84582

S/181/60/002/010/003/051
B019/B070

24.7700 2407 only
26.1631

AUTHORS: Zhdanovich, N. S., Konopleva, R. F., Ryvkin, S. M.

TITLE: Annealing-out of Defects Formed by Gamma Rays in n-Type Germanium

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 10, pp. 2356-2358

TEXT: When the defects produced in n-type germanium by irradiation with γ rays are removed by annealing, the decrease shows a nonexponential character. For an explanation of this it is necessary to consider the diffusion of the interstitial atoms and vacancies (Refs. 2,3). Fig. 1 shows the fraction φ of the defects removed by annealing as a function of $\sqrt{t}$ for annealing temperatures of 120, 140, and 160°C, t being the annealing time. The experimental values are seen to agree with the theory mentioned in the introduction. Similar results are obtained on bombardment by electrons and neutrons. The activation energy for the diffusion of the defects is found to be 1.01 ev. For comparison, analogous values obtained on irradiation with neutrons (1.12 ev) and with electrons (1.36 and 1.3 ev) are given (Refs. 1,3,4,5). Fig. 2 shows φ as a function

Card 1/2

84582

Annealing-out of Defects Formed by Gamma Rays in n-Type Germanium

S/181/60/002/010/003/051
B019/B070

of $Z = (4Dt/r_0^2)^{1/2}$. It is found that the experimental and theoretical values agree well for $\lambda = 0.5$ and $D_0/r_0^2 = 1.3 \cdot 10^9$ per second. r_0 is, thus, found to be $2.8 \cdot 10^{-7}$ cm, and so somewhat larger than that obtained in the case of neutron bombardment. Fig. 3 shows that by increasing the γ quantum flux the removal of defects by annealing is more rapid. The linear part of the curve is also reduced. In the conclusion it is stated that the theory of the removal of defects by annealing which is confined to diffusion is unable to explain some important properties which are possibly connected with the interaction of defects with other structural perturbations. There are 3 figures and 6 references: 2 Soviet and 4 US.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN SSSR, Leningrad (Institute of Physics and Technology of the AS USSR, Leningrad)

SUBMITTED: March 17, 1960

Card 2/2

STRUKOV, I.T.; ZHDANOVICH, Yu.V.

4-Thiazolidinecarboxylic acid and its derivatives. Part 10: Transformations of 4-chloro- and 4-aminomethylene-2-phenyl-5-oxazolones. Zhur.ob.khim. 33 no.3:910-917 Mr '63. (MIRA 16:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov (VNIIA), Moskva.
(Oxazolinone)

POLUKAROV, A.N., KUPCHENKO, M.M.; Prinimali uchastiye: CHERNOBAY, A.I.; MALYSHEVA, P.I.; ZHDANOVICH, Yu.V.; KOKAREV, A.V.; KOLTYSHEV, D.I.

Tellurium recovery from copper-electrolysis slime into sodium slag. TSvet. met. 33 no.8:56-57 Ag '60. (MIRA 13:8)

(Copper--Electrometallurgy)
(Tellurium)

PROCESSES AND PROPERTIES INDEX

Ca

14

Anah-Bulat mirabilite lake.—A. V. Zhdanovskii and D. I. Ryabchikov. *Ann. secteur anal. phys. chim., Inst. chim. gén.* (U. S. S. R.) 13, 363-73(1940).—Analytical data are recorded. The brine is of the sulfate type. During the winter months mirabilite is deposited in very large amt. from the lake water. Methods of utilizing the residual brine for prepn. of $MgCl_2$ and bromides are discussed.

B. C. P. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ZHDANOVSKIKH, V.P.

We are improving production methods and equipment. Gidroliz. i lesokhim. prom. 14 no.6:16-18 '61. (MIRA 14:9)

1. Sverdlovskiy sovnarkhoz.
(Sverdlovsk Province--Hydrolysis)
(Sverdlovsk Province--Wood--Chemistry)

ZHDANOVSKIY, A.B.; LYAKHOVSKAYA, Ye.I.; SHLEYMOVICH, R.E.; BUKSHTEYN, V.M., redaktor; VALYASHKO, M.G., redaktor; PEL'SH, A.D., redaktor; KOTS, V.A., otvetstvennyy redaktor; LEVIN, S.S., tekhnicheskiy redaktor; ERLIKH, Ye.Ya., tekhnicheskiy redaktor.

[Handbook of experimental data on the solubility of multicomponent water-salt systems] Spravochnik eksperimental'nykh dannykh po rastvorimosti mnogokomponentnykh vodnosolevykh sistem. Leningrad, Gos.nauchno-tekhn.izd-vo khim.lit-ry. Vol.2.[Quaternary and more complex systems] Chetyrekhkomponentnye i bolee slozhnye sistemy. 1954. 1269 p. (MLRA 8:3)
(Solubility)(Salts)(Systems (Chemistry))

ZHDANOVSKIY, K.T.; NETREBKO, P.G.; RABINOVICH, G.V.; SUKONNIK, M.A.; TOVAROVSKIY, I.G.

Blast furnace operations on sinter with the fine fraction sifted out. Metallurg 10 no.12:3-5 D '65. (MIRA 18:12)

1. Krivorozhskiy metallurgicheskiy zavod.

ZHDANOVSKIY, K.I.

ERUK, A.S., professor, doktor tekhnicheskikh nauk; GERMAN, M.Ya., dotsent, kandidat tekhnicheskikh nauk; KOROBOV, I.I., inzhener; ZHDANOVSKIY, K.T., inzhener; LIBERZON, E.A., inzhener.

Investigating the aerodynamic properties of bulk piles of coke. Stal' 7 no.2:101-105 '47. (MLRA 9:1)

(Coke)

YESKIN, V., traktorist (der.V.Berezovka, Yelovskiy rayon, Permskaya oblast'); ZHDANOVSKIY, N., prof., doktor tekhn.nauk; MOKSHIN, A., kand.tekhn. nauk

Determination of the power rating of an engine. Sel'.mekh. no.3:35-37 '62. (MIRA 15:3)

(Tractors—Engines)

L 33749-66 EWT(m)/T WE

ACC NR: AR6017326 (A) SOURCE CODE: UR/0273/66/000/001/0045/0045

AUTHOR: Zhdanovskiy, N. S.; Gitlin, N. N.; Nikolayenko, A. V.; Koshushko, K. I.

TITLE: Jet ignition is an effective means of increasing economy and completeness of combustion in automotive engines working on gasoline and liquified gas

SOURCE: Ref. zh. Dvigateli vnutrennego sgoraniya, Abs. 1.39.337

REF SOURCE: Zap. Leningr. s.-kh. in-ta, v. 97, 1965, 181-189

TOPIC TAGS: ignition, combustion research, engine ignition system, fuel consumption

ABSTRACT: Jet ignition is an effective means of increasing fuel economy in serial automotive engine working on gasoline and liquified gas. The more active flow of the combustion process results in decreasing the carbon oxide content in exhaust gases, compared to spark ignition. This holds true for both gasoline and liquified fuels.

SUB CODE: 13/ SUBM DATE: none

Card 1/1 BLG

ZHDANOVSKIY, Nikolay Stepanovich; ZUYEV, Aleksey Ivanovich; CHAPSKIY, O.U., red.; BARANOVA, L.G., tekhn. red.

[Testing and running of tractor engines without braking (under operating conditions)] Bestormoznaia proverka i obkatka traktornykh dvigatelei (v ekspluatatsionnykh usloviiakh) Leningrad, Sel'khozizdat, 1962. 53 p. (MIRA 15:9)
(Tractors--Engines--Testing)

ZHDANOVSKIY, N. S., doktor tekhn. nauk; GITLIN, N. N., kand. tekhn. nauk; NIKOLAYENKO, A. V.

Investigating the performance of the GAZ-21 engine with flame ignition in case of carburetor mixing and fuel injection. Avt. prom. 28 no.9:3-8 S '62. (MIRA 15:10)

1. TSentral'nyy nauchno-issledovatel'skiy i konstruktorskiy institut toplivnoy apparatury avtotraktornykh i statsionarnykh dvigateley i Leningradskiy sel'skokhozyaystvennyy institut.

(Motor vehicles—Engines—Testing)

ZHDANOVSKIY, N. S. Doc Tech Sci -- (diss) "Scientific bases of brakeless tests of tractor and automobile motors." Len, 1957. 39 pp (Min of Agr USSR. Len Agr Inst. Engineering Faculty) 140 copies (KL, 43-57, 88)

(Bibliography: pp 34-36 (16 titles))

ZHDANOVSKIY, N. S. and D'IAKOV, D. N.

Kharakteristiki effektivnosti i ekonomichnosti dvigatelei otechestvennykh traktorov. Moskva, Mashgiz, 1949. 83 p. diagres.

Characteristics of the effectiveness and efficiency of Soviet traction engines.

DLC: TI210.D5

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

ZHDANOVSKIY, N.S.

29194 Sravnitel'noe issledovanie sposobov eksperimental'nogo opredileniya mekhanicheskikh poter' abtotraktornykh dvigateley. Sbornik nauch-tekhn. rabot (Leningr. int mekhanizatsii sel. Khoz-va,) Vi, 1949, S. 44-77

SO: Letopis' Zhurnal'nykh Statey, Vol. 39, Moskov, 1949

ZHDANOVSKIY, N.S.

29193 Issledovanie teplovogo Rezhima gil'zy Rabot (Leningr. in-t mekhanizatsii sel. Khoz-va,) Vi, 1949, S. 78-98

SO: Letopsi' Zhurnal'nykh Statey, Vol. 39, Moskov, 1949

ZHDANOVSKIY, N. S.

Rural thermal electric power station Moskva, Gos, izd-vo sel'khoz, lit-ry, 1953. 123 p. (V pomoshch'sel'skim elektrifikatoram) (54-33406)

TK1193.R925

D'YACHENKO, Nikolay Kharitonovich, doktor tekhn. nauk, prof.; DASHKOV, Sergey Nikitich, doktor tekhn. nauk, prof.; MUSATOV, Vitaliy Sergeyevich, kand.tekhn.nauk; BELOV, Pavel Mitrofanovich, kand. tekhn.nauk,prof.; BUDYKO, Yuriy Ivanovich, kand.tekhn.nauk. Prinimali uchastiye: BURYACHKO, V.R.; GUGIN, A.M.; ZHDANOVSKIY, N.S., doktor tekhn. nauk,prof., retsenzent; YURKEVICH, M.P., inzh., red. izd-va; PETERSON, M.M., tekhn. red.

[High-speed piston internal conbustion engines] Bystrokhodnye porshnevye dvigateli vnutrennego sgoraniia. Moskva, Mashgiz, 1962. 368 p. (MIRA 15:7)
(Gas and oil engines) (Diesel engines)

ZHDANOVSKIY, N.S.

Automobiles - Motors

Determining mechanical losses of automobile and tractor engines by the method of cylinder elimination. Avt.trakt.prom., no. 6, 1952.

MONTHLY LIST OF RUSSIAN ACCESSIONS, LIBRARY OF CONGRESS, OCTOBER 1952. UNCLASSIFIED.

AKATOV, Yevgeniy Ivanovich; BELOV, Pavel Mitrofanovich; D'YACHENKO, Nikolay Kharitonovich, prof., doktor tekhn.nauk; MUSATOV, Vitaliy Sergeyevich; ZHDANOVSKIY, N.S., doktor tekhn.nauk, retsenzent; DUBUSOVA, G.A., red.izd-va; FRUMKIN, P.S., tekhn.red.

[Performance of a motor-vehicle engine under unsteady conditions] Rabota avtomobil'nogo dvigatelia na neustanovivshemsia rezhime. Pod red. N.Kh.D'iachenko. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 247 p. (MIRA 13:4)
(Motor vehicles--Engines)

ZHDANOVSKIY, N.S., doktor tekhn.nauk

Loading of tractors by towing in traction tests. Trakt. i sel-khozmash. 32 no.3:18-20 Mr '62. (MIRA 15:2)

1. Leningradskiy sel'skokhozyaystvennyy institut.
(Tractors--Testing)

ZHDANOVSKIY, S.N., starshiy elektromekhanik

Use plastics for staffs. Avtom. telem. i svyaz' 2 no.12:35 D '58.
(MIRA 11:12)

1.Orshanskaya distantsiya signalizatsii i svyazi Belorusskoy dorogi.
(Railroads--Equipment and supplies)

BISIKALOVA, V.N.; PREDTECHENSKIY, A.N.; ZHDANOVSKIY, V.I.

Effect of drug-induced sleep on the course of the vaccination process in rabbits vaccinated with living tularemia vaccine. Zhur. mikrobiol.epid. i immun.28 no.12:98-101 D '57. (MIRA 11:4)

1. Iz Saratovskogo meditsinskogo instituta.
(TULAREMIA, immunology,
vacc. with living vaccine, eff. of sleep ther. in rabbits (Rus)
(SLEEP, effects,
on immun. response to living tularemia vaccine in rabbits (Rus)

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

BC

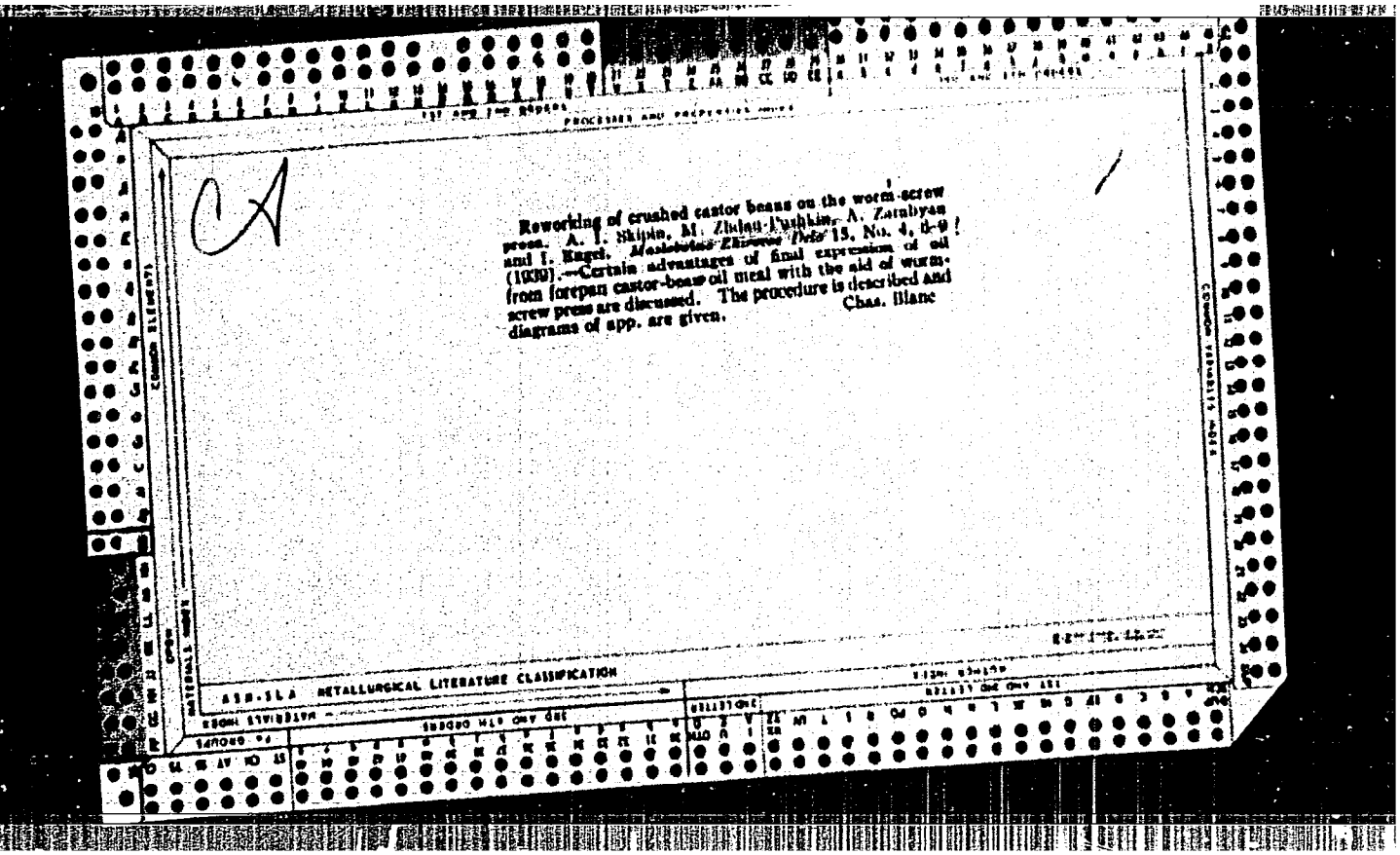
B-I-7

Oil from Kuban *Perilla ocumoides* seeds. M. Zhdan-Pushkin (Masloboino-Zhir. Delo, 1929, No. 2, 41—47).—The seeds contain moisture 6·30, protein 23·12, oil 45·07, nitrogen-free extractive matter 10·28, crude fibre 10·28, ash 4·64, essential oil 0·20%. The essential oil, d 0·9304, has saponif. value 24·8, acid value 2·6, ester value 22·2; it polymerises, with thickening, when heated. The fatty oil has acid value 1·0, saponif. value 190·06, ester value 189·06, Reichert-Meissl value 1·48, Polenske value 1·62, acetyl value 0·71, iodine value 203·00, hexabromide value 63·65, unsaponifiable matter 0·3%, Hehner value 90·8. The fatty acids were examined. CHEMICAL ABSTRACTS.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

ZHDAN-PUSHKIN, A. A.; BYALIK, V. L.; KLEIN, E. G.

"The So-called Acute Catarrhal Appendicitis," Voyenno-Med. Zhur., No. 11, p. 53, 1955.



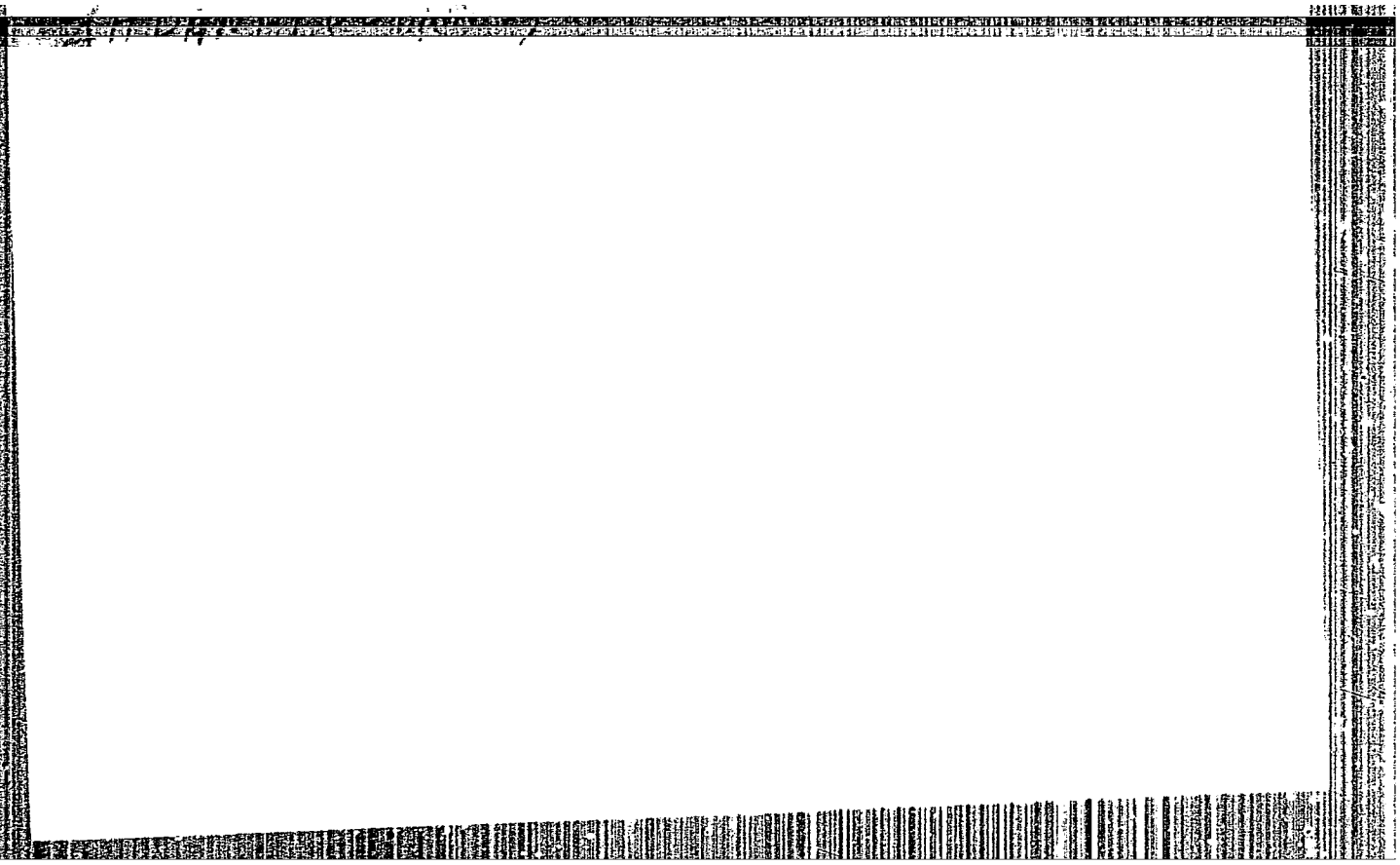
CA

Reworking of crushed castor beans on the worm-screw press. A. T. Shipin, M. Zhdan-Pushkin, A. Zarubyan and I. Engel. *Maslobolno-Zhirovoe Delo* 15, No. 4, 6-9 (1939).—Certain advantages of final expression of oil from forepan castor-bean oil meal with the aid of worm-screw press are discussed. The procedure is described and diagrams of app. are given. Chas. Blanc

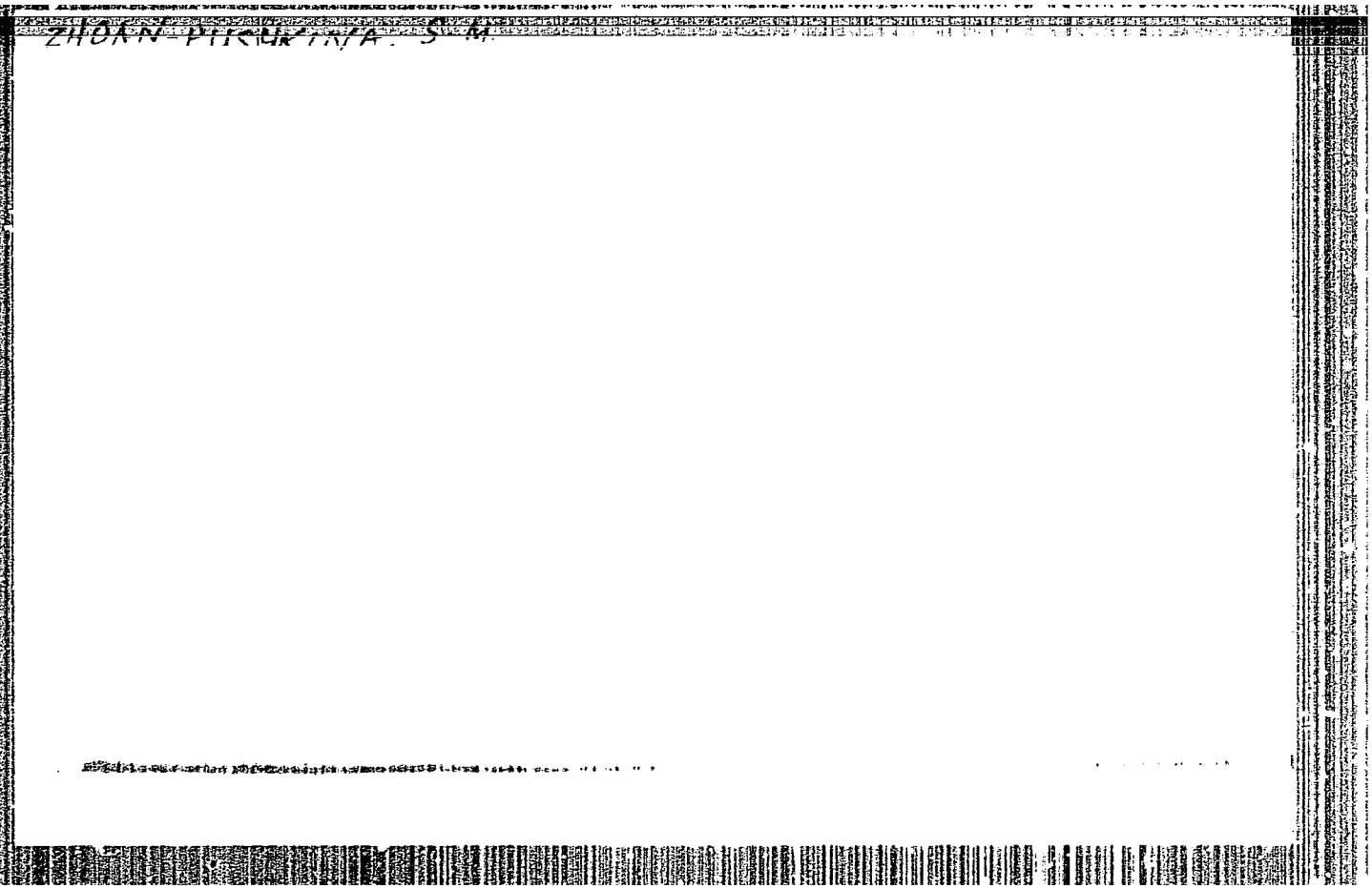
ORLOV, I.V., kand.tekhn.nauk, dotsent; ZHDAN-PUSHKINA, G.F., inzh.

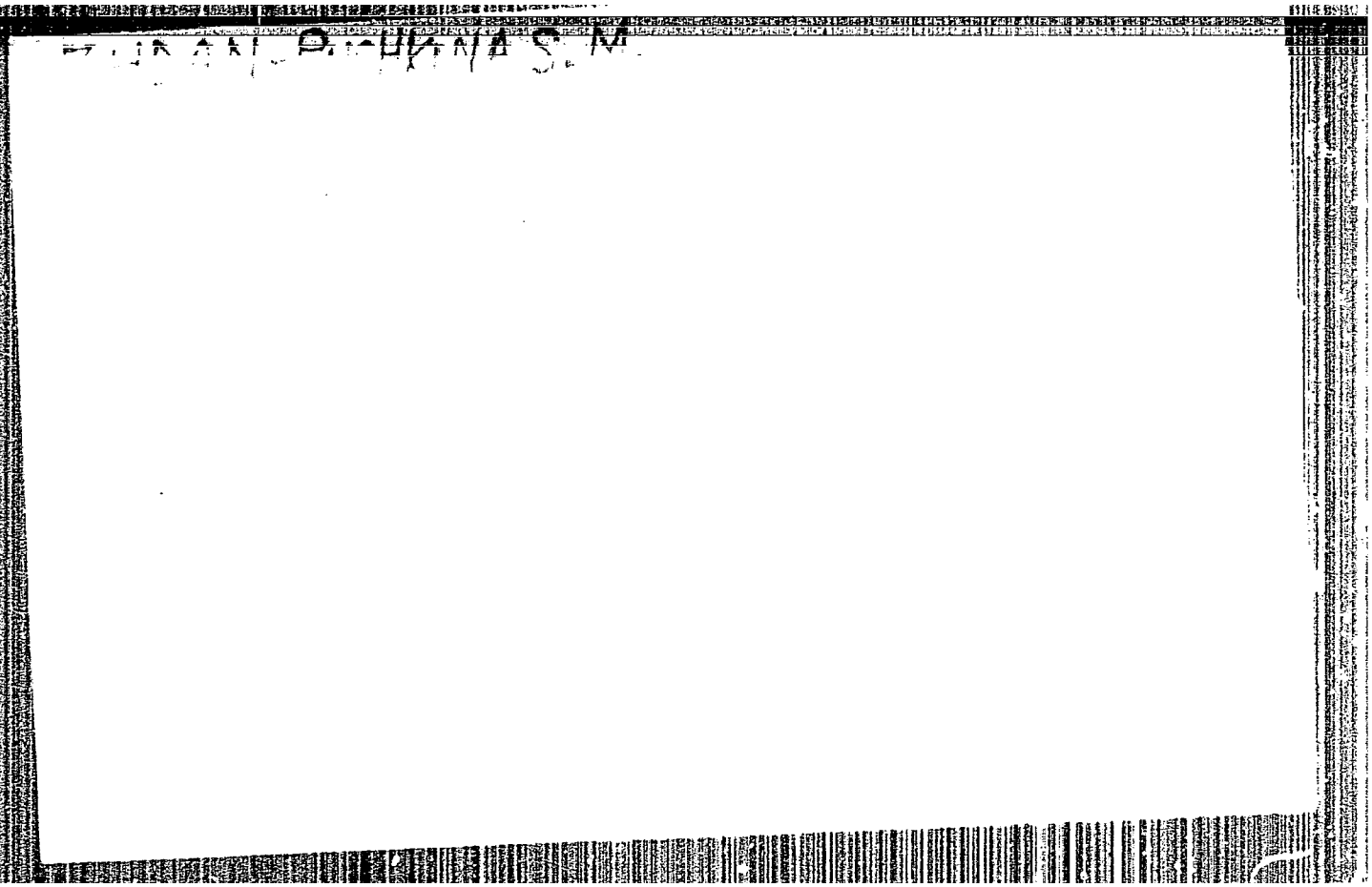
Conventional symbols for the flow sheet of the manufacture of a garment. Izv.vys.ucheb.zav.; tekh.leg.prom. 3:150-155 '62. (MIRA 15:6)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti (for Orlov). Kiyevskiy Dom modeley (for Zhdan-Pushkina).
(Clothing industry)



APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R002064630003-7"





ZHDAN-POSHKINA S.M.

Influence of inoculated cultures on the process of sorbit...
oxidation by Acetobacter suboxyd...

ZHDAN-PUSHKINA, S.M.

RAZUMOVSKAYA, Z.G.; ZHDAN-PUSHKINA, S.M.

Oxidation of sorbitol to sorbose in a medium with increased concentrations of sorbitol. Uch.zap.Len.un. no.216:38-48 '56. (MLRA 10:3)

(SORBITOL) (SORBOSE) (ACETOBAR)

ZHDAN-PUSHKINA, S.M.

Oxidation of increased concentrations of sorbitol in a medium containing mineral nitrogen. Uch.zap.Len.un. no.216:49-56 '56. (MIRA 10:3)

(SORBITOL) (SORBOSE) (AMMONIUM SULFATE) (ACETOBACTER)

ZHDAN-PUSHKINA, S.M.; KRENEVA, R.A.

Sorbite oxidation during intensive and delayed reproduction of Acetobacter suboxydans. Mikrobiologiia 32 no.4:711-716 Jl-Ag '63. (MIRA 17:6)

1. Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova.

KOZ'MINA, O.P.; KURLYANKINA, V.I.; ZHDANPUSHKINA, S.; MOLOTKOV, V.A.

Mechanism of the oxidation of cellulose ethers by oxygen. Part 12: Synthesis and oxidation of ethyl cellulose based on cellulose tagged with radiocarbon at the glucoside C atom. Vysokom.soed. 5 no.4: 492-495 Ap '63. (MIRA 16:5)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR i Leningradskiy gosudarstvennyy universitet.
(Cellulose ethers) (Oxidation) (Carbon isotopes)

ZHDAN-PUSHKINA, S.M.

Yeast filtrate as a culture medium for bacteria oxidizing sorbitol into sorbose [with summary in English]. Mikrobiologiia 28 no.1:93-98 Ja-F '59. (MIRA 12:3)

1. Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova.
(ACETOBACTERIUM, culture,
on yeast-filtrate medium (Rus)).
(YEASTS, DRIED,
filtrates as culture medium for Acetobacter (Rus))

USSR/Microbiology - General Microbiology . F-1

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9750

Author : Razumovskaya, Z.G., Zhdan-Pushkina, S.M.
Inst : -
Title : Characteristics of Sorbose-Forming Bacteria, Depending on Cultivation Conditions.

Orig Pub : Vestn. Leningr. un-ta, 1956, No 15, 107-116

Abstract : Increased aeration exerts an especially powerful effect on bacterial multiplication during the initial hours of culture development and somewhat increases the numbers of bacteria. In media containing little nutrient, the lag-phase is lengthened and the entire process of propagation is very sluggish. An excess of nutrient substances in the lag-phase is also unfavorable to bacterial multiplication, and only in the final hours of culture development does the presence of increased nutrient substance secure an increase in numbers of bacteria. An increase in sorbitol concentration

Card 1/2

ZHDAN-PUSHKINA, S.M.

USSR / Microbiology. Technical Microbiology. F-3

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 21886

Author : Razumovskaya, Z.G., Zhdan-Pushkina, S.M.
Inst :
Title : The Influence of the Planting Cultures on Sorbitol Oxidation by Acetobacter suboxydans.

Orig Pub: Mikrobiologiya, 1956, 25, No 1, 16-24

Abstract: Observations on the development of a culture of A. suboxydans showed that, depending on the conditions of aeration and on the composition of the bacterial nutrient medium, separate reproductive phases occur at different times. Bacteria in the same phases of development, but under different conditions of cultivation, may differ in the number of cells, as well as in their physiological states, which becomes significant in utilizing these cultures as planting material. It was established that bacteria which are in a state of active reproduction in the logarithmic phase, when utilized as an inoculum, bring about oxi-

Card : 1/2 -24-

USSR / Microbiology. Technical Microbiology. F-3

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 21886

dation of sorbitol less actively than bacteria taken at a later stage of culture development. The aeration conditions under which the seeding material was cultivated are of great importance. Bacteria cultivated under conditions of heightened aeration oxidize sorbitol more actively than in the surface method of cultivation. The increase in the final yeast moisture (dry residue 0.95%) reacts negatively on the activity of the planting culture. A medium with an increased concentration of B-complex (5%) is recommended as a nutrient medium for an active planting material for sorbitol production.

Card: 2/2 -25-

ZHDANOVSKIY, N.S., doktor tekhn. nauk, prof.; FAYNLEYB, B.N., kand. tekhn. nauk; ZUBRITSKIY, B.N., inzh.

Effect of the intensity of the process of combustion on the wearing rate of piston rings. Trakt. i sel'khozmash. no.9:3-5 S '64. (MIRA 17:11)

1. TSentral'nyy nauchno-issledovatel'skiy i konstruktorskiy institut toplivnoy apparatury avtotraktornykh i statsionarnykh dvigateley i Leningradskiy sel'skokhozyaystvennyy institut.

ZHDANOVSKIY, Nikolay Stepanovich -- awarded sci degree of Doc Tech Sci for the 22 Oct 57 defense of dissertation: "Scientific bases for the dragless [bestormoznyy - "brakeless"] testing of tractor and automobile motors" at the Council, Leningrad Agric Inst; Prot No 12, 17 May 58. (BMVO, 10-58,23)

ZHDANOVICH, V.F.

Asymptotic expansions in eigenvalues of a boundary value problem with a parameter. Dokl. AN SSSR 135 no.6:1318-1321 D '60.
(MIRA 13:12)

1. Predstavleno akademikom I.G. Petrovskim.
(Boundary value problems)

ZHDANOVICH, Vasiliy Mikhaylovich; RUMYANTSEV, A.T., red.; GUREVICH, M.M., tekhn. red.

[Guarantee of high crop yields; accumulation and utilization of local fertilizers on White Russian collective farms] Zalog vysokogo urozhaia; iz opyta nakopleniia i primeneniia mestnykh udobrenii v belorusskikh kolkhozakh. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1960. 31 p. (MIRA 14:7)

(White Russia—Field crops--Fertilizers and manures)

ZHDANSKI, K.

MARAI, Zh.; ZHDANSKI, K.

High-tension voltage regulatoes with low pedestal voltage. Prib.i tekh.eksp. no.2:108-112 S-O '56. (MLRA 10:2)

1. TSentral'nyy nauchno-issledovatel'skiy institut fiziki Akademii nauk Vengrii, otdelenie kosmicheskogo izlucheniya.
(Voltage regulations)

ZDAROV,

Zdarov, "The mechanization of washing and drying of metal products", Sbornik sokr. dokladov Srat. gor. nauch.-tekhn. konf-tsii predpriyatiy mashinostroit. i metalloobrabat. prom-sti, Saratov, 1949, p. 108-11.

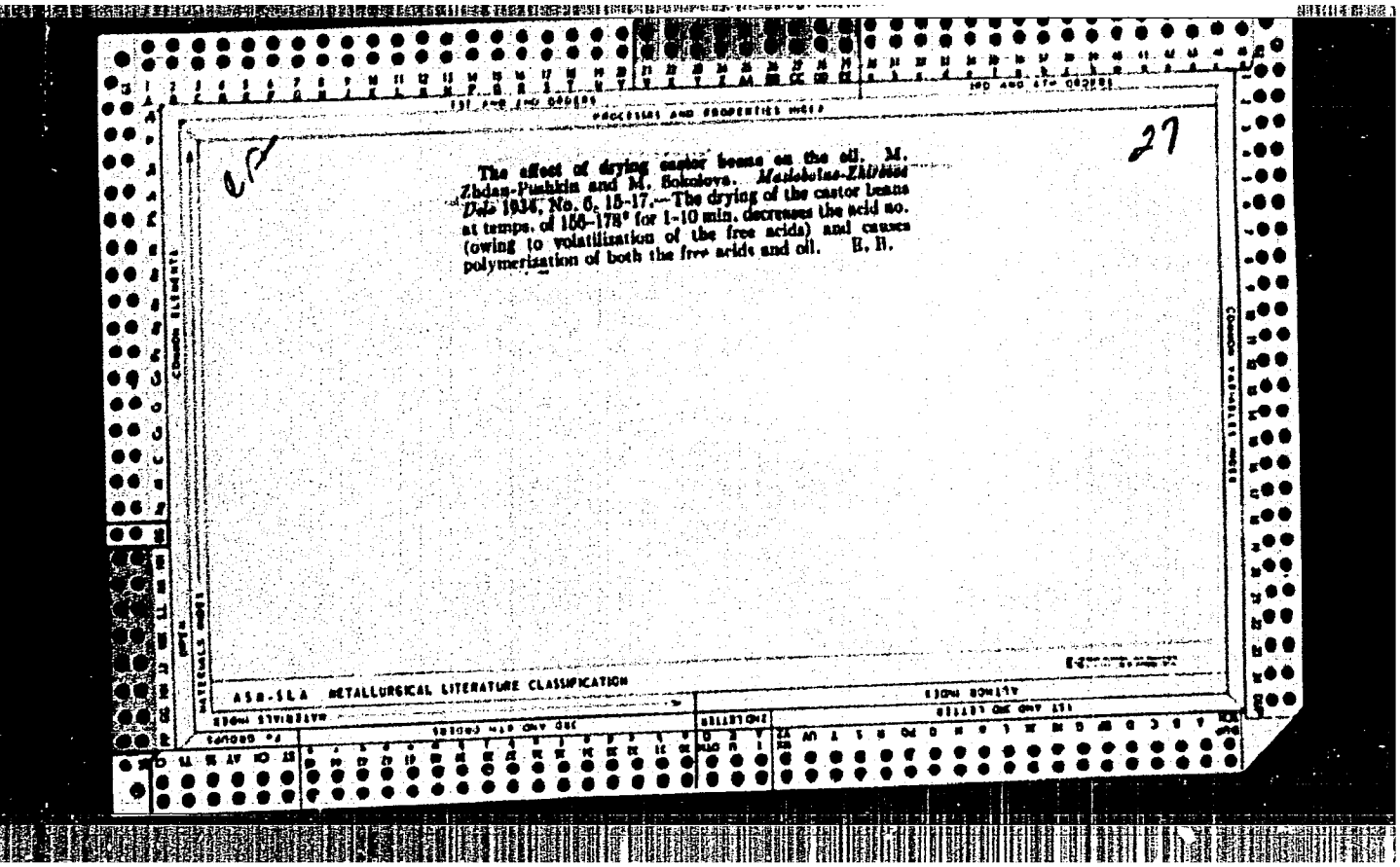
SO: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 11, 1949).

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

The oil from the seeds of Perilla ocumoides from Kuban. M. Zhukov-Lubmin. *Masloboino-Zhirovoe Delo* 1929, No. 2, 44-7.—The seeds have the following compn. in %: moisture 6.30, protein 23.12, oil 45.07, N-free extractive matter 10.28, crude fiber 10.28, ash 4.04, essential oil 0.29. The essential oil has sapon. no. 24.8, acid no. 2.6, ester no. 22.2. The cold-pressed oil has an exceptionally light color. The taste is similar to that of linseed oil. The specific odor is obviously caused by the presence of the essential oil. By heating the oil to 110-115° it becomes considerably lighter in color. On prolonged heating with the exclusion of air the oil thickens, indicating its ability to polymerize. On rapid heating within 10-15 min. to 350° it thickens to such an extent that it cannot be poured. Its flash-point is 277° at 320°. The oil remains liquid even at very low temps. At −24° it becomes slightly turbid, it thickens at −30° and becomes again mobile and clear at −26°. Its d. is 0.9304. The increase of temp. at bromination is 37.5° from which an iodine no. of 206 is calcd. The oil has acid no. 0.997, sapon. no. 190.06, ester no. 189.06, Reichert-Meissl no. 1.43, Polenske no. 1.02, acetyl no. 0.71, I no. 203.05, hexabromide no. 63.65, unsapon. 0.3%, Hehner no. 95.8. These consts. point to the presence of highly unsatd. acids and low content of volatile and hydroxy acids. The acids m. −4.5°, solidify −5°, I no. 200.3. The solid and liquid acids were sepd. through their Pb salts. Only 3.27% of solid acids were present. The solid acids had I no. 1.48, sapon. no. 197.6, m. 56.5°, which is the m. p. of a eutectic mixt. of stearic and palmitic acids. The liquid acids, hexabromide m. 179°, contained 22.15% 9,10,12,13,15,16-linolenic acid., 56.42% linoleic acid and 13.10% oleic acid. The percent compns. of the press cake and bran were, resp.: oil 11.72, 1.02; moisture 9.07, 11.71; protein 37.57, 41.53; N-free extractive matter 17.62, 18.70; fiber 16.34, 18.58; ash 7.02, 8.25. The raw oil, when spread on glass, dries only in 120 hrs. This slow drying is due to the fact that the raw oil has the tendency to coalesce on glass, preventing the formation of a thin film. By heating the oil to 200-250° this tendency disappears and an elastic, clear film results in 60 hrs. These perilla oil films possess very high dielectric properties.
R. Bielouss

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



The effect of drying castor beans on the oil. M. Zhdan-Pushkin and M. Sokolova. *Maslobelno-Zhirovoe Delo* 1934, No. 6, 15-17.—The drying of the castor beans at temps. of 156–178° for 1–10 min. decreases the acid no. (owing to volatilization of the free acids) and causes polymerization of both the free acids and oil. H. H.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

"Casein" from castor-oil cakes. M. Zhdan-Pushkin and A. Sokolova. *Masloboino-Zhirovoe Delo* 1933, No. 3, 10-22.—By treating the oil-free cakes of castor-oil with NaOH (1°Bé.) at 40-45° for 2 hrs. and subsequently pptg. the proteins with 3.5% HCl, a yield of 40.5% (of the wt. of the cake) of crude "casein" was obtained.

B. Bielouss

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1. BARYSHNIKOVA, P.P. ZHDANYUK, K.S. KOLOTILINA, N.D.

2. USSR (600)

4. Iron Founding

7. Using "P&Orgavtoprom" binder for first class cores. Lit.proizv. No. 12 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

ZHDANOV'S, D. A.

USSR/Medicine - Lymph Flow Sep/Oct 53

"Criticism of Some Theories of the Course of Lymph Flow," G.F. Ivanov

Arkhiv Anat, Gist, i Embr, Vol 30, No 5, pp 78-84

Author criticizes a statement made by D.A Zhdanov that expt methods of research in anatomy are overrated and that macro-microscopic methods should be more fully utilized. Says that to limit research to macro-microscopic methods would be to transform the sutdy of anatomy back into a process of collecting disconnected facts. D.A. Zhdanov's book, "General Anatomy and Physiology of the Lymph System," is also subjected to criticism as contg inconsistencies and deviations from Pavlov's physiology.

273T34

273T34

ZHDANOVSKIY, N.S.; KOVALEV, I.M.; KHASHCHINSKIY, V.P., professor.

[Rural thermal electric power stations] Sel'skie teplovye elektrostantsii. Pod red. V.P.Khashchinskogo. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1953. 123 p. (V pomoshch' sel'skim elektrifikatoram) (MLRA 7:3)

(Electric power plants) (Heat engines)

ZHDANOVSKIY, N. S.

Zhdanovskiy, N. S. - "Investigation of the working process of a tractor diesel engine using shale fuel", Sbornik nauch.-tekhn. rabot (Leningr. in-t mekhanizatsii sel. khoz-va), V, 1948, p. 97-116.

SO: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 12, 1949).

ZHDANOV, D.A.

[Modern methods and techniques of morphological research]
Sovremennye metody i tekhnika morfologicheskikh issledovanii.
Leningrad, Medgiz, 1955. 269 p. (MLRA 9:1)
(MORPHOLOGY)

ZHDANOV, G. S., ZVONKOVA, Z. V.

Electrons

Distribution of electron density of crystaline complex compounds. Zhur. eksp. i teor. fiz., 22, no 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1953, Uncl.

CHERNYSHEV, A.V., inzh.; ZHDED, A.A., inzh.

P.A.Iapshin brigade of communist labor. Shakht. stroi. 6 no.3: 24-25 Mr '62. (MIRA 15:3)

1. Novomoskovskiy Dom inzhenera i tekhnika (for Chernyshev).
2. Shakhta No.66 kombinata Tulaugol' (for Zhded).
(Tula Basin--Coal mines and mining)

ZHDANSKIY, V.G., inzh.

Effective means of preparing a silicate substance. Stroi. mat. 7 no.4:29 Ap '61. (MIRA 14:5)
(Silicates)

BALEK, A.; GABESAM, L., inzh.; KHAVELKOVA, B., inzh.; STITSKEL, I., inzh.; SHVAGR, Ya., inzh.; TITERA, D., inzh. ZHDYARSKIY, M., doktor; SEMENOV, I.I. [translator]; KORMNOV, Yu.F., red.; SHAGALOV, G.L., red.; REZOUKHOVA, A.G., tekhn.red.

[Economic development of Czechoslovakia from 1948 through 1958] Ekonomicheskoe razvitie Chekhoslovakii, 1948-1958 gg. Red.IU.F. Kormnov. Moskva, Izd-vo inostr.lit-ry, 1959. 367 p. Translated from the Czech. (MIRA 13:4)

1. Gosudarstvennoye statisticheskoye upravleniye Chekhoslovakii (for Balek, Gabesam, Khavelkova, Stitskel, Shvagr, Titera, Zhdyarskiy). (Czechoslovakia--Economic conditions)

ZHDYMORA, I. (Tiraspol')

To the fund of the seven-year plan. NTO no.3:16-17 Mr '59.
(MIRA 12:6)

1. Zamestitel' predsedatelya soveta pervichnoy organizatsii nauchno-tekhnicheskogo obshchestva pishchevoy promyshlennosti konservnogo zavoda imeni 1 Maya.
(Tiraspol--Canning industry)

ZHEBEK, Z. [Zsebok, Zoltan]

Significance of radiation shielding materials in the light of contemporaty radiological investigations. Periodica polytechn electr 6 no.1:XXII-XXXII '62.

DEBEK, Z. [Csebok, Z.], prof.

Angiography and the tumors of extremities. Periodica polytechn electr 7 no. 4:XVI-XXII '63.

ZHEBEK, Z. [Zsebok, Z.]; MESHTER, E. [Mester, E.]

Role and significance of the "hard rays" in the contemporary roentgen diagnostic investigations. Periodica polytechn electr 5 no.3:274-286 '61.

ZHEBEL', B. G.

Zhebel', B. G. — "Development of Scanning by an Oscillating Ray and Its Application in Television." Min Communications USSR, Leningrad Electrical Engineering Inst of Communications imeni Professor M. A. Bonch-Bruyevich, Leningrad, 1955 (Dissertation for Degree of Candidate of Technical Sciences);

SO: Knizhnaya Letopis', No. 23, Moscow, June, 1955, pp. 87-104.

6.6000

S/112/59/000/012/090/097
A052/A001

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 12, pp. 258-259, # 25732

AUTHOR: Zhebel', B.G.

TITLE: Rocking Beam Scanning and Its Application to Television

PERIODICAL: Sb. tr. Leningr. elektrotekhn. in-ta svyazi, 1957, No. 2 (32), pp. 29-34

TEXT: Principles and special features of rocking beam scanning are described. By complementing the beam deflection in horizontal and vertical direction with a longitudinal or lateral swing by means of auxiliary generators of rectangular, sinusoidal and some other pulses, the sharpness of the image can be improved, the scanning frequency can be reduced, the time selection of video signals can be brought about, and so on.

L.I.K.

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

Card 1/1

G.

ZHEBEL', B.,kand.tekhn.nauk; ODNOL'KO, V.,kand.tekhn.nauk

Color television. IUn.tekh. 3 no.12:43-45 D '58.
(MIRA 12:1)

(Color television)

ZHEBELEV, A.

Solved and unsolved problems. Na stroi. Ros. 3 no.10:27-29 O '62. (MIRA 16:6)

1. Glavnyy mekhanik stroitel'stva Bratskoy gidroelektrostantsii. (Bratsk Hydroelectric Power Station--Construction equipment)

SOV/123-59-16-66925

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 16, p 430 (USSR)

AUTHOR: Zhebelev, V.K.

TITLE: On the Problem of the Temperature Condition of the Piston of the High-Speed YaAZ-204 Diesel Engine

PERIODICAL: Izv. Irkutskogo s.-kh. in-ta, 1958, vyp. 8, 141 - 157

ABSTRACT: A method is described of investigating the temperature field of the piston when operating under various conditions. The results of temperature measurements are stated. The most strained parts with respect to temperature are those parts of the surface which are located nearer to the edge. The non-uniform distribution of temperature promotes the formation of cracks. Measures are suggested to eliminate the defects.

Card 1/1

ZHEBELEV, V. K., Engineer

"Methods for Determination and Investigation of the Temperature Condition of Crankgear Components of a Two-Cycle High-Speed Diesel in Relation to Various Operating Conditions." Sub 18 May 51, Moscow Inst for the Mechanization and Electrification of Agriculture imeni V. M. Molotov

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

AMIROVA, S.A.; PECHKOVSKIY, V.V.; PROKHOROVA, V.G.; ZHEBELEVA, T.V.; LEZHNEVA, A.A.

Oxidation of manganese-vanadium spinel by oxygen. Zhur. fiz. khim. 38 no.1:108-114 Ja'64. (MIRA 17:2)

1. Permskiy politekhnicheskiy institut.

AKSENTOV, Yu.V.; VEREVKIN, N.S.; ZHEBEL', B.G.; ZLOTNIKOV, S.A.; KOLIN, K.T.; KONDRAT'YEV, A.G.; MIRENKO, Yu.G.; ODNOL'KO, V.V.; TARANETS, D.A.; SHMAKOV, P.V., red.; VENGRENYUK, L.I., red.; KARABILOVA, S.F., tekhn.red.

[Television; general course] Televidenie; obshchii kurs. Pod red. P.V.Shmakova. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1960. 391 p. (MIRA 13:12)
(Television)

ZHEBEL', B., kand.tekhn.nauk; DZHAKONIYA, V., inzh.

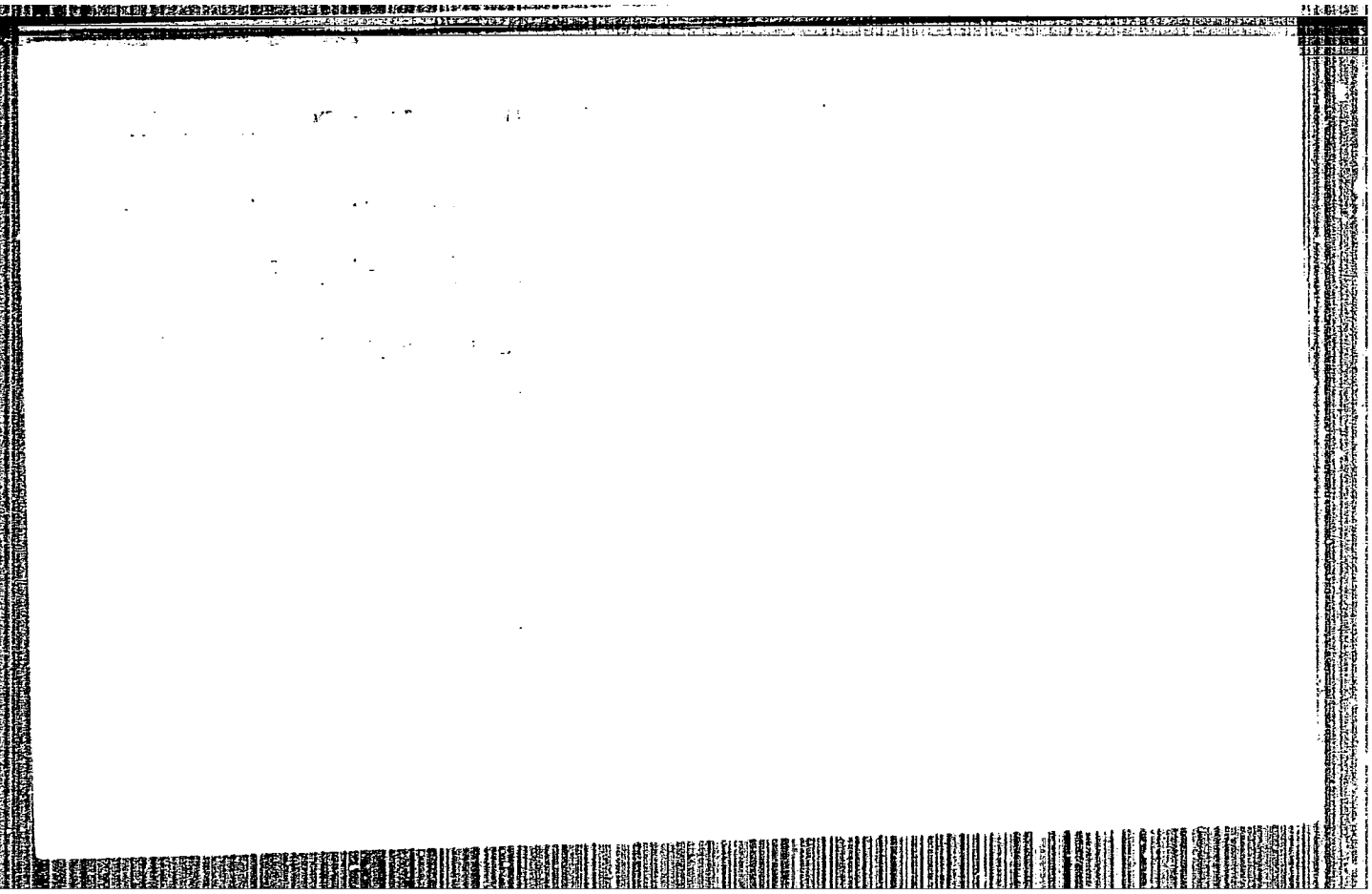
Three-dimensional color television. Tekh.mol. 28 no.8:35-36 '60. (MIRA 13:9)

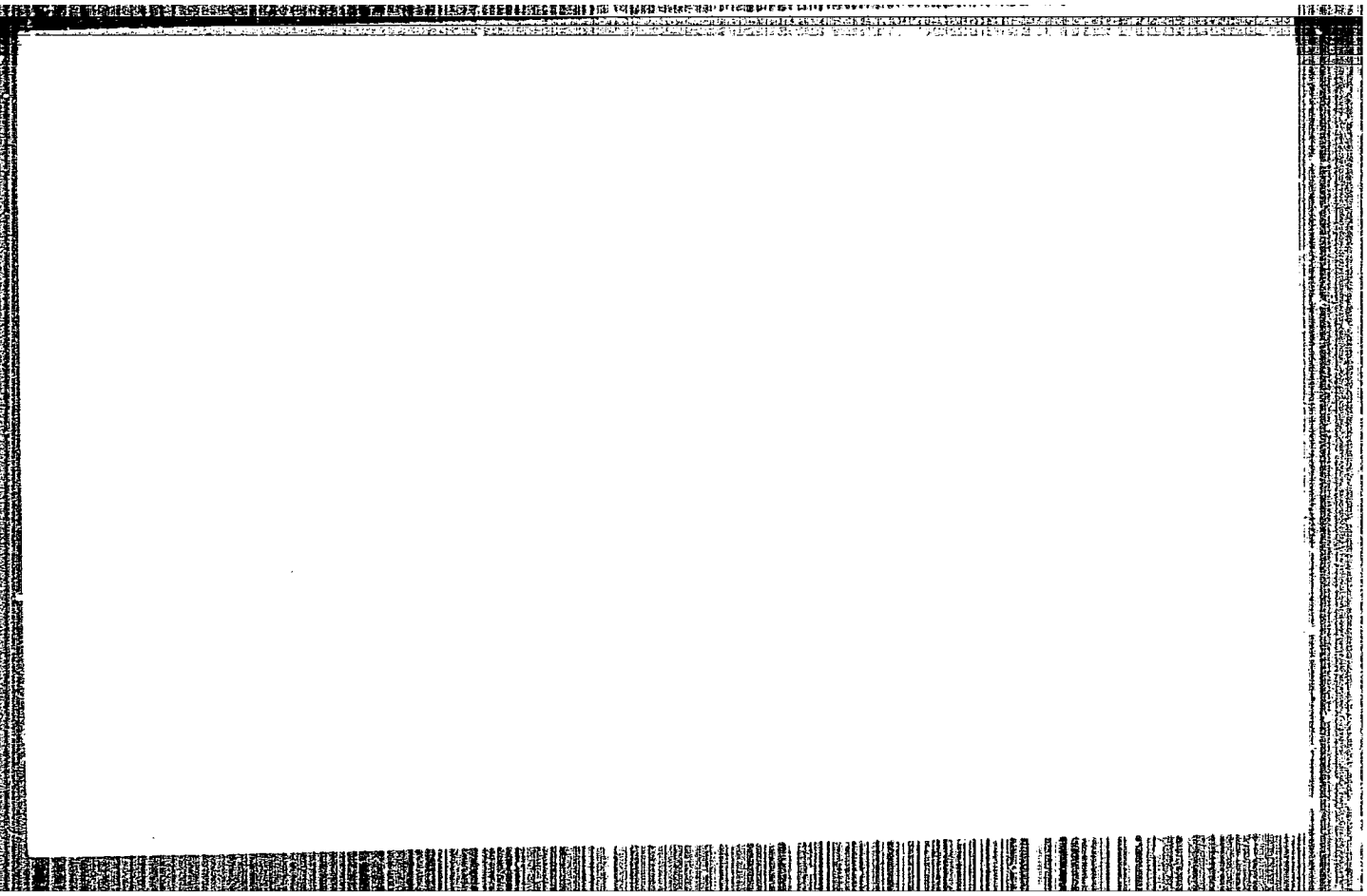
(Color television)

ZHEBEL', Boris Georgiyevich; SHMAKOV, P.V., doktor tekhn. nauk, nauchnyy red.; VOROB'YEV, G.S., red. izd-va; GURDZHIYEVA, A.M., tekhn. red.

[Color television] TSvetnoe televidenie. Leningrad, Ob-vo po rasprostraneniiu polit. i nauchn. znanii, 1961. 62 p. (MIRA 15:4)

(Color television)





APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R002064630003-7"

AMIROVA, S.A.; PECHKOVSKIY, V.V.; PROKHOROVA, V.G.; ZHEBELEVA, T.V.

Oxidation of manganous oxide by oxygen. Zhur. fiz. khim. 37 no.6:1328-1335 Je '63. (MIRA 16:7)

1. Permskiy politekhnicheskiy institut.
(Manganese oxides) (Oxygen)

ZHEBENKA, R.

4692 Zhebenka, R. Problema Podnyatiya Produktivposti Zhivotnovod stva V kolkhozakh i sovkhozakh sovetskoy Litvy. vil'nyus, gospolitn-auchizdat, 1954. 24 s. 22 sm. (o-vo po rasprostraneniyu polit i nauch. znaniy litov. SSR) 6.000 ekz. 35k-nalitov. Yaz-(54-57048) 338.1:636(47.45)

SO: Letopis' Zhurnal' nyph Statey, Vol 7, 1949

USSR / Farm Animals. General Problems. Q-1

Abs Jour: Ref Zhur-Biol., No 23, 1958, 105634.

Author : Zhebenka, R., Pakenas, P.
Inst : Not given.
Title : Artificial Insemination of Animals.

Orig Pub: Soc. zemes ukis., 1957, No 12, 18-24.

Abstract: No abstract.

Card 1/1

ZHEBENKA, R.P. [Zebenka, R.P.], kand. sel'skokhozyaystvennykh nauk; PAKENAS, P.I., kand. biol. nauk

Organization of breeding work in the Lithuanian S.S.R. Zhivotnovodstvo 21 no.11:43-47 N '59 (MIRA 13:3)

1. Direktor Litovskogo nauchno-issledovatel'skogo instituta zhivotnovodstva i veterinarii (for Zhebenka). 2. Zaveduyushchiy laboratoriyey iskusstvennogo osemeneniya sel'skokhozyaystvennykh zhivotnykh. (Lithuania--Stock and stockbreeding)

ZHEBENKA, R.P. [Zebenka, R.P.]

Increasing the butterfat content of dairy cattle in the Lithuanina S.S.R. Zhivotnovodstvo 23 no.8:38-42 Ag '61. (MIRA 16:2)

1. Direktor Litovskogo nauchno-issledovatel'skogo instituta zhivotnovodstva.

(Lithuania--Dairy cattle breeding)

[illegible]

"Study of ram spermatogenesis by means of radioactive phosphorus with different feeding and frequency of use."

report submitted for 5th Intl Cong on Animal Reproduction & Artificial Insemination, Trent, Italy, 6-13 Sep 64.

ROZENFEL'D, L., prof.; KHARITONOV, V., inzhener; ONOSOVSKIY, V., inzhener; MANUYLO, N., inzhener; ZHEBENKO, A., inzhener; BAKALLO, N., inzhener.

Testing the cooling equipment of the refrigerated ship "Aktiubinsk." Khol.tekh. 34 no.2:6-10 Ap-Je '57. (MIRA 10:10)
(Refrigeration and refrigerating machinery--Testing)
(Refrigeration on ships)

ZHEBENKO, A.

AUTHORS: Rozenfel'd, L. (Professor), Kharitonov, V., Onosovskiy, V., Mamuylo, N., Zhebenko, A., and Bakallo, N. (Engineers). 66-2-2/22

TITLE: Investigation of the refrigeration equipment of the refrigerator ship, "Aktyubinsk". (Ispytaniye kholodil'nogo oborudovaniya refrizheratornogo sudna "Aktyubinsk").

PERIODICAL: "Kholodil'naya Tekhnika" (Refrigeration Engineering), 1957, No.2, pp.6 - 10 (USSR).

ABSTRACT: The results are described of tests of a refrigerated Diesel-electric ship, carried out by the Chair of Refrigeration Machinery of the Leningrad Technological Institute in cooperation with the team of a Baltic plant. The refrigeration machinery was designed by the Central Refrigeration Machinery Design Office and manufactured by the Moscow "Compressor" Works. The "Aktyubinsk" has a displacement of 10 250 tons and is one of a larger series of refrigerator vessels. It has 5 refrigerated holds and 5 refrigerated 'tween decks of a useful volume of 6700 m^3, enabling transportation of 2700 tons of frozen or 3350 tons of chilled fish. The refrigerated holds and 'tween decks are subdivided into a fore and an aft group, each of which can operate at differing temperatures. The cooling of the holds and the 'tween decks is effected by a solution of calcium chloride. In single stage operation a temperature of -6 C

Card 1/3

Investigation of the refrigeration equipment of the refrigerator ship, "Aktyubinsk". (Cont.) 66-2-2/22

can be maintained in the holds and in the 'tween decks whilst in 2-stage operation a temperature of -18 C can be maintained so that it is possible to maintain a temperature of -6 C in one group of chambers and 'tween decks and a temperature of -18 C in the other group. The characteristics of the refrigeration machinery were established at the test stand of the "Compressor" works and have been described in an earlier paper (1). The results of the tests of the refrigerator ship are discussed and summarised in 2 tables. During the tests the entire refrigeration equipment operated satisfactorily, the insulation of the refrigerated holds and 'tween decks is of good quality and operated satisfactorily. The adopted 2-stage system is very simple in operation but the author considers it advisable to develop a circuit with an intermediate steam extraction applicable for marine use and to compare the respective technical and economic indices. To gain a clearer picture on the correct selection of the type of refrigeration machinery the applied 2-stage set МХМ-АДС-150 should be compared with a high r.p.m. multi cylinder compressor, both stages being in a single unit. For marine conditions it may be of interest

Card 2/3

Investigation of the refrigeration equipment of the refrigerator ship, "Aktyubinsk". (Cont.) 66-2-2/22

to use a rotational compressor as a booster compressor of the lower stage. A number of slight inadequacies revealed during the tests should be eliminated and further control and metering instruments should be installed.

There are 3 figures, 2 tables and 1 Slavic reference.

AVAILABLE:

Card 3/3

ZHEBERSTOV, V.I.; ADAMSKIY, Z.I.

Criterion of light sensitivity established by the International Organization for Standardization as applied to industrial photographic films. Zhur.nauch.i prikl.fot. i kin. 5 no.6:450-451 N-D '60. (MIRA 14:1)

1. Moskovskiy poligraficheskiy institut.
(Photographic sensitometry—Standards)
(Photography—Films)

ZHEBIN, A.I.; BALINCHENKO, I.I.; KARAGODIN, L.N., kand.tekhn.nauk; SIMONOV, A.A., inzh.

Article "Safety measures in baring coal intercalation." Bezop. truda v prom. 6 no.2:21-23 F '62. (MIRA 15:2)

1. Pomoshchnik glavnogo inzh. shakhty "Kommunist-Novaya" tresta Oktyabr'ugol' (for Zhebin). 2. Nachal'nik opornogo punkta Makeyevskogo nauchno-issledovatel'skogo instituta po bezopasnosti rabot v gornoy promyshlennosti pri shakhte "Kommunist-Novaya" tresta Oktyabr'ugol' (for Balinchenko). 3. Makeyevskiy nauchno-issledovatel'skiy institut po bezopasnosti rabot v gornoy promyshlennosti (for Karagodin, Simonov).

(Coal mines and mining--Safety measures)
(Shchukin, V.R.)

ZHEBIN, Moisey Isaakovich; SHAMIRGON, S.A., nauchnyy red.; IONOV, V.N., red.; GLAZKOVA, Ye.I., red.; DORODNOVA, L.A., tekhn. red.

[Molder employed in manual molding]Formovshchik ruchnoi formovki. Moskva, Proftekhizdat, 1962. 294 p. (MIRA 16:1)
(Molding (Founding))

ZHEBIN, M. I., Engineer

"Investigation of the Processes of Surface Drying of Casting Molds With Infrared Rays." Sub 9 Jan 51, Moscow Machine Tool and Tool Inst imeni I. V. Stalin

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

Surface drying of foundry molds by infrared rays. M. I. Zhrbin. *Liteinoe Proizvodstvo* 1953, No. 10, 4-8.—By using 500-w. lamps placed in a square pattern 200 mm. on the side, the rate of drying of sand molds was investigated. The study covered the influence of many factors which is presented in many curves, and the whole of the accumulated data is summarized in a formula giving energy required for drying derived as a resultant of 10 factors involved and then presented as nomograms for the time of drying to a specific depth and for the depth of the dried layer. J. D. Cat

874. SURFACE DRYING OF SAND MOULDS BY INFRA-RED RADIATION.
Zhabin, M.I. (Liteln. Proizv. (Found. Ind., U.S.S.R.), Oct. 1953, 4-6).

ZHEBIN, M.I.

Surface drying of casting patterns by means of infrared rays.
Lit. proizv. no.10:4-8 N-D '53. (MLRA 6:12)
(Patternmaking)

TETUSHKIN, A., shturman-aeros"yemshchik; SOROKIN, S., shturman-aeros"yemshchik; ZHEBKO, V., shturman-aeros"yemshchik; CHUGUNKIN, M., shturman-aeros"yemshchik.

Improving the training of aerial navigators-photographers. Grazhd. av. 12 no.7:16 Jl '55. (MIRA 11:6)
(Navigation (Aeronautics)) (Photography, Aerial)

37279

S/169/62/000/004/064/103
D228/D302

9,9842

AUTHORS: Chegoryan, V.A., and Zhebko, V.M.

TITLE: Investigating horizontal movements of ionization irregularities in the ionosphere over Khar'kov in the IGY period

PERIODICAL: Referativnyy zhurnal. Geofizika, no. 4, 1962, 8, abstract 4G41 (Mezhdunar. geofiz. god, Inform. byul., no. 3, 1962, 24-29)

TEXT: The results of measuring the speed and the directional distribution of the drift of small-scale ionization irregularities in the ionosphere's E- and F-regions are given for different seasons of the year in the period from December 1958 to December 1959. The employed apparatus and the program and the method of the observations are briefly described. It is shown that speeds of 70 - 90 m/sec (in winter and autumn) and 40 - 70 m/sec (in spring and summer) are most often encountered in the ionosphere's F-region. The drift direction is east-west. In the ionosphere's E-region the velocity is 60 - 100 m/sec (in winter and autumn) and 40 - 80 m/sec (in sum-

Card 1/2

Investigating horizontal movements ...

mer and spring). The drift direction is westwards and southwards, with small deviations towards the north and the east. Comparison of the results, obtained at two stations (distance of ~85 km), discloses the coincidence in the character of the speed distribution, but there is no complete congruence in the distribution of the directions. [Abstractor's note: Complete translation].

Card 2/2

30153
S/609/61/000/003/001/008
D039/D112

9.9110

AUTHORS: Taran, V.I.; Zhebko, V.M.

TITLE: The measurement of velocities of the drift of heterogeneities in the E and F zones of the ionosphere in accordance with the International Geophysical Year program

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Organizatsionnyy komitet po provedeniyu Mezhdunarodnogo geofizicheskogo goda. Mezhdunarodnyy geofizicheskiy god; informatsionnyy byulleten', no.3, 1961, 13-18

TEXT: The present paper covers the results of experimental investigations of the velocities and directions of the drift of heterogeneities in the E and F zones of the ionosphere. These investigations were carried out, in accordance with the program of the International Geophysical Year, in Khar'kov and cover the period from Aug 24, 1957 to Nov, 1958. The measurements were conducted according to a graphical method proposed in Ref. 1 (Ref. 1: Instruction Manual, No V, The Ionosphere, vol. III, The measurement of ionospheric drifts, 1956). V.P. Dokuchayev (Ref. 3: Izv. vyssh. ucheb. zavedeniy, seriya radio-

Card 1/4

The measurement of veloci ies ...

tekhnicheskaya, No 1, 1958) had previously found that in the lower part of the E region the ionized gas moved at the velocity of the wind, while in the F region, the velocity of a homogeneous ionized mass differed noticeably from the wind velocity. In the present study of the velocity of the drift of heterogeneities, provision was made for the recording of amplitudes of radio-waves reflected from the ionosphere at three points on the earth's surface; the distance between each point was of the order of one wavelength. An ionospheric-station transmitter, developed by the Khar'kovskiy politekhnicheskiy institut (Khar'kov Polytechnic Institute) and mentioned in the paper of [illegible] elstov and B.C. Bondar' (Ref. 4: Inform. byull. MGC, No 1, Izd-vo AN UkrSSR, 1958), was used in these investigations. The reflected signals were received at three spots located 144 m from one another. The receiving antennas were placed on open land. Tuned single-loop rectangular coils with a side of 2 m were used as receiving antennas on the 2.2+Mc band, and 15 m dipoles on the 4.5-9 Mc band. A receiver fitted with an electronic commutator and described in Ref. 4, as well as a ring scaler operating on vacuum tubes built around binary cells, were also used. The ring scaler was described in the

Card 2/4

The measurement of velocities ...

paper of M.M. Bonch-Bruyevich (Ref. 5: Primeneniye elektronnykh lamp v eksperimental'noy fizike [The application of electronic tubes in experimental physics] , GITTL, 1954, str. 505). Up to June 1958, the drift in the F region was measured at night, and from June on - at day time. It was found that for the E region the predominant velocity of the drift of heterogeneities was 50-60 m/sec and for the F region - 50-60 and 80-90 m/sec. During the period under study, the direction of the drift of heterogeneities in the E region was chiefly southerly and easterly. From Aug 1957 to Nov 1958, the drift in the F zone was southerly and easterly, and from Sept to Nov 1958, mainly easterly. Over the whole period of measurements the direction of the drift in the E and F zones coincided to a certain degree. The following conclusions were drawn from the results: (1) the difficulties of determining the true height of the drifts made it difficult to find the main directions of the drifts and their diurnal and seasonal variations; (2) very high solar activity often caused abnormal phenomena in the ionosphere which considerably complicated the analysis of processes taking place there; (3) the high gradient of the velocity and direction of the drift according to height,

Card 3/4

The measurement of velocities ...

can lead to a sharp change of the velocity and direction of the drift even upon a small change of the effective height; (4) the predominant velocity of the drift for the E region was found to be about 50-60 m/sec and that for the F region - about 50-60 and 80-90 m/sec. In the F region the drift was south-westerly and easterly, and in the E region - southerly and easterly. Both authors express their acknowledgement to B.L. Kashcheyev for the supervision of this research work. There are 12 figures and 6 references: 4 Soviet-bloc and 2 non-Soviet-bloc. The two references to English-language publications read as follows: Instruction Manual, No V, The Ionosphere, vol III, The measurement of ionospheric drifts, 1956; I.L. Jones, B. Landmar a. C.S.K. Setty, Movements of ionospheric irregularities observed simultaneously by different methods, J. of Atmosph. Terr. Phys., vol. 10, 1957.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut (Khar'kov Polytechnic Institute).

Card 4/4

30155
S/609/61/000/003/003/008
D039/D112

9,9/10

AUTHORS: Chegoryan, V.A.; Zhebko, V.M.

TITLE: An investigation of the horizontal movements of the ionization heterogeneities in the ionosphere, conducted over Khar'kov in the International Geophysical Cooperation period

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Organizatsionnyy komitet po provedeniyu Mezhdunarodnogo geofizicheskogo goda. Mezhdunarodnyy geofizicheskiy go[illegible] informatsionnyy byulleten', no.3, 1961, 24-29

TEXT: The paper presents results of measurements of the velocity and direc-tional distribution of the drift of ionization heterogeneities in the E and F regions of the ionosphere. The results cover the period from December 1958 to December 1959, and are given for various seasons of the year. The investigation was conducted both at a field laboratory located 85 km from Khar'kov and at the Khar'kovskiy politekhnicheskiy institut (Khar'kov Polytechnic Institute). The horizontal drifts were investigated by the method of spaced

Card 1/5

An investigation of the ...

antenna reception. All observations were carried out in accordance with the approved international program of measuring the drifts in the ionosphere both on the "regular world days", and on other days. The recordings were processed by the method of similar fadings mentioned in the papers of S.N. Mitra (Ref. 1: Statistical analysis of fading of a single downcoming wave from the ionosphere, Proc. of the I.E.E., 1949, v. 96, p. III, 505, and Ref. 2: A Radio Method of Measuring Winds in the Ionosphere, Proc. of the I.E.E., 1949, v. 96, p. III, 441.). The ionospheric station used at the field laboratory is described by V.I. Taran and V.M. Zhebko (Ref. 3: "Mezhdunarodnyy geofizicheskiy god", Inf. byulleten' No 3, Izd-vo AN UkrSSR, 1961) and by V.V. Tolstov and B.G. Bondar' (Ref. 4: "Mezhdunarodnyy geofizicheskiy god", Inf. byulleten' No 1, Izd-vo AN UkrSSR, 1958.). The ionospheric station used at the Khar'kov Polytechnic Institute is described by N.T. Tsymbal (Ref.5: Izvestiya vuzov MVO, "Radiotekhnika", No 2, 1959, 221.). The observations at the field laboratory were carried out on a near-gyromagnetic frequency. The investigations at the field laboratory were carried out from December 1958 to December 1959 and were based on 230 recordings for the E region and 383

Card 2/5