L 26624-66 EWT(d)/EWP(h)/EWP(l) SOURCE CODE: UR/0413/66/000/00

ACC NR: AP6009551

AUTHORS: Amel'kovich, I. I.; Artamonov, Yu. G.; Dyatlov, Ye. S.; Magirovskiy, N. P.; Novozhilov, Yu. I.; Orlov, S. F.; Pikkuvirta, P. O.; Podkovyrin, A. I.; Polyachenko, V. A.; Senchenko, L. P.; Fedoseyev, O. V.; Shubin, L. V. 32 B

ORG: none

TITLE: Machine for gathering, hauling, and transportation of felled trees. Class 45, No. 179539 [announced by Onega Tractor Factory (Onezhskiy traktornyy zavod); Leningrad Kirov Factory (Leningradskiy Kirovskiy zavod); Leningrad Forestry Technical Academy im. S. M. Kirov (Leningradskayalesotekhnicheskaya akademiya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5, 1966, 93-94

TOPIC TAGS: tractor, forestry, forestry product

ABSTRACT: This Author Certificate presents a machine for hauling, gathering, and transporting felled trees, consisting of a mono-axle tractor, semitrailer with steering axle connected with the tractor by a universal joint, and a hoist. To insure a continuous pick-up of felled trees and their loading on the machine, the latter is equipped with a movable boom, to the end of which is attached a pincer clamp. To improve the maneuverability of the machine, the movable boom is mounted [illegible] tractor frame and the pick-up device on the frame of the semi-trailer.

UDC: 629.114.4:634.0.377.4

L 26674-66

ACC NR: AP6009551

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prevent damage to the movable parts, the latter are protected by means of pipe fastened above the saddle hitch device. To facilitate the loading of large packets of trees, a pulley is attached to the protective pipe (see Fig. 1).

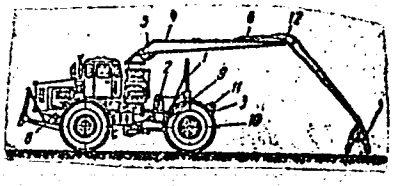

Fig. 1. 1 - pick-up assembly; 2 - hoist; 3 - saddle-hitch device; 4 - movable boom; 5 and 6 - power cylinders; 7 - pincer clamp; 8 - mono-axle tractor; 9 - semitrailer; 10 - steering axle of semitrailer; 11 - protective pipe; 12 - pulley.

Orig. art. has: 1 diagram.

SUB CODE: 13,02/ SUBM DATE: 15Jun64

Card 2/2 BLG

FADEYEVA, T.S.; DYATLOVA, A.I.

Dynamics of seed germination in the reciprocal hybrids of strawberries. Bot. zhur. 47 no.8:1190-1194 Ag '62. (MIRA 15:10)

1. Leningradskiy gosudarstvennyy universitet.
(Strawberry breeding) (Germination)

KHRISTOLYUBOVA, N.B.; DYATLOVA, A.I.

Electron microscopic study on nuclear and plasmatic relations in plant cells. Izv. SO AN SSSR no.4. Ser. biol.-med. nauk no.1:23-27'63. (MIRA 16:8)

1. Institut tsitologii i genetiki Sibirskogo otdeleniya AN SSSR, Novosibirsk.
(ELECTRON MICROSCOPY) (PLANT CELLS AND TISSUES)

L 60037-65 EWP(e)/EWT(m)/EWP(t)/EWP(b) Pq-4 JAJ/WH

ACCESSION NR: AP5017983 UR/0072/65/000/007/0007/0008

666.1.01.535.323

[illegible], N. I. (Candidate of chemical sciences); Botvinkin, O. K. (Candidate of chemical sciences); Dyatlova, L. V. (Engineer)

[illegible] birefringence in glass of the system [illegible] alumina silica

Steklo i keramika, no. 7, 1965, 7-8

TOPIC TAGS: double refraction, spodumene glass, glass optical property, structural birefringence, glass crystallization

ABSTRACT: The study was made in order to determine the possibility of the appearance of structural birefringence in glasses from which glass [illegible] materials are obtained, [illegible] use of optical anisotropy in [illegible] the samples studied [illegible] the system Li_2O - Al_2O_3 - SiO_2 [illegible] composition close to [illegible] and contained 10% TiO_2 as a catalyst. [illegible] comparison of the curves [illegible] temperature dependence of [illegible]

[illegible] the [illegible]

[illegible] during [illegible] crystalline phase

L 60037-65

ACCESSION NR: AP5017983

and by the growth of the crystals in an oriented direction. The structural birefringence was found to be very sensitive to temperature changes. The 700-740C range, in which crystallization of the main phase takes place, corresponded to the observed marked birefringence. The method described can be used for determining the crystallization range in processes involved in the manufacture of transparent pyroceramics. Orig. art. has: 3 figures.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut stekla (Scientific Research Institute of Glass)

AKOL'ZIN, P.A.; GERASIMOV, V.V.; KASPEROVICH, A.I.; MAMET, A.P.; MAN'KINA, N.N.; MARGULOVA, T.Kh.; MARTYNOVA, O.I.; MIROPOL'SKIY, Z.L.; Prinimali uchastiye: DYATLOVA, N.M.; BIKHMAN, B.I.; STYRIKOVICH, M.A., retsenzent; KOSTRIKIN, Yu.M., red.

[Water system of thermal electric power plants (ordinary and atomic)] Vodnyi rezhim teplovykh elektrostantsii (obychnykh i atomnykh). [By] P.A.Akol'zin i dr. Moskva, Energiia, 1965. 382 p. (MIRA 18:3)

L 53047-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG
ACCESSION NR: AP5012970 UR/0078/65/010/005/1131/1137
546.65:541.49+661.863/.868.7

AUTHOR: Dyatlova, N. M.; Temkina, V. Ya.; Belugin, Yu. F.; Lavrova, O. Yu.; [illegible]; Kozlovich, F. D.; Kalmykova, N. N.; Zhirov, Ye. P.

TITLE: Complexing of beta-hydroxyethyliminodiacetic acid with rare earth elements

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 5, 1965, 1131-1137

TOPIC TAGS: beta-hydroxyethyliminodiacetic acid, rare earth complex formation, [illegible] separation, yttrium separation, rare earth element, complex compound

ABSTRACT: The authors studied the capacity of ß-hydroxyethyliminodiacetic acid to [illegible] with rare earth elements, determined [illegible] and calculated the instability [illegible] of the complexing agent. [illegible] processes facilitate the determination [illegible] purification of rare earth elements. [illegible] instability constants of the complexes show that this complexing agent [illegible] be used for the separation of rare earth metals. The difference in the pA of

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L 53047-65

ACCESSION NR: AP5012970

the complexes of dysprosium and yttrium, equal to 0.71, is particularly notable, since it exceeds any previous value attained with other complexing agents. Experiments involving the separation of a binary mixture containing 30% Y_2O_3 and 70% Dy_2O_3 by means of β-hydroxyethyliminodiacetic acid were very successful. It was found that as the atomic number of the rare earth metal increases, the stability of the complexes rises sharply at first (from lanthanum to europium), then remains approximately constant (from europium to lutetium). Orig. art. has: 8 figures, 2 tables, and 11 formulas.

ASSOCIATION: none

SUBMITTED: 16Sep63 ENCL: 00 SUB CODE: IC, GC

NO REF SOV: 001 OTHER: 011

Card 2/2

L 57010-65 EWT(m)/EWP(j)/T Pc-4 RM

ACCESSION NR: AP5010582 UR/0020/65/161/003/0607/0610

AUTHOR: Dyatlova, N. M.; Kabachnik, M. I. (Academician); Medved', T. Ya.; Rudomino, [illegible]; Belugin, Yu. F.

TITLE: Peculiarities of complex formation of phosphoorganic complexing agents

SOURCE: AN SSSR. Doklady, v. 161, no. 3, 1965, 607-610

TOPIC TAGS: phosphonic acid, complex compound, chelate, metalorganic compound

ABSTRACT: The complexing properties of ethylendiaminobismethylphosphonic acid (I), [illegible]isopropylphosphonic acid (II) and ethylenediaminobismethylphosphonic [illegible] have been investigated. From [illegible] titration curves [illegible] and II are tetrabasic acids [illegible] tetrabasic acids [illegible] betaine structure. Complex formation with the cations Mg, Ca, Sr, [illegible] Zn, Mn, Fe^{+3}, Be, Y, La, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu [illegible] The pK values of the acids were determined. Formation of hydrogen [illegible] was observed for a 1:1 composition of components with all cations with the exception of the alkali earth cations. For Fe^{+3}, Cr, Al, Mn, Th, and the rare earth [illegible] the formation of hydroxy complexes was observed. The rare earth elements

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L 57010-65

ACCESSION NR: AP5010582

2

and Th form in presence of excess reagent compounds of type $Me(H_2X)_2$. Phospho- [illegible] complexing agents form especially stable hydrogen complexes as compared with [illegible] complexing agents. Orig. art. has: 1 table, 3 graphs, and 5 formulas.

[illegible] Institut khimicheskikh reaktivov i osobo chistykh khimicheskikh [illegible] (Institute of Chemical Reagents and High Purity Matter); Institut [illegible] Solnechnoy SSSR

SUB CODE: OC

New complexons. R. P. Lastovskii, Yu. I. Valushtein, N. M. Dyatlova, V. Ya. Temkina, and I. D. Kolotova (All-Union Sci. Research Inst. Chem. Reagents, Moscow). *Zhur. Anal. Khim.* 10, 125-31; *J. Anal. Chem. U.S.S.R.* 10, 117-20(1955)(Engl. translation).—Two new complexons Na benzohydrylaminodiacetate, $C_{17}H_{17}NO_4Na_2$ (I) and dihexamethylenediaminetetraacetic acid, $C_{14}H_{24}N_2O_8$ (II) and its Na salt, $C_{14}H_{20}O_8N_2Na_4$ (II) were synthesized. I is a white cryst. powder sol. in hot H_2O, alkalies, sparingly sol. in cold H_2O, insol. in EtOH, Me_2CO, C_6H_6, and $CHCl_3$. II is a white cryst. powder sol. in H_2O, sparingly sol. in EtOH, insol. in Me_2CO, $CHCl_3$, $C_2H_4Cl_2$, and C_6H_6. The suitability of I and II for analytical work was tested polarographically with 17 cations at various pH and the results are tabulated. Under certain conditions I and II formed stable complexes with certain cations which indicates their applicability to analytical work. The study is being continued. M. Hosch

(4)

DYATLOVA, N. M.

Name: DYATLOVA, N. M.

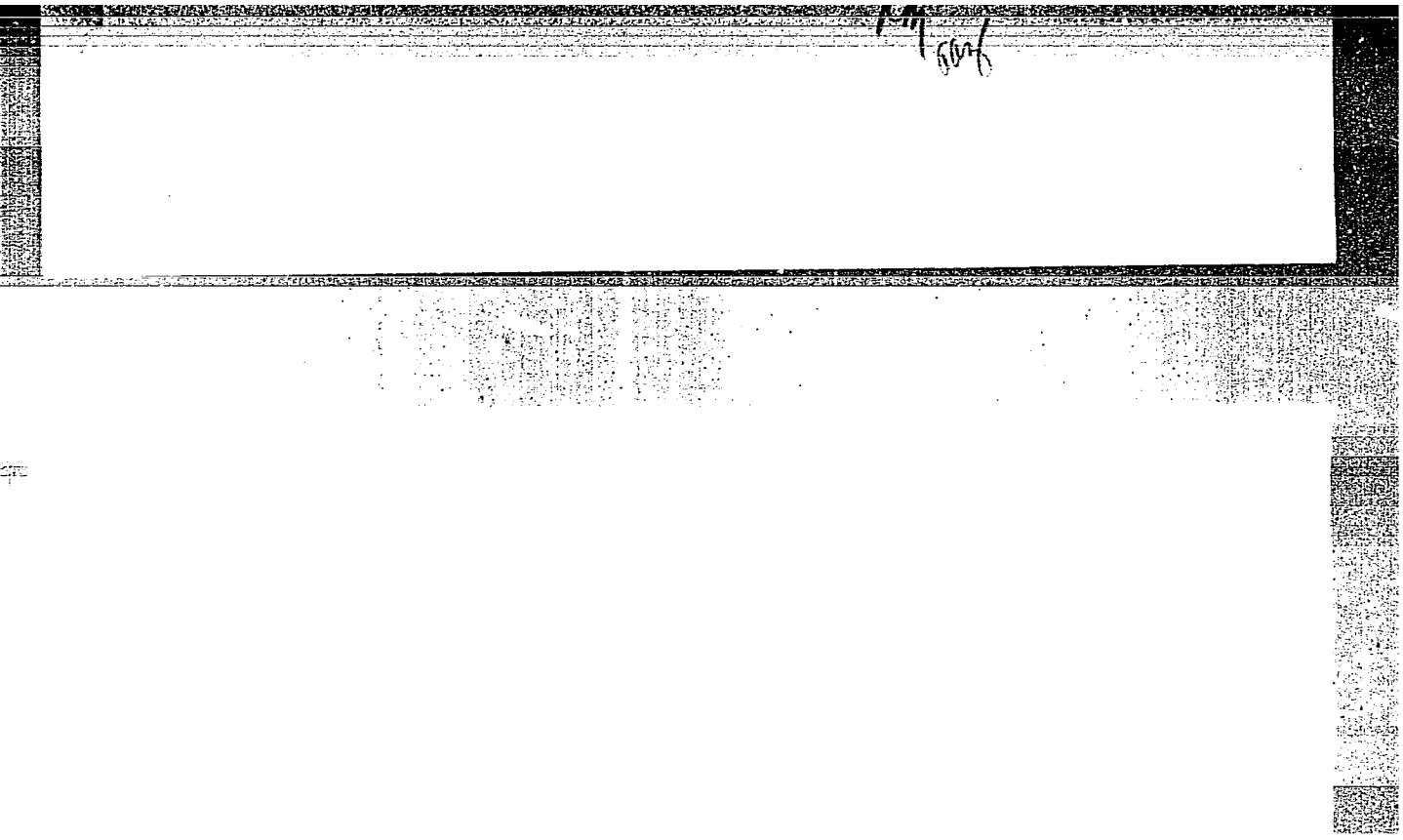
Dissertation: Investigation of some intracomplex compounds

Degree: Cand Chem Sci

Defended at
~~Affiliation~~: Moscow State Pedagogical Inst imeni V. I. Lenin

Publication
~~Defense~~ Date, Place: 1956, Moscow

Source: Knizhnaya Letopis', No 48, 195[illegible]



APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000411720017-8"

Dyatlova N. M.

AUTHORS: Lastovskiy, R. P., Vaynshteyn, Yu. I., Dyatlova, N. M., Kolpakova, I. D. 75-1-4/26

TITLE: New Complexons. (Novyye kompleksony), Information 3. Benzylaminodiacetic Acid and α,α',α"-Triaminotribenzyldiphenylmethanehexaacetic Acid (Soobshcheniye 3. Benzilamindiuksusnaya kislota i α,α',α"-Triaminodibenzildifenilmetangeksauksusnaya kislota)

PERIODICAL: Zhurnal Analiticheskoy Khimii, 1958, Vol. 13, Nr 1, pp. 31-35 (USSR)

ABSTRACT: With the examples of methylaminediacetic acid (1), benzylaminediacetic acid (2) and benzhydrilaminediacetic acid (3) the influence exerted by the modification of the molecular weight upon the complex-forming properties of some complexones was determined.

$CH_3N(CH_2COOH)_2$ $\bigcirc$-$CH_2N(CH_2COOH)_2$ $\bigcirc$-CH-$\bigcirc$ $N(CH_2COOH)_2$

(1) (2) (3)

The investigation of the properties of these new compounds

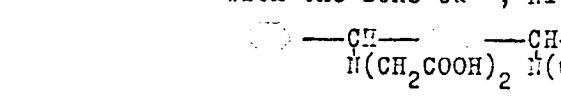
Card 1/5

New Complexons .
Information 3. Benzylaminodiacetic Acid and α,α',α"-Triaminodibenzyldiphenylmethanehexaacetic Acid

was carried out polarographically. The displacement of the half-wave potentials for a number of cations at different P_H were also determined. In this connection it was found that benzylaminediacetic acid at P_H 2,5 forms complex compounds with the ions Cu^{2+}, Bi^{3+}, Ni^{2+} and Sb^{3+}, at p_H 4,4 with the ions Cu^{2+}, Co^{2+} and Mo(V), at p_H 9,35 with the ions Pb^{2+}, La(III) and at p_H 12,4 with the ions Cu^{2+}, La(III) and Sb^{3+}.

A comparison between methylamine-, benzylamine- and benzhydril amine-diacetic acid showed that an increase in molecular weight under certain conditions causes an increase in the complex-forming properties. The polarographic investigation of α,α',α"-triaminedibenzyldiphenylmethanehexaacetic acid (4) showed that this compound at P_H 2,5 forms complex compounds with the ions Pb^{2+}, Cu^{2+}, As(III), Ni^{2+}, Co^{2+} and Mo(VI), at p_H 4,4 with the ions Co^{2+}, Mo(VI), Fe^{3+}, at p_H 9,35 with the ions Pb^{2+},

Bi^{3+}, Ni^{2+}, Cd^{2+}, Mn^{2+}, Cr^{3+} and La(III) and at p_H 12,4 with the ions Cu^{2+}, Ni^{2+}, Co^{2+} and Al^{3+}.



(4)

The formation of a number of complex compounds with this complexone is dependent on time. Thus, e.g., at p_H 9,35 the half-wave potential of cadmium amounts to from -0,6 to -0,76 V, in this connection the height of the wave decreases from 16 to 11 mm and a second wave forms. The existence of two waves can here not be caused by a stepwise reduction, as cadmium does not show any intermediate stages in the oxidation number. The formation of two waves may be explained by the formation of different complex compounds so slowly passing over into one another that each of them is capable of forming its own wave. After 15 days standing the second wave disappears and the reduction potential of cadmium amounts to -0,7 V. On further standing no change

New Complexons.
Information 3. Benzylaminodiacetic Acid and α,α',α"-
-Triamir odibenzyldiphenyl..hanehexaacetic Acid

any more occurs. This phenomenon may be explained by the presence of 3 complex-forming groups in α,α',α"-triamine-dibenzyldiphenylmethanehexaacetic acid which form intermediary complexes which one after another enter into the reaction. For a more complete characterization of the investigated new complexones the dissociation constants of the formed complex compounds were determined in a polarogrphic way. For benzylaminediacetic acid the dissociation constants of the complexes with copper and bismuth were determined, for the disodium salt of benzhydrilaminediacetic acid the dissociation constants of the complexes with copper, cobalt, nickel, lanthanum and cadmium, and for α,α',α"--triaminedibenzyldiphenylmethanehexaacetic acid the dissociation constants of the complexes with copper, lanthanum and cadmium. The results of the polarographic investigations of the disodium salt of benzhydrilaminediacetic acid had already been published previously (ref. 1). The synthesis of benzylaminediacetic acid and α,α',α"-triaminedibenzyldi-phenylmethanehexaacetic acid are accurately described. There are 2 tables, and 3 references, all of which are Slavic.

Card 4/5

New Complexors.
Information 3. Benzylaminodiacetic Acid and α,α',α"-
-Triaminolibenzyldiphenylmethanehexaacetic Acid

ASSOCIATION: All-Union Scientific Research Institute for Chemical Reagents, Moscow (Vsesoyuznyy nauchno - issledovatel'skiy institut khimicheskikh reaktivov, Moskva)

SUBMITTED: September 18, 1956

AVAILABLE: Library of Congress

1. Complex compounds - Polarographic analysis
2. Benzylaminodiacetic acids - Chemical reactions
3. δ,δ',δ"-triaminodibenzyldiphenylmethanehexaacetic acids - Chemical reactions 4. Complex compounds - Properties

Card 5/5

SOV/81-59-16-56637

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 16, p 94 (USSR)

AUTHORS: Vaynshteyn, Yu.I., Dyatlova, N.M.

TITLE: The Investigation of Complex Compounds of Hexamethylenediamine Tetraacetic and Benzhydrylamine Diacetic Acids With Some Metals

PERIODICAL: Tr. Vses. n.-i. in-ta khim. reaktivov, 1958, Nr 22 , pp 43-49

ABSTRACT: The complex-formation of the ions Zn^{2+}, Cd^{2+}, Cu^{2+} and La^{3+} with hexamethylenediamine tetraacetic acid (H_4R) and of the ions Cd^{2+}, Co^{2+}, Cu^{2+}, La^{3+} with sodium benzhydrylamine diacetate (Na_2R') has been studied by the polarographic method. It has been shown that at pH 9.35 and a H_4R concentration from $1 \cdot 10^{-5}$ to $2.5 \cdot 10^{-4}$ M the complex Zn_2R is formed, the instability constant of which is equal to $6 \cdot 10^{-13}$; at a concentration of $H_4R > 2.5 \cdot 10^{-4}$ M the complex ion ZnR^{2-} is formed, the instability constant of which is equal to $4.7 \cdot 10^{-5}$. At pH 9.35, Cd^{2+} and La^{3+} form with H_4R the complexes Cd_2R and La_2R^2, the instability constants of which are equal to $7.52 \cdot 10^{-9}$ and $1.35 \cdot 10^{-8}$, respectively. Cu^{2+} at pH 4.4 forms with H_4R the complex Cu_2R, the instability constant of which is equal to $8.5 \cdot 10^{-5}$. At pH 9.35, Cd^{2+} and La^{3+} form with Na_2R' the com-

Card 1/2

SOV/81-59-16-56637

The Investigation of Complex Compounds of Hexamethylenediamine Tetraacetic and Benzhydrylamine Diacetic Acids With Some Metals

plexes CdR' and LaR'^{+}, the instability constants of which are equal to $2.76 \cdot 10^{-8}$ and $9.34 \cdot 10^{-3}$, respectively. At pH 4.4, Co^{2+} and Cu^{2+} form the compounds CoR' and CuR', the instability constants of which are equal to $1.26 \cdot 10^{-6}$ and $8.9 \cdot 10^{-4}$, respectively

V. Shmidt.

Card 2/2

S/075/60/015/004/009/030/XX
B020/B064

AUTHORS: Lastovskiy, R. P., Kolpakova, I. D., and Dyatlova, N. M.

TITLE: New Complexons. Information 4. Synthesis and Study of the Complexons of the Triazine Series

PERIODICAL: Zhurnal analiticheskoy khimii, 1960, Vol. 15, No. 4, pp. 419 - 423

TEXT: Continuing their study of the synthesis of new complexons (Refs. 1-3), the authors investigate here the effect of nitrogen in the triazine cycle upon its capability of forming complex compounds. The introduction of atoms capable of coordinating with metals into the complexon molecule increases its capability of forming complexes and, in many cases, increases the selectivity of complexons for several metal cations. It was of interest to study the effect of heteroatoms in cyclic compounds. For this purpose, the following complexons containing a 1,3,5-triazine cycle were prepared: 2-oxy-4,6-diamino-1,3,5-triazine-N,N,N',N'-tetraacetic acid (I) and 2,4,6-triamino-1,3,5-triazine-N,N,N',N',N",N"-hexaacetic acid (II) by condensing cyanur chloride with

imino diacetic acid. The complex-forming properties of the new compounds were polarographically studied by shifting the half-wave potential and determining the instability constants of the complexes of a number of cations. Table 1 indicates that the synthesized complexons form a number of compounds with metal ions, among which the following are of special interest: At pH 2.5, I reacts with Pb^{2+}, Cu^{2+}, Bi^{3+}, Cd^{2+}, Ni^{2+}, Mo^{VI}, and Ti^{IV}; at pH 4.4, apart from these ions, with As^{III} and Mn^{2+}; at pH 9.35 with Pb^{+}, Cu^{2+}, Cd^{2+}, As^{III}, Co^{2+}, and Mo^{VI}; and at pH 12 with Cu^{2+}, Cd^{2+}, Zn^{2+}, Ni^{2+}, and Bi^{3+}. At pH 4.4, II reacts with Pb^{2+}, Cu^{2+}, Mn^{2+}, Mo^{VI}, and Ti^{IV}; at pH 2.5, apart from these ions, with La^{III}, Tl^{+}, and Zn^{2+}; at pH 9.3 with Pb^{2+}, Cu^{2+}, As^{III}, Mn^{2+}, Mo^{VI}, and La^{III}; and at pH 12 with Cu^{2+}, Cd^{2+}, Ni^{2+}, and Mo^{VI}. To determine the influence of nitrogen atoms in the hetero-cycle upon the stability of the complexes being formed, the properties of compounds I and II were compared with one another and with m-phenylene diamine-N,N,N',N'-tetraacetic acid, which were synthesized and

New Complexons. Information 4. Synthesis and Study of the Complexons of the Triazine Series

S/075/60/015/004/009/030/XX
B020/B064

polarographically examined for the purpose. The instability constants of some complexes formed by the complexons examined with several metals were determined polarographically (Table 2). The half-wave potential shifts of the ion complexes with I and II are in all cases greater than with III, while the tendency toward forming stable complexes with I is greater than with II. I and II are characterized by the presence of the same group capable of forming complexes with metal cations, i.e., $(HOOC-CH_2)_2N-\underset{\|}{C}-N=\underset{|}{C}-N(CH_2COOH)_2$. The increased capability of II of forming complexes may be ascribed to the presence of a symmetrical molecule (three iminodiacetic acid groups). Finally, the synthesis of I and II is described in detail. There are 2 tables and 6 references: 4 Soviet, 1 Swiss, and 1 German.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov, Moskva (All-Union Scientific Research Institute for Chemical Reagents, Moscow)

SUBMITTED: April 14, 1959

Card 3/3

YASHUNSKIY, V.G.; SAMOYLOVA, O.I.; DYATLOVA, N.M.; LAVROVA, O.Yu.

Substances with complex-forming capacity. Part 7: N,N,S-mercaptoethylaminotriacetic acid. Zhur.ob.khim. 32 no.10:3372-3378 O '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze i Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov.
(Acetic acid) (Complex compounds)

LASTOVSKIY, R.P. (Moscow, Bogorodskiy val.d.3); DYATLOVA, N.M. (Moscow, Bogorodskiy val.d.3); KOLPAKOVA, I.D. (Moscow, Bogorodskiy val.d.3); TEMKINA, V.Ya. (Moscow, Bogorodskiy val.d.3); LAVROVA, O.Yu. (Moscow, Bogorodskiy val.d.3)

New complexones and possibilities of their application in analytical chemistry. Acta chimica Hung 32 no.2:229-233 '62.

1. Vsesoyuznyy nauchno-issledovatelskiy institut khimicheskikh reaktivov.

DYATLOVA, N.M.; BIKHMAN, B.I.

Complexons of certain metals with N,N,S-mercaptoethylaminotriacetic acid studied by the high-frequency titration method. Zhur.anal.khim. 18 no.7:796-798 Jl '63. (MIRA 16:11)

1. All-Union Scientific-Research Institute of Chemical Reagents and Substances of Special Purity, Moscow.

LASTOVSKIY, R.P.; DYATLOVA, N.M.; TEMKINA, V.Ya.; YAROSHENKO, G.F.; KOLESNIK, Ye.S.

New polycomplexons. Trudy IREA no.25:57-65 '63. (MIRA 18:6)

DYATLOVA, N.M.; YASHUNSKIY, V.G.; SIDORENKO, V.V.; LAVROVA, O.Yu.; LASTOVSKIY, R.P.

Synthesis and study of new complexons containing heteroatoms in cyclic compounds. Trudy IREA no.25:83-90 '63.

Synthesis and study of new selective ion-exchange resins. Ibid.:91-99

(MIRA 18:6)

LUKIN, A.M.; PETROVA, G.S.; PYATIOVA, N.M.

Reaction of cadion (prepared by the Institute of Chemical Reagents) with lead and cadmium. Trudy IREA no.25 161-171 '63.

(MIRA 18:6)

DYATLOVA, N.M.; LAVROVA, O.Yu.

Reduction of rare-earth metals. Trudy IREA no.25:289-302 '63.
(MIRA 18:6)

DYATLOVA, N.M.; DEDIGIN, Yu.F.

Certain remarks concerning the applicability of B'errum and Schwatzenbach's methods for calculating the constants of dissociation of acids. Trudy IREA no.25:374-384 '63.
(MIRA 18:6)

DYATLOVA, N.M.; BIKHMAN, B.I.

Using the measurements of electric conductivity in studying complexons. Trudy IREA no.25:385-390 '63.

Study of complexons by the high-frequency titration method. Ibid.:400-407 '63.

(MIRA 18:6)

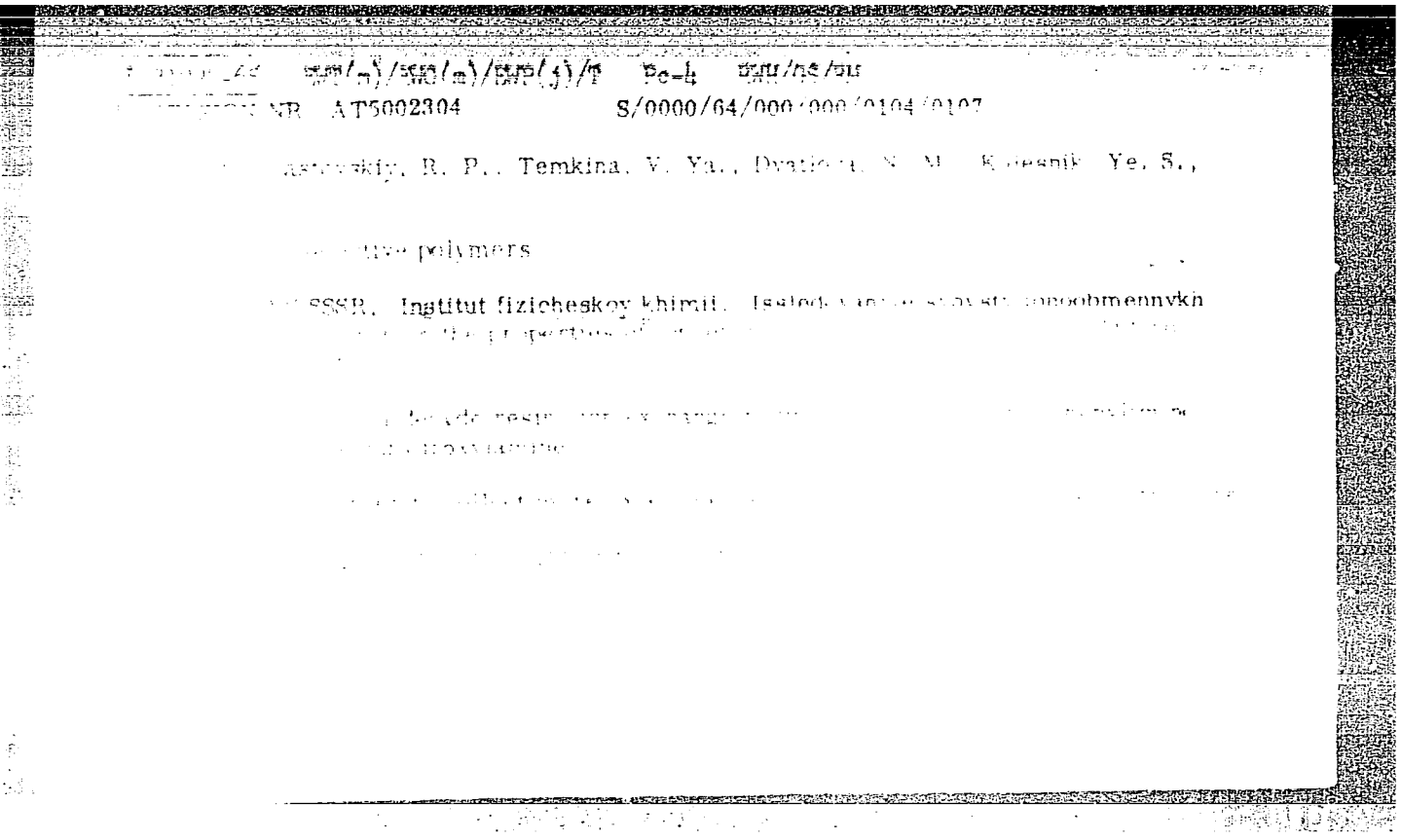
DYATLOVA, N.M.; LAVROVA, O.Yu.; BIKHMAN, B.I.

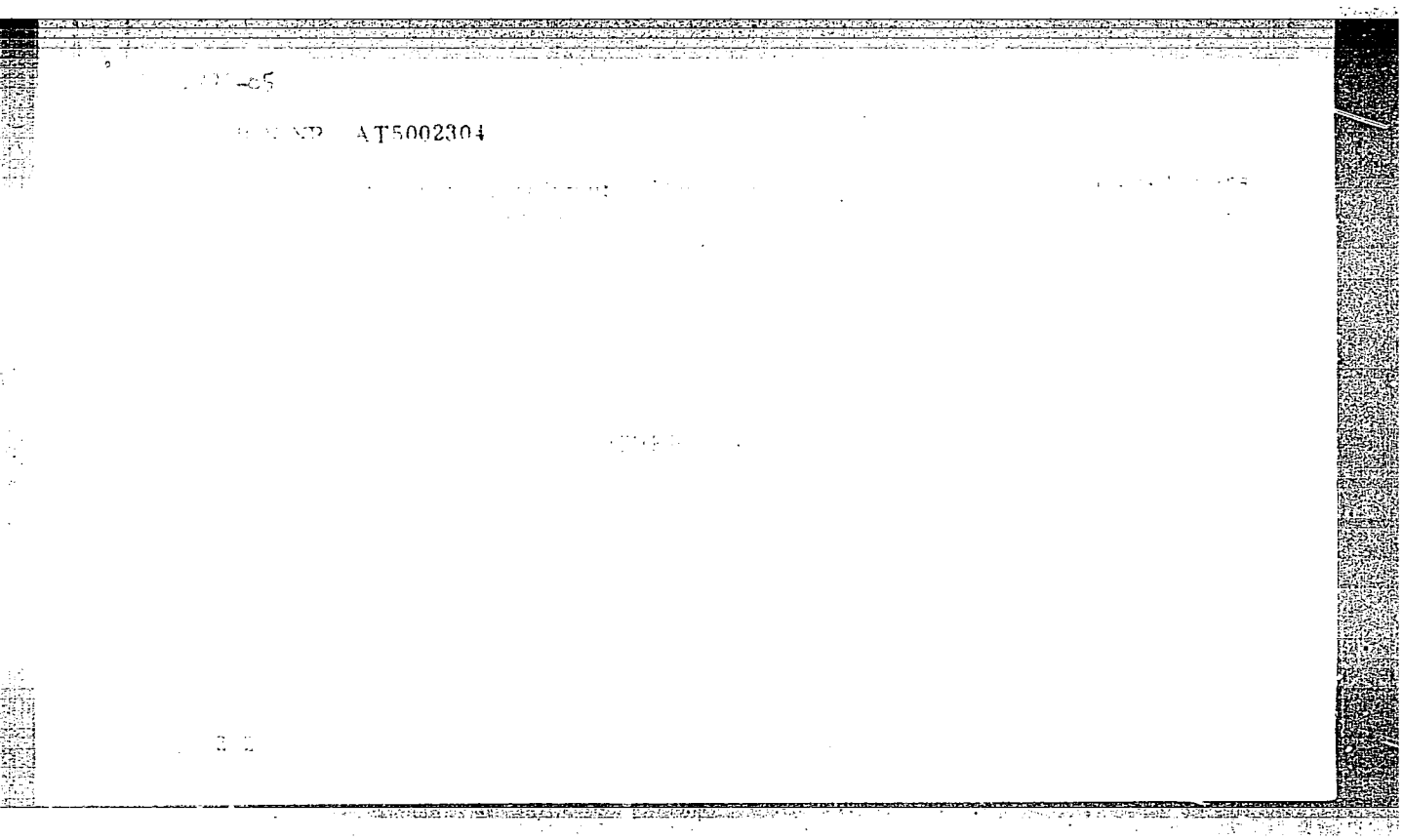
Determination of the composition and instability constants of some complexion salts. Trudy IREA no.25:391-399 '63.
(MIRA 18:6)

DYATLOVA, N.M.; SELIVERSTOVA, I.A.; YASHUNSKIY, V.G.; SAMOYLOVA, O.I.; Prinimala uchastiye Dobrynina, N.A.

Complexons. 1,3-Diaminopropanol-2-N,N,N'N'-tetraacetic acid. Zhur. ob. khim. 34 no.12:4003-4007 D '64 (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo shistykh khimicheskikh veshchestv "IREA" i Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut im. Ordzhonikidze.





DYATLOVA, N.M., kand. khim. nauk; BIKHMAN, B.I., starshiy nauchnyy sotrudnik

Determination of calcium iron and copper by the complexometric method in the presence of a complexon. Teploenergetika 11 no.12: 88-89 D '64 (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv.

DYATLOVA, N.M.; BIKHMAN, B.I.

High-frequency study of complexons with surface-active properties. Zhur. neorg. khim. 10 no.1:237-240 Ja '65. (MIRA 18:11)

1. Submitted Aug. 24, 1963.

DYATLOVA, N.M.; TEMKINA, V.Ya.; BFLUGIN, Yu.F.; LAVROVA, O.Yu.; BERTINA, L.E.; IOZEFOVICH, F.D.; KALMYKOVA, N.N.; ZHIROV, Ye.P.

Complex formation of β-hydroxyethyliminodiacetic acid with rare-earth elements. Zhur. neorg. khim. 10 no.5:1131-1137 My '65. (MIRA 18:6)

DYATLOVA, N.M., [illegible]

Methods for complexometric determination in the washing of deposits from power generating units using complexons. Teploenergetika 12 no.1:92-93 Ja '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh veshchestv.

DYATLOVA, N.M.; IASTOVSKIY, R.P.

Structure of complexons and their complex-forming capacity.
Usp. khim. 34 no.7:1153-1184 Jl '65.
(MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv.

L 61845-65 EWT(m)/EWP(j)/T Pc-4 JAJ/RM

AP5018148 UR/0074/65/034/007/1153/1184

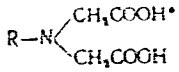
[illegible]a, N. M.; Lastovskiy, R. [illegible]

[illegible]ucture of complexing agents and their capacity for forming complexes

Uspekhi khimii, v. 34, no. 7, 1965, 1153-1184

coordination compound, complex, iminodiacetate ligand

The field of coordination chemistry of complexing agents of general

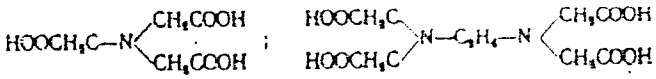


an aliphatic, aromatic, or alicyclic substituent, is reviewed in order [illegible] in the literature. General principles of complex formation and sta[illegible] Emphasis is placed on the effect [illegible]

L 61845-65

ACCESSION NR: AP5018148

ison of dissociation constants of a series of complexing agents of various metals with iminodiacetate ligands and oxygen-containing *R* substituents indicates that stability increases with increased basicity of the nitrogen atom. Comparison of wave potentials indicates that introduction of functional groups and hetero- the iminodiacetate ligand affects the basicity of the nitrogen atom, and in the ligand's selective behavior [illegible] one or more of acetate groups in the ligand



NTA EDTA

an alkyl- or arylhydroxy group is reflected in the stability of the complexing In general, substitution of propionate group for acetate group in the imino- ligand is reflected in a decreased stability of complexing agents with a metals. A copper complexing agent is an exception, probably because structure. It is concluded that modification of ligand composition is provides stable complexing agents [illegible] tables,

L 61845-65

ACCESSION NR: AP5018148

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo khimicheskikh veshchestv [All-Union Scientific Research Institute

KABACHNIK, M.I., akademik; DYATLOVA, N.M.; MEDVED', T.Yu.; MEDYNTSEV, V.V.; RUDOMINO, M.V.

Polynuclear beryllium complexonates. Dokl. AN SSSR 164 no.6:1311-1314 O '65. (MIRA 18:10)

1. Institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv i Institut elementoorganicheskikh soyedineniy AN SSSR.

DYATLOVA, N.M.; BIKHMAN, B.I.; LASTOVSKIY, R.P.

Study of the complex formation of diethylenetriaminepentaacetic acid with some metals. Zhur. neorg. khim. 10 no.1:241-243 Ja '65. (MIRA 18:11)

1. Submitted Aug. 24, 1964.

L 24729-66 EWT(d)/EWT(m)/EWP(c)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(l)/EWG(m)-6
ACC NR: AP6015856 SOURCE CODE: UR/0314/65/000/008/0005/0008

IJP(c) JD
AUTHOR: Shvarts, G. L. (Candidate of technical sciences); Kristal', M. M. (Candidate of technical sciences); Dyatlova, V. N. (Engineer)

ORG: none

TITLE: New structural materials for chemical machine building

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 8, 1965, 5-8

TOPIC TAGS: low alloy steel, corrosion resistance, titanium, stainless steel, steel, annealing, sheet metal, corrosion rate, alloy, dispersion hardening, ferritic steel, austenitic steel, martirsitic steel, titanium alloy, solid solution/09G2S low alloy steel, 16GS low alloy steel, St 3 steel, 00Kh18N10 stainless steel, Kh18N10T steel, 0Kh17N16M3T steel, N70M27F alloy, Kh15N55M16V alloy, Kh15N9Yu steel, Kh16N6 steel, Kh17N5M3 steel, VT1-1 titanium, OT4 titanium alloy

ABSTRACT: In recent years the low-alloy steels 09G2S and 16GS have begun to be used to make chemical apparatus in addition to the usual quality steels. In comparison with steel St. 3, these steels are characterized by increased strength (15-20%) and by a wide operating temperature range (-40 to +420°C).

An effective method of increasing corrosion resistance in nitric acid and in other corrosive media is to decrease the carbon content to 0.03% or less. Presently, stainless steel grade 00Kh18N10 containing up to 0.04% is being put into GOST 5632-61. Production is starting on sheet steel grade 00Kh18N10 containing less than 0.03% C. Studies have indicated that the corrosion

Card 1/3 UDC: 669.018.9:66.02.001.8

resistance of steel containing less than 0.03% C, after annealing and subsequent heat at 650 C for 1 hour in fuming 65% nitric acid, is 0.25 mm/year whereas steel Kh18N10T containing 0.08% C it is 2 mm/year.
The production of steel OKh17N16M3T (EI580) containing less than 0.06% C has started. This steel has a pure austenitic structure.

Alloy N70M27F is recommended for joining large-size weldments when the thickness of the weld metal is less than 5 mm, on the basis of the studies conducted at NIIkhimmash together with TsNIIChM. The corrosion rate of this alloy in hydrochloric acid in 1-37% concentrations at 20 and 70°C and in boiling solutions containing up to 10% HCl does not exceed 0.2 mm/year, and in the 15-21% concentration range it amounts to less than 0.5 mm/year. In sulfuric acid the alloy is stable under the following conditions: at 20 and 70°C in the 10-83% concentration range; at 95°C in the 10-30 and 50-93% concentration ranges, at boiling temperature in the 10-40% concentration range (rate of corrosion does not exceed 0.1 mm/year). Alloy N70M27F is stable in phosphoric acid at 77-115% concentrations and up to 140-200°C (in relation to the acid concentration).

The Ni-Cr-Mo alloy Kh15N55M16V is sufficiently stable in sulfuric acid in all concentrations at 70°C and in the 10-55 and 78-93% ranges at 95°C and in boiling sulfuric acid up to 10% concentration (rate of corrosion is 0.1-0.5 mm/year). In concentrations above 10% the alloy is unstable in boiling sulfuric acid.

ACC NR: AP6015856

A need for materials combining high corrosion resistance and strength led to the introduction of dispersion hardened steels Kh15N9Yu, Kh16N6, and Kh17N5M3 of the austenitic-martensitic class as well as of steels of the austenitic-ferritic class for chemical machine building. The corrosion rate of steels Kh15N9Yu and Kh16N6 in 65% fuming nitric acid is 1.6 mm/year and 1.54 mm/year respectively.

A deficiency of austenitic-ferritic class steels is their tendency, higher than in austenitic steels, to selective structural corrosion in media containing the chlorine ion, sulfuric acid and maleic acid.

Of the various grades of titanium produced domestically technically pure titanium VT1-1 and low-alloy titanium alloy OT4 are used in chemical equipment building.

The corrosion resistance of titanium in a number of corrosive media can be improved by alloying it with other elements forming solid solutions with titanium. Workers at the Institute of Physical Chemistry AN USSR and NIIkhimmash, together with the State Institute of Rare Metals, established that in solutions of hydrochloric acid an alloy of titanium and 0.2% Pd has a considerably lower corrosion rate than titanium; it is stable in 30% HCl at room temperature, in 10% HCl at 90°C, and in 5% HCl at boiling temperature. Orig. art. has: 3 figures. [JPRS]

SUB CODE: 13, 11, 20 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 001

Card 3/3

DYATLOVA, N.S., aspirant.

Reasons for unfavorable development of tuberculosis in patients with timely diagnosis of pulmonary tuberculosis. Probl. tub. 34 no.1: 3-7 Ja-F '56 (MLRA 9:5)

1. Iz Instituta tuberkuleza Akademii meditsinskikh nauk SSSR (dir. Z.A. Lebedeva)

(TUBERCULOSIS, PULMONARY, diag.
early, causes for unfavourable develop.)

DYATLOVA, N.S.

"Prevention of tuberculosis through sanitation; for physicians and epidemiologists" by S.E.Nezlin. Reviewed by N.S.Diatlova. Probl. tub. 35 no.4:122-124 '57. (MLRA 10:8)
(TUBERCULOSIS--PREVENTION) (NEZLIN, S.E.)

DYATLOVA, N.S.

"Collective farm sanatoria" by A.M. Volokhvianskii, B.V. Zimenkov. Reviewed by N.S. Diatlova. Probl. tub. 36 no.8:99-100 '58 (MIRA 12:7)
(TUBERCULOSIS--HOSPITALS AND SANATORIUMS) (VOLOKHVIANSKII, A.M.) (ZIMENKOV, B.V.)

DYATLOVA, N.S.

Conference on the epidemiology and statistics of tuberculosis.
Probl.tub. 37 no.3:110-112 '59. (MIRA 12:6)
(TUBERCULOSIS)

DYATLOVA, N.S., kand.med.nauk

"Collected papers on the exchange of information on practices in antituberculous institutions of the R.S.F.S.R." Reviewed by N.S.Diatlova. Probl.tub. 37 no.4:113-115 '59.
(MIRA 12:10)

(TUBERCULOSIS)

RADKEVICH, R.A., doktor med.nauk; STEPANYAN, E.S., kand.med.nauk; DYATLOVA, N.S., kand.med.nauk; STUKALOVA, B.Ya., kand.med.nauk

Review of "Problems in the prevention and treatment of tuberculosis," published by the Lvov Tuberculosis Institute. Probl.tub. 37 no.6: 105-108 '59. (MIRA 13:2)

(TUBERCULOSIS)

RADKEVICH, R.A., prof.; UVAROVA, O.A., doktor med.nauk; UTKIN, V.V., kand. med.nauk; GROMOVA, L.S., kand.med.nauk; DYATLOVA, N.S., kand.med.nauk

Review of the book "Collection of transactions of the Republic Scientific Research Institute of Tuberculosis of the Ministry of Public Health of the Georgian S.S.R.; Vol.10." Probl. tub. 41 no.10:88-90 '63. (MIRA 17:9)

AGAFONOVA, V.A.; BEDNAYA, L.D.; BOCHKAREVA, I.I.; VITES, V.G.; GEGECHKORI, N.M.; DYATLOVA, O.A.; YEFIMOVA, Z.A.

Spectrum analysis of high-melting metals: tungsten and molybdenum. Fiz.sbor. no.4:44-51 '58. (MIRA 12:5)
(Tungsten--Spectra) (Molybdenum--Spectra)

DYATLOVA, O.I.

"Better utilization of potato planting machines." MTS 12, No 4, 1952.

1. DYATLOVA, O.I.
2. USSR (600)
4. Agricultural Machinery
7. New share for potato planters, S.l'khozmashina no. 4, 1953.

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

USSR/Farm Animals - Small Horned Cattle.

Abs Jour : Ref Zhur- Biol., No 18, 1958, 83394

Author : Dyatlova, O.N.

Inst : All-Union Scientific Research Institute of Sheep and Goat Husbandry.

Title : Changes of the Chemical Composition of Urine in Fine-Fleeced Sheep Caused by Modification of Feed Level and Feed Quality.

Orig Pub : Byul. nauchno-tekhn. inform. Vses. n.-i. in-t ovtsevodstva i kozovodstva, 1956 (1957), No 3 (25), 182-184.

Abstract : As animals were fed with alfalfa hay, corn and sudan grass silage, sunflower oil cakes, and barley waste, larger quantities of chemical substances (general nitrogen, Ca, P, S) were discharged in their urine on the 3rd month of pregnancy than on the 5th month. As steppe grass and oats were

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V-6

USSR/Pharmacology and Toxicology - Cardiovascular.

Abs Jour : Ref Zhur - Biol., No 14, 1958, 66357

Author : Gukasyan, A.G., Dyatlova, T.D. (Moscow)
Inst : -
Title : The Treatment of Hypertension with Rederpam and the Alkaloids of the Rauwolfia serpentina (R.S.) Group.

Orig Pub : Terapevt. arkhiv, 1957, 29, No 7, 53-63.

Abstract : The treatment of hypertensive patients with Rederpam did not result in a persistent decrease in blood pressure. Under the influence of reserpine, reduction in blood pressure occurred during the 1st-3rd week following onset of treatment. Optimal dosage of reserpine should not be over 1 mg per day. Reduction in arterial blood pressure was unstable. An improvement in the patients' sense of well-being paralleled reduction in arterial blood pressure. -- From author's resume.

Card 1/1

DYATLOVA, O.N.; BYKOV, V.V.

Chemical polishing of glass. Stek. i ker. 19 no.2:19-23 F '62. (MIRA 15:3)
(Grinding and polishing) (Glass manufacture)

DYATLOVA, T.I.

Materials for studying the fleas of the Ukraine. Nauk.zap.Kiev.un. 9 no.6:145-149 '50. (Ukraine--Fleas) (MLRA 9:10)

DYATLOVA, T.I.

Ectoparasites of chiroptera in the Ukraine. Nauk.zap.Kiev.un.12 no.3: 97 '53. (Ukraine--Parasites--Bats) (MLRA 9:10)

DYATLOVA, T.R.

Accuracy of soil temperature observations by the use of extractible thermometers and the EDTUK (AM-2) electric thermometers. Sbor. rab. Mosk. gidromet. obser. no.1:89-102 '60. (MIRA 14:11)

(Soil temperature--Measurement)

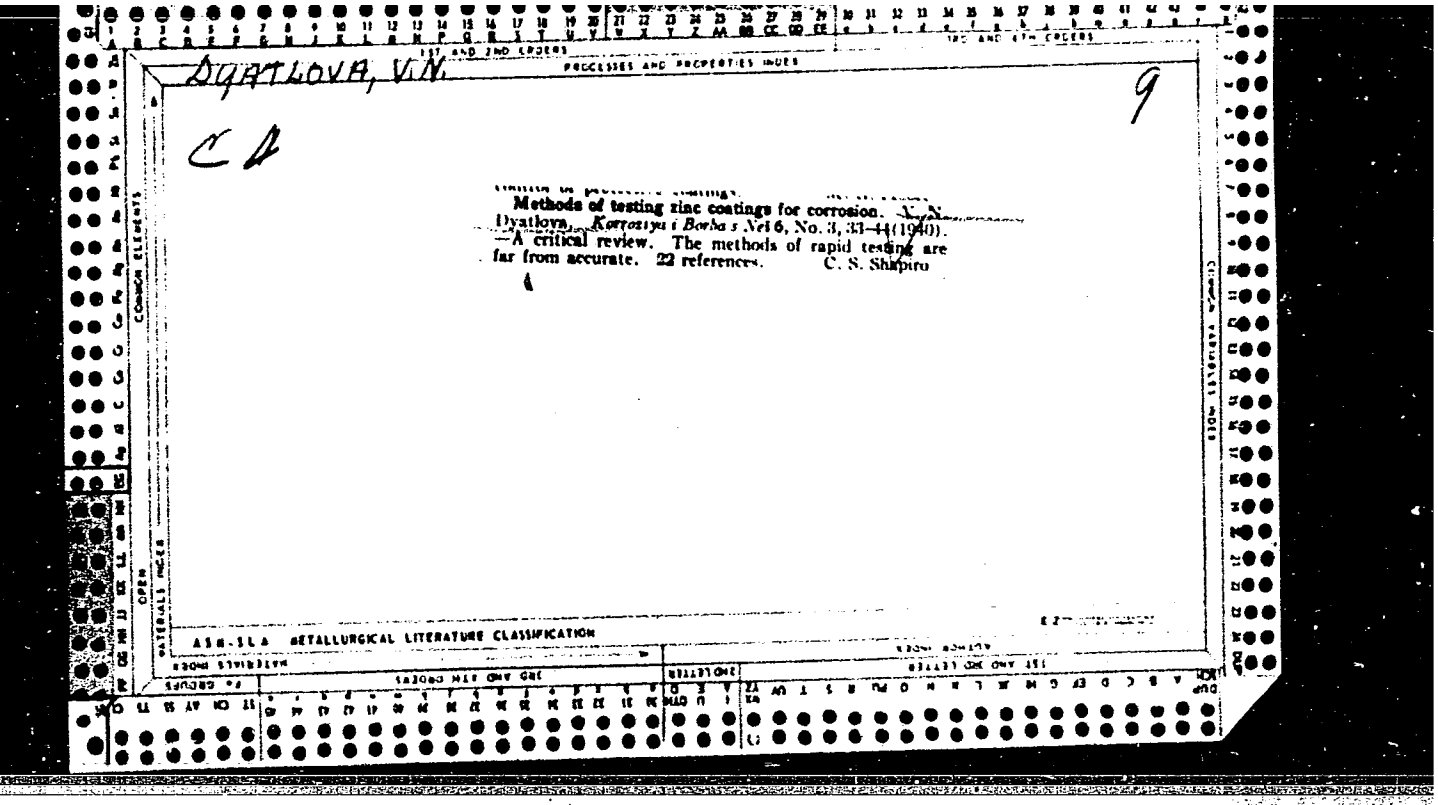
DYATLOVA, T.R.

Moisture conditions of soils under green and black fallows in the Moscow area. Sbor. rab. Mosk. gidromet. obser. no.1:69-74. '60. (MIRA 14:11)

(Moscow Province--Fallowing)
(Soil moisture)

DYATLOVA, V.I., kand. tekhn. nauk; BAUMAN, I.D., tekhnik

Developing a method of sticking polyvinyl chloride film to various kinds of walls. Sbor. trud. VNIINSM no.7:159-163 '63.
(MIRA 17:11)


DYATLOVA, V.N.

CA

9

Methods of testing zinc coatings for corrosion. V. N. Dyatlova. *Korroziya i Borba s Nei* 6, No. 3, 33–44 (1940). —A critical review. The methods of rapid testing are far from accurate. 22 references. C. S. Shapiro

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

DYATLOVA, V.N.

DIATLOVA, V.N., inzhener; ZOLOTNITSKIY, I.M., kandidat tekhnicheskikh nauk; MAKHNEV, T.A., inzhener, redaktor; TIKHONOV, A.Ya., tekhnicheskiy redaktor; DOLLEZHAL', N.A., doktor tekhnicheskikh nauk, professor, laureat Stalinskoy premii, redaktor.

[Corrosion resistant and chemically stable materials; a handbook] Korrozionnaia i khimicheskaia stoikost' materialov; spravochnik. Pod red. N.A. Dollezhalia. [Sostavili: V.N.Diatlova, I.M.Zolotnitskii] Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 568 p. (MIRA 7:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya.
(Materials) (Corrosion and anticorrosives)

SLOMYANSKAYA, F.B., kandidat tekhnicheskikh nauk; DYATLOVA, V.N.; AFANAS'YEV, P.S.; YEGOROV, A.P.; VITKOVSKIY, M.N.; MISHIN, I.A.; MEDOVAR, B.I.; LANGER, N.A.; PAL'CHUK, N.Yu., kandidat tekhnicheskikh nauk; FRID, Ya.L.; LEVIN, I.A., kandidat tekhnicheskikh nauk.

Methods of testing stainless steels for susceptibility to intergranular corrosion. Zav.lab.21 no.11:1314-1340 '55. (MIRA 9:2)

1.Vsesoyuznyy nauchno-issledovatel'skiy i konstrukterskiy institut khimicheskogo mashinostroyeniya (for Slomyanskaya, Dyatlova).2.Nachal'nik TSentral'noy zavodskoy laboratorii (for Afanas'yev).3.Nachal'nik laboratorii eksperimental'nogo zaveda khimicheskogo mashinostroyeniya.4.Sumskoy mashinostroitel'nyy zavod imeni M.V.Frunze (for Vitkovskiy, Mishin).5.Institut elektrosvarki imeni Ye.O.Patona, Akademii nauk SSSR (for Medovar, Langer).6.Moskovskoye vysshoye tekhnicheskoye uchilishche imeni N.E.Baumana (for Pal'chuk).7.Zamestitel' nachal'nika TSentral'noy zavodskoy laboratorii zavoda "Serp i Molot" (for Frid).

DYATLOVA, V.N., inzh.; FROLIKOVA, Ye.M., inzh.

Relation between the corrosion resistance of 1Kh18N9T and Kh18N12M3T steels and the composition of the σ-phase. Trudy NIIKHIMMASH no.34:69-81 '60. (MIRA 14:1)

(Steel—Corrosion)

S/184/63/000/002/004/007
A059/A126

AUTHORS: Dyatlova, V.N., Frolikova, Ye.M., - Engineers

TITLE: Resistance to corrosion of metals and alloys in solutions of sulfuric acid with titanium impurity

PERIODICAL: Khimicheskoye mashinostroyeniye, no. 2, 1963, 32 - 33

TEXT: In the production of titanium pigments, solutions of sulfuric acid containing titanium, iron and other metal cations are used. The working solution is cooled in a vacuum crystallizer from 55 to 15°C, and supplied to the vacuum evaporator, where it is heated to 70°C. The rate of corrosion of different metals and their welded samples was determined in order to find materials appropriate to replace copper and lead in these setups. Titanium was welded in argon with infusible electrodes, while the electrode НЖ-13. св.Х 18 Н11 Б (NZh--13.sv.Kh18N11B) was used for the manual welding of the steels Х 18 Н12 М2Т (Kh18N12M2T) and Х18Н 12 М3 Т (Kh18N12M3T), and the steel Х 23 Н28 М 3Д 3 Т (Kh23N28M3D3T) was manually welded with the electrode М15 (M15) in the Laboratoriya svarki NIIKhIMMASha (Welding Laboratory of the NIIKhIMMASh) under the

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Resistance to corrosion of metals and alloys in ....

guidance of A.N. Krutikov and P.T. Dmitriyeva. Corrosion tests were performed both in laboratory and plant conditions in the solution contained in the vacuum crystallizer. Titanium BT-1 (VT-1) showed the highest resistance to corrosion both in the production of titanium dioxide pigments and in the vacuum crystallizer at 55°C. All stainless steels and also copper and its alloys were rather resistant to corrosion in the production of titanium dioxide pigments showing surface pitting. The corrosion of the steel Kh23N28M3D3T increased by a factor of more than 10 under working conditions as compared to the laboratory, and that of the steels Kh18N12M2T and Kh18N18M3T by a factor of more than 200, being uniform in each case. The rate of corrosion of copper increased only little with the degree of its purity. Deoxidized Chile copper dissolved completely; the bronzes behaved in almost the same way as copper. The steel Kh23N28M3D3T was highly resistant both on complete and partial submersion in the solution of the vacuum crystallizer, while Kh18N12M3T showed pitting, and Kh18N12M2T was very strongly corroded. Copper and bronzes were subject to strong local corrosion along the water lines on partial immersion, while corrosion was uniform and intense on complete submersion. The rate of corrosion of the steel Kh23N28M3D3T was 10fold under working conditions as compared to the laboratory, and corrosion

Resistance to corrosion of metals and alloys in ....

spread in the form of stains. The steels Kh18N12M3T and Kh18N12M2T were very badly corroded. Copper was much more heavily attacked as compared to the laboratory tests, while the bronzes were corroded to the same extent, and a uniform oxide film formed on the Fe-Mn bronzes. The maximum impurity contents found in the solution contained in the vacuum crystallizer were: 0.01 g Cr^{3+}/ liter; 0.02 g Cu^{2+}/ liter; and traces of nickel. There are 3 tables.

DYATLOVA, V.N., inzh.; FROLIKOVA, Ye.M., inzh.

Corrosion resistance of metals and alloys in sulfuric acid solutions with titanium admixture. Khim.mashinostr. no.2:32-33 Mr-Ap '63. (MIRA 16:4)

(Metals—Corrosion) (Titanium) (Sulfuric acid)

L 10709-63 EWP(q)/EWT(m)/BDS--AFFTC/ASD--JD

ACCESSION NR: AP3001648 S/0063/63/008/003/0283/0293 58

AUTHOR: Dyatlova, V. N.; Kristal', M. M.; Shvarts, G. L. (Cand. of technical sciences)

TITLE: Stainless steels as materials for chemical equipment

SOURCE: Vsesoyuznoye khimicheskoye obshchestvo. Zhurnal, v. 8, no. 3, 1963, 283-293

TOPIC TAGS: austenite-martensite stainless steels, Kh17N7Yu, Kh15N9Yu, Kh17N5M3, Kh15N8M2Yu, corrosion resistance of steels

ABSTRACT: Authors describe a new type of stainless steels which are high-strength, age-hardenable steels of the austenite-martensite class. Special feature of these steels is the ability of the martensite transformation to take place in them under the effect of low temperatures or cold plastic flow and increase in their strength during the subsequent aging process. American steels of this type, particularly those used in the aviation industry, are discussed briefly. Soviet steels of this type which are discussed include the Kh17N7Yu, Kh15N9Yu, Kh17N5M3, and Kh15N8M2Yu. Chemical composition and structure age given in various tables and

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L 10709-63
ACCESSION NR: AP3001648

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figures. Article then compares the corrosion resistance of these steels to 2Kh13, 1Kh18N9T and Kh17N2 steels. Comparative data is shown in tables. Article concludes by comparing the new steels with other types of steels with respect to mechanical properties, structure and corrosion resistance. Orig. art. has: 8 figures and 8 tables.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 01Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 015 OTHER: 007

ja/Sum

Card 2/2

DYATLOVA, V.N.; ZARETSKIY, Ye.N., kand. tekhn. nauk, retsenzent;
KUBAREV, V.I., inzh., red.

[Corrosion resistance of metals and alloys; a handbook]
Korrozionnaia stoikost' metallov i splavov; spravochnik.
Izd.2., perer. i dop. Moskva, Izd-vo "Mashinostroenie,"
1964. 350 p. (MIRA 17:5)

L 01806-66 EWT(d)/EWT(m)/EWP(i)/EWP(c)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(z)
EWP(b)/EWP(l)/EWA(c)/ETC(m) IJP(c) WW/MJW/JD/HW/JG/MJW(CL)
ACCESSION NR: AP5020697 UR/0314/65/000/008/0005/0008

AUTHOR: Shvarts, G. L., (Candidate of technical sciences); Kristal', M. M., (Candidate of technical sciences); Dyatlova, V. N., (Engineer)

TITLE: New structural material for chemical machine building

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 8, 1965, 5-8

TOPIC TAGS: structure material, chemical equipment material, steel, corrosion resistant steel, alloy, corrosion resistant alloy/ 000Kh18N10 steel, 0K17N16M3T steel, Kh15N9Yu steel, Kh16N6 steel, Kh17N5M3 steel

ABSTRACT: In connection with increasing demands of the chemical industry, several new materials have been suggested for use in chemical equipment. Low-carbon 18-8-type steel 00Kh18N10 (0.04% max carbon) has been added to GOST 5632-61. 000Kh18N10 steel (0.03% max carbon) has been made available in sheet and plate form. The latter steel is much more corrosion resistant than standard Kh18N10T steel and its welds are not susceptible to knife-line attack. For parts operating in nitric acid and urea the fully austenitic steel EI580 with 0.06% max carbon is recommended. For service in sulfuric and

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L 01806-66

ACCESSION NR: AP5020697

hydrochloric acid solutions with low or medium concentration, the new nickel-molybdenum alloys N70M27F and Kh15N55M16V have been developed. Welds of Kh15N55M16V alloy are susceptible to knife-line attack, but an attempt has been made to eliminate this susceptibility by decreasing the silicon content. The precipitation-hardenable austenic-martensitic steels Kh15N9Yu, Kh16N6, and Kh17N5M3, which combine high strength with a satisfactory corrosion resistance, have been used under conditions where no other stainless steels could be used. Titanium has been extensively used in numerous applications, especially where chlorine is involved. Certain economic advantages are offered by the use of clad metals, such as carbon steels clad with Kh18N10T, Kh17N13M2T, and OKhN28M3D3T steel, or with nickel, copper, or silver. The clad steels have the same resistance to intergranular corrosion as solid stainless steels, and their resistance to stress corrosion is even higher. To have a satisfactory corrosion resistance the metal and its welded joints should contain not more than 0.03% carbon. Orig. art. has: 3 figures. [ND]

ASSOCIATION: none

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L 01806-66

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DYATLOVA, V.N.

17

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Moscow. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorskiy institut khimicheskogo mashinostroyeniya.

Materialy v khimicheskom mashinostroyenii (Materials in Chemical Machine Building) Moscow, Informatsionno-izdatel'skiy otdel, 1960. 143 p. (Series: Its: Trudy, vyp. 34) 3,000 copies printed.

Sponsoring Agency: Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu and Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorskiy institut khimicheskogo mashinostroyeniya NIIKhIMMASh.

Ed. (Title page): V. K. Fedorov, Candidate of Technical Sciences; Editorial Council: Chairman: V. B. Nikolayev; Deputy Chairman: Yu. M. Vinogradov, Candidate of Technical Sciences; B. N. Borisoglebskiy, A. N. Goncharov, Yu. G. Popandopulo, I. N. Yakulov, Candidate of Technical Sciences, and G. M. Yusova, Candidate of Technical Sciences; Ed.: V. I. Glukhov; Tech. Ed.: P. A. Vshivtsev.

PURPOSE: This collection of articles is intended for technical personnel in chemical machine building and other branches of the machine and instrument industry.

COVERAGE: The collection deals with the results of investigations on the mechanical, corrosive, and engineering qualities of certain alloys. Also discussed are heat-treatment regimes, the phase composition of stainless steels, methods of checking products, and new designs of apparatus used in checking. References accompany each article.

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Garrilov, V. M. [Engineer], and V. K. Fedorov [Candidate of Technical Sciences]. Crystallization of Alloys in the Elastic-Vibration Field 3

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Shapiro, M. B. [Engineer], and V. M. Makarov [Engineer]. Induction Hardening of Small-Module Pinions of [Speed] Reducers 26

Chernykh, N. P. [Engineer, Irkutskiy filial NIIKhIMMASh - Irkutsk Branch of NIIKhIMMASH]. Investigation of the Effect of Hydrogen on the Endurance of Certain Steels [Engineers V. D. Kolchanova and M. I. Mil' took part in the investigation] 33

Akchentseva, A. P. [Candidate of Technical Sciences], and G. N. Shumratova [Engineer]. Effect of Heat Treatment on the Phase Composition of 1Kh18N9T and Kh18N12M3T Steels [V. N. Dyatlova, P. T. Dmitriyev, B. N. Shevelkin, A. M. Shabanova, Z. K. Ogurtsova, and L. Ye. Lobanova took part in the investigation] 50

Dyatlova, V. N. [Engineer], and Ye. M. Prolikova [Engineer]. Dependence of the Corrosion Resistance of 1Kh18N9T and Kh18N12M3T Steels on the σ-Phase Content 69

Shevelkin, B. N. [Candidate of Technical Sciences]. Effect of Various σ-Phase Contents in 1Kh18N9T Steel and α- and σ-Phase

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DYATLOVA, V.P.

DYATLOVA, V. P.

"Development of a Method for Preparing Water-Stable Bonds for the Manufacture of Sand-Silicate Filter Elements." Cand Tech Sci, Moscow Chemicotechnological Inst, Moscow, 1954. (RZhKhim, No 22, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

Dyatlova, V. P.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 1/25

Authors : Matveyev, M. A., and Dyatlova, V. P.

Title : Thermodynamic study of the dissociation of Na_2SiF_6 and its solution in alkali silicate

Periodical : Zhur. fiz. khim. 28/10, 1713-1719, Oct 1954

Abstract : The dissociation of Na_2SiF_6 (sodium fluosilicate) was measured at temperatures of 540 - 900°C and the parameters of this reaction were calculated. The thermal effect and the entropy of Na_2SiF_6 were also computed from the experimental data obtained. It was established that the addition of Na_2SiF_6 to a solution of trisodium silicate results in the formation of [illegible] part of the Na_2SiF_6 [illegible]

graph, drawing.

Institution. : The D. I. Mendeleyev Chemical-Technological Institute, Moscow

Submitted : July 7, 1953

DYATLOVA, V. P.

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Facing material. M. A. Matveev and V. P. Dyatlova. U.S.S.R. 102,900, June 25, 1956. Water-resistant and mechanically strong filtering and facing products are obtained from a mixt. of sand and grog which is mixed with Na silicate, pressed, and fired at 900°. To the mixt. is added 2-2.5% AlF_3 to promote aluminosilicate bonding. The degree of porosity is controlled by selection of the grain size of the grog and sand. M. Hirsch

RACHKOV, N.F., kand. tekhn. nauk; DYATLOVA, V.P., kand. tekhn. nauk; CHERENKOVA, G.M., inzh.

Surface finishing of asbestos-cement slabs with silicate paints. Trudy NIIAsbesttsementa no.8:168-172 '58. (MIRA 16:8)

AUTHORS: Matveyev, M.A. and Dyatlova, V.P. SOV/80-59-1-8/44

TITLE: Production of Water-Resistant Sand-Silicate Filtering Items (Polucheniye vodostoykikh peschano-silikatnykh fil'truyushchikh izdeliy)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Nr 1, pp 50-54 (USSR)

ABSTRACT: Sand-silicate filtering items, such as plates, pipes, etc, are widely used in various branches of national economy. However, they possess an essential drawback of being poorly water-resistant. The adhesive of these items, consisting of alkaline silicates with addition of silicon fluoride or sodium fluoride, dissolves during a contact with water and the items are destroyed. In order to overcome this deficiency the authors proposed a new method of producing a water-resistant adhesive by means of adding to sodium silicate of aluminum fluoride which substitutes both sodium fluoride and alumina at the same time. With addition of 20% AlF_3 the solubility of the silicate adhesive attains a minimum, and its water-resistance rises more than 200 times. As the amount of adhesive with respect to the filler does not exceed 12%, it is recommended to add AlF_3 to sandsilicate filters in a quantity of 2 to 2.5% of the weight of the dry mixture of components in order to obtain water-resistant filters. Their high qualities have been confirmed by the results of structural and

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SOV/80-59-1-[illegible]

Production of Water-Resistant Lead-Silicate Filtering Items

Microscopic studies and also by the tests of water-resistance and mechanical strength.
There are 3 graphs, 1 microphoto, 1 table and 7 Soviet references.

SUBMITTED: June 8, 1956

Card 2/2

RACHKOV, N.F., kand.tekhn.nauk; DYATLOVA, V.P., kand.tekhn.nauk

Possibilities for producing roofing and facing tiles using sand and soluble glass. Stroi.mat. 5 no.2:34-35 F '59.
(MIRA 12:2)

(Tiles) (Sand) (Soluble glass)

DYATLOVA, V.P., kand.tekhn.nauk; POMANSKAYA, M.P., inzh.

Adhesive compounds for finishing materials made of plastic. Stroi. mat. 7 no.9:32-33 S '61. (MIRA 14:11)
(Adhesives) (Plastics)

FAEYEVA, V.S.; DYATLOVA, V.P.; DIKANOVA, N.A.; YANTIKOVA, M.P.

Rapid method of determining the consistency of adhesive cements for floors. Sbor. trud. VNIINSM no.4:105-113 '61. (MIRA 15:2)

(Cements, Adhesive--Testing)

S/812/61/000/005/004/005

AUTHORS: Dyatlova, V.P., Candidate of Technical Sciences, Gryzlova, P.G., Stolyar, N.M., Engineers, Akishina, R.I., Zil'bershteyn, K.Ya., Technicians.

TITLE: Application of indene-coumarone resins in adhesive compounds for polymer surface coverings.

SOURCE: Akademiya stroitel'stva i arkhitektury SSSR. Institut novykh stroitel'nykh materialov. Sbornik trudov. no.5. 1961. Novyye stroitel'nyye polimernyye materially. pp. 75-81.

TEXT: The paper describes experimental work which establishes the effectiveness of indene-coumarone-resin- (ICR)-based mastics (M) of various types. Unmodified resins yield stiff M suitable for the attachment of polystyrene (PS) facing panels; the strength of the mastic depends on the type of resin employed. ICR-based M modified with chloroprene rubber become elastic and suitable for the gluing of polyvinylchloride (PVC) articles. The ICR polymers under discussion are obtained from the heavy fraction of heavy benzol derived from hard coal. Various ICR's, having differing softening T and color, are obtained, depending on raw material, polymerization, and catalyzer. The All-Union Standard GOST 9263-59

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provides for 6 lettered (A through Ye) types graded by softening T and 5 numbered (Roman numerals) "marks" graded by color. Both characteristics are governed by the molecular weight and the composition, which affect their chemical and physico-mechanical properties also (chemical stability, water-resistance, workability, adhesive and dielectric properties). High-T light-colored ICR are less soluble, stronger in compression, harder, and more brittle. Dark ICR are soluble in white spirit and are more elastic but mechanically less strong. Antecedent uses of ICR and ICR mastics are summarized. In 1958-1960 the Institute of New Building Materials undertook a project for the development of ICR mastic in "pure" and modified form for the attachment of polymer surface coverings. Mastics for polystyrene panels: These M are based on the principle of "like sticks to like." PS and ICR are chemically similar, their monomers are homologs, both are nonpolar and have several solvents in common. The following M was developed for adhesion of PS panels to a cement-sand underflooring (in parts of weight): ICR 1, petroleum solvent 0.6, dibutylphthalate 0.4, pulverized lime 5. The ICR is dissolved in the petroleum with addition of the plastifier; the liquid M components are then mixed with the lime filler. Tests show that M which maintain adhesion strength (0.5 kg/cm^2 in spalling tension) without loss due to humidity and high T can be made from ICR having an elevated softening T. The hardness of the adhesive layer when dry does not affect its adhesiveness unfavorably.

Mastics for PVC linoleum and tiles without backing: The Institute experimented with ICR's modified by a relatively small quantity of chloroprene rubber (neoprene) and special rolling procedures for the mixture of ICR, rubber, and kaolin. The essence of the mechanical treatment appears to be the destruction of the polymer chains and the formation of free radicals which afford new, previously nonexisting, properties, such as adhesiveness relative to polar materials and elasticity, both of which are essential in the gluing of PVC materials. The proposed M contains (in weight percent): ICR 20, neoprene 5, solvent (ethylacetate: gasoline – 2:1) 30, plastifier 5, filler 40. The ICR and the kaolin are mixed with neoprene on rolls, whereupon the mass obtained is dissolved in a mixture of the volatile organic solvents and the plastifier. The shear strength of the M obtained was found to depend strongly on the type of ICR used with a given rubber content. M with high-T ICR, for example, affords achievement of a shear strength of 5 kg/cm^2 after only 24 hrs setting time. Tricresylphosphate and dibutylphthalate were the most effective plastifiers (comparison tabulated). The indispensability of the use of volatile organic solvents (e.g., ethylacetate and gasoline) to improve the setting of the adhesive is explained. An increase in neoprene content reduces the shear strength. A test batch of coumarone-rubber M was produced by the Mytishchi Kombinat of Synthetic Building Materials and Products and was tested on building projects of Glavmosstroy (at Khoroshevo-Mnevniki, the House-building Kombinat

no.69, et al.), with favorable results. Comparative adhesion (shear) strength data are graphed for the subject M versus other M commonly employed in the building trades. There are 3 figures, 1 table, and 4 Russian-language Soviet references.

ASSOCIATION: None given.

VAYNER, Ye.M.; DYATLOVA, V.P.; POMANSKAYA, M.P.; GRABYL'NIKOVA, K.A.

Production of rubber linoleum and a mastic for gluing it down.
Stroi.mat. 8 no.7:26-27 Jl '62. (MIRA 15:8)
(Linoleum) (Glue)

DYATLOVA, V.P.; POMANSKAYA, M.P.; AKISHINA, R.I.

Devices for determining adhesive strength. Zav.lab. 29 no.11:1375 '63. (MIRA 16:12)

DYATLOVA, V.P., kand. tekhn. nauk; AFONIN, V.B., inzh.

KN-2 coumarone-rubber mastic. Stroi. mat. 11 no.7:27 Jl '65.
(MIRA 18:8)

MATVEYEV, M.A.; DYATLOV, V.P.

Production of water-resistant sand-silicate filters. Zhur. prikl.khim. 32 no.1:50-54 Ja '59. (MIRA 12:4)
(Filters and filtration)