

YERSHOVA, I.N. (Leningrad, ul. L.Tolstogo, d.7, kv.93)

Peritonitis following stomach resection in cancer [with summary in English]. Vest. khir. 80 no.2:44-49 F '58. (MIRA 11:3)

1. Iz kliniki fakul'tetskoy khirurgii (zav.-prof. V.I.Kolesov) i-go Leningradskogo meditsinskogo inosituta im. I.P.Pavlova i kliniki fakul'tetskoy khirurgii No.2 (nach.-prof. A.V.Mel'nikov) Voenno-meditsinskoy akademii ordena Lenina im. S.M.Kirova.

(GASTRECTOMY, in various dis.

cancer, postop. peritonitis, ther. (Rus)

(PERITONITIS, etiol. & pathogen.

infect. in gastrectomy for stomach cancer ther. (Rus)

YERSHOVA, I.N. (Leningrad, V.O., 9-ya liniya, d.70, kv.20)

Use of procuran in anesthesia. Vest.khir. no.6:91-94 '61.  
(MIRA 15:1)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta skoroy  
pomoshchi im. Yu.Yu. Dzenelidze (dir. - dotsent S.N. Polikarpov).  
(CURARELIKE SUBSTANCES) (ANESTHESIA)

VOL'PERT, Ye.I.; YERSHOVA, I.N.; LAZAREVA, K.N.

Anesthesia in emergency surgery on organs of the abdominal cavity.  
Vest.khir. no.3:85-90 '62. (MIRA 15:3)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta skoroy  
pomoshchi im. Yu.Yu. Dzhaneldize (dir. - dotsent S.M. Polikarpov,  
nauchn. rukovod. - prof. M.S. Lisitsyn [deceased]).  
(ABDOMEN—SURGERY) (ANESTHESIA) (MEDICAL EMERGENCIES)

YERSHOVA, I.N., kand. med. nauk

Basis for selecting the method of anesthesia in surgery on  
gastroduodenal hemorrhages. Trudy Inst. im. N.V. Sklif. 9:  
206-209 '63. (MIRA 18:6)

L. Leningradskiy gorodskoy nauchno-issledovatel'skiy institut  
skoroy pomoshchi imeni Dzhanelidze.

YERSHOVA, I.N., kand. med. nauk; RUMYANTSEVA, V.V.

Pulmonary complications in patients with acute surgical diseases  
of organs of the abdominal cavity under various methods of  
anesthesia. Trudy Inst. im. N.V. Sklif. 9:214-217 '63.  
(MIRA 18:6)

1. Leningradskiy nauchno-issledovatel'skiy institut skoroy  
pomoshchi imeni Dzhanelidze.

YERSHOVA, I.P.

Material serving as an ecological and physiological basis for a  
bait method of controlling water voles. Trudy VIZR no.1:178-185  
'48. (MIRA 11:7)

(Water voles)

YERSHOVA, I. P.

"The Role of the Olfactory Receptor in the Feeding of Field Mice and Other Rodents,"

Zhur. Obshch. Biol., 9, No. 5, 1948.

Mbr. Lab. Zoology Inst. Plant Protection, All-Union Acad. Agric. Sci. V. I. Lenin,

-c1948-

YERHOVA, I. I.

25639 YERHOVA, I. F. O yavleniyakh gigoretseptsi  
u grbzunov. Turdy Vsesoyaz in-to zashchitb rasteniy, vbp. 2, 1949,  
s 149-51

So: Letopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949



YERSHOVA, I. P.

"The Sight of Wild Rodents and Its Effect on Their Search for Food." (p. 296)  
Ershova, I. P. and Falkenshtein, B. Yu.

SO: Journal of General Biology XII (Zhurnal Obshchei Biologii) Vol. XII, No.4, 1951.

YERHOVA, I.P.

Some peculiarities of olfactory receptors of rodents. Zool. Zh., '52,  
31, 146-149. (MIRA 4:12)  
(PBA 27, no.11:7563 '53)

YERSHOVA, I.P., kand.biol.nauk

Damage done by the water rat and its control in steppe silviculture.  
Trudy VIZR no.6:174-184 '54. (MIRA 11:7)  
(Water voles) (Rodent control)

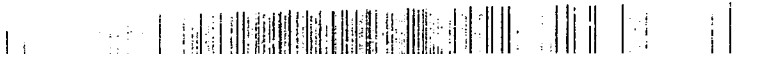
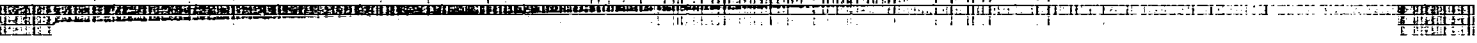
YERSHOVA, I.P.

Defense reactions to poison baits in the lesser suslik. Trudy  
probl. i tem.sov. no.5:64-65 '55. (MIRA 8:12)

1. Vsesoyuznyy institut zashchity rasteniy, Vsesoyuznaya akademiya  
sel'skokhozyaystvennykh nauk imeni Lenina  
(Suslika) (Pesticides)

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962910013-9



APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962910013-9"

YERSHOVA, I.P.

FAL'KINSHTEYN, B.Yu., prof.; YERSHOVA, I.P., kand.biol.nauk

Some new raticides. Gig. 1 ser. 22 no.11:96 N '57.

(MIRA 11:1)

1. Iz Vsesoyuznogo instituta zashchity rasteniy Vsesoyuznoy akademii  
sel'skokhozyaystvennykh nauk im. V.I.Lenina.

(RATS,

raticides (Rus))

*YERSHOVA I. I.*  
FAL'KENSHTBYN, B.Yu., prof.; YERSHOVA, I.P., kand.biol.nauk

New rodenticides. Zashch. rast. ot vred. 1 bol. 3 no.1:28 Ja-P '58.  
(Susliks) (Rodenticides) (MIRA 11:3)

YERSHOVA, I.P.  
GULIDOV, A.M.; YERSHOVA, I.P.

Protecting fruit trees from rabbits. Zashch. rast. ot vred. i bol.  
3 no.1:54 Ja-P '58. (MIRA 11:3)  
(Fruit trees--Diseases and pests) (Rabbits)



YERSHOVA, I.P.; REYMOV, R.

Role of visual reception in food habits of the lesser suslik  
(*Citellus pygmaeus* Pall.). *Uzb. biol. zhur.* no.3:67-69 '59.  
(MIRA 12:11)

1. Vsesoyuznyy institut zashchity rasteniy Vsesoyuznoy akademii  
sel'skokhozyaystvennykh nauk imeni V.I. Lenina, i Institut zoologii  
i parazitologii AN UzSSR.  
(Susliks) (Rodent baits and repellents)

LASHKEVICH, A.M.; TEREHT'YEVA, A.A.; IVANOVA, L.S.; BORODULINA, M.A.;  
VELICHENKO, I.N.; NIKULENKO, V.S.; KONSHINA, T.I.; SHAKHOVA, T.P.;  
NYASHINA, A.A.; YASINSKAYA, Z.A.; AGAL'TSEVA, N.B.; SEL'MENSKAYA,  
Ye.G.; KRETSMER, V.L.; KONONOVICH, L.K.; FEDORAYEVA, A.M.; TKACHEUK,  
L.Ya.; VIATKINA, G.A.; SLOUSHCH, V.S.; RACHINSKAYA, L.N.; PORTNAYA,  
R.Yu.; KARAKOVSKAYA, E.M.; POKROVSKAYA, M.A.; KORNEVA, A.I.;  
~~YERSHOVA, K.F.~~, otv. red.; Prinimal uchastiye KAMANOV, M.I., red.;  
LAGAREVA, A.P., otv. za vypusk; NIKITINA, I.P., tekhn. red.

[Economy of Novosibirsk Province; collection of statistics] Narodnoe  
khoziaistvo Novosibirskoi oblasti; statisticheskii sbornik. Novo-  
sibirsk, Gosstatizdat TsSU SSSR, 1961. 331 p. (MIRA 15:6)

1. Novosibirsk. Oblastnoye statisticheskoye upravleniye. 2. Nachal'nik Statisticheskogo Upravleniya Novosibirskoy oblasti (for Yershov). 3. Zamestitel' nachal'nika Statisticheskogo Upravleniya Novosibirskoy oblasti (for Kamanov).  
(Novosibirsk Province—Economic conditions)

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YERSHOVA, K-N.

Determination of Manganese by the Periodate Method.  
 K. N. Yershova and G. N. Volkova. Henry Brucher  
 (Altadena, Calif.), Translation No. 2052, 1948, 3  
 pages. From *Zavodskaya Laboratoriya* (Factory  
 Laboratory), v. 13, no. 6, 1947, p. 751.

Describes favorable experiences with the periodate  
 method for manganese in steel, according to the  
 procedure described by Lundell, Hoffman, and  
 Wright. Includes details of preparation of solu-  
 tions, accuracy of results obtained, etc.

ASSOCIATION OF METALLOGICAL ENGINEERS

SECTION 1

GROUP 1

CLASSIFICATION

GROUP 1

CLASSIFICATION

GROUP 1

CLASSIFICATION

YERSHOVA, K. N.

Yershova, K. N.

"Non-Metallic Inclusions in the Steel of Certain Parts for Railroad Structures and Their Effect on Metal in Plastic Deformation." Min Railways USSR. ALL-Union Sci Res Inst of Railroad Transport. Moscow, 1955. (Dissertations for the Degree of Candidate in Technical Sciences).

SO: Knizhnaya Letopis', No 27, 2 July 1955

YERSHOVA, K.N., kandidat tekhnicheskikh nauk.

Nonmetal impurities in arsenic steel. Trudy TSNII MPS no.116:  
47-53 '56. (MLBA 9:11)

(Steel)

SOV/137-57-1-1614

Translation from: Referativnyy zhurnal. Metallurgiya, 1957, Nr 1, p 214 (USSR)

AUTHOR: Yershova, K. N.

TITLE: Methods for Determining an Arsenic Content in Steel (Metodika opredeleniya sodержaniya mysh'yaka v stali)

PERIODICAL: Tr. Vses. n.-i. in-ta zh.-d. transp., 1956, Nr 116, pp 54-61

ABSTRACT: A critical survey of the methods used for the determination of As in steel. The author develops a new version of colorimetric determination in the presence of 0.05-0.30% As. 0.5-1.0 g of steel is treated with 10 cc of a mixture of HCl and HNO<sub>3</sub> and the solution is evaporated to dryness. The residue is dissolved in 10 cc of concentrated HCl and transferred to a flask into which 2 g FeSO<sub>4</sub> and 2 gr KBr are added; the As is then distilled off into a receiving vessel with water. The distillate is transferred into a 250-cc measuring flask and 1-2 drops of 0.1-N KMnO<sub>4</sub> are added. Phenolphthalein and 25% NaOH solution are added to the solution containing As<sup>3+</sup>. The excess of NaOH is neutralized with HCl (1:20), the solution is cooled and diluted up to the mark. 20-cc portions are transferred into 50-cc measuring flasks. 1-N NaOH solution is added

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Methods for Determining an Arsenic Content in Steel

SOV/137-57-1-1614

drop by drop up to the appearance of a pink coloration, after which 2.5 cc of ammonium-molybdate solution and 1 cc of 0.15% hydrazine-sulfate solution are added. The flask with the liquid is heated to the complete development of the coloration, cooled, brought up to the mark with water, and read on the photometer in a 20-cc cell. The As content is found on a calibration curve.

Z. G.

Card 2/2

YERShOVA, K. N.

137-1958-2-2497

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 44 (USSR)

AUTHOR: Yershova, K. N.

TITLE: Nonmetallic Inclusions in the Steel of Defective and Experimental Automatic Couplings (Nemetallicheskiye vklucheniya v stali defektnykh i opytnykh avtostsepok)

PERIODICAL: Tr. Vses. n.-i. in-ta zh.-d. transp., 1957, Nr 130, pp 80-84

ABSTRACT: A study was made of the nonmetallic inclusions on a metallographic specimen; undertaken also were microscopic and petrographic analyses of nonmetallic inclusions separated out by an electrolytic method. With respect to the nature of their nonmetallic inclusions, defective automatic couplers were found to fall into two groups: 1) those containing globular sulfides and two-phase globular oxides, which consist of alumina in a silica envelope; 2) those in which dendritic sulfides are found along the boundaries of the austenite grains, and in which grains or porous accumulations of corundum are encountered, partially as crystals with unfilled faces. It was noted that the automatic couplings affected with hot cracks contained dendritic sulfides and that the metal of almost all the automatic couplings contained extraneous nonmetallic

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137-1958-2-2497

Nonmetallic Inclusions in the Steel of Defective (cont.)

inclusions of quartz and other minerals. The chemical composition of the nonmetallic inclusions in both groups of automatic couplers was approximately identical. The higher-strength steels used in the experimental automatic couplings contained sulfide nonmetallic inclusions (which tended to occur along the boundaries of the grains), fine-crystalline aluminous nonmetallic inclusions (which tended to form accumulations), and a large quantity of extraneous nonmetallic inclusions.

A. Sh.

1. Steel--Inclusions-- Determination
2. Steel--Microscopic analysis
3. Steel--Petrographic analysis

Card 2/2

YERHOVA, K.N., kand. tekhn. nauk,

Nonmetallic inclusions in rail steel. Trudy TSNII MPB no.154:74-77  
'58. (MIRA 12:1)

(Railroads--Rails)

YERSHOVA, K.N., kand.tekhn.nauk

Analysis of aluminum antifriction alloys with a high content  
of tin. Trudy TSNII MPS no.227:4-18 '62. (MIRA 15:4)  
(Aluminum alloys--Analysis)

YERSHOVA, K.N., kand.tekhn.nauk

Photocolorimetry for the analysis of ferrous and nonferrous alloys.  
Trudy TSNII MFS no.227:19-33 '62. (MIRA 15:4)  
(Colorimetry) (Iron alloys--Analysis)  
(Nonferrous alloys--Analysis)

USSR/Soil Science - Organic Fertilizers.

J

Abs Jour : Ref Zhur Biol., No 19, 1958, 86806

Author : Yershova, K.P.

Inst : Kinel' State Experimental Station

Title : Effectiveness of Organic Mineral Fertilizers in Kuybyshevskaya Oblast

Orig Pub : S. kh. Povolzh'ya, 1957, No 5, 19-23

Abstract : The doses and methods of placing organic mineral granulated fertilizers and the ratio of Pc and organic substance in them were studied in crops of Lutescens 801 wheat at the Kinel State Experimental Station in 1951-1953. The author thinks it possible to apply organic-mineral granules, mixtures and composted manure to the chernozems of Kuybyshevskaya Oblast under spring and winter wheat when they are placed under the plow while plowing fall land or fallows.

-- V.D. Astafyeva

Card 1/1

ROZHKOVA, Ye.V.; YERHOVA, K.S.; ANDRUSENKO, N.I.

Water in zeolites. Min.syr'e no.6:3-28 '62.  
(Zeolites)

(MIRA 16:4)

YERSHOVA, K.S.; REKHARSKAYA, V.M.

Characteristics of water in malacons. Min.syr'e no.6:114-117  
'62. (MIRA 16:4)

(Malacon)

YERSHOVA, L.I.

Reflex reaction of the blood pressure during prolonged stimulation  
of the aortic and sinus nerves. Fiziol.zhur. 50 no.4:479-486 1p  
'64. (MIRA 18:4)

1. Institut fiziologii imeni Pavlova AN SSSR, Leningrad.



SUVOROV, N.N.; MOROZOVSKAYA, L.M.; LEYBEL'MAN, F.Ya.; YERSHOVA, L.I.

Improved method of obtaining progesterone and oxime of  $\Delta^5, 16$ -pregnadien-3 $\beta$ -ol-20-one acetate from solasodine. Med. prom. 14 (MIRA 13:8) no. 7:31-33 Je '60.

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze. (PROGESTERONE) (OXIMES)

MOROZOVSKAYA, L.M.; YERSHOVA, L.I.; SUBOROV, N.N.

Synthesis of L-3,5,3'-triiodthyronine. Med. prom. 16 no.1:10-16  
Ja '62. (MIRA 15:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevtichskiy  
institut imeni Ordzhonikidze.  
(THYRONINE)

SUVOROV, N.N.; MOROZOVSKAYA, L.M.; YERSHOVA, L.I.

Derivatives of indole. Part 17: Synthesis of  $\alpha$ -methyl-substituted  
tryptophans. Zhur.ob.khim. 32 no.8:2556-2561 Ag '62.  
(MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy  
institut imeni S. Ordzhonikidze.  
(Tryptophan)

CHISTYAKOV, I.G.; USOL'TSEVA, V.A.; NASYROVA, M.D.; YERSHOVA, L.I.

Systems having the liquid crystalline state. Part 3: Cholesteryl caprylate and cholesteryl caprylate. *Izv.vys.ucheb.zav.;khim. i khim.tekh.* 6 no.2:257-259 '63. (MIRA 16:9)

1. Ivanovskiy gosudarstvennyy meditsinskiy institut i Institut kristallografii AN SSSR.  
(Cholesterol esters) (Octanoic acid)

YERSHOVA, L.P., inzh.; KORSUNSKAYA, A.I., inzh.; Primali uchastiye; KOLOV, M.I.;  
NEKHOROSHIKH, Yu. M.; MEZENTSEV, G.V.

Nonuniformity of magnetic properties in a stack of electrical steel  
sheets. Stal' 21 no.6:546-548 Je '61. (MIRA 14:5)

1. Magnitogorskiy metallurgicheskiy kombinat.  
(Sheet steel—Magnetic properties)

MIRONOV, L.V., kand.tekhn.nauk; YERSHOVA, L.P., inzh.; DOROSHEK, S.I., inzh.;  
KOLOV, M.I., inzh.

Effect of carbon on the structure and properties of cold-rolled  
transformer steel. Metalloved. i term. obr. met. no.6:6-10 Je '62.

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov  
i Magnitogorskiy metallurgicheskiy kombinat.  
(Sheet steel—Magnetic properties)

KOLOV, M.I., inzh.; YERHOVA, L.P., inzh.; SELIVANOV, N.M., kand.tekhn.nauk

Effect of grain size on the magnetic properties of cold-rolled electrical steel. Stal' 22 no.8:744-747 Ag '62. (MIRA 15:7)

1. Magnitogorskiy metallurgicheskiy kombinat.  
(Sheet steel--Magnetic properties)

YERSHOVA, L.P.; KOLOV, M.I.; TEREKHOVA, A.I.

Effect of metal oxidation on the properties of transformer steel.  
Stal' 23 no. 3:266-269 Mr '64. (MIRA 17:5)

1. Magnitogorskiy metallurgicheskiy kombinat.



S/126/61/012/003/006/028  
E025/E435

AUTHORS: Yershova, L.S., Bogachev, I.N., Shklyar, R.S.

TITLE: The effect of deformation on the formation of  $\epsilon$ -phase in manganese steels

PERIODICAL: Fizika metallov i metallovedeniy, v.12, no.5, 1961, 670-677 + 1 plate

TEXT: The kinetics of formation of  $\epsilon$ -phase and the effects of plastic deformation of the  $\gamma \rightarrow \epsilon$  transformation are studied in a series of C-Mn-Ni steels. In a 20% Mn steel the  $\gamma \rightarrow \epsilon$  transformation is found to take place at a 100°C for steel with a C content below 0.1%; however, if the C content is increased to 0.3% the transformation temperature falls to below zero. Under plastic deformation far greater strain hardening is exhibited by the low-C steel due to the larger capacity for strain hardening of the  $\epsilon$ -phase. The behaviour is compared with a 26% Ni steel, where the austenite breaks down to ferrite under plastic deformation and with an 18% Ni, 6% Mn steel where the austenite does not undergo a transformation during deformation. Further studies on the Mn steels show that the character of the phase transformation on plastic deformation depends on the  
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The effect of deformation ...

S/126/61/012/005/006/028  
E025/E435

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relative values of the deformation temperature and the critical temperatures of  $\gamma \rightarrow \alpha$  and  $\gamma \rightarrow \epsilon$  transformations.

D.S.Steynberg is mentioned in the article in connection with his testing apparatus. There are 7 figures, 2 tables and

4 references: 1 Soviet-bloc and 3 non-Soviet-bloc. The three references to English language publications read as follows:

Ref.1: Walters F.M., Welles C. Trans. ASM, v.24, no.2, 1936, 359;

Ref.3: Troiano A.R., McGuire F.T. Trans. ASM, v.31, 1943, 340;

Ref.4: Cina B. Acta met, v.6, no.12, 1958.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S.M.Kirova  
(Ural Polytechnical Institute im. S. Kirov)

SUBMITTED: February 27, 1961

Card 2/2

35948  
S/126/62/013/001/009/018  
E111/E580

18.750  
AUTHORS:

Yershova, L.S. and Bogachev, I.N.

TITLE:

Influence of preliminary plastic deformation on the  $\gamma \rightarrow \epsilon$  transformation in manganese steel

PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.1, 1962, 107-113

TEXT:

It is known that preliminary plastic deformation greatly affects the martensite transformation, but there are no published data on the influence of preliminary plastic deformation on the transformation of austenite into the  $\epsilon$ -phase. In the present work, type П10 (G20) steel (0.06% C and 19.7% Mn) was used. In this alloy, transformation of austenite into  $\epsilon$ -phase on cooling starts at 90-100°C and continues down to room temperature. Deformation (up to 33.2% at 300 and up to 27.3% at 450°C) was carried out by extension of tensile test specimens machined from water-quenched samples, followed by metallographic and dilatometric testing, hardness measurement and X-ray phase analysis. All specimens were air cooled after deformation. From their deformed zones, 5-10 mm thick specimens were prepared and

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Influence of preliminary ...

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E111/E580

annealed in a lead bath at 400, 650 and 850°C. The work showed that preliminary plastic deformation has a regular and substantial effect on the transformation of austenite into the  $\epsilon$ -phase. Up to 3% deformation at 300°C has a strong activating effect on the transformation, but heavier deformation produces a stabilizing influence which becomes more pronounced with increasing deformation. The activating effect is attributed to stresses produced at small deformations, the stabilizing effect to the refinement of grains and mosaic blocks and the formation of shear planes. Preliminary deformation at 450°C has only the stabilizing effect, as a result of improvement in the plastic properties of the alloy. Annealing of an alloy previously deformed at 300-400°C increases stabilization because stresses are removed and further block boundaries produced. The  $\epsilon$ -phase, formed by cooling both previously deformed and undeformed austenite leads eventually to further strengthening of the alloy. The dispersion of the  $\epsilon$ -phase formed on cooling deformed austenite is greater than that of  $\epsilon$ -phase formed from undeformed austenite. The phase transformation of austenite into  $\epsilon$ -phase has features characteristic of the

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Influence of preliminary ...

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E111/E580

martensite mechanism. There are 5 figures.

ASSOCIATION: Ural'skiy politekhnicheskii institut im.S.M.Kirova  
(Ural Polytechnical Institute imeni S.M.Kirov)

SUBMITTED: May 12, 1961

Card 3/3

36685

S/126/62/013/002/015/019  
E111/E135

18.7500

AUTHORS: Yershova, L.S., and Bogachev, I.N.

TITLE: Study of phase work hardening during the  $\gamma \rightleftharpoons \epsilon$  transformation in an iron-manganese alloy

PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.2, 1962, 300-304

TEXT: The influence of phase transitions on the rate of the  $\gamma \rightleftharpoons \epsilon$  transformation was studied. This study was carried out since the authors found no published work on this subject. Type Г20 (G20) alloy (0.06% C, 19.7 Mn, 0.92 Si, 0.003S and 0.009 P) was used. Dilatometric specimens and specimens for metallographic and X-ray structural analysis were prepared from the heat-treated material. Both fine and coarse-grained specimens were used. Phase transitions were effected by heating for 3-5 minutes in a salt bath and cooling in air, X-ray and metallographic examination and hardness tests being made after each cycle. Dilatometric investigation was carried out with repeated heating to 300 °C-air cooling cycles. The influence of  
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X

Study of phase work hardening ...

S/126/62/013/002/015/019  
E111/E135

annealing on the structure of the alloy previously subjected to phase work-hardening was also studied for lead-bath annealing at 370, 620 and 800 °C. In its initial hardened state the alloy contains about 50%  $\epsilon$ -phase, which changes into austenite at 150-200 °C, the reverse starting at 90-100 °C. The work showed that repeated  $\gamma \rightarrow \epsilon$  and  $\epsilon \rightarrow \gamma$  transitions affect the transformation considerably, not more than 4 cycles activating it and producing some hardening, while more heating-cooling cycles have the opposite effect. Phase transitions affect the  $\gamma \rightarrow \epsilon$  transformation in a manner similar to preliminary plastic deformation in the austenitic state. The activating effect of a few phase transitions is due primarily to the residual stresses produced in the austenite during forward and reverse phase transformations. The stabilizing effect with a large number of transitions is due mainly to mosaic-block breakdown processes. Annealing at 350-400 °C of specimens previously subjected to a number of heating and cooling cycles eliminates the activating effect of the few-cycles treatment and leads to additional stabilization of austenite. Austenite grain shape and size are  
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Study of phase work hardening ... S/126/62/013/002/015/C19  
E111/E135

maintained during repeated cycles, this being the manifestation of the heredity of the austenite grain. With the aid of phase work-hardening followed by recrystallization, austenite in manganese alloys containing a considerable quantity of  $\epsilon$ -phase can be recrystallized. The martensitic character of the  $\epsilon$ -transformation is confirmed by the formation of a relief on a polished surface, as a result of the phase transformation. There are 6 figures.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im.  
S.M. Kirova  
(Ural Polytechnical Institute imeni S.M. Kirov)

SUBMITTED: June 30, 1961.

Card 3/3

X



AUTHOR: Iershova, L. S.

TITLE: Kinetics of the  $\epsilon$ -phase formation in iron-manganese alloy

SOURCE: Fizika metallov i metallovedeniye, vol. 15, no. 4, 1961, 571-579

TOPIC TAGS:  $\epsilon$ -phase kinetics,  $\epsilon$ -phase formation, iron-manganese alloy, isothermal austenite decomposition, overcooling effect on austenite

ABSTRACT: The relation between temperature and speed of the isothermal austenite decomposition with the formation of  $\epsilon$ -phase has been investigated. The specimens studied were the iron-manganese 020, 0255, and 30G23 alloys. The effect of the overcooling on the  $\epsilon$ -phase formation in these alloys is investigated. It is shown that the  $\epsilon$ -phase is formed in the isothermal austenite decomposition during interrupted isothermal cooling. An increase in carbon and manganese content in the alloy leads to an increase in the temperature interval of the maximum isothermal decomposition of austenite; an increase in carbon content stabilizes austenite. The  $\epsilon$ -phase formation is more intensive during the starting periods of the isothermal decomposition. The length of the starting period of the isothermal decomposition decreases with an increase in length, the speed of austenite decomposition decreases. A smaller amount of austenite and the prevention of the  $\epsilon$ -phase formation in the alloys is observed.

Card 1/2

ADMISSION NR: AP0000100

processible. The transformation of austenite into the  $\epsilon$ -phase under isothermal conditions during an uninterrupted cooling is incomplete, a considerable part of the austenite remaining unchanged. The existing relation between temperature and transformation speed proves that the  $\epsilon$ -phase formation is a thermal process. The  $\epsilon$ -phase and the martensitic transformation have the same kinetic properties. Orig. art. has: 1 formula, 1 table, and 5 figures.

ASSOCIATION: Ural'skiy politekhnicheskii institut im. S. M. Kirova (Ural Polytechnic Institute)

SUBMITTED: 17Jul62

DATE ACQ: 12Jun63

ENCL: 00

SUB CODE: HL

NO REF SOV: 009

OTHER: col.

Card 2/2

L 09011-67 EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/HW  
 ACC NR: AP6027791 (A) SOURCE CODE: UR/0126/66/022/001/0101/0107 49  
 42

AUTHOR: Levitin, V. V.; Yershova, L. S.

ORG: Ukrainian Scientific Research Institute of Special Steels, Alloys and Ferroalloys  
 (Ukrainskiy NII spetsial'nykh staley, splavov i ferrosplavov)

TITLE: X-ray analysis of the effect of deformation and annealing on the structure of mono-  
 crystal specimens of a high-temperature alloy

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 1, 1966, 101-107

TOPIC TAGS: high temperature alloy, crystal structure analysis, x ray diffraction analysis,  
 polygonization development / KhN77TYuR high-temperature alloy

ABSTRACT: Methods of x-ray diffraction topography and measurement of reflection intensity  
 were used to investigate the structure of monocrystal specimens of KhN77TYuR alloy  
 (20.7% Cr, 2.54% Ti, 0.83% Al, 0.05% C, 0.26% Mn, 0.48% Si, 0.009% P, 0.005% S,  
 0.0064% B), obtained by recrystallization. Reflections from the same crystals were success-  
 ively investigated in three states: original state, after ~6-12% deformation (impact hardening),  
 and after vacuum annealing at 600°C for 8 hr. Findings: the original crystals consist of weakly

Card 1/2

UDC: 648.73:669.15

L 09011-67

ACC NR: AP6027791

disoriented fragments or subgrains. Deformation results in changes in the reflex structure, integral intensity and angles of disorientation; these changes differ for the different reflections. Thus, e.g. in the presence of low tangential stresses (characteristic of the planes (II) and (III) of the investigated crystal) integral intensity and angle of disorientation increase as then impurities or subgrain boundaries function as barriers to the movement of dislocations. If the applied tangential stresses are high, on the other hand, these barriers are eliminated and the measured integral intensity sharply decreases. Annealing results in an increase in integral intensity, angles of disorientation and the number of intense spots in the structure of the reflexes, which is attributed to polygonization. These effects apparently may be attributed to the redistribution of dislocations, decrease in their density and the arraying of dislocations into "walls" with the formation of polygonal substructure. Orig. art. has: 4 figures, 2 tables.

SUB CODE: 11, 20 / SUBM DATE: 22May65/ ORIG REF: 008/ OTH REF: 003

Card 2/2 not

LYALIKOV, A.S.; ZAGROMOV, Yu.A.; YERSHOVA, L.S.

Experimental data on the dissipation power of the additional resistances of electric measuring instruments (under conditions of free convection). Izv.TPI 137:25-28 '65.

(MIRA 19:1)

5(3)

SOV/62-59-5-35/40

AUTHORS: Yershova, L. V., Gogitidze, V. N., Beikov, V. M., Novikov, S. S.

TITLE: Preparation of Gem-dinitroparaffins (O poluchenii gem-dinitroparafinov)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 5, pp 943-945 (USSR)

ABSTRACT: For the investigation of the influence exercised by the carbon chain in the gem-dinitro-compounds upon their physical properties the homologous series of gem-dinitro-compounds was synthesized. For this purpose the alkyl acetoacetic esters were nitrated. This method was applied for the first time by G. Chancel (Ref 1). It renders it possible to extend the carbon chain in stages, i.e. the initial product is extended each time by one carbon atom. In the course of the present investigation, a series of gem-dinitroparaffins from 1,1-dinitropropane to 1,1-dinitrodecane was in this way obtained. Of the synthesized compounds, the molar refraction of the dinitromethyl group was determined (Table 1). Moreover, also the physical constants and boiling points were determined (Table 2). There are 2 tables and 6 references, 1 of which is Soviet.

Card 1/2

Preparation of Gem-dinitroparaffins

SOV/62-59-5-35/40

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk  
SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of  
the Academy of Sciences, USSR)

SUBMITTED: November 11, 1958

Card 2/2

5.3610

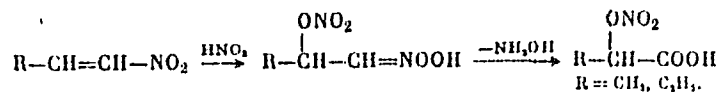
77378  
SOV/79-30-1-39/78

AUTHORS: Belikov, V. M., Yershova, L. V., Novikov, S. S.

TITLE: Concerning the Action of Nitric Acid on Nitroolefins

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 191-192 (USSR)

ABSTRACT: The action of  $\text{HNO}_3$  on nitroolefins, specifically, on 1-nitrobut-1-ene, 1-nitroprop-1-ene, and nitroethylene, was investigated. The nitrates of  $\alpha$ -hydroxy acids were obtained as final products. From nitrobutylene the nitrate of  $\alpha$ -hydroxybutyric acid (I) was obtained, and, from nitropropylene, the nitrate of lactic acid (II). Nitroethylene formed very unstable products. An attempt to isolate a discrete compound was unsuccessful. The reaction probably takes place as follows:



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Concerning the Action of Nitric Acid  
on Nitroolefins

77378  
SOV/79-30-1-39/78

Compound (I) was obtained in 47% yield, bp 115°/2 mm,  $n_D^{20}$  1.4365,  $d_4^{20}$  1.2849, and (II) in 39% yield, bp 96°/3 mm,  $n_D^{20}$  1.4356,  $d_4^{20}$  1.3672. There are 3 references, 1 U.S., 1 French, 1 U.K. The U.S. and U.K. references are: M. Frankel, K. Klager, J. Org. Ch., 23, 494 (1958); F. Pattison, G. Brown, Can. J. Chem., 34, 879 (1956).

ASSOCIATION: Institute of Organic Chemistry, Academy of Sciences,  
USSR (Institut organicheskoy khimii Akademii nauk SSSR)

SUBMITTED: January 14, 1959

Card 2/2

YERSHOVA, M.A.

Strikes preceding the October Revolution in the Moscow leather  
industry. Leg.prom. 17 no.11:69-71 N '57. (MIRA 10:12)  
(Leather industry)  
(Russia--Revolution, 1917-1921)

YERHOVA, M.A.

State of the health education program at an urban medical center.  
Vrach.delo no.4:409-411 Ap '60. (MIRA 13:6)

1. Sektor sanitarnogo prosveshcheniya (rukovoditel' - kand.med.  
nauk M.P. Boyko) Ukrainskogo nauchno-issledovatel'skogo insti-  
tuta kommunal'noy gigiyeny.

(HEALTH EDUCATION)

YERSHOVA, M.A., kand. istor. nauk, dotsent

History of the Moscow Leather Factory. Nauch. trudy MTILP  
2513-14 '62. (MIRA 1618)

1. Kafedra istorii Kommunisticheskoy partii Sovetskogo  
Soyuza i filosofii Moskovskogo tekhnologicheskogo instituta  
legkoy promyshlennosti.

YERSHOVA, M.A. (Moskva)

People's inspectors. Shvein. prom. no. 114-6 Ja-F '65.

(MIRA 18:4)

YERSHOVA, M. I., Candidate Phys-Math Sci (diss) -- "Some problems of free and induced thermal convection". Moscow, 1959. 4 pp (Min Higher Educ USSR, Moscow State U im M. V. Lomonosov), 150 copies (KL, No 25, 1959, 126)

YERSHOVA, M.M.

Helminths of rodents in the Caucasus Preserve. Uch.zap.GGFI  
no.27:108-110 '60. (MIRA 15:3)  
(Caucasus Preserve--Parasites--Rodentia)  
(Worms, Intestinal and parasitic)

GLUSHKOVA, M.A.; YERSHOVA, M.M.; BUSLAYEV, Yu.A.

Synthesis of phosphonitrile chloride in nitrobenzene.  
Zhur.neorg.khim. 10 no.8:1943-1945 Ag '65.

(MIRA 19:1)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova  
AN SSSR. Submitted November 13, 1964.



MARKOV, V.P. [deceased]; GLUSHKOVA, M.A.; YERSHOVA, M.M.

Polymeric nature of ammonium dialuminum amidohexachloride.  
Zhur. neorg. khim. 9 no.5:1144-1146 My '64. (MIRA 17:9)

1. Institut obshechey i neorganicheskoy khimii imeni N.S.  
Kurnakova AN SSSR.

"APPROVED FOR RELEASE: 03/15/2001

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YERSHOVA, M.V.; LYAMTSEV, V.T.

Effect of phenyllin on the course of experimental myocardial  
infarct in rabbits. Kardiologiya 4 no. 4:81-82 J1-Ag ' 64  
(MIRA 19:1)

1. Kafedra gospital'noy terapii ( zav. - prof. P.K. Bulator)  
i kafedra patologicheskoy anatomii ( za. - prof. M.A. Zakhar'yev-  
skaya) I Leningradskogo meditsinskogo instituta imeni I.P. Pavlova.

ALETIN, V.I.; YERSHOVA, N.A.; BLEYZIZE, T.P.

The use of animal glue to increase the retentivity of kaolin in  
printing paper. Bum.prom. 30 no.12:18-19 D '55. (MLRA 9:3)

1. Pervaya Leningradskaya bumazhnaya fabrika.  
(Leningrad--Paper industry)



ZINCHENKO, V.A.; YERSHOVA, N.A.; GERTSEVA, N.M.

Determination of bi- and trivalent titanium in titanium slags.  
Titan i ego splayv no.8:242-246 '62. (MIRA 16:1)  
(Titanium--Analysis)  
(Valence (Theoretical chemistry))

LOGINOV, A.A.; YERSHOVA, N.D.

Effect of the excitation of interoceptors on the correlation of  
blood protein fractions. Uch.zap.agu no.6:63-72 '55. (MLBA 9:11)  
(BLOOD PROTEINS) (RECEPTORS (NEUROLOGY))

VERSHOVA, N. D.

La

A 53  
d

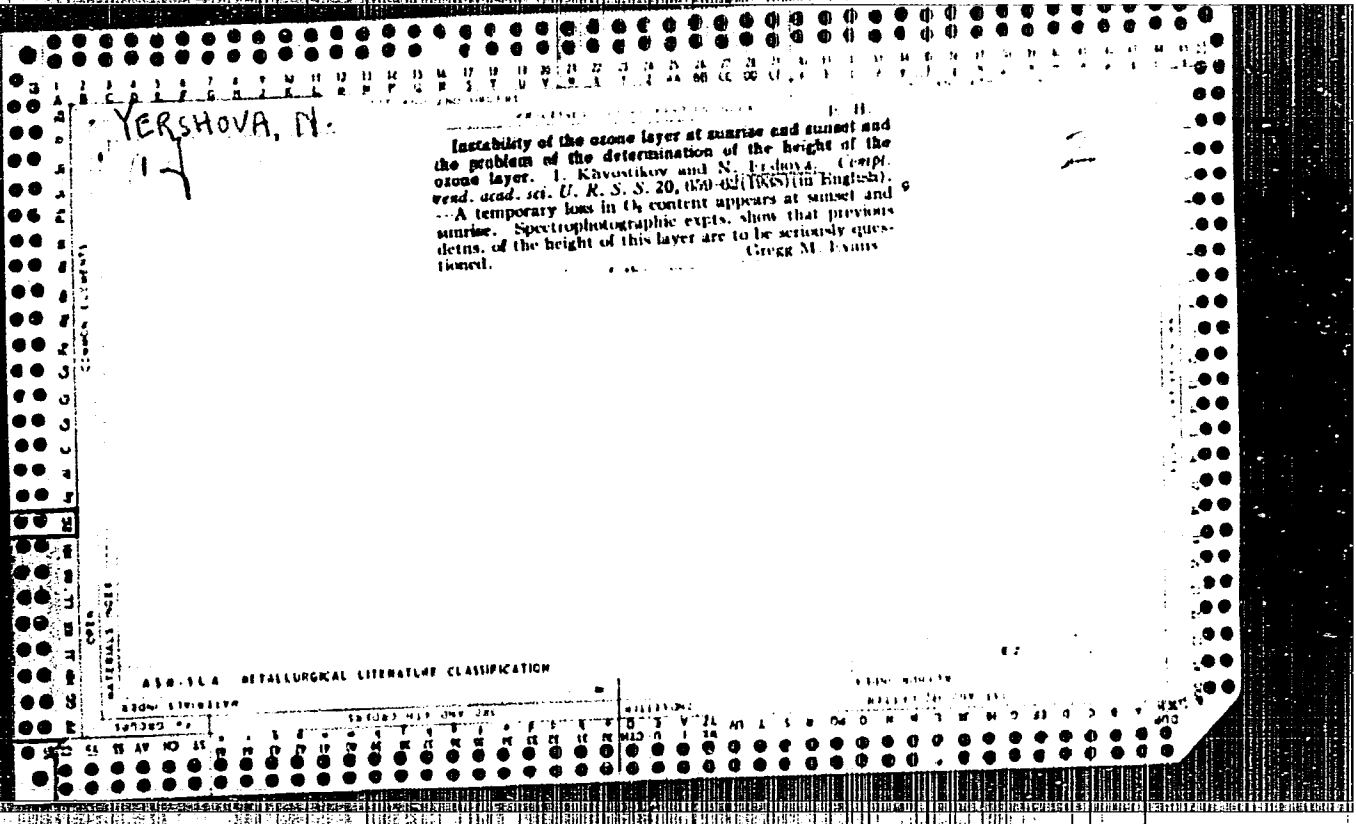
PERIODIC AND PROPERTIES INDEX

2626. Periodic Variations of Atlantic Currents. V. V. Gulevskii and N. D. Vershova. *Comptes Rendus (Doklady) de l'Acad. des Sciences, U.S.S.R.*, 1, 2, pp. 221-224, 1958. In English.—The cause or causes of the periodic variations in temperature in the Atlantic waters are sought for. The authors regard the physical basis of Sandstrom's theory of Atlantic variations to be at fault and they further assert that the theory does not explain the nature of the thermal variations. Observations of the temperature variations in the Atlantic lead the authors to conclude: (1) The origin of the temperature variations of Atlantic currents is not to be found in the origin of the Gulf Stream; (2) some temperature wave enters the Atlantic from the north; (3) without any predetermination as to the origin of these variations, they are propagated counterclockwise along a closed route which lies partly in the Atlantic and partly in the Arctic encircling the pole. The probable cause of these variations is then investigated and an approximate equation established between the variation in heat content in the Atlantic current and the Polar ice. The solution of the latter shows that the Polar ice transforms the Atlantic Ocean and the Polar Basin adjoining into an auto-oscillating system. In the opinion of the authors a complete answer to the problem will require further investigation.

A. E. H. G.

438-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM	TO	INDEXED	FILED	SEARCHED	SERIALIZED	INDEXED	FILED	SEARCHED	SERIALIZED	INDEXED	FILED
1	2	3	4	5	6	7	8	9	10	11	12



YERSHOVA, N. D., MIKHAYLIN, I. M. and KHVOSTIKOV, I. A.

"Measurements of the Brightness of the Green Line of the Night Sky,"  
Iz. Ak. Nauk SSSR, Ser. geograf i. geofiz., No.2, pp. 217-21, 1939  
Inst. Theoretical Geophysics, AS USSR

Translation 563844

YERSHOVA, N. D.

329 Metody Raboty Svarshchikov-novatorov Rzhskogo Vagonostroitel'nogo Zavoda. Riga, 1954. 12s. 3 Ill. 20 Sl. (Resp. Dom Nauki I Tekhniki MI TP Latu. SSSR. Listok Novators. No 12 (79)). 450 Ekz. Bespl.--Sost. Ukazony i Kontse Teksta.--(54-1403zh) 621.791.75s.

50: Knizhnaya, Letopis, Vol. 1, 1955

YERSHOVA, N. D. (Engineer, Latvian SSR), and RUSOV (Engineer, Estonian SSR), and  
REKHLIYAVIUS, G. Yu., (Engineer, Lithuanian SSR)

"The status and prospects for the development of welding in the Baltic republics".

Report presented at the 3rd Baltic Conference on Welding, convened by the Sovnarkhozes  
of the Lithuanian SSR, Latvian SSR, and Estonian SSR, 8-9 Apr 1964, Vilnyus.

[Avtomaticeskaya SVARKA, No. 7, 1964 - p. 95]

FILIPPOV, L.P.; YERHOVA, N.G.; SMIRNOVA, H.H.

Changes in the properties of fluids in supercooling. Vest.Mosk.un.  
Ser.3:Fiz.,astron.15 no.4:21-25 JI-Ag '60. (MIRA 13:9)

1. Kafedra molekulyarnoy fiziki Moskovskogo universiteta.  
(Supercooling)



L 34393-66 EWT(m)/EWP(t)/ETI IJP(c) JD/WB

ACC NR: AP6003322

SOURCE CODE: UR/0365/66/002/001/0063/0066

AUTHOR: Yershova, N. I.; Vedeneyeva, M. A.; Sergeyeva, G. G.

27

ORG: Moscow Institute of Steel and Alloys (Moskovskiy institut stali i splavov)

26

TITLE: Corrosion behavior of 1Kh21N5T steel

8

SOURCE: Zashchita metallov, v. 2, no. 1, 1966, 63-66

TOPIC TAGS: austenitic steel, corrosion resistance, metal heat treatment, intergranular corrosion, steel/ Kh18N10T steel, 1Kh21N5T steel

ABSTRACT: An investigation was made of the effect of heat treatment on the corrosion resistance of two-phase austenite-ferrite 1Kh21N5T steel (0.11% C, 5.34% Ni, 20.77% Cr, and 0.77% Ti) in comparison with that of austenitic Kh18N10T steel, containing 0.09% C, 10.78% Ni, 18.0% Cr, and 0.42% Ti. The samples were tested (1) after quenching from 1050C (industrial treatment during production of sheet steel), (2) after quenching from 1050C and subsequent annealing for 1 hr at 650C, and (3) after quenching from 1300C, creating in the steel structures that can possibly be formed during welding. The anode polarization curves in 1 N H<sub>2</sub>SO<sub>4</sub> were taken by using the potentiostatic method for determining the passivation and resistance to corrosion of the two-phase 1Kh21N5T steel in the passive state. The curves were taken in 0.5 N NaCl at 25C to determine the stability of the passive state in the presence of Cl ions. In addition,

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UDC: 541.138.2

L 34393-66

ACC NR: AP6003322

corrosion tests were made in 1 n  $H_2SO_4$  for 10 hr at 25C. The intergranular corrosion was studied by the AM method (according to instructions GOST 6032-58) in a solution of  $CuSO_4 + H_2SO_4 + Cu$  (shavings). The polarization curves were taken with 40 x 5 x 1-mm samples, and corrosion tests with 50 x 20 x 1-mm samples. Annealing at 600C decreased the corrosion resistance of both steels in 1 N  $H_2SO_4$  and 0.5 N NaCl without causing a tendency toward intergranular corrosion detectable by standard methods. Quenching of 1Kh21N5T steel (Kh8N10T steel was not subjected to this test) from 1300C decreased its resistance to corrosion in the same media and increased its tendency to intergranular corrosion. The corrosion resistance of austenite-ferrite 1Kh21N5T steel was lower than that of austenite Kh18N10T steel under the testing conditions; 1Kh21N5T steel passivated less efficiently than Kh18N10T steel. Annealing impeded the passivation of 1Kh21N5T steel to a larger degree than it did the passivation of Kh8N10T steel. Orig. has: 2 fig. and 2 tables.

SUB CODE: 13/ SUBM DATE: 26Mar65/ ORIG REF: 004

Card 2/2 BLC

DEMCHEV, V.I., inzh.; YERSHOVA, N.I., inzh.

Lighting of farm buildings. Mekh. i elek. sots. sel'khoz.  
21 no.5:62-63 '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy svetotekhnicheskii  
institut.

YERSHOVA, N.I.; VEDENEYEVA, M.A.; SERGEYEVA, G.G.

Anodic behavior of 1Kh21N5T steel. Zashch. met. 2 no.1:63-66  
Ja-F '66. (MIRA 19:1)

1. Moskovskiy institut stali i splavov. Submitted March 26, 1965.

YERSHOVA, N.K.

Efficiency of photosynthesis in the leaves of carrots sown  
in the fall and spring. Fisiol.rast. 7 no.1:104-106 '60.  
(MIRA 13:5)

1. Department of Fruit and Vegetable Growing, Stalingrad  
Agricultural Institute.  
(Carrots) (Photosynthesis)

ZHOGOLEV, Ievgeniy Andreyevich; ROSLYAKOV, Gennadiy Stepanovich;  
TRIFONOV, Nikolay Pavlovich; SHURA-BURA, Mikhail Romanovich,  
prof.. Primalni uchastiye: VASIL'YEV, V.M., sotrudnik;  
YERHOVA, N.M., sotrudnik. BEZBORODOV, Yu.M., red.; AKHLAMOV,  
S.N., tekhn.red.

[System of standard subroutines] Sistema standartnykh pod-  
programm. Pod red. M.R.Shura-Bura. Moskva, Gos.izd-vo fiziko-  
matem.lit-ry, 1958. 230 p. (MIRA 12:3)

1. Vychislitel'nyy tsentr Moskovskogo gosudarstvennogo universi-  
teta (for Vasil'yev, Yerhova).  
(Programming (Mathematics)) (Electronic calculating machines)

SOV/69-21-6-10/19

15.9210  
15.9110

56

AUTHOR:

Selivanovskiy, S.A. and Yershova, N.M.

TITLE:

The Sodium Chloride Agglomeration of Latex Particles

PERIODICAL:

Kolloidnyy zhurnal, 1959, Vol 21, Nr 6, pp 686-691  
(USSR)

ABSTRACT:

The authors report on an investigation intended to show the conditions of agglomeration of particles in latexes under the effect of additions of electrolyte (sodium chloride). The latexes were prepared by polymerization of various monomers with different emulsifiers. The obtained data can also help to understand the processes going on in the early stages of latex coagulation. For the experiments the following latexes were synthesized: 1) divinyl styrene latex ("sodium paraffinate") as emulsifier, 2) chloroprene latexes with sodium oleate, nekal and the wetting agent OP-10 as emulsifiers, 3) polystyrene latex with sodium

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SOV/69-21-6-10/19

The Sodium Chloride Agglomeration of Latex Particles

oleate as emulsifier. The latexes were stabilized with hydroquinone used in the form of a 3% aqueous solution for the selected monomers. The non-polymerized monomers of the divinyl styrene and polystyrene latexes were distilled off in the vacuum. A short characteristic of the obtained latexes is given in table 1. The mean volume-surface radius of the particles in the latex was determined with the method of adsorptive titration with the soap previously used as emulsifier of the latex. The titration was carried out up to the beginning of micelle formation of the soap in the aqueous phase. The surface tension at the phase boundary latex-air was measured with tensiometer DYU-NUI<sup>15</sup> Ref 7,7. The surfaces occupied by the molecules of the emulsifiers in the adsorptive layer were determined with parallel titration of the latexes with the solutions of the given emulsifier and sodium oleate. The surface occupied

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SOV/69-21-6-10/19

The Sodium Chloride Agglomeration of Latex Particles

by a sodium oleate molecule was considered equal to  $28.2 \cdot 10^{-16} \text{ cm}^2$  according to S.M. Maron [Ref 8]. The obtained data are given in table 2. The authors also determined the degree of saturation by the emulsifier of the adsorptive films of the latex particles, i.e. the ratio of the amount of emulsifying agent contained in them prior to titration and the amount observed in them at the time of micelle formation in the aqueous phase ( in percent). For the investigation of the agglomerating effect of NaCl the authors added equal amounts (in weight) of variously concentrated NaCl solution to latex batches with previously determined particle sizes. The mixed specimens were stored for nine days at room temperature. Those in which neither lamination nor coagulation could be observed were diluted after this period with an equal amount of water (pH  $\sim$  11), in order to reduce the salt concentration below the critical point and exclude further particle agglomeration.

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The Sodium Chloride Agglomeration of Latex Particles

In the diluted specimens the authors determined the mean volume-surface radius of the particles. In order to find the changes in size of the particles during certain periods, the authors prepared specimens with a maximum salt content not effecting neither lamination nor coagulation. From these specimens after intervals of 3, 6 and 9 days samples were taken to determine the size of the particles (after corresponding dilution). The obtained results are shown in table 3-6 and graphs 1-6. The data show that added NaCl acts differently in dependence on the nature of emulsifier and polymer. In divinyl styrene and chloroprene latexes prepared with soaps of fatty acids as emulsifiers added NaCl (more than 0.7% in the aqueous phase) calls forth considerable agglomeration (Graph 1). There is also a considerable growth of particle size. The mean volume-surface radius can increase to more than three fold size for divinyl styrene latex (Table 3)

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The Sodium Chloride Agglomeration of Latex Particles

and to 2.5-fold size for chloroprene latex (Table 4). Particle agglomeration in nekal containing chloroprene latex is less considerable (Table 4). In chloroprene latex prepared with non-ionogenic emulsifier OP-10 the adding of even large amounts of NaCl (12.3% in the aqueous phase) did not call forth agglomeration. Adding of NaCl (up to 0.75% in the aqueous phase) to desodorized polystyrene latex (emulsified with sodium oleate) did not cause neither reduction of surface tension nor agglomeration. The data of table 5 and graph 2 show that in divinyl styrene and particularly chloroprene latexes emulsified with fatty acid soaps agglomeration under the effect of added NaCl intensely develops during three days, but slows down afterwards (Graph 3). Table 6 and Graph 4 and 5 show that during agglomeration under the effect of added NaCl saturation of the latex particle films by the emulsifier grows in direct proportion to the particle radius. The dependence of the surface

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SOV/69-21-6-10/19

The Sodium Chloride Agglomeration of Latex Particles

tension of each latex on the saturation of the particle films, however, is practically expressed by the same curves (Graph 6) prior to and after agglomeration. The authors express their gratitude for help to N.A. Fermor. There are 6 graphs, 6 tables and 12 references, 6 of which are English, 5 Soviet and 1 German. 4

ASSOCIATION: Nauchno-issledovatel' skiy institut sinteticheskogo kauchuka imeni S.V. Lebedeva, Leningrad (Scientific Research Institute of Synthetic Rubber imeni S.V. Lebedev, Leningrad)

SUBMITTED: May 15, 1958

Card 6/6

Arithmetical block

S/194/62/C00/007/C07/160  
D222/D309

bers. A priority is established for the execution of the five classes of operations defined. Methods are given for the specification and coding of information on group operations and information on the logical conditions in arithmetical O's. Algorithms for the sub-blocks of the arithmetical block are described. The sorting sub-block does some preliminary processing to prepare information for the arithmetical block. The sub-block for powers in the general case replaces powers by logarithmic operations according to the formula  $a^B = e^{B \ln a} = \exp(B \ln a)$  and inserts instructions to call in the standard programs  $\ln x$  and  $e^x$ . A number of special cases are singled out (B is positive or negative integer,  $B = k/2$ , where k is an integer, etc.). The sub-block for programming composes the programs for the arithmetical O's. The programming is accompanied by an economization of instructions, done by a separate sub-block. Economization of instructions is provided for six types of equivalent expressions, e.g. for  $x^2$ ,  $x + y$  and their equivalents  $xx$  and  $y + x$ . [Abstracter's note: Complete translation.]

Card 2/2

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962910013-9

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962910013-9"



Yershova, N. M.

USSR/Physics - Moisture of dispersives

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Author      : Yershov, V. N., AND Yershova, N. M.

Title      : An express method for determining the moisture of capillary-porous  
dispersive materials.

Periodical   : Zhur. tekhn. fiz. 24, 854-858, May 1954

Abstract    : Find a new criterion for the moisture content of capillary-porous  
dispersive materials, that permits one to reduce this quantity to an  
electrical parameter. Describe a practical device for such a study.  
Refer to related works of A. F. Chudhovskiy (ZhTF, 8, No 11, 1938;  
Sbornik Trudov AFI, No 5, 1952, and No 6, 1953).

Institution :

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ERSHOVA, N. N.

Order of reaction of carbon with steam. N. M. Ershova.  
Zhur. Priklad. Khim. 27, 106-9 (1954). -- Plots of the rate of  
reaction between C and steam at 745°, (g. of steam reacted  
per cm. C surface per sec.) vs. steam concn. are straight lines  
indicating a 1st-order reaction. I. Benecowitz.

YERSHOV, V.N.; YERSHOV, N.M.

Thermal method for determining the moisture of fine-grained capillary and porous substances. Zhur.tekh.fiz.26 no.6:1306-1308 Je '56. (Moisture--Measurement) (MLRA 9:9)

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