Abs Jour : Referat Zhur - Biologii, No 16, 1957, 70336

the mucus of the goblet cells is secreted into the duct fulmen or crypts; 3) cells, the process of secretion which occurs by small drops on the surface of the ducts, can be stained after wards light orange, and with eosin-azure- light-violet.(they do not stain with muci- carmine or hematoxylin Heidenhein). On the surface of these droplets there are very tiny granules which stain with Mallory- orange and Eosin-azure- pink. The same droplets of 3-6m diam. are found in the fulmen of the pancreas duct among the zymogen granules and mucus. The stainmg qualities of the droplet-substance indicate its protein character. Small nuclei giving a mucoid reac- tion described in humans were not found in rats. By Homor's method,lipase was discovered in the epithelium of the large efferent ducts, (esterase). The latter is not commonly found in the mucoid and goblet cells. The mucoid and protein secretions of the epithelial

Abs Jour : Referat Zhur - Biologii, No 16, 1957, 70336

lining of the efferent ducts and crypts, mixed with the granules of zymogen, change the character of the basic secretions, produced by the acinus part of the pancreas.

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17.2400

86845
S/020/60/135/005/039/043
B016/B052

AUTHOR: Voronin, G. N.

TITLE: Inclusion of S^{35} of Methionine in the Exocrine Part of the Pancreas During Radiation Sickness

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 5, pp. 1247 - 1249

TEXT: The author studied the excretory function of the pancreas in rats suffering from radiation sickness after one total X-ray exposure. He endeavored to explain the discrepancies in publications regarding the effects of irradiation (Refs. 1-7). The author used the РУМ-3 (RUM-3) device; the total dose was 1000 r, and the dose rate 35 r/min. Leucopenia occurred after 5 days. One hour or five days after the X-ray treatment, S^{35} Methionine of 0.5μ curie per g of weight was injected into irradiated rats and into control animals which had not been irradiated 0.5, 1, 2, and 3 h after injection, the pancreas was taken out and fixed, and the control sections and trace autographs were colored (Fig. 1, 24 h of exposure). Contrast autographs (Fig. 2) were not colored. The author has already

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86845

Inclusion of S^{35} of Methionine in the Exocrine Part of the Pancreas During Radiation Sickness

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B016/B052

published data on the dynamics of the absorption of S^{35} Methionine by the pancreatic epithelium (Ref.9). Fig. 3 shows the intensity of S^{35} Methionine absorption by the whole pancreas and the basal and apical parts of acinous glandular cells in rats exposed and not exposed to radiation. From the histological preparations and the autographs the author concludes that: one single but total exposure to strong X-ray dose affects the functional state of the pancreas in so far as it inhibits the excretory function. This inhibition is gradually reduced to the normal state. Like other researchers, the author ascribed this phenomenon to the direct action of ionizing radiation on the mitochondria of acinous glandular cells (Refs. 3,4). There are 3 figures and 9 references: 5 Soviet and 2 German.

ASSOCIATION: Institut eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR (Institute of Experimental Medicine of the Academy of Medical Sciences USSR)

PRESENTED: June 25, 1960, by N. N. Anichkov, Academician

SUBMITTED: May 12, 1960

Card 2/5

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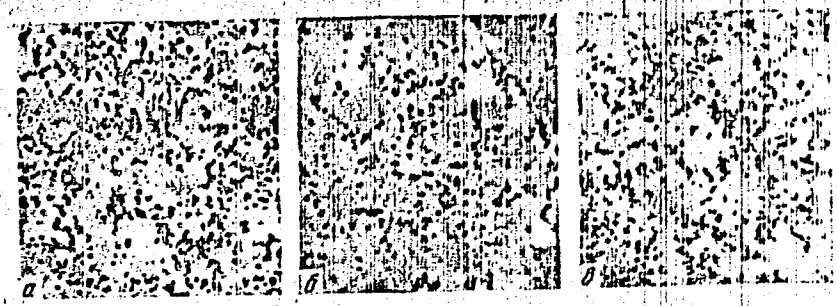

Card 3/5

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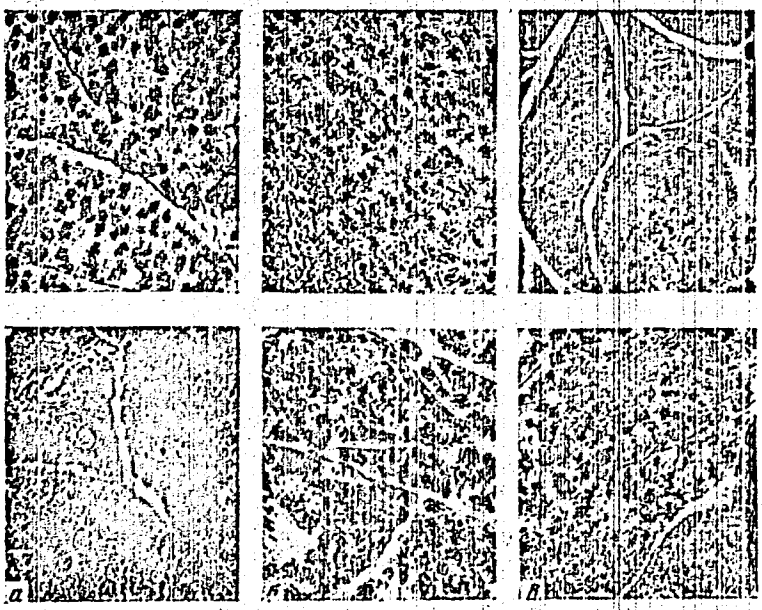
B016/B052



Card 4/5

Legend:
Fig. 1. Trace autographs of the pancreas 30 min after the injection of S^{35} Methionine, 800 times enlarged. a - control, b - 1 h after irradiation, v - 5 days after irradiation. Fig. 2: Contrast autographs of the pancreas: top - 1 h after injection of S^{35} Methionine, bottom - 3 h after injection of S^{35} Methionine, 90 times enlarged. Notation like in Fig. 1.

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S/020/60/135/005/039/043
B016/B052

Legend:
Fig. 1. Trace autographs of the pancreas 30 min after the injection of S^{35} Methionine, 800 times enlarged. a - control, b - 1 h after irradiation, v - 5 days after irradiation. Fig. 2: Contrast autographs of the pancreas: top - 1 h after injection of S^{35} Methionine, bottom - 3 h after injection of S^{35} Methionine, 90 times enlarged. Notation like in Fig. 1.

Card 5/5

VORONIN, G.N.; MIKHAL'SKAYA, Z.P.; RIKKL', A.V.

Morphological changes of the pancreas during the development of experimental diabetes. Biul.eksp. biol. i med. 54 no.12:103-105 D'62. (MIRA 16:6)

1. Iz laboratorii obshchey fiziologii imeni K.M.Bykova (zav. prof. A.V.Rikkl') i eksperimental'noy gistologii (zav. - prof. V.P.Mikhaylov) Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad. Predstavlena deystvitel'nym chlenom AMN SSSR S.V. Anichkovym.

(PANCREAS—DISEASES) (DIABETES)

L 22423-65 EWG(j)/EWG(r)/EWT(1)/FS(v)-3/EWG(v)/EWG(a)/EEC(c) Pe-5 JT/HM

ACCESSION NR: AT4047750 S/0000/64/000/000/0154/0163

AUTHOR: Voronin, G. V.

TITLE: "Elementary links" in biological control systems

SOURCE: AN SSSR. Institut avtomatiki i telemekhaniki. Teoriya i primeneniye avtomaticheskikh sistem (Theory and application of automatic systems). Moscow, Izd-vo Nauka, 1964, 154-163

TOPIC TAGS: biological control system, eyesight analyzer

ABSTRACT: Based on Western and Soviet published data and also on some author's experiments with an eyesight analyzer, an attempt is made to single out and classify some elementary dynamic links most frequently occurring in biological systems. At points of application of the controlling actions, a complex biological cell (such as an efferent or an intermediate neuron) may be subdivided into the following elements: soma, dendrites, axon hill, axon, and its terminal synaptic

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L 22423-65

ACCESSION NR: AT4047750

branching. The above plus some simple cells are assumed to be "elementary links." Possible structures and dynamic schemes of the following cells are considered: an efferent neuron, an intermediate neuron, an efferent neuron, a continuous-signal neuron, and a receptory cell. Six types of elementary links are tabulated; their theoretical signal shape, formula, and equivalent circuit diagram are supplied. If the response of the elementary links to typical disturbances is known, the link type which effects the overall response may be guessed at from the shape of the overall biopotential taken from a macrolevel of the organ in question. The responses of the eye retina of a frog to sinusoidal 0-6.5-cps light stimuli are reported and interpreted in terms of possible elementary-link structures. Orig. art. has: 6 figures and 1 formula.

ASSOCIATION: none

SUBMITTED: 05Jun64 ENCL: 00

SUB CODE: DP NO REF SOV: 009 OTHER: 008

Card 2/2

VORONIN, G.V.; TOTT, Sh.; SOKOLOV, Ya.N.

Amplitude-phase frequency analysis of retina biopotentials during sinusoidal light stimulation. Biofizika 9 no. 1: 94-103 '64. (MIRA 17:7)

1. Institut avtomatiki i telemekhaniki AN SSSR, Moskva i Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.

VORONIN, G.V. (Moskva)

Electron-beam photoelectric coverter for studying the dynamics of visual analyzers control theory methods. Avtom. i telem. 24 no.11:1524-1532 N '63. (MIRA 16:12)

L 37132-66 EWT(d) SCTB DD/GD

ACC NR: AT6006226 SOURCE CODE: UR/0000/65/000/000/0295/0303

AUTHOR: Voronin, G. V.

26
B+1

ORG: none

TITLE: The retina as an object of bionic study

SOURCE: AN SSSR. Institut avtomatiki i telemekhaniki. Tekhnicheskaya kibernetika (Technical cybernetics). Moscow, Izd-vo Nauka, 1965, 295-303

TOPIC TAGS: bionics, perception, electronic remulation, light pulse

ABSTRACT: The author studies the particulars of the structure of a retina and its total biopotential. The cellular structure is studied. Frog eyes were used as the samples in the dynamic analysis of the organization of the retina. The effects of light on the various layers of the retina are discussed and a diagram is presented. Dynamic analysis of electroretinograms is used for studying the dynamics of the retina. The electroretinograms are subdivided into time and frequency regions and the possible fundamental subsystems of the retina are located. A physical analog of the electroretinogram was set up on the basis of the subsystem concept. The number and types of subsystems were determined on the basis of the apparent difference between the behavior of the retina and the analog. A dynamic model of the retina

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ACC NR: AT6006226 O

was set up for certain types of stimuli. The methods used in setting up the analysis and analogs are discussed. The results show that the electroretinograms are actually the sum of the reactions of four possible dynamic subsystems. These subsystems are described with respect to their reactions to a square pulse of light: a. superslow or slow aperiodic. b. cut-off or what might be called light limiting. c. plus switching, reacting only to switching on light by a positive pulse. d. minus switching, reacting only to switching on light by a negative pulse. A comparison of the results shows that there is a discrepancy between the analog and the retina in the areas of high frequency stimulation. Further study shows that an entire series of observable experimental facts cannot be reproduced by the analog. Orig. art. has: 6 figures.

SUB CODE: 06 / SUBM DATE: 05Nov65 / ORIG REF: 008 / OTH REF: 004

Card 2/2 af

VORONIN, I.

Reduce expenditures for horse transport. Fin. SSSR 20 no.7:63 Jl '59. (MIRA 12:11)

1. Zaveduyushchiy Samarskoy TSentral'noy sberegatel'noy kassoy Vostochno-Kazakhstanskoy oblasti.
(Samara District--Horses--Transportation)

KURBATOV, I.; VORONIN, I.

Crews of machine operators take care of several crops. Nauka i pered. op v sel'khoz 9 no.5:9-11 My '59. (MIRA 12:8)

1.Direktor Belgorodskoy sel'skokhozyaystvennoy opytnoy stantsii (for Kurbatov). 2.Zaveduyushchiy otdelom ekonomiki i organizatsii Belgorodskoy sel'skokhozyaystvennoy opytnoy stantsii (for Voronin).
(Farm management)

VORONIN, I., inzhener.

Self-propelled bag stacker. Muk.-elev. prom. 22 no.8:25-26 Ag '56.
(Hoisting machinery) (MLRA 10:8)

VORONIN, I., and others.

Geography Mordoviya:

Sovetskaya Mordoviya: ocherki posvyashchennye 20-letiyu respubliki. Saransk, Mordovskoe Gosudarstvennoe Izdatel'stvo, 1950. pp. 341; 20 x 13.

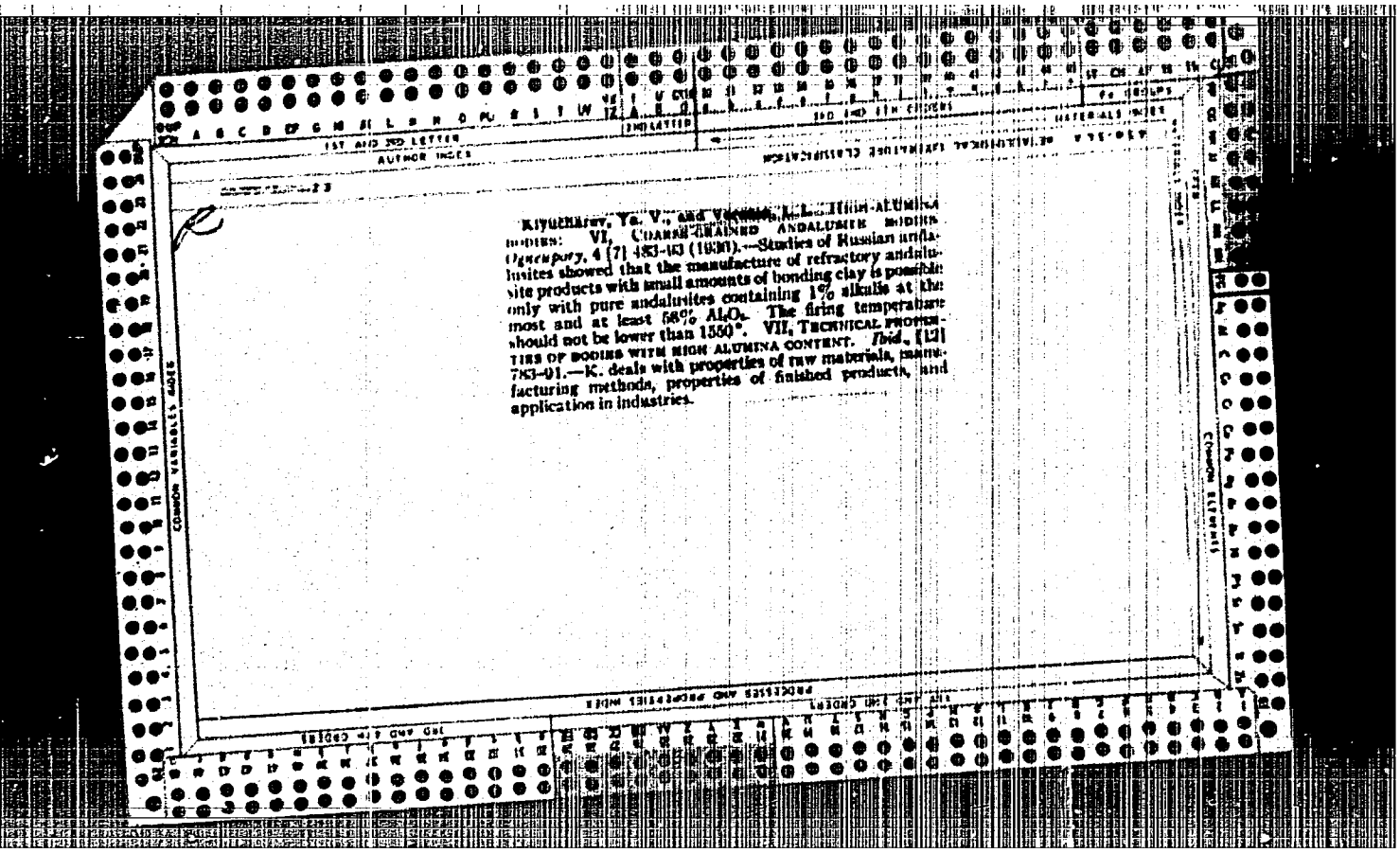
VORONIN, I.D.

Toponymy and archives. Vop. geog. no.58:155-157 '62. (MIRA 15:9)

(Mordovia—Names, Geographical)

VORONIN, Ivan Dmitriyevich; AVDEYEV, V., red.; KIRDYASHOV, P., red.izd-va; POPOVA, M., tekhn.red.

[Sketches and articles] Ocherki i stat'i. Saransk, Mordovskoe knizhnoe izd-vo, 1957. 187 p. (MIRA 11:5)
(Mordovia)



MAGDA, I.I., prof.; VORONIN, I.I., dotsent; BUT, I.F., aspirant

Use of synthetic materials in veterinary surgery. Veterinariia 41 no.12:43-47 D '64. (MIRA 18:9)

1. Khar'kovskiy zooveterinarnyy institut.

VORONIN, I.I., Doc Vet Sci—(diss) " Intrapelvic conductor anaesthesia of the external genital organs of a bull. (Anatomo-topographic substantiation and clinical application)." Khar'kov, 1958. 22 pp (Min of Agr USSR. Khar'kov Vet Inst), 150 copies (KL,45-58, 151)

VORONIN, I.K., gornyy inzhener; PETERS, I.V., gornyy inzhener.

Experience of Kalininugol' Trust mine No. 71, with an intermittent work week. Ugol' 32 no.7:46 Jl '57. (MLRA 10:7)
(Moscow Basin--Coal mines and mining)

S/089/60/008/06/03/021
B006/B063

21.6200

AUTHORS: Voronin, I. M., Dmitriyev, V. D., Ibragimov, Sh. Sh., Lyashenko, V. S.

TITLE: The Mechanical Properties and the Microstructure of Some Building Materials After Neutron Bombardment

PERIODICAL: Atomnaya energiya, 1960, Vol. 8, No. 6, pp. 514-518

TEXT: The authors examined the effects of the conditions prevailing in the reactor of the Pervaya atomnaya elektrostantsiya (First Atomic Power Plant) upon the mechanical properties and the microstructure of technically pure molybdenum and steels of the following grades: 1Kh18N9T (1Kh18N9T), Kh20N14S2 (Kh20N14S2), 1Kh15N11M2S2T (1Kh15N11M2S2T), 2Kh13 (2Kh13), 1Kh13BMS2 (1Kh13BMS2), and Kh10Yu5ST (Kh10Yu5ST). Furthermore, the authors tested eight steels whose chemical composition is given in Table 1. The mechanical properties of austenite steels which were exposed to an integral neutron flux of the order of 10^{20} n/cm^2 and a temperature of 450 - 650°C are listed in Table 2 (limit

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S/089/60/008/06/03/021
B006/B063 B230

The Mechanical Properties and the Microstructure of Some Building Materials After Neutron Bombardment

of strength, relative elongation, microhardness) and compared with the values before irradiation. The various steel grades showed different results. The microhardness of the grade 1Kh18N9T, for example, is increased by 65 kg/mm^2. The increase in hardness of the other grades is lower. The properties depend on the kind of treatment after the chilling (from 1100°C). The microhardness of the above-mentioned steel, for example, is reduced by 52 kg/mm^2 compared to the value before the irradiation, if it is cold-worked after the chilling. Fig. 1 shows a 325-fold magnification of the microstructure of the austenite steel Kh20N14S2 before and after irradiation. In the following, the authors discuss the effect of the temperature prevailing during the irradiation upon the properties of the specimens. The influence of irradiation usually increases with rising temperature. The microstructure of cold-worked steel irradiated at 500°C is shown in Fig. 2 and compared to Fig. 1b. The dissolution of the austenite structure is distinctly marked. Drawing of the steels (at different temperatures and for different times) leads to a lesser decrease in plasticity due to irradiation. From this

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The Mechanical Properties and the Microstructure of Some Building Materials After Neutron Bombardment

S/089/60/008/06/03/021
B006/B063 B230[illegible]

the authors conclude that the changes in the properties of austenite steels between 500°C and 650°C brought about by irradiation with an integral flux of 0.9 - 3.4.10^{20} neutrons/cm^2 are chiefly related to non-equilibrium states of the material. The mechanical properties of ferrite and ferrite-martensite steels are not strongly affected by neutron bombardment (Table 3). Table 5 gives data on the change in the properties of technically pure molybdenum due to irradiation. This Table shows an increase in the strength and hardness and a considerable decrease in relative elongation. All these changes are greatly dependent on the initial state of the material. Ye. V. Chermashentsev and A. Ya. Ladygin are finally thanked for their assistance in this work. M. D. Abramovich is also mentioned. There are 2 figures, 5 tables and 6 references, 4 of which are Soviet.

SUBMITTED: August 27, 1959

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L 11105-63 EPF(n)-2/T-2/BDS AFFTC/ASD/AFWL/SSD Pu-4 EM

ACCESSION NR: AP3001176 S/0089/63/014/005/0465/0468 64

AUTHOR: Ibragimov, Sh. Sh.; Sy*gshchikov, L. A.; Voronin, V. M.; Kudryashov, V. G. 19

TITLE: Investigation of spent fuel elements of the First Atomic Electric Station

SOURCE: Atomnaya energiya, v. 14, no. 5, 1963, 465-468

TOPIC TAGS: spent fuel element, First Atomic Power Plant, fuel burnup, microstructure, microhardness, tensile strength, microcrack

ABSTRACT: Tests have been made of three spent tubular fuel elements used in the Pervaya atomnaya elektrostantsiya (First Atomic Power Plant) for 111, 324.5, and 557 days with mean fuel burnups of 11.8, 28, and 59%, respectively. The fuel elements consisted of two concentric steel tubes whose annular clearances were filled with fuel (a uranium-molybdenum alloy containing 9% molybdenum and metallic magnesium). During operation, the fuel elements were water cooled. Water inlet temperature was 175—190C and exit temperature, 260—280C. The maximal temperature of the external surfaces did not exceed 360—370C. The tests involved external examination of the elements, exact measurement of the diameter, metallographic investigation, and mechanical tests of ten tubes. Although no external damage

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L 11105-63
ACCESSION NR: AP3001176

to the elements was found, a thin (about 1μ) oxide film, varying in color from light-brown to dark-grey, formed on the element surfaces, and some swelling appeared along the length of the fuel element; the maximal increase in diameter, which occurred at the middle point, amounted to 0.10, 0.15, and 0.20 mm for fuel elements operated for 111, 324.5, and 557 days, respectively. The microstructure of the tube material did not undergo significant changes. Interaction between steel, magnesium, fuel, and the surrounding medium was confined to the fuel elements which operated for 111 and 324.5 days. Microcracks up to 100 μ deep were found in fuel elements which operated for 557 days. The tensile strength and microhardness of the tubes increased and the elongation decreased. These changes were most pronounced for external surfaces. With an increase in fuel burnup, and consequently of integral neutron flux, the strengthening of the tube material increased. The results are recommended for use in designing similar type reactors. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 21Jun62 DATE ACQ: 21Jun63 ENCL: 02

SUB CODE: NS NO REF SOV: 005 OTHER: 000

Card 2/2

L 14420-63 EWP(k)/EWP(q)/EWT(m)/BDS AFFTC/ASD

ACCESSION NR: AP3003973 S/0089/63/015/001/0030/0037

AUTHOR: Ibragimov, Sh. Sh.; Voronin, I. M.; Kruglov, A. [illegible]

TITLE: Effect of neutron irradiation on the structure and mechanical properties of alloy steels

SOURCE: Atomnaya energiya, v. 15, no. 1, 1963, 30-37

TOPIC TAGS: iron neutron irradiation, nickel neutron irradiation, low-alloy-steel neutron irradiation, high-alloy-steel neutron irradiation, neutron-irradiated-iron property, neutron-irradiated-nickel property, neutron-irradiated-steel property, neutron-irradiated stainless-steel property, neutron-irradiated-alloy-steel property

ABSTRACT: The effect of neutron irradiation on the structure and mechanical properties of iron, nickel, 1Kh16MSB ferritic steel, 2Kh2MB, 2K[illegible]MSP, and 1Kh12MS ferritic-pearlitic steels, and 1Kh18N9T and 1Kh18N[illegible]MSB austenitic steels in the temperature range 200—500C was investigated (see Table 1 of Manuscript for compositions). Specimens 3 mm in diameter and 25 mm long were annealed and then subjected to irradiation by hard neutrons (average neutron energy (E) was 0.38 Mev;

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L 14420-63
ACCESSION NR: AP3003973

30% of the neutrons had E of over 1 Mev) at 320—500C or soft neutrons (average E was 36 Kev; 10% of the neutrons had E of over 1 Mev) at temperatures below 255C. The irradiation had no effect on the grain size of iron and 1Kh16MSB steel. Irradiation of iron at 200—240C increased the tensile strength from 35.0 to 53.5 kg/mm^2 and the yield strength from 29.5 to 52.5 kg/mm^2; corresponding increases for 1Kh16MSB steel were from 63.0 to 75.0 kg/mm^2 and from 44.0 to 66.0 kg/mm^2. Elongation for iron dropped from 38.5 to 15.0% and for 1Kh16MSB from 26.0 to 8.0%. The absolute values of changes depended on temperature and irradiation dose. The most intensive changes took place at 200—240C and loses up to 1.1 x 10^{20} neutron/cm^2 for iron and up to 2.8 x 10^{20} neutron/cm^2 for 1Kh16MSB steel. A further increase in irradiation had no additional effect on mechanical properties, and the above doses can be considered as saturation limits. The strengthening defects caused by irradiation can be completely eliminated by annealing at 500C. The effect of irradiation on the mechanical properties of austenitic steel and nickel is shown in Table 2 of the Enclosure. It can be seen that complex alloy steels have a higher saturation limit than iron and low-alloy steels. The radiation defects can be eliminated by annealing at 430—650C. Irradiation of 2Kh2MS, 2Kh6MST, and 1Kh12MS steels at 200—350C with an integral dose of 8 x 10^{20} to 1.2 x 10^{21} neutron/cm^2 increased the tensile

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ACCESSION NR: AP3003973

strength, yield strength, and hardness and decreased the elongation. Irradiation at 450—500C decreased the tensile and yield strength and resulted in an almost complete loss of ductility in the case of 2Kh2MS steel. Neutron irradiation had no effect on resistivity. The strengthening defects caused by irradiation at 200—240C can be eliminated by annealing at 350—575C. Irradiation with hard neutrons at 320—360C (integral dose, 1.2×10^{21} neutron/cm^2) substantially changed the microstructure (dispersion and the form and size of the carbides) in 2Kh2MS and 2Kh6MST steels. Orig. art. has: 5 tables and 3 figures. [JPRS]

ASSOCIATION: none

SUBMITTED: 31May62 DATE ACQ: 08Aug63 ENCL: 02

SUB CODE: ML NO REF SOV: 008 OTHER: 001

Card 3/3

L 17116-63 EPR/EPF(c)/EPF(n)-2/EWP(q)/EWT(m)/BDS AFFTC/ASD/ESD-3/SSD
Pc-4/Pr-4/Pu-4/Pa-4 WW/JD/AR/HM
ACCESSION NR: AP3002848 S/0126/63/015/006/0895/0899

AUTHORS: Ibragimov, Sh. Sh.; Voronin, I. M.

TITLE: Hardening of iron and nickel by neutron irradiation

SOURCE: Fizika metallov i metallovedeniye, v. 15, no. 6, 1963, 895-899

TOPIC TAGS: hardening, Fe, Ni, neutron irradiation, radiation defect, dislocation movement

ABSTRACT: The effect of neutron irradiation on the mechanical properties of Fe and Ni has been studied. The Fe and Ni rods 25 mm long and 3 mm in diameter were subjected to the stretching test and to metallographic analysis. The samples were annealed in vacuum at different temperatures in order to remove mechanical and thermal stresses and to obtain the variation in grain sizes. The irradiation dose varied from 1.1×10^{20} to 2.8×10^{20} neutron/cm^2. The flow limit of Ni varied proportionately to the cubic root of the integral irradiation dose (with the exception for maximum dose). The hardening characteristics of Ni were found to vary to a greater degree than these of Fe. The greatest irradiation effect (dose 2.8×10^{20} neutron/cm^2) on the mechanical properties of Ni was observed in fine-

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L 17116-63
ACCESSION NR: AP3002848 2

grained samples, while the opposite was true for the Fe samples. The authors conclude that neutron irradiation of Fe and Ni results in the formation of defects preventing the movement of dislocations, but do not affect the electrical resistivity of the metals. The intensification of Ni hardening during irradiation was due partially to the accumulation of point-defects near dislocations in the form of Cottrell atmospheres. The highest degree of hardening under equal irradiation conditions was achieved with coarse-grained iron samples. In conclusion the authors express their appreciation to S. T. Konobeyevskiy for discussion of the results. Orig. art. has: 4 tables and 2 figures.

ASSOCIATION: none

SUBMITTED: 17Jul62 DATE ACQ: 23Jul63 ENCL: 00

SUB CODE: ML NO REF SOV: 003 OTHER: 009

Card 2/2

L 20448-66 EWT(m)/EWP(w)/EPF(n)-2/EWA(d)/T/EWP(t) JD/GG

ACC NR: AP6007948 (N) SOURCE CODE: UR/0089/66/020/002/0137/0140

AUTHOR: Ibragimov, Sh. Sh.; Voronin, I. M.; Ladygin, A. Ya. 54 49 13

ORG: none

TITLE: Effect of neutron irradiation on the mechanical properties of high alloy ferritic steel

SOURCE: Atomnaya energiya, v. 20, no. 2, 1966, 137-140

TOPIC TAGS: solid, carbon steel, alloy steel, chromium steel, carbon steel irradiation, steel irradiation, irradiation effect, radiation damage

ABSTRACT: The effect of neutron irradiation at 40—600C on the mechanical properties of low-carbon and alloy steels has been investigated. EI-853 steel (0.13—0.16%C, 16—17% Cr, 1.4—1.8% Si, 1.8—2.0% Nb, 0.9—1.2% Mo) vacuum annealed for 1 hr at 900C and low-carbon steel (0.03% C) vacuum annealed at 700C were irradiated with integral doses ($1.5 \cdot 10^{20}$—$7 \cdot 10^{21}$ neutron/cm^2). Neutron irradiation at temperatures up to 200—240C increased considerably the tensile strength, yield strength, and hardness, and decreased elongation. At temperatures over 200—240C, the effect of irradiation gradually decreased. No effect was observed at temperatures over 500C. The effect of the irradiation

Card 1/2 UDC: 621.039.553:669.15.194

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ACC NR: AP6007948

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becomes noticeable at doses of about $1 \cdot 10^{19}$ neutron/cm^2; intensive strengthening occurs in the range of $1.2 \cdot 10^{19}$—$2.3 \cdot 10^{20}$ neutron/cm^2. At saturation doses ($3 \cdot 10^{20}$ neutron/cm^2 for EI-853 steel) the tensile strength increased by 20% (12 kg/mm^2), the yield strength by 50% (22 kg/mm^2), and the hardness by 35% (65—70 kg/mm^2), and elongation decreased by 70% (from 26 to 8%). Metallographic investigation revealed no structural changes under the effect of irradiation. The effect of irradiation on low-carbon steel is similar, but it becomes noticeable at lower irradiation doses and saturation occurs sooner than in EI-853 steel. Experiments with three low-carbon chromium steels (with 4.12, 8.24, 12.5% Cr) revealed that the presence of chromium does not affect the sensitivity of steel to irradiation. The same is true of nickel. Si, Mo, and Mn on the other hand reduce the sensitivity. The radiation-induced structural defects and change in mechanical properties can be eliminated by annealing at 230—450C. Therefore, irradiation at high temperatures (450—500C) has no effect on mechanical properties. Ferritic alloy behaves in a neutron field the same way as low-carbon steel does, the only difference being that steel alloyed with such elements as Si, Mo, or Mn has a lower incubation period and a higher integral saturation dose. Orig. art. has: 3 tables. [WW]

SUB CODE: 11/ SUBM DATE: 21Aug65/ ORIG REF: 002/ OTH REF: 004

ATD PRESS: 4222

Card 2/2 BK

LEVANOVA, R.V., starshiy nauchnyy sotr.; VORONIN, I.M., mladshiy nauchnyy sotr.; ANTONOVA, G.P., tekhnik; ANIKIENKO, O.M., tekhnik; RESHETNIKOV, N.S., dots.; LEONT'YEV, L.N., mladshiy nauchnyy sotr., otv. za vypusk; BASINKEVICH, I.R., red. izd-va; GRECHISHCHEVA, V.I., tekhn. red.

[Album of working drawings of the basic parts and units of the ZIL-157 motortruck]Al'bom rabochikh chertezhei osnovnykh detalei i uzlov avtomobilia ZIL-157. Moskva, Goslesbumizdat. Pt.2.[The chassis except the ZIL-157 engine]Shassi, krome dvigatelia ZIL-157. 1962. 280 p. (MIRA 15:10)

1. Khimki. TSentral'nyy nauchno-issledovatel'skiy institut mekhanizatsii i energetiki lesnoy promyshlennosti.
(Motortrucks—Design and construction)

KERSANDKI, I.I. [Kershanskyy, I.I.]; VORONIN, L.S.; SVRAEVA, K.E. [Savrayeva, K.Ye.]; GNATISENKO, G.I. [Gnatyshenko, G.I.]; SCIUROVSKI, V.G. [Shchurovskiy V.G.]; SOKOBAEV, S.D. [Shokobayev, Sh.D.]

Semiindustrial research on the electromelting of the raw high-silicon copper concentrates. Analel matalurgie 16 no.1:51-63 Ja-Mr '62.

KERSHANSKIY, I.I.; VORONIN, I.S.; SAVRAYEVA, K.Ye.; GNATYSHENKO, G.I.; SHCHUROVSKIY, V.G.; SHOKOBAYEV, Sh.D.

Pilot plant testing of the electric smelting of high-silicon copper concentrates without previous roating. Tsvet.met. 34 no.9:24-34 S '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnykh metallov (for Kershanskiy, Voronin, Savrayeva). 2. Institut metallurgii i obogashcheniya AN KazSSR (for Gnatyshenko, Shchurovskiy). 3. Kazakhskiy politekhnicheskiy institut (for Shokobayev).
(Copper—Electrometallurgy)

VORONIN, I.S.; KERSHANSKIY, I.I.; TAKEZHANOV, S.T.; BEYLIN, Ya.Z.; SARSEMBAYEV, A.S.; KAGARMANOV, O.Kh.

Introduction of the zinc condensation process in the electrothermal treatment of silver foam. TSvet. met. 38 no.2:18-24 F '65. (MIRA 18:3)

COUNTRY	USSR
CATEGORY	Forestry. FOREST CULTURES.
ABS. JOUR.	Ref Zhur-Biologiya, No.1, 1959, No. 1510
AUTHOR	Voronin, I.V.; Popov, V.M.
INST.	
TITLE	Economic Importance of Forest Belts in the Work of the South-eastern Railway.
ORIG. PUB.	Izv. vyssh. uchebn. zavedeniy. Lesn. zh., 1958, No.2, 34-40
ABSTRACT	No abstract

CARD: 1/1

VASIL'YEV, Prokofiy Vasil'yevich; VORONIN, I.V.; MOTOVILOV, G.P.; SUDACHKOV, Ye.Ya.

[Economics of Soviet forestry] Ekonomika lesnogo khoziaistva SSSR. Moskva, Goslesbumizdat, 1959. 371 p. (MIRA 13:5)
(Forests and forestry--Economic aspects)

VORONIN, I.V.; PERMYAKOV, B.G.

Results of draining the Sibay strip mine. Gor. zhur. no.5:19-22 My '64. (MIRA 17:6)

1. Bashkirskiy medno-sernyy kombinat, g. Sibay (for Voronin).
2. Magnitogorskiy gornometallurgicheskiy institut (for Permyakov).

VORONIN, I.V.; DOLMATOV, G.K.

Disjunctive tectonics of the Sibayskoye pyrite deposit.
Mat. po geol. i pol. iskop. IUzh. Urala no. 3:95-99 '62.
(MIRA 17:7)

VORONIN, I.V., prof., nauchn. red.; PETROPOL'SKAYA, O.A., red.; BERIGARDT, N.Ye., tekhn.red.

[Conference on the results of scientific research in 1961; summaries] Konferentsiia po itogam nauchno-issledovatel'skoi raboty za 1961 god; tezisy dokladov. Voronezh, Voronezhskoe knizhnoe izd-vo, 1962. 155 p. (MIRA 17:3)

1. Voronezh. Lesotekhnicheskiy institut. 2. Kafedra ekonomiki i organizatsii lesnogo khozyaystva i lesnoy promyshlennosti Voronezhskogo lesotekhnicheskogo instituta (for Voronin).

VORONIN, I. V.

PA 40/49T76

USSR/Mining Equipment Jan 49
Machines, Drilling

"Replacing Pneumatic Drive with Electric Drive in Drilling Machines," I. V. Voronin, 1 p

"Gor Zhur" No 1

Type X-2 drilling machines, which can be handled by two men, were converted from pneumatic drive to electric drive because often the compressed air and hoses necessary for pneumatic operation were not available.

[redacted] 40/49T76

231755

VORONIN, I. V.

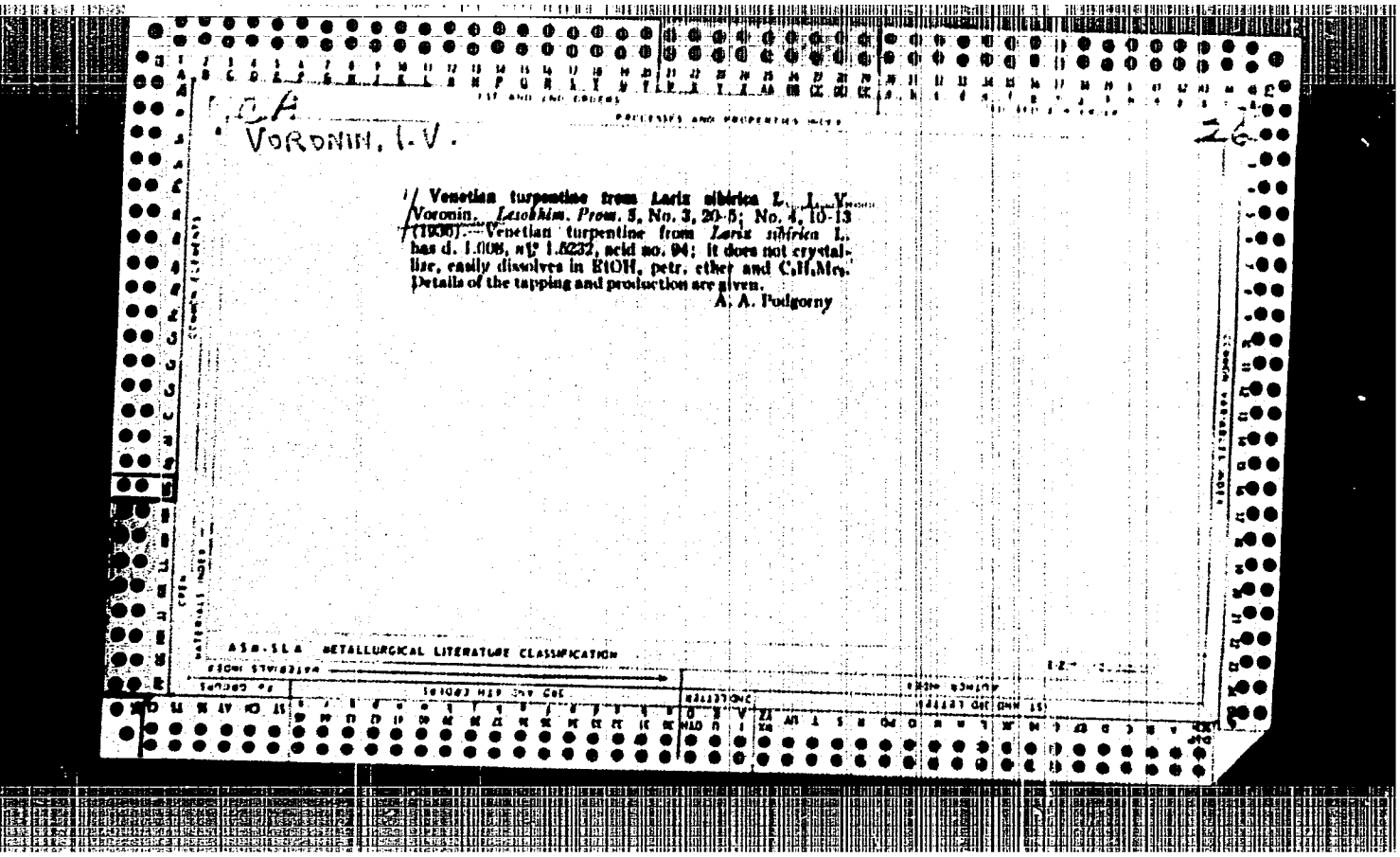
USSR/Metallurgy - Welding, Equipment Oct 52

"Stand for Automatic Welding," I. V. Voronin, Engr

"Avtogen Delo" No 10, pp 22-24

Describes universal stand developed for plants of Min of Constr and Road Mach Bldg. Stand serves as support for traveling welding head, permitting welding of all exterior longitudinal and circular joints of large pieces such as, e.g., boiler drums 5.6 m long and 1.5 m in diam. Gives several photographs illustrating application.

231755



VORONIN, I.V.

Venetian turpentine from Larix sibirica L. I. V. Voronin. *Lesokhim. Prom.* 5, No. 3, 20-5; No. 4, 10-13 (1936).—Venetian turpentine from *Larix sibirica* L. has d. 1.008, n_D^{20} 1.5232, acid no. 94; it does not crystallize, easily dissolves in EtOH, petr. ether and $CHCl_3$. Details of the tapping and production are given.

A. A. Podgorny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

VORONIN, Ivan Vasil'yevich, prof.; ZDRAVKOVSKIY, Dionis Iosifovich; KOZLOV, Nikolay Andreyevich; LEBEDEV, Arseniy Andreyevich; SEMENOV, Izosim Alekseyevich; SUDACHKOV, Yevgeniy Yakovlevich; VASIL'YEV, P.V., doktor ekon. nauk, retsenzent; KARASIKOV, S.A., retsenzent; MOTOVILOV, G.P., red.; SVETLAYEVA, A.S., red. izd-va; POPOVA, V.V., tekhn. red.

[Economics, organization and planning of lumbering production in lumbering camps] Ekonomika, organizatsiia i planirovanie lesokhoziaistvennogo proizvodstva v leskhozakh i lespromkhozakh. Izd.2, dop. i perer. [By] I.V.Voronin i dr. Moskva, Goslesbumizdat, 1963. 299 p. (MIRA 17:2)

VORONIN, Ivan Vasil'yevich; SUDACHKOV, Ye.Ya., red.; SVETLAYEVA, L.S., red.izd-va; SHIBKOVA, R.Ye., tekhn. red.

[Organization of combined forest working circles and logging camps in forests of the first and second categories]Organizatsiia kompleksnykh khoziaistv v lesakh pervoi i vtoroi grupp. Moskva, Goslesbumizdat, 1962. 81 p. (MIRA 16:3)
(Forest management)

VORONIN, Ivan Vasil'yevich

Ekonomika Lesnogo Khozyaystva, Organizatsiya I Planirovaniye Proizvodstva (The Economics of The Lumber Economy, Organization and Planning of Production, By) I. V. Voronin (1 Dr.) Moskva, Goslesbumizdat, 1958.

292 P. Tables

Bibliographical Footnotes

VORONIN, I.V.

VORONIN, I.V., dotsent; KAPPER, O.G., professor; NAUMENKO, I.M., professor, OSTROVSKIY, P.Ya., dotsent; RUBTSOV, V.I., dotsent.

Some observations on "Trudy Instituta lesa." Vest. AN SSSR 24 no.8:123-129 Ag '54. (MLRA 7:9)

1. Nauchnyye rabotniki Voronezhskogo lesotekhnicheskogo instituta (avtory retsenzii).
(Forests and forestry--Periodicals)

VORONIN, Ivan Vasil'yevich; SUDACHKOV, Ye.Ye., red.; PLESHANOVA, M.I., red.izd-va; KUZNETSOVA, A.I., tekhn.red.

[Analytical principles of the economic operation of a lumber camp] Osnovy analiza khozyaistvennoi deiatel'nosti leskhoza. Moskva, Goslesbumizdat, 1960. 45 p. (MIRA 13:9)
(Lumbering--Accounting)

112-1-1407

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 1, p.214 (USSR)

AUTHOR: Voronin, I.V.

TITLE: Automation and Mechanization of Electric Welding Operations at the Vyksa Plant of Crushing and Grinding Equipment (Avtomatizatsiya i mekhanizatsiya elektrosvarochnykh rabot na Vyksunskom zavode drobil'noraz mol-nogo oborudovaniya)

PERIODICAL: Sbornik: Avtomatizatsiya tekhnol. protsessov v mashinostr. Moscow, AN SSSR, 1955, pp.264-266

ABSTRACT: Bibliographic entry

Card 1/1

L 00487-66 EWT(1)/EWT(m)/EPF(n)-2/EWG(m)/EPA(w)-2/EWP(t)/EWP(b) IJP(c) JD/JG/AT

ACCESSION NR: AP5020566 UR/0294/65/003/004/0627/0631

66.065

AUTHOR: Donskoy, A. V.; Dresvin, S. V.; Voronin, K. K.; Vol'nets, F. K.

TITLE: Some special characteristics of processes for growing high melting crystals in high frequency plasma burners

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 4, 1965, 627-631

TOPIC TAGS: plasma burner, crystal, plasma physics, argon

ABSTRACT: The article advances construction details of a high frequency burner which assures long term operation at sufficiently high values of the discharge power. The simplest type of induction plasma burner consists of an inductive discharge without electrodes in a quartz tube. By blowing gas through the tube, a plasma flame is formed at the end of the tube which resembles an ordinary chemical flame. Feed source for the burner is a lamp generator with a power of 5-30 kilowatts and a frequency of 1-60 megacycles. If no measures were taken for heat shielding the quartz walls of the tube against the high temperatures of the

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ACCESSION NR: AP5020566

plasma (9000-10,500 K), the walls would melt within 20-30 sec. Three shielding methods are outlined: 1) burner with forced gas cooling of the tube 2) burner with water cooling, and 3) burner with cooling coils. To obtain crystals of high melting materials in a high frequency plasma burner with a metal water cooled chamber, the standard powder for a gas flame burner was used. Crystal growth was 13-15 mm/hour. A long focus lens was used for observation of the crystal growth. Addition of a small percent of air in the argon fed to the burner improves the heat characteristics of the burner. Orig. art. has: 3 figures

ASSOCIATION: Leningradskiy politekhnicheskiy institut im. M. I. Kalinina (Leningrad Polytechnic Institute)

SUBMITTED: 25Jun64 ENCL: 00 SUB CODE: SS, ME

NR REF SOV: 002 OTHER: 003

Card 2/2

VORONIN, Ivan Vasil'yevich; VOSKRESENSKIY, Dmitriy Alekseyevich; KOZLOV, Nikolay Andreyevich; LEBEDEV, Arseniy Andreyevich; PERSPECHIN, Boris Mikhaylovich; SUDACHKOV, Yevgeniy Yakovlevich, kand.ekon. nauk; CHULITSKIY, Lev Dmitriyevich; KARASIKOV, G.A., prepodavatel', retsenzent; MOTOVILOV, G.P., doktor sel'skokhoz.nauk, red.; SHAKHOVA, L.I., red.izd-va; FUKS, Ye.A., red.izd-va; BACHURINA, A.M., tekhn.red.

[Forestry economics; organization and production planning] Ekonomika lesnogo khoziaistva; organizatsiia i planirovanie proizvodstva. Moskva, Goslesbumizdat, 1958. 292 p. (MIRA 12:3)

1. Khrenovskiy tekhnikum lesnogo khozyaystva (for Karasikov).
(Forests and forestry--Economic aspects)

VORONIN, Ivan Vasil'yevich, dotsent; VASIL'YEV, Prokofiy Vasil'yevich, prof.; ALTSYSHKIN, Sergey Petrovich, inzh.; ISHIN, Dmitriy Petrovich, inzh.; KOSTYUKOVICH, Fedor Trofimovich, dotsent; MAKAROV, Grigoriy Yefimovich, inzh.; RADETSKIY, Vitaliy Il'ich, kand.sel'skokhoz.nauk; SABO, Yevgeniy Dyul'yevich, kand.tekhn. nauk; SUDACHKOV, Yevgeniy Yakovlevich, doktor sel'skokhoz.nauk; FEDOROVYKH, Mikhail Leonidovich, assistent; YANYSHKO, Anatoliy Davydovich, assistent; FUKS, Ye.A., red.izd-va; KUZNETSOVA, A.I., tekhn.red.

[Organizing and planning work at forestry enterprises] Organizatsiia i planirovanie proizvodstva na predpriiatiiakh lesnogo khoziaistva. Moskva, Goslesbumizdat, 1960. 328 p. (MIRA 14:2)

(Forest management)

1. K. BALODIS, K. I. VORONIN, A. KRIVOSTENKO

2. USSR (600)

4. Bee Culture - Equipment and Supplies

7. Bee flights during wintering. Pchelovodstvo 30 no. 1. 1953.

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

FEDOROV, Leonid Vasil'yevich; OVCHARENKO, Ye.P., red.; VORONIN, K.P., tekhn. red.

[Television equipment at the 1960 Exhibition of the Achievements of the National Economy of the U.S.S.R.] Televizionnaia apparatura na VDNKh; ekspozitsiia 1960. Moskva, Gos. energ. izd-vo, 1960. 79 p. (Massovaia radiobiblioteka, no.403) (MIRA 14:7)
(Television—Exhibitions) (Moscow—Exhibitions)

SAMOYLOV, Georgiy Pavlovich; KANAYEVA, A.M., red.; TARASOV, F.I., red.; VORONIN, K.P., tekhn. red.

[Maintenance of a television receiver] Ukhod za televizorom. Pod obshchei red. A.M.Kanaevoi. Moskva, Gos. energ. izd-vo, 1961. 37 p. (Massovaia radiobiblioteka, no.389) (MIRA 15:3)
(Television--Receivers and reception)

MALISHEVSKIY, Nikolay Aleksandrovich; GIRSHFEL'D, V.Ya., red.; VORONIN, K.P., tekhn. red.

[Using sea water in cooling systems of electric power plants] Ispol'zovanie morskoi vody v sistemakh okhlazhdeniia elektrostantsii. Moskva, Gos. energ. izd-vo, 1961. 198 p. (MIRA 14:8)
(Electric power plants--Cooling)

YELIZAROV, Pavel Pavlovich; SHITSMAN, S.Ye., inzh., retsenzent; KATKOVSKAYA, K.Ya., red.; VORONIN, K.P., tekhn.red.; LEKONOV, G.Ye., tekhn.red.

[Operating high-pressure boiler units at electric power plants] Ekspluatatsiia kotel'nykh ustanovok vysokogo davleniia na elektrostantsiiakh. Moskva, Gos.energ.izd-vo, 1961. 399 p. (MIRA 14:6)

1. Moskovskiy ordena Lenina energeticheskiy institut (for Shitsman).
(Boilers) (Steam power plants)

SHEVELEV, V.F., nachal'nik; VORONIN, K.N., sekretar' partkoma inzhener.

Supplying industry continuously. Vest.mash. 33 no.4:66-67 Ap '53. (MLRA 6:5)

1. Otdel metallov ChTZ. (Machinery industry)

VORONIN, K.V.

Induction of labor. Nauch.trudy Kaz.gos.med.inst. 14:391-393 '64.

Importance of some factors for the beginning and the course of induced labor. Ibid.:395-397 '64. (MIRA 18:9)

1. I kafedra akusherstva i ginekologii (zav. - prof. R.G. Bakiyeva, prof.-konsul'tant P.V.Manenkov) Kazanskogo meditsinskogo instituta.

BAKIYEVA, R.G.; VORONIN, K.V.; KOROL'KOVA, O.A.; MIRONOVA, T.A.

Effect of protracted pregnancy on the course of labor and the fetus. Nauch. trudy Kaz. gos. med. inst. 14:359-361 '64. (MIRA 18:9)

1. 1-ya kafedra akusherstva i ginekologii (zav. - prof. R.G. Bakiyeva, prof.-konsul'tant P.V.Manenkov) Kazanskogo meditsinskogo instituta.

VORONIN, K.Ye., entomolog (g. Ussuriysk)

The collembola Sminthrus sp., a vegetable pest in Khabarovsk Territory. Zashch. rast. ot vred. i bol. 7 no.7:59 Jl '62. (MIRA 15:11)
(Khabarovsk Territory—Vegetables—Diseases and pests)
(Khabarovsk Territory—Collembola—Extermination)

KUPALOV, P.; VOLOKHOV, A.; VORONIN, L.

Influence of V.I.Lenin's ideas on the development of the theory of higher nervous activity. Zhur. vys. nerv. deiat. 10 no.2: 161-166 Mr-Ap '60. (MIRA 14:5)
(LENIN, VLADIMIR IL'ICH, 1870-1924)

VORONIN, L. (Sevastopol').

Eliminating background noise from alternating current. Radio no.7:Supp.10 Jl '57. (MLRA 10:8)

(Radio--Noise)

APOSTOL, Gh.; VORONIN, L.G.

Modifications produced in the bioelectric activity of the rabbit cerebral cortex by the association of sound with rhythmical light. Studii cerc biol s. zool 16 no. 4:319-326 '64.

PROCESSES AND PROPERTIES INDEX

CA

11-5

Secretory function of the stomach of *Macaca rhesus*. N. E. Bocherystova and L. G. Voronin. *Bull. acad. sci. U. R. S. S., Ser. biol.* 1943, 361-9(English summary)).—On the basis of expts. on rhesus monkeys by means of Heidenheim pouch, gastric fistulas, esophagotomy and combinations thereof, it was shown that: the gastric juice of these animals has very low acidity (0.01-0.043%); protein digestion in the stomach apparently is performed partly by trypsin arising from duodenal juices; and the gastric juice contains pepsin (as shown by digestion of proteins upon addn. of 0.5% HCl). The amt. of the juice depends on food-excitation of the animal, the consistency of the food and its other properties, as shown by expts. on "simulated feeding." The very low acidity of the gastric juice is probably caused by the fruit-vegetable diet. The presence of the amylase in the gastric juice is not excluded.

G. M. Kosolapoff

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

VORONIN, L. G.

"On the Problem of Imitative Faculties of Lower Monkeys." Zef. Zhur., Vol 33, No 3 1947, p 373. Inst of Evolutionary Physiology and Fathology of Higher Nervous Activity imeni Academician I. P. Pavlov, Acad Med Sci, and Sukhumi Biological Station, Acad Med Sci USSR.

SO: U-4396

VORONIN, L. G.

"Analysis and Synthesis of Complex Stimuli by Normal and Damaged Cerebral Hemispheres," Moscow, 1948

VORONIN, L. G.

PA 77T71

USSR/Medicine - Reflexs, Motor Apr 1948
Chemistry - Phenamine

"The Effect of Phenamine on the Motor Reflexes of Makak Monkeys," L. G. Voronin and G. I. Shirkova, Sukhumi Biol Sta, Acad Med Sci USSR, 4 pp

"Dok Ak Nauk SSSR" Vol LX, No 3

Studies to determine stimulating effect of phenamine on motor reflexes of subject monkeys. Submitted by Acad L. A. Orbeli 27 Feb 1948.

77T71

VORONIN, L. G.

VORONIN, L. G. "On the secretory and motor functions of the monkey stomach", Trudy Sukhum. biol. stantsii Akad, med. nauck SSSR, Vol. I, 1949, p. 67-69.

SO: U-4393, 19 August 53, (Letopis 'Zhurnal 'nykh Statey', No. 22, 1949).

VORONIN, L. G.

VORONIN, L. G. and SHIRKOVA, G. I. "On the effect of extended interruption in work on the conditioned motor reflexes of macaco rhesus monkeys", Trudy Bukhum. biol. stantsii Akad. med. nauk SSSR, Vol. I, 1949, p. 162-63.

SO: U-4393, 19 August 53, (Letopis 'Zhurnal 'nykh Statey', No. 22, 1949).

VORONIN, L. G.

Voronin, L. G. - "In the forests of Ethiopia" (Hunting apes), Vokrug sveta, 1949, No. 4, p. 53-57.

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

VORONIN, L.G.

Critique of antipavlovian conceptions by I.S. Beritashvili. Fiziol. zh.SSSR 37 no.3:261-272 May-June 51. (CLML 21:1)

VORONIN, L.G.

Certain data on conditioned reflex to time in lower monkeys (baboons, Macaca, and marmoset. Zh. vysshei nerv. deiat., Pavlova 1 no. 2:213-222 Mar-Apr 1951. (CLML 22:5)

1. Institute of Physiology imeni I. P. Pavlov of the Academy of Sciences USSR.

VORONIN, L.G.

Role of training of the inhibitory process in the higher nervous function in monkeys; effect of training of extinction of inhibition in one point in the cortex on the same inhibition in other points. Zh. vyssheĭ nerv. deiat. Pavlova 1 no.4:566-570 July-Aug 1951. (CIML 23:2)

1. Institute of Physiology imeni I. P. Pavlov, Academy of Sciences USSR.

VORONIN, L.G.

Results of the study of the higher nervous function in lower monkeys. Zh. vysshei nerv. deiat. 2 no. 1:58-69 Jan-Feb 1952. (CLML 23:3)

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VORONIN, L.G.

Mechanisms of chain temporary connections. Zh. vyssheĭ nerv. deiat. 2 no. 4:535-546 Jul-Aug 1952. (CIML 23:3)

1. Institute of Physiology imeni I. P. Pavlov of the Academy of Sciences USSR.

VORONIN, L.G.

[Analysis and synthesis of complex stimuli in the higher animals] Analiz i sintez slozhnykh razdrazhitelei u vysshikh zhivotnykh. [Leningrad] Medgiz, Len. otd-nie, 1952. 198 p. (MLRA 6:5)
(Conditioned response)

BOLOTINA, O.P.; VORONIN, L.G., zaveduyushchiy.

Conditioned motor responses to time in dogs. Trudy Inst. fiziol. 1:29-34 '52. (MLRA 6:8)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti. (Conditioned response)

ROKOTOVA, N.A.; VORONIN, L.G., zaveduyushchiy.

Formation of temporary association in dogs under the effect of traces of indifferent stimuli. Trudy Inst.fiziol. 1:35-42 '52. (MLRA 6:8)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti.
(Conditioned response)

FIRSOV, L.A.; VORONIN, L.G., zaveduyushchiy.

Data for the study of conditioned motor responses to chains of stimuli in monkeys. Trudy Inst.fiziol. 1:187-195 '52. (MLRA 6:8)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti. (Conditioned response)

BOLOTINA, O.P.; VORONIN, L.G., zaveduyushchiy.

Conditioned motor responses to time in monkeys. Trudy Inst.fiziol. 1:196-204 '52. (MLRA 6:8)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti. (Conditioned response)

MALINOVSKIY, O.V.; VORONIN, L.G., zaveduyushchiy.

Secondary conditioned reflexes in monkeys. Trudy Inst.fiziol. 1:205-212 '52. (MLRA 6:8)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti. (Conditioned response)

PANKRATOV, M.A.; VORONIN, L.G., zaveduyushchiy.

Experimental sleep in monkeys. Trudy Inst.fiziol. 1:213-221 '52.
(MLRA 6:8)

1. Laboratoriya sravnitel'noy fiziologii vysshey nervnoy deyatel'nosti.
(Sleep)

VORONIN, L. G.

Conditioned Response

In "the capital of conditioned reflexes." Priroda, 41, No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, May 1952 1953. Unclassified.

USSR/Biology - Conditioned Reflexes Jan 52

"In the Capital of Conditioned Reflexes," Prof L. G. Voronin

"Priroda" No 1, pp 63-71

Discusses in detail work on conditioned reflexes and brain activity carried out at Pavlovo (Koltushi) Labs, Inst of Physiol imeni I. P. Pavlov, Acad Sci USSR. Says that it was established there that the behavior of insects is not based on instinct alone: Silk worms which have been conditioned to spin a longer filament by

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VORONIN, PROF L. G.

raising the temp and excluding light at the same time, finally react to darkness alone in the same manner (darkness normally results in a shorter filament). The influence of the brain on inner organs has been studied for a long time in Acad K. M. Bykov's laboratory. In E. Sh. Ayrapetyants's laboratory, formation of conditioned reflexes by the irritation of inner organs is being studied. The effect of medicinal agents on conditioned reflexes is being investigated. Recently, the effect of brain activity on blood coagulation was established. Much work is being done on improving the production and utilization of livestock. It was established that feeding of iodized casein to cows raises milk production.

211T17

VORONIN, L.G.

WORONIN, L.G.

On comparative physiology of higher nervous activity. Acta physiol. hung. 4 Suppl:20-22 1953. (CLML 25:1)

1. Of the Institute of Physiology imeni I. P. Pavlov of the Academy of Sciences USSR, Leningrad.

VORONIN, L.

"Conference dedicated to Pavlov's theory held in Leipzig. Tr from the Russian" (p.85)
PRIRODA (Bulgarska Akamemiia Na Nauldite) Sofiya Vol 2 No 5 Sept/Oct 1953

SO: East European Accessions List Vol 2 No 8 Aug 1954

VORONIN, L. Professor

"Soviet Report on International Congress of Physiology Held in Montreal in September 1953."

SO: Meditsinskiy Rabotnik, Vol. 17, No. 9 (1233), p.4, 1953

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(REFLEX, CONDITIONED, form. rate)

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Title : Some results of a comparative physiological study of higher nervous activity

Periodical : Izv. AN SSSR, Ser. biol. 5, 122-134, Sep-Oct 1954

Abstract : Discusses shortcomings of experiments on higher nervous activity during Pavlov's time. Studied higher nervous activity of representatives of various classes of vertebrates (fish, reptiles, birds, and mammals) by means of conditioned reflexes obtained by the usual stimuli (light, sound) and food. Method used is such that natural food-obtaining movements serve as an index of conditioned-reflex activity. Tables; photographs.

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Submitted : July 5, 1954

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Vest.Mosk.un. no.9:39-54 S '55. (MLRA 9:1)
(Conditioned response) (Orientation)