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Because of our limited budget, publication of the Reviews and Abstracts mentioned on page 25, Vol. XV No. 3 has been postponed again. They will be combined with additional material intended for this issue and will appear in Vol. XIV No. 1, February 1945.

The subjects to be covered will include Apparatus and Methods, Bituminous Materials, Dispersions, Foam, Glass, General, Paints, Petroleum Products, Plastics, Polymers, Proteins, Solutions and Theory.

REPORT ON ANNUAL MEETING

SOCIETY OF RHEOLOGY

The Annual Meeting was held November 17 and 18th at the Hotel Pennsylvania in New York City. There was a total of 82 registrations for the three sessions which were held Friday morning, afternoon and Saturday morning. Fifteen papers were read and the discussions were most stimulating. The program has been published previously in the August issue of the Bulletin. T. Alfrey and P. Doty read papers 14 and 16, respectively, for the authors who were unable to be present.

At the business meeting on Friday afternoon the resignation of H. F. Wakefield as Publishing Editor was regretfully accepted. The office of Secretary-Treasurer was discontinued and H. F. Wakefield was elected to serve as Treasurer for the remaining term, while R. B. Dow continues as Secretary. The question of publication was thoroughly discussed at the Executive and business meetings. While a more complete journal of rheology is favored by many, it was felt that the present time was not a suitable one for a new venture, and that the present Bulletin would be continued until a more complete report was prepared by the Publication Committee. N. W. Taylor will continue as Editor, with T. Alfrey as Publishing Editor.

R. B. DOW

RHEOLOGY INDEX A, 1944

Eugene C. Bingham

Arranged Alphabetically by Authors

Numbers 260-407 inclusive

- 260 Abere, J., Goldfinger, G., Mark, H. & Naidus, H. Ann. N. Y. Acad. Sci. 44, 267-96 (1943); cf. C.A. 37, 6529. Recent results on the kinetics and elementary steps of polyreactions. C.A. 38, 1161
- 261 Alfrey, T., Bartovics, A., & Mark, H. J. Am. Chem. Soc. 65, 2319-23 (1943) Comparative osmotic and viscosity measurements with polystyrene fractions. C.A. 38, 673

- 262 Arend, A. G. *Silk and Rayon* 17, 496-8 (1943).
Spinning-bath developments. (Continuous registration of temp., pH and viscosity in control room.)
C.A. 37, 6453
- 263 Bacon, R. F. & Fanelli, R. *J. Am. Chem. Soc.* 65, 639-48 (1943).
The viscosity of sulfur. (Minute amts. of hydrogen sulfide and persulfides profoundly affect the viscosity.)
Data.
C.A. 37, 3312
- 264 Bartovics, A. & Mark, H. *J. Am. Chem. Soc.* 65, 1901-5 (1943).
Osmotic pressure and viscosity measurements with cellulose acetate fractions.
C.A. 38, 11
- 265 Beerbower, A., Sproule, L. W., Patberg, J. B. & Zimmer, J. C. *Inst. Spokesman* 6, No. 8, 4-7, No. 9, 1-7 (1942); No. 10, 6-7, No. 11, 2-4 (1943).
Flow characteristics of lubricating greases. (The appar. viscosity at a given rate of shear is mainly dependent on the viscosity of the mineral oil, the amt. and type of soap and the temp. Data important with launching greases and at subzero temps. in antifricition bearings.)
C.A. 37, 4556
- 266 Bingham, Eugene C. & Foley, Robert T. *J. Phys. Chem.* 47, 511-27 (1943); cf. C.A. 37, 36566.
Fluidity of electrolytes. II.
C.A. 38, 12
- 267 Blakeley, T. H. & Mitchell, J. G. *J. Soc. Chem. Ind.* 62, 179-81 (1943).
Control of tar viscosity by standard gravity and other means.
C.A. 38, 1863
- 268 Bondi, A. *Petroleum Refiner* 22, 287-94 (1943).
Physical properties of lubricating oils at low temperatures. (The cause of deviations is discussed.)
C.A. 37, 6443
- 269 Boow, J. and Turner, W. E. S. *J. Soc. Glass Tech.* 26, 215-37 (1942).
The viscosity and working characteristics of glasses.
I. The viscosity of some commercial glasses at temperatures between approximately 500° and 1400°. (Factors have been derived for the oxides SiO₂, Al₂O₃, Fe₂O₃, CaO, MgO, Na₂O and PbO by which, within prescribed limits of compn., the viscosities of glasses contg. them

- can be calcd.)
 C.A. 37, 3572
- (2) Boow, James and Turner, W. E. S. J. Soc. Glass
 Tech. 27, 94-112 (1943); cf. C.A. 37, 3573¹.
 The viscosity and working properties of glass. II. The
 rate of cooling and setting of colorless and colored
 glasses.
 C.A. 623
- 270 Boulton, J. & Jackson, D. L. C. J. Soc. Dyers Colourists
59, 21-6 (1943).
 The fluidity of nylon solutions in m-cresol as a measure-
 ment of chemical damage in nylon textiles.
 C.A. 37, 2582
- 271 Boutaric, A. Rev. Gen. Sci. 51, 231-4 (1940). Investi-
 gations of the viscosity of colloidal solutions.
 C.A. 37, 2978
- 272 Bowden, F. P. & Tabor, D. Australia, Council Sci. Ind.
 Research, Bull. No. 145, 7-38 (1942).
 Friction and lubrication report No. 1. I. The theory
 of metallic friction and the role of shearing and plough-
 ing.
 C.A. 38, 320
 (2) Bowden, F. P. & Tabor, D. Australia, Council Sci.
 Ind. Research Bull. No. 155, 24 pp (1942).
 Friction and lubrication report No. 2. The lubricating
 effect of thin metallic films and the theory of the act-
 ion of bearing metals.
 C.A. 38, 320
- 273 Bradford, S. C. Phil. Mag. 34, 433-71 (1943).
 The properties of fluids. (Maxwell's kinetic theory
 is extended so as to include the properties of assocd.
 liquids. Edser's law for mol. attraction detcs. liquid
 properties. Viscosity data are calcd. for Me₂CO, Et₂O,
 n-hexane, C₆H₆, CHCl₃ and CCl₄.
 C.A. 37, 6171
- 274 Bredée, H. L. J. prakt. Chem. 159, 146-52 (1941).
 Calculation of the limiting value $\lim_{c \rightarrow 0} (\eta \text{ sp./c})$.
 Cf. Schulz and Blaschke, J. prakt. Chem. 159, 153-4.
 C.A. 37, 3987
- 275 Bredée, H. L. & Booy, J. de Kolloid-Z. 99, 171-89
 (1942).
 The relation between viscosity and concentration. VI.
 The meaning of the viscometric "extension factor".
 C.A. 37, 4289

- 276 Buist, J. M. & Seymour, R. C. Trans. Inst. Rubber Ind. 19, 64-90 (1943).
Position of the rubberlike state on the plastic-elastic scale.
C.A. 38, 1907
- 277 Burgess, G. Foundry Trade J. 69, 197-204 (1943).
Factors influencing the fluidity of cast iron. (fluidity increases with temp., C content up to 4% and P content but decreases with S and Mn.)
C.A. 37, 6226
- 278 Buzégh, A. V. Kolloid-Z. 103, 119-26 (1943).
The viscosity of suspensions. The effect of strong electrolytes on the viscosity of suspensions of starch and bentonite.
C.A. 38, 289
- 279 Carlisle, M. T. & Olive, Connie Chem. Education 21, 142 (1944)
An adaptation of the Atwood machine for viscosity determinations.
C.A. 38, 1398
- 280 de Carvalho, Guimaraes Hervasio Anais assoc. quim. Brasil 2, 21-8 (1943).
Relation between viscosity and temperature.
C.A. 38, 912
- 281 Cragg, J. C. and Evans, E. A. J. Inst. Petroleum 29, 99-109 (1943).
Viscosity measurement and viscosity index. (Four labs. using the same seven oils obtained an average difference of 0.83 per cent).
C.A. 37, 4945
- 282 Dales, B., Walsh, R. H. & Abernathy, H. H. India Rubber World 107, 565-7 (1943).
Compounding Neoprene latex. I. Effect of various materials on viscosity. (Expts. point to methyl cellulose of low viscosity as the best thickening agent. Parlin cup used for testing.)
C.A. 37, 2616
- 283 Dana, S. W. J. Sediment. Petrol. 13, 21-7 (1943).
A pipet method of size analysis for the centrifuge. (A modification of Stokes' law.)
C.A. 37, 6162
- 284 Dehlinger, Ulrich Z. Metallkunde 35, 182-4 (1943).
Plastic flow resulting from multi-axial stress in multicrystalline metals.
C.A. 38, 1457

- 285 Dow, R. B. Rheol. Bull. 14, No. 3, 18-23 (1943).
Some rheological properties of matter under hydro-
static pressure.
C.A. 38, 11
- 286 Dunin, M. S. Plant Virus Diseases and Their Control,
Trans. Conf. Plant Virus Diseases. Acad. Sci. U. S.S.R.
Inst. Microbiol. 1941, 49-57.
Viscometric method of immunobiological analysis.
C.A. 37, 4127
- 287 Dutta, A. Nature 152, 445-6 (1943).
Boiling point and viscosity of gases.
C.A. 38, 286
- 288 Eichler, Wolfgang (to Kodak A.-G.). Ger. 729, 773,
Nov. 26, 1943 (Cl. 39b. 17).
Lowering the pouring viscosity of gelatin solutions.
C.A. 38, 508
- 289 Endell, K. & Hendricks, G. Zement, 31, 16-19 (1942).
Control of the degree of fluidity and electrical con-
ductivity of portland cement clinker in the temperature
interval 1300-1450 by fluxes (metal oxides and salts)
and its technical significance. (Fluidity is increased
at 1400° by addn. 1-3% of oxides -m following order
Na₂O, CaO, MgO, Fe₂O₃, MnO, SiO₂ and Al₂O₃ decrease the
fluidity.)
C.A. 37, 6429
- 290 Everett, H. A. S.A.E. Journal 51, 165-9T, (1943).
Viscosity on cylinder wear. (Wear decreases with in-
creasing viscosity.)
C.A. 37, 6444
- 291 Evstratov, V. F., Reich, V. N. & Sukhotina, Y. A.
Kauchuk i Rezina 1941, No. 4, 23-9.
Determination of the plasticity of rubber.
C.A. 37, 5275
- 292 Fair, W. F. Jr. & Volkmann, E. W. Ind. Eng. Chem.,
Anal. Ed. 15, 235-9 (1943).
Viscosity of pitches.
(Capillary and falling coaxial cylinder. Saal pene-
tration viscosities do not agree).
C.A. 37, 3248
(2) Fair, W. F. Jr. & Volkmann, E. W. Ind. Eng. Chem.,
Anal. Ed. 15, 240-2 (1943).
Viscosity of coal-tar residues - comparison of viscosity
measurements and the A.S.T.M. penetration tests.
C.A. 37, 3587

- 293 Ferry, John D. Ann. N. Y. Acad. Sci. 44, 313-27 (1943).
Rigidities of solutions of polymers.
C.A. 1162
- 294 Fetz, Erich. Iron Age 152, No. 26, 42-53, No. 27, 40-52 (1943); cf. C.A. 36, 2824².
Dynamic hardness testing at elevated temperatures.
C.A. 38, 709
- 295 Finkelstein, B. N. & Cursin, M. P.
Theory of the electroviscous effect.
C.A. 38, 290
- 296 Flory, Paul J. & Rehner, John Jr. J. Chem. Phys. 11, 512-20 (1943).
Statistical mechanics of cross-linked polymer networks. I. Rubberlike elasticity.
C.A. 38, 291
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Statistical theory of chain configuration and physical properties of high polymers.
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- 297 Foster, J. F. & Hixon, R. M. J. Am. Chem. Soc. 65, 618-22 (1943).
Solution viscosities of the anyloses components of starch.
C.A. 37, 3296
- 298 Friend, J. Newton & Hargreaves, Wm. D. Phil. Mag. 34, 643-50 (1943).
The viscosity at the boiling point.
C.A. 38, 1408
(2) Friend, J. Newton & Hargreaves, Wm. D. Phil. Mag. 34, 810-16 (1943); cf. preceding abstr.
Viscosities and rheochors of HNO₃, nitro paraffins and isomeric nitrites.
C.A. 38, 140
- 299 Frosch, O. J. Bell Labs. Record 22, 269-72 (1944).
Flow properties of cellulose esters.
C.A. 38, 1637
- 300 Gallay, Wilfred and Puddington, Ira E. Can. J. Research 21B, 171-8 (1943).
Sedimentation volumes and anomalous flow in lyophobic suspensions.
C.A. 38, 10
(2) Gallay, Wilfred & Puddington, Ira E. Can. J. Research 22B, 16-20 (1944).
Sedimentation volumes and rigidity in suspensions of Na soaps in mineral oils.
C. A. 38, 1676

- 301 Georgi, C. Inst. Spokesman 5, No. 6, 1-2 (1941).
Consistency tests. Aluminum cone vs. standard steel cone.
C.A. 37, 4557
- 302 Golik, A. Bull. acad. sci. U.R.S.S., Ser. phys. 5,
No. 1, 54-6 (1941); Khim. Referat. Zhur. 4, No. 9,
3-4 (1941); cf. C.A. 34, 7681¹.
The heat capacity and viscosity of liquids.
C.A. 38, 1680
- 303 Gradishar, F. J., Faith, W. L. & Hedrick, J. E. Trans.
Am. Inst. Chem. Engrs. 39, 201-22 (1943).
Laminar flow of oil-coal suspensions. (There is
viscous flow at concs. below a certain point where
plasticity begins with appreciable yield value).
C.A. 37, 3304
- 304 Green, B. K., Chollar, R. G. & Wilson, G. J. Rubber
Age (N.Y.) 52, 319-27 (1943).
A tensiometer stiffness test for elastomers at low
temperatures.
C.A. 37, 6491
- 305 Haehl, A. and Le Bras, J. Rev. gen. caoutchouc 19,
183-8; Kautschuk 18, 144-5 (1942).
The effect of milling on the softness of rubber. I.
Temperature and friction.
C.A. 38, 891
- 306 Hatch, R. S. Ind. Eng. Chem., Anal. Ed. 16, 104-7
(1944).
Cupriethylenediamine as a solvent for precise de-
termination of cellulose viscosity.
C.A. 38, 1638
- 307 Hauth, B. Oel u. Kohle 39, 645-7 (1943).
Estimation of the viscosity-temperature behavior of
lubricating oils by means of a conventional slide rule.
C.A. 38, 1626
- 308 Haward, N. Trans. Faraday Soc. 39, 267-80 (1943);
cf. C.A. 37, 255².
Fast and slow extension of some plastic materials.
C.A. 38, 1157
- 309 Hay, R. J. West Scot. Iron Steel Inst. 49, 89-99
(1942).
Slag systems. The viscosity determination of blast
furnace slags.
C.A. 37, 1961

- 310 Henry, E. C. Bull. Am. Ceram. Soc. 21, 269-71 (1942).
Plasticity and workability of ballclays.
C.A. 37, 2150
- 311 Hersberger, A. B. and Overbeck, C. Am. Soc. Testing
Materials (1942).
Estimating the A.S.T.M. ring-and-ball softening point
of asphalts. (Uses three baths for conditioning and
3 for test each at constant temp.
C.A. 37, 2169
- 312 Höppler, F. Mitt. Dachpappen-Ind. 14, 179-87 (1941).
The rheological behavior of coal tar and coal-tar
pitches, from bituminous coal. (Fundamental similarity
to the bitumens.)
C.A. 37, 4228
(2) Hoppler, F. Kolloid-Z. 98, 348-58 (1942).
Rheometry and colloidal nature of the system, sodium
cellulose glycolate and water.
C.A. 37, 4952
(3) Hoppler, F. Fette u. Seifen 49, 700-8 (1942).
Colloidal and flow properties of lubricating greases
and of calcium-oleate-mineral oil mixtures.
C.A. 37, 6444.
(4) Hoppler, F. Z. Untersuch. Lebensm. 85, 54-9
(1943).
Viscosity behavior of malt extracts.
C.A. 38, 455
- 313 Hoffmann, K. Kolloid-Z. 103, 161-3 (1943).
The formation of chain aggregations during coagulation.
C.A. 38, 1160
- 314 Hofmann, W. Ber. Ges. Freunden tech. Hochschule Berlin
1941, No. 1, 62-4.
Creep experiments in lead crystals. (Creep in single
crystal depends on the plasticity of the crystal = $10^{-4}\%$
per hr.)
C.A. 37, 4285
- 315 Houwink, V.R. & Klassens, K. H. Kolloid-Z. 99, 160-71
(1942).
The viscosity-concentration relation in concentrated
solutions of high polymers. (Significance of formulas
of the type $\log \eta = C_v^a$.)
C.A. 37, 4289
- 316 Hubbard, Robert M. & Brown, George G. Ind. Eng. Chem.
35, 1276-80 (1943).
Viscosity of pentane.
C.A. 903

- 317 Huggins, Maurice L. *Ann. N.Y. Acad. Sci.* 44, 431-43 (1943).
Thermodynamic properties of solutions of high polymers. The empirical constant in the activity equation.
C.A. 28, 1162
(2) Huggins, Maurice L. *J. Phys. Chem.* 47, 502-11 (1943).
The vitreous state: some semiquantitative considerations.
C.A. 38, 287
- 318 Huggins, Maurice L., Sun, Kuan-Han., and Silverman, Alexander. *J. Am. Ceram. Soc.* 26, 393-8 (1943).
The vitreous state.
C.A. 1158
- 319 Humbert, R. P. *Bull. Am. Ceram. Soc.* 21, 258-60 (1942).
Symposium on testing and classification of ball clays. A critical analysis of Stokes' law as a basis for the determination of particle size of clays and non-plastic materials.
C.A. 37, 2149
- 320 Il'menev, M. I. and Ovechkina, M. P. *Zavodskaya Lab.* 9, 1348 (1940).
Determination of viscosity. (Wide range claimed).
C.A. 37, 3303
- 321 Irany, Ernest P. *Rheol. Bull.* 214, No. 3, 23-6 (1943); cf. C.A. 32, 8867; 33, 8069⁰; 35, 7781; 37, 4944⁹.
The viscosity function.
C.A. 38, 7
(2) Irany, Ernest P. *J. Am. Chem. Soc.* 65, 1392-7 (1943).
The viscosity function. IV. Non-ideal systems.
C.A. 37, 4944
- 322 Jacopetti, M. *Gazz. chim. ital.* 72, 251-62 (1942).
Conductimetric behavior of solutions of lithium chloride.
Cf. C.A. 24, 3417; 3418; and 34, 7686
Visc. 18° to 100° at 8 concns.
C.A. 37, 3321
- 323 James, Hubert M. and Guth, Eugene *J. Chem. Phys.* 11, 531 (1943); cf. C.A. 37, 6930¹.
Statistical treatment of imperfectly flexible chains.
C.A. 38, 288

- 324 Jander, G. and Möhr, H. Z. physik. Chem. 190A, 81-100 (1942).
Diffusion and hydration of cupric and nickel ions in aqueous solutions.
C.A. 37, 3320
- 325 Jirgensons, Br. J. Prakt. Chem. 160, 120-32 (1942).
Viscosity and molecular decomposition of the proteins. (Denaturing and degradation of proteins by acid, alkali and heat. Numerous tables. Sphero-proteins first increase in viscosity and then decrease due to unwinding of the mol. ball.)
C.A. 37, 3994
- 326 Kapitsa, P. L. J. Phys. (U.S.S.R.) 5, 59-69 (1941) (in English).
Heat transfer and superfluidity of He II.
C.A. 39, 1157
- 327 Kaufman, Gus Inst. Spokesman 5, No. 12, 1-6 (1942).
Consistency of lubricating greases and oils at low temperatures. (Greases from low viscosity oils show the least change in penetration with reduced temp.).
C.A. 37, 4557
- 328 Keyl, K. Ger. Pat. 711, 447 Aug. 28, (1941).
Rotation viscometer.
C.A. 37, 3980
- 329 Kierstead, A. and Turkevich, John. J. Chem. Phys. 12, 24-7 (1944).
Viscosity and structure of pure hydrocarbons.
C.A. 38, 1409
- 330 Kish, G. D. Rubber Age (N.Y.) 53, 131-5; Am. Gas J. 158, No. 6, 9-12; Petroleum Engr. 14, No. 8, 132, 136, 140; Aero Digest 42, No. 5, 245-6, 257, 339; Oil & Gas J. 42, No. 4, 43-44, 46 (1943).
A method of testing the elasticity of synthetic rubbers at low temperatures.
C.A. 37, 5278
- 331 Klinkmann, G. H. Asphalt Teer Strassenbautech. 41, 271-5 (1941).
Adhesivity.
C.A. 38, 627
- 332 Knowles, E. C. and McCoy, F. C. Ind. Eng. Chem. 35, 1118-22 (1943).
Surface consistency characteristics of asphalts.
C.A. 38, 242

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Viscometer.
C.A. 37, 1903
- 334 Kornfeld, M. O. and Rivkin, M. M. J. Exptl. Theoret. Phys. (U.S.S.R.) 9, 595-6 (1939).
The "brittleness" of liquids.
(Tammann assumed the boundary at 10^{12} to 10^{13} poises but it depends upon the rate of deformation.)
C.A. 37, 6172
- 335 Kruyt, H. R., Vermaas, D. and Hermans, P. H. Kolloid-Z. 100, 111-121 (1942).
Deformation and orientation of isotropic nitrocellulose threads. III. Double refraction of swollen and imbibed threads.
C.A. 37, 6453
- 336 Kuhn, Werner and Kuhn, Hans. Helv. Chim. Acta 26, 1394-1465 (1943).
The coiling of fiber molecules in flowing solutions.
C.A. 38, 673
- 337 Kuznetsov, V. D. J. Phys. (U.S.S.R.) 5, 299-317 (1941).
Work of the physics of solids in the U. S. S. R. (Crystn. of supercooled liqs., plasticity and strength of ionic crystals, plastic deformation of polycryst. metals, brittleness of steel, phys. foundations of metal cutting, etc.)
C.A. 37, 3313
- 338 Landau, L. J. Phys. (U.S.S.R.) 5, 71-90 (1941) (in English).
Theory of superfluidity of He II.
C.A. 38, 1157
(2) Landau, L. J. Exptl. Phys. (U.S.S.R.) 11, 592-614 (1941). Cf. C.A. 35, 6852.
Theory of superfluidity of helium II.
A quantized liquid at absolute zero may possess superfluidity but at higher temperatures both superfluid and normal flow. Cf. Kapitza.
C.A. 37, 1312
- 339 Larson, C. M. and Knopf, C.L. Inst. Spokesman, 6, No. 1, 1-2, 4-7, (1942).
Grease consistency investigations. (Sinclair pressure viscometer and Knopf consadometer used. Consistency of grease can be detd. if the P. D. consistencies at 35° and 80° F. are known).
C.A. 37, 4557
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Experimental facts pertaining to the viscosity,

- molecular size and molecular shape.
C.A. 37, (1912)
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Flow deformation of metals.
C.A. 37, 4998
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(1941).
Viscometer (falling ball).
C.A. 37, 2962
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(1943).
Plastic working of Magnesium-alloy sheet.
C.A. 37, 6233
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155-66 (1943).
The gelatin viscosity reduction method of measuring
proteolytic activity.
C.A. 38, 758
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Slag viscosity and refining problems. III
C.A. 37, 1961
- 346 Lucatu, E. Bull. soc. roumaine phys. 42, 105-28
(1941).
Viscosity of pure liquids. Influence of temperature
and constitution. (Spherical molecules have higher
temp. coeff. of viscosity. The absorption band at
9622 A. connected with association of alcohols and
acids.)
C.A. 37, 3987
- 347 McAdam, D. J. Jr., and Mebs, R. W. Proc. Am. Soc.
Testing Materials (1943).
The technical cohesive strength and other mechanical
properties of metals at low temperatures. (Strength,
ductility and temp.).
C.A. 37, 6224
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Viscosity of pectin solutions and its relation to
gelling ability. (There seems to be a certain pro-
portionality.)
C.A. 37, 4280
- 349 Marcelin, A. Mecanique 26, 86-92 (1942).
The nature of viscosity of fluids, particularly
lubricating oils.
C.A. 37, 4951

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Starch viscosity or strength. (The fluidity funnel is not a true viscometer).
S.A. 46A, 1349
- 351 Mardles, E. W. J. *J. Oil Colour Chem. Assoc.* 25, 194-210 (1942).
Notes on the rheology of paints. (Yield value is lower with vehicles of high viscosity and those which give low sedimentation volumes. Thixotropic suspensions usually show smaller sed. vols. as well as slower rate of sedimentation. Tack is closely related to yield value, developing sharply with the latter.)
C.A. 37, 2591
- 352 Mark, H. Cold Spring Harbor Symposia Quant. Biol. 9, 204-10 (1941); Cf. C.A. 37, 697⁵.
Structure and mechanical behavior of high polymers.
C.A. 38, 906
(2) Mark, H. *Am. Scientist* 31, 97-141 (1943).
Some scientific aspects of the synthetic rubber problem.
C.A. 37, 5277
- 353 Matveev, R. R. *Ogneupory* 9, 110-18 (1941).
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APPLICATION

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