. José M. Kenny,
Dept of Materials & Production Chemistry,
University of Naples - P. Tecchio,
80125 Naples, Italy
Tax: +39-81-768 2404 E-Mail: kenny@unipg.it
- 3-5/6/96 Glasgow, Scotland **'Production Methods and Workability of Concrete & 4th Concrete - Scotland Exhibition'**
Contact: Carol MacDonald, Technology & Business Centre,
University of Paisley, Paisley, PA1 2BE, Scotland
Tel: 0141 848 3734 Fax: 0141 848 3739
- 24-28/6/96 Cambridge, UK The Royal Society - Unilever Indo-UK Forum on
'The Dynamics of Complex Fluids'
Contact: Mrs M.E.Staff, Polymer & Colloids Group,
Cavendish Laboratory, Madingley Laboratory,
Cambridge, CB3 0HE, England.
Tel: 01223 337007 Fax: 01223 337000
- 18-23/8/96 Quebec City, Canada **'XIIth International Congress on Rheology'**,
Canadian Rheology Group / Groupe Canadien de Rhéologie,
Chairman: Prof. D.DeKee, Dept of Chemical Engineering,
University of Sherbrooke, Sherbrooke,
Québec, J1K 2R1. Canada
Congress Secretary: Dr M. Dumoulin,
National Research Council - Canada
Industrial Materials Institute, 75, de Mortagne,
Boucherville (Québec), Canada, J4B 6Y4
Fax: 1-514-641-5103
- 4-5/9/96 To be announced UK Annual BSR Meeting and AGM
'Young Rheologists Day' & 'Controlled Stress Rheometry'
Contact: Dr Paul Doody, National Starch & Chemical Ltd,
Galvin Rd., Slough, Berkshire, SL1 4DF
Tel: 01753-533494 Fax: 01753-577704
email: paul.doody@nssgb.co.uk

Travel grants are available to help students attend any of these meetings.
Applications to the BSR Secretary supported by a letter from supervisor.

- 9-11/9/96
Aberystwyth, Wales
'4th International Conference on Flow Processes in Composite Materials (FPCM '96)'
Contact: Dr R.S.Jones, Dept of Mathematics,
University of Wales, Penglais, Aberystwyth, Dyfed,
SY23 3BZ, UK Tel: +44(0)1970-622762 Fax: +44(0)1970-622777
- 17-18/9/96 Cirencester,
UK
BOHLIN Instruments Limited
'Rheology User Group Meeting, 1996'
Contact: Trevor Gregory, Bohlin Instruments Ltd.,
Unit 6, Corinium Centre, Cirencester, Glou., GL7 1YJ, UK
Tel: +44 (0) 1285 644407 Fax: +44 (0) 1285 644314
- 28-30/10/96 Metz, France
Joint Meeting of French and German Rheologists
31ème Colloque Annuel du GFR, **'Rheology and Structure'**
Contact: Prof R.Gressely, L.P.L.1., Groupe Physique des
Colloides, 1bd Arago, F-57078, Metz Cedex 03, France
or Dr M.Kröger, Technische Universität Berlin,
Institut für Theoretische Physik, Hardenbergstr. 36,
Sekt. PN 107, D-10623, Berlin, Germany
- 3-6/11/96
Chicago, USA
'American Institute of Chemical Engineers Annual Meeting
and Polymer Processing Society Meeting for the Americas
First Joint Topical Conference on **'Processing, Structure
and Properties of Polymeric Materials'**
Contact: Prof. I. Manas-Zloczower, Case Western Reserve
University, Dept of Macromolecular Science,
Kent Hale Smith Building, Cleveland, OH 44106. USA.
Tel: (216) 368-3596 Fax: (216) 368-4202
E-Mail: ixm@po.cwru.edu
- 16-20/2/1997
Galveston, TX, USA
'68th Annual Meeting of the Society of Rheology.'

Travel grants are available to help students attend any of these meetings.
Applications to the BSR Secretary supported by a letter from supervisor.

COURSE DIARY

DATE	PLACE	DETAILS
15/2/96	AEA, Harwell, Oxfordshire	'On-line Slurry Instrumentation Seminar' Contact: Mrs Margaret McCulloch, AEA Technology, 404 Harwell, Didcot, Oxfordshire, OX11 0RA, UK Tel: 01235 434626 Fax: 01235 432313

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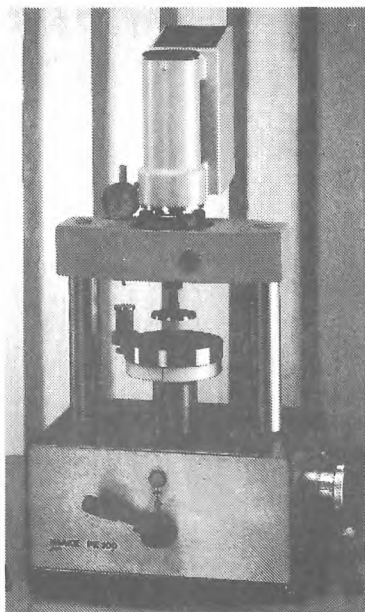
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AEA, Harwell,
Oxfordshire**'Slurry Handling Course'**Contact: Mrs Margaret McCulloch,
AEA Technology, 404 Harwell, Didcot,
Oxfordshire, OX11 0RA, UK
Tel: 01235 434626 Fax: 01235 432313

19-22/3/96

AEA, Harwell,
Oxfordshire**'Applied Rheology Course'**Contact: Mrs Margaret McCulloch,
AEA Technology, 404 Harwell, Didcot,
Oxfordshire, OX11 0RA, UK
Tel: 01235 434626 Fax: 01235 432313

29/2/96

Cirencester,
UK

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25/4/96

30/5/96

27/6/96

26/9/96

24/10/96

28/11/96

One Day Rheology Workshops
at BOHLIN INSTRUMENTS LIMITED**'Coatings Rheology'****'Bitumen Rheology'****'Dispersion Rheology'****'Cosmetics & Toiletries Rheology'****'Food Rheology'****'Paint Rheology'****'Pharmaceuticals Rheology'****'Polymer Rheology'**Contact: Trevor Gregory, Bohlin Instruments Ltd.,
Unit 6, Corinium Centre, Cirencester, Glou., GL7 1YJ, UK
Tel: +44 (0) 1285 644407 Fax: +44 (0) 1285 644314

15-19/4/96

Bristol, UK

'Spring School in Surface Chemistry & Colloids'Contact: Dr Susan Pringle,
Dept for Continuing Education,
University of Bristol, 8/10 Berkeley Square, Clifton,
Bristol, BS8 1HR, UK
Tel: 0117 928 7122 Fax: 0117 925 4975

28-31/5/96

Univ of Strathclyde,
Scotland**One Week Course: 'Theoretical, Experimental and Industrial Aspects of Rheology.'**Contact: Dr N.E. Hudson,
Dept of Pure & Applied Chemistry, University of Strathclyde,
295 Cathedral St., Glasgow, G1 1XL.
Tel: +44 (0) 141 552 4400 X 2162 Fax: +44 (0) 141 552 5664
Email: n.e.hudson@strath.ac.uk

4-8/11/96

Univ of Strathclyde,
Scotland**One Week Course: 'Process Rheology.'**Contact: Prof J. Ferguson,
Dept of Pure & Applied Chemistry,
University of Strathclyde,
295 Cathedral St., Glasgow, G1 1XL.
Tel: +44 (0) 141 552 4400 X 2161 Fax: +44 (0) 141 552 5664

MEMBERSHIP NEWS

The following applications for membership were approved at the Council meeting on December 12th, 1995

Mr K.Barber,
Haake UK,
Sussex Manor Park,
Gatwick Road, Crawley,
Sussex, RH10 2QQ
(fea ABCDEFGHIJKLMNOP)

Mr J.H.Christensen,
Dept of Plastics Technology,
Technical University of Denmark,
2800 Lyngby,
Denmark
(fetsa BD)

Mr D.J.Cliff,
Redland Technologies Ltd.,
Sussex Manor Business Park,
Gatwick Road, Crawley,
West Sussex, RH10 2HG
(petsa GHO)

Mr D.DiCorpo,
Brookfield Eng. Laboratories Inc.,
240 Cushing St, Stoughton,
Massachusetts 02072
USA
(feta DFGIJKLM)

Mr R.de Roeck,
Dept of Chem Engineering,
University of Cambridge,
Pembroke Street,
Cambridge, CB2 3RA
(feta D)

Dr H.Fay,
Loctite (Ireland) Ltd.,
Tallaght Business Park,
Dublin 24,
Republic of Ireland
(feta CDFG)

Mr J.Forsyth,
University of Strathclyde,
295 Cathedral Street,
Glasgow, G1 1XL,

(fetsa CO)

Dr P.Gaskell,
Croxtan & Garry Technical Centre,
PO Box 1,
Melton,
North Humberside, HU14 3HW
(pea BCDGHKO)

Mr C.D.Hudson,
Vinamul Ltd.,
Mill Lane,
Carshalton,
Surrey, SM5 2JU
(fea FGO)

Mr J.P.Hughes,
School of Mathematics & Statistics
University of Plymouth,
Drake Circus, Plymouth,
Devon, PL4 8AA
(ftsas DGN)

Mr D.C.Kothari,
Particle Technology Group,
Dept of Chemical Engineering,
Imperial College of Science,
London, SW7 2BY
(fetsa ACLNO)

Dr E-M.Kutschmann,
HAAKE Germany,
Dieselstrasse 4,
D-76227 Karlsruhe
Germany
(fetsa DFGKL)

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Miss R.K.Matharu,
Scotia Pharmaceuticals Ltd,
Kingstown Broadway,
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(petsa FGHJ)

Miss M.Ranganathan,
Dept of Chem Engineering,
University of Cambridge,
Pembroke Street,
Cambridge, CB2 3RA
(feta D)

Dr S.Sharma,
Kelco International Ltd.,
Waterfield,
Tadworth,
Surrey, KT20 5HQ
(feta DEGLN)

Dr V.Stratford,
Vinamul Ltd.,
Mill Lane,
Carshalton,
Surrey, SM5 2JU
(fea DG)

Mr D.Thomson,
Motorola Ltd.,
Colvilles Road,
Kelvin Estate,
East Kilbride, G75 0TG
(pea D)

Mr M.J.Thompson,
Coates Lorilleux Inks,
Cray Ave., St Mary Cray,
Orpington,
Kent, BR5 3PP
(fea DFG)

Dr A.R.Wheatley,
SEAT, University of Sunderland,
Edinburgh Building, Chester Rd.,
Sunderland, SR1 3SD
(fetsa BDG)

The following resignations have been received:

Mr M.Appello, Mr P.D.Browning, Dr S.A.Bullivant, Prof J.Dolz,
Dr S.Michiels.

The following cease to be members under rule 4(d):

Mrs U.Elie, Dr A.Garcia-Rejon, Dr T.Geehan, Dr J.Jaworski, Ms R.Kelly,
Dr G.Manfre, Dr Y.Michopoulos, Mr A.L.Milton, Mr F.Presti,
Prof D.Quemeda, Dr L.R.Rudzinski, Mr S.Smith, Mr D.M.Stocks,
Miss K-M.To, Dr P.Zoon.

Theoretical, Experimental and Industrial Aspects of Rheology
28th to 31st May 1996

This Rheology Course, sponsored by TA Instruments Ltd., of Leatherhead, Surrey, will take place at the University of Strathclyde's Educational and Recreational Centre, Ross Priory, on Loch Lomond, Scotland. The course, which is residential, is intended to cover the basics of rheology, modern experimental techniques (including constant stress rheometry, rheogoniometry, elongational flow and industrial aspects of rheology) and lead to state-of-the-art concepts in flow, data acquisition and interpretation. The lectures will be given by well known rheologists, including: Professor H.A.Barnes, Unilever plc; Professor J.Ferguson, University of Strathclyde; Professor T.E.R Jones, University of Plymouth; Professor K.Walters, U.C.W., Aberystwyth; and others.

The cost of the course is £750.00. This includes the course fee, lecture notes, textbook, accommodation (full board) and transport to and from the centre of Glasgow. Accommodation at the Priory is limited and the overflow will be accommodated in a local hotel. All rooms have full facilities. If you wish more information, please contact the organiser at the address given below. It should be emphasised that the numbers on the course will be limited, so please book as soon as possible to avoid disappointment.

Contact: Contact: Dr N.E.Hudson, Dept of Pure & Applied Chemistry,
University of Strathclyde, 295 Cathedral St., Glasgow, G1 1XL. Scotland
Tel: +44 (0) 141 552 4400 X 2162 Fax: +44 (0) 141 552 5664
Email: n.e.hudson@strath.ac.uk

Notification of a Member's Movements

Our Treasurer until September's AGM, Roy Carter, who had to resign the post due to pressure of work, has subsequently resigned from Rheometric Scientific and from the 2nd January will be working for Schenk Limited at Lombard Way, Banbury, OX16 8TX. Tel: 01295 251122, Fax: 01295 252111, where he will be the Business Manager for Vibration Technology.

Roy apologises to BSR members, that due to the hiatus arising out of the above change and due to a bout of food poisoning following a visit to Venezuela, there has been a delay in preparing the Annual Accounts and submitting them to our Auditors. They are now with the Auditors and it is hoped that they will be available for publication in our next issue of the Bulletin.

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