

SOV/124-57-5-5550

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 63 (USSR)

AUTHOR: Sinyavskiy, N. N.

TITLE: Determining the Maximum Possible Rate of Discharge Through a Water Intake in the Absence of a Diversion Dam (Opredeleniye velichiny predel'nogo besplotinnogo vodootbora)

PERIODICAL: Tr. Khar'kovsk. inzh.-stroit. in-ta, 1955, Nr 4, pp 257-262

ABSTRACT: The author examines the problem of determining the maximum possible rate of discharge through a water-intake canal when the river bed is not equipped with a diversion dam. First, he solves conjointly two equations: 1) the equation for the motion of a liquid flowing at a variable rate, which equation he writes for a prismatic-section channel whose bottom is assumed to have a slope equal to the hydraulic free-surface slope

$$\frac{\alpha_0 Q_1^2}{g \omega_1} + y_{c1} \omega_1 = \frac{\alpha_0 Q_2^2}{g \omega_2} + y_{c2} \omega_2$$

Card 1/2 and 2) the equation for the actual flow rate in the river. This

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Determining the Maximum Possible Rate of Discharge Through a Water (cont.)

enables him to determine the river's minimum flow rate Q_2 and to determine its corresponding depth h_2 . In the expression cited first above, Q_1 is the given flow rate of the river in a reference section of the river bed situated immediately above the upstream end of the water-intake canal (which the author designates as reference section Nr 1); ω_1 is the effective channel cross-sectional area at said reference section, and y_{c1} is the depth thereof of the center of gravity thereof, and the prevailing water depth is h_1 (which is assumed to be less than the water depth would actually be in the case of the flow rate Q_1). The water depth h_1 is designated as the minimum depth compatible with the amount of erosion tolerated ($h_1 \geq h_{er,1}$); Q_2 , ω_2 , y_{c2} , and h_2 are the flow rate, channel cross-sectional area, center-of-gravity depth, and water depth, respectively, in a reference section of the river situated immediately below the upstream end of the water-intake canal (which the author designates as reference section Nr 2). The maximum possible discharge rate through the water-intake canal is then $Q_{max} = Q_1 - Q_2$. For the case of rectangular-section water-intake canals the author includes a graph designed to facilitate the calculations.

P. G. Kiselev

Card 2/2

PETROV, Georgiy Aleksseyevich; SINYAVSKIY, N.N., dots., otv. red.;
NAZARENKO, L.M., red.

[Variable mass hydraulics; fluid flow with changing flow
rate along the way] Gidravlika peremennoi mas v; dvizhe-
nie zhidkosti s izmeneniem raskhoda v doli' puti. Khar'kov,
Izd-vo Khar'kovskogo univ., 1961. 203 p. (MIRA 18:1)

MALISHEVSKIY, Nikolay Georgiyevich, prof., doktor tekhn.nauk; SINYAVSKIY, N.N., kand.tekhn.nauk, otv.red.; TRET'YAKOVA, A.N., red.; TROFIMENKO, A.S., tekhred.

[Water intakes from open bodies of water] Vodopriemniki iz
otkrytykh vodosmov. Khar'kov, Izd-vo Khar'kovskogo gos.univ.
im. A.M.Gor'kogo, 1958. 141 p. (MIRA 12:8)
(Water-supply engineering)

BEVZA. G.G.; VERINA, V.N.; SINYAVSKIY, P.V.

Unusually strong squall in Moldavia. Okhr. prir. Mold. no.3:51-59
'65. (MIRA 18:10)

L 13281-66 EWT(1)/FCC GW

ACC NR: AR5028756

SOURCE CODE: UR/0169/65/000/008/B050/B051

SOURCE: Ref. zh. Geofizika, Abs. 8B286

AUTHOR: Sinyavskiy, P. V.

TITLE: Forecasting the relative geopotential

CITED SOURCE: Sb. rabot po regional'n. sinoptike, no. 9, 1964, 184-187

TOPIC TAGS: atmospheric geopotential, weather forecasting, troposphere,
SYNOPTIC METEOROLOGY, ATMOSPHERIC TEMPERATURE

TRANSLATION: The author considers approximate methods for forecasting $H-500/1,000$ which characterizes the average temperature of the lower half of the troposphere and is used in synoptic forecasting. The transformational variation is considered as the difference between local and advective changes in the relative potential. A definition of the effective change has important practical significance. Two methods are considered: (1) trajectory of a particle at the 700 mb level is plotted and the $H-500/1,000$ difference is found at the initial point and at the point where the 24 hr advective variation is determined; (2) three individual layers are considered and the sum of the advective changes for $H-850/1,000$ $H-700/850$ and $H-500/700$ is

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UDC: 551.509.32

L 13281-66

ACC NR: AR5028756

found, each of which is determined by the same method. It was assumed in all cases that the trajectory coincides with the absolute isohypses for the initial period. Tables are given showing the recurrence interval for the various divergences between the advective and the actual changes in $H-500/1,000$ for Odessa and L'vov; the two methods are compared with respect to results for cold and warm periods. A comparison is made between the relative altitude forecast by this method and actual (local) changes. The author concludes that the second forecasting method gives highly divergent results much less frequently. Since the differences in local and advective changes are due to transformation, these differences should be treated as transformational variations rather than as errors in forecasting.

SUB CODE: 04

Card 2/2

LITVINIYUK, A.F., gornyy inzh.; OSTROUKHOV, I.I., gornyy inzh.; SINYAVSKIY, S.N.:
gornyy inzh.

Practice and prospects for over-all mechanized mining of manganese ores.
Gor. zhur no.4:41-46 Ap '63. (MIRA 16:4)
(Manganese mines and mining--Equipment and supplies)

SINYAVSKIY, V.

All-purpose device for cutting out openings in metal or wood.
Radio no.5:31 My'55. (MIRA 8:6)
(Cutting tools.)

SINYAVSKIY, V.

Start was made in Krasnogorsk. Tekh.mol. 29 no.3:2-3 '61.

(MIRA 14:3)

(Krasnogorsk—Agricultural machinery—Technological innovations)
(Communist Youth League)

MAL'TSEV, V.; BORODIN, V.; SINYAVSKIY, V.; CHURAKOVA, N.

Siberia and the Far East must have their own good health resorts!
Okhr.truda i sots.strakh. no.5:49-53 My '59.(MIRA 12:9)

1. Predsedatel' Chabarovskogo krayevogo soveta profsoyuzov (for Mal'tsev). 2. Predsedatel' Sakhalinskogo oblastnogo soveta profsoyuzov (for Borodin). 3. Predsedatel' Chitinskogo oblastnogo soveta profsoyuzov (for Sinyavskiy).

(Soviet Far East--Health resorts, watering places, etc.)

(Siberia--Health resorts, watering places, etc.)

SINYAVSKIY, Vadim

The exciting moment. Sov.foto .22 no.10:43-44 0. '62.

(MIRA 15:11)

(Photography of sports)

SINYAVSKIY, V.

AID P - 1654

Subject : USSR/Aeronautics

Card 1/1 Pub. 58 - 13/19

Author : Sinyavskiy, V.

Title : Instructor in an aviation circle

Periodical : Kryl. rod., 3, 18-19, Mr 1955

Abstract : The author describes in four brief sketches the activities of aircraft modelling instructors. Several names are mentioned. Photo

Institution: None

Submitted : No date

AID P - 3588

Subject : USSR/Aeronautics
Card 1/1 Pub. 58 - 5/26
Author : Sinyavskiy, V.
Title : ~~When an aeroclub instructor came to a primary organization~~
Periodical : Kryl. rod., 11, 8, N 1955
Abstract : A report on the activity of regional and local organizations of DOSAAF in the Vitebsk area. Names are mentioned. Photo.
Institution : None
Submitted : No date

SINYAVSKIY, V.

~~_____~~
Road to success. Voen.znan. 31 no.8:20 Ag '56.
(Itkis, Mikhail)

(MLBA 9:11)

~~SINYAVSKIY, Vito~~

Life at its prime. Voen. snan. 33 no.3:4-5 Mr '57.
(Gavrilova, Ol'ga Nikolaevna)

(MIRA 10:6)

SINYAVSKIY, VIK

85-58-3-7/26

AUTHOR: Sinyavskiy, Vik.

TITLE: Leonid Borovkov, Model Airplane Builder (Leonid Borovkov, aviamodelist)

PERIODICAL: Kryl'ya rodiny, 1958, Nr. 3, pp. 8-9 (USSR)

ABSTRACT: An account of a schoolboy's training in model-aircraft building. There is one photograph.

AVAILABLE: Library of Congress

Card 1/1

SINYAVSKIY, Vik (Tbilisi)

~~no.2:16-17 F '59.~~
Absolute champion of the world; a sketch. Kryl.rod. 10
no.2:16-17 F '59. (MIRA 12:5)
(Ostrovskii, Petr)

22(1)

SOV/85-59-12-16/38

AUTHOR: Sinyavskiy, Viktor(Saratov)

TITLE: At the Take Off

PERIODICAL: Kryl'ya rodiny, 1959, Nr 12, p 12 (USSR)

ABSTRACT: The article tells of a student of an unidentified university at Saratov, an enthusiastic glider pilot of the Saratov aeroclub, Lyudmila Kiseleva. She successfully combines studies with sport activities and has already participated in a zonal glider pilot competition at Stalingrad, where she had won 4th place. As a member of the Komsomol, she carries out the social work of an agitator. Other persons mentioned in the text include instructor Vera Vasil'yevna Moskovskaya, chief of staff Sokolov, instructor Yevgeniy Vasil'yevich Andronov and a fellow-trainee Stanislav Bochkarev. There is 1 photo.

Card 1/1

SINYAVSKIY, V.G. [Sinyavskiy, V.G.]; TURBINA, A.I.; ROMANKEVICH, M.Ya.
[Romankevych, M.IA.]

Diazotization of granular copolymers of p-aminostyrene with
divinylbenzene and their nitrogen coupling with some phenol
derivatives. Dop. AN URSSR no.5:613-615 '63. (MIRA 17:9)

1. Institut khimii polimerov i monomerov AN UkrSSR. Predstavleno
akademikom AN UkrSSR A.I.Kiprianovym.

15-8050

26295

S/190/61/003/008/008/019

B110/B218

AUTHORS: Ostroverkhov, V. G., Vakarchuk, I. S., Sinyavskiy, V. G.

TITLE: Kinetics of polymerization of 2-methyl-5-vinyl pyridine and its copolymerization with styrene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 8, 1961, 1197-1202

TEXT: It was the aim of the present work to determine the constants of polymerization rates of 2-methyl-5-vinyl pyridine (MVP) in benzene, in the presence of benzoyl peroxide (BP) or azoisobutyric acid dinitrile (ABN) as an initiator. To determine the relative activity constants r_1 and r_2 of the monomers, the authors also studied thermal block polymerization of MVP without initiator, and copolymerization of MVP and styrene in the presence of ABN. The reagents MVP and styrene were purified by double distillation and, after that, either used immediately or stored in a Dewar vessel containing dry ice (maximum storage time 24 hr). Benzene was purified by H_2SO_4 and then distilled by Na; BP and ABN were

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Kinetics of polymerization of ...

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twice recrystallized from absolute methanol while petroleum ether was purified by boiling with Na and subsequent distillation (boiling point 50 - 70°C). Polymerization of MVP in solution: The benzene solution of MVP and the initiator were filled into ice-cooled ampoules which were fused in N₂ atmosphere, heated in a thermostat, and then cooled in ice.

The content of ampoules was introduced into a flask by means of acetone, and the polymers were precipitated by adding the 2.5-3-fold volume of petroleum ether. When using ABN as initiator, polymerization occurred at 60, 70, and 80°C. The concentration of MVP was 1.7 - 1.9 mole/l, that of the initiator $\sim 7 \cdot 10^{-3}$ mole/l. For 70°C, the authors graphically found the equation $dx/dt = k(a - x)^n c^m$, where a = initial concentration of monomer, c = concentration of initiator, m = 0.5, n = 1.5. Solution of the equation yielded: $k = \left\langle \frac{[a^{1-n} - (a-x)^{1-n}] \cdot m k_B}{(1-n) c_0 [1 - \exp(-k_B a t)]} \right\rangle$. Here, k_B denotes the decomposition constant of the initiator at a given temperature T⁰. Calculation of k_B according to V. van Hook, A. Tobolsky
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Kinetics of polymerization of ...

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B110/B218

(Ref. 4: J. Amer. Chem. Soc., 80, 779, 1958) led to the following results: for 60°C: $3.2 \cdot 10^{-2}$, for 70°C: 0.125, and for 80°C: 0.446. For k ($l \cdot \text{mole}^{-1} \cdot \text{min}^{-1}$), the authors found: $k_{60} = 3.93 \cdot 10^{-3} \pm 8 \cdot 10^{-5}$; $k_{70} = 1.15 \cdot 10^{-2} + 8 \cdot 10^{-5}$; $k_{80} = 2.58 \cdot 10^{-2} \pm 1.1 \cdot 10^{-3}$, $E_{\text{act}} = 22$ kcal/mole.

In the presence of BP: $m = 0.5$; $n = 1.3$, k_B for 60°C = $9.94 \cdot 10^{-3}$, for 80°C = 0.13, $k_{60^\circ\text{C}}$ (in $l^{0.8} \cdot \text{mole}^{-0.8} \cdot \text{min}^{-1}$) = $3.28 \cdot 10^{-3} \pm 1.7 \cdot 10^{-4}$; $k_{80^\circ\text{C}} = 1.66 \cdot 10^{-2} \pm 2.7 \cdot 10^{-4}$, $E_{\text{act}} = 18.9$ kcal/mole. Thermal polymerization of MVP without initiator was carried out at 80, 100, and 120°C. For 120°C, the authors found: $dx/dt = k_1[M]$, where $[M]$ denotes the monomer concentration in parts of the initial concentration. k_1 (determined

graphically) amounted to $6.5 \cdot 10^{-4} \text{ min}^{-1}$. Results obtained at 80 and 100°C are very inaccurate due to the low yield in polymers. The polymers of MVP

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are insoluble and not capable of swelling in H₂O, ether, and petroleum ether, soluble in alcohols, dioxane, acetic acid, mineral acids, in the initial monomer, and in chloroform, poorly soluble in aromatic hydrocarbons, acetone, and CCl₄. Boiling point was between 200 and 235°C; softening occurred at about 165-170°C. The viscosity in propanol at 25°C showed a minimum in the concentration range of 0.1 - 0.2 g/100 ml. 0.4% solutions exhibited the well-known dependence of viscosity on polymerization temperature and concentration. Copolymerization of MVP and styrene was carried out at 60°C, in the presence of 0.16 - 0.2% by weight of ABN. The N content of copolymers was determined according to Dumas. Table 2 shows the results. The copolymerization constants were graphically determined from the equation: $F(f-1)/f = r_1 F^2/f - r_2$ (f, F = molar ratios of monomers in the copolymer and in the initial mixture) according to R. Fineman and S. Ross (Ref. 8: J. Polymer Sci., 5, 259, 1950): $r_1(\text{MVP}) = 0.88 \pm 0.2$; $r_2(\text{styrene}) = 1.19 \pm 0.12$. The copolymers

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B110/B218

melt at 210 - 240°C. At 160 - 170°C, they shrink. They are readily soluble in acetone, dioxane, chloroform, and acetic acid. In methanol, only copolymers with a higher mol% content of MVP than 0.2 - 0.3 are readily soluble. There are 4 figures, 2 tables, and 8 references: 3 Soviet and 5 non-Soviet.

ASSOCIATION: Institut khimii polimerov i monomerov AN USSR
(Institute of Polymer and Monomer Chemistry AS UkrSSR)

SUBMITTED: October 14, 1960

Table 2. Block polymerization of MVP with styrene in the presence of ABN.
Legend: (1) Composition of initial mixture, molar fractions; (2) content of nitrogen in the copolymer, %; (3) composition of the copolymer, molar fractions; (4) yield of copolymer, %; (5) viscosity of a 0.4% solution in toluene; (6) MVP; (7) styrene.

Card 5/6

SINYAVSKIY, V.G.

S/021/62/000/012/017/018
D205/D307

AUTHORS: Sinyavs'kiy, V.G., Turbina, A.I. and Romankevych, N.Ya.

TITLE: The synthesis of p-aminostyrene

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 12, 1962, 1622-1623

TEXT: p-Nitrophenyl chloromethyl carbinol, $p\text{-NO}_2\text{-C}_6\text{H}_4\text{-CH(OH)-CH}_2\text{-Cl}$, was cyclized in high yield to $p\text{-NO}_2\text{-C}_6\text{H}_4\text{-CH(O)-CH}_2$ with aqueous alkali at 40-50°C, and the oxide was then reduced to $p\text{-NH}_2\text{-C}_6\text{H}_4\text{-CH}_2\text{CH}_2\text{OH}$ with (a) Zn dust in aqueous CaCl_2 and (b) H_2 , using Raney nickel or platinized carbon, in benzene, at 50-60°C and under a pressure of 100-150 atm. p-Aminophenyl ethyl alcohol was then dehydrated to p-aminostyrene, in high yield, by heating with solid KOH, in a stainless steel reactor, under N_2 or reduced pressure (8-10 mm Hg).

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The synthesis of ...

S/021/62/000/012/017/018
D205/D307

ASSOCIATION: Institut khimii polimeriv ta monomeriv AN URSR
(Institute of Chemistry of Polymers and Monomers of
the AS UkrSSR)

PRESENTED: by A.I. Kiprianov, Academician

SUBMITTED: March 5, 1962

Card 2/2

S/073/62/028/009/007/011
A057/A126

AUTHORS: Romankovich, M. Ya., Sinyavskiy, V. G., Tsygankova, M. P.

TITLE: Synthesis and investigation of selective polyelectrolytes.
Communication I

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v. 28, no. 9, 1962, 1096 - 1099

TEXT: Selective, polymer ion exchange resins were prepared with the complex forming groups not participating in the formation of the polymer. Thus were obtained nitropolystyrene, aminopolystyrene and products of its azoconjunction with p-cresol, p-nitrophenol, β -naphthol, resorcin, anilide of acetoacetic acid, benzazoresorcin, pyrogallol, 8-oxiquinoline, anilinediacetic acid, 1-phenyl-3-methyl-5-pyrozalon, salicylic, gallic, anthranilic and chromotropic acid, 2-naphthol-6,8-disulphuric- and 2-naphthol-3,6-disulphuric acid. Some of the prepared ion-exchange resins showed selective properties for several cations as for instance: Fe, Ni, Co, Al, Mg, Zn, Cr. More detailed investigations are carried out at the present time. The capacity of the ion exchange resins was determined after regeneration with 10 - 20% hydrochloric acid solution. The

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Synthesis and investigation of...

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A057/A126

regeneration occurs almost quantitatively. Structural formulas of the obtained resins are presented, and the preparation technique is described. The prepared ion exchange resins are insoluble in acids, alkali solutions, and organic solvents. The products with chromotropic and anthranilic acid showed a very strong swelling in water, while those with β -naphthol, anilide of acetoacetic acid and p-cresol showed very low swelling in water. Therefore these two groups were not investigated. There is 1 table.

ASSOCIATION: Institut khimii polimerov i monomerov AN USSR (Institute of Polymer and Monomer Chemistry AS UkrSSR) ↓

SUBMITTED: August 12, 1961

Card 2/2

L 18806-63

EPF(c)/ENP(j)/EWT(m)/BDS ASD Pc-4/Pr-4 RM/WW/MAY

ACCESSION NR: AP3000284

S/0021/63/000/005/0613/0615

AUTHOR: Sy*nyavs'ky*y, V. G.; Turbina, A. I.; Kiprianov, A. I.

49
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TITLE: Diazotization of granular Copolymers of n-aminostyrol with divinylbenzene and their nitrogen coupling with some phenol derivatives (Presented by UkSSR Academician A. I. Kiprianov)

SOURCE: AN UkSSR Dopovidi, no. 5, 1963, 613-615

TOPIC TAGS: kinetics, granular copolymer, aminostyrol, nitrogen, granular cohesion, granular dimension, reagents concentration, diazotization, nitrogen coupling

ABSTRACT: The authors studied the kinetics and other regular phenomena of the diazotization of granular copolymers of n-aminostyrol with divinylbenzene, and the nitrogen coupling of the resulting diazopolymers with azocompounds. They undertook the study of the dependency of polyaminostyrol cohesion, granular size, concentration, and ratio of reagents upon the speed and degree of completeness of the reactions because there was no literature on the problem. They

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ACCESSION NR: AP3000284

observed the following: That decreases in cohesion and increases in reagent ratios accelerated the diazotization and nitrogen coupling reactions, while variations in granular sizes and concentrations of the reagents had little effect; that a decrease in granular size and an increase in reagent ratios produces a higher degree of reaction completion. They conclude that, for a maximum yield of diazopolymers, it is necessary to use: copolymer granules of minimum size and cohesion; at least a 1 to 6 ratio of copolymer to sodium nitrite solution; a concentrated solution of sodium nitrite for easier handling. Orig. art. has: 3 graphs.

ASSOCIATION: Institut khimii polymeriv ta monomeriv AN UkSSR (Institute of Chemistry of Polymers and Monomers of the AN UkSSR)

SUBMITTED: 26Oct62

DATE ACQ: 17Jun63

ENCL: 00

SUB CODE: CH

NO REF SOV: 002

OTHER: 001

Card 2/2

SINYAVSKIY, V.G.; TURBINA, A.I.; ROMANKEVICH, M.Ya.

Polymerization and copolymerization of p-aminostyrene.
Plast. massy no.8:63-65 '63. (MIRA 16:8)

(Styrene) (Polymerization)

L 17705-63

EWP(j)/EPF(c)/EWT(m)/BDS ASD Pc-4/Pr-4 RM/WW

ACCESSION NR: AP3003996

S/0073/63/029/007/0736/0738

67
66

AUTHORS: Sinyavskiy, V. G.; Turbina, A. I.; Romankevich, M. Ya.

TITLE: Swelling and salt formation of granular copolymers of n-aminostyrole and divinylbenzene

SCURCE: Ukrainskiy khimicheskiy zhurnal, v. 29, no. 7, 1963, 736-738

TOPIC TAGS: polymer swelling, salt formation, aminostyrole, divinylbenzene, dichloroethane, dimethylformamide

ABSTRACT: Experiments were conducted to determine the rate and degree of swelling and salt formation, using granular copolymers of n-aminostyrole and divinylbenzene as a function of temperature, size of granules and HCl concentration. The swelling was determined by means of a comparator which measured the size of granules. The degree of salt formation or the amount of absorbed HCl or the change in the static volume in mg-equiv./l of the copolymer was determined by the titration of the excess acid. The copolymer granules swell very little in benzene, dichloroethane, chloroform, dioxane, ether, but do swell in glacial acetic acid, dimethylformamine, pyridine, and in mineral acid solutions. The swelling greatly depends on the copolymer binding and on the temperature of the solvent. Copolymer saturation with acid is more complete if it is treated in a column rather than at static

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L 17705-63

ACCESSION NR: AP3003996

conditions. Orig. art. has: 2 figures.

ASSOCIATION: Institut khimii polimerov i monomerov AN UkrSSR (Institute of Polymer and Monomer Chemistry, Academy of Sciences, UkrSSR)

SUBMITTED: 25Oct62

DATE ACQ: 15Aug63

ENCL: 00

SUB CODE: CH

NO REF SOV: 000

OTHER: 001

Card 2/2

ACCESSION NR: AP4012195

S/0191/64/000/002/0063/0064

AUTHORS: Sinyavskiy, V. G.; Turbina, A. I.

TITLE: Methods for determining the primary amino group, control of processes of monodiazotization and azo-combination of aromatic amino polymers

SOURCE: Plasticheskiye massy*, no. 2, 1964, 63-64

TOPIC TAGS: amino group, monodiazotization, azo-combination, aromatic amino polymer, polymer-analogous conversion, Sandmeyer's reaction, hydroxy sulfo hydryl polystyrol, chlorpolystyrol, fluorpolystyrol

ABSTRACT: Polymer-analogous conversion is becoming very significant. By nitrating the granular copolymer of styrol and divinyl benzol following reduction, subsequent monodiazotization and combination with various aromatic amines and phenols causes synthesis of the complexing cationites, ionite-indicators and poly azo dyes. With the aid of Sandmeyer's reaction, hydroxy sulfo hydryl, chlor-, fluor- and other derived polystyrols are obtained. A method is also

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ACCESSION NR: AP4012195

presented for quantitative determination of the primary amino groups in aromatic polymers. This method provides a control for the processes of monodiazotization, azo combination of amino polymers and elimination of the diazo group. With 50-95% content of the amino group in the polymer, accuracy of the method does not exceed 2.4%. Orig. art. has: 1 Diagram, 1 Table, 1 Formula

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: CH

NR REF SOV: 003

OTHER: 001

Card 2/2

L 00206-66 INT(m)/ESP(j)/T RM/MS/DS

ACC NR: AR6014588

SOURCE CODE: UR/0081/65/000/021/S087/S087

AUTHORS: Sinyavskiy, V. G.; Koshechkina, L. P.; Romankevich, M. Ya. 31TITLE: Polystyreneaminoacetic acid as a complexing cation exchanger 7

SOURCE: Ref. zh. Khimiya, Abs. 21S541

REF SOURCE: Sb. Metody polucheniya khim. reaktivov i preparatov, Vyp. 10. M., 1964, 93-96

TOPIC TAGS: organic synthetic process, ion exchange resin, copolymer

ABSTRACT: A method for the synthesis of complexing amphoteric cation exchangers is developed. Granular copolymer of aminostyrene (20 g) with divinylbenzene was swelled by being kept for 2 hours in 500 ml of 1N HCl, then filtered and placed in a reactor fitted with a stirrer, reflux condenser, and dropping funnel. Monochloroacetic acid (80 g, excess of 5 times the required amount) and 600 ml of water were added. The mixture was heated on a steam bath, 20% aqueous NaOH solution was gradually added as the pH of the reaction mixture dropped, maintaining it within 10--12. After completion of the condensation process the mixture is heated for additional 2--3 hours at the above pH. Granules of the cation exchanger are washed with water to neutrality and dried in air, yielding 32.4 g. N. Shamis [Translation of abstract]

SUB CODE: 11,07

Card 1/1/124

L 21725-65 EPF(c)/EPR/EWP(j)/EWT(m)/T PC-4/Pr-4/PB-4 RPL RM/WW
ACCESSION NR: AP4044550 S/0073/64/030/008/0868/0869

AUTHOR: Sinyavskiy, V. G.; Turbina, A. I.

TITLE: Depolymerization of polyaminostyrene and n-aminostyrene-divinylbenzene copolymer

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 30, no. 8, 1964, 868-869

TOPIC TAGS: polyaminostyrene, aminostyrene, depolymerization

ABSTRACT: The possibility of recovering and utilizing wastes of the n-aminostyrene polymer and copolymer industry was investigated. The polyaminostyrene in the waste was depolymerized in an inert gas stream under reduced pressure in the presence of zinc powder as a reducing agent. To facilitate uniform heating sand was added to the polymer. The yield of monomer was greatly decreased during increase of the molecular weight of polymer and of the degree of copolymerization with divinylbenzene. It was possible to depolymerize only polymerization and copolymerization products of n-aminostyrene. Aminopolystyrene obtained by

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L 21725-65

ACCESSION NR: AP4044550

reduction of the nitration product of polystyrene cannot be depolymerized under these conditions. Doubly distilled depolymerization product has the same physical constants as n-aminostyrene. The identical nature of these two materials was verified by quantitative and qualitative analysis and also by their infrared spectra. Orig. art. has: 1 figure.

ASSOCIATION: Institut khimii polimerov i monomerov AN UkrSSR (Institute of the Chemistry of Polymers and Monomers, Academy of Sciences of UkrSSR)

SUBMITTED: 05Oct63

ENCL: 00

SUB CODE: GC, MT

NO REF SOV: 001

OTHER: 001

Card 2/2

L 3088-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RPL/ASD(m)-3/
AFETR WW/RM S/0020/64/159/063/0602/0604

ACCESSION NR: AP4049923

AUTHOR: Koton, M. M. (Corresponding member AN SSSR); Andreyeva, I. S. V.;
Turbina, A. I.; Sinyavskiy, V. G.

TITLE: Polymerization of o-hydroxyphenyl vinyl ketone

SOURCE: AN SSSR. Doklady*, v. 159, no. 3, 1964, 602-604

TOPIC TAGS: chelate polymer, o-hydroxyphenyl vinyl ketone, polymer,
metal chelate copolymer, methyl methacrylate, divinylbenzene

ABSTRACT: The conditions of the radical polymerization of o-hydroxy-phenyl vinyl ketone were studied in an effort to obtain polymers containing chelate groups by direct polymerization or copolymerization. The o-hydroxyphenyl vinyl ketone, synthesized specially for the study, was polymerized in a nitrogen atmosphere by several methods: in solution, in bulk, and in suspension. Either benzoyl peroxide or azobisisobutyronitrile were used as initiators. The polymerization temperature was 75-80C. The colorless (after reprecipitation) powder-like polymer is soluble in some organic solvents, such as benzene,

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5

L 16088-65

ACCESSION NR: AP4049923

acetone, pyridine, or dimethylformamide, and in dilute alkalis; it is insoluble in methanol, carbon tetrachloride, or ethyl ether. The molecular weight of 125,000 was determined by the light-dispersion method. The intrinsic viscosity of polymers depends on the method of obtaining them. The lowest values were obtained for the product polymerized in solution; the highest, in suspension. The kinetics of the polymerization were studied, and the curves and the constants were obtained. The IR spectra confirm that polymerization takes place only along the double bonds. The oxime derivatives confirm the presence of the theoretical number of carbonyl groups in the polymers obtained. Products of copolymerization of o-hydroxyphenyl vinyl ketone with methyl methacrylate or divinylbenzene were also obtained; the latter product has ion-exchange properties. The presence of chelate groups in the polymers studied makes it possible to use these polymers or copolymers for obtaining polymeric complexes with metals. Orig. art. has: 1 formula, 2 tables, and 2 figures.

ASSOCIATION: Institut vy*sokomolekulyarnykh soyedineniy Akademii nauk SSSR (Institute of Macromolecular Compounds, Academy of Sciences, SSSR)

Card 2/3

L 16088-65
ACCESSION NR: AP4049923

SUBMITTED: 09Jul64

ENCL: 00

SUB CODE: GC, HT

NO REF SOV: 004

OTHER: 001

ATD PRESS: 3145

0

Card 3/3

PIRGINA, A.I.; SINYAVSKIY, V.G.; ROMANOVICH, M.A.

Synthesis of α -pyracyphenyl vinyl ketone. Ukr. khim. zhur. 31 no.1:
66-68 195. (RUSS 13:5)

1. Institut vysokomolekulyarnykh soyedineniy AN UkrSSR.

SINYAVSKIY, V.M.

SINYAVSKIY, V.M. [Syniavs'kyi, V.M.], kand.tekhn.nauk.

Using farm waste products for heating feed steamers. Mekh. sil'.
hosp. 9 no.2:19-20 F '58. (MIRA 11:3)
(Feeding and feeding stuffs--Equipment and supplies)

SINYAVSKIY, V.M. [Syniavs'kiy, V.M.], kand.tekhn.nauk

Automatic disconnection of milking machinery. Mekh.sil'.hosp.
8 no.9:25-26 S '59. (MIRA 13:1)
(Milking machines)

SINYAVSKIY, V.M.[Siniavs'kiy, V.M.], kand.tekhn.nauk

Moistening coarse forage by steaming. Mekh.sil'hosp. 10
no.2:26 F '59. (MIRA 12:6)
(Feeding and feeding stuffs)

SINYAVSKIY, V.M. [Syniavs'kiy, V.M.], kand.tekhn.nauk

How to convert a three-phase milking machine into a two-phase
machine. Mekh. sil'. hosp. 11 no.11:10-11 N '60. (MIRA 13:11)
(Milking machines)

SINYAVSKIY, V.M. [Syniavs'kyi, V.M.], kand. tekhn. nauk

Automatic control of feed distribution. Mekh. sil'. hosp. 14
no.5:23-24 My '63. (MIRA 16:10)

KONDRATYUK, Pavel Ivanovich; OS'MAK, Ilarion Terent'yevich
[deceased]; SINYAVSKIY, V.M.[Syniavs'kyi, V.M.]; SAGACH,
M.F.[Sahach, M.F.]; LEVITSKAYA, G.P.[Levyts'ka, H.P.],
red.; GULENKO, O.I.[Hulenko, O.I.], tekhn. red.

[Mechanization of livestock and poultry farms] Mekhaniza-
tsiia tvarynnytskykh i ptakhivnychykh ferm. 3., perer. i
dop. izd. Kyiv, Derzhsil'hospvydav URSR, 1964. 333 p.
(MIRA 17:4)

SINYAVSKIY, V.N., kand. tekhn. nauk; ZYABLOV, V.A., kand. tekhn.
nauk, rensent

[Machines and equipment for cultivating root crops;
theory and design fundamentals] Mashiny i oborudovanie
dlia obrabotki korneklubneplodov; teoriia i osnovy
proektirovaniia. Moskva, Mashinostroenie, 1964. 110 p.
(MIRA 18:2)

SINYAVSKIY, V. N.

SINYAVSKIY, V. N.: "Investigation of the processes of soaking crude fodder and the selection of the design parameters for soaking vats." Min Higher Education USSR. Ukrainian Order of Labor Red Banner Agricultural Academy. Kiev, 1956. (Dissertation for the Degree of Candidate in Technical Sciences.)

Source: Knizhnaya letopis' No. 28 1956 Moscow

SINYAVSKIY, Viktor Naumovich; KOZHUKHOV, V.K., retsenzent;
KALACHIKHIN, A.F., red.

[Design, construction, and tests of high-voltage insulators]
Raschet, konstruirovaniye i ispytaniya izoliatorov vysokogo
napriazheniya. Moskva, Energiya, 1965. 166 p.

(MIRA 19:1)

1. Nachal'nik otdela vysokikh napriazheniy Vsesoyuznogo elektro-
tekhnicheskogo instituta (for Kozhukhov).

SINYAVSKIY, V.S., inzh.; VEDEKIN, S.G., prof.

Aluminum alloys used in railroad car construction. Vest. TSNIIMPS
17 no.8:30-34 D '58. (MIRA 12:1)
(Railroads--Cars--Construction) (Aluminum alloys)

SEMYAVSKIY, V.S., Cand Tech Sci -- (diss) "Study of the corrosion-
mechanical strength of aluminum alloys for ^{car}~~coach~~ building."
Mos, 1959. 10 pp (~~USSR~~ ^{USSR} Min of Railways, All-Union Sci Res Inst of
Railroad Transport). 150 copies (KL,40-59, 104)

40

SINYAVSKIY, V.S., inzh.

Cyclic strength of aluminum alloys for railroad car construction.
Vest. TSNIIMPS 18 no.7:47-49 N '59. (MIRA 13:2)
(Aluminum alloys) (Railroads--Cars)

28(5)

SOV/32-25-4-32 '71

AUTHORS:

Lapin, A. A., Sinyavskiy, V. S., Vedenkin, S. G.

TITLE:

Testing Metals for Corrosion Fatigue on an Electromagnetic Machine of the Natural-vibration Type (Ispytaniye metallov na korrozionnyu ustalost' na elektromagnitnoy mashine avtokolebatel'nogo tipa)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 4, pp 461-463 (USSR)

ABSTRACT:

For studying the corrosion-fatigue resistance of aluminum alloys, new testing methods were developed which permit the kinetics of cracking to be determined. The machine suggested represents; in principle, an electromechanical generator with reverse coupling (Fig 1). The load frequency is determined by the fundamental frequency of the sample and can be changed in the range of from 30 to 200 cycles. The sample itself practically acts as a dynamic damper for the elastic element between the electromagnets. The sketch of the machine shows that selenium rectifiers VSA-5, an electromechanical counter SB-1 M-100, computing devices BK-3 with cathodes MTKh-90, as well as a microscope MPV-1 (for measuring the oscillation amplitude) and microscope MBS-2 (for observing the sample) are used. On the

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SOV/32-25-4-32/71

Testing Metals for Corrosion Fatigue on an Electromagnetic Machine of the Natural-vibration Type

machine described, samples of the aluminum-magnesium alloy AMG-6T (5.87% Mg, 0.60% Mn, 0.22% Si, 0.01% Cu, 0.14% Fe and 0.12% Ti) with the mechanical characteristics:

$\sigma_{0.2} = 19 \text{ kg/mm}^2$, $\sigma_B = 38 \text{ kg/mm}^2$ and $\delta = 22\%$ were tested. A

comparison of the destruction occurred was made by means of the standard generator ZG-12; a beam tube of the oscillograph EO-6 was used here. The samples were tested in air, distilled water and 3% NaCl solution. Satisfactory results were obtained (Fig 3) and - according to the character of the curves obtained (Fig 4) - it was stated that the fatigue process in air can be divided into three stages. The propagation of cracks occurs mainly transcrystallitically according to the position of the β phase (Al_3Mg_2). There are 4 figures and 6 references, 5 of which are Soviet.

ASSOCIATION:
Card 2/3

Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozh-
nogo transporta (All-Union Scientific Research Institute of

85117

S/123/6C/000/017/001/016
A005/A001

18.12.0

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1960, No. 17, P. 19,
91441

AUTHORS: Vedenkin, S.G., Sinyavkiy, V.S.

TITLE: Investigation of Aluminum Alloys for Car Building

PERIODICAL: Tr. Vses. n.-i. in-ta zh.-d. transp., 1959, No. 171, pp. 5-66

TEXT: The authors review the properties of the Al-Alloys applied to car building in the various countries, and they give an account of the methods and results of investigation of the fatigue strength and the corrosion fatigue of the magnesium alloys AMr 3 (AMg3) and AMr 6T (AMg6T). The specimens were tested on an electromagnetic stand of the resonance type assuring the specimen natural vibrations of 30-200 cps frequency. At $N = 10^5 - 10^8$ cycles, the fatigue strength of the AMg6T alloy in air and in 3% aqueous solution of NaCl is higher than the properties of AMg3, but hereat the decrease of the fatigue strength of the latter in a corrosion medium is relatively greater. The conventional limit of the corrosion fatigue of AMg6T amounts to $0.45 \sigma_{-1}$ of this alloy in air, and for AMg3

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AO05/A001

Investigation of Aluminum Alloys for Car Building

to 0.30 σ_{max} . The mechanism of the corrosion fatigue was investigated, the variations of the electrode potential of the Al-alloys are presented and discussed depending on the time and the stress state, the kinetics of formation and development of the corrosion-fatigue cracks were studied in their interaction with the stresses and the electrode potential, and it is shown that the corrosion media increase the rate of plastic deformation. The corrosion stability of the Al-alloys was investigated in solutions of chlorides and some acid media; the possibility is shown of using Al-Mg alloys in isothermal cars without paint and construction of tanks for transporting concentrated acids. Corrosion tests of Al-alloys were performed at static stresses. The preliminary plastic deformation intensifies the corrosion cracking of the magnalium alloys, and their sensitivity to the latter increases with increased content of Mg in the Al-alloy. There are 86 references.

F.P.A.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

VEDENKIN, S.G., prof.; MOISEYEV, I.A., kand.tekhn.nauk; SINYAVSKIY,
V.S., kand.tekhn.nauk

Make wider use of aluminum alloys in manufacturing railroad
equipment. Zhel.dor.transp. 43 no.8:26-30 Ag '61. (MIRA 14:8)
(Aluminum alloys) (Railroads—Cars—Construction)

VEDENKIN, S.G., prof.; SINYAVSKIY, V.S., kand. tekhn. red.;
MOISEYEV, I.A., kand. tekhn.nauk; POPOV, A.V., red.;
DROZDOV, N.D., tekhn.red.

[Aluminum alloys for the rolling stock] *Aluminievye splavy
dlia podvizhnogo sostava. Pod red. S.G.Vedenkina. Moskva,
Tranzheldorizdat, 1962. 41 p. (MIRA 16:3)*

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut
zheleznodorozhnogo transporta.
(Railroads--Rolling stock) (Aluminum alloys)

S/135/62/000/012/009/015
AC06/A101

AUTHORS: Vasil'yev, K. V., Candidate of Technical Sciences, Maslova, Ye. P.,
Engineer, Moiseyev, I. A., Candidate of Technical Sciences,
Sinyavskiy, V. S., Engineer

TITLE: Gas-electric cutting of alloy AMr6 (AMg6)

PERIODICAL: Svarochnoye proizvodstvo, no. 12, 1962, 23 - 25

TEXT: To develop gas-electric cutting techniques for alloy AMg6, TsNII MPS together with VNIIAVTOGEN carried out an experimental investigation to determine optimum cutting conditions, and the fatigue limit and corrosion resistance of the alloy after cutting. AMg6 sheets, 4, 8 and 12 mm thick were cut on a KIP -1-57 (KDR-1-57) machine designed by VNIIAVTOGEN. It was found that the quality of the cut depended upon the hydrogen content in the argon-hydrogen mixture; best results were obtained at 40 to 51% hydrogen in the mixture. Moreover the quality is predetermined by the accordance of the cutting speed and the operational current strength. The cutting speed and gas consumption depend upon the thickness of the metal. At a lower speed the surface of the cut is flashed, and a burr is formed on the lower edge. The edges can be vertical and inclined and show

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Gas-electric cutting of alloy 6 (AMg6)

S/135/62/000/012/009/015
ACO6/A101

satisfactory quality under optimum conditions. The fatigue limit was tested on specimens cut by mechanical means and by the gas-electric method. The results were only slightly different (8.9 against 7.7 kg/mm²). The corrosion resistance for both types of specimen is similar. Overheating during cutting does not cause proneness to stress corrosion of the alloy. There are 7 figures and 1 table.

ASSOCIATION: VNIIAVTOGEN (Vasil'yev and Maslova); TsNII MPS (Moiseyev and Sinyavskiy)

Card 2/2

ACCESSION NR: AT4010279

S/3053/62/000/000/0030/0039

AUTHOR: Vedenkin, S. G.; Sinyavskiy, V. S.

TITLE: Studies in the field of the corrosive fatigue of metals

SOURCE: Trudy* Vsesoyuznoy mezhvuzovskoy nauchnoy konferentsii po voprosam bor'by* s korroziyey, Baku, 1962. Moscow, 1962, 30-39

TOPIC TAGS: corrosion, corrosion fatigue, crack, aluminum alloy, mechanical fatigue, fatigue, electromagnetism, resonator, fissure, vibration frequency stress, cyclic stress, cathode current, alkaline, microspore, spore, adsorption, corrosion passivation, corrosive cracking

ABSTRACT: The development of cracks on aluminum alloys and steel, due to mechanical and corrosive fatigue, was studied by conventional methods and also by the use of an electromagnetic resonance machine. This machine was used to find the time of appearance of the fissure and the rate of its increase by measuring the frequency of vibration. The potential of the metal becomes less positive when cyclic stresses are applied to it. This fact is believed to be not the cause, but the result of the formation of fissures due to corrosive fatigue. The protective action of the cathode current in the prevention of corrosive fatigue results from the

Card 1/2

ACCESSION NR: AT4010279

alkalinity of the cathode of the tested specimen. The alkalinity is sufficient for the passivation of the metal and prevents further corrosive action. The authors suggest that if the metal is exposed to an aggressive environment, the distortion of the surface layer occurs in the places at which the stresses are concentrated. The dislocations move to these distortion places and create vacancies. The coagulation of these vacancies creates microspores that, in turn, grow into microfissures. The adsorption of the different surface-active substances occurs mostly on the deformed parts of the metallic surface and favors the formation and development of the microfissures. The presence of these fissures makes the metal more active and corrosive processes develop. There is a difference of oxygen content in the solution on the metallic surface and on the bottom of the fissure (aeration effect) that contributes to the corrosion rate, but does not appear to be the deciding factor in the corrosion process. Orig. art. has: 10 figures.

ASSOCIATION: TSNII MPS

SUBMITTED: 00

DATE ACQ: 28Jan64

ENCL: 00 1

SUB CODE: MM

NO REF SOV: 011

OTHER: 001

Card 2/2

VEDENKIN, S.G.; SINYAVSKIY, V.S. (Moscow)

Mechanism of corrosion-fatigue failure. Zhur.fiz.khim. 36 no.10:
2209-2214 0 '62. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo
transporta Ministerstva putey soobshcheniya.

ACCESSION NR: AP4040702

S/0135/64/000/006/0025/0028

AUTHORS: Molseyov, I. A. (Candidate of technical sciences); Sinyavskiy, V. S. (Candidate of technical sciences); Usachev, V. I. (Engineer); Pashkov, N. V. (Engineer)

TITLE: On the fatigue strength of aluminum alloy welds

SOURCE: Svarochnoye proizvodstvo, no. 6, (630), 1964, 25-28

TOPIC TAGS: welding, aluminum alloy AMg6, aluminum alloy AMg61, aluminum alloy AD33, filler metal AK, fatigue strength, impact strength, argon, arc welding, electrode, butt welding, pin support

ABSTRACT: The strength of aluminum alloy welds in flat and three-dimensional structures was studied to determine the effect of the seam form, spacing, and the technique of weld finishing on the durability of joints. All joints were welded by the same technique (argon arc welding with fusible electrodes). Flat samples consisted of: 1) plated and non-plated metals, 2) butt welds with and without final mechanical finish, 3) samples with central collars or bosses of rectangular section, made of solid metal (no welding) and samples with welded collars and bosses (complete and incomplete penetration). The joints were simulated in three-dimensional models. All samples were made of three aluminum alloys: AMg6, AMg61

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ACCESSION NR: AP4040702

and AD-33; filler metal used for the first two was of the same composition while the AK electrode was used for AD-33. The results showed that the fatigue strength of unplated specimens was 13-15% higher than of the plated ones. Unwelded AMg6 and AMg61 specimens had equal fatigue strengths, which were 23% higher than that of AD-33. Finish milling of butt welds produced a 16% increase in strength, while pneumatic hammering raised the fatigue strength almost to the level of alloy AMg6. Because the AK electrode strength is lower than that of the AD-33, the weld strength is 23% lower than that of the original metal. In the composite structures the density and intersections of seams had a weakening effect on the welds. Surface hardening of the joint and the adjacent metal area considerably increased the strength. Engineer G. S. Sary*cheva participated in this work. Orig. art. has: 2 tables and 5 figures.

ASSOCIATION: TsNII MPS

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 009

OTHER: 000

Card 2/2

MAKSIMOV, V.N., kand. tekhn. nauk; SINYAVSKIY, V.S., kand. tekhn. nauk;
MOISEYEV, I.A., kand. tekhn. nauk

Strength of the assemblies of an experimental car made from
aluminum alloys. Vest. TSNII MPS 23 no.4:3-7 '64.
(MIRA 17:8)

101010101 10101 10101 10101 10101 10101 10101 10101 10101 10101
101010101 10101 10101 10101 10101 10101 10101 10101 10101 10101

Fatigue strength of welded joints in aluminum alloy. Sver. proizv.
no. 101010101 10101 (MIRA 1812)

1. Vsesoyuznyy nauchnoissledovatel'skiy Institut zhelezno-dorozh-
nogo transporta pri Ministerstve putey soobshcheniya.

L 29798-66 EWT(m)/EWP(t)/ETI LJP(c) JD/GD/JH

ACC NR:

AT6016425

(A)

SOURCE CODE: UR/0000/65/000/000/0173/0178

AUTHORS: Zakharov, Ye. D.; Sorokin, N. A.; Kuznetsov, A. N.; Sinyavskiy, V. S.;
Gusev, V. P.; Kuznetsova, K. N.; Tsay, A. F.; Yegorova, L. S.

34
B+1

ORG: none

TITLE: Dependence of the stability of the solid solution in the alloy D16 on the
chemical compositionSOURCE: AN SSSR. Institut metallurgii. Metallovedeniye legkikh splavov (Metal-
lography of light alloys). Moscow, Izd-vo Nauka, 1965, 173-178TOPIC TAGS: ^{chemical composition, metal property,} aluminum ~~containing~~ alloy, solid solution, magnesium containing alloy,
copper containing alloy, manganese containing alloy / D16 aluminum alloy

ABSTRACT: The stability of solid solution in D16 type aluminum alloys was studied
as a function of the alloy composition. The stability of the solid solutions was
determined by the method of step-wise tempering at 250, 300, 350, 400, and 450C
for periods of 0.5, 1, 2, 3, 5, 7, 10, 20, and 60 min. After tempering, the speci-
mens were naturally aged for a period of 10 days, then their electrical conduc-
tivity, strength limit, relative elongation, and flow limit were determined. The
experimental results are shown graphically (see Fig. 1). On the basis of the ex-
perimental data C-curves for the stability of solid solution were constructed (see
Fig. 2). The optimum alloy composition results from: less than 6% total copper

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L 29798-66

ACC NR: AT6016425

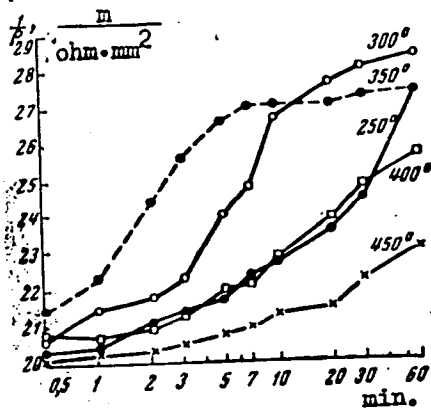


Fig. 1. Change in the electrical conductivity of alloy No. 1 (3.91% Cu; 1.2% Mg; 0.5% Mn) as a function of the duration of isothermal tempering at intermediate temperatures.

Card 2/3

L 29798-66

ACC NR: AT6016425

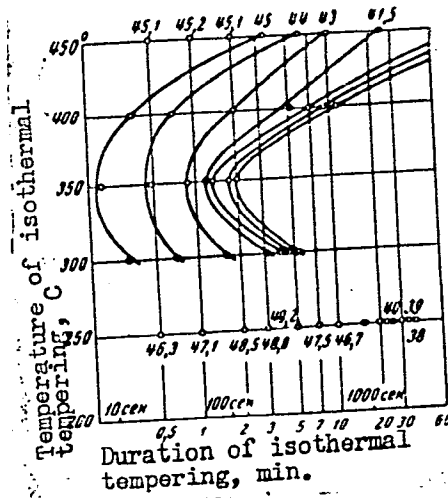


Fig. 2. C-type diagram for the stability of the solid solution in alloy No. 1, constructed from data for the change in the strength limit (for normal tempering $\sigma_f = 45.1 \text{ kg/mm}^2$).

and magnesium content for a total of less than 4.8% copper content. The manganese content should be less than 0.6%. Orig. art. has: 1 table and 5 figures.

SUB CODE: 11/ SUBM DATE: 16Sep65/ ORIG REF: 001/ OTH REF: 002

Card 3/3 *fv*

USSR/^{Sinyavskiy, V. V.}Chemistry - Sulfuric acid production

FD-1810

Card 1/1 Pub 50-14/19

Author : Sinyavskiy, V. V.

Title : Extension of the time of service of cast-iron slide-gates

Periodical : Khim. prom., No 2, 111 (47), Mar 1955

Abstract : To reduce the corrosion of Ludlow slide-gates used on acid conduits at sulfuric acid plants, parts made of carbon steel have been replaced with chromium-nickel steel parts.

USSR/Chemistry - Sulfuric acid

SINYAVSKIY, V V

FD-2530

Card 1/1

Pub. 50 - 9/14

Author : Sinyavskiy, V. V.

Title : Improvements in the spraying appliances of towers at the contact sulfuric acid department

Periodical : Khim. prom. No 4, 234-236, Jun 1955

Abstract : Describes improvements in spraying appliances which have allegedly raised the absorption of sulfur trioxide to 99.9%.
Three figures.

Institution : Voskresensk Chemical Combine imeni V. V. Kuybyshev

SINYAVSKIY, V.V.

Feeders of new construction for VKHZ furnaces. Khim. prom.
no.3:167-169 Ap-My '56. (MLRA 9:10)

1. Voskresenskiy khimicheskiy kombinat imeni V.V. Kuybysheva.
(Furnaces)

SINYAVSKIY, V. V.

Lowering the ... ssure loss in the ... unit assembly ...

3

SINYAVSKIY, Ye.I.

Study of variations in the mineralization of formation waters in
the terrigenous part of the Devonian of the Volga-Ural region.
Razved. i okh. nedr 27 no.12:54-56 D '61. (MIRA 15:3)

1. Trest Tatneftegazrazvedka.
(Volga-Ural region--Oil field brines)

SINYAVSKIY, Ye.I.

Some data on the gas potential of formation waters of the terrigenous part of Devonian oil fields in Tatarstan. Geol.nefti i gaza 6 no.5:50-53 My '62. (MIRA 15:5)

1. Gosudarstvennyy geologo-razvedochnyy trest neftyanoy i gazovoy promyshlennosti Tatarskoy ASSR.

(Tatar A.S.S.R.--Oil field brines)

(Tatar A.S.S.R.--Gas, Natural)

SINYAVSKIY, Ye.I.

Static level of underground waters in the lower Kama and central
Volga Valleys. Geol.nefti i gaza 6 no.8:36-39 Ag '62.
(MIRA 15:9)

1. Gosudarstvennyy geologo-razedochnyy trest neftyanoy i
gazovoy promyshlennosti Tatarskoy ASSR.
(Volga Valley--Water, Underground)

BONDARENKO, Nikolay Grigor'yevich [Bondarenko, M.H.]; SINYAVSKIY,
~~Yuriy Illarionovich~~ [Syniavs'kyi, I.U.I.]; YEROSHENKO,
T.G. [Eroshenko, T.H.], tekhn. red.

[Problems in the study of agricultural machinery] Zadachnyk
po sil'skohospodars'kii tekhnitsi. Kyiv, Derzhsil'hospvydav
URSR, 1962. 197 p. (MIRA 16:5)
(Agricultural machinery—Problems, exercises, etc.)

SINYAYEV, A.

With the help of patrons. Okhr. truda i sots. strakh. 3
no. 12:29 D '60. (MIRA 13:12)

1. Direktor doma otdykha "Dubovaya roshcha."
(Volga Valley--Labor rest homes)

SINYAYEV, A., polkovnik.; BUTIVCHENKO, A., podpolkovnik, kandidat voyennykh nauk.

Bacteriological weapons of the United States Army. Voenn. znan. 31
no.9:26-27 S '56. (MLRA 9:11)
(Bacteriological warfare)

AL'SHITS, Zelik Solomonovich; SINYAYEV, A.D., polkovnik, red.;
KUZ'MIN, I.F., tekhn. red.

[Fundamentals of offensive combat] Osnovy nastupatel'-
nogo boia. Moskva, Voenizdat, 1964. 133 p.
(MIRA 17:2)

TUMAS, Vladimir Aleksandrovich; SINYAYEV, A.D., red.; MUKHACHOVA, M.D.,
tekhn. red.

[Control of small units in modern battle; company, platoon,
squad]Upravlenie podrazdeleniyami v sovremennom boiu (rota,
vzvod, otdelenie). Moskva, Voenizdat, 1962. 99 p.
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