DEREVINSKIY, I.L.

Maximum stresses produced in wire ropes by winding in the process of their manufacture. Nauch. trudy KNIUI no.2:122-129 '58.
(MIRA 13:8)

(Wire rope) (Strains and stresses)

BELEN'KIY, D.M., kand.tekhn.nauk; DEREVINSKIY, I.L., inzh.; ALOYIN, L.M., inzh.; GERDT, R.A., inzh.

Investigating round-link chains for mine conveyers. Nauch.dokl. vys.shkoly; gor.delo no.2:143-147 '59. (MIRA 12:7)

1. Predstavlena kafedroy gornykh mashin i rudnichnogo transporta Karagandinskogo politekhnicheskogo instituta.
(Conveying machinery) (Link-belting)

BELEN'KIY, D.M., dotsent; DEREVINSKIY, I.L., kand.tekhn.nauk

Study of the parameters of the bearing springs of a belt and spring conveyor. Izv. vys. ucheb. zav.; gor. zhur. 5 no.10:105-110 '62. (MIRA 15:11)

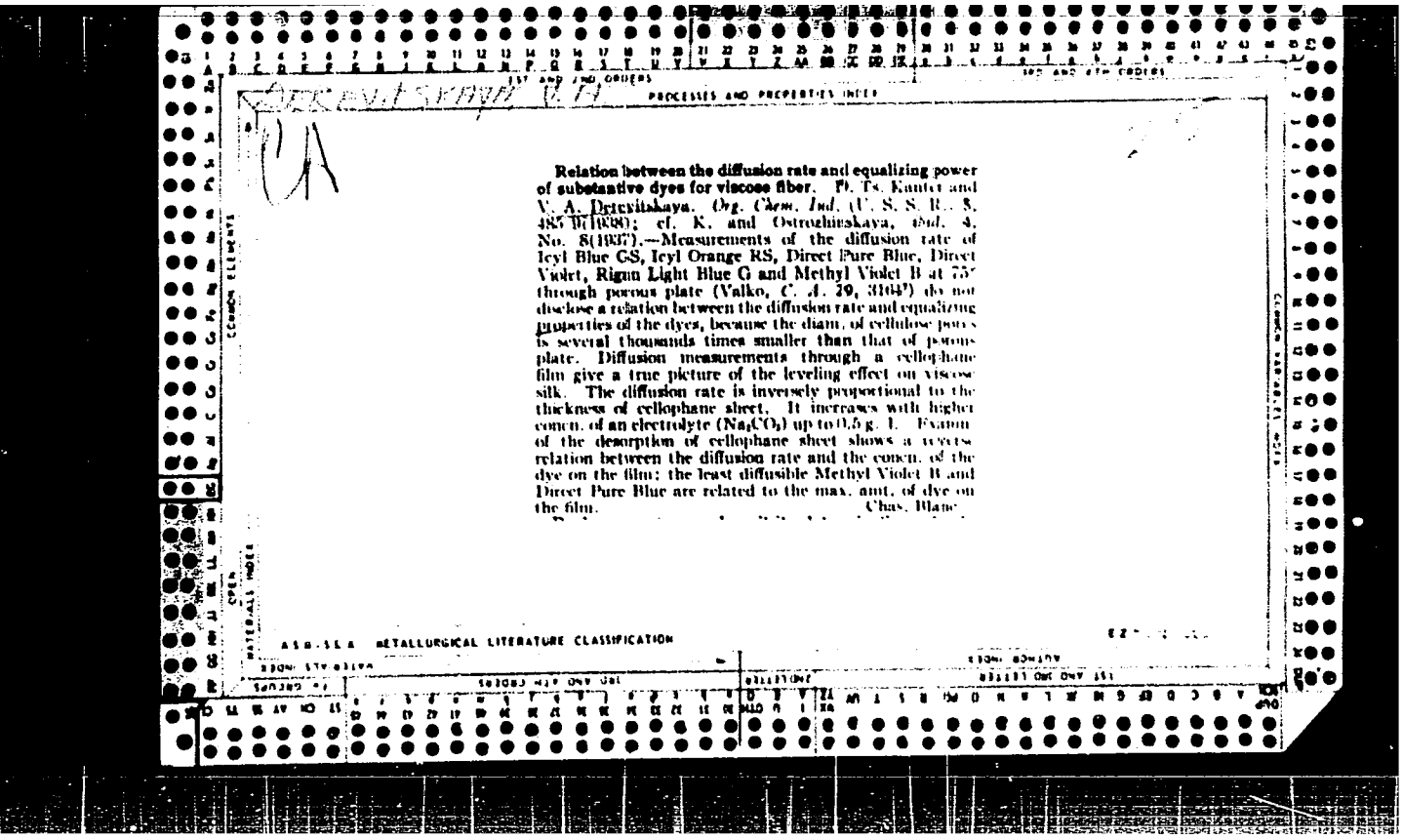
1. Karagandinskiy politekhnicheskiy institut. Rekomendovana kafedroy prikladnoy mekhaniki.

(Conveying machinery)

DEREVINSKIY, I.L., inzh.

Determining the lifting span of a ballasting machine. Izv.vys.ucheb. zav.; mashinostr. no.4:134-137 '64. (MIRA 18:1)

1. Karagandinskiy politekhnicheskiy institut.



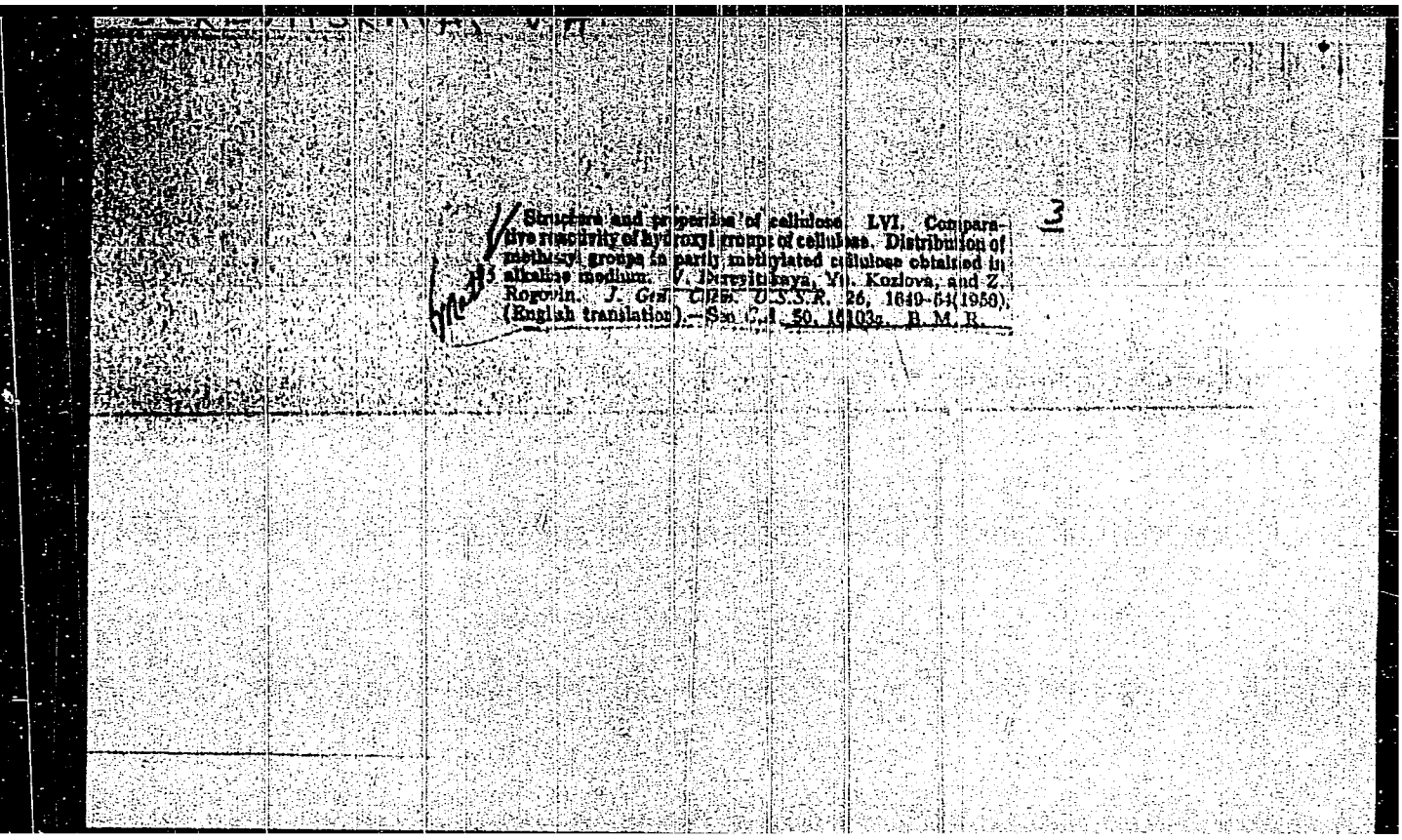
PROCESSES AND PROPERTIES INDEX

Relation between the diffusion rate and equalizing power of substantive dyes for viscose fiber. Fr. Ts. Kantor and V. A. Drevitskaya. *Org. Chem. Ind.* (U. S. S. R.) 5, 485-91(1938); cf. K. and Ostrozhinskaya, *ibid.* 4, No. 8(1937).—Measurements of the diffusion rate of Icyl Blue GS, Icyl Orange RS, Direct Pure Blue, Direct Violet, Rigun Light Blue G and Methyl Violet B at 75° through porous plate (Valko, C. A. 29, 3104⁹) do not disclose a relation between the diffusion rate and equalizing properties of the dyes, because the diam. of cellulose pores is several thousands times smaller than that of porous plate. Diffusion measurements through a cellophane film give a true picture of the leveling effect on viscose silk. The diffusion rate is inversely proportional to the thickness of cellophane sheet. It increases with higher concn. of an electrolyte (Na_2CO_3) up to 0.5 g./l. Examn. of the desorption of cellophane sheet shows a reverse relation between the diffusion rate and the concn. of the dye on the film; the least diffusible Methyl Violet B and Direct Pure Blue are related to the max. amt. of dye on the film. Chas. Blanc.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

DEREVITSKAYA, V.A.; KOZLOVA, Yu.S.; ROGOVIN, Z.A.

Investigating the comparative reactivity of the hydroxyl groups of cellulose. Soob.o nauch.rab.chl.VKHO no.3:9-12 '55. (MIRA 10:10)
(Hydroxyl group) (Cellulose)



Structure and properties of cellulose. LVI. Comparative reactivity of hydroxyl groups of cellulose. Distribution of methoxyl groups in partly methylated cellulose obtained in 5 alkaline medium. V. Nesmeyanova, Vi. Kozlova, and Z. Rogovin. *J. Gen. Chem. U.S.S.R.* 26, 1649-54(1950). (English translation).--*Sci. C.I.* 50, 16103g. R.M.R.

DEREVITSKAYA, V.A.

Structure and properties of cellulose. LVI. Comparative reactivity of hydroxyl groups of cellulose. Distribution of methoxyl groups in partly methylated cellulose obtained in alkaline medium. V. Derevitskaya, Vl. Kozlova, and Z. Rogovin. *J. Gen. Chem. U.S.S.R.* 26, 1849-54(1956). (English translation).—See C.A. 50, 16103a. B.M.R.

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DEREVITSKAYA, V.

3

Structure and characteristics of cellulose. LVI. Comparative reactive ability of cellulose hydroxyl groups; distribution of methoxyl groups during partial methylation of cellulose prepared in alkaline) media. V. Derevitskaya, Yu. Kozlova and Z. Rogovin (*Zh. obshch. Khim.*, 1956, 26, 1466—1471).—Specimens of cotton cellulose were examined after treatment in 18% alkali and partial methylation with methyl iodide and dimethyl sulphate. The greatest activity was displayed by secondary hydroxyl groups, the number of methoxyl groups on the secondary C atoms being 1·5 times that on the primary. Determination of free glycol groups by means of iodic acid oxidation showed that distribution of methoxyl groups was not uniform. Methylcellulose with γ=78·5 (γ=number of substituted groups per 100 glucose units) showed 20 methoxyl groups distributed on $C_{(2)}$ and 58·5 on $C_{(3)}$. For this no. on the secondary C atoms, the no. of free glycol groups per 100 glucose radicals would be expected to be 41·5; however, according to the oxidation test, it was 42·3. In methylcellulose with γ=162, the no. of free glycol groups per 100 glucose radicals was 36; but after selective methylation at secondary carbon atoms it was 21. Distribution of methoxyl groups in alkali cellulose was also identical and showed γ near to 100 in heterogeneous and homogeneous media, indicating that distribution did not depend on content of alkali adsorbed by alkali cellulose. A. L. B.

NESMEYANOV, A.N.; KNUNYANTS, I.L.; SHEMYAKIN, M.M.; BOGOSLOVSKIY, B.M.; SKURATOV, S.M.; KONKIN, A.A.; DEREVITSKAYA, V.A.; ROGOVIN, Z.

In memory of A.A. Strepikheev; obituary. Khur.ob.khim.26 no.11:3224-3226 N '56. (MLRA 10:1)
(Strepikheev, Aleksandr Aleksandrovich, 1912-1955)

DEREVITSKAYA, V.A.

Structure and properties of cellulose. LVII. Comparative reactivity of hydroxyl groups of cellulose. 2. Distribution of methoxyl groups in partly methylated cellulose prepared in basic medium. V. Derevitskaya, Ya. Kozlova, and Z. Rogovin (Textile Inst., Moscow). *Zhur. Obshchei Khim.* 28, 3709-14(1958); cf. *C.A.* 51, 7098.—Partly methylated cellulose prepd. from MeI and Me$_2$SO$_4$ and cellulose in the presence of Et$_3$(PhCH$_2$)NOH (I), or from methylation of a Na-Cu deriv. of cellulose was examd. by iodate oxidation method. In the presence of I the secondary HO groups (II) of cellulose are more reactive so that approx. twice as many MeO groups are formed on these groups as on the primary ones. The Na-Cu deriv. of cellulose, prepd. by treatment of viscose silk with aq. CuCl$_2$, 10–15 min., followed by wringing, suspension in toluene, and treatment with 35% NaOH 4 hrs. at 0°, on methylation with MeI (20–30 hrs. at 40° and 26 hrs. at 20°), or with Me$_2$SO$_4$ (32–6 hrs. at 35–40° and up to 30 hrs. at 20°), reacts more selectively so that almost all the reaction occurs at II. In the presence of I the methylation with Me$_2$SO$_4$ results in nearly equal distribution of MeO groups between C$_2$ and C$_3$ positions; with MeI treatment, however, there is tendency for the MeO groups to be located primarily at one of the secondary C atoms. The results indicate that the reaction occurs at HO groups which had the opportunity to react with the base in the suspending medium. LVIII. Comparative reactivity of hydroxyl groups of cellulose. 3. Distribution of methoxyl groups in partially methylated cellulose obtained by methylation of cellulose with diazomethane. *Ibid.* 3674–8.—Treatment of 1 g. dry viscose silk with 100 ml. Et$_2$O soln. of 0.5 *M* CH$_2$N$_2$ contg. 2.5 ml. H$_2$O at 2° for up to 50 hrs.,

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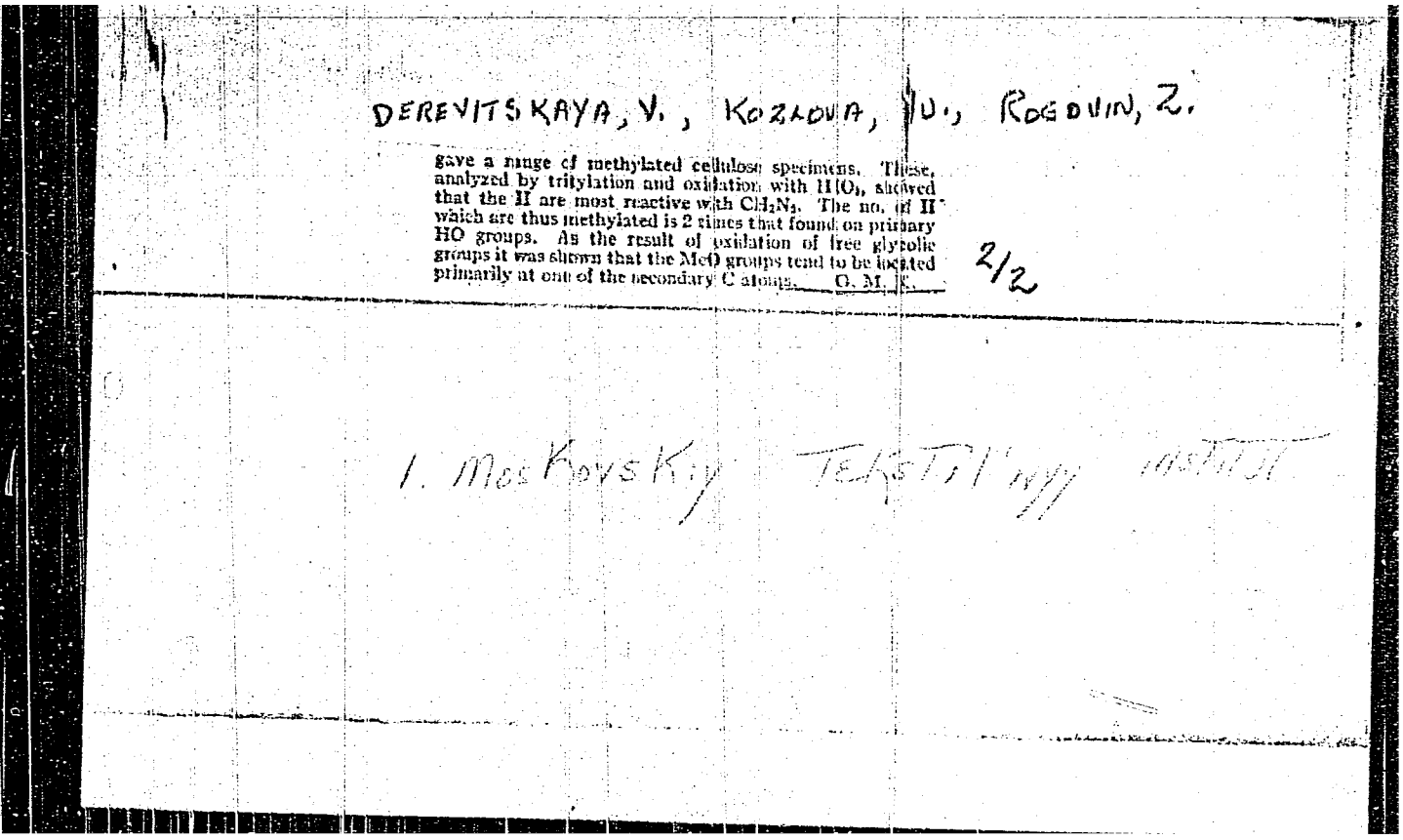

DEREVITSKAYA, V., KOZLOVA, YU., ROGOVIN, Z.

gave a range of methylated cellulose specimens. These, analyzed by tritylation and oxidation with HIO_4, showed that the II are most reactive with CH_2N_2. The no. of II which are thus methylated is 2 times that found on primary HO groups. As the result of oxidation of free glycolic groups it was shown that the MeO groups tend to be located primarily at one of the secondary C atoms. O. M. F.

2/2

1. MOSKOVSKIY TEKSTIL'NYY INSTITUT

DEREVITSKAYA, V.; KOZLOVA, Yu.; ROGOVIN, Z.

Relative reactivity of cellulose hydroxyl groups. Part 3. Distribution of methoxy groups in partially methylated cellulose obtained by cellulose methylation by diazomethane. Zhur.ob.khim. 26 no.12:3374-3376 D '56. (MLRA 10:7)

1. Moskovskiy tekstil'nyy institut.
(Cellulose) (Methylation)

DERAVITSKAYA, V. A., PROKOF'YEVA, M., and ROGOVIN, S. A.

"Reactivity of the OH-groups of cellulose during methylation," a paper presented at the 9th Congress on the Chemistry and Physics of High Polymers, 28 Jan-2 Feb 57, Moscow, Textile Research Inst.

B-3,084,395

Structure and properties of cellulose. LXVI. Prepara-
tion of carbonic esters of cellulose. Z. A. Rogovin, Yu. S.
Kozlova, and V. A. Derevitskaya (Textile Inst., Moscow).
Khim. Nauka i Prom. 2, 404(1957); cf. C.A. 51, 9136a.—
The cellulose ester of methyl carbonic acid (I) was obtained
from cellulose alcoholate and ClCOOMe. The 2 reagents
were periodically shaken in sealed tubes 70-140 hrs. at room
temp. The product was filtered, washed at first with
MeOH till free of Cl^- and then with Me_2CO, and dried at
90-100°. I thus obtained was white, fibrous, contg. 10.05,
10.3, and 11.1% OCH_3 groups and Y = 63, 67, and 72
[Y = 100X, X = degree of esterification = 162% OMe/
(3100-183% OMe)]. I was more stable in boiling H_2O and
in N H_2SO_4 than the corresponding ester of methyldithio-
carbonic acid but less stable in alkali. The value of X of I
did not change after 4 hrs. at 120°. LXVII. Properties of
cellulose esters of monothiocarbonic acid. M. A. Tyu-
ganova and Z. A. Rogovin. Ibid. 405-6.—The difficulty of
viscose formation from cellulose xanthate, large vol. of CS_2
formation, is avoided when instead of dithiocarbonic acid,
monothiocarbonic acid is used as the intermediate product.
In the latter case the COS formed, hydrolyzed to H_2S, is
more easily absorbed than CS_2. The cellulose formed is
more stable. The order of stability in 2N H_2SO_4 and 2N
NaOH is as follows: $(C_6H_9O_4OC(O)S)_2$ > $(C_6H_9O_4OC(S)-S)_2$ > acetylcellulose.

I. Bencowitz

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4E3d
4E4j
4E3c(j)
2 may

Relative reactivity of the hydroxyl groups of cellulose in methylated reactions. Z. A. Rogovin and V. Derevitskaya. Pererabotk. u. Tekhnol. 8, 61-4(1957).—By the prepn. of partially methylated cellulose and the subsequent detn. of the position of the MeO group in the glucose chain it is shown that the secondary OH groups are essentially more reactive than the primary ones. F. E. Brauns

AUTHORS: Derevitskaya V., Prokof'yeva M., Rogovin, Z. 79-28 3-35/61

TITLE: Investigation of the Comparative Reactivity of the Hydroxyl Groups of Cellulose (Issledovaniye sravnitel'noy reaktsionnoy sposobnosti gidroksil'nykh grupp tsellyulozy). V. On the Distribution of the Methoxy Groups in the Partially Methylated Cellulose Which was Obtained in an Alkaline Medium With Different Concentrations of Alkali Liquor (V. O raspredelenii metoksil'nykh grupp v chastichno metilirovannoy tsellyuloze, poluchennoy v shchelochnoy srede pri razlichnoy kontsentratsii shchelochi)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 3, pp. 716-718 (USSR)

ABSTRACT: In an earlier work by the authors (Ref. 1) they reported on the results of the investigation of the reactivity of the hydroxyl groups in cellulose on the action of an 18% alkali liquor, as well as on the subsequent methylation. In the present work the reaction with 8, 13 and 40% liquor was carried out. The alkaline cellulose was squeezed to one third of its weight in order to liberate it from adsorbed

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Investigation of the Comparative Reactivity of the Hydroxyl Groups of Cellulose. V. On the Distribution of the Methoxy Groups in the Partially Methylated Cellulose Which was Obtained in an Alkaline Medium With Different Concentrations of Alkali Liquor

79-88 3-35/61

alkali, then it was washed with dry isobutylalcohol and finally it was methylated. In some cases also the squeezed, but not yet washed alkalicellulose was methylated. The four tables give information on the methylation results of alkalized cellulose; they read: The distribution of the methoxy groups was investigated in the partially methylated cellulose which had been obtained by the action of methyl iodide on the alkalized cellulose with concentration of the liquor taken for the production of alkali cellulose (from 8-4c%). The formation of the reaction of alkali cellulose and the subsequent methylation takes place at the expense of the secondary hydroxyl groups most markedly with a liquor concentration of 4o%. In the methylation of the not washed alkali cellulose obtained by the action of a 4o% alkali solution the authors obtained a methyl cellulose with a considerably greater content of alkali cellulose than is the case with methyl cellulose resulting from the methylation of a washed alkali cellulose; this is tentatively explained by an occurring alcoholysis of the alkali-

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Investigation of the Comparative Reactivity of the Hydroxyl Groups of Cellulose. V. On the Distribution of the Methoxy Groups in the Partially Methylated Cellulose Which was Obtained in an Alkaline Medium With Different Concentrations of Alkali Liquor 79-28-3-35/61

cellulose. (Isobutylalcohol being used in the washing of the adsorbed alkali).
There are 4 tables and 2 references, 1 of which is Soviet.

ASSOCIATION: Moskovskiy tekstil'nyy institut (Moscow Textile Institute)

SUBMITTED: January 17, 1957.

Card 3/3

AUTHORS: Derevitskaya, V., Prokop'yeva, M., Rogovin, Z. 79-28-3-36/61

TITLE: Investigation of the Comparative Reactivity of the Hydroxylgroups of Cellulose (Issledovaniye sravnitel'noy reaktsionnoy sposobnosti gidroksil'nykh grupp tsellyulozy). VI. On the Distribution of the Methylation Products of the Na-Alcoholate of Cellulose (VI. O raspredelenii metoksil'nykh grupp v produktakh metilirovaniya Na-alkogolyata tsellyulozy)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 3, pp. 718-721 (USSR)

ABSTRACT: Although the formation of the alcoholate of cellulose in liquid ammonia has been investigated by many scientists there has been no clear data on the reactivity of the cellulose hydroxyl groups in the reaction with metallic Na so far. The authors tackled this task. The synthesis of the alcoholate and the measurement of the velocity of the formation of hydrogen was carried out according to Shorygin (Ref. 2). The experiments were made with ground

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Investigation of the Comparative Reactivity of the Hydroxylgroups of Cellulose VI. On the Distribution of the Methylation Products of the Na-Alcoholate of Cellulose.

79-28 5-36/61

sulfitecellulose and viscose rayon. The duration of the formation of each γ-hydrogen atom by the action of Na on the cellulose with various concentrations of this body was determined. Depending on the quantity of the introduced sodium this velocity changed, the ratio between the duration of the formation of the first, second and third γ-hydrogen atom ($\tau_1 : \tau_2 : \tau_3$) remained, however, practically constant (tables 1, 2). The summary reaction velocity and the ratio $\tau_1 : \tau_2 : \tau_3$ depend on the character of the cellulose preparation. The velocity of formation of the first γ hydrogen atom exceeds that of the third γ-atom 16-18 fold in the action of sodium on viscose rayon, in the case of the ground cellulose 7-8 fold, the different summary reaction velocity playing a rôle. The authors assume that the great difference in the velocities of formation of the 3 γ hydrogen atoms in this reaction must be explained by the different reactivity of the hydroxylgroups of cellulose, for which reason the distribution of sodium in the elementary members of the monoalcoholate

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Investigation of the Comparative Reactivity of the Hydroxylgroups of Cellulose. VI. On the Distribution of the Methylation Products of the Na-Alcoholate of Cellulose

79-28-3-36/61

of cellulose had to be determined. Therefore a methylation of the alcoholates was carried out at γ = 100-200 (γ = content of alcoholate in relation to sodium) and the distribution of the methoxylgroups in the synthetized methylcelluloses was determined. Before this the ammonia was completely removed by blowing with dry nitrogen. The methylation took place with methyl iodide in the course of 12 hours, a methyl cellulose with a very small content of methoxylgroups (1,6 - 2%) having been obtained. By repeating the sodiumammonia treatment and the methylation this content was increased. The results of methylation show (table 3) that the formation of the alcoholate and the methylation take place exclusively at the expense of the secondary hydroxyl groups; the further reaction of the formation of the alcoholate at γ)100 and its methylation takes place at the expense of the primary hydroxyl group of the cellulose.

Card 3/4

There are 3 tables and 5 references, 2 of which are Soviet.

Investigation of the Comparative Reactivity of the Hydroxylgroups of Cellulose. VI. On the Distribution of the Methylation Products of the Na-Alcoholate of Cellulose. 79-28 3-36/6

ASSOCIATION: Moskovskiy tekstil'nyy institut (Moscow Textile Institute)

SUBMITTED: January 17, 1957.

Card 4/4

AUTHORS: Derevitskaya, V., Prokof'yeva, M., Rogovin, Z. 79-28-5-58/69

TITLE: Investigation of the Comparative Reactivity of the Hydroxyl Groups of Cellulose (Issledovaniye sravnitel'noy reaktsionnoy sposobnosti gidroksil'nykh grupp tsellyulozy)
VII. On the Distribution of the Methoxyl Groups in the Partially Methylated Cellulose obtained from Cellulose Treated With Sodiumisoamylate (VII. O raspredelenii metoksil'nykh grupp, v chastichno metilirovannoy tsellyuloze, poluchennoy iz tsellyulozy, obrabotannoy izoamilatom natriya)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 5, pp. 1368-1371 (USSR)

ABSTRACT: Starting from the condition that in cellulose only one hydroxyl group with increased acidous properties exists, the formation of an alcoholate can be expected not only by the direct action of metallic sodium but also by means of a conversion with an alcoholate of ordinary alcohol.

Card 1/3

Investigation of the Comparative Reactivity of the Hydroxyl Groups of Cellulose. VII. On the Distribution of the Methoxyl Groups in the Partially Methylated Cellulose obtained from Cellulose Treated With Sodiumisoamylate

79-28-5-58/69

The experiments by Rassow and Wadewitz (reference 1) to obtain a sodium alcoholate of cellulose this way were not successful probably because they carried out the reaction at a great excess of alcohol which had to lead to an alcoholysis of the formed cellulose alcoholate. In order to avoid this it was necessary to use a sodium alcoholate dissolved in inert solvents. In the present paper a sodium derivative of cellulose was obtained by the action of sodiumisoamylate on cellulose in an inert solvent. Cotton cellulose served as initial substance, which had earlier been treated with alkali and finally had been included (reference 3). In this conversion only that cellulose treated the alakaline way proved to be reactive. The alcoholate of cellulose experimentally produced in two different ways was then methylated with methyliodide. In order to determine the distribution of the methoxyl groups in methylcelluloses

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Investigation of the Comparative Reactivity of the Hydroxyl Groups of Cellulose. VII. On the Distribution of the Methoxyl Groups in the Partially Methylated Cellulose obtained from Cellulose and Treated With Sodiumisoamylate

79-28-5-58/69

the number of free primary hydroxyl groups was calculated by means of "tritylization" (metodom tritilirovaniya) (table 2). In the reaction of cellulose with Na-isoamylate and subsequent methylation the secondary hydroxyl groups have a greater reactivity than the others. The average number of methoxyl groups per secondary carbon atom exceeds that of the methoxyl groups at the primary carbon atom by the 2,5-times. There are 2 tables and 6 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy tekstil'nyy institut (Moscow Textile Institute)

SUBMITTED: January 17, 1957

Card 3/3

LIN'-YAN' [Lin-Yan]; DEREVITSKAYA, V.A.; ROGOVIN, A.Z.

Development of methods for the synthesis of cellulose esters with n-substituted amino acids. Vysokom.soed. 1 no.1:157-161 Ja '59. (MIRA 12:9)

1. Moskovskiy tekstil'nyy institut.
(Cellulose) (Amino acids)

SUN'-TUN [Sun-T'ung]; DERBVITSKAYA, V.A.; ROGOVIN, Z.A.

Synthesis of new cellulose derivatives and other polysaccharides. Part 2: Synthesis of amino acid amides of alginic acid and carboxymethylcellulose via amino acids. Vysokom.soed. 1 no.8:1178-1181 Ag '59. (MIRA 13:2)

1. Moskovskiy tekstil'nyy institut.
(Alginic acid) (Cellulose) (Amides)

SUN' TUN; DEREVITSKAYA, V.A.; ROGOVIN, Z.A.

Synthesis of new derivatives of cellulose and other polysaccharides. Part 3: Synthesis of a graft copolymer of carboxymethylcellulose and polyenanthamide. Vysokom.soed. 1 no.11:1625-1629 N 59. (MIRA 13:5)

1. Moskovskiy tekstil'nyy institut.
(Heptanamide) (Cellulose) (Polymers)

DEREVITSKAYA, V.A.

PHASE I BOOK EXPLOITATION SOV/5286

Strepikheyev, Aleksandr Aleksandrovich (Deceased), and Varvara Andreyevna Derevitskaya

Osnovy khimii vysokomolekulyarnykh soyedineniy (Principles of the Chemistry of High Molecular Weight Compounds) Moscow, Goskhimizdat, 1961. 354 p. Errata slip inserted. 15,000 copies printed.

Ed.: A. A. Rogaylina. Tech. Ed.: V. V. Kogan.

PURPOSE: This textbook is intended for students in schools of higher education. It may also be used by specialists in the manufacture of plastics, chemical fibers, rubber, textiles, and leather.

COVERAGE: The textbook deals with the chemistry of high molecular compounds. It includes basic data on polymer synthesis, the mechanism and kinetics of polymerization and polycondensation processes, and the properties and chemical conversions of natural and synthetic high molecular compounds. Professor

Card 1/8

G. L. Slonimskiy wrote Part III, the section on the physicochemistry of high polymers. The authors thank Professor V. V. Korshak, Corresponding Member of the Academy of Sciences USSR; A. N. Pravednikov, Ye. A. Vasil'yev-Sokolov, and M. P. Zverev, Candidates of Chemical Sciences; Professors S. M. Skuratov and Z. A. Rogovin; and A. V. Volokhin, R. N. Martsinkovskaya, and Z. Ye. Krinskaya, Candidates of Technical Sciences. References accompany most of the chapters.

TABLE OF CONTENTS:

DEREVITSKAYA, V.A.

PHASE I BOOK EXPLOITATION SOV/4984

International symposium on macromolecular chemistry. Moscow, 1960.

Mezhdunarodnyy simpozium po makromolekulyarnoy khimii SSSR. Moskva, 14-18 iyunya 1960 g.; doklady i avtoreferaty. Sektsiya III. (International Symposium on Macromolecular Chemistry Held in Moscow, June 14-18, 1960; Papers and Summaries) Section III. [Moscow, Izd-vo AN SSSR, 1960] 469 p. 55,000 copies printed.

Tech. Ed.: P. S. Kashina.

Sponsoring Agency: The International Union of Pure and Applied Chemistry. Commission on Macromolecular Chemistry.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high molecular compounds.

COVERAGE: This is Section III of a multivolume work containing papers on macromolecular chemistry. The articles in general deal with the kinetics of polymerization reactions, the synthesis of special-purpose polymers, e.g., ion exchange resins, semiconductor materials, etc., methods of catalyzing polymerization reactions, properties and chemical interactions of high molecular materials, and the effects of various factors on polymerization and the degradation of high molecular compounds. No personalities are mentioned. References given follow the articles.

POLYAKOV, A.I.; DEREVITSKAYA, V.A.; ROGOVIN, Z.A.

Investigation of the possibility of preparing unsaturated compounds of cellulose by the Chugaev reaction. Vysokom. soed. 2 no. 3:386-389 Mr '60. (MIRA 13:11)

1. Moskovskiy tekstil'nyy institut.
(Cellulose)

SUN'TUN [Sun T'ung]; DEREVITSKAYA, V.A.; ROGOVIN, Z.A.

Synthesis of new cellulose derivatives and other polysaccharides. Part 8: Synthesis of cellulose esters of amino acids. Vysokom. soed. 2 no.5:785-790 My '60. (MIRA 13:8)

1. Moskovskiy tekstil'nyy institut.
(Amino acids) (Cellulose)

S/190/60/002/012/002/019
B017/B055

AUTHORS: Sun' Tun, Derevitskaya, V. A., Rogovin, Z. A.

TITLE: Synthesis of New Derivatives of Cellulose and Other Polysaccharides. IX. Synthesis of Aromatic Amino Acid Esters of Cellulose

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 12, pp. 1768-1771

TEXT: The authors developed a method for the synthesis of aromatic amino acid esters of cellulose. The synthesis of these cellulose esters is carried out in two stages, i.e.

1) $\left[C_6H_7O_2(OH)_3\right]_x + x\,ClCO\text{-}C_6H_4\text{-}NO_2 + x\,C_5H_5N \longrightarrow$

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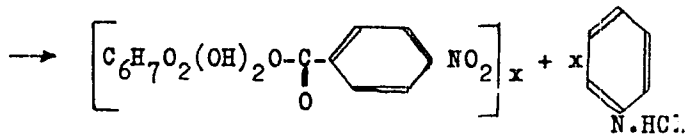
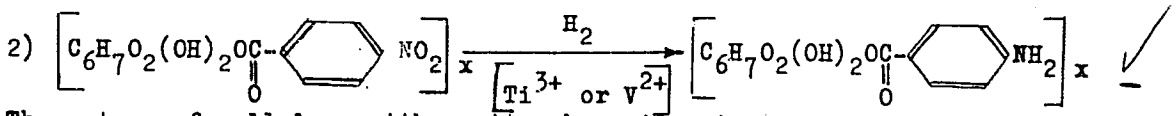
Synthesis of New Derivatives of Cellulose and Other Polysaccharides. IX. Synthesis of Aromatic Amino Acid Esters of Cellulose

S/190/60/002/012/002/019
B017/B055





The esters of cellulose with p-nitro-benzoic acid and p-aminobenzoic acid were prepared for the first time. The influence of esterification conditions on the composition of the p-nitro-benzoic acid ester formed is shown in Table 1. A higher degree of esterification ($\gamma > 200$) renders the cellulose p-nitro-benzoate soluble in dimethyl formamide, and capable of swelling strongly in acetone, nitro-benzene, and pyridine. No suitable solvent was found for products esterified to a lower degree. The composition of the cellulose p-aminobenzoates is given in Table 2. Highly esterified p-aminobenzoic acid esters of cellulose are insoluble in

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Synthesis of New Derivatives of Cellulose and Other Polysaccharides. IX. Synthesis of Aromatic Amino Acid Esters of Cellulose

S/190/60/002/012/002/019
B017/B055

dimethyl formamide, acetone, nitro-benzene, pyridine, glacial acetic acid, and 20% aqueous HCl. Cellulose p-aminobenzoates are suitable for the preparation of chemically died cellulosic fibers. There are 2 tables and 2 Soviet references.

ASSOCIATION: Moskovskiy tekstil'nyy institut (Moscow Textile Institute)

SUBMITTED: May 11, 1960

Card 3/3

Derevitskaya, V.A.
Osnovy Khimii Vysokomolekulyarnykh Soyedineniy [By]
A.A. Strepikheyev. Moskva,
Goskhimizdat, 1961.
354 p. Diagrs., Graphs, Tables.
Includes Bibliographies.

STREPIKHEYEV, Aleksandr Aleksandrovich [deceased]; DEREVITSKAYA, Varvara Andreyevna; ROGAYLINA, A.A., red.; KOGAN, V.V., tekhn.red.

[Principles of the chemistry of macromolecular compounds] Osnovy khimii vysokomolekuliarnykh soedinenii. Moskva, Gos.nauchno-tekhn.izd-vo khim. lit-ry, 1961. 354 p. (MIRA 14:5)

(Macromolecular compounds)

GAL'BRAYKH, L.S.; DEREVITSKAYA, V.A.; ROGOVIN, Z.A.; Prinimala uchastiye: LISHEVSKAYA, M.O.

Synthesis of new derivatives of cellulose and other polysaccharides. Part 13: Method of synthesizing cellulose dinitrile. Vysokom.soed. 3 no.7:980-983 Jl '61. (MIRA 14:6)

1. Moskovskiy tekstil'nyy institut.
(Cellulose)

POLYAKOV, A.I.; DEREVITSKAYA, V.A.; ROGOVIN, Z.A.

Synthesis of new derivatives of cellulose and other polysaccharides. Part 4: Synthesis of cellulose esters with α-amino acids. Vysokom.soed. 3 no.7:1027-1030 Jl '61. (MIRA 14:6)

1. Moskovskiy tekstil'nyy institut.
(Cellulose esters) (Amino acids)

GAL'BRAYKH, L.S.; DEREVITSKAYA, V.A.; ROGOVIN, Z.A.

Synthesis of new derivatives of cellulose and other polysaccharides. Part 16: Synthesis of some nitrogen-containing derivatives of cellulose and other polysaccharides. Vysokom.soed. 3 no.10:1561-1565 O '61. (MIRA 14:9)

1. Moskovskiy tekstil'nyy institut.
(Polysaccharides) (Nitrogen compounds)

KOCHETKOV, N.K.; DEREVITSKAYA, V.A.; LIKHOSHERSTOV, L.M.

Carbodiimide method for the condensation of carbohydrates with amino acids. Zhur. VKHO 6 no.2:228-229 '61. (MIRA 14:3)

1. Institut khimii prodnykh soyedineniy AN SSSR.
(Carbohydrates) (Carbodiimide) (Amino acids)

DEREVITSKAYA, V.A.; MOLODTSOV, N.V.; KOCHETKOV, N.K.

Simple synthesis of N-aminoacyl derivatives of amino sugars.
Zhur.VKHO 6 no.5:594-595 '61. (MIRA 14:10)

1. Institut khimii prirodnykh soyedineniy Akademii nauk SSSR.
(Glucosamine)

DEREVITSKAYA, V.A.; SMIRNOVA, G.S.; ROGOVIN, Z.A.

Comparative acidity of hydroxyl groups in D-glucose, α- and β-methylglucosides, maltose, and cellobiose. Dokl. AN SSSR 141 no.5:1090-1092 D '61. (MIRA 14:12)

1. Moskovskiy tekstil'nyy institut. Predstavleno akademikom M.M. Shemyakinym.

(Glycosides) (Hydroxyl group)

S/190/62/004/003/013/023
B110/B144

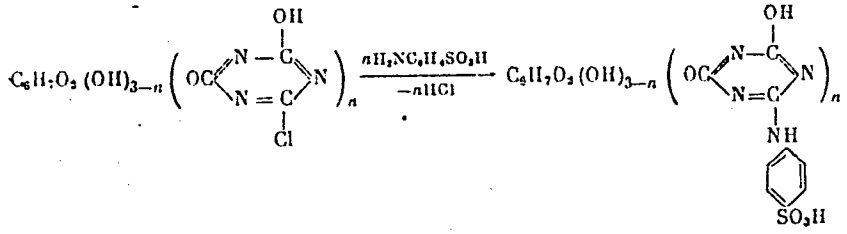
5.3931
15.9010

AUTHORS: Gal'braykh, L. S., Derevitskaya, V. A., Rogovin, Z. A., Chekalin, N. A.

TITLE: Synthesis of new derivatives of cellulose and other polysaccharides. XVIII. Synthesis of sulfo derivatives of cyanuric cellulose

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 3, 1962, 409-413

TEXT: Sulfo cationites were produced from cyanuric cellulose (A):



Card 1/3

Synthesis of new derivatives...

The substitution degree of A calculated from the N content is 10-90 % higher than that calculated from the Cl content. Cl atoms not reacting with cellulose are assumed to be partially saponified by treating alkali cellulose with cyanuric chloride solution. In this process, chemical bonds may form among cellulose macromolecules. The physical structure of cellulose has a great effect upon the substitution degree which becomes 2.5-3.5 times as high by the use of sulfite cellulose instead of cotton fabric. For 60-72 hrs A was treated with aqueous solutions of Na salts of sulfanilic or metanilic acids (3 moles acid per structural unit of A) with the module 1:20. CH_3COONa addition increased the pH value to 4.0-4.5.

The sulfur content of the sulfo derivative of A was determined gravimetrically, its ion exchangeability by potentiometric titration in the presence of NaCl. Maximum S substitution at γ = 33 corresponded to 1.23 meq/g. 65-80 % of Cl atoms enter into A. The Cl content in the sulfo derivative, however, is $\leq$ 0.1-0.2 % which suggests additional hydrolysis. The curves of potentiometric titration of sulfo cationites have two salient points corresponding to two types of acid groups in the macromolecule: at pH = 3.8-4.0, the SO_3H groups are completely neutralized, and at 7.8-8.1, the OH group formed by Cl hydrolysis is neutralized. Derivatives

Synthesis of new derivatives...

of A can also be produced by treating cellulose with aqueous solutions of 2-chloro-4,6-di(4'-sulfophenyl amino)-triazine-1,3,5 and 2,4-dichloro-6-(4'-sulfophenyl amino)-triazine-1,3,5. Owing to its low substitution degree this method is not suited for the synthesis of sulfo cationites. The low degree of cationite swelling owing to chemical bonds among macromolecules, might recommend its application to ion exchange chromatography. There are 1 figure, 2 tables, and 9 references: 1 Soviet and 8 non-Soviet. The most important reference to the English-language publication reads as follows: J. Warren et al. Text. Res. J., 22, 584, 1952.

ASSOCIATION: Moskovskiy tekstil'nyy institut (Moscow Textile Institute)

SUBMITTED: March 2, 1961

Card 3/3

KOCHETKOV, N.K.; DEREVITSKAYA, V.A.; LIKHOSHERSTOV, L.M.; KARA-MURZA, S.G.

Glycopeptides. Part 1: Synthesis of 6-O-glycyl-glucose and 6-O-(D,L-alanyl)-glucose. Zhur.ob.khim. 32 no.4:1159-1166 Ap '62. (MIRA 15:4)

1. Institut khimii prirodnykh soyedineniy AN SSSR.
(Glycopeptides)

DEREVITSKAYA, V.A.; LIKHOSHERSTOV, L.M.; KARA-MURZA, S.G.; KOCHETKOV, N.K.

Glycopeptides. Part 2. Synthesis of 6-O aminoacyl derivatives of glucose. Zhur.ob.khim. 32 no.7:2134-2140 Jl '62. (MIRA 15:7)

1. Institut khimii prirodnykh soyedineniy AN SSSR.
(Glycopeptides) (Amino acids) (Glucose)

(3)

ANTONOV, V. K., Institute for Chemistry of Natural Compounds, Academy of Sciences USSR, Moscow - "Tautomeric transformations of hydroxyacylcyclopeptides" (Section III)

DEREVITSKAYA, V. A., Institute for Chemistry of Natural Compounds, Academy of Sciences USSR, Moscow - "Synthesis and chemical behavior of model glycopeptides" (Section III)

SHCHUKINA, L. A., Institute for Chemistry of Natural Compounds, Academy of Sciences USSR, Moscow - "Synthesis of cyclic depsipeptides" (Section III)

reports to be submitted for the Fifth European Peptide Symposium, Oxford, England, 3-7 Sep 1962.

STEPANENKO, B.N., otv. red.; SEVERIN, S.Ye., red.; DEREVITSKAYA, V.A., red.; ROZENFEL'D, Ye.L., red.; KUZNETSOV, A.A., red.; PARNES, Ya.A., red.izd-va; MAKAGONOVA, I.N., tekhn. red.

[Carbohydrates and carbohydrate metabolism]Uglevody i uglevodnyi obmen; materialy. Moskva, Izd-vo Akad. nauk SSSR, 1962. 335 p. (MIRA 16:1)

1. Vsesoyuznaya konferentsiya po probleme "Khimiya i obmen uglevodov."2d, Moscow, 1961. 2. Institut biokhimii im. A.N. Bakha Akademii nauk SSSR (for Stepanenko). 3. Institut biologicheskoy i meditsinskoy khimii Akademii meditsinskikh nauk SSSR (for Rozenfel'd).

(CARBOHYDRATE METABOLISM)

KOCHETKOV, N.K.; DEREVITSKAYA, V.A.; MOLODTSOV, N.V.

Glycopeptides. Part 3: Synthesis of N-aminoacyl derivatives of amino sugars. Zhur.ob.khim. 32 no.8:2500-2505 Ag '62. (MIRA 15:9)

(Sugars)

DEREVITSKAYA, V. A.

Dissertation defended for the degree of Doctor of Chemical Sciences at the Institute of Chemistry of Natural Products in 1962:

"Investigation of the Relative Reactiveness of Hydroxyls of Cellulous and Amylose in Reactions with Bases and In O-alkylation."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

DEREVITSKAYA, V.A.

GOFMAN, A.; FREY, A.I.; RUTSHMANN, I.; OTT, Kh.; SHEMYAKIN, M.M.; KISHFALUDI, L.; KOCHETKOV, N.K.; DEREVITSKAYA, V.A.; PROKOF'YEV, M.A.; SHABAROVA, Z.A.; FILIPPOVA, L.A.; SHANKMAN, S.; KHAYGA, S.; LIV, F.; ROBERTS, M.Ye.; GAVRILOV, N.I.; AKIMOVA, L.N.; KHLUDOVA, M.S.; MAKSIMOV, V.I.; IZELIN, B.M.; SHEPPARD, R.K.; SHKODINSKAYA, Ye.N.; VASINA, O.S.; BERLIN, A.Ya.; SOF'INA, Z.P.; LARIONOV, L.F.; KNUNYANTS, I.L.; GOLUBEVA, N.Ye.; KARPAVICHUS, K.I.; KIL'DISHEVA, O.V.; MEDZIGRADSKIY, K.; KAFTAR, M.; LEV, M.; KORENSKI, F.; BUASSONA, R.A.; GUTTMAN, St.; KHOYGENIN, R.L.; ZHAKENO, P.A.; BAZHUS, S.; LENARD, K.; DUAL'SKI, S.; SHREDER, Ye.; SHMIKHEN, R.; KHOKHLOV, A.S.

Results of the Fourth European Symposium on the chemistry of peptides. Abstracts of reports. Zhur. VKHO 7 no.4:468-476 '62. (MIRA 15:8)

1. Aktsionernoye obshchestvo "Sandos", Bazel', Shveytsariya (for Gofman, Frey, Ott, Rutshmann). 2. Farmatsevticheskaya fabrika "G.Rikhter", Budapesht, Vengriya (for Kishfaludi, Korenski, Dualski). 3. Institut khimii prirodnykh soyedineniy AN SSSR, Moskva (for Kochetkov, Derevitskaya, Shemyakin, Khokhlov). 4. Laboratoriya khimii belka Moskovskogo gosudarstvennogo universiteta (for Prokof'yev, Shabarova, Filippova, Gavrilov, Akimova, Khludova). 5. Fond meditsinskikh issledovaniy, Passadena, Kaliforniya, Sev.Soyed.Shtaty Ameriki (for Shankman, Khayga, Liv, Roberts). 6. Laboratoriya khimii belka Instituta organicheskoy

(Continued on next card)

DEREVITSKAYA, V.A.; LIKHOSHERSTOV, L.M.; KOCHETKOV, N.K.

Glycopeptides. Report No.14: Synthesis of 6-O-diglycyl-D-glucose and 6-O-triglycyl-D-glusoce and 6-O-triglycyl-D-glucose. Izv. AN SSSR.Otd.khim.nauk. no.10:1795-1798 O '62. (MIRA 15:10)

1. Institut khimii prirodnykh soyedineniy AN SSSR.
(Glycopeptides) (Glucose)

KOCHETOV, N.K.; DEREVITSKAYA, V.A.

Synthesis of glycopeptide models. Coll Cz Chem 27 no.9:2243 S '62.

1. Institute for the Chemistry of Natural Products, Academy of Sciences of U.S.S.R.

CHICHIBABIN, Aleksey Yevgen'yevich. Prinimali uchastiye: REUTOV, O.A.; KITAYGORODSKIY, A.I., prof.; LIBERMAN, A.L., doktor khim. nauk; BAGDASAR'YAN, Kh.S., doktor khim. nauk; PLATE, N.A., kand. khim. nauk; KOLOSOV, M.N., kand. khim. nauk; BOTVINIK, M.M., doktor khim. nauk; STEPANOV, V.M., kand. khim. nauk; MEL'NIKOV, N.N., prof.; DEREVITSKAYA, V.A., doktor khim. nauk; LIBERMAN, A.L., red.; SERGEYEV, P.G. [deceased]; ROMM, R.S., red.; SHPAK, Ye.G., tekhn. red.

[Basic principles of organic chemistry] Osnovnye nachala organicheskoi khimii. Izd.7. Pod red. P.G.Sergeeva i A.L. Libermana. Moskva, Goskhimizdat. Vol.1. 1963. 910 p. (MIRA 16:10)

1. Chlen-korrespondent AN SSSR (for Reutov).
(Chemistry, Organic)

POLYAKOV, A.I.; ROGOVIN, Z.A.; DEREVITSKAYA, V.A.

On the possibility of preparing unsaturated derivatives of cellulose by the Chugaev reaction. Part 2. Vysokom.soed. 5 no.2:161-163 F '63. (MIRA 16:2)

1. Moskovskiy tekstil'nyy institut.
(Cellulose xanthates) (Unsaturated compounds)

KOCHETKOV, N.K.; DEREVITSKAYA, V.A.; LIKHOSHERSTOV, L.M.

Glycopeptides. Report No.5: Stability of the ester bond of O-aminoacyl derivatives of glucose. Izv. AN SSSR. Otd.khim. nauk no.4:688-695 Ap '63. (MIRA 16:3)

1. Institut khimii prirodnykh soyedineniy AN SSSR.
(Glucose) (Esters)

MOLODTSOV, N.V.; KOCHETKOV, N.K.; DEREVITSKAYA, V.A.

Glycopeptides. Part 6: Further development of the synthesis of N-aminoacyl derivatives of amino sugars. Izv. AN SSSR. Ser. khim. no.12:2165-2172 D '63. (MIRA 17:1)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

DEREVITSKAYA, V.A.; ZHAROV, V.G.; KOCHETKOV, N.K.

Structure of group substances of blood. Proteolysis of the A group substance. Dokl. AN SSSR 153 no.2:342-345 N '63. (MIRA 16:12)

1. Institut khimii prirodnykh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Kochetkov).

KOCHETKOV, N.K.; KARA-MURZA, S.G.; DEREVITSKAYA, V.A.

Structure of the blood group substances. Hydroxylaminolysis of the blood group substance A and the general structure of the biopolymer. Dokl. AN SSSR 153 no.6:1338-1341 D '63. (MIRA 17:1)

1. Institut khimii prirodnykh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Kochetkov).

DEREVITSKAYA, V.A.; LIKHOSHERSTOV, L.M.; KOCHETKOV, N.K.

Glycopeptides. Report No.7: Hydroxylaminolysis of o-aminoacyl derivatives of glucose. Izv. AN SSSR. Ser.khim. no.3:469-475 Mr '64. (MIRA 17:4)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

DEREVITSKAYA, V. A.; MOLODTSOV, N. V.; KOCHETKOV, N. K.

Glycopeptides. Report No. 8: Synthesis of N-galacturonoylglycine. Izv AN SSSR Ser Khim no. 4:677-680 Ap '64. (MIRA 17:5)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

DEREVITSKAYA, V. A.; KIKOT', G. S.; KOCHETKOV, N. K.

Methylation of the blood group substance A. Izv AN SSSR Ser Khim no. 4:761-763 Ap '64. (MIRA 17:5)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

L 16156-65 EWT(m) AFWL/ASD(a)-5 RM
ACCESSION NR: AP4045804 S/0062/64/000/009/1728/1728

AUTHOR: Derevitskaya, V. A.; Vafina, M. G.; Kochetkov, N. K.

TITLE: Synthesis of serine O-glycosides

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no. 9, 1964, 1728

TOPIC TAGS: serine, serine glycoside, serine O glycoside, peptide bond, polysaccharide bond, glycopeptide, pyranoside, dextrorotatory, laevorotatory, serine glycoside melting point, crystallization, hydrogenolysis

ABSTRACT: We have realized the synthesis of the O-glycosides of serine, models of one of the possible bond types of the peptide and polysaccharide part in natural glycopeptides. We obtained the O-β-D-(2, 3, 4, 6-tetra-O-acetyl)glucopyranoside of the methyl ester of N-carbobenzoxy-D,L serine (I)(40% yield) by the interaction of 2, 3, 4, 6-tetra-O-acetyl-α-D-glucopyranosylbromide with the methyl ester of N-carbobenzoxy-D, L-serine in the presence of Ag_2CO_3. By crystallization of (I) from an ether-hexane mixture, we isolated D-I (m. p. 95.5C, $[\alpha]_D$ --27C with

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L 16156-65
ACCESSION NR: AP4045804

2, chloroform , yield 10%). We obtained L-I (m. p. 93, $[\alpha]_D$ + 16(with 1, chloroform), yield 40%) under analogous conditions from the methyl ester of N-carbobenzoxy-L-serine. By desacetylation of D-I and L-I by the action of $(C_2H_5)_3N$ in absolute CH_3OH we obtained the corresponding O-β-D-glycopyranoside of the methyl ester of N-carbobenzoxy-D-serine (D-II, $[\alpha]_D$ - 3.3C (with 1.77, CH_3OH), yield 84%) and O-β-D-glucopyranoside of the methyl ester of N-carbobenzoxy-L-serine(L-II, $[\alpha]_D$ - 10C (with 0.5, CH_3OH), yield 92%). Hydrogenolysis of D-II and L-II over $Pd/BaSO_4$ in aqueous CH_3OH obtained the corresponding hydrochlorides of O-β-D-glycopyranoside of the methyl ester of D-serine $[\alpha]_D$ + 6C (with 2, water) yield 86%) and of O-β-D-glucopyranoside of the methyl ester of L-serine $([\alpha]_d$ — 18.5C (with 2, water), yield 84%.

ASSOCIATION: Institut khimii prirodnykh soedineniy Akademii nauk SSSR (Institute of the Chemistry of Natural Compounds, Acad. of Sciences, SSSR)

SUBMITTED: 15Jun64 ENCL: 00
SUB CODE: GC, OC NO REF SOV: 000 OTHER: 000

Card 2/2

KALINEVICH, V.M.; DERKVITSKAYA, V.A.; KOCHETKOV, N.K.

Glycopeptides. Report No.13: Synthesis of o-aminoacyl derivatives of N-acetylglucosamine. Izv. AN SSSR. Ser. khim. no.3:496-502 '65. (MIRA 18:5)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

DEREVITSKAYA, V.A.; KALINEVICH, V.N.; KOCHETKOV, N.K.

Synthesis of methyl ester of 9-O-glycyl-N-acetylneuraminic acid. Dokl. AN SSSR 160 no.3:596-599 Ja '65.

(MIRA 18:3)

1. Institut khimii prirodnykh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Kochetkov).

KOCHETKOV, N.K.; DEREVITSKAYA, V.A.; LIKHOSHERSTOV, L.M.

Glycopeptides. Report No.9: Synthesis of O-aminoacyl derivatives of some monosaccharides. Izv. AN SSSR. Ser. khim. no.6:1045-1051 '65. (MIRA 18:6)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

VAPINA, M.G.; [illegible]

Glycopeptides. Report No.[illegible] synthesis of [illegible] glycosides. Izv. AN SSSR.Ser.khim. no.[illegible] '65.

(MIRA 18:10)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

KOCHETKOV, N.K.; KARA-MURZA, S.G.; DEREVITSKAYA, V.A.

Control of the homogeneity of the blood group substance by means of gel filtration. Dokl. AN SSSR 163 no.2:500-502 Jl '65. (MIRA 18:7)

1. Institut khimii prirodnykh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Kochetkov).

DEREVITSKAYA, V.A.; KARA-MURZA, S.G.; KOCHETKOV, N.K.

Structure of group substances of blood; alkaline hydrolysis of the A + H blood group substance. Dokl. AN SSSR 163 no.3:650-653 Jl '65. (MIRA 18:7)

1. Institut khimii prirodnykh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Kochetkov).

KOCHETKOV, N.K., DEREVITSKAYA, V.A., [illegible], ZAFINA, M.G., BOCHKOV, A.F.

Synthesis of methyl ester of C-(β-D-glucofuranosyl)-L-serine. Izv. AN SSSR. Ser. khim. no.9:[illegible] '65. (MIRA 18:9)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

KOCHETKOV, N.K.; KARA-MURZA, S.G.; DEREVITSKAYA, V.A.

Structure of blood group substances and acid hydrolysis of blood group substance (A + H). Izv.AN SSSR.Ser.khim. no.12:2212-2214 '65. (MIRA 18:12)

1. Institut khimii prirodnykh soyedineniy AN SSSR. Submitted April 12, 1965.

DEREVITSKAYA, V.A.; KALINEVICH, V.M.; KOCHETKOV, N.K.

Glycopeptides. Part 16: Synthesis of methyl ester of N-glycylmethoxyneuraminic acid. Khim.prirod.soed. no.4: 241-244 '65.

(MIRA 19:1)

1. Institut khimii prirodnykh soyedineniy AN SSSR. Submitted May 3, 1965.

DEREVITSKAYA, V.V.

37279. Mestobitaniya i soobshchestva saranchevykh naurzumskogo zapovednika. Trudy naurzum. Gos. Zapovednika, Vyp. 2, 1949, s. 25-68-Bibliogr: 22 Nazv

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

DEREVITSKAYA, V.V.; GLUSHKOVA, M.R.

Diphasic meningoencephalitis in Moscow Province. Zhur.mikrobiol.epid. i immun. 29 no.2:39-44 F '58. (MIRA 11:4)

1. Iz Moskovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.
(MENINGOENCEPHALITIS, epidemiology,
diphasic, in Russia (Rus)

DEREVITSKIY, D.P.

Statistical method for determining errors of a potentiometric computer. Izv.vys.ucheb.zav.; prib. 6 no.6:43-49 '63. (MIRA 17:3)

1. Leningradskiy mekhanicheskiy institut.

L 60065-65 EED-2/EWT(d)/EWP(1) Pg-4/Pq-4/Pk-4 IJP(c) GG/BB

ACCESSION NR: AR5002395 S/0271/64/000/010/B011/B011

681.142.2

39

B

SOURCE: Ref. zh. Avtomat., telemekh. i vychisl. tekhn. Sv. t., Abs. 10B64

AUTHOR: Derevitskiy, D. P.

TITLE: Designing analog computers by means of digital computers

CITED SOURCE: Sb. tr. Leningr. mekhan. in-ta, no. 37, 1964, 48-62

TOPIC TAGS: analog computer, digital computer, analog computer design

TRANSLATION: Designing the analog computers intended for solution of algebraic equations is considered. The universal digital computers are used for this purpose because of the conflicting requirements of the analog computers, such as accuracy and structural complexity, reliability and economy, etc. An algorithm has been developed for selecting elements and entire-unit circuits on the basis of two conflicting specifications, of which the first is mandatory, and the second is to be met as far as possible. This method has been used for designing, on a "Ural-1" digital computer, the addition circuits of an analog computer intended for solving equations of this form:

$$\sum_{i=1}^{s} K_i \prod_{j=1}^{n_i} X_{ij} = 0.$$

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L 60069-65

ACCESSION NR: AP5002395

A design program (in the operator form) of such a circuit is presented; it refers to the case of potentiometer-type addition; also two equations and the schemes of their realization selected and calculated on a "Ural-1" computer are presented. Eight illustrations. Bibliography: 1 title.

SUB CODE: DP ENCL: 00

Card 2/2

DEREVITSKIY, I. F., FOGT, A. F. and KARATAEV, I. I.

"Densification of precipitates on vacuum filters", Russ 52, 902, 1938.

The dehydration is improved by the use of vibrators acting on the surface of the ppt. or on the filter itself.

DEREVITSKIY, N.

Derevitsky, N. On the rejection of field experiment data and their subsequent analysis. Acta [Trudy] Univ. Asiae Mediae. Ser. V-a. Fasc. 22, 21 pp. (1939). (Russian. English summary)

The author discusses Chauvenet's principle (from a sample of N observations, reject those less probable than $1/2N$) as a guide to the detection of gross errors in field experiments. Having rejected certain items from an mn-fold experiment, he determines the theoretical values of the missing observations by least squares [Allan and Wishart, J. Agricultural Sci. 20, 399–406 (1930)]. He offers the approximation process

$$a_{ij}(p+1)=\frac{nS_i(p)+mS_j(p)-S_t(p)-(m+n-1)a_{ij}(p)}{(m-1)(n-1)}$$

as a rapid method of calculating the desired theoretical values a_{ij}. Here $S_i(p)$, $S_j(p)$ and $S_t(p)$ are the computed mean yields for the ith treatment, jth replication and total experiment, respectively, using the observed values of accepted data and the pth order approximations $a_{ij}(p)$ as values of the missing data; there are m treatments and n replications. Several numerical examples are discussed at length.

A. A. Brown (Alexandria, Va.).

Source: Mathematical Reviews, Vol 8 No.9

DEREVITSKIY, N A

N/5
783.32
.D4

Peredovyye metody truda rabotnikov dvizheniya (Advanced labor methods of transportation workers) Moskva, Transzheldorizdat, 1952. 190 p. Diagrs., graphs, tables.

AB 521312

DEREVITSKIY, N.A., red.; BOROVOY, N.Ye., red.; VERINA, G.P., tekhn. red.;

[Advanced methods of railroad operation workers] Peredovye metody truda rabotnikov dvizheniia. Moskva, Gos.transp.zhel-dor izd-vo, 1952. 190 p. (MIRA 14:6)

(Railroads--Traffic)

DEREVITSKIY, N. A.

Possibilities for reducing the number of extra trains in passenger traffic. Zhel. dor. transp. 45 no.4:35-36 Ap '63. (MIRA 16:4)

1. Nachal'nik passazhirskoy slushby Yugo-Zapadnoy dorogi, Kiyev.
(Railroads—Management)
(Railroads—Passenger traffic)

DEREVITSKIY, N.A. (Kiyev)

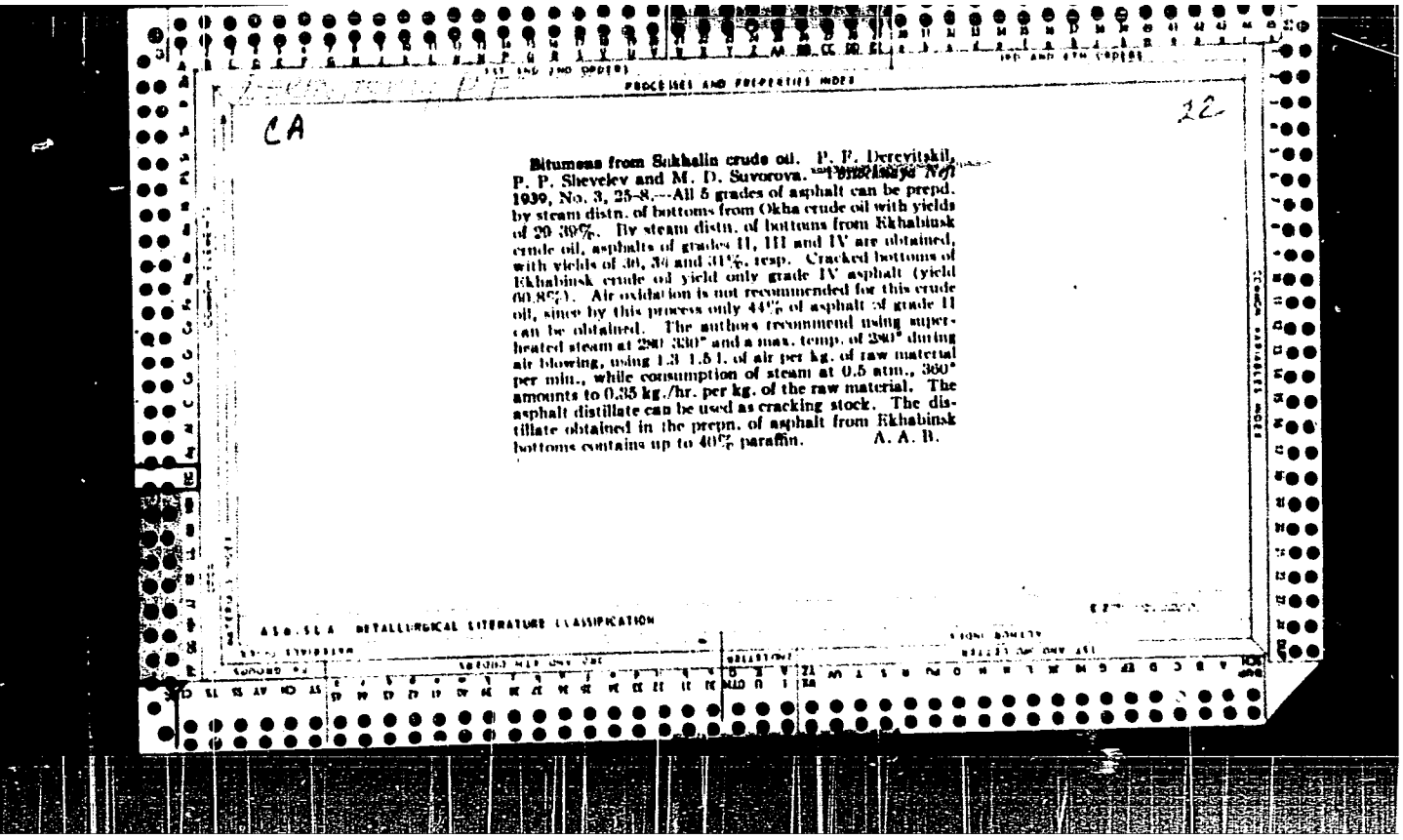
Accelerating the turnaround of passenger car sets. Zhel. dor. transp. 47 no.3:29-30 Mr '65. (MIRA 18:5)

1. Nachal'nik passazhirskoy sluzhby Yugo-Zapadnoy dorogi.

DEREVITSKIY, N. F. 1822-1959 1964

AGRICULTURE (PLANT GROWING)

DECEASED



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Bitumens from Sukhalin crude oil. P. P. Derevitskii, P. P. Shevelev and M. D. Suvorova. *Neftyanoe Khozyaistvo* 1939, No. 3, 25–8.—All 5 grades of asphalt can be prepd. by steam distn. of bottoms from Okha crude oil with yields of 29–39%. By steam distn. of bottoms from Ekhabinsk crude oil, asphalts of grades II, III and IV are obtained, with yields of 30, 34 and 41%, resp. Cracked bottoms of Ekhabinsk crude oil yield only grade IV asphalt (yield 60.8%). Air oxidation is not recommended for this crude oil, since by this process only 44% of asphalt of grade II can be obtained. The authors recommend using superheated steam at 280–330° and a max. temp. of 280° during air blowing, using 1.3–1.5 l. of air per kg. of raw material per min., while consumption of steam at 0.5 atm., 360° amounts to 0.35 kg./hr. per kg. of the raw material. The asphalt distillate can be used as cracking stock. The distillate obtained in the prepn. of asphalt from Ekhabinsk bottoms contains up to 40% paraffin. A. A. B.

DEREVITSKIY, P. F.

USSR/Chemistry - Chemical products, transportation of FD-968

Card 1/1 Pub. 50 - 11/19

Author : Derevitskiy, P. F.

Title : Improvements in the transportation of chemical materials shipped in the powder form

Periodical : Khim. prom., No 7, 429-432 (45-48), Oct-Nov 1954.

Abstract : Discusses conveyors, pneumatic appliances, and other equipment used in loading and unloading powdered materials shipped in bulk in railroad cars. Describes the design of special railroad cars which are used for that purpose. These cars are equipped with automatic unloading devices. One table, one figure.

DEREVITSKIY, P. F.

8

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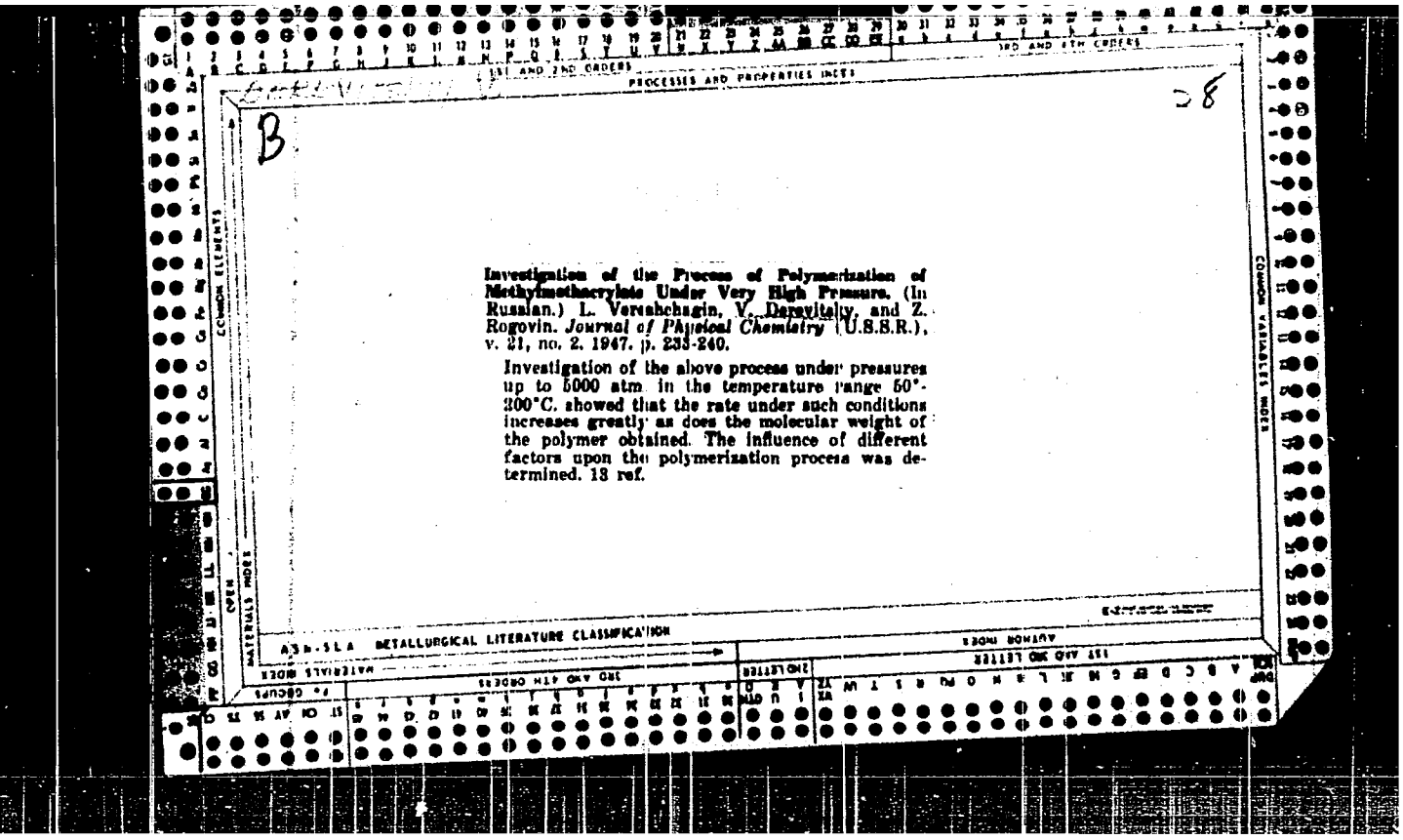
18 18

Furnace for high-temperature roasting of fine-grained pyrites. P. F. Derevitskii, N. A. Semenenko, A. P. Shurygin, I. N. Sidel'kovskii, K. M. Rainov, and A. M. Malets. U.S.S.R. 105,612, May 25, 1957. M. Hosch

VOL'FKOVICH, S.I.; IONASS, A.A.; POSTNIKOV, N.N.; REMEN, R.Ye.; SIDEL'DOVSKIY, L.N.; SHURYGIN, A.P.; DEREVITSKIY, P.F.; YAGODINA, T.N.

Hydrothermal process of defluorination of natural phosphates in a cyclone furnace. Khim.prom. no.8:674-680 D '59. (MIRA 13:6)

1. Nauchnyy institut po udobreniyam i insektofungisidam im. Ya.V. Samoylova i Moskovskiy energeticheskiy institut im. Molotova.
(Phosphates) (Fluorine)



Investigation of the Process of Polymerization of Methylmethacrylate Under Very High Pressure. (In Russian.) L. Vershchagin, V. Dzerovitsky, and Z. Rogovin. *Journal of Physical Chemistry* (U.S.S.R.), v. 21, no. 2, 1947. p. 233-240.

Investigation of the above process under pressures up to 5000 atm. in the temperature range 50°-300°C. showed that the rate under such conditions increases greatly as does the molecular weight of the polymer obtained. The influence of different factors upon the polymerization process was determined. 13 ref.

DEREVLEV, A.I.

USSR/Farm Animals. Horses. Q

Abs Jour: Ref Zhur-Biol., No 4, 1958, 16757.

Author : Derevlev A.
Inst :
Title : Controlled Feeding of Foals (Napravlennoye kormleniye zherebyat)

Orig Pub: Konevodstvo, 1957, No 6, 36-38.

Abstract: In experiments with foals of the Vladimir breed, it was found that the early supplementary feeding of young foals (as from 1-2 months) by concentrates had a favorable influence on their development, and contributed to the better utilization of nitrogenous substances in later age. The utilization

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USSR/Farm Animals. Horses. Q

Abs Jour: Ref Zhur-Biol., No 4, 1958, 16757.

of the nutrient substances by test foals, as compared with their controls, was higher by 6.82-28.7 percent.

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DEREVLEV, A.I.

Q-4

USSR/Farm Animals. The Swine

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50075

Author : Tsirel'son, N.B., Rikardo, D.I., Derevlev, A.I.
Inst : VASKhNIL [All-Union Academy of Agricultural Sciences imeni Lenin]
Title : The Influence of BTS [Belen'skiy's Therapeutic Serum] Upon Weight Gain Increases in Swine During Fattening.

Orig Pub : Dokl. VASKhNIL, 1957, No 7, 35-37

Abstract : Serum obtained from the blood of large horned cattle was injected intramuscularly into the scapula of swine. The first group of animals received 0.25 ml and the second group 0.1 ml doses per 1 kg of live weight. The animals of the third group received hypodermic injections into the ear area 3 times daily with 3 day intervals. Best fattening results (15 kg weight gain per head per month) were obtained when intramuscular injections of the serum were performed during the first month. In order to stimulate fattening, it is

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USSR/Farm Animals. The Swine Q-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50075

recommended that intramuscular serum injections be employed which should start on the first day of fattening.

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USSR/Farm Animals. The Swine Q-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50073

Author : Tsirel'son, N.B., Rikardo, D.I., Derevlev A.I.
Inst : -
Title : Belen'kiy's Therapeutic Serum (BTS) in Fattening of Swine for Meat.

Orig Pub : Zhivotnovodstvo, 1957, No 7, 61-62

Abstract : When Belen'kiy's therapeutic serum (BTS) was used in a 0.1 ml/kg dose 3 times for 10 days preceding fattening and for the first month of fattening, positive results were obtained. From the economic point of view, protein stimulation achieved in subconcentrated fattening procedures is more profitable than in concentrated fattening procedures, even when antibiotics are used.--A.D. Musin

Card : 1/1

TOBINSKIY-BERESNEV, V.M., podpolkovnik meditsinskoy sluzhby; DEREVLEV, K.M., kapitan meditsinskoy sluzhby; KOROLEV, G.P., kapitan meditsinskoy sluzhby

Prevention and treatment of mycoses of the feet. Voen.-med. zhur. no.4:78-79 Ap '61. (MIRA 15:6)
(DERMATOPHYTES) (FOOT--DISEASES)