"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

the fine iron powder which is always present (some fractions of one per cent) in graphite thus ground adsorbs not more than 0.5% of the adsorbed amount of graphite. The interaction of oxygen with the fresh cleavage plane of graphite at room temperature is a typical case of activated chemical adsorption. The physical adsorption is extremely low at these temperatures. Adsorption equilibrium is quickly attained in the initial stage, which indicates the low activation energy of the process. With further pressure increase the adsorption increases very slowly. The graphite surface is thought to be inhomogeneous. It consists of sites with different adsorption activity. The surface is saturated with chemisorbed oxygen already at a pressure close to the atmospheric one. Desorption measurements disclosed that all the oxygen adsorbed was irreversibly bound to the surface. No further adsorption takes place on an oxidized sample. The adsorption activity of samples kept at room temperature in an argon atmosphere for 1, 10, and 30 days did not change. Specific adsorption was reduced by about 20% by heating an ampul with non oxidized graphite at 300°C for 50 hr. This may be due to partial saturation of the surface by gas molecules which escaped from the glass during heating. Graphite roasted at 800°C for 24 hr in an ampul which had

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17257

Chemical and physical...

S/020/61/139/005/021/021
B103/B208

previously been degassed, lost only 10% of its adsorption. Such a high stability of free radicals on the surface makes graphite a suitable test object of the elementary interactions of various molecules with the surface radicals. Pulverization of graphite in dry air destroys the crystals in all crystallographic directions. The large surface thus formed has a high content of ruptured π or σ bonds which form centers of chemical O_2 adsorption on the surface. On the other hand, the activity of π-electrons may be increased by lattice deformations in the basal plane which also contributes to an increase in adsorption activity. By measuring the adsorption isotherms at −196°C, the authors proved that the chemisorption of oxygen at these temperatures is insignificant. The isotherms have hysteresis loops both on the initial and on the oxidized graphite sample. The authors believe that this loop which extends to the range of low relative pressures, is due to a certain swelling of the sample. The O_2 molecules may penetrate into the interplanar spaces of the graphite crystals which were largely destroyed during grinding. In the high pressure range, the hysteresis is obviously due to capillary condensation in the pores and gaps between the particles. The desorption isotherm shows a

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

27267

Chemical and physical ...

S/020/61/139/005/024/024
B103/B208

break at $P/P_S = 0.25$. This break may be related to the clearing of some pores which were filled at high vapor tensions. This break did not appear at low pressures. The adsorption isotherm of nitrogen shows no hysteresis phenomena in this pressure range. This is explained by a higher penetrability of O_2 at low temperatures. For this reason, the specific surface of fine-dispersed graphite which was calculated from the low-temperature N_2 adsorption, may be a little too low, as compared with the surface accessible to O_2 molecules. This fact is, however, negligible for the authors' conclusions. There are 3 figures and 6 references: 4 Soviet-bloc and 2 non-Soviet-bloc. The reference to English-language publications reads as follows: T. Koutecký, H. Tomášek, Phys. Rev. 120, 1212 (1960).

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: March 15, 1961, by M. M. Dubinin, Academician

SUBMITTED: March 13, 1961

Card 4/4

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARIF'YANTS, Yu.A.; KISELEV, V.F.; LEZHNEV, N.N.; NOVIKOVA, I.S.; FEDOROV, G.G.

Synthesis and functional analysis of oxygen complexes on a surface of freshly cleft graphite. Dokl. AN SSSR 143 no.6:1358-1361 Ap '62. (MIRA 15:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i Nauchno-issledovatel'skiy institut shinnoy promyshlennosti. Predstavleno akademikom M.M.Dubininym.
(Graphite) (Surface chemistry) (Oxygen compounds)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

37521

S/020/62/144/001/021/024
B124/B101

5.4400

AUTHORS: Zarif'yants, Yu. A., Kiselev, V. F., and Fedorov, G. G.

TITLE: Differential adsorption heats of oxygen and water vapor on the surface of graphite

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 1, 1962, 151-154

TEXT: Fine-disperse graphite with a specific surface S = 350 m^2/g, which had been obtained from natural graphite crushed in a ball mill in an argon atmosphere, was used in the experiments. Adsorption heats were measured using an automatic calorimeter with constant heat exchange; oxygen adsorption was determined by a volumetric method, and by water vapor adsorption with magnesium perchlorate. These methods were described in Ref. 7 (ZhFKh, No. 6 (1962)). The initial adsorption heats of oxygen were very high (110 kcal/mole). With a surface coverage of about 0.5 $\mu M/m^2$ of oxygen, the differential adsorption heat begins to decrease, and with 1 $\mu M/m^2$, its value is only ~50 kcal/mole. The results obtained show a high degree of reproducibility on fresh cleavage areas of graphite. The high initial adsorption heats are due to the formation of carbonyl groups,

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

radicals, and groups of the types $-C(=O)-O\cdot$ (157 kcal/M), $-C-O-O-C-$ (111 kcal/M) or $-C(=O)-C(=O)-$ (105 kcal/M) which probably appear prior to the formation of the peroxide radicals R-O-O· on the surface. Some of them are successively converted to yield saturated oxygen-containing complexes. Chemisorption phenomena could not be observed. The adsorption heats of water vapor on oxidized graphite surfaces were also measured. The graphite sample previously used for the adsorption of oxygen was evacuated down to 10^{-5} mm Hg and contacted with water vapor. The high initial adsorption heats (40 kcal/M), which exceed the physical adsorption heat of water considerably, are due to the formation of hydroxyl groups on the graphite surface. The adsorption heats decrease with increasing coverage, and approach condensation heats when the coverage is 0.5 to 0.6 $\mu M/m^2$. The adsorption heats on oxidized and hydrated graphite were very close to the condensation heats. On an average, water molecules form two hydrogen bonds with oxygen-containing groups and hydroxyl groups on the surface. The probability of adsorption on single hydroxyl groups is small. There are 2 figures.

Card 2/3

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

Differential adsorption heats of ... S/020/62/144/001/021/024
B124/B101

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: December 26, 1961, by M. M. Dubinin, Academician

SUBMITTED: December 23, 1961

Card 3/3

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 17720-63 EPR/EPF(c)/EWP(q)/EWT(m)/BDS AFFTC/ASD Ps-4/Pr-4 WW/WH

ACCESSION NR: AP3004073 S/0076/63/037/007/1619/1622

AUTHORS: Fedorov, G. G.; Zarif'yants, Yu. A.; Kiselev, V. F. 67 66

TITLE: Analysis of the surface properties of a fresh fracture in graphite 15

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 7, 1963, 1619-1622

TOPIC TAGS: graphite, oxygen, oxygen adsorption, heat of adsorption

ABSTRACT: Authors analyzed the reaction capability of the surface of a fresh graphite fracture with respect to oxygen. A specially-purified, natural graphite was used in the experiments. A thin grist was obtained in a laboratory-type steel vibratory mill with an overpressure of purified argon. The powder was then poured into a glass ampule which was then soldered to the adsorption apparatus. After prolonged evacuation and deaeration of the apparatus to a vacuum of 1x10-5 mm mercury column, the diaphragm was broken, the ample was evacuated and the oxygen adsorption was measured. Differential heats of oxygen adsorption were determined. The inhibiting effect of the reaction products on the oxidation process of a fresh fracture was demonstrated. Assumptions concerning a possible mechanism of oxidation of the graphite surface were pointed out. Orig. art. has: 2 figures.

ASSOCIATION: Moscow State University.

Card 1/2

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 18307-63 EPR/EPF(c)/EWP(q)/EWT(m)/BDS AFFTC/ASD Ps-4/Pr-4
WH/K

ACCESSION NR: AP3004981 S/0076/63/037/008/1846/1849

68
67
15

AUTHORS: Zarif'yants, Yu. A.; Kiselev, V. F.; Fedorov, G. G.

TITLE: Investigation of the surface properties of the freshly splitted graphite

SOURCE: Zhurnal fiz. khimii, v. 37, no. 8, 1963, 1846-1849

TOPIC TAGS: heat adsorption by graphite, water vapor heat adsorption

ABSTRACT: Authors studied the adsorption of water vapors on a fresh surface of graphite. Measurement of the water vapor adsorption shows that the physical adsorption isotherm is complicated by a chemical reaction. The value of the irreversible adsorption measured after the adsorption cycle on the surface of fresh graphite, kept for a period of 48 hrs. in saturated water vapors, consists of 0.53 μ mole/m^2. The differential of heat adsorption in the region of small surface area is almost four times greater than the heat of physical adsorption for the usual oxidizing hydrocarbon adsorptions. Apparently, the first traces of water adsorb chemically on the valence-saturated carbon atoms. The graphite was left for 12 hrs. to be exposed to atmospheric oxygen before the desorption was measured. Almost all adsorbed oxygen was irreversibly bound with the graphite surface and its value was 1 μ mole/m^2. Thus, the retention of fresh graphite in

Card 1/2

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 18307-63
ACCESSION NR: AP3004981

saturated water vapors does not result in full passivation of the surface. The adsorption of oxygen on its surface is accompanied by the release of a large amount of heat which indicates chemical adsorption. Orig. art. has: 4 figures.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet fizicheskiy facul'tet (Moscow state university, physics faculty)

SUBMITTED: 19Sep62 DATE ACQ: 06Sep63 ENCL: 00

SUB CODE: PH, CH NO REF SOV: 006 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

FEDOROV, G.G., ZARIF'YANTS, Yu.A.; KISELEV, V.F.

Properties of the surface of a freshly cleft graphite. Part 3. Zhur. fiz.khim. 37 no.10:2344-2346 O '63. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet.

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

DOBROVOL'SKIY, N.N.; ZARIF'YANTS, Yu.A.; KISELEV, V.F.; LEZHNEV, N.N.; FEDOROV, G.G.

Properties of the surface of a freshly left graphite. Part 4. Zhur. fiz. khim. 38 no.2:506-509 F '64. (MIRA 17:8)

1. Moskovskiy gosudarstvennyy universitet Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

TITLE: Investigation of the properties of the surface of freshly [illegible]

SOURCE: Zhurnal fizicheskiy khimii, v. 38, no. 11, 1964, 2655-2658

TOPIC TAGS: graphite surface adsorption, nitrogen oxide, paramagnetic center concentration, magnetic susceptibility

ABSTRACT: The authors have investigated the adsorption and the differential heats of adsorption of nitrogen oxide at the surface of freshly cleft graphite. The magnetic susceptibility of adsorbed NO was measured. At low pressures, strong chemical bonds are formed in the interaction between the NO-molecule and the fresh and oxidized graphite surfaces. At higher pressures, a considerable part of the adsorbed NO is in a molecular form. An estimation was made of a possible concentration of paramagnetic centers at the fresh graphite surface. "The author

Card 1/2

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 24778-65

ACCESSION NR: AP4049607

2

is grateful to V. F. Kiselev for discussions." Orig. art. has: 2 figures

ASSOCIATION: Moskovskiy gosudar. [illegible] universitet Fizicheskiy fakultet

SUBMITTED: 08May63 ENCL: 00

SUB CODE: MT, GC NO REF SOV: 010 OTHER: 004

Card 2/2

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 35090-65 EEC(b)-2/EPF(c)/EPR/EWG(j)/EWP(j)/EWT(1)/EWT(m)/EEC(t)/EWP(b)/T/EWP(e)
Pc-4/Pl-4/Pr-4/Ps-4 IJP(c) RM/WH/WW

ACCESSION NR: AP5006698 S/0076/65/039/002/0461/0462

42
41
B

AUTHOR: Kvlividze, V. I.; Zarif'yants, Yu. A.; Kiselev, V. F.

TITLE: Surface properties of fresh cracks in graphite. VI. Nuclear magnetic resonance in polyethylene with a freshly cracked graphite filler

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 2, 1965, 461-462

TOPIC TAGS: cracked graphite, filled polyethylene, mobile hydrocarbon group, nuclear magnetic resonance, graphite filler, graphite surface

ABSTRACT: The influence of a filler on the NMR spectrum of natural and synthetic rubber was studied earlier by several researchers (see, e.g., I. Ya. Slonim, Usp. khimii, 31, 609, 1962). In the present work, the NMR signals from pure polyethylene were compared with those from polyethylene samples filled with freshly-cracked graphite. The results show that the active filler significantly modifies the shape of the NMR signals. The authors also found a widening of the narrow component of the NMR signal which indicates that the most mobile hydrocarbon groups of the amorphous part of the polymer are being braked. The introduction of graphite with oxidized surfaces results in less drastic changes in the structure of the NMR signals. To obtain deeper insight into the polymer-filler

Card 1/2

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 35090-65

ACCESSION NR: AP5006698

interaction, the authors are presently conducting tests at low temperatures. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow state university)

SUBMITTED: 26Oct63 ENCL: 00 SUB CODE: MT, GC

NO REF SOV: 007 OTHER: 003

Card 2/2

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 10771-67 EWT(m)
ACC NR: AP7003504 SOURCE CODE: UR/0076/66/040/006/1358/1360
AUTHOR: Zarif'yants, Yu. A.; Popik, Yu. V.
ORG: Physics Faculty, Moscow State University (Moskovskiy gosudarstvennyy universitet, Fizicheskiy fakul'tet); Physicomathematical Faculty, Uzhgorod State University (Uzhgorodskiy gosudarstvennyy universitet, Fiziko-Matematicheskiy fakul'tet)
"Adsorption of Water Vapor on the Surface of Oxidized PbS Powder" 21

Moscow, Zhurnal Fizicheskoy Khimii, Vol 40, No. 6, pp 1358-1360

ABSTRACT: The sensitivity of PbS photoresistances is increased considerably by heating them in the air. During this treatment chemisorption of oxygen on the surface and formation of oxidized compounds in the volume take place. Chemisorption cannot be differentiated from oxidation in the volume if the amount of oxygen that is taken up by PbS is determined gravimetrically, whereas adsorption of water vapor on oxidized PbS depends on the amount of O-containing complexes formed on the surface only. Determination of water vapor adsorption isotherms on PbS powder samples (natural galenite powder with a specific surface of 1.2 m^2/g) oxidized at 20, 100, 200 and 300° indicated that the amount of water adsorbed did not vary with the temperature of oxidation and was close to that corresponding to monomolecular filling of the surface. On the basis of the result obtained, the concentration of hydrated O-containing complexes on the PbS surface was of the order of 10-15 micromoles/m^2 and had the same value independently of the temperature of oxidation. The authors thank V. F. Kiseley for discussing the results of the work.
Orig. art. has: 2 figures. [JPRS: 38,967]
TOPIC TAGS: adsorption, chemisorption, lead compound
SUB CODE: 07 / SUBM DATE: 08Jun65 / ORIG REF: 009 / OTH REF: 003
Card 1/1 UDC: 541.183
0926 0039

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARIF'YANTS, Yu.A.

Properties of the surface of a freshly cleaved graphite. Part 4. Zhur.fiz. khim. 38 no.11:2655-2658 N '64. (MIRA 18:2)

1. Moskovskiy gosudarstvennyy universitet, fizicheskiy fakul'tet.

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARIGIN, V.B.; BERDICHEVSKIY, B.L.

Automatic line for piercing and countersinking the blade perforations of earth-cutting machines. Stroi. i dor. mash. 6 no.3:33-36 Mr '61. (MIRA 14:4)

(Drilling and boring machinery)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARIKHINA, V.I.

LEYKINA, Ye.S.; GEFTER, V.A.; ZARIKHINA, V.I.

Use of the carmine agglutination test for an early diagnosis of ascariasis in mass examination [with summary in English]. Med. paraz. i paraz.bol. 26 no.5:612-617 S-O '57. (MIRA 11:2)

1. Iz sektora eksperimental'noy parazitologii Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR (dir. instituta - prof. P.G.Sergiyev, zav. sektorom prof. V.P.Pod"yapol'skaya) i iz parazitologicheskogo otdela sanitarno-epidemiologicheskoy stantsii Moskovskoy Okruzhnoy zheleznoy dorogi (nach. stantsii I.I.Mogilevskiy)

(ASCARIASIS, diag.
agglut. with carmine technic (Rus))
(AGGLUTINATION, in various diseases,
ascariasis, diag. value of carmine technic (Rus))

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARIKOV, T.Z.

Characteristics and conditions governing the formation of vein-disseminated ores in one of the deposits in the Almalyk ore region. Trudy Sred.-Az.politekh.inst. no.12:31-43 '61. (MIRA 18:12)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

PERCHUK, Leonid L'vovich; KORZHINSKIY, D.S., akademik, glav. red.; ZHARIKOV, V.A., otv. red.

[Physicochemical petrology of the granitoid and alkali intrusions of the central Turkestan and Alay Ranges] Fiziko-khimicheskaia petrologiia granitoidnykh i shchelochnykh intruzii TSentral'nogo Turkestano-Alaia. Moskva, Izd-vo "Nauka," 1964. 240 p. (MIRA 17:6)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

MESHCHERYAKOV, A.F.,inzh.; PROVODIN, S.S., inzh.; KALINOVSKAYA, Ye.Ya., inzh.; SHOLOKHOV, A.N., inzh.; DUMESH, S.Ye., inzh.; SPIRINA, Ye.I., inzh.; ZAIONSKAYA, M.I., inzh.; ZARILOVA, T.A., tekhnik; LITINA, L.A., tekhnik; SHCHERDYUKOV, Ya.I., otv. red.

[Index to an illustrated map of Moscow] Ukazatel' k illiustrirovannoi skheme Moskva. Moskva, 1957. 47 p. (MIRA 15:2)

1. Moscow. Arkhitekturno-planirovochnoye upravleniye. (Moscow--Directories)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

MESHCHERYAKOV, A.F., inzh.; PROVODIN, S.S., inzh.,; KALINOVSKAYA, Ye.Ya., inzh.; SHOLOKHOV, A.N., inzh.; DUMESH, S.Ye., inzh.; SPIRINA, Ye.I., inzh.; ZATONSKAYA, M.I., inzh.; ZARILOVA, T.A., tekhnik; LITINA, L.A., tekhnik; SHERDYUKOV, Ya.I., otv. red.

[Index to an illustrated map of Moscow] Moskva; ukazatel' k illiustrirovannoi skheme. Moskva, 1957. 47 p. (MIRA 14:9)

1. Mosgorgeotrest, Moscow.
(Moscow—Maps—Indexes)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

GUSEV, S.A., inzh.; ZHUKHOVITSKIY, B.Ya., kand.tekhn.nauk; ZARIN, D.D., kand.tekhn.nauk; IVANOV-SMOLENSKIY, A.V., kand.tekhn.nauk; KNYAZEVSKIY, B.A., kand.tekhn.nauk; KUZNETSOV, A.I., inzh.; KOZIS, V.L., kand.tekhn.nauk; KORYTIN, A.A., inzh.; LASHKOV, F.P., inzh.; L'VOV, Ye.L., kand.tekhn.nauk; MELESHKINA, L.P., kand.tekhn.nauk; NEKRASOVA, N.M., kand.tekhn.nauk; NIKULIN, N.V., kand.tekhn.nauk; POLEVOY, V.A., kand.tekhnicheskikh nauk; RAZEVIG, D.V., kand.tekhn.nauk; ROZANOV, G.M., kand.tekhn. nauk; RUMSHISKIY, L.Z., kand.fiz.-matem.nauk; SVISTOV, N.K., kand.tekhn.nauk; SIROTINSKIY, Ye.L., kand.tekhn.nauk; SOKOLOV, M.M., kand.tekhn.nauk; TALITSKIY, A.V., prof.; TREMBACH, V.V., inzh.; FEDOROV, A.A., kand.tekhn.nauk; GRUDINSKIY, P.G., prof.; PRYTKOV, V.T., kand.tekhn.nauk; CHILIKIN, M.G., prof., glavnyy red.; GOLOVAN, A.T., prof.; red.; PETROV, G.N., prof., red.; FEDOSEYEV, A.M., prof., red.; ANTIK, I.V., red.; SKVORTSOV, I.M., tekhn.red.

[Handbook for electric engineering] Elektrotekhnicheskii spravochnik. Moskva, Gos.energ.izd-vo, 1952. 640 p. (MIRA 13:2)

1. Prepodavateli Moskovskogo energeticheskogo instituta imeni V.M. Molotova (for all except Antik, Skvortsov).
(Electric engineering)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

[illegible]: [illegible]tromagnetic probe, electromagnetic field, skin effect, [illegible] inhomogeneity

[illegible]

tric cylinder buried in the ground. The problem is considered [illegible] tion that the ground has good conductivity ($\gamma \simeq 0.1$ mho/meter) and that the field frequency is sufficiently high ($f \geq 300$ kcs); it is then possible to use success- [illegible] half space occupied by [illegible]

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 41700-65

ACCESSION NR: AR5006423

the ground can be replaced by a certain plane having an equivalent conductivity.

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARIN, D. D. 178T49

USSR/Electricity - Cables, Gas-Filled Ionization Feb 51

"Reasons for Automatic Quenching of Ionization in Gas-Filled Cables," D. D. Zarin, Cand Tech Sci, Moscow Power Eng Inst imeni Molotov

"Elektrichestvo" No 2, pp 13-16

Describes expt in which causes of quenching of ionization in gas-filled cables were discovered. Established that increased ionization gradient is connected with increase in cond of surface which surrounds gas layers located within the cable insulation. Sets up quant relationships governing effect. Submitted 13 Oct 50.

178T49

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARIN, D.D., kandidat tekhnicheskikh nauk, dotsent.

On the theory of calculating unsteady thermal conditions in cables. Trudy MEI no.18:116-131 '56. (MLRA 10:1)

1. Kafedra obshchey elektrotekhniki.
(Electric cables) (Heat--Transmission)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARIN, L.P.

Way we are carrying out the planning and design of woodpulp and paper enterprises. Bum.prom. 35 no.11:5-7 N '60. (MIRA 13:11)

1. Direktor Giprobuma.
(Paper industry)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARIN, P. Ya.

ZARIN, P. Ya. -- "Methods of Propagation and Evaluation of Pure Cultures of Brewers' Yeast." Acad Sci Latvian SSR, Inst of Microbiology, 1949 In Latvian (Dissertation for the Degree of Candidate of Biologic al Sciences)

SO: Izvestiya Ak. Nauk Latviyskoy SSR, No. 9, Sept., 1955

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

AUTHOR: ZARIN', R., VAL'DMAN, A. PA - 2777

TITLE: The Influence Exercised by Feeding of Antibiotica on the Growth of Chickens. (Vliyaniye skarmlivaniya antibiotikov na rost tsyplyat, Russian)

PERIODICAL: Latvijas PSR Zinatnu Akad.Westis, 1957, Vol. 1, Nr 3 (116) pp 65-68 (U.S.S.R.)
Received: 5 / 1957 Reviewed: 7 / 1957

ABSTRACT: Leghorn chickens raised on a farm, from their 8th to their 35th day of life, received 20 mg crystalline penicillin, 1 g adsorbent (which contained 50 μg vitamin B_{12} and 15 mg biomicin), 50 μg crystalline vitamin B_{12} and 40 mg furacilin.

The result of this feeding was that the weight increase of the chickens was higher by 23,8, 14,2, 12,1 and 4,3% respectively than the weight increase of chickens of the control group which were not given antibiotica. Expressed in percents, 96, 94, 92, 90% of the test chickens remained alive against 85,6% of the chickens of the control group. (4 Tables and 4 Citations from Slav Publications).

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress

Card 1/1

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

SILAYENKOV, Ye.S., kand.tekhn.nauk; ZARIN, R.A., inzh.

Behavior of steel reinforcement in cellular concrete roofs of industrial buildings. Prom. stroi. 40 [i.e. 41] no.4:31-35 Ap '63. (MIRA 16:3)
(Roofing, Concrete) (Concrete reinforcement)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

SHAYENKOV, Ye.S., kand. tekhn. nauk; TIKHOMIROV, G.V., inzh.; ZARIN, R.A., inzh.; SKOBELEVA, T.A., inzh.

Service life of autoclaved cellular concrete in large products. Sbor. trud. Sverd. nauch.-issl. inst. po stroi. no.10:109-134 '63. (MIRA 17:10)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

SILAYENKOV, Ye.S., kand.tekhn.nauk; ZARIN, R.A., inzh.

Condition of roofs of industrial buildings made of autoclaved cellular concrete. Prom. stroi. 39 no.5:58-62 '61. (MIRA 14:7)

(Roofs) (Lightweight concrete)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

VORONIN, V.I., inzhener; ZARIN, S.A., inzhener; SARBUCHEV, A.A., inzhener.

Unattended NUS-3 amplifier station, fed by remote control. Vest. sviazi 15 no.11:5-8 N '55. (MLRA 9:2)
(Amplifiers, Electron) (Remote control)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

BORODZYUK, G.G.; STEPANOV, G.N.; DRIATSKIY, N.M.; IONTOV, L.Ye.; KOVALEV, S.M.; BLOKHIN, A.S.; DVORTSOV, L.D.; LUGOVSKOY, N.Ye.; MERKULOV, A.G.; SMIRNOV, B.P.; ROGINSKIY, E.M.; BALAN-IL'YEVSKAYA, I.A.; IZRAILIT, S.G.; GRANAT, M.B.; ZARIN, S.A., otv.red.; FEDOROVSKAYA, L.N., red.; MARKOCH, K.G., tekhn.red.

[Multichannel apparatus for high-voltage telephony on overhead lines and cables] Mnogokanal'naia apparatura vysokochastotnogo telefonirovaniia po vozdushnym i kabel'nym liniiam sviazi. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1959. 511 p. (MIRA 14:1)

(Telephone--Equipment and supplies)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

VASIL'YEV, S.A.; GUROV, V.S.; DAVYDOV, G.B.; ZARIN, S.A.; ZAYONCHKOVSKIY, Ye.A.; IL'INA, L.D.; KIRILLOV, Ye.V.; LISHAY, K.P.; MILEVSKIY, Yu.S.; MIKHAYLOV, M.I.; NIKOL'SKIY, K.K.; PUKHAL'SKIY, A.Ch.; PUKHAL'SKAYA, N.N.; RABINOVICH, M.B.; SHVEDSKIY, S.A.; KONDRASHINA, N.M., red.; KARABILOVA, S.F., tekhn.red.

[Recommendations of international consultative committees on telephony and telegraphy] Rekomendatsii mezhdunarodnykh konsul'tativnykh komitetov po telefonii i telegrafii. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1959. 335 p. (MIRA 13:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut svyazi Ministerstva svyazi SSSR (for all except Kondrashina, Karatilova).
(Telephone) (Telegraph)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

KUNITSYN, N.; ZARINA, A.

Collective farms of Kuban eill make one hundred million bricks. Sel'. stroi. 13 no.6:10 Je '58. (MIRA 11:6)

1.Glavnyy inzhener Krasnodarskogo krayevogo upravleniya po stroitel'stvu v kolkhozakh (for Kunitsyn). 2.Starshiy ekonomist Krasnodarskogo krayevogo upravleniya po stroitel'stvu v kolkhozakh (for Zarina).
(Kuban--Brickmaking)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARIN, D.D., kand.tekhn.nauk, dotsent

Equations of signals describing the perturbation of an electromagnetic field by a buried dielectric cylinder. Trudy VZEI no.26:76-84 '64.

Method for increasing the interference rejection of measuring systems with electric field transducers. Ibid.:85-91

(MIRA 18:6)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

AUTHOR: Zarin, D. D.

TITLE: Method for enhancing noise immunity of measuring systems with electric-

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APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ACCESSION NR: AN5005340

where A(t) is the signal and w(t) is the noise. Three illustrations. Bibliography: 4 titles.

SUB CODE: DP, EE ENCL: 00

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 40114-66 EWT(d)/EEC(k)-2/EWP(1) IJP(c) GG/BC

ACCESSION NR: AR5008938 S/0274/65/000/002/A041/A041

621.371.162

12

B

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz'. Svodnyy tom, Abs. 2A179

AUTHOR: Zarin, D. D.

TITLE: Signal equations describing the disturbance of the electromagnetic field produced by a dielectric cylinder buried in soil

CITED SOURCE: Tr. Vses. zaochn. energ. in-ta, vyp. 26, 1964, 76-84

TOPIC TAGS: search coil, electromagnetic field

TRANSLATION: The equations are derived of the signals arising in search coils due to a disturbance of the electromagnetic field produced by a dielectric cylinder buried in soil. Good soil conductivity ($\gamma = 0.1$ mho/m) and a fairly high field frequency ($f \geqslant 300$ kc) are assumed; it is also assumed that the current lines are largely concentrated near the soil surface (skin effect). This permits replacing the entire soil semispace by a plane having an equivalent conductivity. On the basis of quasi-stationary conditions and a zero disturbance at infinity, an Euler

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ACCESSION NR: AR5008938

equation is set up; its solution permits determining a corresponding vector-potential in the air near the soil surface in terms of current density. Formulas are developed for signal emf in 1, 2, and 4 (differential circuit) coils of the searching device, under the assumption that the initial magnetic field is uniform in a certain area. The above equations permit calculating the signal parameters due to an anomalous cylindrical form. Bibl. 2, figs. 4.

SUB CODE: EC ENCL: 00

Card 2/2

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

SAYENKO, G.N.; ZARIN', V.E.; BOYCHENKO, Ye.A.

Formation of photosynthetic peroxide during the reduction of carbon dioxide in plant leaves. Fiziol.rast. 12 no.6:998-1004 N-D '65. (MIRA 18:12)

1. Institut geokhimii i analiticheskoy khimii imeni V.I. Vernadskogo AN SSSR, Moskva. Submitted January 11, 1965.

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

DAUGERTS, R.; GARANCS, A.; ZARINA, D.; SIRMAIS, J., red.

[Physiology of animals] Dzivnieku fiziologija. Riga, Latvijas Valsts izd-ba, 1963. 433 p. [In Latvian] (MIRA 17:7)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

BARANOVA, Z.D.; ZARINA, E.Ya.; FILICHEVA, T.B.; SOLOV'YEVA, G.I.; MAYBORODA, V.I.

Use of surface-active agents in the production of raw-stock dyed viscose silk. Khim.volok no.6:66-67 '63. (MIRA 17:1)

1. Klinskiy kombinat (for Baranova, Zarina, Filicheva). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (for Solov'yeva, Mayboroda).

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

OREKHOVA, Z.M.; ZARINA, E.Ya.; ROTMISTROVSKAYA, R.R.

Conditions for the formation of viscose fiber for the production of artificial lamb fur. Khim.volok. no.2:60 '62. (MIRA 15:4)

1. Klinskiy kombinat iskusstvennogo volokna.
(Fur, Artificial)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ANDREYEVA, L.E.; ZARINA, E.Ya.; CHEKHOL'SKAYA, E.K.

Using "kateksol" as a surface-active agent. Khim.volok. no.5:67-68 '62. (MIRA 15:11)

1. Klinskiy kombinat iskusstvennogo i sinteticheskogo volokna.

(Rayon)
(Surface-active agents)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

KHLEBNIKOV, A.M.; ZARINA, E.Ya.; CHEKHOL'SKAYA, E.K.; OREKHOVA, Z.M.

Blending of silk on bobbins of a finishing machine. Khim. volok. no.5:73 '62. (MIRA 15:11)

1. Klinskiy kombinat iskusstvennogo i sinteticheskogo volokna.

(Rayon)
(Textile finishing)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

BELITSIN, M.N.; OREKHOVA, Z.M.; FREYDLIN, Ya.A.; ZARINA, E.Ya.; BARANOVA, Z.D.; KAMUSHKIN, P.P.

Production of viscose silk with a higher uniformity of its physical and mechanical properties. Khim.volok. no.5:60-62 '61. (MIRA 14:10)

1. Klinskiy kombinat.

(Rayon)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

MAYBORODA, V.I.; SOLOV'YEVA, G.I.; EGLIT, L.V.; FODIMAN, I.V.; SHILOVA, G.I.; ZARINA, E.Ya.; CHAMOVA, L.P.; FILICHEVA, T.B.

Highly dispersed pigments for stock dyeing of viscose fibers. Khim. volok. no.3:60-62 '65. (MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy iskusstvennogo volokna (for Mayboroda, Solov'yeva, Eglit). 2. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley (for Fodiman, Shilova). 3. Klinskiy kombinat iskusstvennogo i sinteticheskogo volokna (for Zarina, Chamova, Filicheva).

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARINA, M. N.

24198 ZARINA, M. N. Brigada na zverovodcheskoy ferme. (Saltykovskiy zverosovkhoz Glavzverovoda M-va vnesheney torgovli SSSR. S. primech. red.) Karakulevodstvo i zverovodstvo, 1949, No. 4, S. 55-59.

SO: Letopis, No. 32, 1949.

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

SOV/112-59-17-35848

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 17, p 16 (USSR)

AUTHOR: Zarina, N.A.

TITLE: Heat-Resistant Enameled Wires With Polyester Varnish

PERIODICAL: Kabel'n. tekhnika, 1957, Nr 1-2, pp 38-41

ABSTRACT: Numerous shortcomings of the silico-organic varnish K-47, proposed by VEI for enameled wires are pointed out. Results of the studies of enameled wires produced with polyester varnish 124, also developed by VEI, are given. It is shown that the heat resistance of the new enameled wires is higher than that of enameled wires with silico-organic varnishes, they withstand the temperature of 180°C for a long time. At heating to 200°C the elasticity of the insulation of enameled wires decreases noticeably. High electro-insulating properties and mechanic strength of the new enamel insulation are shown. The results of the studies of wires made of resistance alloys enameled with varnish 124 are also given.

V.A.P.

Card 1/1

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ACCESSION NR: AP3001[illegible]

AUTHOR: Zarina, N. A.; Polyakov, I. I.; Peshkov, I. B.; Belinskaya, G. V. 76

TITLE: Refractory mineral insulation for electric wires. Class H 01b; 21e, 3 sub 01. No. 152900 6

SOURCE: Byul. izobreteniy i tovarnykh znakov, no. 3, 1963, 27

TOPIC TAGS: wire insualtion, mineral, refractory, silicone

ASSTRACT: Refractory mineral insulation for electric wires, intended to operate at temperatures from 250 to 550°, and deposited on the wire in the form of a suspension by the method of dipping or electrophoresis with subsequent heat treatment and impregnation with silicone laquer; its distinguishing feature is that the suspension contains the following (parts by weight):

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 16836-63
ACCESSION NR: AP3003260

Onotskiy talcum --	55-60
Muscovite mica --	12--15
Chasov-Yar type clay --	4--5
Liquid glass --	3--4
Low melting flux --	15--20
Polyvinyl spirits --	0.2--0.3

[Abstracter's note: complete translation]. Orig. art. has: no figures, tables, or formulas.

ASSOCIATION: none

SUBMITTED: 20Nov61 DATE ACQ: 23Jul63 ENCL: 00

SUB CODE: MA NO REF SOV: 000 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 5016-66 EWT(m)/EWP(j)/EWP(k) RM

ACCESSION NR: AP5020033 UR/0292/65/000/008/0037/0039

621.315.337.4

39

AUTHOR: Zarina, N. A. (Engineer); Peshkov, I. B. (Candidate of technical sciences) 38

23

TITLE: New heat-resistant enameled wires 19

SOURCE: Elektrotekhnika, no. 8, 1965, 37-39

TOPIC TAGS: enameled wire / PNET wire, PET-2 wire

ABSTRACT: Results of the testing of new class-F heat-resistant enameled wires are reported. The PNET wire consists of a copper nickel-plated conductor insulated by a K-62 lacquer coating. The wire intended for coils can be operated at 250C for 250 hrs and withstands 300C for 50 hrs. The wire retains its satisfactory characteristics after being held at 200C for 2000 hrs. Mechanical characteristics of the PNET wire are also reported. It is hoped that manufacture of the new wire will begin after the Soviet chemical industry has mastered the

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L 5016-66

ACCESSION NR: AP5020033

production of the K-62 lacquer. The PET-2 wire has a copper conductor coated with the K-62 lacquer and on top with a no. 124 polyester lacquer. This wire withstood a temperature of 200C for 50 days (diameter 0.31 mm) and 100 days (diameter 1 mm). This wire is recommended for continuous operation in machines and instruments at 155C, for a 7000-hr operation at 180C, and for a 500-hr operation at 250C. Again, manufacture of this wire depends on the availability of the K-62 lacquer. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: EE

NO REF SOV: 002 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARINA, N.A., inzh.; PESHKOV, I.B., kand. tekhn. nauk

New heat resistant enamel coated wires. Elektrotekhnika 36 no.8: 37 Ag '65. (MIRA 18:9)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

SILAYENKOV, Ye.S., kand. tekhn. nauk; ZARIN, R.A., inzh.; RUDIN, V.V., inzh.

Practices in maintenance of gas concrete elements. Anal. prich. aver. i povr. atrol. kon. no.21:137-152 '64. (MIRA 18:5)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

SILAYENKOV, Ye.S., kand. tekhn. nauk; MIKHALKO, V.R., inzh.; ZARIN, R.A., inzh.

Studying gas-slag-ash lime panels in the walls of industrial plants. Prom. stroi. 42 no.1:25-29 '65. (MIRA 18:3)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

Country : USSR
Category : Farm Animals. Poultry.
Abs. Jour : Ref Zhur-Biol., No 21, 1958, 96928

Author : Zarina, R.; Valdmanis, A.
Institut. : AS Latvian SSR.
Title : The Use of Antibiotics in the Feeding of Chicks.

Orig Pub. : Izv. AN Latv SSR, 1957, No 3, 65-68

Abstract : The experiment was conducted under farm conditions on 5 groups of chicks 8-35 days old. The following substances were added to each kg of feeds: in the first group of chicks 5 γ percent of crystalline vitamin B_{12}, in the second group 4 mg percent of furacillin, in the third group 5 mg percent of vitamin B_{12} and 1.5 mg percent of biomycin, in the fourth group 2 mg percent of penicillin; the fifth was the control group. The largest weight gain was found in chicks of the fourth group - 23.8 percent,

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARINA, YEKATERINA PETROVANA

N/5
912.743
.33

ZARINA, YEKATERINA PETROVANA

Nemetsko-russkiy slovar' po sudostroyeniyu i sudovomu mishinostroyeniyu (German-Russian dictionary of ship-building and ships'-machinery building) Leningrad, Sudpromgiz, 1957.

362 P.

Added title page in German Deutsch-Russisches Worterbuch fur Schiffbau und Schiffsmaschinenbau.

MEA

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARINA, Yekaterina Petrovna, dotsent; MOISEYEV, A.A., doktor tekhnicheskikh nauk, professor, redaktor; MISHKEVICH, G.I., redaktor; POL'SKAYA, R.G., tekhnicheskiy redaktor; FRUMKIN, P.S., tekhnicheskiy redaktor

[German-Russian dictionary of shipbuilding and marine engine construction] Nemetsko-russkii slovar' po sudostroeniiu i sudovomu mashinostroeniiu. Leningrad, Gos.soiuznoe izd-vo sudostroit. promyshl., 1957. 362 p. (MLRA 10:7)

(German language--Dictionaries--Russian)
(Shipbuilding--Dictionaries)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

POPOVA, L.A., inzh.; ANTIPINA, V.I.; GRAKHOV, A.N., starshiy inzh.; PERSHINA, M.P., tekhn.; TEREN'T'YEVA, K.A., starshiy tekhn.; ZARINA, Ye.S.; TUULYA-METS, Kh.Yu., inzh.; MERILA, L.A., starshiy inzh.; KUZNETSOV, I.V., red.; EYPRE, T.F., red.; SVITINA, A.A., red.; MOISEYEV, I.N., red.; FLAUM, M.Ya., tekhn. red.

[Hydrological yearbook] Gidrologicheskii ezhegodnik. Leningrad, Gidrometeor. izd-vo. 1957. Vol.1. [Basin of the Baltic Sea] Bassein Baltiiskogo moria. Nos.0-3. [Basins of the Gulf of Finland and the Gulf of Riga from the Russian-Finnish frontier to the northern watershed of the Salaca River] Basseiny Finskogo i Rizhskogo zalivov ot gosudarstvennoi granitsy s Finliandiei do severnogo vodorazdela r.Salatsa. Pod red. I.V.Kuznetsova i T.F.Eipre. 1961. 460 p. (MIRA 14:9)
(Baltic Sea region—Hydrology) (Kama Valley—Hydrology)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

CA

4

PROCESSES AND PROPERTIES INDEX

Electrofilters for the precipitation of fluosilicic acid from gases [Cottrell precipitators]. I. Zaring and G. Popova. *J. Chem. Ind.* (Moscow) 13, 806-7(1936). Electrofilters ppt. almost all the H_2SiF_6 from superphosphate factory gases. H. M. Leicester

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

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BC

B-I-8

Electrofilter for separation of hydrofluosilicic acid from gases. I. ZASIKO and G. POPOVA (J. Chem. Ind. Russ., 1936, 13, 866—867).—95% of the H_2SiF_6 content of aërosols formed by the action of SiF_4 on H_2O can be collected with the aid of electrofilters, as compared with 60% by other methods.

R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND CODES

PROCESSES AND PROPERTIES INDEX

CA

9

Testing of metal alloys for resistance to phosphoric acid. I. I. Zaring, A. I. Loginova and K. F. Petrova. *Korrozivni i Borba s Nei* 6, No. 1, 4-9(1940).—Tests with H_3PO_4 of various concns. and purities were made on Mo-contg. ferrosilicon, 2 steels and 2 Cr cast irons, contg., resp., Cr —, 18, 8, 38, 31.5; Ni —, 8, —8, —, —; [illegible], 0.4, —, —, —; Mo 2.6, —, —, —, —; Si 10.75, —, —, —, —; C 0.51, —, —, 2.05, 1.09%. For Cr-contg. alloys, technical phosphoric acid is the more corrosive the higher the P_2O_5 content; Mo-contg. ferrosilicon is corroded more at lower concns. of P_2O_5. Of Cr alloys tested, cast iron high in Cr shows greatest resistance. Ti steel also is very resistant. Steel without Ti is resistant only when cold-hardened; that annealed at 1050° is much less-resistant. The concn. of H_3PO_4 has little influence between limits of 12 and 55% and for temps. up to 60°. At 80° the losses are usually smaller under 1 atm. than *in vacuo*. Min. resistance occurs at concns. of 30-50% P_2O_5. Cold-hardened steel contg. no Ti is stable at 50° to low concns. of the acid (up to 30%). Steel annealed at high temp. is stable at 40° in 45%, at 60° in 30% and at 80° in 23% acid. As an impurity in H_3PO_4, Cl ion

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

CA

9

Testing metals for their chemical resistance to fluosilicic acid. M. A. Filippenko and I. I. Zaring. *Mineral'nuse Udobrenya Insektofungisidui* 1, No. 5, 95-8(1935).—Among a great variety of metals and alloys investigated a cast iron contg. Cu 0.09, S 0.008, Cr 40.68 and P 0.05% was most resistant; next was a steel contg. C 0.15, Ni 8, Cr 18 and Ti 0.4%. The metal samples were kept under agitation in a thermostat charged with a mixt. of H_2SiF_6 6.5, P_2O_5 0.5 and SiO_2 about 1.5% (corresponding to conditions existing during manuf.) for 5-6 days at a temp. of 45°. A. A. Boehtlingk

COMMON ELEMENTS

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MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

AUTHOR INDEX

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CA 9

Testing steels for their resistance to corrosion and erosion in contact with phosphoric acid extracts from Vyatka phosphorites. M. A. Filippenko and I. I. Zaring. *Mineral'nye Udobreniya Insektofungitidui* 1, No. 4, 93-6(1935).—Strips of various alloys were placed in a thermostat (73-6°) and immersed in a suspension contg. P_2O_5 24.10, SO_3 3.4 and F 0.94% (liquid phase) and gypsum and undecompd. solid particles of Vyatka phosphorite (solid phase). For 100-114 hrs. the following alloys resisted the corrosion and erosion completely: (a) C 0.10, Si 0.39, Cr 10.50, Ni 8.64 and Mn 0.64%, (b) C 0.10, Si 0.94, Cr 15.48, Ni 8.77, Mn 8.77 and Ti 0.56%; (c) C 0.25, Si 0.40, Cr 17.00, Ni 0.00 and Mn 0.50%. Steel contg. C 0.10, Si 0.78, P 0.011, Cr 27.29 and Mn 0.24% was slightly attacked and that contg. C 0.05, Si 2.50, Cr 18.00 and Ni 25.00% was badly corroded.

A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

Magnesium fluosilicate. A. G. Pavlovich-Volkovyskii and I. I. Zaring. Russ. 50,000, Nov. 30, 1939. P-contg. gases obtained in the acid treatment of phosphorites and apatite are treated with an aq. suspension of $MgCO_3$ or $MgCl_2$.

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

The effect of sulfuric acid temperature on the removal of fluorine in the production of superphosphate. I. I. Zaring. *J. Chem. Ind.* (U. S. S. R.) 16, No. 7, 47-2 (1939); cf. *C. A.* 33, 3981[1].—The temp. of the H_2SO_4, with which apatite concentrates are treated to produce superphosphates should be 60-75° to ensure max. removal of H_2SiF_6 in the outgoing gases. At lower temps. more F is found in the superphosphate. H. M. Leicester

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

The utilization of fluorine from the production of superphosphate. I. I. Zaring. *J. Chem. Ind.* (U. S. S. R.) 15, No. 12, 23-6(1938).—Methods of absorbing H_2SiF_6 from superphosphate waste gases and converting it to Na_2SiF_6 are discussed. H. M. Leicester

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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CA

15

PROCESSES AND PROPERTIES INDEX

Separation and absorption of fluorine in the preparation of superphosphate in the Voskresenskii superphosphate plant. I. I. Zaring and T. P. Popova. *Trans. Sci. Inst. Fertilizers and Insectofungicides U. S. S. R.* No. 123, 163-7(1935).—The absorption of F in Lutjens-Ludwig chambers does not exceed 15-30%. The amount of H_2SiF_6 formed in the absorption liquid is stationary below a concn. of 8%, and therefore it should be attempted, by using a continuous process and applying a tight app., to raise the concn. in excess of 8%. A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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BC

B--1-8

RECOVERY OF FLUORINE IN THE CONCENTRATION OF PHOSPHORIC ACID. I. I. Zaring (J. Chem Ind. Russ., 1936, 13, 266-271).--Aq H_3PO_4, containing 1.5% of F, is obtained by the extraction of fluorapatite or phosphorite with H_2SO_4. During concn. of the aq. H_3PO_4 very little F passes over in the vapours until the concn. of acid is > 30% P_2O_5, above which the amount of H_2SiF_6 in the distillate rises rapidly. 88% of the F in the vapour is recovered by condensing 20% of the vapour. On an industrial scale, 60% of the F present in the original ore is thus recoverable as 10% aq. H_2SiF_6, concentrating the extract from 27 to 50% P_2O_5.

R. T.

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1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

B-1-8

Testing steels for their resistance to corrosion and/or erosion in contact with phosphoric acid extracts from Vyatka phosphorites. M. A. [illegible] and I. I. [illegible] (Min. Udob. Insektofung., 1935, 1, No. 4, 95—96).—Tests were made at 72—75° in a suspension of $CaSO_4$ and undecomposed phosphorite in a solution containing P_2O_5 24·10, SO_3 3·4, and F 0·64%. The following steels resisted corrosion and erosion completely for 100—114 hr.: (a) C 0·10, Si 0·39, Cr 19·50, Ni 8·64, Mn 0·64%; (b) C 0·10, Si 0·94, Cr 15·48, Ni 8·77, Mn 8·77, Ti 0·6%; (c) C 0·25, Si 0·40, Cr 17·00, Ni 9·00, Mn 0·50%. Steel containing C 0·10, Si 0·78, P 0·011, Cr 27·29, and Mn 0·24% was slightly attacked. That containing C 0·35, Si 2·50, Cr 18·00, and Ni 25·00% was badly corroded. Cu. Abs. (c)

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CA

16

The operation of blowers in the chemical works of Konstantinowsk. I. I. Zaring. *J. Chem. Ind.* (U. S. S. R.) 18, No. 2, 67(1941); *Chem. Zentr.* 1943, I, 68; cf. Levedayl, *C. A.* 34, 7517[1]. By aerating the superphosphate with blowers in distributing it on the pile the temp. is lowered and the water content is reduced. The advantages of the use of blowers over that of conveyor belts are discussed.

M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

CA

Obtaining crystalline magnesium fluosilicate by flash drying. I. I. Zaring. *J. Chem. Ind.* (U. S. S. R.) 17, No. 6, 26-D(1940).—$MgSiF_6$ solns. are obtained by neutralizing H_2SiF_6 with MgO. The solns. are sprayed into a chamber of hot gases for rapid drying. At temps. above 65° the $MgSiF_6$ is hydrolyzed. It is difficult to get complete dehydration, but solns. contg. 35 60% $MgSiF_6 \cdot 6H_2O$ can be easily obtained. H. M. Leicester

COMMON ELEMENTS INDEX

COMMON VARIABLES INDEX

OTHER MATERIALS INDEX

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CA

18

The utilization of fluorine from the evaporation of phosphoric acid. [illegible], *Chem. Ind.* (Moscow) 13, 260-71(1940); cf. C. A. 30, 4578[8]. When H_3PO_4 contg. F is concd. to 42% P_2O_5, SiF_4 begins to distil. At 48% P_2O_5, 52% of the F has distd. If the first 18-20% of the distillate is condensed separately, it will contain 80-85% of the F as a 4.5-5.5% soln. of H_2SiF_6. Semifactory-scale expts. give even better results. H. M. Lewester

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARING, I. I.

"Testing of Metal Alloys for Resistance to Phosphoric acid," I. I. Zaring, A. I. Loginova, and K. F. Petrova, Korroziya i Borba s Nev VI, No 1, pp 4-9 (1940) (SEE: Inst. Insect/Fungi. in Ya. V. Samoylov)

SO: U-237/49, 8 April 1949

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARING, I. I.

"The Operation of Blowers in the Chemical Works of Konstantinovsk," I. I. Zaring, J. Chem Ind (USSR) XVIII, No 2 pp 6-7(1941) (SEE: Inst. Insect/Fungi. in Ya. V. Samoylov)

SO: U-237/49, 8 April 1949

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76001
SOV/70-4-5-23/36

24.7000

AUTHORS: Vasil'yev, L. I., Zaring, K. L., Kudryavtseva, L. A.

TITLE: Multiple Slips in Zinc at Indoor Temperatures

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 5, pp 768-772 (USSR)

ABSTRACT: It has been known that zinc crystals deformed at indoor temperatures develop slip parallel to (0001), [2$\bar{1}\bar{1}$0] while at higher temperatures the slip takes place parallel to (01$\bar{1}$0), [2$\bar{1}\bar{1}$0]. In special cases of the crystal orientation with respect to the stress, slips have also been developed in (11$\bar{2}$2), [$\bar{1}$123] and (0111), [?] directions. The authors, in deforming the specimens of polycrystalline zinc rods at indoor temperatures found that some grains slip in two different directions, i.e., parallel to (0001), [2$\bar{1}\bar{1}$0] and (01$\bar{1}$1), [2$\bar{1}\bar{1}$0], or even in three directions. These cases are called multiple slips. Both slips take place in the direction of the shortest interatomic spacing [2$\bar{1}\bar{1}$0]. The specimens, 50 mm long and 1.5 mm in diameter, 99.8% Zn or purer, were annealed at 140° C in oil bath for one hour, cooled

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Multiple Slips in Zinc at Indoor Temperatures

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SOV/70-4-5-23/36

off, electropolished in the aqueous solution of orthophosphoric acid, plastically deformed by stretching with device UPR at the rate of 0.03% to 27%/min, and studied under interference microscope MII-4. Larger grains had clearer and more variegated slips. No grain was deformed uniformly; some regions of a grain remained undeformed. Some grains were broken into blocks circumscribed by differing slip planes while other grains had one or two sets of glide bands. Each set of kink bands showed offsets of about the same height and form pointing to their identical compositions of a similar number of glide planes. The interplanar angle φ, between basal (0001) and pyramidal (01$\bar{1}$1) slip planes proved in the majority of cases to be close to its theoretical value of 65°. The development of pyramidal slip planes in polycrystalline specimens, while they remain suppressed in single crystals, apparently is the effect of the adjacent grains and of the extremely nonuniform deformation of the polycrystalline specimens. Under these conditions, the stress within some grains apparently

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Multiple Slips in Zinc at Indoor Temperatures

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exceeds the critical point at which the pyramidal slip planes begin to develop. Larger grains offer better opportunity for the development of pyramidal slips, since small grains can more easily be turned and released of stresses. It is still not verified whether a rapid deformation contributes to the development of pyramidal slips. Additional slip planes were also observed in polycrystalline specimens constituted of aluminum and brass grains and near the grain boundaries of di- and tricrystalline aluminum. There are 3 figures; and 12 references, 7 U.S., 2 Soviet, 1 U.K., and 1 Canadian. The 5 most recent U.S. references are: Ojala, T., et al., J. Metals, 8, 10, 1344, 1956; Gilman, J. J., Acta Metallurgica, 3, 2, 209, 1955; Gilman, J. J., J. Metals, 8, 10, 1326, 1956; Boas, W., Ogilvie, G. J., Acta Metallurgica, 2, 5, 655, 1954; The U.K. reference is: Bell, R. L., Cahn, R. W. Proc. Roy. Soc. A, 239, 1219, 494, 1957.

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Multiple Slips in Zinc at Indoor Temperatures

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ASSOCIATION: Siberian Physicotechnical Scientific Research Institute (Sibirskiy fiziko-tekhnicheskiy nauchno-issledovatel'skiy institut)

SUBMITTED: May 20, 1959

Card 4/4

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARING, K.L.; VASIL'YEV, L.I.

Correspondence of the relaxation and velocity characteristics of plastically deformed zinc. Izv. vys. ucheb. zav.; fiz. no.5:21-24 '64.

Mechanism underlying the deformation of polycrystalline zinc when the deformation rate is slowed down. Ibid.:24-27

(MIRA 17:11)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6"

"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARING, K.L.; VASIL'YEV, L.I.

Characteristics of the deformation of polycrystalline zinc at various speeds. Izv. vys. ucheb. zav.; fiz. no. 2:116-120 '64. (MIRA 17:6)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

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BR

ACCESSION NR: AP4036567 S/0139/64/000/002/0116/0120

AUTHORS: Zaring, K. L.; Vasil'yev, L. I.

TITLE: Anomalies in polycrystalline zinc deformation at various rates

SOURCE: IVUZ. Fizika, no. 2, 1964, 116-120, and inserts A, B, and C following p. 120

TOPIC TAGS: polycrystalline zinc, metallographic study, interference microscope MII 4, slow deformation, local slip, grain boundary, twinning, weak dislocation

ABSTRACT: The behavior of polycrystalline zinc under 0.03%/min and 27%/min continuous tension rates as well as under sudden change in tension rate during the deformation process was investigated. Mechanical and metallographic studies were made on 99.9% pure zinc with 0.026% by weight Pb, 0.041% Fe, and 0.014% Cd. The wire specimens (1.5 mm in diameter and 50 mm long) were annealed in an oil bath, at 140C for 1 hr and subsequently cooled to 40C. Metallographic investigations were made using a 900 magnification MII-4 interference microscope. Slow deformations indicated the presence of local slip with significant shifts along the grain boundaries and a distinct polygonal character, whereas high deformation rates generated a thin, uniform distribution slip, twinning, and weak dislocations along

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ACCESSION NR: AP4036567

the grain boundary. Flow curves of zinc after the sudden application of a tension rate fell on the continuous deformation curves with secondary tension after only a small degree of initial deformation. Orig. art. has: 5 figures.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V. V. Kuybyshseva (Siberian Institute of Engineering Physics, Tomsk State University)

SUBMITTED: 22May63 DATE ACQ: 05Jun64 ENCL: 00

SUB CODE: MM NO REF SOV: 027 OTHER: 007

Card 2/2

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

polycrystalline zinc on

going from fast to slow

SOURCE:

TOPIC TAGS: zinc, poly

rate

deformation

paper (Izv. vuzov

occurring during an

intermediate electric

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 11965-65

ACCESSION NR: AP4047344

[illegible] observe the so-
[illegible] under

the deformation [illegible]
creased deformation rates as before. [illegible]
[illegible] deformation begins both with displacement along the grain
boundaries and with polygon[illegible] the crystallographic glide
mechanism typical of slow tension comes into play later. All these
[illegible] during the time of de-
[illegible] lower ones. Orig.

Card 2/3

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 11965-65

ACCESSION NR: AP4047344

art. has: 4 figures.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom [illegible] (Siberian Physicotechnical [illegible]

SUBMITTED: 22May63 ENCL: 00

SUB CODE: SS OTHER: 002

Card 3/3

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

[illegible]

ACCESSION NR: AP4047347 S/0139/64/000/005/0021/0024

[illegible]

TITLE: On the correspondence between the relaxational and velocity

SOURCE: IVUZ. Fizika, no. 5, 1964, 21-24

[illegible]

ABSTRACT: The purpose of this investigation was to check whether conclusions reached in earlier papers by one of the authors (Vasil'yev, ZhTF v. 20, 5, 519, 1950 and v. 25, 4, 687, 1955; DAN SSSR v. 89, 3, 451, 1953 and v. 92, 2, 301, 1953; L. M. Butkevich, Izv. vuzov SSSR, Fizika, No. 6, 3, 1958) concerning the connection between

with face-centered cubic and tetragonal lattices hold true also for

[illegible]

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

L 11504-63

ACCESSION NR: AP4047343

[illegible] systems. Annealed wire samples

[illegible]

sense that all the curves are similar in behavior and that zinc does not behave differently from the other metals. This confirms the general nature of the correspondence between the relaxation [illegible] of metals observed in the earlier work, and the deduction that the relaxing ability of metals is one of the most [illegible]

the manuscript and for valuable remarks." Orig. art. has: 4 figures.

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

[illegible]

ORGANIZATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom [illegible]

SUBMITTED: [illegible] ENCL: [illegible]

SUB CODE: SS, MM NR REF SOV: 006 OTHER: 003

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARING, K.L.; KHARITONENKO, G.P.

Characteristics of the deformation of α-iron during sudden changes in the speed of plastic tension. Fiz. met. i metalloved. 17 no.1:100-104 Ja '64. (MIRA 17:2)

1. Sibirskiy fiziko-tekhnicheskiy institut.

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"APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001963820015-6

ZARING, P. V. C/ 1963 1964

Pests and Diseases of Sugar Beets

DECEASED

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PROCESSES AND PROPERTIES INDEX

Vitamin C content of Latvian feed. E. Zarina and C. Putnina. *Acta Univ. Latviensis, Kim. Fakultat. Ser.* 3, No. 9-12, 329-80(in German 381-4)(1937).—A new method for the detn. of vitamin C was developed: The weighed quantity of the material, quickly shredded, is boiled for 10 min. in 60 cc. of 5% AcOH and in a current of CO_2; the soln. is then cooled (quickly and without interruption of the current of CO_2) and filtered through cloth in a 100-cc. measuring flask. The residue is washed with AcOH and pressed out. When the liquid in the flask is filled with 5% AcOH to the mark, 10 cc. is pipetted off and, after addn. of 0.4 g. powd. $CaCO_3$, shaken thoroughly. Five cc. of 5% neutral $Pb(OAc)_2$ soln. is added, again shaken, and filtered (for acceleration: in the CO_2 current). Ten cc. of the filtrate is mixed with 5 cc. of 80% AcOH (p_H of the liquid = 2.5) and titrated with 0.001 *N* 2,6-dichlorophenolindophenol (that is prepd. according to Bessey and King; the standardization of the titer takes place according to Tillmans with 0.001 *N* Mohr's salt). For dark-colored exts., the titration method of Siebert—simplified by the authors—is suitable; they titrate in acid soln. (p_H 2.5) and do not need a centrifuge. In this case, the titration is finished when the greenish color of the nitrobenzene changes to reddish. The middle vitamin C content in 100 g. of fruits and berries is highest in fresh hips with 1300, dried hips 1000, lemon peels 218, orange peels 197, and is lowest in grapes 0.5, pears 2, apples and bananas 3. In 100 g. of vegetables the vitamin C content

(over)

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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Measurement of the electron spin resonance of a single crystal of $CuK_2(SO_4)_2 \cdot 6H_2O$ diluted with the Zn salt at 520.74 Mc/s and at liquid air temperatures was consistent with a spin Hamiltonian with the parameters $\Delta = -0.3 \times 10^{-5}$ cm^{-1},

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ZARINS, A.

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Oxidation of tetrahydrofuran to succinic acid. S. Hillers and A. Zarins. *Latvijas PSR Zinatnu Akad. Vestis* 1950, No. [illegible] No. 24), 9-10(Russian summary).—$(CH_2-CO_2H)_2$ m. 181-2°, was obtained in 80% yields by slow (several days) oxidation of tetrahydrofuran with the theoretical amt. of concd. HNO_3 at 0-5°; to initiate the generation of N oxides, 0.1 g. starch/100 ml. acid was added. Oxidations with permanganate in alk. medium, bichromate in acid, chlorate in the presence of V, and HNO_3 at elevated temps. were unsuccessful in producing a pure product.

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