

THE BRITISH SOCIETY OF RHEOLOGY

BULLETIN — No. 1, 1961

HISTORY
NOT TO BE REMOVED
FROM
FILE.

Hon. Secretary :

DR M. F. CULPIN,
8 The Broadway,
Pontypool,
Monmouthshire.

Hon. Editor (Bulletin) :

MR. J. F. HUTTON,
"Shell" Research Ltd.,
P.O. Box No. 1,
Chester.

THE BRITISH SOCIETY OF RHEOLOGY



New Members

Elected December, 1960.

NAME AND ADDRESS

INTERESTS

R. P. David,
2005 15th Street,
Troy, New York,
U.S.A.

Hydrocarbon liquid-solid suspensions.
Non-Newtonian fluids in general.

J. M. Smith,
3 Heatherslade Road,
Southgate,
Nr. Swansea,
Glam.

Engineering problems in the flow of
pseudo-plastic and visco-elastic liquids
using physical and optical methods to
study behaviour.

C. Lee,
Revertex Limited,
Temple Fields,
Harlow, Essex.

Emulsions. Pressure sensitive adhesives.

I. N. Chicurel,
Johnson & Johnson Research Center,
U.S. Route 1,
New Brunswick, N.J., U.S.A.

Flow and deformation of elastomers,
plastics, etc.

F. M. Leslie,
Dept. of Mathematics,
The University,
Manchester 13.

Theoretical rheology; non-Newtonian
fluids.

J. R. Brayford,
45 Coniston Road,
Harrogate,
Yorks.

Polymer melts, extrusion, viscometry,
melt spinning.

Dr. W. J. McTegart,
Dept. of Metallurgy,
University of Sheffield,
St. Georges Square,
Sheffield 1.

Plastic deformation of metals and alloys
at high temperatures.

R. G. Walters,
41 Brookside,
Belper, Derbys.
W. J. Thompson,
Engineering Laboratory,
Trumpington Street,
Cambridge.

Lubricants, suspensions of powders in
liquids, rotational viscometry, sliding
plate and extrusion viscometry.
Determination of the rheological be-
haviour of saturated, remoulded clay
soils.

Victoria (Australia) Branch

NAME AND ADDRESS

INTERESTS

L. D. Armstrong,
139 Estelle Street,
Doncaster,
Melbourne, Australia.

Rheology of wood.

E. R. Ballantyne,
23 Hartlands Road,
East Ivanhoe, N.21,
Victoria, Australia.

Sealants, mastics and other building pastes. Bitumens and bituminous materials. Glass, Coaxial and parallel plate (shear) methods.

Dr. H. A. J. Battaerd,
c/o ICIANZ Ltd.,
Central Research Labs.
Newson Street,
Ascot Vale, Victoria,
Australia.

Rheological behaviour of polymers.

N. G. Brown,
c/o C.S.I.R.O.,
Division of Building Research,
Graham Road,
Highett, S.21,
Victoria, Australia.

Rheological properties of thick pastes.

B. D. Craven,
Australian Paper Manufacturers Ltd.,
Research Division,
626 Heidelberg Road,
Alphington, Victoria,
Australia.

Rheology of Paper.

Prof. H. H. Dunkin,
Mining Department,
University of Melbourne,
Parkville, N.2,
Victoria, Australia.

Mining and mineral dressing, rock fracture, flow and stability under barodynamic and applied stress. Suspensions of powders in liquids. Processing of clay and other minerals.

Dr. R. C. Gifkins,
302 Springfield Road,
Nunawarding,
Victoria, Australia.

Plastic flow of metals, especially creep.

Miss V. Goldsmith,
c/o Division of Forest Products,
C.S.I.R.O.,
P.O. Box 310,
South Melbourne, SC.5,
Victoria, Australia.

Wood and paper.

K. R. Hall,
c/o C.S.I.R.O.,
Chemical Research Labs.,
Box 4331, G.P.O.,
Melbourne,
Victoria, Australia.

Rotational viscometry (Haake). Mixing of non-Newtonians.

NAME AND ADDRESS	INTERESTS
R. Hughan, Chemical Research Labs., C.S.I.R.O., Box 4331, G.P.O., Melbourne, Victoria, Australia.	Ceramic raw materials, suspensions and pastes.
O. G. Ingles, C.S.I.R.O., Soil Mechanics Section, Coleman Parade, Syndal, Victoria, Australia.	Clay-water systems; soils.
R. S. T. Kingston, Division of Forest Products, C.S.I.R.O., P.O. Box 310, South Melbourne, SC.5, Victoria, Australia.	Wood and Cellulosic materials.
K. G. Martin, Division of Building Research, C.S.I.R.O., Graham Road, Highett, Victoria, Australia.	Bitumens and viscoelastic fluids. Rotational and parallel plate viscometry.
J. W. Spencer, c/o C.S.I.R.O., Division of Building Research, Graham Road, Highett, S.21, Victoria, Australia.	Rheological properties of thick pastes.
P. Terry, Central Research Labs., ICIANZ, Newson Street, Ascot Vale, Victoria, Australia.	Polymers and fabrication of polymers.
Prof. R. D. Wright, c/o Physiology Department, University of Melbourne, Parkville, N.2, Victoria, Australia.	

Changes of Address.

The following include corrections to previously published addresses.

BROMLEY, R. H., MR.

92 Clovelly Road, Glenfield, Leicester.

COPLEY, A. L., PROF.

Haemorheology Laboratory, Dept. of Physiology and Pharmacology, New York Medical College, Fifth Avenue at 105th Street, New York 29, N.Y., U.S.A.

IVANOVSKY, L., DR.

Graf Starhemberggasse 38/12, Vienna IV, Austria.

KOLSKY, H., DR.

Division of Applied Mathematics, Brown University, Providence,
R.I., U.S.A.

LODGE, A. S., DR.

College of Science and Technology, Manchester.

REINER, M., PROF.

c/o Technion, Haifa, Israel.

SACK, R. A., DR.

Department of Mathematics, Royal Technical College, Salford 5,
Lancs.

SCOTT, J. R., DR.

Rubber and Plastics Research Association, Shawbury, Shrewsbury,
Shropshire.

Recent Meetings.

The Swedish Society held a conference on 6th December, 1960, in Gothenburg at the Svenska Institutet för Konserveringsforskning. Papers were read on;

“Rheological elements and principles of measurement,” by B. Drake (Institutet för Konserveringsforskning).

“Friction mechanisms in textile fabrics,” by B. Behre (Textilforskningsinstitutet, Göteborg).

“A report on a two-month visit to the U.S.A. concerning flow in wet preparation processes,” by B. Olofsson (Textilforskningsinstitutet).

Future Meetings.

Arrangements are well advanced for the Autumn Meeting on “*Rheological Techniques*” at Llundudno. At present nine contributions have been promised. There will be room for two or three more papers so intending speakers who have not already done so should write to the Honorary Secretary as soon as possible. The proceedings of the meeting will be published in a special issue of “Laboratory Practice.”

The two German societies, Deutsche Rheologen-Vereinigung e.V. and the Deutsche Rheologische Gesellschaft e.V., will in future co-operate in the organisation of a Spring Meeting to be held in alternate years in Bad Oeynhausen and West Berlin. This year the meeting will be in April in Bad Oeynhausen. Normally the meeting will occupy two

days, the first being devoted primarily to discussions of general themes and the second to particular questions of theoretical rheology and techniques of measurement.

The Annual Conference of the Oil and Colour Chemists' Association will be held at Torquay from 30th May to 3rd June, 1961. The theme is "*Physics in Surface Coatings*" and the following papers will be read:

- "The physical behaviour of paint films," by G. Phillips,
- "The coating and the substrate," by T. R. Bullett and A. T. S. Rudram,
- "The behaviour of printing ink on rollers," by C. C. Mill,
- "The physics of brush marks," by N. D. P. Smith, S. E. Orchard and A. J. Rhind-Tutt,
- "The wetting, adhesion and penetration of surface coatings on wood," by V. R. Gray,
- "Painting porous building materials," by G. W. Mack,
- "Some aspects of the physical assessment of emulsion polymer films," by H. Williams,
- "Solar reflectivity of paints," by R. N. C. Strain,
- "The correlation of service behaviour with observed physical characteristics of air-drying paints for structures," by D. P. Earp and F. G. Dunkley.

Enquiries should be addressed to the Secretary of the Association at Wax Chandlers' Hall, Gresham Street, London, E.C.2.

Meetings of the Faraday Society include a "*Colloid Centenary Symposium*" to be held at the Royal College of Science and Technology, Glasgow, C.1, on Tuesday, 27th June, 1961. The main speakers will include Sir Eric Rideal, F.R.S. (Imperial College), Prof. J. A. V. Butler, F.R.S. (Chester Beatty Research Institute), Dr. A. S. C. Lawrence (Sheffield University) and Dr. A. P. Prosser (Liverpool University). Further information may be obtained from Dr. A. J. Hyde, Chemistry Department, at the Royal College. On 5th to 7th September the Faraday Society will hold a general discussion on "*Structure and properties of ionic melts*" at Liverpool University. Those interested in contributing papers should in the first instance submit summaries of not more than 500 words, as soon as possible, to the Secretary at 6 Gray's Inn Square, London, W.C.1.

In the December, 1960, *Bulletin* we announced a meeting on "*Interaction between fluids and particles*" to take place during the Third Congress of the European Federation of Chemical Engineering in London on 20th to 26th June, 1962. We have now been informed that during the

Congress there will also be a one day symposium on "*The handling of solids*." Under this heading it is proposed to consider the movement of solids in bulk and the influence of interactions between particles and between particles and apparatus. Intending contributors to either meeting should contact the General Secretary of the Institution of Chemical Engineers, 16 Belgrave Square, London, S.W.1 as soon as possible.

" Rheologica Acta "

The publishers of *Rheologica Acta*, Dr. Dietrich Steinkopff Verlag, Darmstadt, have sent a circular to those who attended the Third International Congress on Rheology at Bad Oeynhausen in September, 1958. The circular states that the second half of the proceedings of that congress will be published this Spring as parts 4 to 6 of volume 1 of *Rheologica Acta*. This is welcome news to the authors of the papers concerned, who have been wondering for two years whether or not their work would ever appear in print.

We have received no information about the future of the journal beyond volume 1, but sincerely hope that it will continue to be published. Such a journal can serve rheology well. For example, in publishing the proceedings of meetings held by the European societies. At the present time papers read at these meetings are either spread through many journals or collected in a book, each method having its disadvantages. However, tardiness and procrastination would not be tolerated.

Financial Assistance for Students.

The Committee has noticed that few research students attend meetings of the Society. No doubt one of the reasons for this state of affairs is financial. We should like to point out that the Society is prepared to give financial assistance to enable students to come to meetings, whether they are members of the Society or not. The amount of aid has not been fixed; each case will be considered on its merits. If any member knows of a student who would like to take advantage of this offer he should write to the Honorary Secretary.

Future Programmes

One of the more difficult tasks confronting the committee is the selection of subjects for future meetings of the Society. In going about this task the Honorary Secretary applies a few rules of thumb and on nearly every occasion comes up with the right solution. At any rate it seems to be the right solution if we are to judge from the members who attend each meeting. Attendances of from 60 to 100, out of a total

membership of nearly 300, at least indicate that there is wide interest in the chosen subjects. But among the questions that now arise are: can we arouse even greater interest by the choice of subject? Should we have more meetings of a miscellaneous character? Are we putting too much emphasis on the currently popular topics and neglecting the interests of minorities? Do any Members think they are being neglected? We invite comments and suggestions.

For your information here is a list of subjects dealt with in the past few years.

1955, Glass; Viscoelasticity; Surface rheology;

1956, Proteins; Textiles; Extrusion and rolling; Control of industrial processes.

1957, Elastomers; Disperse systems.

1958, Polymers; Accurate measurement of viscosity; Road materials.

1959, Flow, fatigue and failure; The glassy state and properties of liquids; Blood.

1960, Miscellaneous papers; Polymers.

1961, Theoretical; Techniques.