

KRIVCENKO, Ivo, dipl. inz. (Ljubljana)

System which ensures high productivity and efficiency.
Nova proizvodnja 3/4:217-218 '64.

KRIVCENKO, Ivo, dipl. inz. (Ljubljana)

High business profit, high personal income. Nova proizvod
15 no.5:345-347 0 '64.

NEYENBURG, V., kand.tekhn.nauk; KRIVCHENKO, A., kand.tekhn.nauk; PROGNIK, D., inzh.

To R.A.Bretosh's response to the article "Determining parameters of supplying hydraulic mines with waterpower"; "Ugol'," 1962, No. 4. Ugol' 39 no.1:69-70 Ja '64. (MIRA 17:3)

1. Donetskij nauchno-issledovatel'skiy ugol'nyy institut.

AID P - 4983

Subject : USSR/Aeronautics - maintenance
Card 1/1 Pub. 135 - 11/26
Author : Krivchenko, A. A., Technician-Lt.
Title : ~~USSR/Aeronautics - maintenance~~
Tuning in on the frequency of the radio altimeter transmitter.
Periodical : Vest. vozd. flota, 9, 66-68, S 1956
Abstract : A method for tuning in on the frequency of the radio altimeter transmitter is described in detail by the author. Two diagrams. The article is of informative value.
Institution : None
Submitted : No date

KRIVCHENKO, A.A.

Determining the mechanical strength of coal taking cleavage into consideration for assessing its destruction by hydraulic giant's jets. Sbor.DonUGI no.22:56-68 '61. (MIRA 15:6)
(Hydraulic mining) (Coal—Testing)

KRIVCHENKO, A.A., inzh.; BAKA, A.V., inzh.

Effect of the rate of the giant jet movement along the
face on the output capacity of hydraulic breaking.

Ugol' Ukr. 6 no.8:17-18 Ag '62. (MIRA 15:11)

1. Donetskij nauchno-issledovatel'skiy ugol'nyy institut.
(Hydraulic mining)

KRIVCHENKO, D.P., inzh.

Designing the pneumatic conveying of sawdust from log frame saws.
Der. prom. 13 no.2:16-17 F '64. (MIRA 17:3)

1. Krasnodarskiy filial Gosudarstvennogo instituta po proyektirovaniyu predpriyatiy derevoobrabatyvayushchey promyshlennosti.

KRIVONOSOV, G. I. Cand. Tech. Sci.

Dissertation: "Unstable Operating Conditions at Hydroelectric Power Stations with Pressure Pipelines and Reactive Turbines." Moscow Order of the Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev, 8 May 47.

SO: Vechernyaya Moskva, May, 1947 (Project #17836)

GUBIN, F.F.; KRIVCHENKO, G.I., kandidat tekhnicheskikh nauk, redaktor;
CHAROV, K.D., tekhnicheskii redaktor.

[Collection of designs of hydroelectric power stations] Atlas gidro-
elektricheskikh stantsii. Moskva, Gos.energ.izd-vo 1948. 60 plans
(in portfolio). Supplement - [Explanatory note] Poyasnitel'naya
zapiska. 53 p. (MIRA 8:4)
(Hydroelectric power stations)

KRIVCHENKO, G.I.; ORLOV, V.A., redaktor; LARIONOV, G.Ye., tekhnicheskii
redaktor.

[Hydraulic hammer and an effective system for regulating turbines
at hydroelectric stations] Gidravlicheskiy udar i ratsional'nye
resheniya regulirovaniya turbin gidroelektrostantsii. Moskva, Gos.
energet.izd-vo, 1951. 198 p. (MLRA 8:11)
(Turbines) (Water hammer)

KRIVCHENKO G. I.

Krivchenko G. I., "Speed Regulator for Medium-powered Water-turbines,"
Mekhanizatsiya trudoyemkikh i tyazhelykh rabot / Mechanization of
Heavy Tasks Requiring Much Labor/, 1953, No 5, Page 49, 1 illustration.

KRIVCHENKO, G.I., kandidat tekhnicheskikh nauk, dotsent.

Determining the area of a surge reservoir under conditions of
continuous operation. Sbor.trud.MISI no.9:100-123 '55.

(Hydroelectric power stations)

(MLRA 10:3)

SOV/124-57-8-8684

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 8, p 15 (USSR)

AUTHOR: Krivchenko, G. I.

TITLE: Temporary Speed Fluctuations and the Flywheel Inertia of Hydroelectric Power Aggregates (Vremennaya neravnomernost' khoda i makhovyye massy agregatov gidroelektrostantsiy)

PERIODICAL: Tr. Mosk. inzh. -stroit. in-ta, 1956, Nr 16, pp 9-25

ABSTRACT: An examination of a number of factors on the temporary speed fluctuation δ and the influence of the inertia (flywheel) effects of an aggregate on the stability of its feedback control system (FCS). The FCS of an aggregate is a closed-loop system and requires examination of all interconnected links that react to an external disturbance. However, under such a premise the solution of the problem becomes complicated. In order to simplify the solution of the determination of δ the author considers the FCS of the aggregate as an open-loop system, wherein the law governing the speed-response characteristics of the turbine is given as one of the starting conditions. It is shown that δ may increase up to the respective run-away speed of the aggregate. The author examines the subject of the rpm

Card 1/3

Temporary Speed Fluctuations and the Flywheel Inertia (cont.)

SOV/124-57-8-8684

(and, hence, the frequency) fluctuations when an aggregate is part of an electric network. It is concluded that with reference to the frequency-deviation conditions it is entirely permissible to assume a minimal value for the system inertia, which, naturally, is obtained from the design conditions of the generator rotor and the turbine runner. The influence of the promptness of the automatic regulator on the control qualities of an aggregate is shown, and it is concluded that the time for a full shut-down of the turbine gate may be increased without affecting the control qualities adversely. The problem of the temporary fluctuations due to a partial load rejection is examined. A formula is given for the determination of the minimum time required to close the turbine gates following a partial load rejection on the basis of a constant water hammer. A mathematical analysis of the influence of the flywheel inertia on the stability of the FCS of the aggregate is performed utilizing the Gurvits criterion. It is asserted that in moderately-sized power aggregates (3,000 to 25,000 kw) working in a network there is no need for an artificial enlargement of the flywheel inertia and provisions for turbine relief outlets. A new approach to the formulations of design specifications for aggregates in conformity with the above-outlined conclusions is proposed. A numerical example is given of the design calculation of an aggregate according to the prescribed aggregate power, the mean water speed, the nominal turbine rpm, the turbine

Card 2/3

SOV/124-57-8-8684

Temporary Speed Fluctuations and the Flywheel Inertia (cont.)

type, the value of the flywheel inertia, and the static head of the hydroelectric power station.

V. S. Volodin

Card 3/3

KRIVCHENKO, O.I., kand.tekhn.nauk, dots.

Temporary nonuniformity of operation and moments of gyration
of units in hydroelectric power stations. Trudy MISI no.16:9-25
'56. (MIRA 11:8)
(Hydroelectric power stations) (Hydraulic machinery)

24-6-16/24

AUTHORS: Krivchenko, G. I. and Orlov, V. A. (Moscow).

TITLE: Investigation under natural conditions of the non-steady state regimes in pressure water systems of hydraulic power stations. (Naturnye issledovaniya neustanovivshikhsya rezhimov v napornykh vodovodakh gidroelektrostantsiy).

PERIODICAL: "Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh Nauk" (Bulletin of the Ac.Sc., Technical Sciences Section), 1957, No.6, pp. 110-118 (U.S.S.R.)

ABSTRACT: The results are described of tests under natural conditions of the non-steady state processes in the water piping feeding the Mingechar hydraulic power station during switching on and switching off of load. The tests were carried out in 1954 and 1955 in the Chair for utilisation of water power of the Moscow Civil Engineering Institute imeni V. V. Kuybyshev (Moskovskiy Inzhenergo-Stroitel'niy Institut im. V. V. Kuybysheva). The arrangement of the water feeding structures to each unit of the Mingechar hydraulic power station and the location of the metering apparatus are shown in Fig.1, p.111. The water is fed to the type PO-211 turbine of 65 000 kW at 125 r.p.m. through a 4.4 m dia. pipe system; under normal operating conditions the pressure at the turbine varies between 49 and 65 m head.

Card 1/3

24-6-16/24

Investigation under natural conditions of the non-steady state regimes in pressure water systems of hydraulic power stations. (Cont.)

The tests were carried out before the water reservoirs were filled to the scheduled capacity and the static head varied between 45.1 and 46.0 m. The load relief during the tests amounted to about 50% in the tests 1, 2, 3 and 100% in the tests 4,5,6,7 and 8 in terms of the total load at 45 m head and was effected by the following two methods:

a) without disconnecting the generator from the power system by closing fully the guide vanes of the turbine and running the generator as a compensator (tests 1,2, 4 and 5); in these tests the guide vanes were fully closed for 60 secs and then they were opened to a position corresponding to no-load.

b) By disconnecting the loaded set from the power system (tests 3, 6, 7 and 8).

In the first mentioned case the r.p.m. remained constant, whilst in the second case it changed considerably. Switching on of load of 60% from zero (tests 9 and 10) was effected by shifting the guide vane limiter from a 15% opening to a 55% opening, whilst the generator remained connected to the power system. On the basis of the obtained theoretical and

Card 2/3

24-6-16/24

Investigation under natural conditions of the non-steady state regimes in pressure water systems of hydraulic power stations. (Cont.)

experimental results it is concluded that calculation of the hydraulic impact (water hammer) in pressure piping of hydraulic power stations fitted with equalisation reservoirs yields results which are in good agreement with obtained test results if the characteristics of the turbine, the real law governing the closing of the guide vane apparatus, the elastic deformations of the water and the walls of the piping and the inertia of the stream, are taken into consideration. The maximum rise in the level of the reservoirs with additional resistance can be determined very accurately if braking of the speed in the derivations and the rise of the level in the respective reservoir during the time of closing the turbine are taken into consideration. Braking of the speed can also affect the rise in the level of the reservoirs in the case of absence of an additional resistance (e.g. in reservoirs of the differential type). There are 7 figures and 6 references, 5 of which are Slavic.

SUBMITTED: July 10, 1956.

AVAILABLE:

Card 3/3

ORAKHELASHVILI, Merab Mamiyevich; GONCHAROV, A.N., redsentsent; KRIVCHENKO,
G.I., redsentsent; ARSHENEVSKIY, H.N., red.; BORUNOV, N.I.,
tekh.red.

[Wear resistance of reaction hydraulic turbines] Iznosostoikost'
reaktivnykh gidroturbin. Moskva, Gos.energ.izd-vo, 1960. 108 p.
(MIRA 14:2)

(Hydraulic turbines)

KRIVCHENKO, Grigoriy Israilevich; ARSHENEVSKIY, Nikolay Nikolayevich;
KLABUKOV, Vitoriy Mikhaylovich; MAR'YANSKIY, L.P., red.;
LARIONOV, G. Ye., tekhn.red.

[Control of adjustable-blade hydraulic turbines] Rezhimy
regulirovaniia povorotnolopastnykh gidroturbin. Moskva, Gos.
energ.izd-vo, 1960. 125 p. (MIRA 14:3)
(Hydraulic turbines)

S/122/60/000/010/007/015
A161/A030

AUTHORS: Krivchenko, G.I., Candidate of Technical Sciences, Lecturer;
Solov'yev, Iu.A., Engineer

TITLE: New Hydraulic Amplifier for Servo Systems and Automatic Control

PERIODICAL: Vestnik mashinostroyeniya, 1960, No.10, pp.36-38

TEXT: The subject amplifier is an invention of the authors (Author's Certificate No.119490 of 10 Apr. 1958), designed as a servo device having no lever transmission and permitting an infinite variation of the travel amplification factor between the control valve and the work element. The system principle, with the input and output elements moving at an angle to each other, is illustrated (Fig. 1). The amplifier joins the controlling input element (a flat slide valve) and the output element (a differential piston) into a single unit. The flat slide valve may be connected to a measuring device, or a transducer of speed, pressure, displacement, shape and dimensions, or temperature of work, etc. The flat valve (1 in Fig.1) is a ground steel plate with two windows separated by a partition (2) (having

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Card 1/4

S/122/60/000/010/007/015
A161/A030

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New Hydraulic Amplifier for Servo Systems and Automatic Control

parallel edges in this case). The partition edges have to be curved if nonlinear displacement is wanted. The two windows form two separate cavities (I and II), the first communicating with the pressure line of the hydraulic system through ducts in the differential piston, and from the other (II), oil is ejected into the drain. The pressure in the control cavity can be varied between maximum and zero by the position of the partition in relation to the windows, with corresponding displacement of the piston. Detailed operation information is given. The static and dynamic properties of the system have been tested in an amplifier manufactured at Vsesoyuznyy nauchno-issledovatel'skiy institut gidromashinostroyeniya, or VIGM, (All-Union Scientific Research Institute of Hydraulic Machinery). The amplifier had a 50 mm diameter differential piston, 25 mm travel, 6 mm diameter distribution windows and 15-20 kg/cm² work pressure; the work fluid was "Л" ("L") grade turbine oil. The hysteresis loop in the forward and back stroke on the output did not exceed 0.01-0.02 mm. The variation of the travel amplification factor K is determined by formula

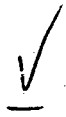
Card 2/4

S/122/60/000/010/007/015
A161/A030

New Hydraulic Amplifier for Servo Systems and Automatic Control

$$K = \frac{1}{\text{tg } \alpha} ,$$

where α is the angle of incline of the cutoff edges of the flat slide valve to the axis of the work piston (See Fig.1). The action speed of the amplifier at large deviations meets the input conditions, and without any lag even at high recording speed during oscillographing. There are 2 figures.

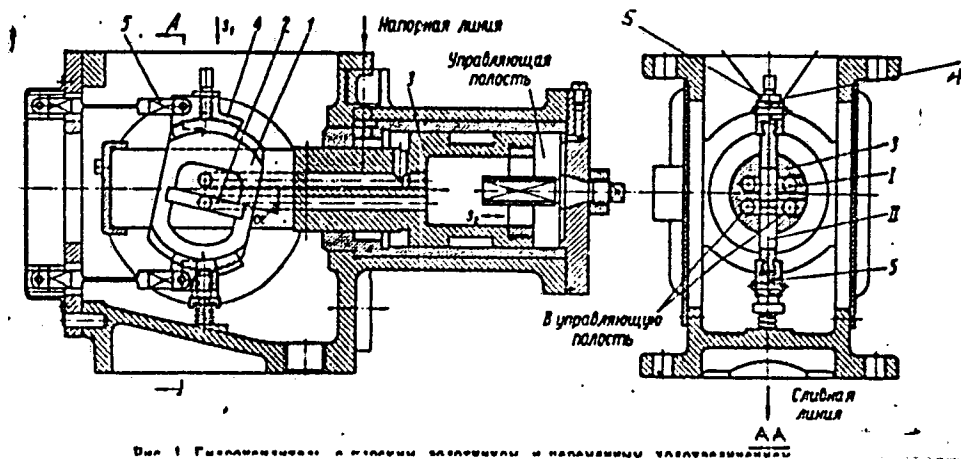


Card 3/4

S/122/60/000/010/007/015
A161/A030

New Hydraulic Amplifier for Servo Systems and Automatic Control

Fig. 1: New hydraulic amplifier for servo systems and automatic control



Card 4/4

KRIVCHENKO, G.I., kand.tekhn.nauk

Protective runaway speed regulation in the generating units of
hydroelectric power stations. Gidr. stroi. 30 no.4:44-48 Ap '60.
(MIRA 14:4)

(Hydroelectric power stations)

SHCHAPOV, Nikolay Mikhaylovich, prof., doktor tekhn. nauk, laureat
Stalinskoy premi; KRIVCHENKO, G.I., red.; BORUNOV, N.I.,
tekhn. red.

[Turbine equipment of hydroelectric power plants] Turbinnoe
oborudovanie gidrostantsii. Izd.3., dop. Moskva, Gos.energ.
izd-vo, 1961. 318 p. (MIRA 15:2)
(Hydraulic turbines) (Hydroelectric power stations)

KISELEV, Petr Grigor'yevich, kand. tekhn. nauk; Prinyal uchastiye
KRIVCHENKO, G.I., dots., kand. tekhn. nauk; ZHURIN, V.D., prof.,
doktor tekhn. nauk, red.; DANIL'CHENKO, N.V., red.; ZHIVOTOVSKIY,
L.S., red.; ORLOV, V.A., red.; VORONIN, K.P., tekhn. red.

[Reference book for calculations in hydraulic engineering] Spra-
vochnik po gidravlicheskim raschetam. Izd.3., perer. i dop. Pod
red. V.D.Zhurina. Moskva, Gos. energ. izd-vo, 1961. 352 p.

(MIRA 14:8)

(Hydraulics--Tables, calculations, etc.)

ARSHENEVSKIY, N.N., inzh.; KLADUKOV, V.M., inzh.; KRIVCHENKO, C.I.,
dotsent, kand.tekhn.nauk

Results of testing the load dropping potential of turbine units at
the Irkutsk Hydroelectric Power Station. Spor. trud. MISI no.35:
49-59 '61. (MIRA 14:9)
(Hydraulic turbines) (Irkutsk Hydroelectric Power Station)

KRIVCHENKO, G.I., dotsent, kand.tekhn.nauk; ARSHENEVSKIY, N.N., inzh.

Distribution of pressures in the runners of an adjustable-blade hydraulic turbine and axial hydrodynamic stresses. Sbor. trud. (MIRA 14:9)
MISI no.35:59-66 '61. (Hydraulic turbines)

KRIVCHENKO, G.I., dotsent, kand.tekhn.nauk

Effect of the characteristics of a hydraulic turbine on the size of
the critical area of the surge tank. Sbor. trud. MISI no.35:78-88
'61. (MIRA 14:9)

(Surge tanks) (Hydraulic turbines)

KRIVCHENKO, G.I., kand. tekhn. nauk; KLAHUKOV, V.M., inzh.

Actual testing of the turbine sets of the Pavlovsk Hydroelectric
Power Station. Gidr. stroi. 33 no. 10:38-43 0 '62. (MIRA 15:12)
(Pavlovsk Hydroelectric Power Station—Hydraulic turbines—Testing)

KRIVCHENKO, G.I. (Moskva)

Characteristics of a hydraulic turbine during transient processes.
Izv. AN SSSR. Otd. tekhn. nauk. Energ. i transp. no.1:113-121 Ja-F '63.
(MIRA 16:5)

(Hydraulic turbines)

KRIVCHENKO, Grigoriy Izrailevich. KUCHKIN, B.M., retsenzent; MAR'YANSKIY, L.P., red.

[Automatic control of hydraulic turbines] Avtomaticheskoe regulirovanie gidroturbin. Moskva, Energiia, 1964. 288 p. (MIRA 17:10)

GRIGOR'YEV, A.M. [Hrihor'iev, A.M.]; KRIVCHENKO, G.O. [Kryvchenko, H.O.], prof. [deceased]; STAROVOYTENKO, I.P.; USTINOVA, L.A. [Ustynova, L.A.]; CHUNTULOV, V.T.; GOLOVNYAK, L.P. [Holovnyak, L.P.], red.; KHOKHONOVSKAYA, T.I. [Khokhanovs'ka, T.I.], tekhn. red.

[Economic and geographical features of the Ukrainian S.S.R.] Ukrain's'ka RSR; ekonomiko-geografichna kharakterystyka. Kyiv, Vyd-vo Kyivs'koho univ., 1961. 208 p. (MIRA 14:10)

(Ukraine--Economic geography)

KLIMANOVA, Ye.A., kand. tekhn. nauk; TSINOVSKAYA, N.Yu., inzh.; KRAVCHENKO,
O.I., inzh.; MUDRAK, A.I., inzh.

Materials made from paper stock and water glass. Bum. prom.
37 no.7:15-16 J1'62. (MIRA 17:2)

KRIVCHENKO, S.; MOSKVIN, D.

An interpretation of the problem of the replacement of the labor force ("Labor supply of the U.S.S.R. and its utilization"; on the problem of the economic capacity of the country by A.D.Kuznetsov. Reviewed by S.Krivchenko, D.Moskvin). Vop.ekon. no.5:107-111 M^y '61.

(Labor supply)
(Kuznetsov, A.D.)

(MIRA 14:5)

COUNTRY : USSR
CATEGORY : Soil Science. Organic Fertilizers.
J
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104495
AUTHOR : Kriychenko, V. I.
INST. :
TITLE : Silicate Bacteria

ORIG. PUB. : Zashchita rast. ot vredit. i bolezney, 1957, No. 5, 31-32

ABSTRACT : In production and plot experiments the positive effect of silicate bacteria on wheat yield and on reduction of fungus infection of wheat, corn and cucumbers was established.--T.Ch.

Card: 1/1

22

KRIVCHENKO, V. I. Cand Agr Sci -- (diss) "Raising ~~of~~ the resistance of winter wheat to brown mildew on the basis of improved nutrition with the use of silicate bacteria. (Applicable to conditions of Krasnodarskiy Kray)." Len, 1958. 19 pp (All-Union Order of Lenin Acad Agr Sci im V. I. Lenin. All-Union Sci Res Inst of Protection of Plants), 100 copies (KL, 14-58, 115)

KRIVCHENKO, V.I.

Using silicate bacteria for increasing the resistance of winter
wheat to leaf rust. Trudy VIZR no.10:125-136 ' 58. (MIRA 12:1)
(Bacteria, Silicate) (Wheat--Diseases and pests)
(Rusts (Fungi))

KRIVCHENKO, V.I., kand.sel'skokhozyaystvennykh nauk

Rapid laboratory method for determining wheat resistance to
loose smut. Zashch. rast. ot vred. i bol. 7 no.1:48-49 '62.
(MIRA 15:6)

1. Laboratoriya immuniteta Vsesoyuznogo institut zashchity
rasteniy.

(Wheat—Diseases and pests)
(Smuts)

FEDOTOVA, T.I., doktor sel'skokhoz.nauk; KRIVCHENKO, V.I., kand.sel'skokhoz.
nauk

Nature of the infestation of wheat with loose smut. Zashch. rast.
ot vred. i bol. 6 no.9:44-45 S '61. (MIRA 16:5)

1. Laboratoriya immuniteta Vsesoyusnogo instituta zashchity
rasteniy.

(Wheat--Diseases and pests) (Smuts)

KORSHIKOV, O.A. [Korshykov, O.A.], prof.; ROLL, Ya.V., otv. red.;
IKSNER, A.M., doktor biol. nauk, red.; TOPACHEVSKIY, O.V.
[Topachevs'kyi, O.V.], kand. biol. nauk, red.; KRIVCHENKO,
V.V. [Kryvchenko, V.V.], red.; SIVACHENKO, I.E.K., tekhn. red.

[Classification key of the freshwater algae of the Ukrainian
S.S.R.] Vyznachnyk prysnovodnykh vodorostei Ukrain's'koi RSR.
Kyiv, Vyd-vo Akad. nauk URSR. Vol. 5. [Subclass Protococ-
cineae: Vacuolales and Protococcales] Pidklas protokokovi
(Protococcineae): Vakuol'ni (Vacuolales) ta Protokokovi
(Protococcales). 1953. 436 p. (MIRA 15:7)

1. Akademiya nauk URSR, Kiev. Instytut botaniky. 2. Chlen-
korrespondent Akademii nauk USSR (for Roll).
(Ukraine—Algae)

AFANAS'YEV, S. G., kand.tekhn.nauk; EPSHTEYN, Z. D., inzh.;
KRIVCHENKO, Yu. S., inzh.; GUREVICH, B. Ye., inzh.; KOZIN, G. N., inzh.;
RUBINSKIY, P. S., inzh.; KUKURUZNYAK, I. S., inzh.; GUL'YEV, G. P.,
inzh.; CHIGRAY, I. D., inzh.

Operation of the "Krivorozhstal'" converter plant. Biul. TSIICHM
no.5:12-16 '61. (MIRA 14:10)
(Krivoy Rog--Metallurgical plants)
(Converters)

KVITKO, M.P.; KRIVCHENKO, Yu.S.

Making Q13L steel in converters with a top oxygen blow. Lit.
proizv. no.2:33-35 F '62. (MIRA 15:2)
(Steel--Metallurgy) (Bressemer process)

KOZIN, G.N.; KRIVCHENKO, Yu.S.; KUDRINA, A.P.; VIT', Ye.F.

Service conditions and wear characteristics of refractories in oxygen-blown converters. Ogneupory 28 no.2:71-78 '63.

(MIRA 16:2)

1. Krivorozhskiy metallurgicheskiy zavod im. V.I.Lenina.
(Converters) (Firebrick)

KRIVCHENKO, Yu.S.; KUDRINA, A.P.; GUL'EV, G.F.; VIT', Yo.F.

Use of quartz sands for the ramming of steel pouring ladles.
Metallurg 8 no.2:17-20 F '63. (MIRA 16:2)

1. Krivorozhskiy metallurgicheskiy zavod.
(Iron and steel plants--Equipment and supplies)
(Sand, Foundry)

KORKOSHKO, N.M., inzh.; KOLGANOV, G.S., inzh.; KRIVCHENKO, Yu.S., inzh.;
SERVETNIK, V.M., inzh.

Comparison of material balances in oxygen converters and large-
capacity open-hearth furnaces with the use of oxygen. Stal' 23
no.9:788-791 S '63. (MIRA 16:10)

KUDRINA, A.P.; KRIVCHENKO, Yu.S.; GUL'YEV, G.F.

Effect of physicochemical indices of basic refractories on the
stability of acid converter linings. Ogneupory 28 no.9:400-408
'63. (MIRA 16:10)

1. Krivorozhskiy metallurgicheskiy zavod im. V.I.Lenina.

KRIVCHENKO, Yu.S., inzh.; SMOKTIY, V.V., inzh.; POLISHAKOV, V.A., inzh.;
LEBEDEV, S.Ye., inzh.

Using steel scrap in the oxygen-blown converter process. Stal' 24
no.2:134-136 F '64. (MIRA 17:9)

1. Krivorozhskiy metallurgicheskiy zavod i Tsentral'nyy nauchno-
issledovatel'skiy institut chernoy metallurgii imeni I.P.Bardina.

KARNAUKHOV, V.V.; SOBOLEV, S.K., kand.tekhn.nauk; GUL'YEV, G.P.;
KOZIN, G.N.; KRIVCHENKO, Yu.S.

Automation of the determination of the stopping moment of
blowing in an oxygen-blown convert. Mat.l gornorud. prom.no. 2:
26-28 Mr-Ap '64. (MIRA 17:9)

KOZIN, G.N.; KRIVCHENKO, Yu.S.

Expanding the assortment of oxygen-blown converter steel.
Met. 1 gornorud. prom. no. 2:63-64 Mr-Ap '64. (MIRA 17:9)

KUDRINA, A.P.; KRIVCHENKO, Yu.S.; GUL'YEV, G.F.

Service of the lining in a 55 ton converter. Met. 1 gornorud.
prom. no. 3:44-46 My-Je '64. (MIRA 17:10)

GUL'YEV, G.F., inzh.; KRIVCHENKO, Yu.S., inzh.; BOL'SHAKOV, V.A., inzh.;
KUDRINA, A.P., inzh.; LEBEDEV, S.Ye., inzh.; CHIGRAY, I.D., inzh.;
SERVETNIK, V.M., inzh.

Converter smelting with partial use of tap cinder. Stal' 24
no.10:881-884 0 '64. (MIRA 17:12)

CHIGRAY, Ivan Dmitriyevich; KRIVCHENKO, Yuriy Sergeyevich

[Converter operator assistant] Podruchnyi konverter-
shchika. Moskva, Metallurgiya, 1965. 169 p.
(MIRA 18:4)

KRIVCHENKO, Yu.S.; BOL'SHAKOV, V.A.

Production of Bessemer steel with the use of final slag from
the previous melt. Met. i gornorud. prom. no.1:60-61 Ja-F '65.
(MIRA 18:3)

KRIVCHENKOV, G.M., kandidat tekhnicheskikh nauk.

Mutual compensation of errors in the screw thread elements of internal
gauges. Standartizatsiia no.2:51-52 Mr-Ap '57. (MIRA 10:6)
(Screw threads, Standard) (Gauges- Standards)

VYRZHIKOVSKAYA, M.F.; KRIVCHENKOV, G.M.

Instruments and devices for clinical radiology. Trudy NIIEKHAI
no.5:307-310 '61. (MIRA 15:8)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgi-
cheskoy apparatury i instrumentov.
(RADIOLOGY, MEDICAL—EQUIPMENT AND SUPPLIES)

KRIVCHENKOV, N. P.

Twenty years of work at the Osakarovka Hatchery. Ptitsevodstvo
8 no.6:25 Je '58. (MIRA 11:6)

1. Nachal'nik upravleniya ptitsevodstva i inkubaterno-ptitsevedches-
kaya stantsiya Karagandinskogo oblastnogo upravleniya sel'skogo
khozyaystva.

(Kazakhstan--Poultry hatcheries)

KRIVCHENKOV, N.P.

Achievements of poultry breeders on state farms. Ptitsevodstvo
9 no.2:17 P '59. (MIRA 12:3)

1. Nachal'nik Karagandinskogo oblastnogo upravleniya ptitsvodstvom
i inkubatorno-ptitsevodcheskoy stantsiyey.
(Karaganda Province--Poultry)

BUKHOVTSEV, Boris Borisovich; KRIVCHENKOV, Vladimir Dmitriyevich;
MYAKISHEV, Gennadiy Yakovlevich; SHAL'NOV, Vladimir
Petrovich; NOVODVORSKAYA, Ye.M., red.; RAYSKAYA, N.A., red.

[Problems in elementary physics; textbook for self-
education] Sbornik zadach po elementarnoi fizike; posobie
dlia samoobrazovaniia. Moskva, Izd-vo "Nauka," 1964. 438 p.
(MIRA 17:7)

GOL'DMAN, Ionif Il'ich; KRIVCHENKOV, Vladimir Dmitriyevich; GEYLICHMAN, B.T.,
professor, redaktor; ZHABOTINSKIY, Ig.Ye., redaktor; GAVRILOV, S.S.,
tekhnicheskiiy redaktor

[Collection of problems in quantum mechanics] Sbornik zadach po
kvantovoi mekhanike. Pod red. B.T.Geilikmana. Moskva, Gos.izd-vo
tekhniko-teoret. lit-ry, 1957. 275 p. (MLR 10:10)
(Quantum theory--Problems, exercises, etc.)

24,1500

2h718
S/056/61/040/005/018/019
B109/B212

AUTHORS: Gershteyn, S. S., Krivchenkov, V. D.

TITLE: Terms of an electron in a field of two different Coulomb centers

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 40, no. 5, 1961, 1491-1502

TEXT: It is demonstrated that the Neuman-Wigner theorem on the impossibility of intersection of terms of the same symmetry is not valid for electrons located in the field of two Coulomb centers with the charges Z_1 and Z_2 . The terms for large and small distances between differently charged nuclei are analyzed. The Schrödinger equation describing the problem of two Coulomb centers reads as follows:

$$-\frac{1}{2} \Delta \Psi + \left(-\frac{Z_1}{r_1} - \frac{Z_2}{r_2} + \frac{Z_1 Z_2}{R} \right) \Psi = E \Psi \quad (1),$$

Where R denotes the internuclear distance, r_1 , r_2 the distance of the

Card 1/7

24718

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B109/B212

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Terms of an electron in a field of two...

electron from the first and the second nucleus. After the elliptic coordinates

$$\xi = (r_1 + r_2)/R, \quad \eta = (r_1 - r_2)/R, \quad \varphi = \arctan(y/x), \quad (2)$$

have been introduced, the following expression is set up for the wave function:

$$\psi = X(\xi) Y(\eta) e^{im\varphi} \quad (3)$$

The Hamiltonian of the system reads

$$\hat{H} = -\frac{2}{R^2(\xi^2 - \eta^2)} \left\{ \frac{\partial}{\partial \xi} (\xi^2 - 1) \frac{\partial}{\partial \xi} + \frac{\partial}{\partial \eta} (1 - \eta^2) \frac{\partial}{\partial \eta} + \frac{\xi^2 - \eta^2}{(\xi^2 - 1)(1 - \eta^2)} \frac{\partial^2}{\partial \varphi^2} \right\} - \frac{2Z_1}{R(\xi - \eta)} - \frac{2Z_2}{R(\xi + \eta)} + \frac{Z_1 Z_2}{R} \quad (9)$$

or $\hat{H}(R) = \hat{H}(R_0) + \hat{V}$, where $\hat{H}(R_0)$ shows the eigenvalues E_1^0 and E_2^0 and the eigenfunctions ψ_1^0 and ψ_2^0 , and $\hat{V} = \frac{\delta \hat{H}}{\delta R} \delta R$. From the orthogonality of the functions ψ_1^0 and ψ_2^0 the following expression is obtained for functions of

Card 2/7

24718
S/056/61/040/005/018/019
B109/B212

Terms of an electron in a field of two...

the same symmetry:

$$\left\langle \frac{1}{r} \right\rangle_{12} = \frac{\pi R^4 (E_1^0 - E_2^0)}{4 (A_1 - A_2)} (\langle \xi^2 \rangle_{12} \langle \eta \rangle_{12} - \langle \xi \rangle_{12} \langle \eta^2 \rangle_{12}). \quad (14)$$

and also an analogous expression for $\left\langle \frac{1}{r^2} \right\rangle_{12}$. Hence,

$$V_{12} = \text{const.} (E_1^0 - E_2^0) \delta R \quad (15),$$

and in this approximation V_{12} vanishes at the sametime as $E_1^0 - E_2^0$, i.e., interaction of terms having the same symmetry is possible. The number of roots of the functions $X(\xi)$ and $Y(\eta)$ in the intervals $1 < \xi < \infty$ and $-1 < \eta < 1$ does not change for different parameters R . This fact can be utilized to compare terms at large and small distances between the nuclei. If n_ξ denotes the number of zeros of $X(\xi)$ ($1 < \xi < \infty$) and n_η that of $Y(\eta)$ ($-1 < \eta < 1$), then, with $R \rightarrow 0$, $n_\xi = n_r$, $n_\eta = 1 - |m|$, where l denotes the orbital angular momentum, and n_r the radial quantum number of the bound atom. For $R \rightarrow \infty$ the elliptic coordinates will change over into parabolic ones. In order to compare the terms at small and large distances, n_ξ and

Card 3/7

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24718
S/056/61/040/005/018/019
B109/B212



Terms of an electron in a field of two...

n_η have therefore to be expressed by parabolic quantum numbers of the free atoms. For $R \gg 1$ one obtains $n_\xi = n_1$, where n_1 denotes the parabolic quantum number; the new variable

$$\mu = R(1 + \eta), \quad 0 \leq \mu \leq 2R \quad (23)$$

is introduced for n_η if $R \gg 1$. This yields

$$Y(\mu) = \mu^{|m|/2} e^{-\mu/R} F(-n_2; |m| + 1; 2\mu/R) \quad (25),$$

where n_2 is a positive integer. (25) has n_2 roots. For $Z_1 = Z_2$ $n_\eta = 2n_2 + 1$ for antisymmetric terms, and $n_\eta = 2n_2$ for symmetric terms. If $Z_1 \neq Z_2$, the following expression is obtained with the help of

$$\mu_1 = R(1 - \eta), \quad 0 \leq \mu_1 \leq 2R \quad (31):$$

$$Y = \mu_1^{|m|/2} e^{-\mu_1/R} F(\alpha; |m| + 1; 2\mu_1/R) \quad (33),$$

where

$$\alpha = -n_2 - n(Z_2 - Z_1)/Z_1 \quad (34).$$

Card 4/7

Terms of an electron in a field of two...

2:718
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B109/B212

For $\alpha > 0$ ($Z_1 > Z_2$, $0 \leq n_2 < n(Z_1 - Z_2)/Z_1$ (35)) one has $n_\eta = n_2$; if $\alpha < 0$ and $Z_2 n/Z_1$ is no integer, then an oscillation of the wave function (Fig. 1) will occur near Z_2 . n_η is described by

$$n_\eta = n_2 + 1 + \text{Ent}[n_2 + n(Z_2 - Z_1)/Z_1] \quad (37),$$

where $\text{Ent}(x)$ denotes the integral part of x . If $\alpha < 0$ and $Z_2 n/Z_1 = n'$, where n' denotes an integer, the following is valid: $n_\eta = n_2 + n'_2$ if, with $R \rightarrow \infty$, the electron is at the nucleus having the smaller charge (in the other case $n_\eta = n_2 + n'_2 + 1$). Fig. 2 shows the behavior of the terms for the case of a σ -term at $Z_1 = 2$, $Z_2 = 3$. The parabolic quantum numbers (n_1, n_2, m) are given in parentheses; the prime denotes the quantum numbers belonging to the nucleus Z_2 . At sufficiently large Z , certain terms of the nucleus Z , which are located below the K-level of the hydrogen atom when vanishing at infinity, will intersect the corresponding hydrogen terms. This appears already when $z \gg 3$ and increases the

Card 5/7

2h718

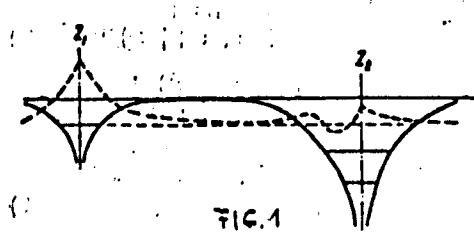
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Terms of an electron in a field of two...

probability for a charge exchange during a collision between a hydrogen atom and the nucleus Z . The authors thank L. D. Landau, L. I. Lapidus, A. A. Logunov, and Ya. A. Smorodinskiy for discussions, and also N. S. Isayeva for preparing the manuscript. The paper refers to a book of G. Bete (Kvantovaya mekhanika prosteyshikh sistem, ONTI, M.-L., 1954). There are 3 figures and 9 references: 2 Soviet-bloc and 7 non-Soviet-bloc.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University). Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: December 26, 1960



Card 6/7

39490

S/056/62/043/002/050/053
B104/B108

24.2300

AUTHORS: Krivchenkov, V. D., Pil'shchikov, A. I.

TITLE: The magnetostatic precession types in an anisotropic sphere

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,
no. 2(8), 1962, 573-580

TEXT: This general calculation of the magnetostatic precession types is made in order to obtain expressions for the resonance fields and magnetostatic potentials of the precession types in an anisotropic sphere. Allowing for different directions of magnetization and external magnetic field, the magnetostatic potential ψ ($\vec{H} = \text{grad } \psi$) inside the sphere is given by

$$\left\{ 1 + \frac{\Omega_1}{\Omega_1^2 - \Omega^2 - \delta^2} \right\} \left(\frac{\partial^2 \psi^{(1)}}{\partial x^2} + \frac{\partial^2 \psi^{(1)}}{\partial y^2} \right) + \frac{\partial^2 \psi^{(1)}}{\partial z^2} + \frac{\delta}{\Omega_1^2 - \Omega^2 - \delta^2} \left(\frac{\partial^2 \psi^{(1)}}{\partial x^2} - \frac{\partial^2 \psi^{(1)}}{\partial y^2} \right), \quad (1).$$

Card (1/3)

S/056/62/043/002/030/053
 B104/B108

The magnetostatic precession types...

$\Delta\psi^{(e)} = 0$ outside the sphere. Boundary conditions:
 $\psi^{(i)} = \psi^{(e)}$ (3)

$$\left\{ \frac{\partial}{\partial r} + \left[\frac{\Omega_1}{\Omega_1^2 - \Omega^2 - \delta^2} \left(\frac{x}{r} \frac{\partial}{\partial x} + \frac{y}{r} \frac{\partial}{\partial y} \right) + i \frac{\Omega}{\Omega_1^2 - \Omega^2 - \delta^2} \left(\frac{x}{r} \frac{\partial}{\partial y} - \frac{y}{r} \frac{\partial}{\partial x} \right) + \frac{\delta}{\Omega_1^2 - \Omega^2 - \delta^2} \left(\frac{x}{r} \frac{\partial}{\partial x} - \frac{y}{r} \frac{\partial}{\partial y} \right) \right] \right\} \psi^{(i)} = \frac{\partial \psi^{(e)}}{\partial r} \quad (4)$$

It is shown that an anisotropy exists in the difference of the resonance fields, and that the precession types are coupled by the anisotropy. The resonance fields of the magnetostatic precession types depend on the orientation of the permanent magnetization relative to the crystallographic axes. This dependence is different for different precession types. If a sphere is magnetized in the direction of easy magnetizability or in the direction of difficult magnetizability, all precession types will agree with those of an isotropic specimen. The resonance fields of such orientations differ from those of an anisotropic specimen by the same amount for all precession types. The temperature dependence of the coupling of the precession types depends on that of the anisotropy constant and magnetization. There is 1 figure.

Card 2/3

The magnetostatic procession types...

S/056/62/043/002/030/053
B104/B108

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: March 2, 1962

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Card 3/3

KRIVCHENKOVA, A.D.

Change in the osmotic resistance and the diameter of erythrocytes in Botkin's disease. Trudy Kish.gos.med.inst. 11: 125-128 '60. (MIRA 16'2)

1. Kafedra propedevticheskoy terapii Kishinevskogo gosudarstvennogo meditsinskogo instituta. (HEPATITIS, INFECTIOUS) (ERYTHROCYTES)

KRIVCHENKOVA, Lyuba; TYURINA, Lara; KOSTIKOVA, Lida; KOSAREVA, Lida;
RUMYANTSEV, Andryusha; CHIZHIKOVA, Lida; GOLEN'SHIN, Petya

Blooming gladioli in May. IUn. nat. no.5:11 My '58. (MIRA 11:5)

1.Shkola No.538, Moskva.

(Gladiolus)

YEFIMOV, I.A.; Prinsipialni uchastiye: KOBEL'EV, V.V.; NAZAROV, A.D.; KRIV-
CHENKOVA, R.N.

[Study of the remagnetization time of ferromagnetic film-type
elements] Issledovanie vremeni peremagnichivaniia ferromagnit'-
nykh plenochnykh elementov. Moskva, In-t tochnoi mekhaniki i
vychislitel'noi tekhniki Akad. nauk SSSR, 1961. 23 p.

(MIRA 14:8)

(Ferrates) (Ferromagnetism)

KOBELEV, V.V.; KORSUNSKIY, A.A.; Prinimala uchastiye KRIVCHENKOVA, R.N.

[Domain structure of uniaxial ferromagnetic films] Domennaia
struktura odnoosnykh ferromagnitnykh plenok. Moskva, In-t tochnoi
mekhaniki i vychislitel'noi tekhniki Akad. nauk SSSR, 1961.
29 p. (MIRA 14:8)

(Ferromagnetism) (Magnetic materials)

GORKIN, V.Z.; KRIVCHENKOVA, R.S.

Effect of cysteamine and other mercaptoamino compounds on the activity of mitochondrial monoamino oxidase. *Biokhimiya* 29 no.5:992-998 J1-Ag '64. (MIRA 18:11)

1. Laboratoriya biokhimi i aminov i drugikh azotistykh osnovaniy Instituta biologicheskoy i meditsinskoy khimii AMN SSSR, Moskva.

KRIVCHENKOVA, R. S.

"Effect of Antituberculosis Chemotherapeutic Substances on the Respiration of Mycobacteria." Cand Biol Sci, All-Union Sci Res Chemico-pharmaceutical Inst, Moscow, 1954. (ZhBiol, No 6, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

KRIVCHENKOVA, R.S.

Studies on the effect of sodium diethyldithiocarbamate on polonium
injury. Med. rad. 5 no.11:53-56 N '60. (MIRA 13:12)
(UREA) (POLONIUM--ISOTOPES) (RADIATION PROTECTION)

GORKIN, V.Z.; KRIVCHENKOVA, R.S.; Priznaniye ustoychivosti: KETROSKNIY, N.A.;
LEONT'YEVA, G.A.

Mechanism of inhibition of the biogenic amine oxidase (spermine oxidase)
activity by isoniiazid. Vop.med.khim. 10 no.2:149-154. Mr-Ap '64.

(MIRA 18:1)

1. Laboratoriya biokhimi aminov i drugikh azotistykh osnovaniy
Instituta biologicheskoy i meditsinskoy khimii ANU SSSR, Moskva.

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826520011-6

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000826520011-6"

VASIL'YEV, Leonid Georgiyevich; LEVIN, Samuil Mironovich; KRIVCHENOK,
I.Ye., red.; POD'YEL'SKAYA, K.M., tekhn.red.

[Public Health Service in Karelia] Zdravookhranenie Karelii.
Petrozavodsk, Gos.izd-vo Karel'skoi ASSR, 1960. 93 p.
(MIRA 14:4)

(KARELIA--PUBLIC HEALTH)

KALUZHSKIY, Nikolay Andreyevich; KRIVCHENOK, I.Ye., red.

[Chemistry and the economy of Karelia] Khimija i ekonomika Karelii. Petrozavodsk, Karel'skoe knizhnoe izd-vo 1965. 103 p. (MIRA 19:1)

KRIVCHENOK, I.Ye., red.

[On the steel main line] Na stal'noi magistrali. Petro-
zavodsk, Karel'skoe knizhnoe izd-vo, 1964. 51 p.
(MIRA 18:11)

VALENTIK, Ivan Yakovlevich; KRIVCHENOK, I.Ye., red.; SHEVCHENKO,
L.V., tekhn. red.

[The seven-year plan of Karelia in operation; facts and
figures] Semiletka Karelii v deistvii; tsifry i fakty.
Petrozavodsk, Karel'skoe knizhnoe izd-vo, 1963. 174 p.
(MIRA 16:7)

1. Predsedatel' Gosudarstvennogo planovogo komiteta Soveta
Ministrov Karel'skoy ASSR (for Valentik).
(Karelia--Economic policy)

KRIVCHIK, A. A. Cand Med Sci -- (diss) "Blood transfusions after acute hemorrhages in cases of hypothermia (Experimental study)." Minsk, 1957. 21 pp (Minsk State Med Inst), 200 copies (KL, 36-58, 115)

KRIVCHIK, I.A.; TSYPLENKOV, V.D.

Making gypsum slag concrete slabs for interior partitions. Rats.
i isobr.predl.v stroi. no.13:19-23 '59. (MIRA 13:6)

1. Po materialam testa Pechorstroy Ministerstva transportnogo
stroitel'stva SSSR, Komi ASSR, g. Pechora, l.
(Walls) (Concrete slabs)

GRIN'KO, S.V.; KRIVCHIK, P.T.; CHEBANENKO, P.K.; SHCHERBAK, I.P.; SHERSTYUK,
A.S., red.; ALEKSEYEV, V., tekhn. red.

[The Dnieper Hydroelectric Power Station a first step in the industrialization of the country; collection of documents on the construction of V.I.Lenin Dnieper Hydroelectric Power Station, 1926-1932] Per-venets industrializatsii strany - Dneproges imeni V.I.Lenina; sbornik dokumentov o stroitel'stve Dneprogesa im. V.I.Lenina 1926-1932gg. Zaporozh'e, Zaporozhskoe knizhnoe izd-vo, 1960. 286 p. (MIRA 14:11)

1. Kommunisticheskaya partiya Ukrainy. Zaporozhskiy oblastnoy komitet. Partiynyy arkhiv.

(Dnieper Hydroelectric Power Station)

LEVITMAN, Kh.Ya., KRIVCHIK, Z.A.

Amperometric determination of copper and nickel in steel alloys
by means of dithio-osamide hydride. Zav.lav.21 no.4:397-399 '55.
(MLRA 8:6)

1. Institut khimii Akademii nauk SSSR.
(Steel alloys--Analysis)

Yermolenko, N.F.; KRIVCHIK, Z.A.

Structure and adsorption activity of peat charcoal. Sbor.nauch.
rab.Inst.khim.AN BSSR no.5:204-212 '56. (MLRA 10:5)
(Peat) (Charcoal)

KRIVCHIK, Z. A. and H. P. YERMOLINKO

"Structure and Adsorbability of Peat Charcoals" Part II *2.125*

Sbornik nauchnykh rabot, vyp. 6, (Collection of Scientific Works of the Institute of Chemistry, Belorussian SSR, Academy of Sciences, No. 6) Minsk, Izd-vo AN Belorusskoy SSR, 1958, 271 pp.

KRIVCHIK, Z.A.; YERMOLENKO, N.F.

Adsorption activity in relation to structure of charcoal from
buried resinous wood. Dokl.AN BSSR 3 no.2:47-51 F '59.

(MIRA 12:5)

(Carbon, Activated)

YEMOLENKO, N. F. and KRIVCHIK, L. A.

"The Structure and The Adsorptional Activity of These Coals."

report presented at the Section on Colloid Chemistry, VIII Mendeleev Conference of
General and Applied Chemistry, Moscow, 16-23 March 1959.
(Koll. Zhur. v. 21, No. 4, pp. 509-511)

KRIVCHIK, Z.A.; YERMOLENKO, N.F.

Structure and adsorption activity of carbons as related to conditions of activation. Dokl. AN BSSR 4 no.6:244-247 Je '60. (MIRA 13:7)

1. Institut obshchey i neorganicheskoy khimii AN BSSR.
(Carbon, Activated)

KRIVCHIK, Z.A.; YERMOLENKO, N.F., akademik

Certain features of cation exchange in an acid medium on cation exchangers with carboxyl functional groups. Dokl. AN SSSR 151 no.5:1147-1149 Ag '63. (MIRA 16:9)

1. Institut obshchey i neorganicheskoy khimii AN BSSR. 2. AN BSSR (for Yermolenko).

(Ion exchange) (Carboxyl group)

KRIVCHIK, Z.A.; YERMOLENKO, N.F.

Sorption and ion-exchange properties of sulfurized coals. Koll.zhur.
26 no.1:51-56 Ja-F '64. (MIRA 17:4)

1. Institut obshchey i neorganicheskoy khimii AN BSSR, Minsk.

KRIVCHIKOV, A.P.

127-58-7-11/20

AUTHOR: Gol'din, M.L., Krivchikov, A.P., Marinin, N.S., and Figotin, L.I., Engineers

TITLE: Gamma-Relay for Ore-Mining Equipment (Gamma-rele dlya gornorudnogo oborudovaniya)

PERIODICAL: Gornyy zhurnal, 1958, Nr 7, pp 60-61 (USSR)

ABSTRACT: The Khar'kovskiy zavod kontrol'no-izmeritel'nykh priborov (The Khar'kov Testing and Measuring Devices Plant) (KIP) has built a gamma-relay for the mining industry. The laboratory studied various operating relays and concluded that detectors of gamma-relay radiation must be fed by direct current. Halogenous counters must be used as detectors. The intensity of their feed is almost equal to the anode feed of the electronic tubes used in the gamma-relay, and a common rectifier could be built. The authors give a detailed description of the device. The use of several such relays at the crushing plant YUCOK showed that the flow on the transmitting belt could be efficiently controlled, thus avoiding clogging or breakage of the belt. There are 2 photos, 1 schematic diagram and 2 Soviet reference.

Card 1/1

1. Mining equipment 2. Gamma relay-Applications

KRIVCHIKOV, D.P.

14(5)

SCV/127-59-3-15/22

AUTHORS: Gol'din, M.L., Generalov, G.S., Krivchikov, A.P.,
Dolgallo, G.N. and Laskovets M.F., Engineers.

TITLE: The Industrial Trials of a Radioactive Meter for
Pulp Density (Promyshlennyye ispytaniya radioaktivnogo
izmeritelya plotnosti pul'py)

PERIODICAL: Gornyy zhurnal, 1959, Nr 3, pp 55-57 (USSR)

ABSTRACT: The authors propose a method of measuring the pulp
density with the aid of radioactive isotopes, and
describe the apparatus used in the experiment. A
stream of gamma-rays from a fixed source RI (figure
1) passes through the tube T and compensatory taper
K simultaneously, exposing to rays two ionizing
chambers, working chamber RK and compensational cham-
ber KK which have a common collecting electrode. The
ion current, originating in the working chamber is
the function of the pulp density. Changes in pulp
density cause the change in importance of the gamma-
ray stream penetrating into the working chamber, and

Card 1/2

SOV/127-59-3-15/22

The Industrial Trials of a Radioactive Meter for Pulp Density.

a differential ionizing current originates in the chambers. This current finally reaches a contactless ferro-dynamic DF indicator and a secondary VF set with a similar indicator. The VF set marks the oscillation of the current on a diagrammatic sheet of paper. When compared with the results of laboratory tests, inscribed density indications differed by 0,4%. There is 1 diagram and 1 graph.

Card 2/2

KRIVCHIKOV, P.F.; CHUGUNOV, L.F.; YASAFOV, A.F.; YAKHIZIN, V.A.

The Tyrnyauz Combine is 25 years old. TSvet. met. 38 no.9:6-12
S '65. (MIRA 18:12)