"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZH, V.

Category : POLAND/Nuclear Physics - Elementary Particles

C-3

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3163

Author : Chizh, V., Savitskiy, G.

Title : Polarization of Nucleons in Photonuclear Reactions

Orig Pub : Byul. Pol'skoy AN, 1956, Otd. 3, 4, No 3, 137-141

Abstract : See Ref. Zh. Fiz. 1957, 6019 [sic!]

Card : 1/1

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 164 (USSR) SOV/137-58-11-22983

AUTHORS: Voloshko, D. M., Chizh, V. A., Shchesno, L. P.

TITLE: Investigation of the Diffusion of Sulfur in Metal With the Aid of Radioactive Tracers (Issledovaniye diffuzii sery v metall s pomoshch'yu radioaktivnykh indikatorov)

PERIODICAL: Byul. nauchno-tekhn. inform. Vses. n.-i. trubnyy in-t, 1958, Nr 4-5, pp 194-198

ABSTRACT: In order to verify the hypothesis that the source of contamination of 20A steel pipes with sulfur lies in the fine $FeSO_4$ crystals remaining on the surface of the pipes after pickling in H_2SO_4, an investigation with tagged atoms was conducted. Fine $FeSO_4$ crystals containing radioactive S were applied onto specimens 1.5x25x50 mm of 20A steel which were dried and subjected to various types of heat treatment: Annealing (920°C, 15 min), normalization (920°, 15 min; 870°, 15 min) and recrystallization (670°, 15 min), after which a layer by layer determination of the radioactivity of the specimens was performed. It is established that the diffusion of S during annealing (920°) occurs to a depth of 0.17 mm and upon recrystallization (670°) to 0.04 mm. T. F.

Card 1/1

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

S/123/61/000/004/015/027
A004/A104

AUTHORS: Rulla, N. V.; Chizh, V. A., and Solov'yev, Yu. G.

TITLE: Some problems of metal motion and the distribution of elements during the casting of hollow tube blanks by the centrifugal method

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 4, 1961, 19, abstract 4G147. ("Byul. nauchno-tekhn. inform. Ukr. n.-i. trubn. in-t, 1959, no. 8, 53-56)

TEXT: Investigations showed that phosphorus and sulfur, at a crystallization rate which is lower than the liquation rate, are distributed at the grain boundaries in the form of a lattice and separate globules which are connected among each other by fine webs. However, at high crystallization rates a relatively uniform distribution of the elements over the wall cross section can be observed. Calculations proved that the molecular diffusion does not affect the balancing of phosphorus and sulfur concentrations. The crystallization rate of the outer layers of tubular blanks was determined experimentally: when superheating of the metal was increased, the crystallization rate decreased. There are 2 figures.

S Zhukovskiy

[Abstractor's note: Complete translation]

Card 1/1

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

ACCESSION NR: AT4045009 S/0000/64/000/000/0057/0059

AUTHOR: Karpov, V. M.; Litvinenko, V. N.; Chizh, V. A.

TITLE: Checking extremely thin-walled tubes by means of radioactive isotopes

SOURCE: Soveshchaniye po probleme izpol'zovaniye atomnoy energii. Kiev, 1961. Radiatsionnaya avtomatika, izotopy* i yaderny*ye izlucheniya v nauke i tekhnike (Radiation automation control systems, isotopes, and nuclear radiation in science and technology); doklady* soveshchaniya. Kiev, izd-vo AN UkrSSR, 1964, 57-59

TOPIC TAGS: thickness measurement, measuring device, radioactive measurement, pipe manufacture, thin walled tube, radioscopy, direct radioscopy

ABSTRACT: The three principal ways to measure the wall thickness of a tube by means of radioactive isotopes are illustrated schematically in Fig. 1 of the Enclosure. The chord method suffers from two deficiencies: the need for a rigidly fixed and extremely thin radiation beam. The reflected radiation method is less sensitive than the direct radioscopy method and, moreover, the saturation thickness is comparatively small. For Sr^{90}, for example, the range measurable by the former method is only 0.1-15 mm. Large thicknesses are most conveniently checked by direct radioscopy. The remainder of the present paper is devoted to a description of a direct radioscopy device for wall-thickness measurements. A special electromag-

Card 1/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

ACCESSION NR: AT4045009

netic unit for contactless mounting and orientation of the radioactive source inside the tube had to be worked out in this connection and is described in detail. With this device, the scatter of thickness measurements is only 3-5 μ and the absolute accuracy can reach 5-8 μ. Orig. art. has: 3 figures and 1 formula.

ASSOCIATION: none

SUBMITTED: 07Jan64 ENCL: 01 SUB CODE: IE, NP

NO REF SOV: 000 OTHER: 000

Card 2/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

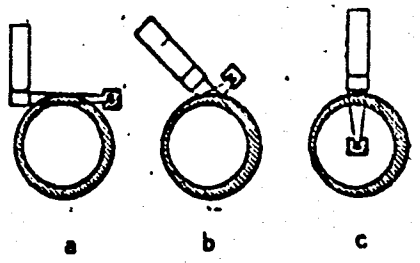


Fig. 1. Techniques of measuring tube wall thickness and its variations: a) from the chord; b) from the intensity of the reflected radiation; c) by direct radioscopy.

rd 3/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

ACCESSION NR: AT4045010 S/0000/64/000/000/0160/0164

AUTHOR: Chizh, V. A.; Rudoy, V. S.; Rulia, N. V.; Chekmarev, I. A.; Fesenko, G. M.; Nesterova, N. N.

TITLE: Quality control of high-alloy austenitic steel ingots by the method of Gamma-defectoscopy

SOURCE: Soveshchaniye po probleme izpol'zovaniye atomnoy energii. Kiev, 1961. Radiatsionnaya avtomatika, izotopy* i yaderny*ye izlucheniya v nauke i tekhnike (Radiation automation control systems; isotopes, and nuclear radiation in science and technology); doklady* soveshchaniya. Kiev, izd-vo AN UkrSSR, 1964, 160-164

TOPIC TAGS: steel ingot, steel casting, steel forging, high alloy steel, austenitic steel, steel ingot structure, steel ingot defect, ingot defect detection, Gamma defectoscopy

ABSTRACT: Air bubbles, porosities and blow holes are common defects in ingots of high-alloy austenitic steel. Because of the low plasticity of such steel at high temperatures, these defects lead to cracks and porosity and even to complete rupture of the ingot during forging and rolling. In order to facilitate the detection of such defects in steel ingots, the authors tested the method of γ-defectoscopy and compared the results with the behavior of the ingots during forging. Eleven

Card 1/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

ACCESSION NR: AT4045010

ingots (80 x 270 mm) were examined by transillumination with γ-rays from Co-60, revealing deep bubbles and porosities in nearly all cases. During subsequent forging to a diameter of 40-43 mm (3-5 forgings with a 350-kg pneumatic hammer at 1150-1180C), the 2 ingots with the deepest bubbles broke completely, and several others showed defective behavior, thus confirming the effectiveness and accuracy of the γ-defectoscopic technique. Finally, sections (3 cylindrical and 5 conical) were cut from the ingots and the compressibility was tested. The maximal critical compression (10%) was obtained in a section which was free of defects, showing that the plasticity is decreased by both bubbles and porosity. The authors conclude that quality control by this method will permit establishment of maximal permissible limits for defects in steel ingots, which is of particular importance in the case of ingots intended for pipe manufacture. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 07Jan64 ENCL: 00 SUB CODE: MM, IE

NO REF SOV: 000 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZH, V.A., inzh.

Investigating the character of metal deformations in pipe rolling with the help of radioactive isotopes. Proizv. trub no.12:41-43 '64. (MIRA 17:11)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

L 08947-67 EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/JM

ACC NR: AP6031515 SOURCE CODE: UR/0383/66/000/004/0035/0036

AUTHOR: Rudoy, V. S. (Candidate of technical sciences); Chekmarev, I. A. (Candidate of technical sciences); Sukonnik, I. M.; Geppa, S. A.; Serbin, I. V.; Yermolov, I. V.; Chizh, V. A.; Derbasov, V. I.; Kurilenko, V. Kh.; Kirvalidze, N. S.; Pasternak, N. M.

58

ORG: none

TITLE: Improving the plasticity of Kh18N10T tube steel by vacuum-arc melting

SOURCE: Metallurgicheskaya i gornorudnaya promyshlennost', no. 4, 1966, 35-36

TOPIC TAGS: austenitic steel, plasticity, ~~steel plasticity improvement~~, vacuum arc, ~~[illegible]steel~~, VACUUM MELTING, METAL TUBE / KH18N10T STEEL

ABSTRACT: The plasticity of conventionally arc melted and vacuum arc melted Kh18N10T steel was tested by rolling conical specimens in a piercing mill and by torsion tests, both at 1000—1300C. It was found that in piercing, the critical reduction depends primarily upon the α-phase content. Metal with a high α-phase content cannot be easily pierced at a temperature of 1200C or higher regardless of the melting method. The content of impurities and gases is of secondary importance. In torsion tests, plasticity was found to depend mainly upon the metal purity. Inasmuch as vacuum arc melting yields steel of a higher purity, its plasticity is also higher than that of conventionally melted steel. The increase of α-phase con-

Card 1/2 UDC: 669.15—194.621.774.35

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

L 08947-67

ACC NR: AP6031515

0

tent up to a certain limit does not substantially affect the plasticity of Kh18N10T steel, but an increase over this limit lowers the steel plasticity. Orig. art. has: 2 figures. [ND]

SUB CODE: 11,13 / SUBM DATE: none/ ORIG REF: 002/

Card 2/2 mat

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

L 31704-65 EPA(s)-2/EWT(m)/EPF(n)-2/EWA(d)/EWP(t)/EWP(z)/EWP(t) Pt-7/Pu-4
MW/JD/WW/JG
ACCESSION NR: AP5014243 UR/0383/65/000/002/0044/0048 37
621.774.1 36

AUTHOR: Fulla, N. V. (Candidate of technical sciences); Solov'yev, Yu. G.; Chikh, V. A.

TITLE: The effect which physical and mechanical factors in the centrifugal casting process have on quality in hollow steel pipe billets

SOURCE: Metallurgicheskaya i gornorudnaya promyshlennost', no. 2, 1965, 44-48

TOPIC TAGS: pipe manufacture, centrifugal casting, steel pipe, metal mechanical property

ABSTRACT: The authors show the advantages of centrifugal casting over stationary casting of pipe billets with a parallel series using 35 carbon steel and Kh18N9T stainless steel. The speed of solidification, (determined by the pouring rate), and the speed of mold rotation (1000-1500 RPM for the centrifugal case) were the main variables while the presence or absence of vibration during solidification was also studied. Mechanical properties were studied. The authors found macroetching of the billets to be unreliable and studied the surface by including the isotope

Card 1/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

L 5704-65
ACCESSION NR: AP5014243

^{35} in the melt and taking autoradiographs of the solidified billet. During centrifugal casting the interaction between the breaking off of pieces of newly solidified crust and remaining liquid metal is dependent on the vibration, in addition to the solidification rate, in that vibration provides for a much less dendritic and acicular structure giving better mechanical properties. The effect of reheating the metal 40°C above the liquidus gives minimal properties while ductility and impact strength are increased for a 90° reheat above liquidus. Water quenching after holding for 20 minutes at 1150°C gave a 30-40% increase in mechanical properties. Specimens for mechanical tests were taken from both internal and external sections of the billets. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM, IE

NO REF SOV: 000 OTHER: 000

Card 2/2 MB

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

ACC NR: AR6035414 SOURCE CODE: UR/0137/66/000/009/V062/V062

AUTHOR: Chizh, V. A.

TITLE: Autoradiographic investigation of the influence of sulfur on the formation of hot cracks in centrifugally-cast pipe stock

SOURCE: Ref. zh. Metallurgiya, Abs. 9V429

REF. SOURCE: Sb. Proiz-vo trub. Vyp. 16. M., Metallurgiya, 1965, 102-105

TOPIC TAGS: cast steel, steel microstructure, crack propagation, tracer study, sulfur, centrifugal casting

ABSTRACT: The investigations were made with radioactive S^{35}, which was introduced into the liquid carbon steel prior to pouring the casting. The results of the investigation have shown that local accumulations of sulfur compounds are produced during crystallization, and the metal failure occurs at these accumulations. In establishing the limiting content of sulfur at which no cracks are produced in the castings, account must be taken of the specific conditions under which the cast piece is obtained. These limits are different for different grades of steel. 2 illustrations. (From RZh Mash.) [Translation of abstract]

SUB CODE: 11, 13

Card 1/1 UDC: 621.774.1:621.74.042.001.5:621.748

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZH, Yaroslav Semenovich [Chyzh, IA.S.]; SICHEVSKIY, Y. [Sychevs'kyi, I.], red.; BURKATOVSKAYA, TS. [Burkatovs'ka, Ts.], tekhn.red.

[I am fattening 500 swine] Vidhodovuiu 500 svynei. L'viv, Knyzhkovo-zhurnal'ne vyd-vo, 1959. 10 p. (MIRA 12:12)
(Swine--Feeding and feeds)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZH, Yaroslav Semenovich, svinar', Geroy Sotsialisticheskogo Truda, deputat L'vovskogo oblastnogo Soveta deputatov trudyashchikhsya; BANNIKOV, N.A., red.; RUDNIK, A.V., red.; FEDOTOVA, A.F., tekhn.red.

[Produce more inexpensive pork] Bol'she deshevoi svininy. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 34 p. (MIRA 13:12)

1. Kolkhoz imeni Shevchenko Zolochevskogo rayona L'vovskoy oblasti (for Chizh).
(Swine)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZH, Yaroslav Semenovich; KATS, G., red.; TELPIS, V., tekhn. red.

[Fattening large groups of swine] Yngresharia unor grupe mar' de porch'. [Otkorm bol'shikh grupp svinei]. Kishineu, Editura de stat "Karia moldoveniaske," 1960. 19 p. [In Moldavian] (MIRA 14:12)
(Swine)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZH-DEMIDOVICH, V., inzhener.

Soil-cement blocks for the construction of one- and two-story buildings. Stroitel' no.8:18-19 Ag '57. (MLRA 10:9)
(Building blocks)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

KATSEVMAN, L.V.; VOKHOMSKIY, M.N., inzh., otv. red.; DIKHTER, Ya.Ye., red.; DYUBEK, L.K., red.; ZHEMOCHKINA, V.B., red.; ITTSIGSON, F.L., inzh., red.; KASTEL', I.N., kand. arkhitektury, red.; CHIZH-DEMIDOVICH, V.V., red.; SHEVCHENKO, V.A., inzh., red.

[Collection of materials on results of research and experimental work in 1960-1961]Sbornik materialov po rezul'tatam nauchno-issledovatel'skikh i eksperimental'nykh rabot rabot 1960-1961 gg. Moskva, 1961. 142 p. (MIRA 15:10)

1. Moscow. Institut tipovogo i eksperimental'nogo proyektirovaniya.

(Building research)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEK, V.; NOVAK, M.

In reference to V.I.Ponomarev's article "Damping by an electric filter in the pass band." Elektrosviaz' 14 no.6:72-73 Je '60. (MIRA 13:7)
(Electric filters)
(Ponomarev, V.I.)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

VLASYUK, P.A., akademik, otv.red.; YUR'YEV, V.Ya., akademik, zam. otv. red.; BUZANOV, I.F., akademik, red.; DANILENKO, I.A., red.; DELONE, L.N., doktor biolog.nauk, red.; KUCHUMOV, P.V., doktor sel'skokhoz.nauk, red.; POLYAKOV, I.M., red.; STRONA, I.G., kand.sel'skokhoz.nauk, red.; TKACHENKO, F.A., kand.sel'skokhoz. nauk, red.; CHIZHENKO, I.A., kand.ekonom.nauk, red.; LESOVICHENKO, Ya.V., red.; MANOYLO, Z.T., tekhn.red.

[Vegetables and potatoes; works of scientific session, No.2] Ovoshchnye kul'tury i kartofel'; trudy nauchnoi sessii, vypusk 2. Kiev, Izd-vo Ukrainskoi Akad.sel'khoz.nauk, 1960. 132 p. (MIRA 14:1)

1. Ukrainskiy ordena Lenina nauchno-issledovatel'skiy institut rasteniyevodstva, selektsii i genetiki. 2. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Danilenko). 3. Chlen-korrespondent AN USSR (for Strona).
(Vegetable gardening) (Potatoes)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

VLASYUK, P.A., akademik, otv.red.; YUR'YEV, V.Ya., akademik, zam.otv.red.; BUZANOV, I.F., akademik, red.; DANILENKO, I.A., red.; DELONE, L.N., doktor biolog.nauk, red.; KUCHUMOV, P.V., doktor sel'skokhoz. nauk, red.; POLYAKOV, I.M., red.; STRONA, I.G., kand.sel'skokhoz. nauk, red.; TKACHENKO, F.A., kand.sel'skokhoz.nauk, red.; CHIZHENKO, I.A., kand.ekonom.nauk, red.; BLANINA, L.F., red.; VIDONYAK, A.P., kand.-tekhn.red.

[Problems in improving the quality of agricultural products; proceedings of the scientific session] Voprosy uluchsheniia kachestva sel'skokhoziaistvennoi produktsii; trudy nauchnoi sessii. Kiev, Izd-vo Ukrainskoi Akad.sel'khoz.nauk. No.4. [Feeds and livestock products] Korma i produkty zhivotnovodstva. 1960. 143 p. (MIRA 14:1)

1. Ukrainskiy ordena Lenina nauchno-issledovatel'skiy institut rasteniyevodstva, selektsii i genetiki. 2. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina i Ukrainskoy akademii sel'skokhozyaystvennykh nauk; Nauchno-issledovatel'skiy institut zhivotnovodstva Lesostepi i Poles'ya USSR (for Danilenko). 3. Chlen-korrespondent AN USSR (for Polyakov). 4. Ukrainskiy ordena Lenina nauchno-issledovatel'skiy institut rasteniyevodstva, selektsii i genetiki (for Strona).

(Feeds) (Stock and stockbreeding)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

ORLOVSKIY, A.V., professor; CHIZHENKO, I.M., dotsent; NEMIROVSKIY, A.S., inzhener.

Use of mercury-arc-rectifier installations to generate wattless power. Prom.energ. 11 no.4:16-21 Ap '56. (MLRA 9:7)

1.Kiyevskiy politekhnicheskiy institut.
(Electric current rectifiers) (Electric substations)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.; DEVIZDE, G.V.

Sonde-type meters of high-power direct currents. Izv. KPI 22:33-46 '57. (MIRA 11:3)

(Electric meters)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.

Current conversion circuits with direct and inverse star connection, ground equalizers, and switching capacitors. Izv. KPI 22:179-199 '57. (Electric current converters) (MIRA 11:3)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.

Performance of current conversion circuits with direct and inverse star connections, ground equalizers, and switching capacitors under uncontrolled conditions. Izv. KPI 22:200-234 '57. (MIRA 11:3)
(Electric current converters)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.

Performance of current conversion circuits with direct and inverse star connections, ground equalizers, and switching capacitors under controlled conditions. Izv. KPI 22:235-258 '57. (MIRA 11:3)
(Electric current converters)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.; NEMIROVSKIY, A.Sh.

First industrial mercury-arc current converter installation with a special switch unit and the results of its test. Izv. KPI 22: 259-278 '57. (MIRA 11:3)

(Electric current converters)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.; RUDENKO, V.S.

Devices used for observation of processes in studying arc backs in current converter installations. Izv. KPI 22:279-284 '57.
(Electric current converters) (MIRA 11:3)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.; RUDENKO, V.S.

Conditions of arc backs in current conversion circuits with direct and inverse star connections, ground equalizers, and switching capacitors. Izv. KPI 22:285-295 '57. (MIRA 11:3)
(Electric current converters)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.; ONISHCHENKO, L.F.

New method for control of current converters having switching devices.
Izv. KPI 22:337-351 '57. (MIRA 11:3)
(Electric current converters)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.

Special features in the process of consumption and generation of reactive power by converters. Izv. KPI 26:7-24 '57. (MIRA 11:6)

1. Kafedra teoreticheskikh osnov elektrotekhniki Kiyevskogo politekhnicheskogo instituta.
(Electric current converters)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.

Performance of a three-phase two-bridge circuit for electric current conversion with commutation capacitors under semicycle switching conditions. Izv. KPI 26:25-80 '57. (MIRA 11:6)

1. Kafedra teoreticheskikh osnov elektrotekhniki Kiyevskogo politekhnicheskogo instituta.
(Electric current converters)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.

Voltage control in three-phase two-bridge converters associated with current switching in the phases of the feeding transformer by vibrations of triple frequency. Izv. KPI 26:107-138 '57. (MIRA 11:6)

1. Kafedra teoreticheskikh osnov elektrotekhniki Kiyevskogo politekhnicheskogo instituta.

(Electric current rectifiers)
(Voltage regulators)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.; NEMIROVSKIY, A.Sh.; GLUKHOV, D.Ya.; IVANOV, Yu.M.

The first compensated mercury rectifying converter of the aluminum plant and results of its testing. Izv. KPI 26:139-169 '57. (MIRA 11:6)

1. Kafedra teoreticheskikh osnov elektrotekhniki Kiyevskogo politekhnicheskogo instituta.

(Mercury-arc rectifiers--Testing)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.; RUDENKO, V.S.

Backfire conditions in powerful mercury current converters. Izv. KPI 26:171-189 '57. (MIRA 11:6)

1. Kafedra teoreticheskikh osnov elektrotekhniki Kiyevskogo politekhnicheskogo instituta.

(Mercury-arc rectifiers)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.; RUDENKO, V.S.

Processes in current converters with switching devices during the omission of ignition. Izv. KPI 26:191-202 '57. (MIRA 11:6)

1. Kafedra teoreticheskikh osnov elektrotekhniki Kiyevskogo politekhnicheskogo instituta.
(Mercury-arc rectifiers)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.; NEDZEL'SKIY, S.I.

Improving the power factor of single-phase current converters under conditions of grid-controlled voltage. Izv. KPI 26:203-223 '57. (MIRA 11:6)

1. Kafedra teoreticheskikh osnov elektrotekhniki Kiyevskogo politekhnicheskogo instituta (for Chizhenko). 2. Kafedra tsentral'nykh elektricheskikh stantsiy Kiyevskogo politekhnicheskogo instituta (for Nedzel'skiy).

(Mercury-arc rectifiers)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

KOSTENKO, M.P., akademik; ZAVALISHIN, D.A., prof.; GLEBOV, I.A., dots.; MEL'NIKOV, N.A., dots.; KAZOVSKIY, Ye.Ya., kand.tekhn.nauk; FAZYLOV, Kh.F., doktor tekhn.nauk, prof.; GORODSKIY, D.A., doktor tekhn.nauk, prof.; KHOLMSKIY, V.G., doktor tekhn.nauk, prof.; CHIZHENKO, I.M., kand.tekhn.nauk; MAMIKONYANTS, L.G., kand.tekhn.nauk; TSUKERNIK, L.V., kand.tekhn.nauk.

Regulating the reactive power with the aid of controlled valves. Vest.elektroprom. 28 no.12:65-71 D '57. (MIRA 10:12)

1. Institut elektromekhaniki AN SSSR (for Kostenko, Zavalishin, Glebov). 2. Vsesoyuznyy zaochnyy energeticheskiy institut (for Mel'nikov). 3. Zavod "Elektrosila" (for Kazovskiy). 4. Institut energetiki AN UzSSR (for Fazylov). 5. Nauchno-issledovatel'skiy institut elektrotekhnicheskoy promyshlennosti (for Gorodskiy). 6. Kiyevskiy politekhnicheskiy institut (for Kholmskiy, Chizhenko). 7. TSentral'naya nauchno-issledovatel'skaya elektrotekhnicheskaya laboratoriya Ministerstva elektrostantsiy (for Mamikonyants). 8. AN SSSR (for TSukernik).

(Electric generators)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

64-1-11/19

AUTHORS: Chizhenko, I. M. , Nemirovskiy, A. Sh.

TITLE: New Compensation Mercury Rectifier Apparatus for Chemical Works (Novyy kompensatsionnyy rtutno-vypryamitel'nyy agregat dlya khimicheskikh predpriyatiy)

PERIODICAL: Khimicheskaya Promyshlennost', 1958, Nr 1, pp. 49-51(USSR)

ABSTRACT: A new transformer plant with parallel connection and a transformer with a leading of angle phase was theoretically worked out and practically investigated in the Polytechnical Institute, Kiyev by order of the Gasenergonadzor MES SSSR. A schematic description of the aggregate mentioned in the title is given. The new plant has the following advantages: the compensation of the reaction capacity is effected in the consumption; the regulation of the transformed voltage is carried out without deterioration of the coefficient of shear; the distribution of the reactive capacity is carried out proportionally to the value of the consumed active capacity, therefore the overcompensation of the reactive capacity in the load change is eliminated; the additional costs for the

Card 1/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

64-1-11/19

New Compensation-Mercury Rectifier **Apparatus** for Chemical Works

new arrangement of the plant are comparatively low. Experimental rectifiers of the same type are in operation in the branch station of the Post-Volynskiy YuZZhD and the aluminum works, Dnepropetrovsk. There are 3 figures.

AVAILABLE: Library of Congress

1. **Mercury rectifiers-Applications** 2. **Electrical equipment-USSR**

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M. [Chyzhenko, I.M.]

Voltage regulation in a three-phase two-bridge current converter with simultaneous compensation of reactive power [with summaries in Russian and English]. Avtomatyka, no.1:56-70 '58. (MIRA 11:4)

1. Kiivs'kiy ordena Lenina politekhnichniy institut.
(Voltage regulators) (Servomechanisms)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

9(4) SOV/112-59-5-9888

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 5, p 208 (USSR)

AUTHOR: Chizhenko, I. M., and Rudenko, V. S.

TITLE: Phenomena in a Compensation Mercury-Arc Rectifier Unit Under Fault Conditions

PERIODICAL: Izv. vyssh. uchebn. zavedeniy. Energetika, 1958, Nr 3, pp 16-24

ABSTRACT: Investigation of the rectifier "star - direct and reverse stars with equalizing reactors and firing-angle capacitors" is reported. Short-circuits on the rectified-current side, arc-backs, and misfirings were studied. Through the investigation of short-circuits and arc-backs, a possibility was found to apply the classical method of calculating transients, in which the valves are considered as automatic breakers that close and open various branches of the circuit. Under short-circuit conditions the valves operate at almost 360°, the currents in 2-phase and 3-phase equalizing reactors are constant, and the voltages on the reactors are zero. The voltage on the capacitors connected to

Card 1/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

SOV/112-59-5-9888

Phenomena in a Compensation Mercury-Arc Rectifier Unit Under Fault Conditions

3-phase equalizing reactors is also negligible. A set of equations that include maximum possible currents in the circuit under short-circuit conditions is presented. The arc-back current increases passing zero several times; this fact is favorable for operation of a protective system. Thanks to several current zeros, many arc-backs would eliminate themselves. A misfiring in an isolated rectifier can cause overvoltages on various circuit components. By selecting proper parameters for 2- and 3-phase equalizing reactors, the overvoltages can be reduced to a tolerable value. When rectifiers operate in parallel, the misfirings result in a self-dropping of load by the faulty unit, and no overvoltage on that unit appears.

L.S.R.

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M., kand.tekhn. nauk, dots.

Two bridge electric current converter with a commutating device. Izv. vys. ucheb. zav.; energ. no.4:23-32 Ap '58. (MIRA 11:6)

1. Kiyevskiy ordena Lenina politekhnicheskiy institut.
(Electric current rectifiers)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

SOV/94-58-8-1/22

AUTHOR: ~~Chizhenko, I. M.,~~ Candidate of Technical Science and Nemirovskiy, A. Sh., Engineer

TITLE: A Multi-phase Compensated Mercury Arc Rectifier Set (Mnogofaznyy kompensatsionnyy rtutno-vypryamitel'nyy agregat)

PERIODICAL: Promyshlennaya Energetika, 1958, 13 Nr 8, pp 1-6 (USSR)

ABSTRACT: The advantages of several possible rectifier circuits for very high power installations are compared. When there are several large sets the rectifiers are grouped in pairs, each pair having two supply transformers. The advantages of considering each pair as a single set are pointed out. A typical circuit is given in Fig.1. A set of this kind may consist of four or even eight simple three-phase rectifiers connected in parallel. It is important to correct the power factor of large rectifiers and one way of doing this is to use a special compensating device consisting of a three-phase group of capacitors and a three-phase equalising coil so ensuring current commutation with a leading control angle. The switching device can be connected to neutral of the supply transformers as in Fig.2 or to the rectifier cathodes as in

Card 1/5

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

SOV/94-58-8-1/22

A Multi-phase Compensated Mercury Arc Rectifier Set

Fig.3. The operation of a complex multi-tube rectifier is described in detail in Information Letter No.3/37 of Gosenergonadzor of the Ministry of Power Stations entitled 'Rectifiers with leading phase-angle'. In each of the two rectifiers the currents reaching the capacitors from the individual elementary rectifiers are added together to produce double frequency current of the same value and wave shape as the capacitor currents of the individual elementary rectifiers. Because the frequency is doubled the size of capacitor necessary is reduced by half. Parallel connection of four elementary rectifiers gives fourfold frequency in the capacitors and the utilisation of the capacitors can be 16 times as effective as in a simple three-phase rectifier. The capacitors ensure that switching of the current in the phases of the supply transformer occurs at leading control angle, the capacitors also create their own voltage component and thus alter the voltage wave shape on other circuit components. The voltage of the blocking rectifier is particularly distorted as will be seen from Fig.4 which gives the wave shape when the rectifier works with a

Card 2/5

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

control angle of $\pi/6$ under ideal conditions in which current switching and deionisation of the arc gap in the ionic rectifier occur instantaneously. It will be seen that the peak inverse voltage of the rectifier is much higher than on normal rectifiers but this occurs at an instant in the cycle when the rectifier stability is already established. However, the critical control angle with the circuit of Fig.3 is only half that for rectifiers with two elementary rectifiers. Fig.5 gives oscillograms of current and voltage on the capacitors in rectifiers with one, two and four elementary rectifiers with one and the same load current on the elementary rectifiers. Fig.6 gives the construction of voltage curves for the supply transformer, with switching capacitors and the inverse rectifier voltage at different values of power factor when the a.c. reactance is 0.1. The method of construction of these curves is explained. Oscillograms were taken on a rectifier set connected as shown in Fig.3 and are given in Fig.7 and 8. For comparison currents and voltages in various parts of an ordinary multi-phase rectifier are given in Fig.9.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

SOV/94-58-8-1/22

A Multi-phase Compensated Mercury Arc Rectifier Set

It is concluded that the proposed convertor circuit with star and delta in the primary and two direct and two reverse stars in the secondary with equalising coils and commutating capacitors ensures rectification of current with leading phase angle between current and voltage in the primary winding of the supply transformer; this means that some reactive power is generated. The reactive power compensated and generated by the circuit as a whole is about ten times that of the capacitors used in the circuit. This occurs because the capacitors only act as a compensating link and the reactive power is generated by exchange of energy between the source of alternating e.m.f., the higher harmonic electromagnetic field and the rectified current circuit. The capacitors operate at four times supply frequency, and their power is about 10% of that of the set. The circuit should only be used when the control angles are small and the commutating

Card 4/5

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

A Multi-phase Compensated Mercury Arc Rectifier Set SOV/94-58-8-1/22

device is mainly required to compensate reactive power. There are 9 figures and 4 references, all of which are Soviet.

Card 5/5

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

SOV/143-59-1-10/17

9(2)

AUTHOR: Chizhenko, I.M., Candidate of Technical Sciences, Docent

TITLE: Two-Bridge Converter of Electric Current with Two Groups of Commuting Condensers (Dvukhmostovoy preobrazovatel' elektricheskogo toka s dvumya gruppami kommutiruyushchikh kondensatorov)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Energetika, 1959, Nr 1, pp 65-74 (USSR)

ABSTRACT: The converter under consideration is based on a three-phase system. It is composed of four elementary one-cycle converters with three rectifiers each. The whole layout is a tw-cycle one and can be represented as a two-bridge circuit. Condensers included in the layout form three commutating units: two in the rectifiers and one in the phases of the feed transformer of each unit. The uncontrolled operation of the converter is characterized by the absence of interference of control grids with the commutation in the rectifiers. The characteristic of the voltage barred by the rectifiers changes softly, not by

Card 1/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

SOV/143-59-1-10/17

Two-Bridge Converter of Electric Current with Two Groups of Commuting Condensers

leaps and bounds. The characteristic of the current in the phase of the feed transformer is almost sinusoidal. The presence of high inductivity does not reduce the efficiency of the converter. The commutation of the current is such that there is no phase shift between the current and the voltage of the transformer and no reactive power is consumed by the converter. The generation of additional reactive power is ensured by the condensers under the influence of the sinusoidal voltage of the feed transformer. The controlled operation of the converter involves a delay, by grids, of the commutation of the current in the rectifiers. The voltage on the D.C. side of the converter is regulated, without losses in efficiency, either by equal changes in the control angle of all rectifiers or by setting different control angles in the anodic and the cathodic rectifier groups. The converter may be used for inversion even without emf source in the network to which the current is fed. It offers, also in this case, ample possibilities for controlling the pro-

Card 2/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I. M.

8 (0)

AUTHORS: Greben', I. I., Kalnibolotskiy, M. L., SOV/105-59-6-23/28
Nesterenko, A. D., Postnikov, I. M.,
Podchenko, I. K., Kholmskiy, V. G., Chizhenko, I. M., and Others

TITLE: Professor N. N. Vasil'yev (Professor N. N. Vasil'yev). On His 70-th Birthday (K 70-letiyu so dnya rozhdeniya)

PERIODICAL: Elektrichestvo, 1959, Nr 6, p 92 (USSR)

ABSTRACT: Nikolay Nikolayevich Vasil'yev began his career in 1914, after having completed his studies at the Petrogradskiy politekhnicheskiy institut (Petrograd Polytechnic Institute), as head of the electric workshop of the Central Workshop of the South-Western Railroad in Kiyev. From 1927 to 1930 he also taught at the Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnic Institute). In 1930 he was appointed Docent in ordinary and in 1931 Professor at the Chair of Electrical Machines at the same Institute. In 1937 he was appointed head of the newly established Chair for the Electrification of Industrial Enterprises. He installed a laboratory with this chair. During the second world war he was evacuated to Tashkent with the entire Institute. After his return he kept the same chair. He wrote more than 20 scientific publications, and constantly endeavored to

Card 1/2

strengthen the relations between the chair and industry. He was awarded the Lenin Order, the Order of the Red Banner of Labor and the medal "For Heroic Work in the Great Patriotic War". There is 1 figure.

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.

8 (0)

AUTHORS: Vasil'yev, N. N., Greben', I.I., Postnikov, I. M., Fedchenko, I. K., Kholmskiy, V. G., Chizhenko, I. M. and Others 30V/105-59-6-25/28

TITLE: Corresponding Member of the AS UkrSSR A. D. Nesterenko (Chlen-korr. AN USSR A. D. Nesterenko) On His 60-th Birthday (K 60-letiyu so dnya rozhdeniya)

PERIODICAL: Elektrichestvo, 1959, Nr 6, p 94 (USSR)

ABSTRACT: Anatoliy Dmitriyevich Nesterenko was born on April 6, 1899 in the village of Blagodatnoye in the Odessa oblast'. In 1926 he completed his studies at the Faculty of Electrical Engineering at the Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnic Institute). He then began his scientific and pedagogical career. With his collaboration, workshops were installed at the same institute for the production of electrical measurement apparatus, which later on developed into a factory. From 1936 to 1938 he was Head of the Laboratory of Electrical Measurements of the Energeticheskiy institut AN SSSR (Institute of Power Engineering at the Academy of Sciences, USSR). In 1937 he was promoted Doctor, and in 1938

Card 1/3

he was appointed Professor of the special field of electrical measurements. From 1938 to 1941 he was chief designer of a factory for electrical apparatus and from 1942 to 1944 he was Professor at the Omskiy mashinostroitel'nyy institut (Omsk Institute of Mechanical Engineering). After the War he collaborated in the elaboration of the five years' plan and worked as a professor at the Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnic Institute). Due to his initiative a chair of electrical apparatus building was established there. At the same time he was Head of the Department of Automation of the Institut elektrotekhniki AN USSR (Institute of Electrical Engineering of the AS UkrSSR). In 1951 he became a Corresponding Member of the AS UkrSSR and in 1952 he was elected Head of the Institut elektrotekhniki (Institute of Electrical Engineering). He published 50 papers. In his works he primarily deals with a classification of measuring methods and of instruments, with the power measurement in single- and multiphase circuits, with the theory of phasometers and of compensation and differential bridge circuits, and the

Card 2/3

inspection of current- and voltage transformers. He has made more than 15 inventions and technical improvements. In 1951 he was awarded the Stalin Prize. He bears the Red Banner of Labor Order and several medals. There is 1 figure.

Card 3/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M., kand.tekhn.nauk dots.

Regulating the current of the compensating unit load by changing the capacity of the commutating capacitors. Izv.vys. ucheb.zav.; energ. 2 no.9:31-37 S '59. (MIRA 13:2)

1. Kiyevskiy ordena Lenina politekhnicheskiy institut. Predstavlena kafedroy teoreticheskikh osnov elektrotekhniki.
(Electric current rectifiers)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M.; NEMIROVSKIY, A.Sh.; SHCHERBAK, S.K.; PUSHKAREV, A.R.; SHAPIRSHTEYN, Ya.A.

First compensating mercury rectifier device and its operation. Prom. energ. 15 no.8:20-27 Ag '60. (MIRA 15:1)
(Electric current rectifiers)
(Electric substations)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

41229

S/194/62/000/007/091/160
D295/D308

26.2311

AUTHORS: Chizhenko, I.M., and Glukhov, D.Ya.

TITLE: Converter for feeding an electric arc load

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1962, abstract 7-5-59 y (Tr. Kiyevsk. politekhn. in-ta Sb. statey elektrotekhn. fak., Kiev, 1961, 90 - 102)

TEXT: A description and an approximate calculation are given of new converter circuits intended for feeding an electric arc load. Capacitive and inductive converter differ from the usual ones in that they comprise 3 capacitors or three chokes in series with the three feeding buses of a three-phase bridge rectifier, which ensures a decreasing load characteristic. By operating in parallel, a capacitive and an inductive set, one obtains a single compensating converter that has a phase-shift angle equal to 1, or a converter with leading phase angle. The paper gives a calculation of the currents and voltages of a capacitive and an inductive converter, and and oscillograms of various modes of operation determined by means

Card 1/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

Converter for feeding an ... S/194/62/000/007/091/160
D295/D308

of a laboratory model. The rectifier suggested has a number of technical advantages in comparison with standard bridge converters with wide-angle quick-acting grid control. [Abstracter's note: Complete translation.]

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHENKO, I.M., kand.tekhn.nauk; RUDENKO, V.S., kand.tekhn.nauk; NEMIROVSKIY, A.Sh., inzh.

Inverse firing conditions in large power converters with multiple rectifiers and a commutating device. Prom. energ. 16 no.8:36-40 Ag '61. (MIRA 14:9)
(Electric substations) (Electric current rectifiers)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

GREBEN', I.I.; IYERUSALIMOV, M.Ye.; KONDRA, B.N.; NESTERENKO, A.D.; PAVLOV, V.M.; POSTNIKOV, I.M.; KHOLMSKIY, V.G.; CHIZHENKO, I.M.

Ivan Kirillovich Fedchenko, 1904-; on his 60th birthday and the 35th anniversary of his theoretical and educational work.
Elektrichestvo no.10:87-88 O '64. (MIRA 17:12)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

ACC NR: AP6018211 EWT(1) DD

AUTHOR: Chizhenkova, R. A. SOURCE CODE: UR/0219/66/061/006/0011/0015

47
B

ORG: Laboratory of the Electrophysiology of Conditioned Reflexes, Institute of Higher Nervous Activity and Neurophysiology, AN SSSR, Moscow (Laboratoriya elektrofiziologii uslovnykh refleksov Instituta vysshey nervnoy deyatel'nosti i neyrofiziologii AN SSSR)

TITLE: Changes in the EEG of the rabbit during the action of a constant magnetic field

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 61, no. 6, 1966, 11-15

TOPIC TAGS: [redacted]biology, magnetic field, neurophysiology, animal physiology

ABSTRACT: Changes in the EEG's of rabbits were studied as a function of their exposure to a constant magnetic field. Experiments were conducted on 20 rabbits, 6 of which had implanted electrodes and 14 of which had electrodes wedged into the bone of the sensomotor and occipital regions of the cerebral hemisphere. An "Ediswan" pen-recording electroencephalograph was used. Electromagnets with pole diameters of 22 cm separated by 16 cm created a constant field of 300 oe. The heads of the experimental animals were placed between the poles. Exposure durations ranging from 1 1/2 sec to 1 min and 20 sec were tested. EEG's were recorded 1 min

Card 1/3

UDC: 612.882.3.014.426-087.87

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

L 30091-66

ACC NR: AP6018211

Table 1. Results of the analysis of the number of spindles in tests using a rheostat or switch (1 min background; 1 min exposure; 1 min after exposure)

Test series	Parameter	No. of tests	Normal	During exposure			After exposure		
			No. of spindles	No. of spindles	% increase	P	No. of spindles	% increase	P
I	Rheostat	300	498	653	31,1	<0,025	609	22,3	<0,05
	switch	110	36	108	200	<0,0005	79	119,5	<0,05
II	Rheostat	150	182	281	54,4	<0,05	290	59,3	<0,001
	switch	150	219	304	38,8	<0,05	306	39,7	<0,05

Series I. Tests conducted on different days
Series II. Tests conducted on the same day

It was concluded that these EEG reactions reflected a biological effect of the field and its cessation and did not reflect a reaction to switching the field on. It has not been determined whether there is a specific receptor of permanent magnetic fields. An approach to this problem would be to compare reactions to a permanent magnetic field, and another factor such as ionizing radiation. Ionizing radiation (a type of emf) in small doses brings about a reaction to its cessation. Orig. art. has: 1 table and 3 figures. [CD]

SUB CODE: 06/ SUBM DATE: 23Jul64/ ORIG REF: 007/ OTH REF: 003/ ATD PRESS: 5012

Card 3/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

STAROBINETS, G.L.; CHIZHEVSKAYA, A.B.; DUBOVIK, T.L.

Entropy of ion exchange with negative hydration. Vestsi AN BSSR.Ser.khim.nav. no.2:110-111 '65.

(MIRA 18:12)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

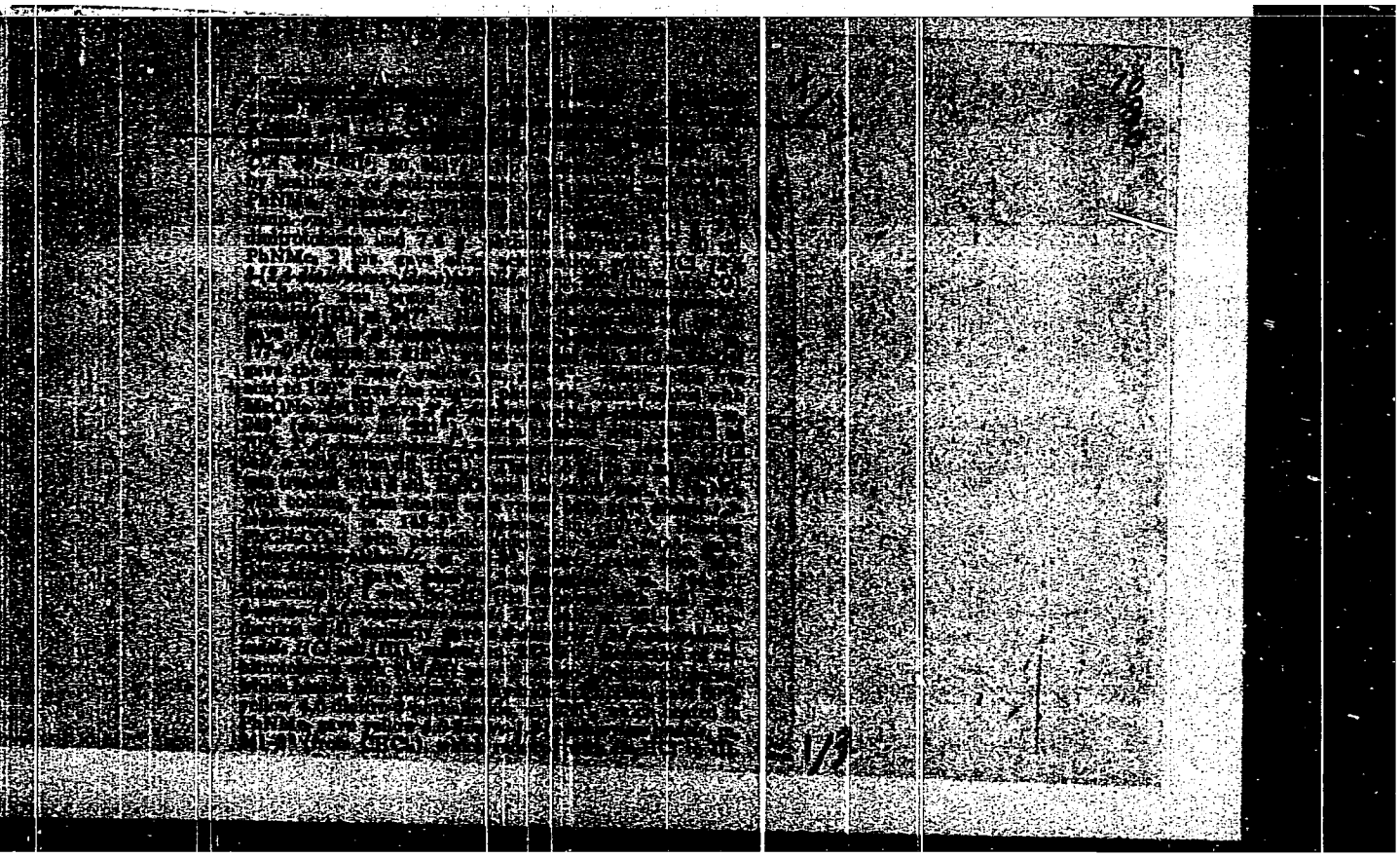
"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, I. and GRAD, N. M.

"The Effect of Penicillin on the Assimilation of Glutamic Acid by Staphylococcus Aurous," (British) Priroda, No. 7, 1948.

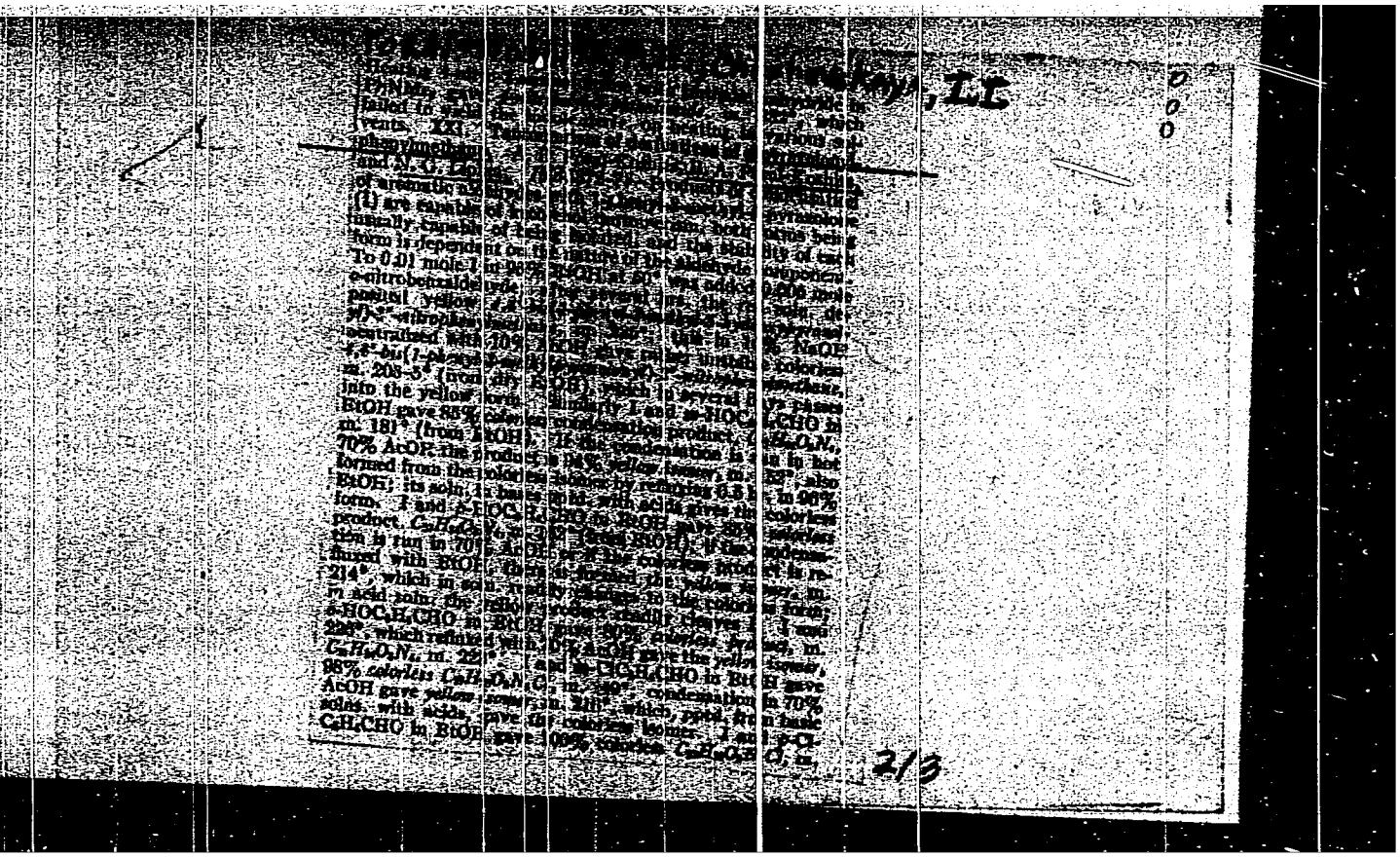
APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1



APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1



APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

3/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

5

Tautomeric compounds. XXII. Mobility of hydrogen atoms of the methyl group of quinaldine. [illegible]

[illegible] above 360°; this [illegible] with Na hydrosulfite forms a reddish soln. which in contact with air forms a ppt., the hydrosulfite soln. dyes cotton green, changing to golden-yellow in the air; the color is stable to light and washing. Sulfonation of the product with 27% oleum and treatment with NaCl gave a sulfonic acid deriv., isolated as Na salt, which dyes cotton olive-yellow. The NaOH-ad. portion of the reaction product [illegible]

[illegible] (I) or [illegible] (II), m. above 300°; di-Ag salt, yellow [illegible]; di-K salt, yellow microcrystals (from EtOH); di-[illegible], m. above 300° (from EtOH); bis(phenylhydrazone). 1/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

Porai-Koshits, A. E. + Chizhevskaya, I.

in above 310°. I (or II) heated [illegible] with material [illegible] with soda lime yielding $C_{18}H_{12}$, quinaldine, and CO_2. Heating 3.9 g. perylenetetracarboxylic anhydride with 3 g. quinaldine 4 hrs. at 180-200° [illegible] material, [illegible] (III), brown solid, sol. in [illegible] hydrosulfite soln. dyes cotton violet, changing to red on exposure. III sulfonated with 27% oleum to a sulfonic acid, whose Na salt dyes [illegible] red brown. The NaOH-sol. [illegible] unreacted hydrogen. Quinaldine and [illegible] anhydride [illegible] yellow [illegible] [illegible] but hydrosulfite-sol. product [illegible] dyed cotton the same shade as did the treatment with II; the yield of the product after alkali fusion was 65%, thus giving a more economical route to III. G. M. K.

2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

were observed during the experiments on the derivation of ac-alpha-chlorotetralin. A new method was developed for the derivation of tetralin hydrogen peroxide by oxidation of tetralin with oxygen in the presence of manganese stearate at 70° and rate of oxygen passing of 25-30 milliliters/min. The possibility of synthesizing ac-alpha-derivatives of tetralin on tetralin hydrogen peroxide base is explained and the synthesis and characterization of hitherto unknown ac-alpha-methoxy-tetralin, ac-alpha-chlorotetralin and ac-alpha-diethylaminotetralin are described. It is shown that the heating of ac-alpha-tetralol (60-70°) in the presence of mineral acids (H_2SO_4, HCl) leads to partial dehydration of the ac-alpha-tetralol and the formation of 1,2-dihydronaphtalin. There are 13 references, of which 6 are Slavic.

ASSOCIATION: Academy of Sciences Byelorussian-SSR, Institute of Chemistry (Institut Khimii Akademii Nauk Belorusskoy SSR).

RESENTED BY:

UBMITTED: January 10, 1956

VAILABLE:

ard 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, I.I.; PANSEVICH-KOLYADA, V.I.

[redacted]

Research in the field of oxide compounds. Part 8: Reaction of allyl ether α-oxides of o-,m-, and p-nitrophenols with diethylamine. Zhur.ob.khim. 27 no.5:1223-1226 My '57. (MLRA 10:8)

1.Institut khimii Akademii nauk Belorusskiy SSR.
(Phenol) (Diethylamine)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, I.I.; PANSEVICH-KOLYADA, V.I.

Investigations in the field of oxide compounds. Part 9: Reaction of α-oxides of allyl ethers of nitrophenols with benzimidazole. Zhur.ob. khim. 27 no.6:1495-1498 Je '57. (MIRA 10:8)

1. Institut khimii Akademii nauk Belorusskoy SSR.
(Phenols) (Benzimidazole) (Propanol)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

OL'DEKOP, Yu.A.; CHIZHEVSKAYA, I.I.

Reactions of a diacetylated derivative of cyclohexyl 1,1-dihydroperoxide with mercury. Sbor. nauch. rab. Inst. fiz.-org. khim. AN BSSR no. 7:68-74 '59. (MIRA 14:4)
(Mercury) (Cyclohexyl hydroperoxide)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, I.I.; SAMUYLENKO, L.I.; GAPNOVICH, L.I.

Synthesis of N,N-bis (2-chloroethyl) amino derivitives from 1-(o-nitro)phenoxy-2,3-epoxypropane. Zhur.ob.khim. 33 no.2: 657-660 F '63. (MIRA 16:2)

1. Institut fiziko-organicheskoy khimii AN Belorusskoy SSR.
(Amines) (Propane) (Epoxy compounds)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, I.I.; GAPANOVICH, L.I.; POZNYAK, L.V.

Mobility of hydrogen atoms in methylene groups of anhydro-2-benzimidazolylmercaptoacetic and β-mercaptopropionic acids. Zhur.ob.khim. 33 no.3:945-949 Mr '63. (MIRA 16:3)

1. Institut fiziko-organicheskoy khimii AN Belorusskoy SSR.

(Benzimidazoleacetic acid)
(Propionic acid) (Hydrogen)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, I.I.; GAPANOVICH, L.I.; KHOVRATOVICH, N.N.;

Study of the hydrogen atomic lability in ethyl groups of certain methylpyridine derivatives. Zhur. b. khim. 34 no.12:4059-4065 D '64 (MIRA 18:1)

1. Institut fiziko-organicheskoy khimii AN Belorusskoy SSR.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, I.I.; GAPANOVICH, L.I.; POZNYAK, L.V.

lability of hydrogen atoms of the methylene group of benzimidazolo (2',1'-2,3) thiazolidin-4-one. Zhur. ob. khim. 35 no.7:1276-1280 Jl '64. (MIRA 18:8)

1. Institut fiziko-organicheskoy khimii AN Belorusskoy SSR.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

KHOVRATOVICH, N.N.; CHIZHEVSKAYA, I.I.

Infrared spectra of L-tyrosine and of some of its derivatives. Dokl. AN BSSR 9 no. 5:305-309 My '65 (MIRA 19:1)

1. Institut fiziko-organicheskiy khimii AN BSSR i Belorusskiy gosudarstvennyy universitet imeni V.I. Lenina. Submitted May 6, 1964.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

OVSYANNIKOV, Nikolay Nikolayevich; CHIZHEVSKAYA, K.M., red.

[Methodology for the presentation of a course on keyboard computers; manual for instructors of the school system of the Administration of the Training of Accountants of the Central Statistical Administration of the U.S.S.R.] Metodika prepodavaniia kursa ekspluatatsii schetno-klavishnykh mashin; posobie dlia prepodavatelei uchebnoi seti UPK TsSU SSSR. Moskva, Statistika, 1964. 181 p. (MIRA 17:4)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

ADAMOV, V.Ye.; BAKLANOV, G.I., prof.; IVANOV, A.I.; SAMOYLOVA, A.A.; USTINOV, A.N.; SHIFMAN, A.G.; SHCHEDRIN, N.I.; CHIZHEVSKAYA, K.M., red.

{Collecting of problems on industrial statistics} Sbornik zadach po statistike promyshlennosti. Moskva, Izd-vo "Statistika," 1964. 247 p. (MIRA 17:5)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

PODOL'SKIY, Vladimir Isakovich; ISAKOV, V.I., prof., red.;
CHIZHEVSKAYA, K.M., red.

[Planning and the organization of machine accounting with the use of keyboard calculating machines] Proektirovanie i organizatsiia mekhanizirovannogo ucheta s primeneniem schetno-klavishnykh mashin. Moskva, Statistika, 1964. 247 p. (MIRA 18:4)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

ISAKOV, Vasiliy Ivanovich; KOROLEV, Mikhail Antonovich; ZHAK, D.K., kand. ekon. nauk, retsenzent; TVERDOKHLEB, N.G., retsenzent; CHIZHEVSKAYA, K.M., red.

[Principles of designing the mechanization of accounting and planning work] Osnovy proektirovaniia mekhanizatsii uchetno-planovykh rabot. Moskva, Statistika, 1965. 250 p. (MIRA 18:5)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

MITYUSHKIN, T.S., kand. ekon. nauk; SUBBOTIN, V.F.; DVOYRIN, E.Yu.; TUKHANOVA, A.N., red.; CHIZHEVSKAYA, K.N., red.

[Accounting on collective farms] Bukhgalterskii uchet v kolkhozakh. Moskva, Statistika, 1964. 446 p. (MIRA 18:1)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

KORCLEVA, Yelena Petrovna; KRIUSHIN, V.N., red.; CHIZHEVSKAYA, K.M., red.

[Punched card computers] Schetno-perforatsionnye mashiny. Moskva, Statistika, 1965. 189 p. (MIRA 18:8)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, M.A.,

Dissertation: "A Polarographic Method for the Determination of Zinc, Copper, and Lead in Industrial Waste Waters." Cand Med Sci., Molotov Medical Inst, Molotov, 1954.(Referativnyy Zhurnal, Khimiya, Moscow, No. 16, Aug 54)

SO: SUM 393, 28 Feb 1955

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, M.P

3(7) PHASE I BOOK EXPLOITATION SOV/1719

Leningrad. Glavnaya geofizicheskaya observatoriya

Metodika meteorologicheskikh nablyudeniy (Methods of Meteorological Observation) Leningrad. Gidrometeoizdat, 1958. 55 p. (Series: Its: Trudy, vyp. 86) 1,200 copies printed.

Additional Sponsoring Agency: USSR. Glavnoye upravleniye gidrometeorologicheskoy sluzhby.

Ed. (Title page): Z.I. Pivovarova, Candidate of Geographical Science; Ed. (Inside book): T.V. Ushakova; Tech. Ed.: N.V. Volkov

PURPOSE: This issue is intended for meteorologists and especially for personnel of the hydrometeorological service.

COVERAGE: This issue discusses the methodology of meteorological, actinometric and gradient measurements and the processing of such data. Subdivisions of meteorology covered in some detail include:

Card 1/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

snow density, daily variation of relative humidity, soil temperature measurements, estimation of quantitative cloud cover, wind velocity measurement, and others. Individual articles are accompanied by bibliographic references.

TABLE OF CONTENTS:

Trifonova, T.S. The Problem of Variable Density in Snow Cover 3

Berlin, I.A. The Problem of Studying the Diurnal Variation of Relative Humidity 10

Kaulin, N. Ya., and M.P. Chizhevskaya. The Error in Measurements of Soil Surface Temperature Using Mercury Soil Thermometers 17

Vorob'yev, I.Ye. Comparing a Visual Estimation of the Amount of Cloudiness With an Estimation Using a Recticule [spherical grid] 22

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

Pivovarova, Z.I., and B.I. Gulyayev. Actinometric Observations in a Forest 25

Pokrovskaya, I.A. Effect of Temperature on Conversion Factors of Thermoelectrical Actinometers and Pyranometers 38

Dubrovin, L.V. The Quantitative Method in Critical Control of Wind Velocity Gradient Observations in the Near Surface (up to two meters) Layer 42

Fateyev, N.P. The Development of Electrical and Radiation Methods for Measuring Surface Soil Temperatures 49

AVAILABLE: Library of Congress

MM/jmr
5-21-59

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

KAULIN, N.Ya.; CHIZHEVSKAYA, M.P.

Errors in measuring the temperature of the surface of the soil by means of mercury thermometers. Trudy GGO no.86:17-21 '58. (MIRA 11:11)
(Soil temperature--Measurement)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, M.P.

Radiation and thermal regime of slopes of different exposure under conditions of the hilly relief of Leningrad Province. Trudy GGO no. 91:71-84 '60. (MIRA 14:1)

(Leningrad Province—Soil temperature)
(Solar radiation)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

S/531/62/000/129/001/004
D218/D308

AUTHOR: Chizhevskaya, M. P.

TITLE: Scattered radiation according to observations at Voyeykovo

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy. no. 129. 1962. Metody meteorologicheskikh nablyudeniy i obrabotki. 40-5[illegible]

TEXT: The properties of scattered radiation in the Northwest of the European part of the USSR are reported. They were deduced from observational data obtained at Voyeykovo (Leningrad oblast') between 1948 and 1960. Actinometric observations were carried out since 1948. Recording of scattered radiation by means of the СГ-3 (SG-3) galvanograph was carried out from April 1950. The МСЩ ПР-354 (MSShch PR-354) galvanograph was used since July 1957. A pyranometer with a shadow ring was set up on a separate

Card 1/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

column at the station and was calibrated against a control actinometer, which was in turn checked against an Ångstrom pyrheliometer. The 1948-1955 observations were converted to the 1956 international pyrheliometric scale. Numerical tables are now reproduced showing the mean scattered radiation in absolute units for different heights of the sun $h_\odot$ and different degrees of cloudiness n. It was found that the intensity of scattered radiation was a parabolic function of $(\sin h_\odot)^{1/2}$ for $h_\odot < 20^\circ$. Above 20° it could satisfactorily be represented by an expression of the form $D = c(\sin h_\odot)^{1/2}$ where $c = 0.19$ for a cloudless sky. For low and intermediate clouds, the scattered radiation increased with increasing n. For low clouds and vertical development clouds, the scattered radiation reached a maximum for $n = 7 - 8$ and decreased thereafter. Vertical-development Cu

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

and Cb clouds with $n < 10$ had the largest scattering power. For a totally overcast sky, the Ac clouds had the highest scattering power. Daily sums of scattered radiation were very dependent on the character of clouds, particularly towards the end of spring and the beginning of summer. In the winter, the daily sums were found to vary only slightly, owing to the presence of uniform cloudiness at Voyeykovo. The daily sums were found to vary from 8 to 364 cal/cm^2 during the year. The mean yearly sum over the 11 years was 41.4 kcal/cm^2, which amounted to 70% of the annual incidence of short-wave radiation. There are 4 figures and 8 tables.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, M.P.

Use of data on direct radiation at Voeykovo in determining the chara eristics of atmospheric transparency. Trudy GGO no. 112: 128-141 '63. (MIRA 17:5)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, M.P.

Regularities of the total radiation as observed at Voyeykovo. Trudy GGO no.160:39-53 '64. (MIRA 17:9)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZHEVSKAYA, M.P.

Radiation balance of the underlying surface according to observations in Voyeykovo. Trudy GGO no.174:149-157 '65. (MIRA 19:1)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

CHIZEVSKAYA, M. S.

Use of the polarographic method in determination of lead in industrial sewage. Gig. sanit., Moskva no. 9:11-13 Sept. 1950. (CIML 20:1)

1. Of the Department of General Hygiene, Molotov Medical Institute.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

(2)

Polarographic determination of the content of zinc in industrial waste waters. M. S. Chizhevskaya (Med. Inst., Molotov). *Gigiena i Sanit.* [redacted]. —The test sample is evapd. with a little HCl, evapd. with HNO_3, ashed at 400°, taken up in 1:1 HCl, evapd., and analyzed polarographically after extn. of the dry residue with 30% $CaCl_2$ or NaCl. The sensitivity is about 5γ Zn per ml.

G. M. Kosolapoff

Chair General Hygiene, Molotov Med. Inst

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

1

1368. The polarographic determination of copper in industrial effluent waters. M. S. Chizhevskaya. *Sb. Nauch. Rabot, Molotov Med. Inst., Molotov*, 1956, 79-82; *Ref. Zhur., Khim.*, 1956, Abstr. No. 29,306.—In this determination, 3 *N* NaCl soln. is used as the indifferent electrolyte. The height of the wave is proportional to the concn. of Cu. The method allows 5 μg of Cu to be determined in 1 ml of soln. The polarography can be carried out in the presence of all the impurities present in the effluent water, except for organic substances, which are removed by ignition. After the determination of Cu, Zn may be determined in the same soln.

C. D. Kopkin

Chem

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1

ACCESSION NR: AP4041032 S/0120/64/000/003/0123/0125

AUTHOR: Potapov, V. K.; Arsent'yev, A. G.; Kazakevich, V. Ye.; Piskunov, A. K.; Chizhevskaya, N. N.

TITLE: Automatic recording of ionization curves

SOURCE: Pribory* i tekhnika eksperimenta, no. 3, 1964, 123-125

TOPIC TAGS: spectrometer, mass spectrometer, MKh-1303 mass spectrometer, ionization curve recording

ABSTRACT: A device for automatic recording of ionization curves (up to one minute) in an MKh-1303 mass spectrometer is described. The ion-source electron gun generates 5—30-ev electrons for ionizing gases or vapors. The ionization and ion-extraction processes are time-separated. Resonance amplification of the ion current corresponding to the electron ionization with a specified energy scatter, synchronous detecting, and the direct recording of ionization

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308910018-1"