

NOT TO BE REMOVED
FROM
FILE.

THE
BRITISH SOCIETY
OF RHEOLOGY

BULLETIN — No. 1, 1960

Hon. Secretary :

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THE BRITISH SOCIETY OF RHEOLOGY

New Members Approved 14th January, 1960.

NAME AND ADDRESS.	INTERESTS.
K. M. Beazley, "Polwithen," Boscoppa, St. Austell, Cornwall.	General rheological problems associated with the clay-water system.
Prof. R. C. L. Bosworth, School of Chemistry, University of New South Wales, P.O. Box No. 1, Kensington, N.S.W., Australia.	Surface and Colloid Chemistry. Basic Rheological Theory.
Dr. R. R. Myers, Dept. of Chemistry, Lehigh University, Bethlehem, Pa, U.S.A.	Dispersions; starch; films; adhesives. Rotational Viscometry, dynamic methods including ultrasonics.
Dr. N. W. Tschoegl, c/o Bread Research Institute of Australia, Private Bag, Post Office, North Ryde, N.S.W., Australia.	Dough Rheology, Linear viscoelastic theory Surface Rheology.
J. E. Adamson, 15 Chatsworth Avenue, Hendon, London, N.W. 4.	Dispersions and solutions of celluloses and proteins. Estimation of "body" and similar subjective concepts.
J. R. O'Neill, John R. O'Neill and Assoc., 690 Warringah Road, Forestville, New South Wales, Australia.	Printing ink. Paper, etc.

News of Members.

Dr. P. Feltham, Honorary Secretary of the Society from 1951 to 1955, has been awarded the D.Sc. degree of the University of Leeds. Although Dr. Feltham has retired from the Committee he still assists the Society as an abstractor for *Rheology Abstracts*.

The new List of Members was circulated with the last Bulletin. Unfortunately it contains some errors for which we offer our apologies to the Members concerned. The following two entries were omitted:

JOINED.	NAME AND ADDRESS.	INTERESTS.
10/57	CONNOR, P., MR. - "The Grange," Drayton, Berks.	Suspensions
2/57	KINSMAN, R. G., MR. - B. Winstone & Sons Ltd., Hare- field, Middlesex.	Printing inks. Suspensions.

The addresses of the following members should now read :

COPLEY, A. L., Prof.

Dept. Physiology and Pharmacology, New York Medical College,
Fifth Avenue at 106th Street, New York 29, N.Y., U.S.A.

IVANOVSKY, L., DR.

Vienna, Postamt 66, Postfach 162, Austria.

MORTON, D. H., MR.

19A Berrow Road, Burnham-on-Sea, Somerset.

RAWLINS, F. I. G., MR.

10 Parliament Court, Parliament Hill, London N.W.3.

WARD, H. J., MR.

c/o Wrightcel Pty. Ltd., P.O. Box 122, Camberwell, Victoria,
Australia.

Mr. N. Wookey, our past Honorary Secretary, has analysed the List of Members and obtained the following results. The total membership of 269 is divided into 232 members in the United Kingdom and 37 overseas members distributed among 15 countries. The major interests of members may be roughly classified as follows :

Polymers	-	17%	Plastics	-	-	6%
Food	-	9%	Fibres	-	-	6%
Inorganic Mat.	-	7%	Rubber	-	-	5%
Pet. and Lub.	-	7%	Paint	-	-	4%
Theory	-	6%	Instruments	-	-	4%
Metals	-	6%	Medical and Biological	-	-	3%

Members of a statistical turn of mind may care to note that 45% of the Society have Ph.D. or higher degrees, that there are 19 professors, 4 ladies, 2 knights and 1 earl. Scotland has nine members and so has Wales and Monmouthshire combined. We have five members named Jones and four named Ward, but apparently no British rheologist is named Smith. There seems no doubt that rheologists are a very mixed bag.

Recent Meetings.

Two meetings have been held by the Indian Society of Theoretical and Applied Mechanics at the University of Roorkee, India. The first, sponsored jointly with U.N.E.S.C.O., was a symposium on "Non-linear Physical Problems" and took place on 21-22 December, 1959. The second was the "Fifth Congress on Theoretical and Applied Mechanics" which immediately followed the symposium on 23-26 December, 1959.

Following a survey of the field of non-linear physical problems by Dr. B. R. Seth (Kharagpur), twenty-nine papers were read at the symposium. The congress was divided into five sections: I Elasticity, plasticity, rheology (26 papers); II Fluid Mechanics, aerodynamics, hydrodynamics (15 papers); III Mechanics of solids, ballistics, vibrations, friction and lubrication (8 papers); IV Statistical mechanics,

thermodynamics, heat transfer (4 papers); V Mathematics of physics, statistics and computation (5 papers). Abstracts of all the papers have been received by the British Society of Rheology and may be borrowed by Members on application to the Editor of *Rheology Abstracts*, Dr. J. C. Vernon.

Future Meetings.

For readers who have not received a copy of the programme of the Spring Meeting at Manchester, the list of papers is as follows:

7th April in Reynolds Hall.

- "Slip corrections to flow curves of greases determined in the plunger viscometer," A. D. Bramhall and J. F. Hutton.
- "Hydrodynamic lubrication in wire drawing," G. H. Tattershall.
- "Lubricated sliding on visco-elastic solids: the importance of hysteresis," H. Minshall.
- "Rheology of suspensions," F. Schultz-Grunow.
- "Displacement of thixotropic gels from the pores of permeable bodies," G. K. Jones.
- "Micro-rheology of pigment by ball-milling in non-aqueous media," L. Dintenfass (read by A Jobling).

8th April in Ashburne Hall.

- "Some outdated presuppositions as a hindrance to a young science," G. W. Scott Blair.
- "General scientific method and the role of models in science," R. F. J. Withers.
- "Experimental evidence on the rheology of complex alloys and its philosophical implications," A. Graham.

By the time this bulletin is published it may be too late for Members to register for the Annual Conference of the Stress Analysis Group of the Institute of Physics. The conference is to be held at the University College of North Staffordshire, Keele, from 11th to 13th April, 1960, and 25th March is the last day for registration. However, as a matter of general interest Members may wish to know the programme.

- "Optical properties of strained amorphous polymers," D. W. Saunders (British Rayon Research Association).
- "Stresses at a crack in a highly elastic material," E. H. Andrews (British Rubber Producers' Research Assoc.)
- "Youngs modulus of a cross-linked anisotropic polymer-modified wool keratin," P. T. Speakman (Dept. of Textile Industries, Leeds University).

- "The influence of molecular weight on the mechanical properties of filaments: (i) experimental; (ii) theoretical," R. J. E. Cumberbirch (British Cotton Industry Research Assoc.)
- "Stress-strain behaviour of textile fibres at very high rates of extension," I. H. Hall (British Rayon Research Assoc.)
- "The breakage of twisted yarns," J. W. S. Hearle (Manchester College of Science and Technology).
- "The structure and mechanical properties of paper," D. H. Page and P. A. Tydeman (British Paper and Board Industry Research Association).
- "Experiments on the life of nylon fibres under load," F. L. Warburton (Wool Industries Research Association).
- "Hot stretching nylon cord," J. O'N. Fisher (British Nylon Spinners Limited).
- "A sensitive instrument for dynamic tension measurements." J. O'N. Fisher.
- "Stress measuring techniques used at the Research Association of British Rubber Manufacturers," A. R. Payne (R.A.B.R.M.)
- "The study by interferometry of the flexure of multiply connected plates," J. P. Duncan (Dept. of Mechanical Engineering, Sheffield University).
- "The determination of slope contours in plates in flexure by the Salet-Imeda technique," C. J. E. Brown (Dept. of Mechanical Engineering, Sheffield University).
- "Photoelastic coatings on granular materials," C. L. Emery (Queen's University. Ontario and Mining Dept., Sheffield University).
- "The impact strength of ceramic materials," A. Dinsdale (British Ceramic Research Association).

There will also be papers by W. F. Thomas, D. G. Holloway and P. E. Jellyman. The Honorary Secretary of the Stress Analysis Group is Mr. C. D. Pomeroy, Mining Research Establishment, Worton Hall, Isleworth, Middlesex.

In the second fortnight of June, 1960, the French Rheology Group under the aegis of the Centre National de la Recherche Scientifique will hold an international colloquium on "Phenomena of relaxation and flow under static and quasi-static influences." The emphasis will be on non-linear phenomena. Preference has been given to contributions of a general or theoretical nature in order to provoke discussion. All enquiries concerning the colloquium should be addressed to Prof. H. Weiss, Office National des Universités et Ecoles Françaises, 96 Boulevard Raspail-Paris (6^{ème}).

On the 29th and 30th September, 1960, the Surface Activity Group of the Society of Chemical Industry will hold a symposium at the Royal Institution, 21 Albermarle Street, London, on "Powders in Industry: Properties and Principals of Application." The symposium is divided into four sections: (A) "Principles of production," (3 papers); (B) "Properties of powders" (6 papers); (C) "Properties of powders utilized in industrial fields" (20 papers); (D) "Principles of application and problems for the future" (3 papers). For further information Members should write to the Honorary Secretary of the Surface Activity Group, The Society of Chemical Industry, 14 Belgrave Square, London S.W.1.