and b) the case where the discharge and the emission by the plasma occur in a narrow cylindrical region which contracts or expands under the action of electromagnetic forces. It is shown that by recording the emission at various angles to the axis of the chamber one can investigate, with the aid of the Doppler effect, the directed motion of plasma layers. On the other hand, by measuring the line profiles due to this directed motion one can determine the ion velocity distribution. The simultaneous measurement of the spectral-line profiles of neutral atoms and ions provides interesting information about the effect of the moving ions on the neutral atoms. The optical method appears to be the only possible method for studying the motion of the two types of particles separately. Determination of the temperature from the Doppler profile may lead to incorrect results if the directed motion is not taken into account. The success of these applications of the Doppler effect to the study of directed motion in plasma will depend on the

suitable choice of spectral lines for which other types of broadening can either be included or allowed for. There are 4 figures and 2 Soviet-bloc references.

ASSOCIATION: IAA imeni Dzerzhinskogo (IAA imeni Dzerzhinskiy)
Moskovskiy energeticheskiy institut (Moscow Power-engineering Institute)

SUBMITTED: January 4, 1960 (initially)
February 6, 1961 (after revision)

Card 3/3

X

ACCESSION NR: AP4036569 S/0139/64/000/002/0136/0141

AUTHORS: Zagoryanskaya, Ye. V.; Kireyev, P. S.

TITLE: The role of interference for electron transmission through a double potential barrier

SOURCE: IVUZ. Fizika, no. 2, 1964, 136-141

TOPIC TAGS: interference, electron transmission, double potential barrier, Fabry Perot etalon, transmission coefficient, reflection coefficient

ABSTRACT: The transmission coefficient for a double potential barrier is computed and compared with that obtained for the analogous problem in optics, the Fabry-Perot etalon. The Fabry-Perot etalon consists of two semitransparent mirrors, each having coefficients of reflection r and transmission τ, which are separated by a distance t. For zero incidence angle of light (wavelength λ) on the system the transmission coefficient is

$$T = \frac{I_r}{I_0} = \frac{\tau^2}{1 + r^2 - 2r\cos[2kt + 2\delta]}$$

Card 1/5

where $k = 2\pi/\lambda$ and δ is the phase shift of the light reflected from one of the mirrors. It is noted that the maximum value of the transmission coefficient is

$$T_{max} = \frac{\tau^2}{(1-r)^2} = \frac{(1-r)^2}{(1-r)^2} \equiv 1.$$

The double potential barrier is shown in Fig. 1 on the Enclosure, where the particle energy $E < U_0$. The transmission coefficient for the system is

$$T = \frac{\tau^2}{1 + r^2 - 2r^2\cos 2kl + r(1-r)(e^{2\kappa a} + e^{-2\kappa a})\cos 2kl} + \frac{\tau^2}{8\xi(1+\xi^2)r(1-r)(e^{2\kappa a} - e^{-2\kappa a})\cdot\sin 2kl},$$

which is expressed in terms of the reflection and transmission coefficients of the single potential barrier,

$$r = \frac{1}{1 + \frac{16\xi^2}{(1+\xi^2)^2(e^{\kappa a} - e^{-\kappa a})^2}}.$$

Card 2/5

ACCESSION NR: AP4036569

$$\tau = \frac{1}{1 + \dfrac{(1+\xi^2)^2(e^{\varkappa a} - e^{-\varkappa a})^2}{16\xi^2}}$$

Here

$$k^2 = \frac{2mE}{\hbar^2},$$

$$\varkappa^2 = \frac{2m(U_0 - E)}{\hbar^2}$$

and

$$\xi = \frac{k}{\varkappa}.$$

The special case of infinitely high, thin barriers is considered where the quantity $\varkappa a$ remains fixed. Then $r \to 1$ and

$$T = \frac{\tau^2}{1 + r^2 - 2r^2\cos 2kl}.$$

Card 3/5

ACCESSION NR: AP4036569

which is only superficially similar to the expression for the optical case. The essential difference is made even more apparent by noting

$$T_{max} = \frac{(1-r)^2}{(1-r^2)} = \frac{1-r}{1+r} = \frac{1}{1+r} \approx \frac{1}{2}.$$

Orig. art. has: 32 equations and 2 diagrams.

ASSOCIATION: Voyenno-inzhenernaya artilleriyskaya akademiya (Military Engineering Artillery Academy); Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys)

SUBMITTED: 10Jul62 DATE ACQ: 05Jun64 ENCL: 01

SUB CODE: GP NO REF SOV: 003 OTHER: 000

Card 4/5

ACCESSION NR: AP4036569

ENCLOSURE: 01

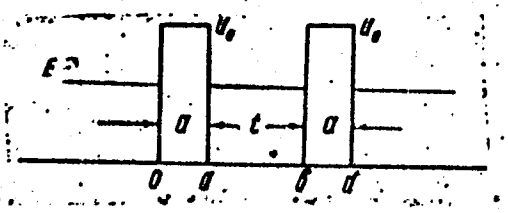


Fig. 1. Double potential barrier.

Card 5/5

ZAGORYANSKAYA, Ye. V.; KIREYEV, P.S.

Potential of a linear alternating charge. Izv. vys. ucheb. zav.; fiz. no. 3:12-16 '64. (MIRA 17:9)

1. Moskovskiy institut stali i splavov Voyenno-inzhenernaya artilleriyskaya akademiya.

PA 46/49T96

USSR/Physics May 49
Spectra, Atomic
Electrodes

"Measuring the Relative Probabilities of Transition of Some Cr II Lines and Determining the Temperature of a Condensed Spark Between Steel Electrodes," Ye. V. Zagoryanskaya, Moscow State U, 4 pp

"Zhur Eksper i Teoret Fiz" Vol XIX, No 5

Measured relative probabilities of transitions of certain chrome Cr II lines (2,876 - 2,860 angstroms). Measurements were made in the arc

46/49T96

USSR/Physics (Contd) May 49

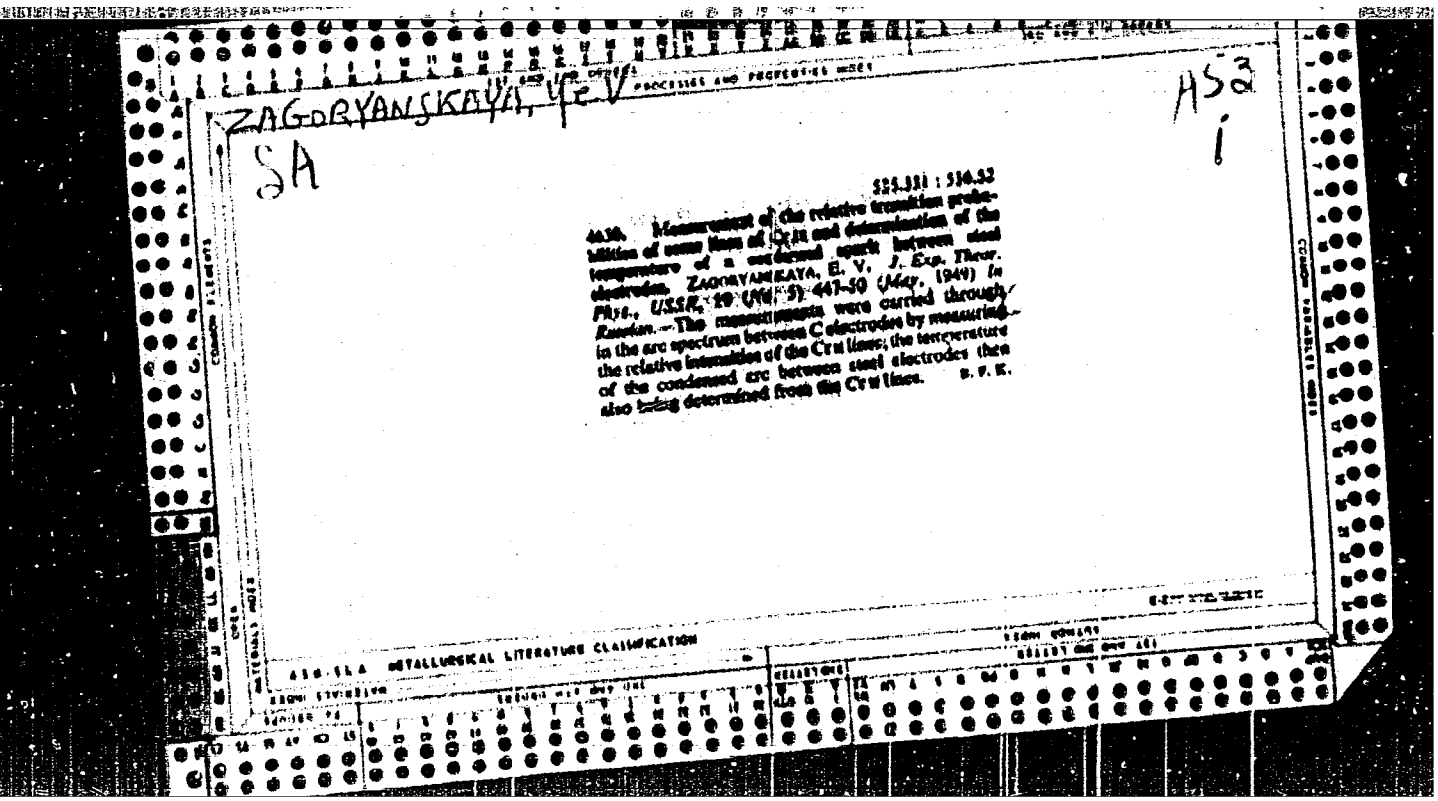
spectrum between carbon electrodes by measuring relative intensities of Cr II lines. Measured temperature of condenser arc between steel electrodes according to Cr II lines. Submitted 6 Nov 48.

46/49T96

ZAGORYANSKAYA, Ye. V.

ZAGORYANSKAYA, Ye.V.

Investigation of spectrum excitation conditions in the controlled spark source. E. V. Zagoryanskaya. *Zavod. skaya Lab.* 15, 53-9(1949). —Abs. and relative intensities, electrode temps., analytical gap voltages, current, and spark temps. were observed as a function of time for several arc and spark lines of Fe, Cr, V, Si, Mg, and Al with an uncontrolled spark source, and one in which triggering was provided by an auxiliary high-frequency fixed-gap spark circuit inductively coupled into the main circuit. With steel electrodes, the triggered source gave more stable intensity ratios and gap voltages than did the uncontrolled source; with Duralumin electrodes, there was little difference between sources. Sparking-off effects are not primarily due to heating up of the electrode, and are not eliminated by keeping gap voltage and amperage const. The temp. of the spark itself is const. throughout the exposure.
Cyrus Feldman



KIREYEV, Petr Semenovich; ZAGORYANSKAYA, Yelizaveta Vasil'yevna; STRIGANOV, A.R., red.; PERKOVSKAYA, T.Ye., red. izd-va; PAVLOVA, V.A., tekhn. red.

[Molecular spectrum analysis] Molekuliarnyi spektral'nyi analiz. Moskva, Gos. izd-vo "Vysshaia shkola," 1961. 142 p. (MIRA 15:1)
(Spectrum, Molecular)

ZAGORYANSKAYA, Ye.V.; KIREYEV, P.S.

Determining the optical constants of thin films from the interference figure. Izv.vys.ucheb.zav.; fiz. no.4:124-133 '61. (MIRA 14:10)

1. Moskovskiy energeticheskiy institut.
(Interferometry)

ZAGORYANSKAYA, Ye.V.; KIREYEV, P.S.

Use of the Doppler effect in studying processes occurring in a gas discharge plasma. Izv.vys.ucheb.zav.; fiz. no.4:163-167 '61. (MIRA 14:10)

1. Moskovskiy energeticheskiy institut.
(Plasma (Ionized gases)) (Doppler effect)

ZAGORYANSKAYA-FEL'DMAN, V.A.

Treatment of laryngeal cancer by ligature of the afferent vessels with subsequent X-ray therapy. Vest. otorinolar. 13 no.2:46-50 Mar-Apr 51. (CLML 20:8)

1. Doctor Medical Sciences. 2. Of the Clinic for Diseases of the Ear, Throat, and Nose (Director--Honored Worker in Science A.I. Fel'dman), Moscow Oblast Scientific-Research Clinical Institute--Central Institute for the Advanced Training of Physicians (Director--V.P. Lebedeva).

ZAGORYANSKAYA, V.A., doktor med.nauk

Laryngitis. Zdorov'e 5 no.8:30-31 Ag '59. (MIRA 13:8)
(LARYNX--DISEASES)

ZAGORYANSKIY, A.; KAPLINA, K.

Fiftieth anniversary of "Pravda." Mest.prom.i khud.promys. 3 no.5:8-9 My '62. (MIRA 15:6)

1. Redaktor gazety "Za obraztsovoye obsluzhivaniye" (for Kaplina).

(Newspapers)

BEREZIN, N.T.; ZAGORYANSKIY, A.D.

Fishes. Zdorov'e 5 no.11:22-23 N '59. (MIRA 13:3)
(Fish as food)

ZAGORYANSKIY, Ye., master SSSR po shakhmatam

Electronic chess player. IUn.tekh. 3 no.4:71-73 Ap '59. (MIRA 12:4)

(Chess)
(Electronic calculating machines)

BUSHE, N.A., kand. tekhn. nauk NARSKIKH, I.I., kand. tekhn. nauk;
BABAYEV, N.K., aspirant; ZAGORYANSKIY, Yu.A., inzh.

Testing of aluminum alloy bearings for diesel locomotive engines.
Vest. TSNII MPS 22 no.7:39-44 '63. (MIRA 16:12)

1. Tashkentskiy institut inzhenerov zheleznodorozhnogo transporta
(for Babayev).

VOLODIN, A.I., kand.tekhn.nauk; NARSKIKH, I.I., kand.tekhn.nauk;
ZAGORYANSKIY, Yu.A., inzh.

Methods for measuring the wear of the crankshafts of diesel locomotive engines. Trudy TSNII MPS no.262:73-84 '63.
(MIRA 16:10)

ZAGOR'YE, A.M.; ZAKH, R.G.

Burning of natural lignin with increased initial moisture. Gidroliz. i lesokhim. prom. 18 no.6:6-10 '65. (MIRA 18:9)

L 9701-66

ACC NR: AP5026567 SOURCE CODE: UR/0286/65/000/019/0131/0131

AUTHOR: Zagor'ye, B. A.

ORG: none

TITLE: A device for hoisting small craft to the deck of a ship-base and lowering them to the water. Class 65, No. 175407

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 131

TOPIC TAGS: boat, elevating gear, safety device, water traffic

ABSTRACT: This Author Certificate presents a device for hoisting small craft onto the deck of a ship-base and for lowering them into the water. The device includes metal supporting structures with cantilever beams hinged to joints, and a block-and-tackle system with a cable passing through the blocks of the tackle. The device is intended to increase the safety of lifting and lowering craft under rough sea conditions. The block-and-tackle system is made with stays of a fixed length, fastened to upper points of the inclined masts of the metal structures. These structures are displaced toward the diametric plane of the ship-base in reference to the diametric plane of the small craft. The stays take on part of the weight of the small craft during its setting on the deck of the ship-base and while lowering it from the deck. This is accomplished with the simultaneous cleansing or recovering of the cables (passing through the blocks of the tackle) by winches which automatically recover the slack. To mechanize the

Card 1/2

UDC: 629.125.65

L 9701-66

ACC NR: AP5026567

positioning of the small craft to its assigned location, a boat dolly with a keel block carriage (which moves in a vertical direction) is mounted on the deck of the ship-base. The small craft are moved along the deck of the ship on this boat dolly. This movement is directed by a specially designed cable and winch, the latter mounted on the deck of the ship.

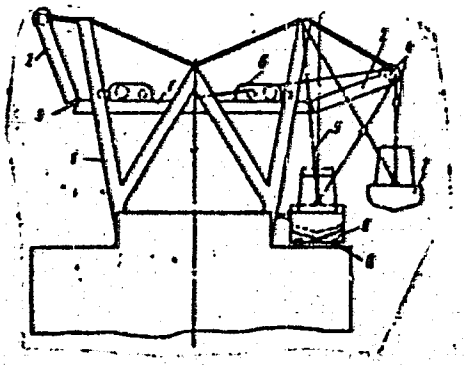


Fig. 1. 1 - Metal supporting structures; 2 - cantilever beams; 3 - hinges; 4 - block-and-tackle system; 5 - stays; 6 - winch of mechanism for the automatic recovery of the cable slack; 7 - small craft; 8 - boat dolly; 9 - keel block carriage.

Orig. art. has: 1 figure.
SUB CODE: 13/ SUBM DATE: 17Jun65

Card 2/2

RABOKH, Ya. [Raboch, J.], ZAGORZH, Z. [Zahor,Z], FAYKS, Ch. [FEIX, C], (Praga)

Testicular biopsy in endocrine disorders [with summary in English]. Probl.endok., i gorm. 4 no.3:78-87 My-Je '58 (MIRA 11:8)

1. Iz Seksologicheskogo instituta (dir. - prof. Y.Giniye), II-go Patologoanatomicheskogo instituta (dir. - prof. V.Yedlichka) i 2-y terapevticheskoy kliniki (zav. - prof. F. Gerles) Karlova universiteta.
(TESTICLE, pathology,
biopsy in endocrine dis. (Rus))
(ENDOCRINE DISEASES, pathology,
testicular biopsy (Rus))

ZAGOSKINA, M.A.

Complications with reference to the nervous system following inoculations for rabies. Sbor. trud. Kursk. gos. med. inst. no.13: 226-230 '58. (MIRA 14:3)

1. Iz kliniki nervnykh bolezney (zav. - prof. N.I.Golik) Kurskogo gosudarstvennogo meditsinskogo instituta i antirabicheskogo otdeleniya (zav. - I.I.Postolenko) Kurskoy oblsanepidstantsii.
(NERVOUS SYSTEM—DISEASES) (RABIES)

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

CA

3 5

The utilization of the by-products of the cotton industry in Middle Asia. A. P. Zakoshchikov, V. T. Ivanova, G. A. Korzhenevskii and A. M. Kuzmina. *Khlopkovoye Nezavisimost* Nos. 6-7, 97-112(1931).—The authors discuss the possibilities of utilizing the various by-products in the cotton industry, such as the hulls, stems, boll residue, leaves and lint, for *cattle feed, cellulose manuf., extn. of tannins, pentosans, xylose, prepn. of lignin* and other products. Chem. analyses of the various parts of the cotton plant and the by-products are given. J. S. Joffe

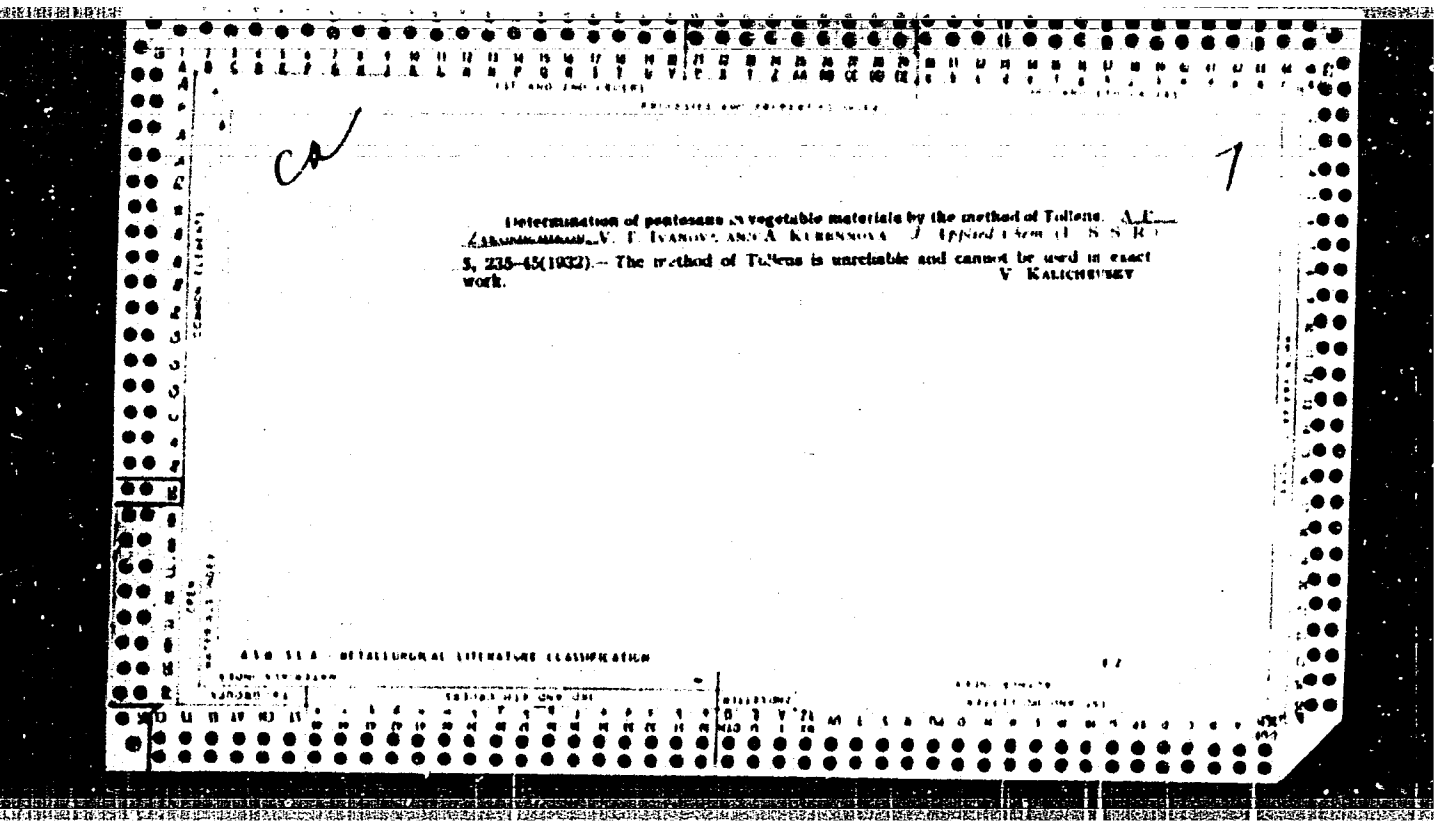
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

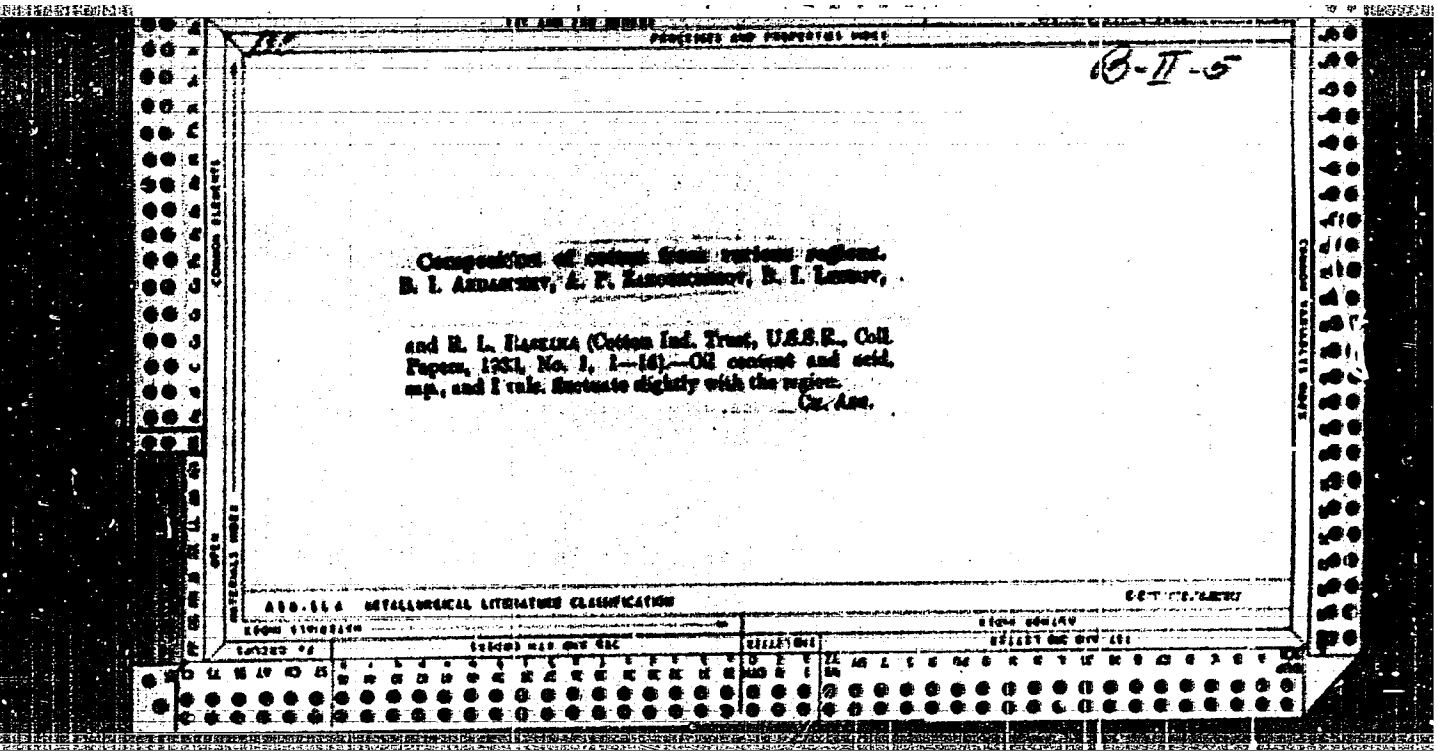
11D

A microscopic investigation of cotton fibers at various stages of maturity. A. P. Zakoshchikov, G. A. Kvatkhesiovskii and M. G. Kutikov. *Trudui Sredneaziatskogo Nauch. Issledovatel. Inst. Khlopkovodstva, Khlopkovoi Prom. Irrigatsii* (Trans. Middle Asiatic Sci. Inst. Cotton Culture, Ind. Irrigation) *Byull.* No. 50, 15-43(1931).—Cotton fiber at 60 days of age has the same structure as fiber from mature plants; it responds to mercerizing as mature cotton and has the same swelling coeff. in Schweitzer reagent and in 80% H_2SO_4. Thus cotton fiber has the same industrial value 35-40 days before the bolls open as after maturity. Only 15-16 days after blooming, cellulose appears in cotton. As the cellulose appears and increases in quantity the proteins decrease. The cuticle differs in compn. from the cellulose of the fiber, but upon hydrolysis with $ZnCl_2$ the products are similar, giving a blue reaction with I. No tannins nor starch were detected in the fibers. A series of illustrations is given. J. S. Joffe

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



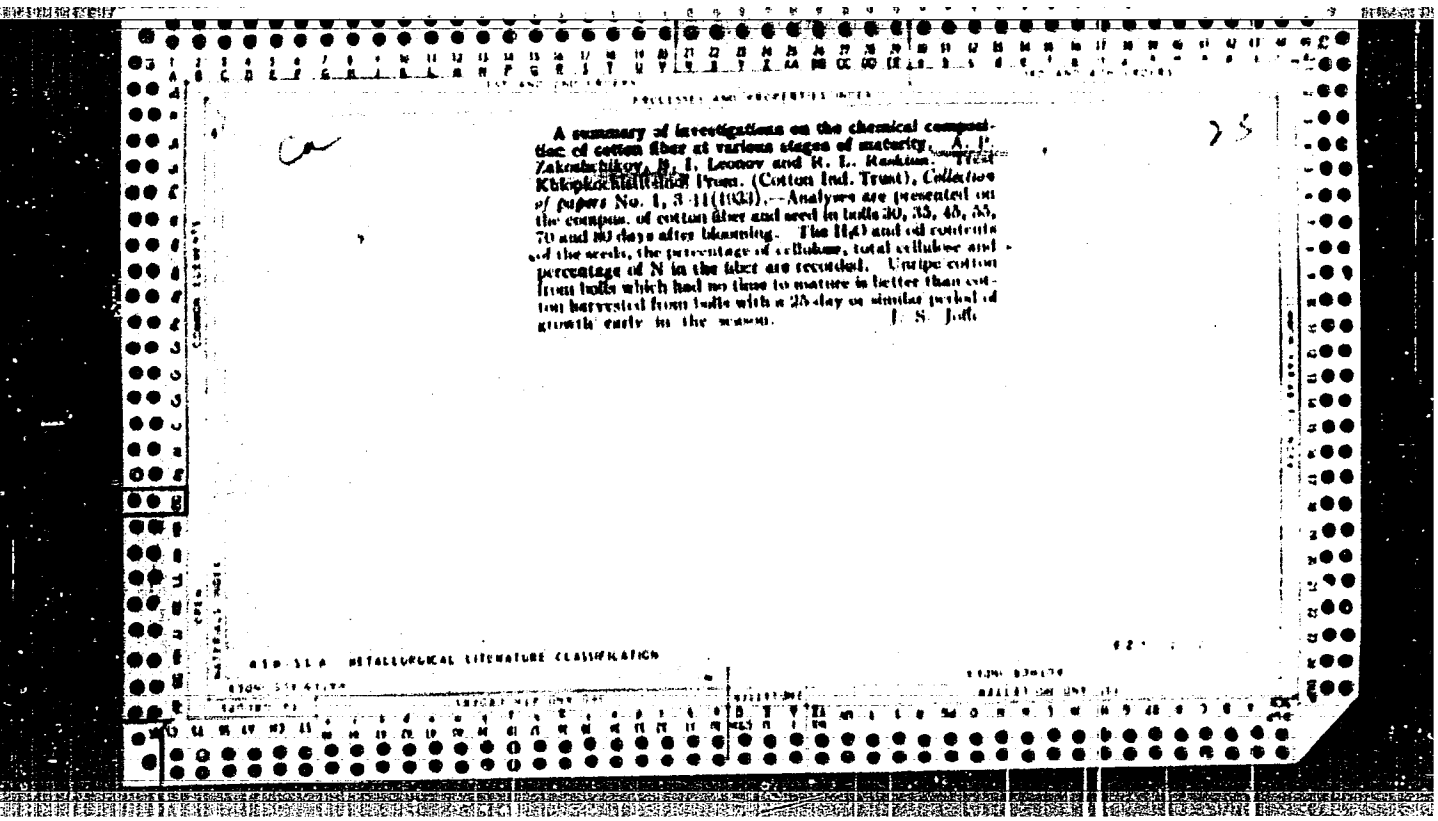
Determination of potassium in vegetable materials by the method of Tollens. A. I. Zakharchenya, V. T. Ivanova, and A. Kuznetsova. *J. Applied Chem. (U.S.S.R.)* 5, 235–45(1932).—The method of Tollens is unreliable and cannot be used in exact work.
V. Kalichevsky



16-II-5

Composition of cottons from various regions.
B. I. ARBATSKIY, L. P. ZAKOSTOMOV, B. I. LEBEDEV,

and R. L. ILLARIONA (Cotton Ind. Trust, U.S.S.R., Coll. Papers, 1951, No. 1, 1—16).—Oil content and acid, sap., and I vals. fluctuate slightly with the region.
—Ou. Abs.



A summary of investigations on the chemical composition of cotton fiber at various stages of maturity. A. P. Zakushnikova, B. I. Leonov and R. L. Rankina. [illegible] Khlopkovodstva Trust. (Cotton Ind. Trust), *Collection of papers* No. 1, 3-11(1933).--Analyses are presented on the compns. of cotton fiber and seed in bolls 30, 35, 40, 55, 70 and 80 days after blooming. The H$_2$O and oil contents of the seeds, the percentage of cellulose, total cellulose and percentage of N in the fiber are recorded. Unripe cotton from bolls which had no time to mature is better than cotton harvested from bolls with a 25-day or similar period of growth early in the season. J. S. Joffe

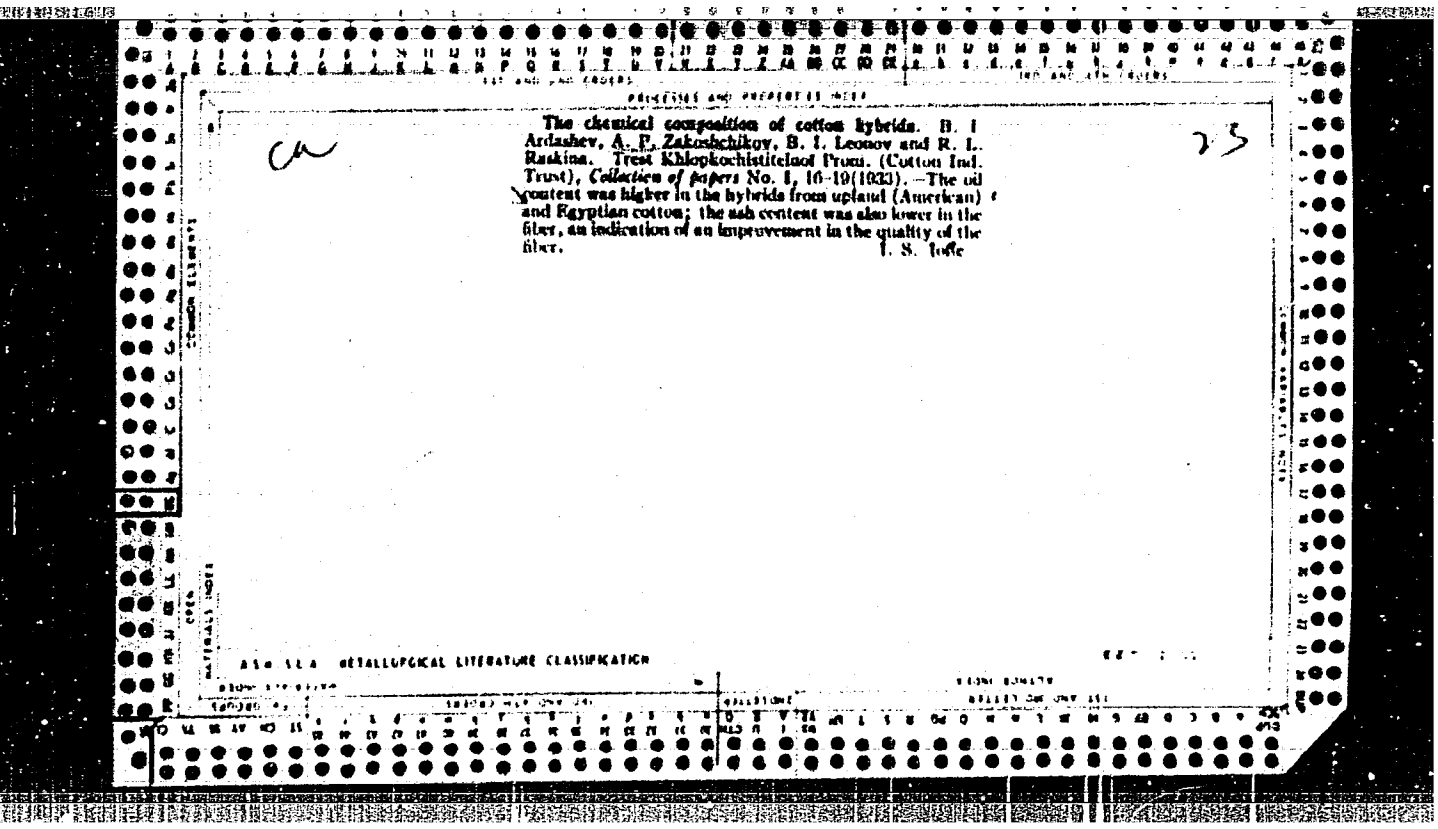
Ca

23

The chemical composition of cotton from various regions. B. I. Ardashev, A. P. Zakoshchikov, B. I. Leonov and R. L. Raskina. Trest Khlopkoschistitelnoi Prom. (Cotton Ind. Trust), *Collection of papers* No. 1, 12-16(1933).--Cotton from 3 different points in Central Asia was analyzed for moisture, ash, cellulose, alky. of ash, total N, P and ether and H_2O exts. The oil content, the acid no., the sapon. no. and I no. fluctuate slightly with the region.

J. S. Joffe

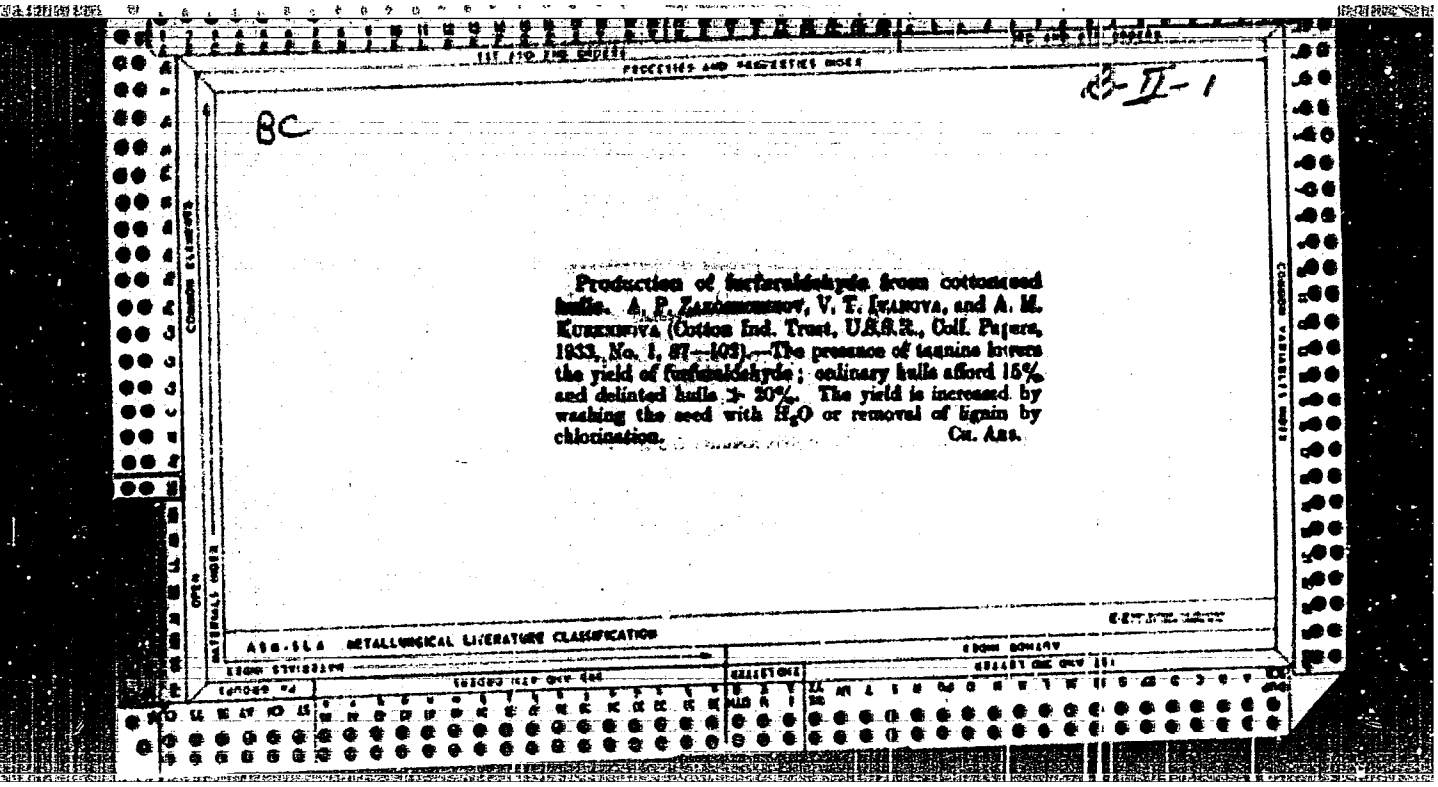
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



The chemical composition of cotton hybrids. B. I Ardashev, A. P. Zakoshchikov, B. I. Leonov and R. L. Ruskina. Trest Khlopkochistitelnoi Prom. (Cotton Ind. Trust), *Collection of papers* No. 1, 16-19(1933).—The oil content was higher in the hybrids from upland (American) and Egyptian cotton; the ash content was also lower in the fiber, an indication of an improvement in the quality of the fiber.

I. S. Ioffe

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION



BC

B-II-1

Production of furfuraldehyde from cottonseed hulls. A. P. Zamaraev, V. T. Ivanova, and A. M. Kuzenkova (Cotton Ind. Trust, U.S.S.R., Coll. Papers, 1933, No. 1, 87—102).—The presence of tannins lowers the yield of furfuraldehyde; ordinary hulls afford 15% and delinted hulls > 20%. The yield is increased by washing the seed with H_2O or removal of lignin by chlorination. Ch. Abs.

A58-5L4 METALLURGICAL LITERATURE CLASSIFICATION

BC

16-E-10

Tannins in cottonseed hulls. A. P. Zakoshchikov, V. T. Ivanova, G. A. Kosmodem'yanskii, and A. M. Kuznetsova (Cotton Ind. Trust, U.S.S.R., Coll. Papers, 1935, No. 1, 102—115).—Ripe hulls contain 7%, and hulls from young plants 12%, of tannins. Ch. Abs.

A S M - S L A METALLURGICAL LITERATURE CLASSIFICATION

BC

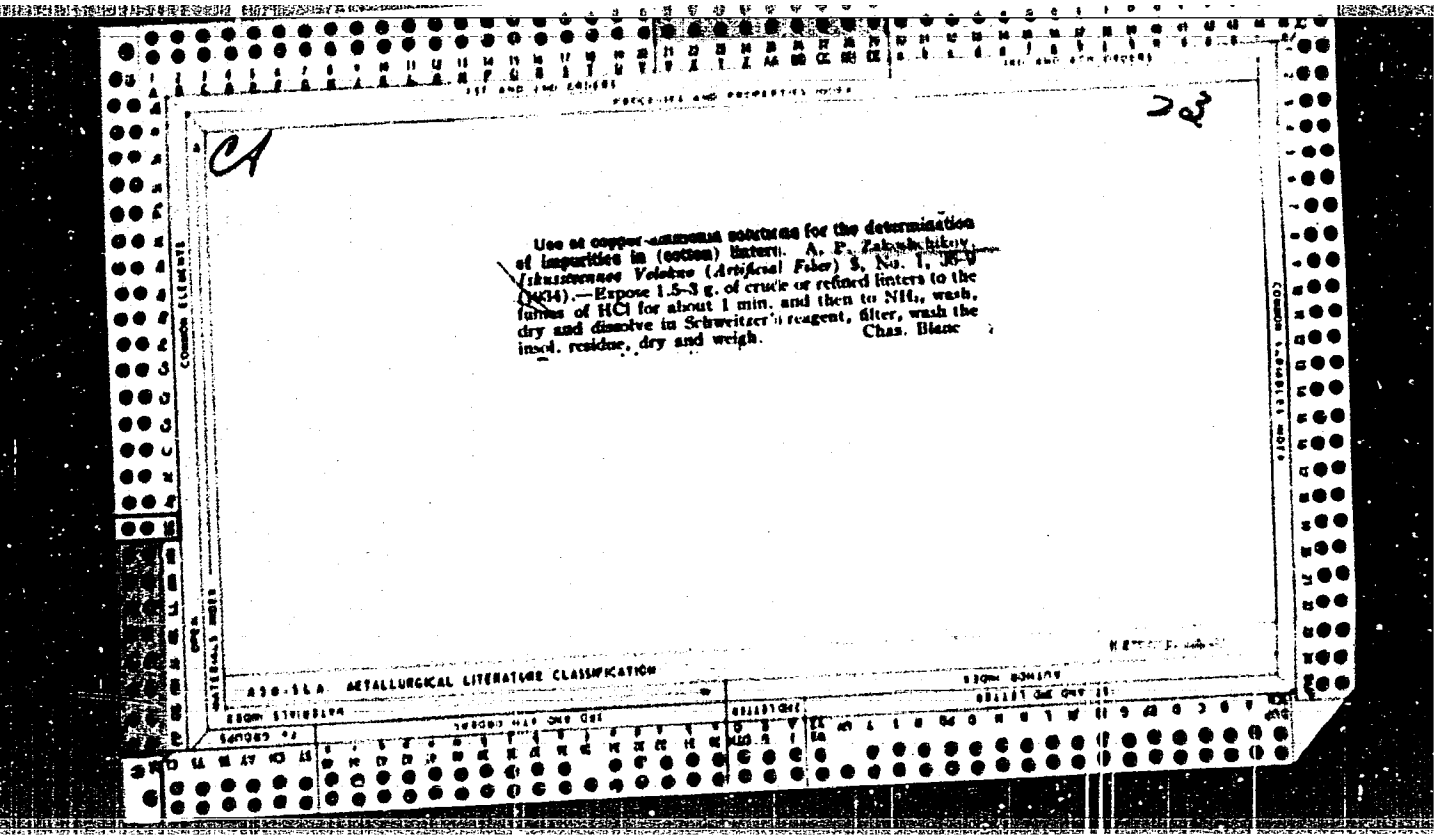
PROCESSES AND PROPERTIES INDEX

B-I-5

Homogeneity of plant celluloses and their products. I. Cross-section elements and methods of their separation. II. Content of cross-structure elements in plant celluloses. A. [illegible] and D. TUMARKIN (Iskusst. Volok., 1934, 5, [illegible]; 1935, 6, 176—182).—I. The presence of cross-section elements in the cellulose material of untreated flax and ramie, unscoured cotton, pulps, nitrocellulose, etc. was shown by treating with 84—88% H_2SO_4. The solutions, diluted with ice-H_2O, filtered, and centrifuged, separated the chemically unchanged cross elements.

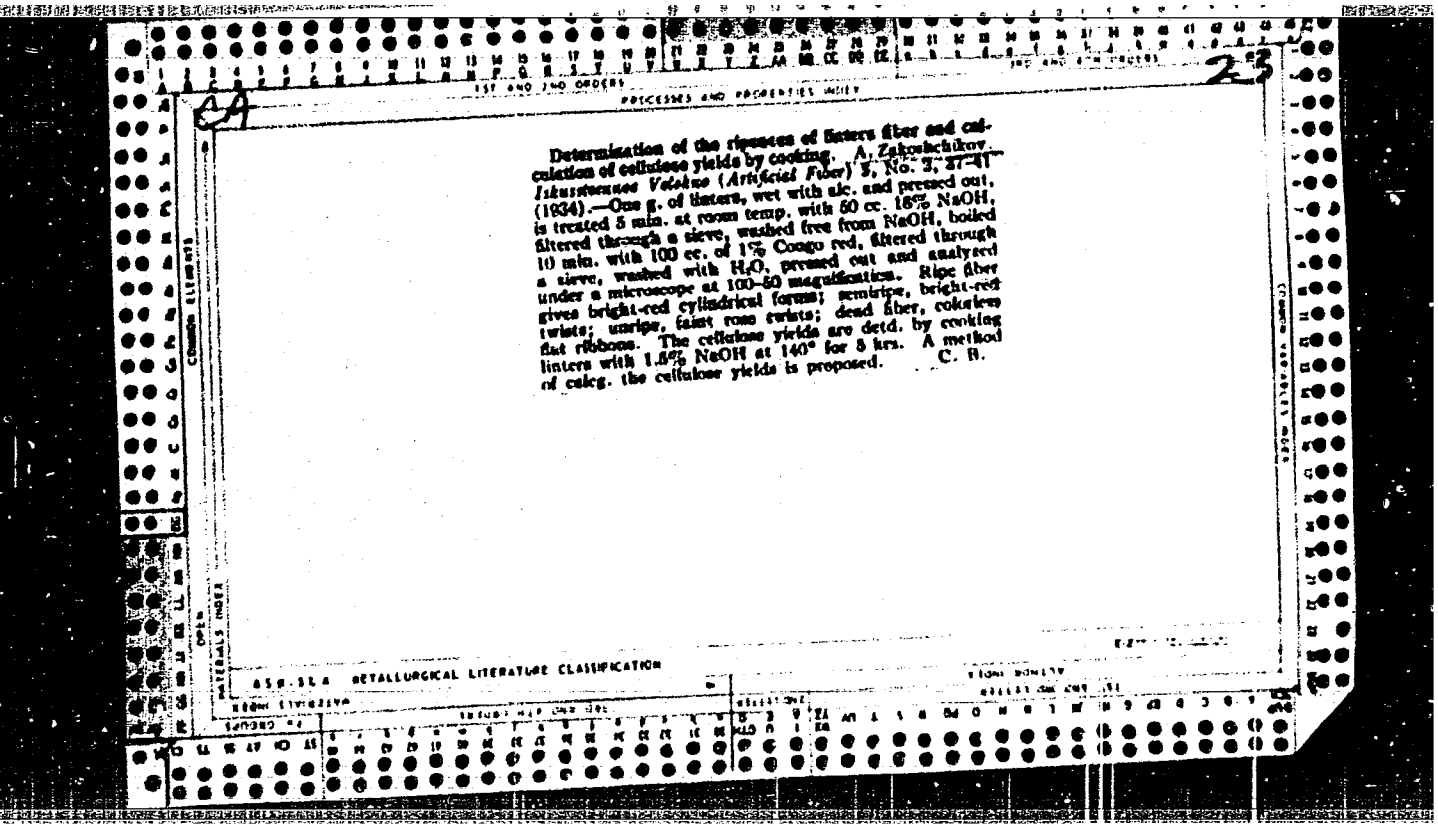
II. A method of determining these cross-section elements is based on treatment with H_2SO_4. Vals. were 0·1—0·6% in raw and 0·07—0·16% in refined cotton, 1·3% in unbleached and 0·07—0·09% in bleached spruce pulp. CH. ABS. (e)

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

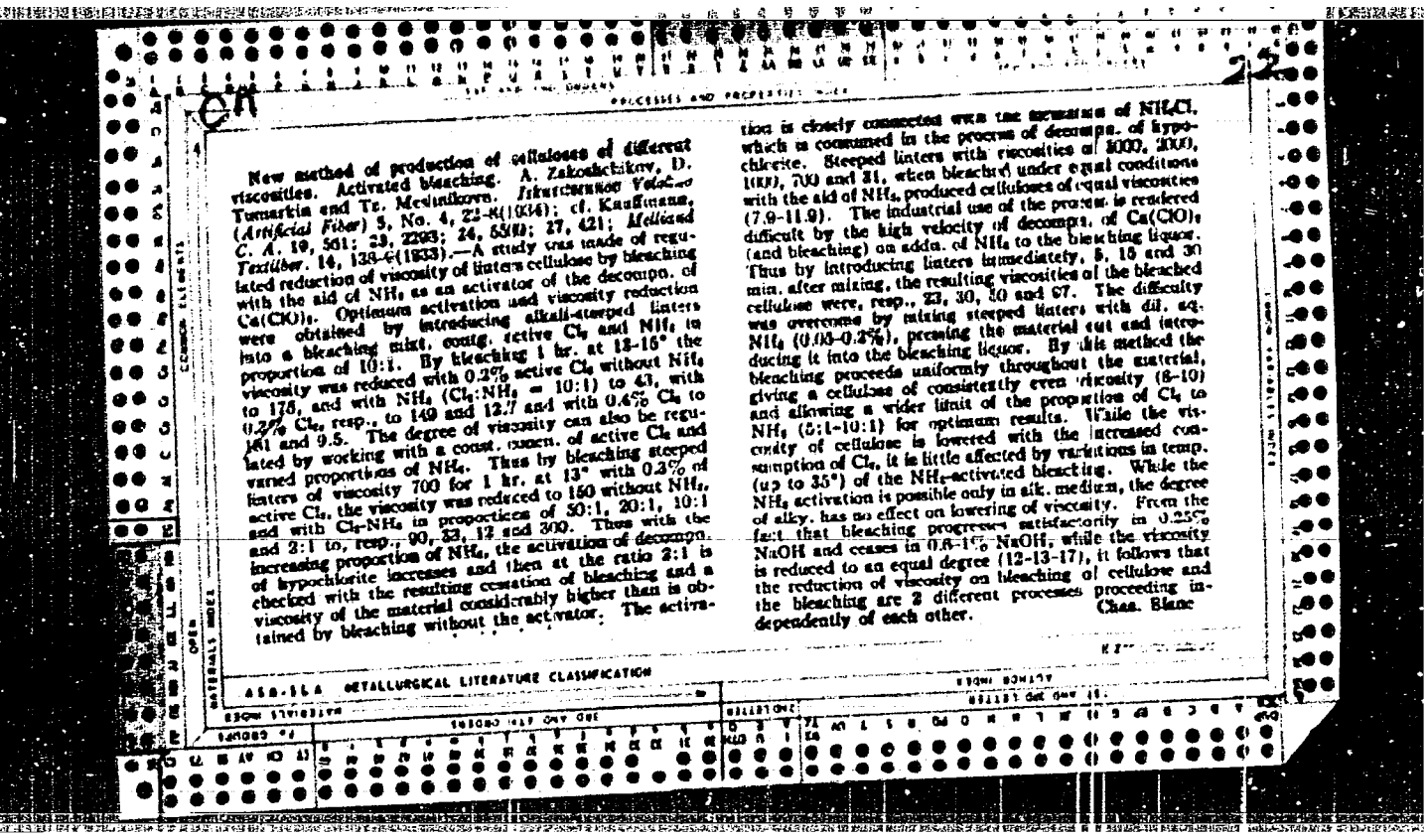


Use of copper-ammonia solutions for the determination of impurities in (cotton) linters. A. P. Zakoshchikov, *Iskusstvennoe Volokno* (*Artificial Fiber*) 3, No. 1, 35-9 (1934).—Expose 1.5–3 g. of crude or refined linters to the fumes of HCl for about 1 min. and then to NH_3, wash, dry and dissolve in Schweitzer's reagent, filter, wash the insol. residue, dry and weigh. Chas. Blanc

A50-5LA METALLURGICAL LITERATURE CLASSIFICATION

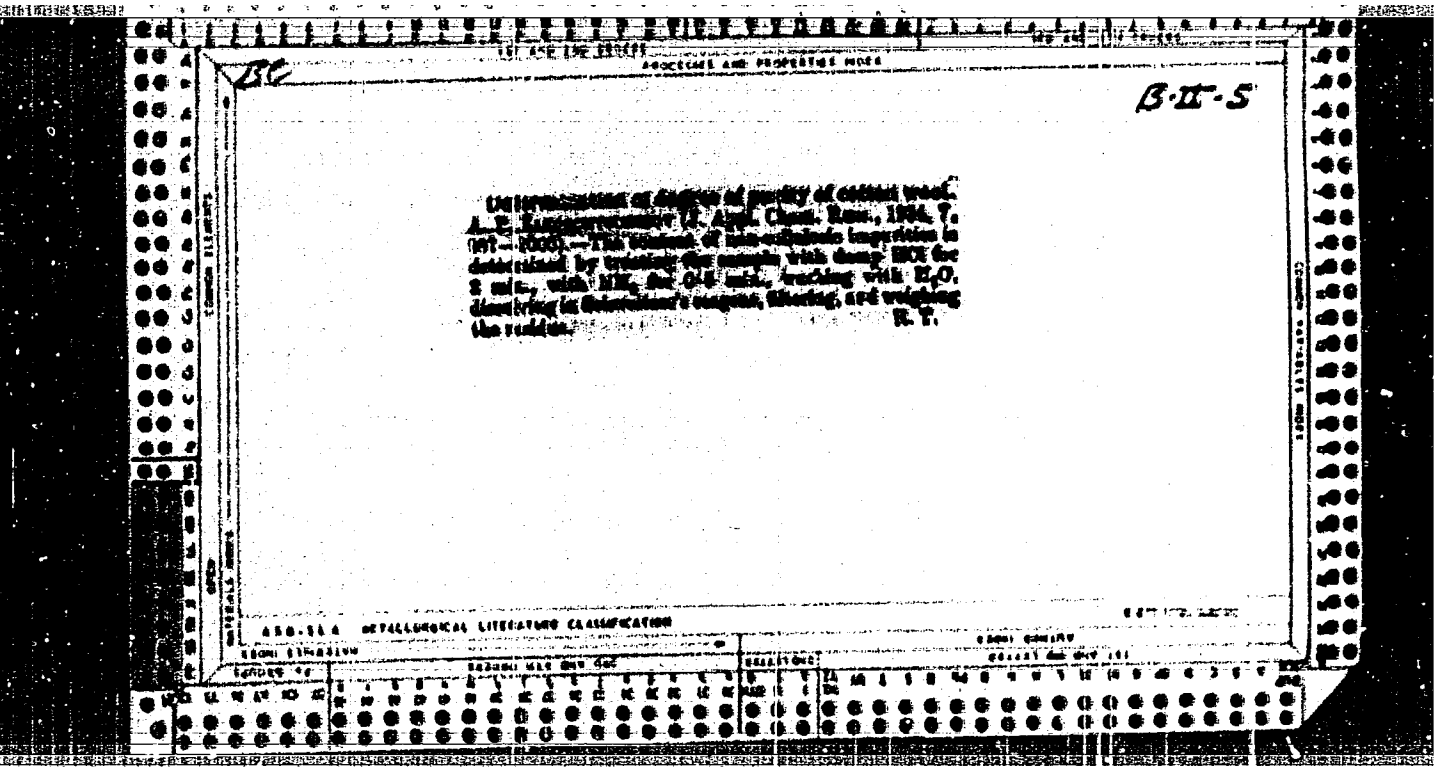


Determination of the rigidities of linters fiber and calculation of cellulose yields by cooking. A. Zakrzhevskiy. *Iskusstvennoe Volokno (Artificial Fiber)* 3, No. 2, 27-31 (1934).—One g. of linters, wet with alc. and pressed out, is treated 5 min. at room temp. with 50 cc. 18% NaOH, filtered through a sieve, washed free from NaOH, boiled 10 min. with 100 cc. of 1% Congo red, filtered through a sieve, washed with H_2O, pressed out and analyzed under a microscope at 100–80 magnifications. Ripe fiber gives bright-red cylindrical forms; semiripe, bright-red twists; unripe, faint rose twists; dead fiber, colorless flat ribbons. The cellulose yields are detd. by cooking linters with 1.8% NaOH at 140° for 5 hrs. A method of calcg. the cellulose yields is proposed. C. B.



New method of production of celluloses of different viscosities. Activated bleaching. A. Zakoshchikov, D. Tumarkin and Te. Mesinikova. *Iskusstvennoe Volokno* (*Artificial Fiber*) 5, No. 4, 23–6(1964); cf. Kaufmann, *C. A.* 19, 561; 29, 2293; 34, 5500; 37, 421; *Melliand Textilber.* 14, 138–9(1933).—A study was made of regulated reduction of viscosity of linters cellulose by bleaching with the aid of NH_4 as an activator of the decompn. of $Ca(ClO)_2$. Optimum activation and viscosity reduction were obtained by introducing alkali-steeped linters into a bleaching mixt. contg. active Cl_2 and NH_4 in proportion of 10:1. By bleaching 1 hr. at 12–15° the viscosity was reduced with 0.2% active Cl_2 without NH_4 to 178, and with NH_4 (Cl_2:NH_4 = 10:1) to 43, with 0.2% Cl_2, resp., to 149 and 12.7 and with 0.4% Cl_2 to 181 and 9.5. The degree of viscosity can also be regulated by working with a const. concn. of active Cl_2 and varied proportions of NH_4. Thus by bleaching steeped linters of viscosity 700 for 1 hr. at 13° with 0.2% of active Cl_2, the viscosity was reduced to 150 without NH_4, and with Cl_2-NH_4 in proportions of 50:1, 20:1, 10:1 and 2:1 to, resp., 90, 33, 12 and 300. Thus with the increasing proportion of NH_4, the activation of decompn. of hypochlorite increases and then at the ratio 2:1 is checked with the resulting cessation of bleaching and a viscosity of the material considerably higher than is obtained by bleaching without the activator. The activation is closely connected with the formation of NH_4Cl, which is consumed in the process of decompn. of hypochlorite. Steeped linters with viscosities of 1000, 700, 100, 700 and 31, when bleached under equal conditions with the aid of NH_4, produced celluloses of equal viscosities (7.9–11.9). The industrial use of the process is rendered difficult by the high velocity of decompn. of $Ca(ClO)_2$ (and bleaching) on addn. of NH_4 to the bleaching liquor. Thus by introducing linters immediately, 5, 15 and 30 min. after mixing, the resulting viscosities of the bleached cellulose were, resp., 23, 30, 50 and 97. The difficulty was overcome by mixing steeped linters with dil. aq. NH_4 (0.03–0.2%), pressing the material out and introducing it into the bleaching liquor. By this method the bleaching proceeds uniformly throughout the material, giving a cellulose of consistently even viscosity (8–10) and allowing a wider limit of the proportion of Cl_2 to NH_4 (5:1–10:1) for optimum results. While the viscosity of cellulose is lowered with the increased consumption of Cl_2, it is little affected by variations in temp. (up to 35°) of the NH_4-activated bleaching. While the NH_4 activation is possible only in alk. medium, the degree of alky. has no effect on lowering of viscosity. From the fact that bleaching progresses satisfactorily in 0.25% NaOH and ceases in 0.8–1% NaOH, while the viscosity is reduced to an equal degree (12–13–17), it follows that the reduction of viscosity on bleaching of cellulose and the bleaching are 2 different processes proceeding independently of each other.

Chas. Blanc



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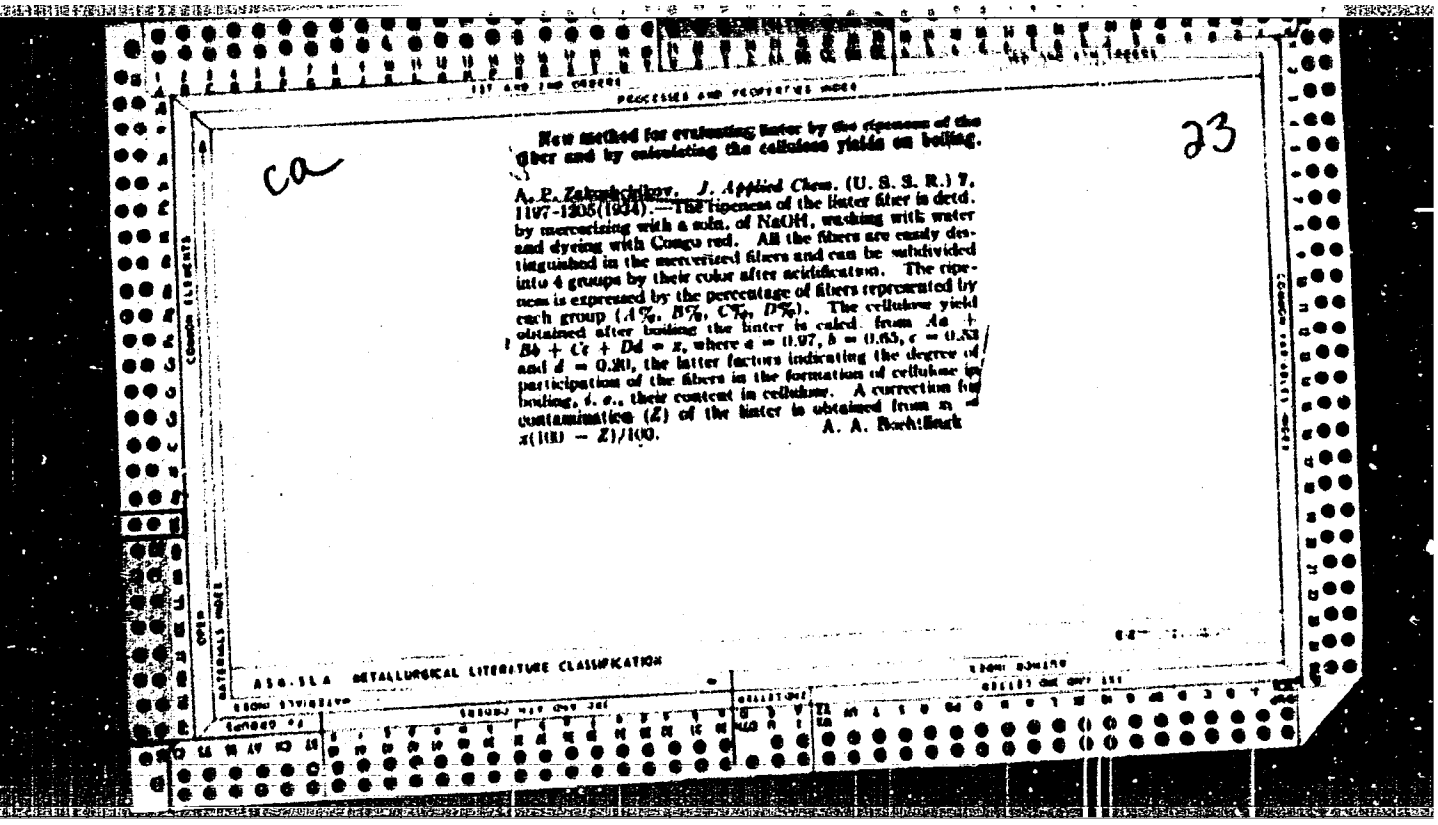
R. T.



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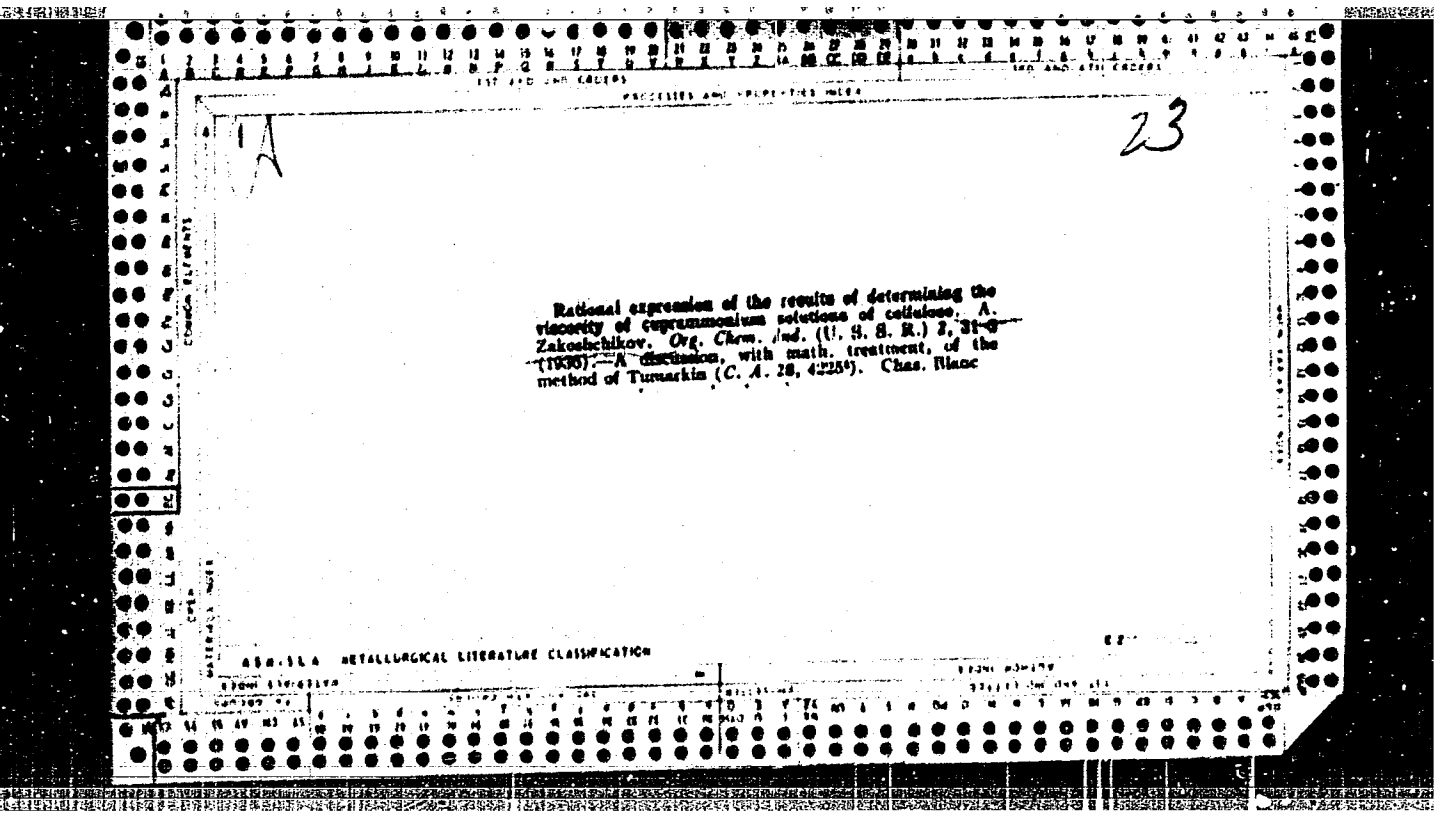
23

New method for evaluating linter by the ripeness of the fiber and by calculating the cellulose yields on boiling.

A. P. Zakrzhevskiĭ. *J. Applied Chem.* (U. S. S. R.) 7, 1197-1205(1934).—The ripeness of the linter fiber is detd. by mercerizing with a soln. of NaOH, washing with water and dyeing with Congo red. All the fibers are easily distinguished in the mercerized fibers and can be subdivided into 4 groups by their color after acidification. The ripeness is expressed by the percentage of fibers represented by each group (*A*%, *B*%, *C*%, *D*%). The cellulose yield obtained after boiling the linter is calcd. from $Aa + Bb + Cc + Dd = x$, where $a = 0.97$, $b = 0.65$, $c = 0.33$ and $d = 0.20$, the latter factors indicating the degree of participation of the fibers in the formation of cellulose on boiling, *i. e.*, their content in cellulose. A correction for contamination (*Z*) of the linter is obtained from $x(100 - Z)/100$.

A. A. Berkhlaut



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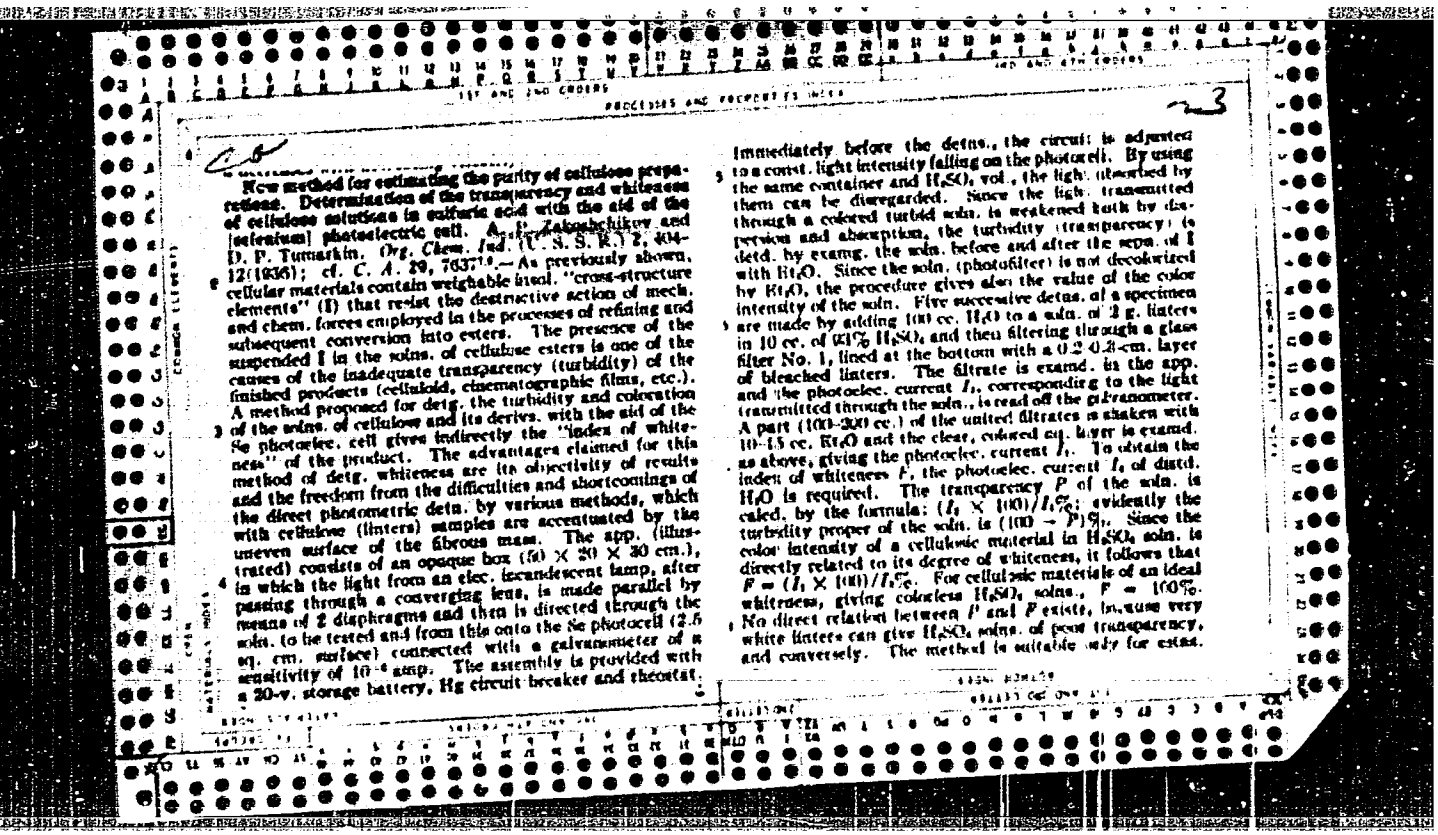
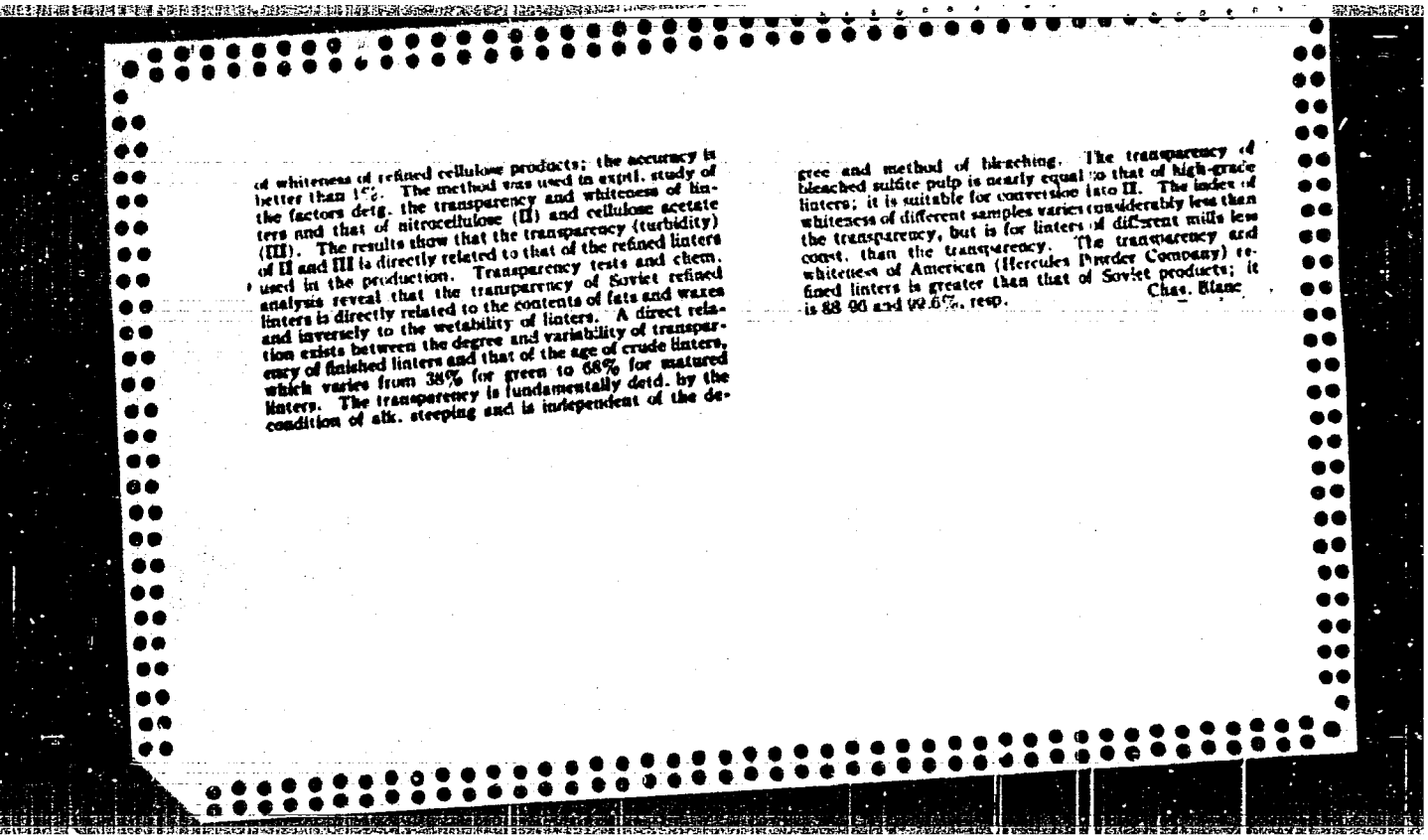
Rational expression of the results of determining the viscosity of cuprammonium solutions of cellulose. A. Zakoshchikov. *Org. Chem. Ind.* (U. S. S. R.) 2, 31-9 (1935).—A discussion, with math. treatment, of the method of Tumarkin (*C. A.* 28, 4225⁸). Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

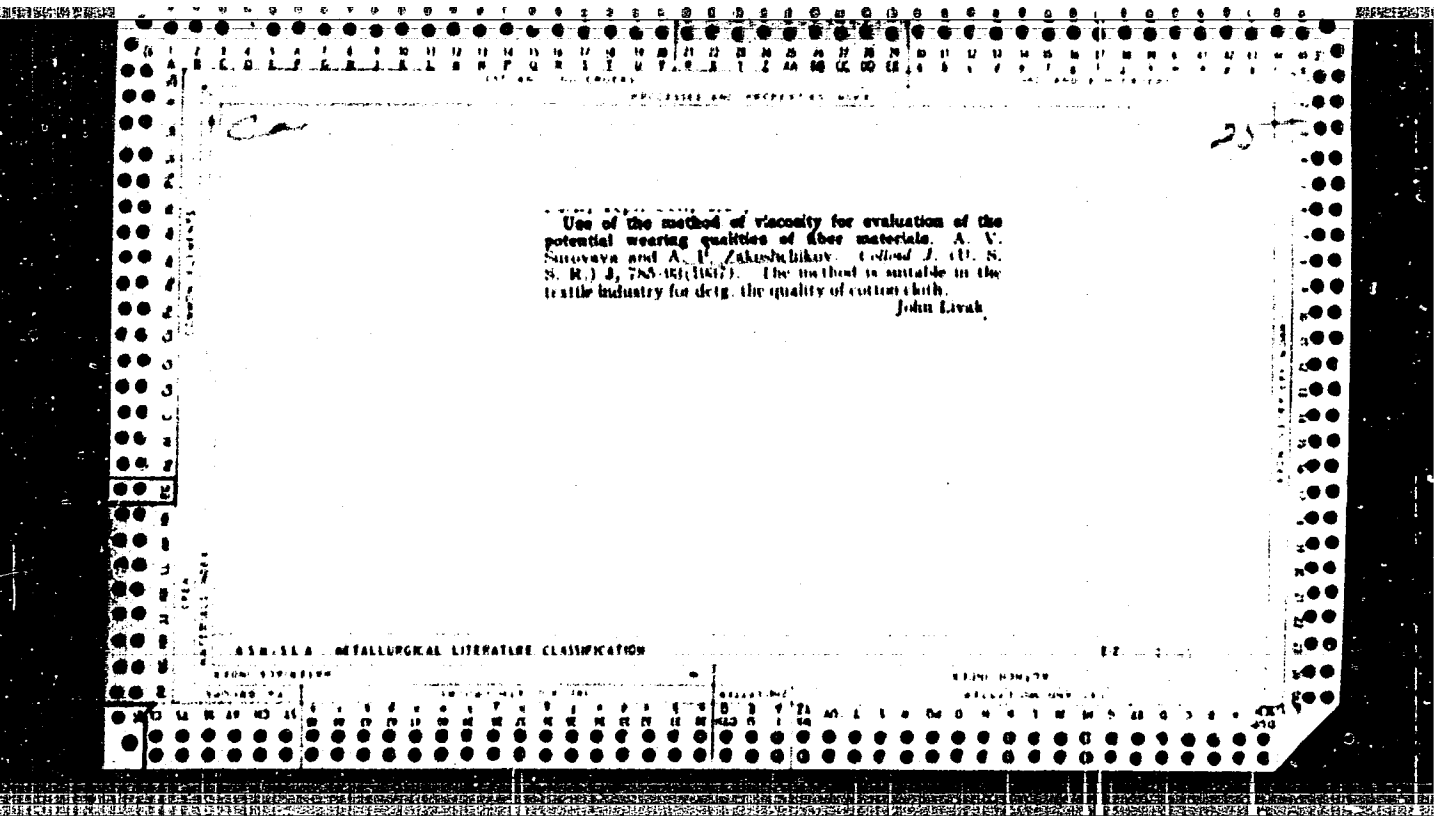


New method for estimating the purity of cellulose preparations. Determination of the transparency and whiteness of cellulose solutions in sulfuric acid with the aid of the [selenium] photoelectric cell. A. P. Zakoshchikov and D. P. Tumarkin. *Org. Chem. Ind.* (U. S. S. R.) 2, 404-12(1936); cf. *C. A.* 29, 7637⁸.—As previously shown, cellular materials contain weighable insol. "cross-structure elements" (I) that resist the destructive action of mech. and chem. forces employed in the processes of refining and subsequent conversion into esters. The presence of the suspended I in the solns. of cellulose esters is one of the causes of the inadequate transparency (turbidity) of the finished products (celluloid, cinematographic films, etc.). A method proposed for detg. the turbidity and coloration of the solns. of cellulose and its derivs. with the aid of the Se photocelec. cell gives indirectly the "index of whiteness" of the product. The advantages claimed for this method of detg. whiteness are its objectivity of results and the freedom from the difficulties and shortcomings of the direct photometric detn. by various methods, which with cellulose (linters) samples are accentuated by the uneven surface of the fibrous mass. The app. (illustrated) consists of an opaque box (50 × 20 × 30 cm.), in which the light from an elec. incandescent lamp, after passing through a converging lens, is made parallel by means of 2 diaphragms and then is directed through the soln. (to be tested and from this onto the Se photocell (2.5 sq. cm. surface) connected with a galvanometer of a sensitivity of 10^{-9} amp. The assembly is provided with a 20-v. storage battery, Hg circuit breaker and thermostat. Immediately before the detns., the circuit is adjusted to a const. light intensity falling on the photocell. By using the same container and H_2SO_4 vol., the light transmitted by the same cellulose (linters) samples are accentuated by the uneven surface of the fibrous mass. The app. (illustrated) consists of an opaque box (50 × 20 × 30 cm.), in which the light from an elec. incandescent lamp, after passing through a converging lens, is made parallel by means of 2 diaphragms and then is directed through the soln. (to be tested and from this onto the Se photocell (2.5 sq. cm. surface) connected with a galvanometer of a sensitivity of 10^{-9} amp. The assembly is provided with a 20-v. storage battery, Hg circuit breaker and thermostat. Immediately before the detns., the circuit is adjusted to a const. light intensity falling on the photocell. By using the same container and H_2SO_4 vol., the light transmitted by them can be disregarded. Since the light transmitted through a colored turbid soln. is weakened both by dispersion and absorption, the turbidity (transparency) is detd. by examg. the soln. before and after the sepn. of I with H_2O. Since the soln. (photofilter) is not decolorized by H_2O, the procedure gives also the value of the color intensity of the soln. Five successive detns. of a specimen are made by adding 100 cc. H_2O to a soln. of 2 g. linters in 10 cc. of 61% H_2SO_4 and then filtering through a glass filter No. 1, lined at the bottom with a 0.2-0.3-cm. layer of bleached linters. The filtrate is examd. in the app. and the photoelec. current I_1, corresponding to the light transmitted through the soln., is read off the galvanometer. A part (100-200 cc.) of the united filtrates is shaken with 10-15 cc. H_2O and the clear, colored liq. layer is examd. as above, giving the photoelec. current I_2. To obtain the index of whiteness F, the photoelec. current I_3 of distd. H_2O is required. The transparency P of the soln. is calcd. by the formula: $(I_2 \times 100)/I_3\%$; evidently the turbidity proper of the soln. is $(100 - P)\%$. Since the color intensity of a cellulosic material in H_2SO_4 soln. is directly related to its degree of whiteness, it follows that $F = (I_1 \times 100)/I_3\%$. For cellulosic materials of an ideal whiteness, giving colorless H_2SO_4 solns., $F = 100\%$. No direct relation between P and F exists, because very white linters can give H_2SO_4 solns. of poor transparency, and conversely. The method is suitable only for estns.



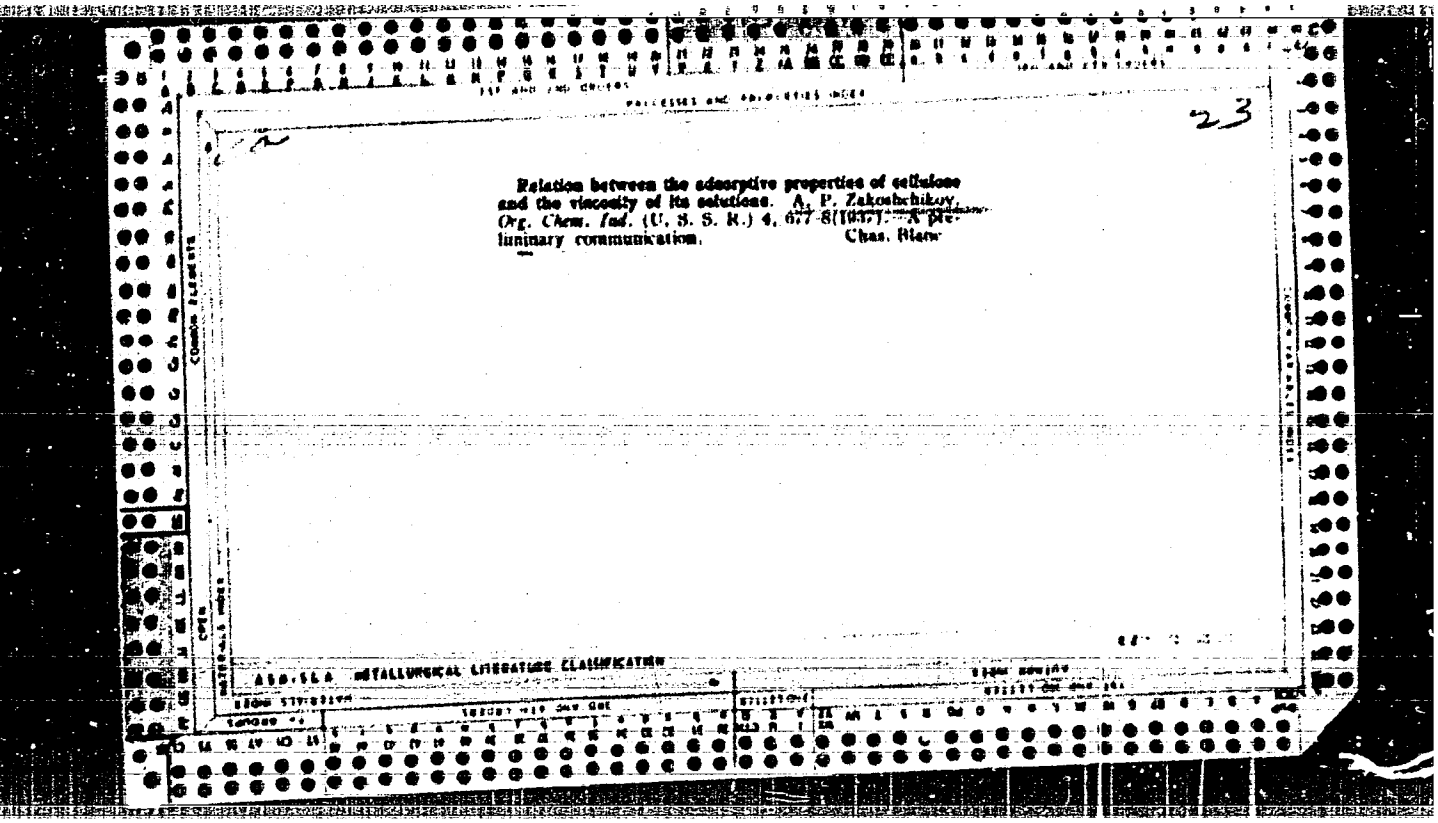
of whiteness of refined cellulose products; the accuracy is better than 1%. The method was used in experl. study of the factors detg. the transparency and whiteness of linters and that of nitrocellulose (II) and cellulose acetate (III). The results show that the transparency (turbidity) of II and III is directly related to that of the refined linters used in the production. Transparency tests and chem. analysis reveal that the transparency of Soviet refined linters is directly related to the contents of fats and waxes and inversely to the wetability of linters. A direct relation exists between the degree and variability of transparency of finished linters and that of the age of crude linters, which varies from 38% for green to 68% for matured linters. The transparency is fundamentally detd. by the condition of alk. steeping and is independent of the degree and method of bleaching. The transparency of bleached sulfite pulp is nearly equal to that of high-grade linters; it is suitable for conversion into II. The index of whiteness of different samples varies considerably less than the transparency, but is for linters of different mills less const. than the transparency. The transparency and whiteness of American (Hercules Powder Company) refined linters is greater than that of Soviet products; it is 88.96 and 92.6%, resp.

Chas. Blanc



Use of the method of viscosity for evaluation of the potential wearing qualities of fiber materials. A. V. Sirovaya and A. P. Zakushchikov. *Colloid J. (U. S. S. R.)* 3, 785-93(1941). The method is suitable in the textile industry for detg. the quality of cotton cloth.
John Livak

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



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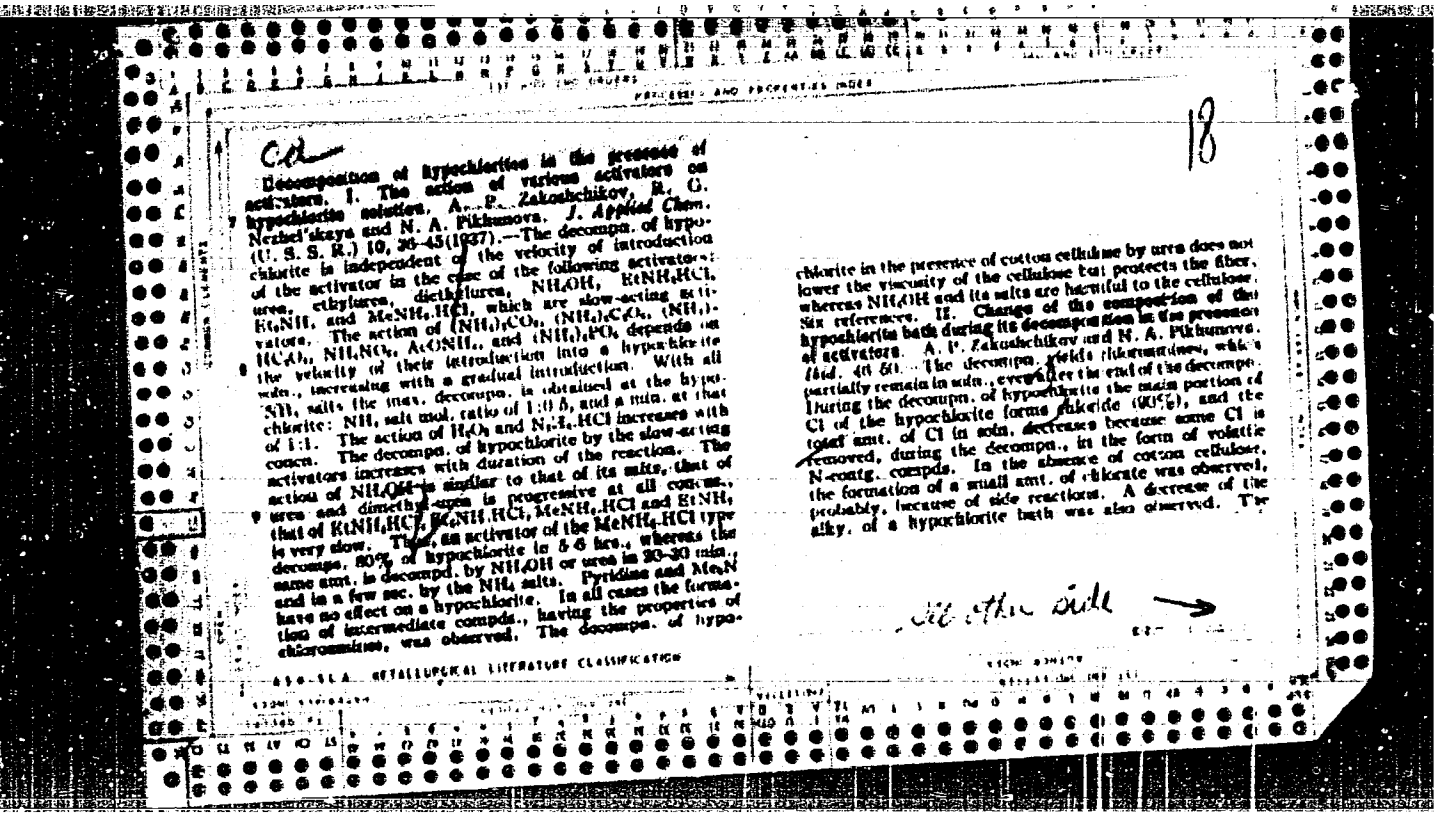
Relation between the adsorptive properties of cellulose and the viscosity of its solutions. A. P. Zakoshchikov. *Org. Chem. Ind.* (U. S. S. R.) 4, 677-8(1937). A preliminary communication. Chas. Blanc



18

CA

Decomposition of hypochlorites in the presence of activators. I. The action of various activators on hypochlorite solution. A. P. Zakoshchikov, R. G. Nezhel'skaya and N. A. Pikhunova. *J. Applied Chem. (U. S. S. R.)* 10, 36-45(1937).—The decompn. of hypochlorite is independent of the velocity of introduction of the activator in the case of the following activators: urea, ethylurea, diethylurea, NH_4OH, $EtNH_2HCl$, Et_2NH, and $MeNH_2HCl$, which are slow-acting activators. The action of $(NH_4)_2CO_3$, $(NH_4)_2C_2O_4$, $(NH_4)HC_2O_4$, NH_4NO_3, $AcONH_4$, and $(NH_4)_2HPO_4$ depends on the velocity of their introduction into a hypochlorite soln., increasing with a gradual introduction. With all activators the max. decompn. is obtained at the hypochlorite: NH_4 salt mol. ratio of 1:0.5, and a min. at that of 1:1. The action of H_2O_2 and $N_2H_4.HCl$ increases with concn. The decompn. of hypochlorite by the slow-acting activators increases with duration of the reaction. The action of NH_4OH is similar to that of its salts, that of urea and dimethylurea is progressive at all concns., that of $KNH_4HC_6H_5O_7$, $EtNH_2HCl$, $MeNH_2HCl$ and $EtNH_2$ is very slow. Thus, an activator of the $MeNH_2HCl$ type decomps. 80% of hypochlorite in 5-6 hrs., whereas the same amt. is decompd. by NH_4OH or urea in 20-30 min., and in a few sec. by the NH_4 salts. Pyridine and Me_3N have no effect on a hypochlorite. In all cases the formation of intermediate compds., having the properties of chloramines, was observed. The decompn. of hypochlorite in the presence of cotton cellulose by urea does not lower the viscosity of the cellulose but protects the fiber, whereas NH_4OH and its salts are harmful to the cellulose. Six references. II. **Change of the composition of the hypochlorite bath during its decomposition in the presence of activators.** A. P. Zakoshchikov and N. A. Pikhunova. *Ibid.* 46-51. The decompn. yields chloramines, which partially remain in soln., even after the end of the decompn. During the decompn. of hypochlorite the main portion of Cl of the hypochlorite forms chloride (80%), and the total amt. of Cl in soln. decreases because some Cl is removed, during the decompn., in the form of volatile N-contg. compds. In the absence of cotton cellulose, the formation of a small amt. of chlorate was observed, probably, because of side reactions. A decrease of the alky. of a hypochlorite bath was also observed. The

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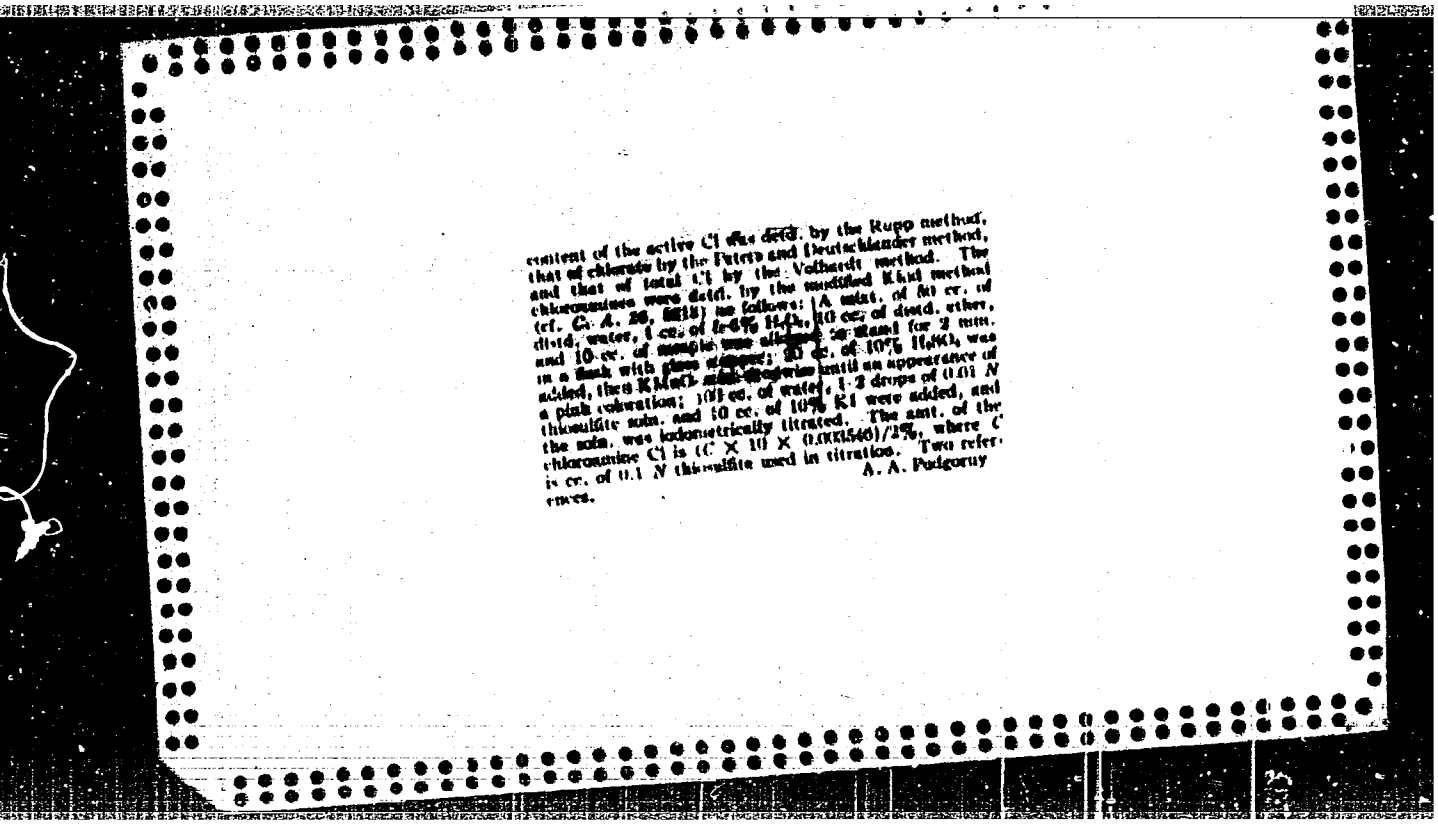
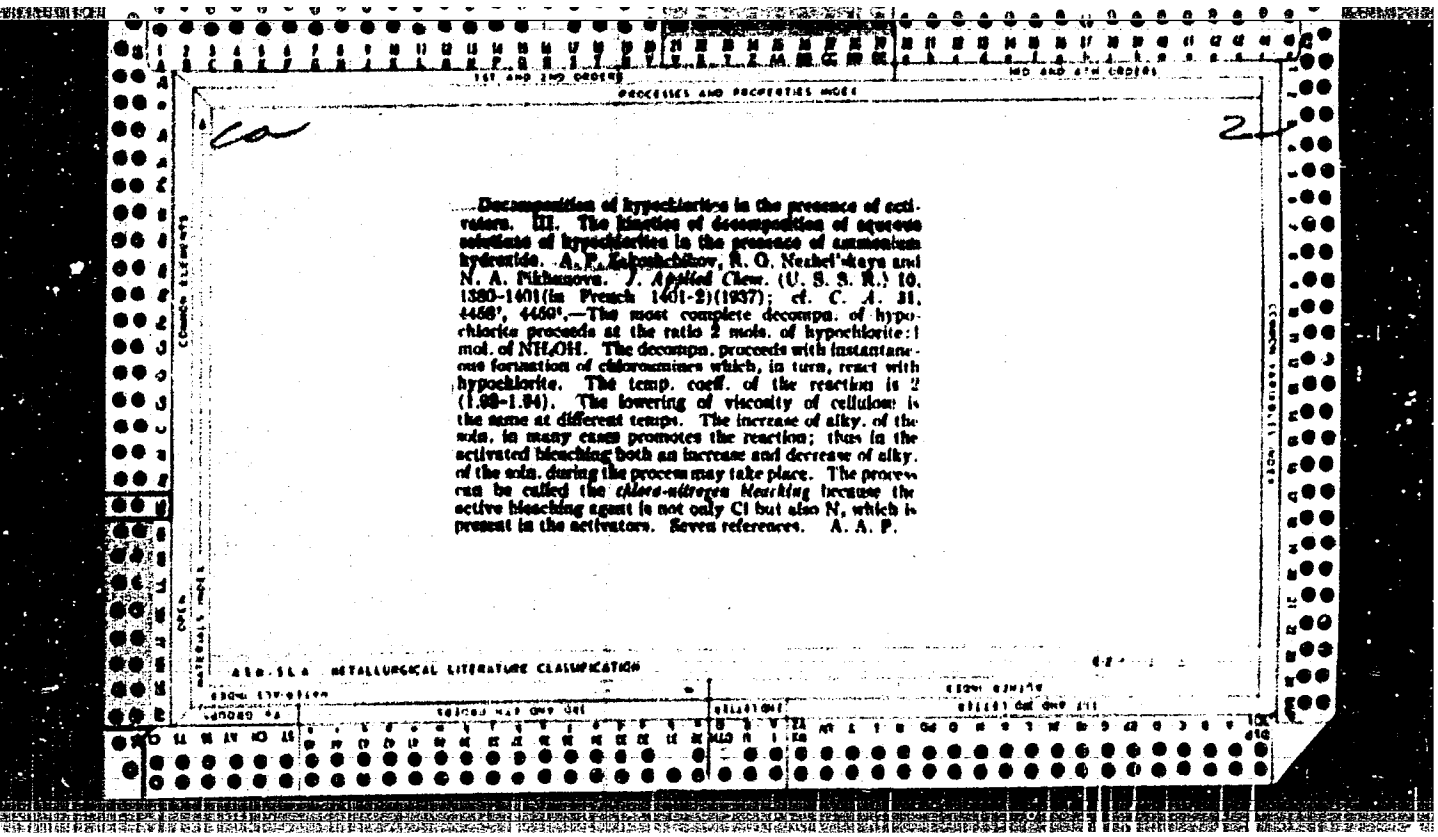


content of the active Cl was detd. by the Rupp method, that of chlorate by the Fetes and Deutschlander method, and that of total Cl by the Volhardt method. The chloramines were detd. by the modified Kind method (cf. C. A. 20, 3818) as follows: [A mixt. of 50 cc. of dried. ether, dried. water, 1 cc. of 5-6% H2O2, 10 cc. of dried. ether, and 10 cc. of sample was allowed to stand for 2 min. in a flask with glass stopper; 20 cc. of 10% KHCO3 was added, then KMnO4 soln. dropwise until an appearance of a pink coloration; 100 cc. of water, 1-2 drops of 0.01 N thiosulfate soln. and 10 cc. of 10% KI were added, and the soln. was iodometrically titrated. The amt. of the chloramine Cl is (C × 10 × (0.003546)/2%, where C is cc. of 0.1 N thiosulfate used in titration. Two refer-
ences.

A. A. Podgornyy



PROCESSES AND PROPERTIES INDEX

Ca

2

Decomposition of hypochlorites in the presence of activators. III. The kinetics of decomposition of aqueous solutions of hypochlorites in the presence of ammonium hydroxide. A. P. Zakushchikov, R. O. Nezhel'skaya and N. A. Pikhtsova. *J. Applied Chem.* (U. S. S. R.) 10, 1380-1401(in French 1401-2)(1937); cf. *C. A.* 31, 4468', 4469'.—The most complete decompn. of hypochlorite proceeds at the ratio 2 mols. of hypochlorite:1 mol. of NH_4OH. The decompn. proceeds with instantaneous formation of chloroamines which, in turn, react with hypochlorite. The temp. coeff. of the reaction is 2 (1.88-1.94). The lowering of viscosity of cellulose is the same at different temps. The increase of alky. of the soln. in many cases promotes the reaction; thus in the activated bleaching both an increase and decrease of alky. of the soln. during the process may take place. The process can be called the *chloro-nitrogen bleaching* because the active bleaching agent is not only Cl but also N, which is present in the activators. Seven references. A. A. P.

ARS-SLA METALLURGICAL LITERATURE CLASSIFICATION

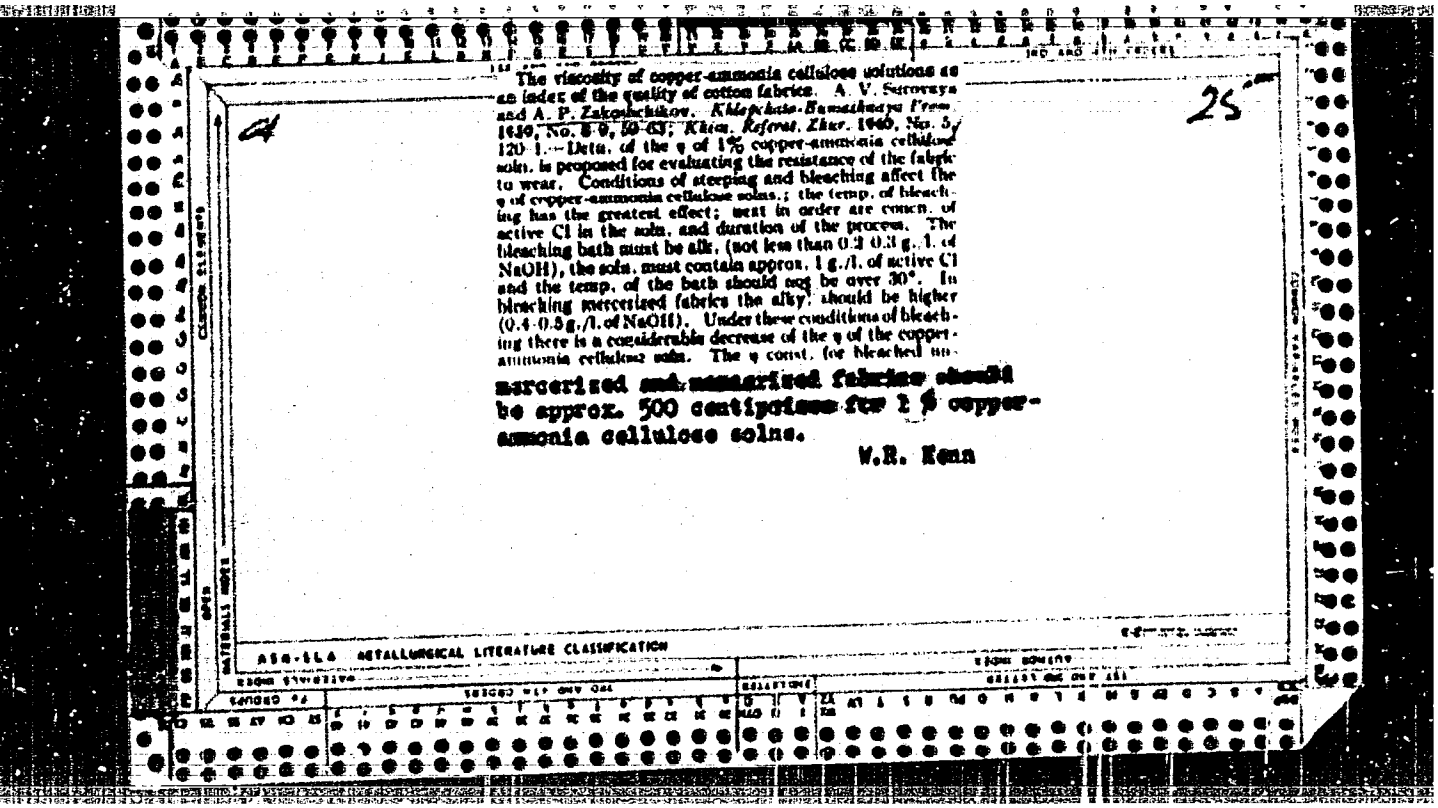
PROCESSES AND PROPERTIES INDEX

CA

96

A new method for bleaching cotton fabrics with chlorine gas. N. A. Mikitskii, A. P. Zakoshchikov, N. A. Bosis and N. I. Stepanova. *Novye Metody Belen'ya Krasheniya i Otdelki Khlopchatobumazh. Tkanei, Sbornik Rabot Khim.-Kolorist. Otdel. Nauch.-Issledovatel. Inst. Khlopchatobumazhnoi Prom.* 1939, 7-41; *Khim. Referat. Zhur.* 1940, No. 8, 108-9; cf. *C. A.* 36, 1186[1].—The fabric is wet with water (not in NaOH soln.), treated with Cl, washed with water and alkali, boiled in NaOH soln. with rosin soap, washed, treated with NaCl soln., washed, acidified, washed and dried. Cl transforms the noncellulose substances partly into polymeric derivs. of sugars and starch, which during the subsequent treatment with alkali are easily sepd. from the fabric. Wetting in water produces a strong fabric with a high capillarity, whiteness and η and permits a longer treatment with Cl_2 than is possible on wetting the fabric in alkali. The method was verified in the lab. and under semiproduction and production conditions. Good results were obtained. W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



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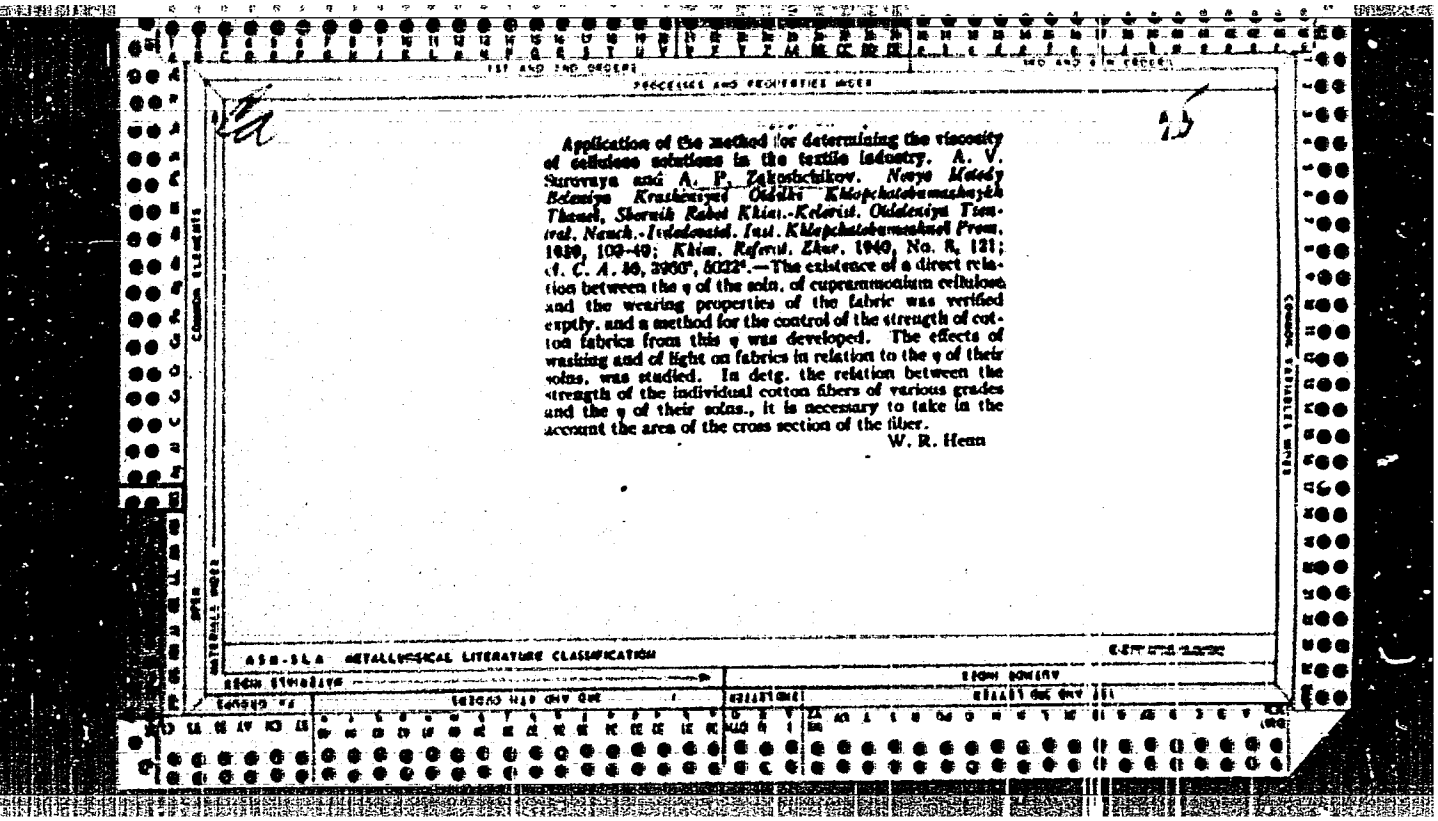
25

The viscosity of copper-ammonia cellulose solutions as an index of the quality of cotton fabrics. A. V. Sarovaya and A. P. Zakoshchikov. *Khlopchato-Bumazhnaya Prom.* 1960, No. 8, 30-31; *Khim. Referat. Zhur.* 1960, No. 5, 120. 1.—Deta. of the η of 1% copper-ammonia cellulose soln. is proposed for evaluating the resistance of the fabric to wear. Conditions of steeping and bleaching affect the η of copper-ammonia cellulose solns.; the temp. of bleaching has the greatest effect; next in order are concn. of active Cl in the soln. and duration of the process. The bleaching bath must be alk. (not less than 0.2-0.3 g./l. of NaOH), the soln. must contain approx. 1 g./l. of active Cl and the temp. of the bath should not be over 30°. In bleaching mercerized fabrics the alky should be higher (0.4-0.5 g./l. of NaOH). Under these conditions of bleaching there is a considerable decrease of the η of the copper-ammonia cellulose soln. The η const. for bleached unmercerized and mercerized fabrics should be approx. 500 centipoises for 1 % copper-ammonia cellulose solns.

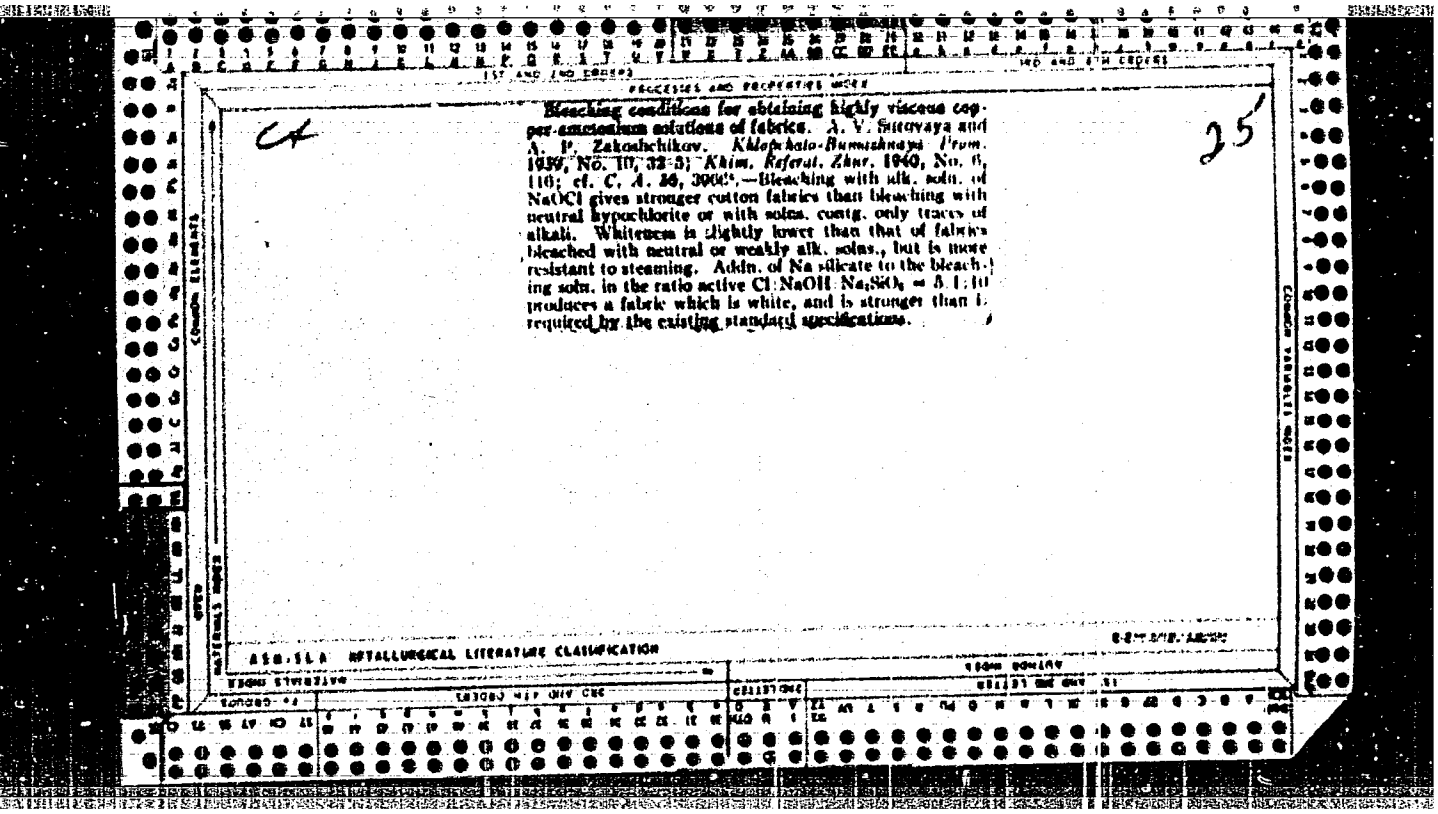
W.R. Kenn

A56-5L6 METALLURGICAL LITERATURE CLASSIFICATION

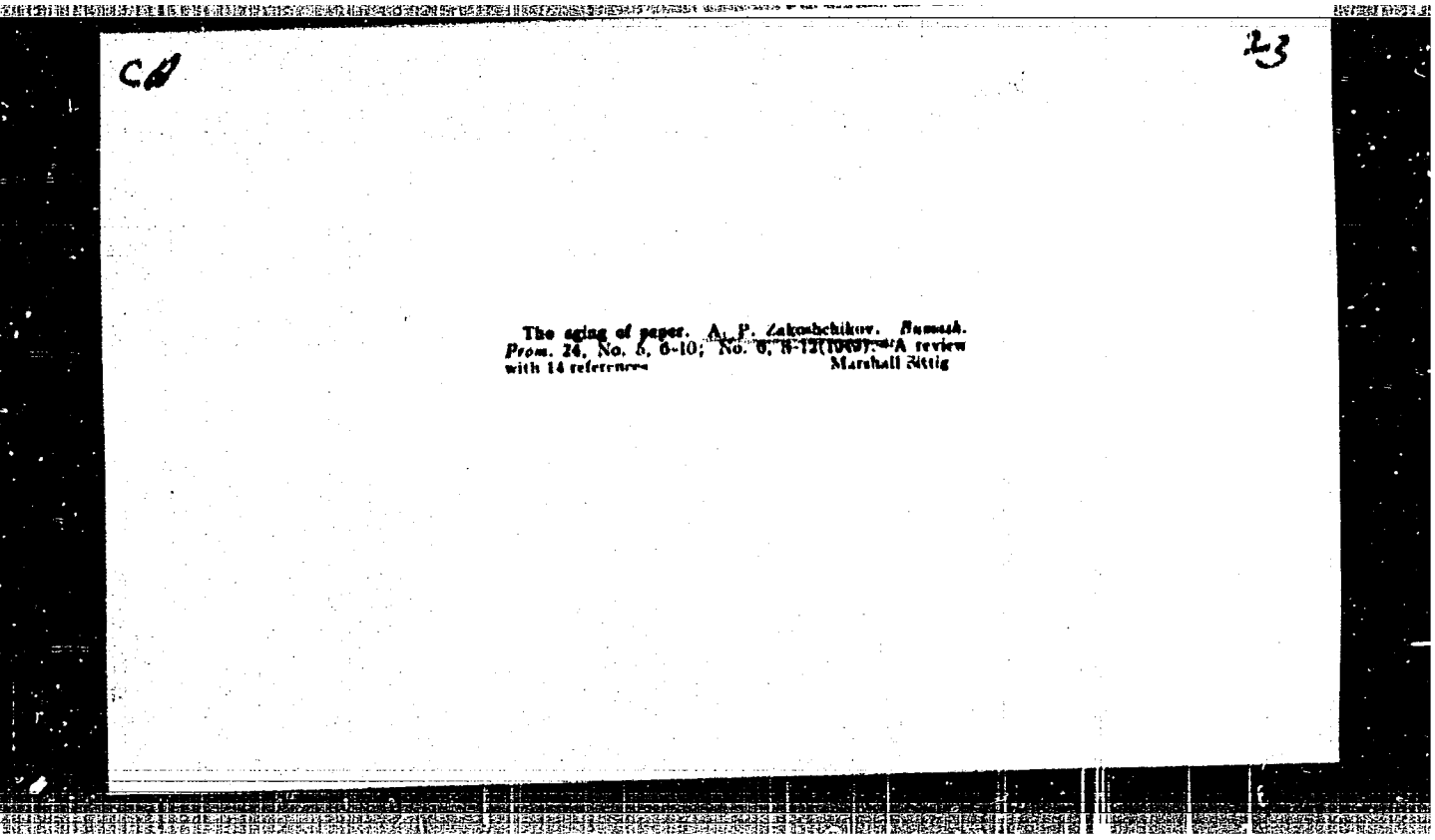


Application of the method for determining the viscosity of cellulose solutions in the textile industry. A. V. Surovaya and A. P. Zakoshchikov. *Nauch. Issledovat. Inst. Khlopchatobumazhnoi Prom.* 1939, 102-49; *Khim. Referat. Zhur.* 1940, No. 8, 121; cf. *C. A.* 40, 3960⁸, 5022⁸.—The existence of a direct relation between the η of the soln. of cuprammonium cellulose and the wearing properties of the fabric was verified empty, and a method for the control of the strength of cotton fabrics from this η was developed. The effects of washing and of light on fabrics in relation to the η of their solns. was studied. In detg. the relation between the strength of the individual cotton fibers of various grades and the η of their solns., it is necessary to take in the account the area of the cross section of the fiber.

W. R. Henn



Bleaching conditions for obtaining highly viscous copper-ammonium solutions of fabrics. A. V. Sitovaya and A. P. Zakoshchikov. *Khlopchato-Bumazhnaya Prom.* 1959, No. 10, 32-5; *Khim. Referat. Zhur.* 1960, No. 6, 116; cf. *C. A.* 50, 3006i.—Bleaching with alk. soln. of NaOCl gives stronger cotton fabrics than bleaching with neutral hypochlorite or with solns. contg. only traces of alkali. Whiteness is slightly lower than that of fabrics bleached with neutral or weakly alk. solns., but is more resistant to steaming. Addn. of Na silicate to the bleaching soln. in the ratio active Cl:NaOH:Na_2SO_4 = 5.1:10 produces a fabric which is white, and is stronger than is required by the existing standard specifications.



CA

23

The aging of paper. A. P. Zakoshchikov. *Bumazh. Prom.* 24, No. 5, 6-10; No. 6, 8-12(1949).—A review with 14 references Marshall Sittig

1. ALEKSEYEVA, T. B.; ASHKINAZI, YE. S.; ZAKOSHCHIKOV, A. P.; KOLOBOVA, O. V.; OTTSOVSKAYA, A. I.

2. USSR (600)

4. Paper Industry

7. Effect of the degree of polymerization of pulp on its characteristics in the hollander process. Bum. prom. 27, No. 7, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

AGEYEV, L.M.; KOROL'KOV, S.I.; ZAKOSHCHIKOV, A.P., redaktor; VOL-KHOVER, R.S., tekhnicheskiy redaktor.

[Chemical and technical control and accounting in hydrolytic and sulfite liquor production] Khimiko-tekhnicheskii kontrol' i uchet gidroliznogo i sul'fitno-spirtovogo proizvodstva. Moskva, Goslesbumizdat, 1953. 403 p. (MLRA 7:8)
(Wood pulp industry)

ZAKRZHEVSKII, A. P.

Hydrolysis of pentosans from cotton hulls, sunflower hulls, corn husks, and beech sawdust. A. P. Zakrzhevskii, Z. M. Polyvyanyi, M. G. Semenko, and G. F. [illegible]. *Gidroliz. i Lesokhim. Prom.* 6, No. 4, 9-11(1953). Cotton hulls (I), sunflower hulls (II), corn husks (III), beech sawdust (IV) were boiled in 0.3% H_2SO_4 at [illegible] (the ratio of the material to the soln. was 1:10), washed, dried, and hydrolyzed by boiling in 0.5 and 1.0% H_2SO_4 soln. for 1 hr. at atm. pressure. I, II, III, and IV, resp., contained 23.3, 24.1, 33.6, and 24.8% of easily hydrolyzable polysaccharides, of which 20.2, 20.5, 35.0, and 20.2% were pentosans, 39.2, 41.8, 13.9, and 45.8% of difficultly hydrolyzable polysaccharides, 5.13, 6.95, 5.86, and 4.8% of uronic acids, 3.30, 2.69, 3.10, and 0.87% of protein. II and IV contained about 2% of pentosans that did not hydrolyze readily. In III some hexoses dissolved together with pentosans. The yields of fermentable sugars were with 0.3% H_2SO_4 3.21, 1.25, 4.16, and 1.33%; with 2.0% H_2SO_4, 13.85, 7.0%, 18.59, and 7.44% based on pentoses; 0.2% H_2SO_4 gave 25.4, 69.2, 15.2, and 21.2%; and 1.0% H_2SO_4 12.5, 10.8, 10.2, and 7.4% of uronic acids. Pentosans in III and I hydrolyzed rapidly, but the reaction was slower with IV and II. The relative content of uronic acids in the hydrolysis of II, when assuming the max. yield of 22.94%, has remained the same, but some volatile acids were formed on treatment with 5% H_2SO_4 [illegible]

(3)

ZAGOSKIN, B.I.; MACHINSKIY, A.P., kand. veter. nauk

The connection between a technical school and agricultural production becomes stronger. Veterinariia 37 no.6:20-22 Je '60. (MIRA 16:7)

1. Zamestitel' direktora po uchebnoy chasti Ryazanskogo zootekhnicheesko-veterinarnogo tekhnikuma (for Zagoskin).
(Veterinary medicine--Study and teaching)

ZAGOSKIN, B. I. and MACHINSKIY, A. P.

"The connection between a technical school and agricultural production is becoming stronger."

Veterinariya, Vol. 37, No. 6, 1960, p. 20

Zagoskin - Deputy Director for Sci. Training

ZAGOSKIN, Lavrentiy Alekxandrovich, leytenant; CHERNENKO, M.B., redaktor; AGRANAT, G.A., redaktor; BLOMKVIST, Ye.E., redaktor; VORONTSOVA, A.N., redaktor; GLEYKH, D.A., tekhnicheskiy redaktor.

[Voyages and explorations of Lieutenant Lavrentii Zagoskin in Russian America during the period of 1842-1844] Puteshestviia i issledovaniia Leitenanta Lavrentiia Zagoskina v russkoy Amerike v 1842-1844 gg. Moskva, Gos.izd-vo geogr. lit-ry, 1956. 453 p. (MLRA 9:5)

(Zagoskin, Lavrentii Alekseevich, 1807-1890) (North America--Discovery and explorations)

ZAGOSKIN, M. P.

FA 6/49T27

USSR/Engineering Jul 48
Energy - Conservation
Furnaces, Electric

"[illegible] for Economizing on Power Consumption in Heat Treatment, Casting and Forging Shops of Machine Construction Factories," N. F. Tikhonov, M. P. Zagoskin, A. S. Kudryavtsev, V. A. Dudinov, Kirov Factory in Urals, 5 pp

"Prom Energet" No 7

Suggestions were awarded a third prize in the All-Union Contest. Describes how capacity of electric furnace was increased, and construction and working

6/49T27

USSR/Engineering (Contd) Jul 48

routine altered. Diesel cylinder blocks and heads are now cast in chills instead of molds. Mentions various refinements in molding and molting techniques. Refers to forging of caterpillar tracks in two heats instead of three, reducing piston clearances in hammers and reducing air supply for fans in coke fires.

6/49T27

ZAGOSKIN, V.A.

Primary zoning in gold ore veins of the middle Vitim mountain country. Geol. rud. mestorozh. 5 no.5:91-94 S-O '63.

1. Universitet druzhby narodov imeni Patrisa Lumumby.

ZAGOSKIN, V.A.

Stages in the ore formation of gold ore manifestations in the central Vitim mountain country. Izv.vys.ucheb.zav.; geol.i razv. 6 no.3:71-80 Mr '63. (MIRA 16:5)

1. Universitet druzhby narodov imeni P.Lumumby.
(Vitim Plateau--Gold ores)

1. ZAGOSKIN, Ye. I., Eng.

2. USSR (600)

4. Electric Transformers

7. Drying transformers with zero sequence current, Elek. sta., 23, No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

ZAGOSKIN, Yu.B., inzh.; SHERMAN, V.L., inzh.

Screwdriver with flexible shaft for M5-M8 screws and nuts. Stroi. i dor. mash. 7 no.3:31-32 Mr '62. (MIRA 15:4)
(Screwdrivers)

KREYNDLIN, L.N., inzh.; ZAGOSKINA, G.V., red.; KOLOMEYER, V.Z., tekhn.red.

[Machine for sawing out hinge seats] Stanok dlia vypilivaniia gnezd pod petli. Moskva, TSentr.biuro tekhn.informatsii Glavstandartoma, 1959. 12 p. (MIRA 13:1)

1. Giprostandartdom (for Kreyndlin).
(Hinges) (Building--Tools and implements)

SHELUDCHENKO, Ye.M., red.; ZAGOSKINA, G.V., red.

[Production of particle board] Proizvodstvo drevesno-struzhechnykh plit. Moskva, 1964. 20 p. (MIRA 18:5)

1. Moscow. TSentral'nyy nauchno-issledovatel'skiy institut informatsii i tekhniko-ekonomicheskikh issledovaniy po lesnoy, tsellyulozno-bumazhnoy, derevoobrabatyvayushchey promyshlennosti i lesnomu khozyaystvu.

OTLEV, I.A., kand. tekhn. nauk; ZAGOSKINA, G.V., red.

[Pressing particle board in multistory hydraulic presses] Pressovanie struzhechnykh plit v mnogoetazhnykh gidravlicheskikh pressakh. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tselliulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoz., 1964. 25 p. (MIRA 18:5)

1. Bryanskiy tekhnologicheskiy institut (for Otlev).

TANSKIY, V.V., inzh.; ZAGOSKINA, G.V., red.; SHMNDAREVA, L.V., tekhn.red.

[Making particle board using the pneumatic fractionation of shavings] Proizvodstvo drevesno-struzhechnykh plit s pnevmaticheskim fraktsionirovaniem struzhek. Moskva, TSentr.biuro tekhn.informatsii Glavstandartdoma, 1959. 15 p. (MIRA 13:1)

(Wood, Compressed)

KREINDLIN, L.N.; DROZDOV, I.Ya.; ZAGOSKINA, G.V., nauchn.red.; SHIGLAREVA, L.V., tekhn.red.

[Using fiberboard in building] Primenenie drevesno-voloknistykh plit v stroitel'stve. Moskva, TSentr. in-t tekhn. informatsii i ekonom. issl. po lesnoi, bumazhnoi i derevoobrabatyvaiushchei promyshl., 1963. 67 p. (MIRA 16:10)

(Fiberboard)

EPSHTEYN, T.G.; ZAGOSKINA, G.V., red.

[Automatic lines for the veneering of panel-type parts and particle board] Avtomaticheskie linii dlia fanerovaniia shchitovykh detalei i struzhechnykh plit. Moskva, TSentr. nauchno-iss . in-t informatsii i tekhniko-ekon. issl. po lesnoi, tselliulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoziaistvu, 1963. 39 p. (MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorskiy institut derevoobrabatyvayushchego mashinostroyeniya (for Epshteyn).

BAKHTEYAROV, V.D.; ZAGOSKINA, G.V., red.; SHENDAREVA, L.V., tekhn. red.

[Ways of increasing the yield of wood products and the efficient utilization of wastes] Puti povysheniia vykhoda produktsii iz drevesiny i ratsional'nogo ispol'zovaniia otkhodov. Moskva, TSentr. in-t tekhn. informatsii i ekon. issl. po lesnoi, bumazhnoi i derevoobrabatyvaiushchei promyshl., 1962. 71 p. (MIRA 16:6)
(Wood-using industries) (Wood waste)

SAKHAROV, M.D.; ZAGOSKINA, G.V., red.

[Present-day elements of window blocks for housing construction] Sovremennye konstruktsii okonnykh blokov dlia zhilishchnogo stroitel'stva. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tsellyulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoz., 1963. 47 p. (MIRA 17:9)

ZAGOSKINA, G.V., red.; SHLUDCHENKO, Ye.M., red.; POSPELOVA, G.L., red.

[Production of particle board; based on the materials of the seminars] Proizvodstvo drevesno-struzhechnykh plit; po materialam seminarov. Moskva, TSentr.nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tsellyulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoz., 1964. 105 p. (MIRA 18:8)

1. Vsesoyuznyy seminar rabotnikov predpriyatiy drevesno-struzhechnykh plit, osnashchennykh otechestvennym oborudovaniyem. 1964.

KOZENKO, A.B.; ZONTOV, A.K.; KOPTSOV, V.S.; FROLOV, A.V., red.; ZAGOSKINA, G.V., red.; SHENDAREVA, L.V., tekhn. red.

[Automated continuous production line for the manufacture of fiberboards]Avtomatizirovannaia potochnaia liniia dlia proizvodstva fibrolitovykh plit. Moskva, TSentr. in-t tekhn. informatsii i ekon. issl. po lesnoi, bumazhnoi i derevoobrabatyvaiushchei promyshl., 1962. 68 p. (MIRA 16:4)
(Fiberboard) (Assembly-line methods)

ARSEN'YEV, K.K., kand. tekhn. nauk; MOROZOV, N.A., kand. tekhn. nauk; GNCHEDRO, D.A., inzh.; ZAGOSKINA, G.V., red.

[Pressing of furniture parts from ground wood] Pressovanie mebel'nykh detalei iz izmel'chennoi drevesiny. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tsellyulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoz., 1964. 20 p. (MIRA 17:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.

ZAGOSKINA, G. V.

KRASOVSKIY, S.P., redaktor; ZAGOSKINA, G.V., redaktor; SHEMDAREVA, L.V., tekhnicheskiy redaktor

[Manufacture of wood-shaving boards] Proizvodstvo drevesno-struzhechnykh plit. Moskva, TSentral'noe biuro tekhn.informatsii, 1957. 42 p. (MLRA 10:8)

1. Russia (1923- U.S.S.R.) Ministerstvo bumazhnoy i derevoobrabatyvayushchey promyshlennosti (Paperboard)

KOBAL'CHUK, L.M., kand. tekhn. nauk; BASKAKIN, Ye.N.; BELOZEROVA, A.S.; ZAGOSKINA, G.V., nauchn. red.

[Mechanized dovetail gluing of wood] Mekhanizirovannoe skleivanie drevesiny na zubchatyi ship. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tselliulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoziaistvu, 1963. 43 p. (MIRA 17:5)

DADEYEV, V.; ZAGOSKINA, V.

In the struggle for high rank. Prof.-tekh.obr. 18 no.6:27-28 Je '61. (MIRA 14:7)

1. Direktor Spetsial'nogo professional'no-tekhnicheskogo uchilishcha No.11 (g. Shuya, Ivanovskoy oblasti) (for Dadeyev). 2. Pomoshchnik direktora po kul'turnovospitatel'noy rabote Spetsial'nogo professional'no-tekhnicheskogo uchilishcha No.11 (g. Shuya, Ivanovskoy oblasti) (for Zagoskina).

(Ivanovo Province--Textile workers)
(Ivanovo Province--Evening and continuation schools)

ZAGOSKINA, Ye.D.; SIKORSKIY, K.P.; VELICHKOVSKIY, Ye.I., red.; KREKSHINA, L., red. izd-va; YAKOVLEVA, Ye., tekhn. red.

[Special aspects of teaching mathematics in grades 5-7 according to the new program; methodological instructions for Moscow teachers] Osobennosti prepodavaniia matematiki v V-VII klassakh po novoi programme; metodicheskie ukazaniia dlia uchitelei g. Moskvy. Moskva, Mosk.rabochii, 1962. 84 p. (MIRA 15:7)

1. Moscow. Gorodskoy institut usovershenstvovaniya uchiteley. (Mathematics—Study and teaching)

ZAGOSKINA, Ye.D.; SIKORSKIY, K.P.; ZEVINA, A.N., otv. red.; VORONKOV, M.I., red.

[Recommended mathematics curriculum for the second half of the 1962-1963 school-year (grade 5 to 11)] Primernyi plan raboty po matematike vo vtorom polugodii 1962-1963 uchebnogo goda (V-XI klassy). Moskva, 1963. 83 p. (MIRA 16:8)

1. Moscow. Gorodskoy institut usovershenstvovaniya uchiteley.
2. Direktor Moskovskogo gorodskogo instituta usovershenstvovaniya uchiteley (for Zevina).
(Mathematics--Study and teaching)

ZAGOSKINA, Ye.D.; SIKORSKIY, K.P. (Moskva)

Methodical hints pertaining to the teaching of mathematics in the 5th and 6th grades. Mat. v shkole no. 6:45-53 N-D '50. (MLRA 14:2)

(Mathematics--Study and teaching)

GRISHANOV, A., insh.; ZAGOVALKO, M.

Excellent track maintenance on our division. Zhel.dor.transp. 36 no.6:65-69 Je '55. (MIRA 12:4)

1. Nachal'nik Kamyshlovskoy distantsii puti (for Grishanov).
2. Kamyshlovskaya distantsiya puti (for Zagovalko).
(Sverdlovsk Province--Railroads--Track)

ZAGOVEL'YEV, A.

Toward new success! Prom.koop. 14 no.2:1-3 F '60.
(MIRA 13:5)

1. Predsedatel' pravleniya Rospromsoveta.
(Cooperative societies)

ZAGOVEL'YEV, A.

Our important tasks. Prom.koop. 13 no.1:1-3 Ja '59.
(MIRA 12:2)

1. Predsedatel' pravleniya Rospromsoveta.
(Cooperative societies)

S/076/63/037/003/004/020
B101/B215

AUTHORS: Yermakov, V. I., Smirnov, N. I., and Zagoretu, N. A. (Moscow)

TITLE: Study of solutions by high-frequency methods. VI. Dispersion effects in electrolyte solutions in a wide frequency range of the electromagnetic field

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 3, 1963, 544-552

TEXT: A non-resonance circuit (Fig. 4) is suggested for measuring the relaxation effects in electrolytes. Measurements were conducted by using the equations $\dot{U}_3 = \dot{e}I_{br}/Y_{sol}$ or $Y_{sol} = \dot{J}k\dot{U}_{br}/\dot{U}_3$, where $k = k_1 k_2/K.K_{...}$, [illegible] to the resistance box of the bridge and $_{sol}$ to the electrolyte solution. Measurements with frequencies up to 200 Mc/sec yielded a stepwise course of the curve electroconductivity versus concentration for KCl, $MgCl_2$ and $AlCl_3$. This is explained by steric hindrance effects on reformation of the hydrate complexes with a certain lifetime. Short-lived hydrates are found at

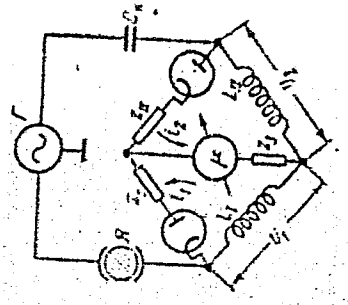
Card 1/2

frequencies above 10^8 cps, whereas below 1 Mc/sec, only the most stable hydrate shells are observed. There are 8 figures.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: November 5, 1961

Fig. 4. Principle of a z-meter circuit with high-frequency compensation; legend: Я = cell; Г = generator.



L 11393-63 EWT(m)/BDS AFFTC/ASD

S/120/63/000/002/037/041

AUTHOR: Chukichev, M. V. and Zagorets, P. A.

TITLE: Using silicon alpha-particle counters for measurements in solutions

PERIODICAL: Pribory i tekhnika eksperimenta, March-April 1963, v. 8 no 2 172-173

TEXT: The article describes the recently developed silicon alpha-particle detectors using a surface barrier and a p-n junction. These counters may be used to determine the concentration of alpha active substances in solutions by measuring the intensity of alpha particles leaving the surface of such solutions. Test results are given and show that counter noise is 5 imp/min and that the instrument is capable of measuring a concentration of the order of $C_{U233} = 1.5 \cdot 10^{-6}$ g/cm^3. There are two figures

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut (Moscow Chemical Technology Institute)

SUBMITTED: May 28, 1962

Card 1/1 ja/CA

CHUKICHEV, M.V.; ZAGORETS, P.A.

Use of silicon alpha-counters for measurements in solutions. Prib. i tekh. eksp. 8 no.2:172-173 Mr-Ap '63. (MIRA 16:4)

1. Moskovskiy khimiko-tekhnologicheskiy institut.
(Nuclear counters)

AUTHOR: Zagorets, P. A.; Yermakov, V. I.; Ormaa, A. P.

[illegible] and nuclear magnetic re-

[illegible]

echo apparatus

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 6, 1963, 1413-1415

TOPIC TAGS: high-frequency method, nuclear magnetic resonance method, spin echo apparatus, spin-lattice relaxation time, $FeCl_3 - NH_4F$

ABSTRACT: A method has been proposed for the relative determination of the spin-lattice relaxation time (T_1) by means of spin echo technique. The possibility of using this method in studies of complexation in solutions has been illustrated on the example of complex formation in the system $FeCl_3$ - NH_4F. Orig. art. has: 2 figures.

ASSOCIATION: Khimiko-tekhnologicheskiy insititut im. D. I. Mendeleyeva (Chemical Engineering Institute)

SUBMITTED: 00 DATE ACQ: 16 Jul 63 ENCL: 00

SUB CODE: 00 NO REF SOV: 005 OTHER: 002

Card 1/1

ZAGOREVSKIY, V.; DUDYKINA, N. V.; Prinimala uchastiye MINLIKEYEVA, G. I.

Ring expansion in the reduction of oximes. Zhur. ob. khim. 33 no.1:322-323 '63. (MIRA 16:1)

1. Institut farmakologii i khimioterapii AMN SSSR.

(Oximes) (Reduction, Chemical)

ZAGOREVSKIY, V.A.; ZYKOV, D.A.

Series of pyran, its analogs, and related compounds. Part 2: Dialkylaminomethylation of esculetin and 4-methylesculetin. Zhur.ob.khim. 33 no.3:793-797 Mr '63. (MIRA 16:3)

1. Institut farmakologii i khimioterapii AMN SSSR.
(Pyran) (Esculetin) (Coumarin)

LEBEDEVA, L.N., assistent; ZAGOVORA, A.V., kand.biolog.nauk; RYAZANTSEVA, N.N.; POGORELL'SKIY, L.G.; GOLUBINTSEVA, A.P., kand.sel'skokhoz.nauk (Novosibirsk); GADZHIYEV, G.E.

Brief reports. Zashch. rast. ot vred. i bol. 6 no.7:56-57 Jl '61. (MIRA 16:5)

1. Kafedra plodovodstva i zashchity rasteniy Novosibirskogo sel'skokhozyaystvennogo instituta (for Lebedeva). 2. Ukrainskiy institut rastitniyevodstva, selektsii i genetiki, Khar'kov (for Zagovora, Ryazantseva). 3. Nachal'nik karantinnoy inspektsii Dagestanskoy ASSR (for Pogorel'skiy). 4. Zaveduyushchiy mezhrayonnoy biolaboratoriyey, Kubinskiy rayon (for Gadzhiyev).

(Plants, Protection of)

ZAGOVORA, A.V.

Some characteristics of the reproduction of the Hessian fly in the Ukraine. Vop. ekol. 7:61-62 '62. (MIRA 16:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut rasteniyevodstva, selektsii i genetiki, Khar'kov.
(Ukraine--Hessian flies)

P

COUNTRY : USSR
CATEGORY : GENERAL & SPEC. ZOOLOGY. INSECTS
Insect and Mite Pests.
ABS. JOUR : Ref Zhur-Biologiye, No.4 , 1959, No. 16289

AUTHOR : Zagovora, A.Ye.
INST. : Ukrainian Sci.Res.Inst. of Plant Cultivation,*
TITLE : Number of Hessian Flies with Different Methods of Soil Treatment.

ORIG. PUB.: Byul. Ukr. n.-i. in-ta rastenivodstva, selekts. i genet., 1958, No.2, 127-128

ABSTRACT : Experiments were set up in 1955 in Akhmatovskaya Oblast on a field under winter wheat which had suffered radically from Hessian flies: 65.4% of the plants were damaged, and there averaged 4.0 pseudo-cocoons on 1 m. The percentage of flies which flew out with soil disking on 8 - 9 cm was 89.9 as compared with the control, with unplowed tillage on 35 - 40 cm -- 82.7%, with plowed tillage with pre-plowing on 24 - 25 cm -- 19.5%. Deep

CARD: 1/2 *Selection, and Genetics

COUNTRY : USSR P

CATEGORY : GENERAL, SPEC. ZOOLOGY, INSECTS

ABS. JOUR : Insect and Mite Pests, Ref Zhur -Biologiya, No. 4, 1959, No. 16284

AUTHOR : Zagorova, A.V.

INST. : Ukrainian Sci.Res.Inst. of Plant Cultivation.*

TITLE : Increased Effectiveness in the Struggle with the Corn Borer.

ORIG. PUB.: Byul. Ukr. n.-i. in-ta rastenivodstva, selekts., i genet., 1958, No.2, 129-131

ABSTRACT : According to a 3-year follow-up on corn stalks 20, 30, and 50 cm high the percentage of caterpillars found in Bogodukhovsky Rayon was correspondingly 37.4, 48.9, and 67.1, and in Khar'kovsky Rayon it was 24.4, 34.5, and 56.2. After reaping of the corn combine for the grain on an average for 2 years there remained a stubble 20, 31 - 50, and 31 0 50 cm high and respectively 14, 34, and 46%. For increased effectiveness in the struggle with the corer

CARD: 1/2 *Selection and Genetics

COUNTRY :
CATEGORY : GENERAL&SPEC.ZOOLOGY.INSECTS

ABS. JOUR.: Ref Zhur -Biologiya, No. 4, 1959, No. 15[illegible]

Author :
INST. :
TITLE :

ORIG. PUB.:

ABSTRACT :a series of projects is necessary to eliminate it, and the remnants of hemp, millet, and corn stalks must be plowed in. -- A.P. Adrianov

CARD : 2/2

USSR / General and Special Zoology. Insects. P

Abs Jour: Ref Zhur-Biol., No 4, 1958, 16420

Author : Zagovora A.V.
Inst : Not given
Title : Injurious Eurygaster on Maize.
(Vrednaya cherepashka na kukuruze).

Orig Pub: Zashchita rast.ot vredit. i boleznei, 1957, No 3, 49-50

Abstract: No abstract.

Card 1/1

SOV/143-58-11-3/16

9(3)
AUTHORS: Zagovorskiy, Ye.N., Engineer, and Rumyantsev, Yu.G., Engineer

TITLE: The Determination of Losses in Enclosed Buses and Their Thermal Calculation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Energetika, 1958, Nr 11, pp 21-30 (USSR)

ABSTRACT: Power generators terminal buses have a design which is different from the open buses presently used. Terminal buses of high-capacity generators must meet the following requirements: a) extraordinary high reliability; b) reduction of losses in surrounding steel constructions; c) limiting electrodynamic forces on buses; d) high economic indexes. The simultaneous satisfaction of all these requirements is made difficult, since the known bus designs contradict economic requirements. At electric power plants where the generators are directly connected to the transformers without intermediate circuit breakers, buses are used having an envelope made of a material different from

Card 1/5

that used for the buses. The author explains the possible versions in the design of such buses. There are buses with aluminum envelopes, with non-magnetic steel envelopes and buses with envelopes made of a non-conductive material (asbestos tubes, etc). Several cooling systems may be used for enclosed terminal buses: 1) Enclosed buses where the heat exchange is achieved by natural convection and radiation, are the most reliable, but they require increased spending for non-ferrous metals. 2) Enclosed buses with forced air-cooling require special protective measures for spending of arcs in case of short circuits and reserve ventilation equipment. Since the air is circulating between the bus and the envelope a dirt precipitation will occur in open cycle cooling systems, while closed cycle systems require an additional air cooler. 3) Liquid cooled bus terminals, using circulating oil or another dielectric cooling agent. The envelope may be reduced in this case, by approximately 30%, resulting