

THE BRITISH SOCIETY OF RHEOLOGY

HISTORY
NOT TO BE REMOVED
FROM
FILE.

BULLETIN

No. 56

New Members, accepted at Committee 23rd October, 1958.

NAME AND ADDRESS	INTERESTS
Dr. Nino Grandis, c/o S.p.A. Mazzucchelli Celluloide, Castiglione Olona (Italy).	Polymers solutions; Polymer slurries; Melt polymers.
Mr. D. R. Reid, 18 Wellesley Road, Colchester, Essex.	High polymers; Creep; Viscoelasticity
Mr. J. S. Steggles, 47 Woodland Way, Theydon Bois, Epping, Essex.	Suspensions of powders in liquids, rotational viscometry.
Mr. E. H. Andrews, "Guessens", Welwyn, Herts.	Rubber and other high polymers. The failure, rupture, fracture, etc., of solids.
Dr. T. L. Richards, 45 Maxstoke Road, Sutton Coldfield, Warwicks.	Deformation of metals (or any solid materials, e.g. rocks).
Mr. D. H. Morton, Courtaulds Ltd. Research Lab., Campbell Steet Droylsden, Lancs.	Mechanical properties of textile fibres under various environmental conditions.
Dr. T. Salomon, Institut Français du Pétrole, Centre de Documentation (à l'attention de M. Salomon), 4 place Bir-Hacheim, Rueil-Malmaison (S.O.), France.	Emulsions. Non-Newtonian liquids.
Mr. R. G. Martin, 89 Croft Avenue, Bromborough, Cheshire.	Petroleum residual oils and bitumen.
Mr. D. Price, c/o Dewey and Almy Ltd., Elveden Road, Park Royal, N.W.10.	Suspensions; Viscometry with special reference to Rotational Viscometry; Non-Newtonian systems.

Annual General Meeting of the Society.

The A.G.M. was held on Friday, 24th October, at the Science Museum Theatre. The officers of the Society reported on the activities during the past year which had included the issue of the new Society journal—*Rheology Abstracts*. The Editor thanked the various members of the Society for their ready co-operation in preparing abstracts for the new publication. The accounts presented by the Hon. Treasurer, and shown in detail in this Bulletin, showed that the financial position of the Society was quite satisfactory.

The following officers were elected for 1958–59:

Hon. Secretary: Mr. N. Wookey
Hon. Treasurer: Mr. D. W. Jopling
Hon. Editor (Abstracts): Dr. J. H. C. Vernon
Hon. Editor (Bulletin): Mr. J. F. Hutton

The President, Professor Richardson, thanked Dr. Mardles for his many years service to the Society. The Committee were given power to co-opt another member to the committee to fill the vacancy caused by Dr. Mardle's resignation.



Accounts for Year Ending 30th June, 1958

1956-7	INCOME	£	s.	d.
558	Balance on 1st July	547	16	4
287	Subscriptions: Members	242	6	1
	Subscribers	29	4	0
2	Casual sales of <i>Bulletins</i>	16	19	0
9	Interest on P.O.S.B.	11	9	6
—	From Internat. Cong. Trust Fund (part payment of postage)	3	8	11
—	From advertising appointments vacant	8	8	0
—	Excess Income from Meetings	1	2	9
<u>£856</u>		<u>£860</u>	<u>14</u>	<u>7</u>

1956-7	EXPENDITURE	£	s.	d.
209	Printing and distributing <i>Bulletin</i> and <i>Nature</i> reprints	165	3	2
16	Publicity	—	—	—
41	Committee and Administrative expenses	47	16	11
26	Typewriter	—	—	—
16	Subsidy of Meetings	—	—	—
548	Balance on 30th June	647	14	6
<u>856</u>		<u>£860</u>	<u>14</u>	<u>7</u>

Signed: DOUGLAS W. JOPLING, *Hon. Treasurer.*
 ALAN G. WARD, *Hon. Auditor.*

Third International Congress on Rheology

This congress was held in Bad Oeynhausen, Germany, from 23rd to 30th September, 1958, at the invitation of the amalgamated societies of German rheologists. There were about 200 participants and some seventy-five technical papers presented in English, French, German or Russian. In addition, about half-a-dozen general lectures were given. All these will be printed in "Rheologica Acta," a new venture of the publishing firm of Steinkopff (Darmstadt), in fact an issue containing about half the papers has already appeared. The subjects ranged over most aspects of pure and applied rheology and the papers were presented in a number of sections, two of which were in session for the whole of the six days that were devoted to scientific meetings.

It will be apparent that the congressists were kept hard at work during the day, but the organizing committee arranged some good entertainments in the evening—concerts and dances, and an excursion on the Sunday. The ladies, perhaps more fortunate, had excursions or visits every day.

The International Committee met during the congress and appointed as its President, Professor F. H. Mueller, who will act at the next congress in 1963. Invitations had been received from U.S.A., Japan and France. The actual venue will be decided on by 1961.

Papers received for a conference on "Flow, fatigue, and failure"
to be held at the University of Leeds on 8th and 9th January, 1959:

- "Kinematic features of the brittle fracture phenomenon."
J. Leeuwerik (T.N.O. Delft).
- "Fatigue surface patterns on isotropic substances."
P. U. A. Grossman (Cambridge University).
- "Fatigue of bituminous road mixes."
R. N. J. Saal (Amsterdam) and P. S. Pell (Nottingham University).
- "The development of micro-cracks in concrete."
R. Jones (Road Research Laboratory, D.S.I.R.).
- "Rupture of rubber."
A. G. Thomas (British Rubber Producers' Research Association).
- "Torsional fatigue of fibres."
A. K. van der Vegt (T.N.O. Delft).
- "Skeleton strength and critical porosity of set sulphate plasters."
K. Schiller (British Plaster Board (Holdings) Ltd.).
- "High temperature creep fracture in metals."
P. Feltham and J. D. Meakin (Leeds University).
- "The sensitivity of micro-creep to fatigue damage in metals."
A. J. Kennedy (College of Aeronautics, Cranfield).
- "The geometry of the plastic deformation of polycrystalline aggregates."
T. Ll. Richards (I.C.I. (Metals) Ltd.).
- "Fracture as the limit of flow."
A. Graham (National Gas Turbine Establishment, M.O.S.).

Rheology in Rural Sussex.

A member has drawn our attention to the rheological terms mentioned in a recent publication* on the Sussex dialect. Most of these are concerned with fine differences in the properties of Sussex mud. For example, while all muds are "stuggy" a mud becomes "cledgy" when it begins to stick to the spade when digging. When, however, the viscosity decreases somewhat and it is difficult to extricate a foot at each step it becomes "slobby." If it is also tenacious it is "slubby," while a certain greasiness or lubricating action makes it "slabby". Most wet and sticky muds are "smeery" but if the consistency has been obtained by a trampling process it is "stoachy" while the peculiar muddiness of a path after heavy rain is described as "clodgy."

The above is certainly a challenge to our theoretical members who should be able to ascribe all these differences to a change in the spectra of relaxation times, or should at least be able to construct a spring and dashpot model to describe the properties of this versatile material.

* "A Dictionary of the Sussex Dialect," by Miss Helena Hall.

Nomenclature

The term "Calibration Standard" has been adopted by the National Bureau of Standards of the U.S.A. to designate materials whose properties are adopted as references to which the properties of other materials can be compared. A Calibration Standard is a material used for calibration of devices which can be reproduced by any standardizing laboratory and for which an accepted value for its pertinent property has been established to a degree of precision commensurate with the best measuring techniques in the field.