

HISTORY
NOT TO BE REMOVED
FROM
FILE.

**THE
BRITISH SOCIETY
OF RHEOLOGY**

BULLETIN

No. 54



New Members.

NAME AND ADDRESS.

INTERESTS.

Prof. Dr. J. Th. G. Overbeek,
van't Hoff Laboratorium,
Sterrenbos 19, Utrecht,
The Netherlands.

Suspensions, emulsions, gels,
polyelectrolytes.

Dr. B. B. Goalby,
Warren House,
46 Tabernacle Street,
London E.C.2.

Rheological properties and instru-
ments for studying solid/liquid dis-
perse systems, especially printing
inks.

Dr. Joseph Kubat,
Swedish Forest Products Res. Lab.,
Drottning Kristinas väg 61,
Stockholm Oo, Sweden.

General.

Mr. H. W. Grenfell,
71 Cecil Street,
Manselton,
Swansea.

Flow of fluids with heat and mass
transfer across an interface with and
without chemical reaction.

Mr. G. Thomas,
Department of Chemical Engineering,
University College,
Singleton Park, Swansea.

Flow properties of Non-Newtonian
fluids.

Mr. F. W. Summers,
Department of Chemical Engineering,
University College of Swansea,
Singleton Park, Swansea, Glam.

Flow properties of Non-Newtonian
fluids.

Mr. P. L. Langborne,
Lubrication and Wear Division, M.E.R.L.,
Thorntonhall,
Glasgow.

Viscous and elastic flow properties of
lubricating greases and oils.

Mr. F. J. Mottram,
Gestetner Ltd.,
Tottenham,
N.17.

The evaluation of solid suspensions
and emulsions by all suitable means.

Mr. D. C. Soul,
Director of Research,
Research Council of the British
Whiting Federation,
"The Hall," Welwyn, Herts.

Rheology of suspensions.

Mr. L. Dintenfass,
10 Belmont Court,
234 Campbell Parade, Bondi Beach,
N.S.W., Australia.

Paint and paint films ; measurement
of rheological properties and cor-
relation of such properties with
colloidal structure.

Mr. K. McLay Cameron,
119 Anglesey Road,
Burton-on-Trent,
Staffs.

Rheological use of X-ray structural
analysis. Plasticity of clays especially
refractories. Rheology applied to
general metallurgy.

Dr. E. R. Howells,
I.C.I. Ltd., Plastics Division,
Black Fan Road,
Welwyn Garden City.

Extrusion and rotational rheometry
of polymers.

Mr. J. W. Redman,
Fullers' Earth Union Ltd.,
Patteson Court, Nutfield Road,
Redhill, Surrey.

Clay-water pastes in the "stiff mud" region. Tars and bitumens and their O/W emulsions.

Dr. A. L. Copley, M.D.,
Director of Experimental Research in
Vascular Diseases,
Medical Research Laboratories,
Charing Cross Hospital,
8 Exchange Court, Strand, London W.C.2.

Blood and Body Fluids. Viscometers and apparatus to measure adhesiveness and firmness among other phenomena.

Mr. J. R. Jones,
Dept. Applied Mathematics,
University College,
Singleton Park, Swansea.

Non-Newtonian fluids, Visco-elastic fluids, plastic solids. Any theoretical discussion.

News of Members.

The President recently visited a number of Indian Universities. During the course of his tour, he took part in the Annual Congress of Indian Association of Applied Mechanics, held at Bangalore, December 26th—29th, 1957. This Association has a strong group of rheologists and about one quarter of the total papers presented dealt with rheology. The President gave, at the request of the Secretary, Dr. B. R. Seth, a talk on the activities of the B.S.R.

Mr. A. de Waele, our honorary auditor, has retired from the post of director of research, Messrs. Gestetner Ltd.

The editors have received several publications of the National Institute for Research in Dairying, N.I.R.D. papers Nos. 1730, 1850, 1917 and 1923 giving the results of research, mainly on the consistency of bovine cervical mucus, and the elastic properties of very soft gels, by Dr. G. W. Scott Blair and colleagues.

These are available to members on request.

Agricultural Rheology by G. W. Scott Blair and Marcus Reiner, 28s. net, Routledge and Kegan Paul, London E.C.4.

Our two members, G.W.S.B. and M.R., have applied the general principals of rheology to the study of soil and of many farm products, such as flour, butter and cheese. The first part of the treatise deals with general rheology and the second part discusses practical applications and summarises research findings.

Future Meetings.

A joint science meeting of the Acoustics Group and The Rheological Society will be held in the Physics Lecture Theatre of Imperial College in Imperial Institute Road, S.W.7, on Thursday, April 17th, at 4.15 p.m., when Professor A. Woodward of Penn State University will talk on "The Dynamical Properties of Polymers."

June 6th—7th, 1958. "*The Accurate Measurement of the Viscosity of Liquids.*"

Preliminary information on this meeting and N.P.L. visit has already been circulated, and a final notice will be sent out in mid May.

September 23rd—30th, 1958. *International Congress on Rheology at Bad Oeynhausen, Germany.*

About 15 British papers have been submitted for this Congress. It is hoped to circulate a list of titles of all papers submitted together with this Bulletin.

October 24th, 1958. "*Rheology of Road Materials.*"

This meeting will probably be held at the Road Research Laboratory, Harmondsworth. Titles tentatively submitted include: "A Survey of Methods proposed for examining the flow of concrete during and after compaction" from Road Research Laboratory. "The use of Mechanical Tests for Bituminous Materials" by A. Pease. "New Views on the Rheology of Concrete" by M. Reiner. "The Rheology of Bituminous Road Mixtures" by R. N. J. Saal. "Rheological Tests in the Control of Bituminous Mixtures" by D. C. Broome. "Measurements of the Mechanical Properties of Bitumen at Times of Loading of about 1 millisecond" from Thornton Research Centre.

January, 1959. "*Fracture, Failure and Fatigue.*"

This meeting will probably be held at Leeds in January, 1959. About 13 papers have been offered to date.

May, 1959. "*Rheology of the Glassy State.*"

This meeting will probably be held at Sheffield, and will include a visit to an industrial glassworks.

Later in 1959. "*The Dynamical Properties of Liquids*" and "*Rheology of Body Fluids.*"

News of Societies.

The Sixth Japanese Annual Rheology Symposium was held in Tokyo, 13th to 14th October, 1957, under the auspices jointly of the Japanese Chemical Society, Physical Society, High Polymer Society and Rubber Producers' Association. The following general lectures and original reports dealing with "Rheology of Natural and Synthetic Rubbers" were given. Abstracts in English are being prepared. Prof. B. Tamanushi at the close of the conference spoke on the activity of Rheologists in European Countries.

"The Present State of the Theory of Rubber Elasticity" by M. Yamamoto and Y. Sato (Kyoto University); "The Magnetic Absorption of Stretched Rubber" by R. Chujo (Kyoto University); on "New Elastometers" by S. Kambara (Tokyo Inst. of Tech.); "The Rheological Aspects of Filler Effect" by S. Nohara (Asaka Ind. Res. Lab.); "The Plasticity of Rubber—Filler Systems" by S. Takahashi and Y. Yasufuku (Furukawa Elec. Co.); "The Spinnability of Rubber—Oil Systems" by S. Shishido and Y. Ito (Niigata University); "What is an Elastomer?" by J. Furukawa (Kyoto University); "The Dynamical Properties of Vulcanised Rubber" by H. Tohara (Nat. Rail. Res. Inst.); "Some Rheological problems in the Rubber Industry" by S. Urabe (Fujikura Rubber Manf. Co.); "The Stress Relaxation of Polyfluoroethylenes" by K. Nagamatsu, T. Takamoto and T. Yoshitomi (Kyushu University); "The Stress Relaxation of Vulcanised Rubber" by K. Kamagata, Y. Minoura and S. Kambara.