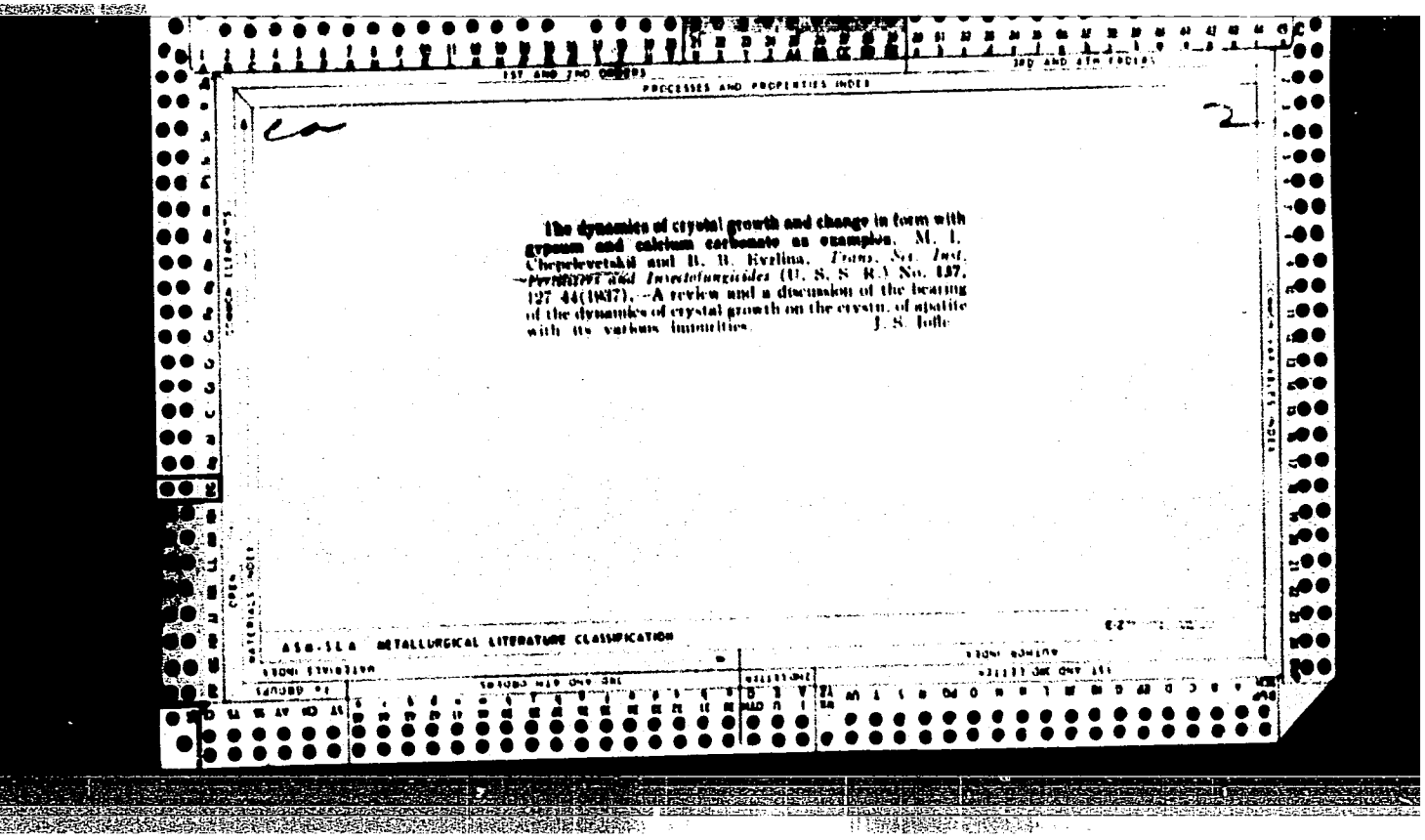
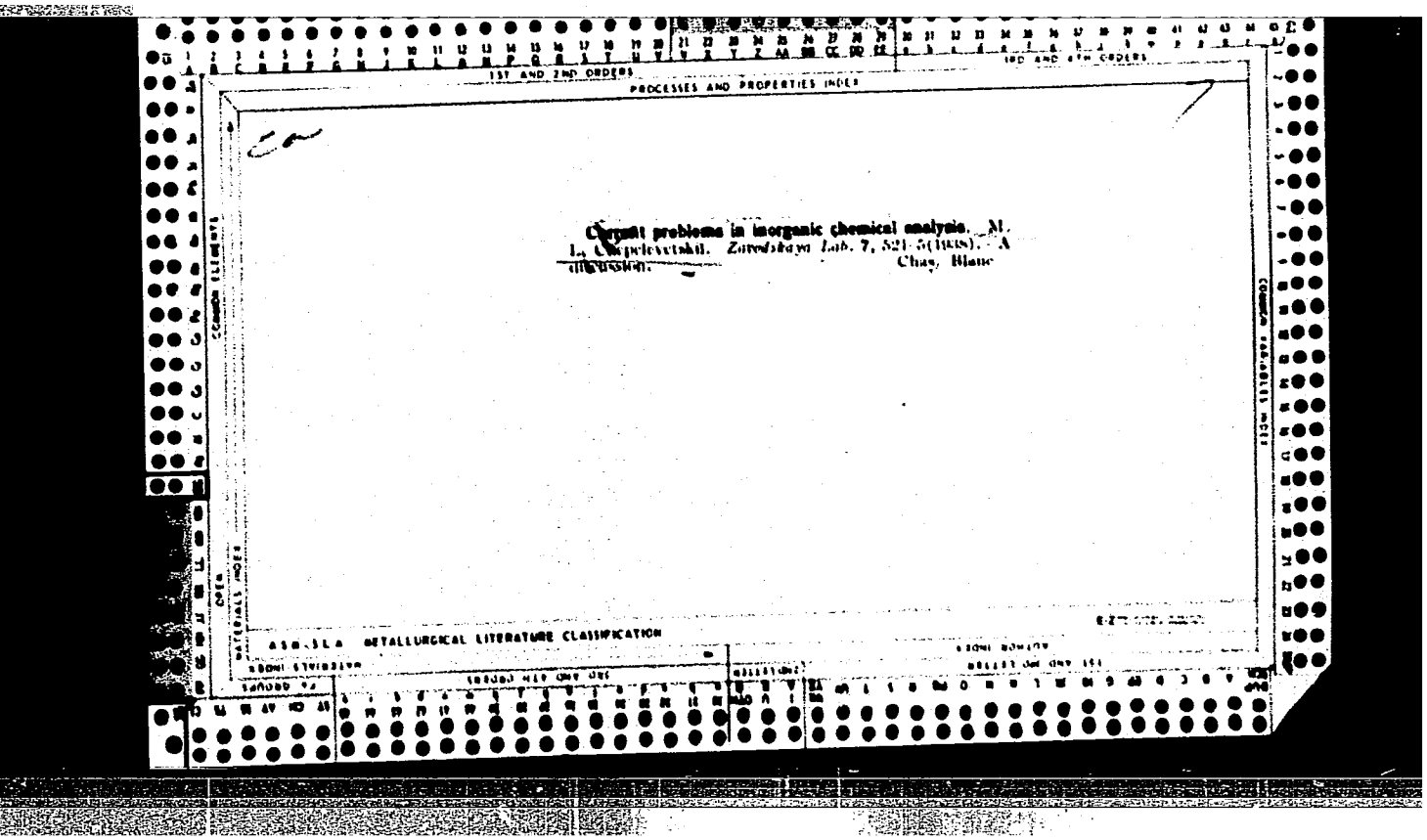


PROCESSES AND PROPERTIES INDEX

The dynamics of crystal growth and change in form with gypsum and calcium carbonate as examples. M. I. Cherpetvetskii and B. B. Evzlina. *Trans. Sci. Inst. Fertilizers and Insectofungicides* (U. S. S. R.) No. 137, 127-44(1937).—A review and a discussion of the bearing of the dynamics of crystal growth on the crystn. of apatite with its various impurities. J. S. Joffe

A60-51A METALLURGICAL LITERATURE CLASSIFICATION



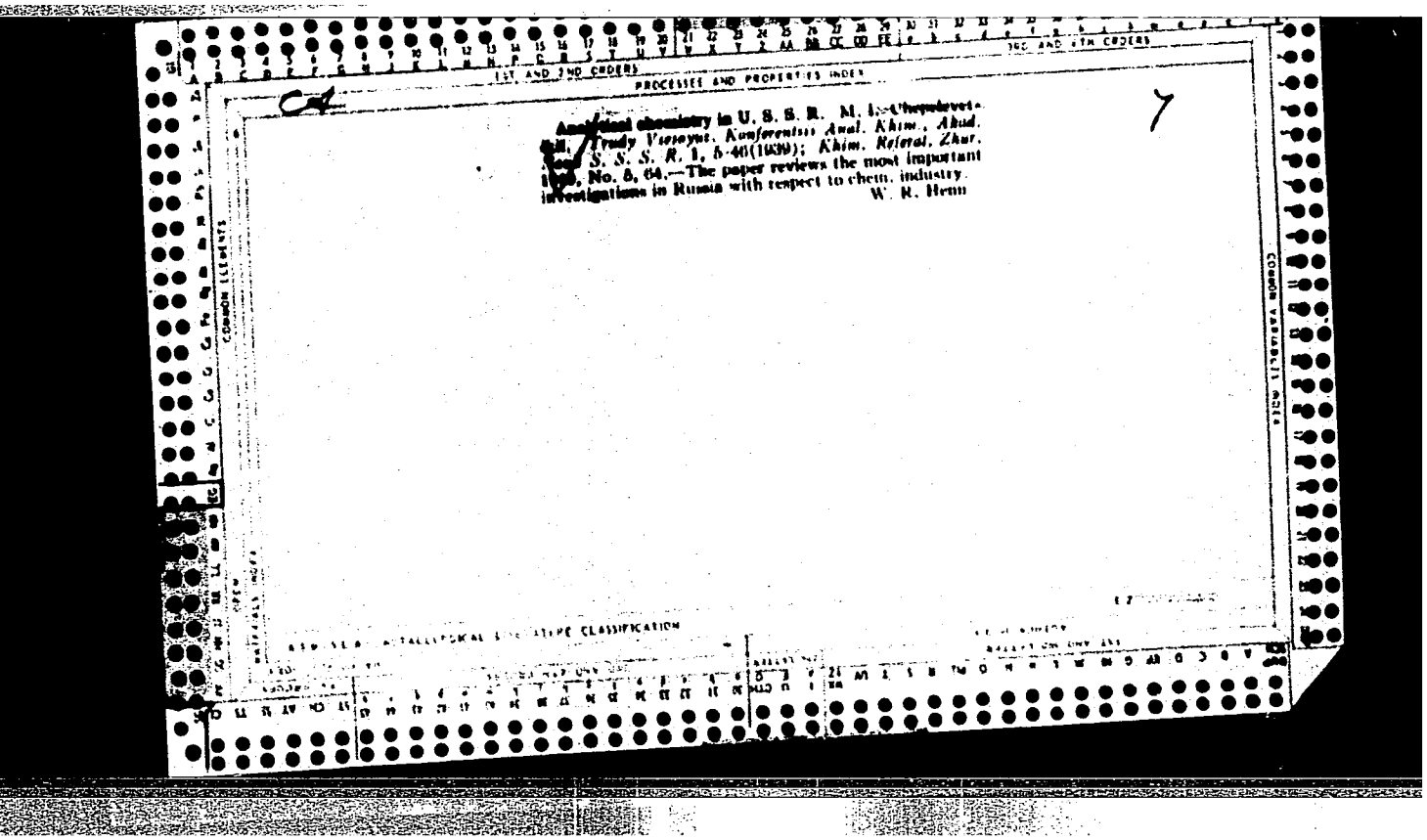
CA

15

Physical chemical investigations of fertilizers. M. L. Chepelevetskii. *Nauch. Inst. Udobreniyam i Insektofungitsidam Im. Ya. V. Samoilova* 1919-39, 63-7(1939); *Khim. Referat. Zhur.* 1940, No. 6, 89-90.—Studies of equilibria, kinetics of decompn., crystn. and transformation of phases during the decompn. by acids of natural phosphate in systems CaO-P_2O_5-SO_3-H_2O, CaO-P_2O_5-N_2O_5-H_2O, Fe_2O_3-P_2O_5-H_2O, Fe_2O_3-P_2O_5-SO_3-H_2O, Al_2O_3-P_2O_5-H_2O, etc., showed that superphosphate contains $CaSO_4$ and that by changing the concn. of H_3PO_4 and the temp. during extn. it is possible to obtain the anhydride, the hemihydrate or gypsum. The permissible contents of R_2O_3 in natural phosphate for fertilizer manuf. by acid treatment were detd. Methods for producing Na_2CO_3, $(NH_4)_2SO_4$ and mirabilite were developed by studying the systems: Na_2SO_4-NH_4HCO_3-H_2O, Na_2SO_4-NH_3-H_2O, Na_2SO_4-$(NH_4)_2SO_4$-NH_3-H_2O, and Na_2SO_4-NH_3-CO_2-H_2O. The formation and stabilization of emulsions were studied, and marginal angles of wetting, heats of wetting, η, fluidities and adhesive properties of insecticide powders were measured. The systems Na_2O-As_2O_5-H_2O and Na_2O-CaO-As_2O_5-H_2O were studied to det. methods for producing As prepns. Theoretical studies were carried out to det. methods for regenerating caustic alkalies and for producing $FeSO_4$ and Na_2SiF_6. The presence of Al salts in the soln. decreases the effect of salting out Na_2SiF_6. Thermal treatment of phosphates is discussed.

W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

Analytical chemistry in U. S. S. R. M. I. Chepukevet. Trudy Vsesoyuz. Konferentsii Anal. Khim., Akad. Nauk S. S. S. R. 1, 5-40(1939); Khim. Referat. Zhur. 3, No. 8, 64.—The paper reviews the most important investigations in Russia with respect to chem. industry.
W. R. Henn

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

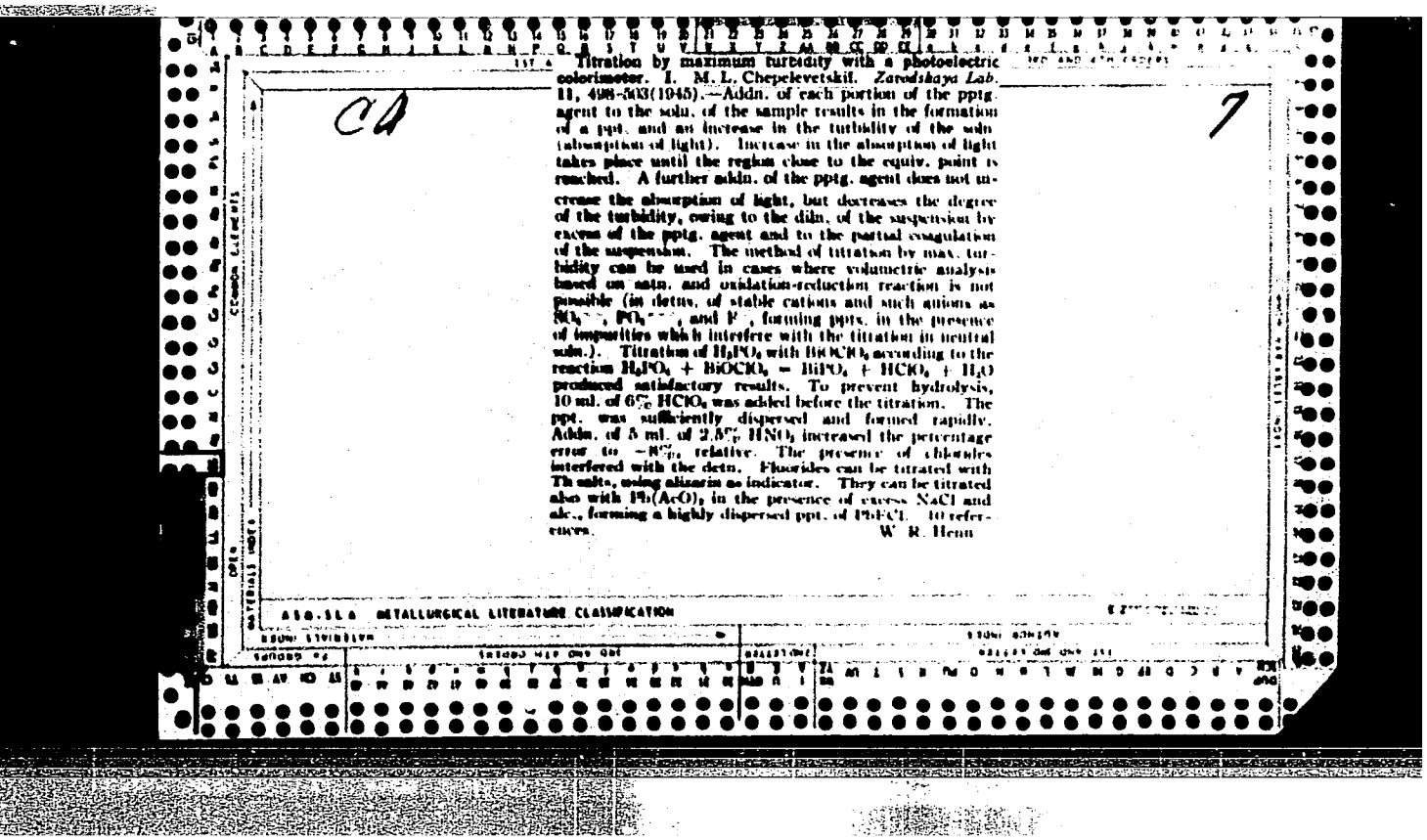
PROCESSES AND PROPERTIES INDEX

Ca

2

Hidden periods of crystallization and the equation for the velocity of formation of crystal nuclei. M. I. Chepelevetskii. *J. Phys. Chem.* (U. S. S. R.) 13, 361-71 (1939).—Exptl. data are given on the hidden periods of crystn. of several salts as a function of supersatn. and temp. The hidden period is a criterion of the rate of formation of nuclei and their growth. The equation for the rate of growth of crystal nuclei is analogous to that for the condensation of a liquid from a vapor with the addn. of a viscosity factor. From these data the approx. sp. surface energies of crystals on the boundary solid body-liquid are calcd. to be $A(^{1}/_{3}) \times 13$; $Ca(H_2PO_4)_2.H_2O$, 2.4; $CaSO_4.2H_2O$, 7.2; $CaCO_3$, 60; $CaSO_4$, 65; $FePO_4.2H_2O$, 95; $BaSO_4$, 101; and CaF_2, 132, in good agreement with calcns. from hardness data according to Hertz, Auerbach and Forsman. F. H. Rathmann

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

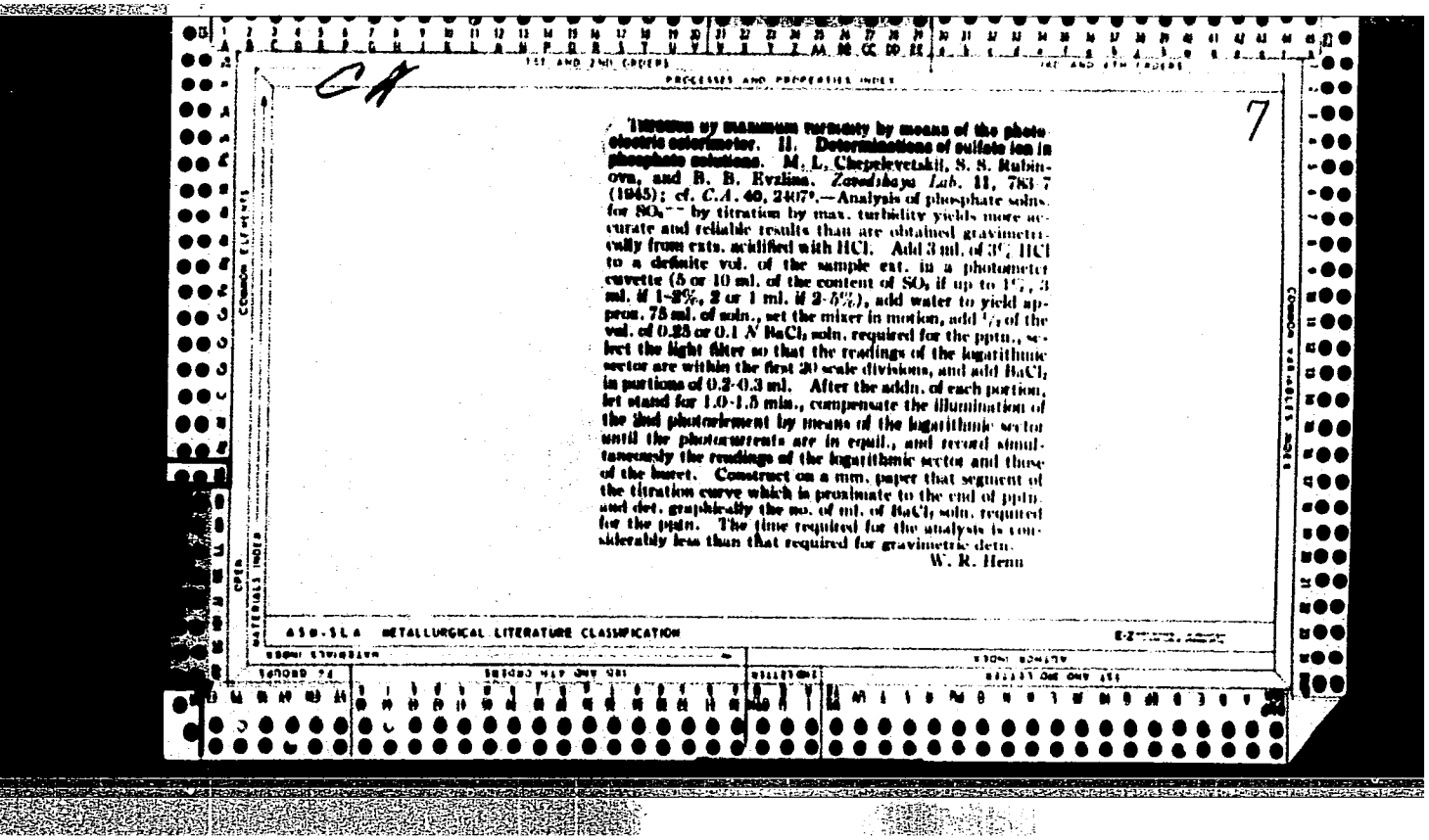


CA 7

Titration by maximum turbidity with a photoelectric colorimeter. I. M. L. Chepelevetskii. *Zavodskaya Lab.* 11, 498-503(1945).—Addn. of each portion of the pptg. agent to the soln. of the sample results in the formation of a ppt. and an increase in the turbidity of the soln (absorption of light). Increase in the absorption of light takes place until the region close to the equiv. point is reached. A further addn. of the pptg. agent does not increase the absorption of light, but decreases the degree of the turbidity, owing to the dilu. of the suspension by excess of the pptg. agent and to the partial coagulation of the suspension. The method of titration by max. turbidity can be used in cases where volumetric analysis based on satn. and oxidation-reduction reaction is not possible (in detns. of stable cations and such anions as SO_4^{--}, PO_4^{---}, and F^-, forming ppts. in the presence of impurities which interfere with the titration in neutral soln.). Titration of H_3PO_4 with $BiOClO_4$ according to the reaction $H_3PO_4 + BiOClO_4 = BiPO_4 + HClO_4 + H_2O$ produced satisfactory results. To prevent hydrolysis, 10 ml. of 6% $HClO_4$ was added before the titration. The ppt. was sufficiently dispersed and formed rapidly. Addn. of 5 ml. of 2.5% HNO_3 increased the percentage error to −8% relative. The presence of chlorides interfered with the detn. Fluorides can be titrated with Th salts, using alizarin as indicator. They can be titrated also with $Pb(AcO)_2$ in the presence of excess NaCl and alc., forming a highly dispersed ppt. of $PbFCl$. 10 references.

W. R. Henn

A50-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

7

Titration by maximum turbidity by means of the photoelectric colorimeter. II. Determinations of sulfate ion in phosphate solutions. M. L. Chepelevetskii, S. S. Rubinova, and B. B. Evzlina. *Zavodskaya Lab.* 11, 783-7 (1945); cf. *C.A.* 40, 2407⁹.—Analysis of phosphate solns. for SO_4^{--} by titration by max. turbidity yields more accurate and reliable results than are obtained gravimetrically from exts. acidified with HCl. Add 3 ml. of 3% HCl to a definite vol. of the sample ext. in a photometer cuvette (5 or 10 ml. of the content of SO_4 if up to 1%, 3 ml. if 1–2%, 2 or 1 ml. if 2–5%), add water to yield approx. 75 ml. of soln., set the mixer in motion, add ¼ of the vol. of 0.25 or 0.1 *N* BaCl₂ soln. required for the ppta., select the light filter so that the readings of the logarithmic sector are within the first 20 scale divisions, and add BaCl₂ in portions of 0.2–0.3 ml. After the addn. of each portion, let stand for 1.0–1.5 min., compensate the illumination of the 2nd photoelement by means of the logarithmic sector until the photocurrents are in equil., and record simultaneously the readings of the logarithmic sector and those of the buret. Construct on a mm. paper that segment of the titration curve which is proximate to the end of ppta. and det. graphically the no. of ml. of BaCl₂ soln. required for the ppta. The time required for the analysis is considerably less than that required for gravimetric detn.

W. R. Henn

A50-SLA METALLURGICAL LITERATURE CLASSIFICATION

CHEPELEVETSKIY, M.L.

③ 4

Solubility isochrones-isotherms of apatite in the system H_2SO_4–H_3PO_4–H_2O as example of topochemical kinetics, and the production of superphosphate. E. B. Brutskus and M. L. Chepelevetskii. *Izvest. Sektora Fiz.-Khim. Anal., Akad. Nauk S.S.S.R.* 20, 383–8(1950).—When apatite is digested with H_2SO_4 in the production of superphosphate, too high a concn. of the acid or too high a temp. stops the reaction. This is attributed to deposition of $CaSO_4$ formed in initial stages of the process on grains of apatite and thereby protecting it from the action of H_2SO_4. The reaction was studied at 50, 70, and 90°, and 4 and 7 hrs. duration. Plotting H_2SO_4 concn. vs. P_2O_5 in soln. showed that for each of these temps. there are concns. of H_2SO_4 at which the reaction is arrested. As the temp. rises this zone of complete passivation of the apatite is shifted toward lower concns. Addn. of H_3PO_4 lowered the soly. of apatite still further. For greatest efficiency in superphosphate production it is essential to feed the ingredients, H_2SO_4 and apatite, at controlled rates. Cf. Ch., *et al.*, *C.A.* 38, 5039⁷.

M. Hoseh

CHEPELEVETSKIY, M.L.

Nuclear Science Abstracts
July 15, 1954
Chemistry

RMK

9-21-54

EXPERIMENT ON THE CONSTRUCTION OF A PERIODIC SYSTEM OF ATOMIC NUCLEI. M. L. Chepelevetskii. Zhur. Eksptl'. i Teoret. Fiz. 23, 327-35(1952) Sept. (In Russian)

For a foundation of a series of investigations of nuclear properties a periodic system of isotopes of atomic nuclei is given. The dimensions of the periods of the nuclei were determined by the number of neutrons and protons in the periods, and in the same way the connection between the forms of the periodicity was determined. The hypothesis states that the construction of a period is accomplished by means of finishing the construction with nucleons of surface layers of nuclei with subsequent finishing of its deep layers. (tr-auth)

AMELIN, A.G.; BALMYEV, A.V.[deceased]; BRUTSKUS, Ye.B.; KEL'MAN, F.N.; OSHEROVICH, R.Ye.; STEPANOV, M.N.; CHERNYSHEVETSKIY, M.L.; CHERNOBAYEVA, M.M.; MIKHAL'CHUK, B.V., redaktor; LEBEDEVA, K.D., redaktor; SHPAK, Ye.G., tekhnicheskiy redaktor.

[Methods of analyzing and controlling the production of sulfuric acid and superphosphates] Metody analiza i kontrolia proizvodstva sernoi kisloty i superfosfata. Sost. A.G.Amelin i dr. Pod red. B.V.Mikhal'chuka. Moskva, Ges.nauchno-tekhn. izd-vo khim. lit-ry, 1955. 159 p. (MLRA 9:5)

1.Moscow. Nauchnyy institut po udobreniyam i insektofungisidam. (Sulphuric acid) (Phosphates)

CHEPELEVETSKIY, M. L.

USSR/Chemical Technology - Chemical Products and Their Application. Fertilizers, I-6

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62121

Author: Chepelevetskiy, M. L., Bol'ts, Ts. S., Vasilenko, N. A., Rubinova, S. S.

Institution: None

Title: Solubility of Crystallohydrate $CaHPO_4 \cdot 2H_2O$ and Rate of Its Conversion to Anhydrous Salt in Connection with Some Problems of the Production of Phosphorus Fertilizers

Original Periodical: Sb. Issledovaniya po prikl. khimii, Moscow-Leningrad, Izd-vo AN SSSR, 1955, 175-183

Abstract: Study of solubility of metastabile at 40° $CaHPO_4 \cdot 2H_2O$ (I) in phosphoric acid solutions and also of the rate of phase conversion (PC) of I to anhydrous salt (II). For the investigations were prepared at $2\text{-}3^\circ$ solutions of monocalcium phosphate which decompose on rise in temperature with separation of I as solid phase. The derived

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The rate of solution of minerals as a property of multicomponent salt systems. M. L. Chmelevetskii, E. B. Brutskus, K. S. Krasnov

4

CHEPELEVETSKIY, M.L.

VASILENKO, N.A.; CHEPELEVETSKIY, M.L.

Solubility of lanthanum phosphate in aqueous solutions of phosphoric acid at 80°. Zhur. neorg. khim. 2 10:2486-2489 O '57. (MIRA 11:3)

1. Nauchno-issledovatel'skiy institut po udobreniyam i insektofungisidam, Laboratoriya fiziko-khimicheskogo analiza.
(Solubility) (Lanthanum phosphate) (Phosphoric acid)

CHEPELEVETSKIY, Mark Leybovich, prof.; BRUTSKUS, Yelena Borisovna; SOKOLOVSKIY, A.A., red.; LUR'YE, M.S., tekhn.red.

[Superphosphate; physicochemical production principles] Superfosfat; fiziko-khimicheskie osnovy proizvodstva. Moskva, Gos.nauchno-tekhn.izd-vo khim. lit-ry, 1958. 272 p. (MIRA 12:2) (Phosphates)

KHAMSKIY, Ye.V.; CHEPELEVETSKIY, M.L.

Effect of the formation conditions of calcium sulfate semihydrate on kinetics of its conversion to dihydrate in phosphoric acid solutions. Zhur. prikl. khim. 31 no.7:976-980 Jl '58.
(Calcium sulfate) (Phosphoric acid) (MIRA 11:9)

AUTHORS: Chepelevetskiy, M. L., Gimmel'farb, B. M., Kuperman, M. Ye., Krasil'nikova, Z. V. 20-119-1-36/52

TITLE: An Electron-Microscope Investigation of the Structure of Phosphorites From the Kara-Tau Basin (Elektronno-mikroskopicheskoye issledovaniye struktury fosforitov basseyna Kara-Tau)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 1, pp. 133-135 (USSR)

ABSTRACT: The phosphorites of this basin (deposits Ak-Say, Kok-su and Chulak-Tau) contain larger quantities of dolomite (mostly 10-18%), whereby the consumption of sulfuric acid per ton of assimilable P_2O_5 in superphosphate increases. Thereby the quality of this fertilizer is impaired as well with regard to the assimilable P_2O_5 as to its physical properties: it becomes hygroscopic and smeary. At present 2 methods of the enrichment of these phosphorites exist: flotation and the chemical method. By flotation it was possible to attain a concentrate with a highly reduced magnesium content (Ak-Say), whereas the phosphorites of the Chulak-Tau deposit still yield concentrates with an MgO-content of 1,5% and higher.

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These difficulties may be explained by the grain size of the phosphate substance of these phosphorites. The respective ores were inspite of a similar geological age and belonging to the same series of phosphorites intensively changed by a contact--metamorphism (nearness of a granite-intrusive), especially their phosphates were recrystallized. The structural peculiarities of the Chulak-Tau phosphorites were investigated under an electron-microscope. The structure of the phosphorites of the two remaining deposits were studied for comparison under an ordinary microscope. The characteristics of the Kara-Tau phosphorites are given in table 1. Polished sections of phosphorite samples were produced, impressions were made by the polystyrene-quartz and the collodium-quartz method and then etched, a nd again impressions made. The investigation showed that the size of the phosphate grains in all 5 samples from Chulak-Tau lies between 0,1 and 4,0 (figure 2). As the production of concentrates is due to the grain size in Chulak-Tau rendered difficult, the flotation shall be combined with a refinement by diluted acids, especially H_2SO_4. There are 2 figures, 1 table.

An Electron-Microscope Investigation of the Structure of Phosphorites From the Kara-Tau Basin 20-119-1-36/52

ASSOCIATION: Nauchnyy institut po udobreniyam i insektofungisidam (Scientific Institute for Fertilizers and Insecticides). Gosudarstvennyy institut gornokhimicheskogo syr'ya (State Institute for Mining-Chemical Raw Materials)

PRESENTED: June 11, 1957, by S. I. Vol'fkovich, Member, Academy of Sciences, USSR

SUBMITTED: June 5, 1957

Card 3/3

BRUTSKUS, Ye.B.; CHEPELEVETSKIY, M.L.

Water - salt systems including orthophosphates. Itogi nauki: Khim.nauki 4:109-121 '59. (MIRA 13:4)
(Systems (Chemistry)) (Phosphates)

5(2)

SOV/80-32-5-2/52

AUTHORS: Khamskiy, Ye.V., Chepelevetskiy, M.L.

TITLE: On the Crystallization of Potassium Sulfate From Solutions of Extraction Phosphoric Acid

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 5, pp 948-952 (USSR)

ABSTRACT: The study of the crystallization of potassium sulfate from solutions of phosphoric acid is closely connected with the production of H_3PO_4 by the method of sulfuric acid extraction. There are the dihydrate, polyhydrate and anhydrite methods of production [Ref 1]. The principal condition for the dihydrate method is the absence of the polyhydrate of potassium sulfate in the bottom phase at the end of the production process. The technological conditions for producing phosphoric acid of high concentration by the dihydrate method are investigated here. It has been shown (Table 1) that in distinction from solutions of chemically pure H_3PO_4 the dihydrate of potassium sulfate is first precipitated in the bottom phase. This change is explained by the presence of admixtures. If the ratio CaO/SO_3 is increased, the crystallization of calcium sulfate in the form of dihydrate takes place at more concentrated solutions of phosphoric acid

Card 1/2

On the Crystallization of Potassium Sulfate From Solutions of Extraction Phosphoric Acid.

and at higher temperatures. The increase of this ratio in the liquid phase raises the stability of the dihydrate in the solutions of phosphoric acid. The experiments showed that the admixtures facilitate the crystallization of calcium sulfate as dihydrate and that the increase of the ratio CaO/SO_3 in the liquid phase improves the stability of the dihydrate. At 70°C and a molar ratio of CaO/SO_3 phosphoric acid containing 34-38% P_2O_5 can be produced.
There are: 3 tables and 5 Soviet references.

ASSOCIATION: Nauchnyy institut po udobreniyam i insektofungisidam im. prof. Ya.V. Samoylova (Scientific Institute of Fertilizers and Insectofungicides imeni Professor Ya.V. Samoylov)

SUBMITTED: December 21, 1957

YANYSHEVA, V.S.; YUZHNAYA, Ye.V.; CHEPELEVETSKIY, M.L.

Electron microscope study of calcium sulfate films formed at the surface of calcite crystals during the decomposition of the latter by sulfuric acid. Dokl. AN SSSR 141 no.5:1161-1162 D '61. (MIRA 14:12)

1. Nauchnyy institut po udobreniyam i insektofungisidam im. Ya.V. Samoylova. Predstavleno akademikom S.I. Vol'fkovichem.
(Calcium sulfate) (Electron microscopy)

CHEPELEVETSKIY, M.L.; KHARITONOVICH K.F.

Solubility product of lead molybdate. Zhur. anal. khim. 18 no.3:357-359 Mr '63. (MIRA 17:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova.

LAMP, V.N.; CHEPELEVETSKIY, M.L.

Solubility in the system K_2SO_4 - $CaSO_4$ - H_3PO_4 - H_2O (isotherm 80°C). Zhur. prikl. khim. 36 no.12:2650-2656 D '63.
(MIRA 17:2)

CHEPELEVETSKIY, M.L.; MAKAREVICH, V.M.

Determination of the sulfate ion in extractive phosphoric acid by photodurbidimetric titration. Zav. lab. 30 no.8:935-937 '64. (MIRA 18:3)

1. Nauchno-issledovatel'skiy institut po udobreniyam i insekto-fungisidam imeni Samoylova.

KHARITONOVICH, K.F.; CHEPELEVETSKIY, M.L.

Study of calcium precipitation as molybdate by phototurbidimetric titration. Zhur. anal. khim. 20 no.6:743-745 '65.

(MIRA 18:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova.

CHEPELEVETSKIY, M.L.; KHARITONOVICH, K.F.

Titimetric attachment to a photocolorimeter. Zav. lab. 31 no.2:253-254 '65. (MIRA 18:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V.Lomonosova.

LAIP, V.N.; CHERLYENSKIY, N.L.

Solubility of salts in a quaternary system $K_2SO_4 - CaSO_4 - H_3PO_4 - H_2O$. Isotherm 60°. Trudy NIUIF no.208: 104-108 '65.

Solubility of salts in the ternary systems $K_2SO_4 - KH_2PO_4 - H_2O$, $KHSO_4 - H_2PO_4 - H_2O$, and $KHSO_4 - KH_2PO_4 - H_2O$, constituents of the quaternary system $K_2O - SO_3 - P_2O_5 - H_2O$. Isotherms 80°. Ibid.:108-115

Conversion of the binary salts of syngenite ($K_2SO_4 \cdot CaSO_4 \cdot H_2O$) and penta salt ($K_2SO_4 \cdot 5CaSO_4 \cdot H_2O$) to soluble sulfates. Ibid.:115-122 (MIRA 18:11)

MISHCHENKO, Yu.S., i CHEPELEVETSKIY, M.L.

Solubility of ammonium sulfate in the presence of sulfuric and phosphoric acids and also of ammonium phosphates. Trudy NIUIF no.208:16-30 '65.

Solubility in the system
$(NH_4)_2HPO_4 - (NH_4)_2SO_4 - H_2SO_4 - H_3PO_4 - H_2O$. Ibid.:90-42
(MIRA 18:11)

FILATOVA, L.N.; CHEPELEVETSKIY, M.L.

Formation in aqueous solutions of a binuclear ferrophosphate complex and its properties. Dokl. AN SSSR 166 no.1:140-143 Ja '66. (MIRA 19:1)

1. Vsesoyuznyy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv. Submitted June 14, 1965.

L 36482-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6027073 SOURCE CODE: UR/0076/66/040/002/0307/0316

AUTHOR: Chepelevetskiy, M. L.

ORG: none

TITLE: Periodic system of atomic nuclei

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 2, 1966, 307-316

TOPIC TAGS: nucleus, isotope, electron shell, neutron, proton, heavy nucleus, stochiometry, transuranium element

ABSTRACT: A previously published periodic system of atomic nuclei is examined in greater detail. The development of a periodic system of nodal isotopes from the experimental data is shown both on the basis of analogies and in contrast to the structure of the electron shells in the Mendeleyev system. The numbers of neutrons and protons filling the 1'-subgroups and the 1"-subgroups respectively can be found from the difference between the sizes of the nucleus periods for neutrons and protons correspondingly. These regularities emanate from the principle of shell layers completion, analogous for the electron and nucleon periodic systems. For average and heavy nuclei the filling numbers of neutrons in each given 1'-subgroup are equal to the sum of the filling numbers of protons in the given 1"-subgroup and in the previous one, i.e., 1"-1. This indicates the simple stoichiometry of the proton-neutron ratios of 1:1 between each two neighboring 1', 1"-subgroups -- a characteristic without analogy in electron shells. The periodic system of nuclei with an odd number of neutrons or protons is shown using nuclear isomerism as an example. The system can be continued beyond the limits of the discovered transuranium elements. The isotopic and mass numbers of nodal isotopes, predicted back in 1947, of earlier unsynthesized elements were subsequently confirmed upon their discovery. Orig. art. has: 1 figure, 3 formulas and 6 tables.

SUB CODE: 20, 07 / SUBM DATE: 21Dec64 / ORIG REF: 016 / OTH REF: 026 [JPRS: 36,455]

Card 1/1 UDC: 541.20

USTICH, A.F., starshiy elektromekhanik; KNYAZEV, M.N., starshiy inzhener; CHEPELEVICH, M.I.

From the editors' mail. Avtom., telem. i sviaz' 5 no.3:44 Mr '61. (MIRA 14:9)

1. Mineralovodskaya distantsiya signalizatsii i svyazi Severo-Kavkazskoy dorogi (for Ustich). 2. Nadezhdinskaya distantsiya signalizatsii i svyazi Sverdlovskoy dorogi (for Knyazev). 3. Nachal'nik laboratorii signalizatsii i svyazi Litovskoy dorogi, (for Chepelevich).

(Railroads--Electric equipment)
(Railroads--Communication systems)
(Railroads--Signaling--Interlocking systems)

CHEPELEVSKIY, I., (Engr-Lt Col)

Coauthor with Engr-Lt Col A. INFELITSYN* of article, " Tent for Repairing Equipment," construction of a tent to be used in the field when repairing equipment. (Tankist, Moscow, No 4, Apr 54)

SO: SUM NO. 239, 13 Oct 1954

CHEPELEVSKIY, I.

STOYANOV, V., inzhener-podpolkovnik; CHEPELEVSKIY, I., inzhener-podpolkovnik.

Repairing electric equipment in the field. Tankist no.5:38-43 My '56. (MIRA 11:3)

(Tanks (Military science)--Electric equipment)

CHEPELEVSKIY, I.

ZHIKH, V., kandidat tekhnicheskikh nauk; CHEPELEVSKIY, I., inzhener.

Simple design for automatic thermoregulators used in electrolytic baths. Avt. transp. 35 no.7:25 Jl '57. (MLRA 10:8)
(Thermostat) (Electroplating)

CHEPELEVSKIY, I. F

ZHIKH, V.A., kand. tekhn. nauk; CHEPELEVSKIY, I.F., inzh.

Automatic control of temperatures in a galvanic bath. Vest. mash. 38 no.4:63-64 Ap '58. (MIRA 11:3)

(Thermostat)

CHEPELEVSKIY, V.; SARKHOSH'YAN, G.

Special exhibition "New techniques in the repairing of units of motor vehicles." Avt.transp. 40 no.9:58 S '62.
(MIRA 15:9)
(Motor vehicles--Maintenance and repair)

CHEPELEVSKIY, V., inzh.; TUMANOV, I., inzh.

Unified specifications for the receiving for overhauling, and the delivery after overhauling of motor vehicles, their parts and units. Avt.transp. 41 no.10:28-29 O '63. (MIRA 16:10)

CHEPELEVSKIY, Vladimir Natanovich; TUMANOV, Ivan Alekseevich; SARKHOSH'YAN, Gurgen Nikitovich; RUMYANTSEV, Aleksey Nikolayevich; KLEVENSKIY, Aleksandr Iosifovich; BELOTSERKOVSKAYA, S.I., red.; SHUPLYAKOV, S.I., red.

[New developments in the technology and equipment used in motor-vehicle repair] Novoe v tekhnologii i oborudovanii dlia remonta avtomobilei. Moskva, Transport, 1964. 127 p. (MIRA 18:1)

L 11780-66(N) EWT(l)/EWT(m)/EWP(e)/EWP(t)/EWP(b) IJP(c) JD/WW/GG/WH

ACC NR: AP6003253 SOURCE CODE: UR/0020/65/165/006/1336/1339

44,55 44,55 44,55 44,55

AUTHOR: Bogomolova, L. D.; Lazukin, V. N.; Chepeleyva, I. V.; Bal'skaya, L. A.

44,55

ORG: Moscow State University im. M.V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

53
52

21, 44, 55

TITLE: Electron paramagnetic resonance of manganese ions in the As-Se-Ge glass system

B

SOURCE: AN SSSR. Doklady, v. 165, no. 6, 1965, 1336-1339

TOPIC TAGS: EPR spectrum, manganese ion, nonsilica glass, arsenic selenium germanium glass, glass structural property

ABSTRACT: EPR spectra of Mn^{2+} in the glasses of the As-Se-Ge system containing 12.5—40 at% Ge have been studied in the 293—77K range to determine the type of chemical bonding of Mn and Ge atoms in relation to heat treatment and crystallization of the glasses. Glass samples were synthesized from high-purity materials by melting and slow cooling in evacuated quartz ampuls. All samples contained 1 at% Mn. The resonance absorption lines with g-factors of 2 and about 4 were observed in the EPR spectra of all samples. The lines with g-factor of 2, which broadened greatly with a decrease in temperature, were attributed to antiferromagnetic, small-size inclusions of MnSe crystals. The "residual" line with a g-factor of 2 in the EPR spectra at 77K, especially

Card 1/2 UDC: 541.67-161.6:538.113

ACC NR: AP6003253

strong in the sample with 40 at% Ge, was correlated with Mn in the glass skeleton. The EPR lines with g-factor of 4, which become more intense with an increase in Ge concentration, were associated with an increase in concentration of $[GeSe_{4/2}]$ and $[GeGe_{4/4}]$ tetrahedral nodes in the glass structure. The presence of Mn may contribute to the increase in the tetrahedral nodes content by a mechanism analogous to that theoretically established for Fe^{3+} in silicate glasses. The EPR line with g-factor of about 4.3 was observed earlier by Soviet and Western scientists in the Fe^{3+} containing silicate glasses. Mn in the glass lattice may be bound to As by a semipolar bond and to Se by a covalent bond. The EPR line with g-factor of 10 was observed in only one glass sample at 77K and was attributed to heat treatment. Orig. art has: 2 figures and 2 tables. [JK]

SUB CODE: 07/ SUBM DATE: 12May65/ ORIG REF: 004/ OTH REF: 001/ ATD PRESS: 417

HW

Card 2/2

CHEPELIK, V., arkhitektor (g.Kiyev).

Practices of maintaining dormitories. Zhil.-kom. khoz. 10 no.10: 6-7 '60. (MIRA 13:10)

(Dormitories--Maintenance and repair)

1. CHEPELKIN, I.

2. USSR (600)

4. Brooms and Brushes

7. Spiral wire brush for cleaning the pipes of a vacuum apparatus. Moloch. prom. 14, no. 3, 1953.

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

CHEPELKIN, N.A., agronom.

Wide horizons. Zemledelie 27 no.8:61-64 Ag '65.
(MIRA 18:11)

1. Kolkhoz "Rassvet", Kirovskogo rayona, Mogilevskoy oblasti.

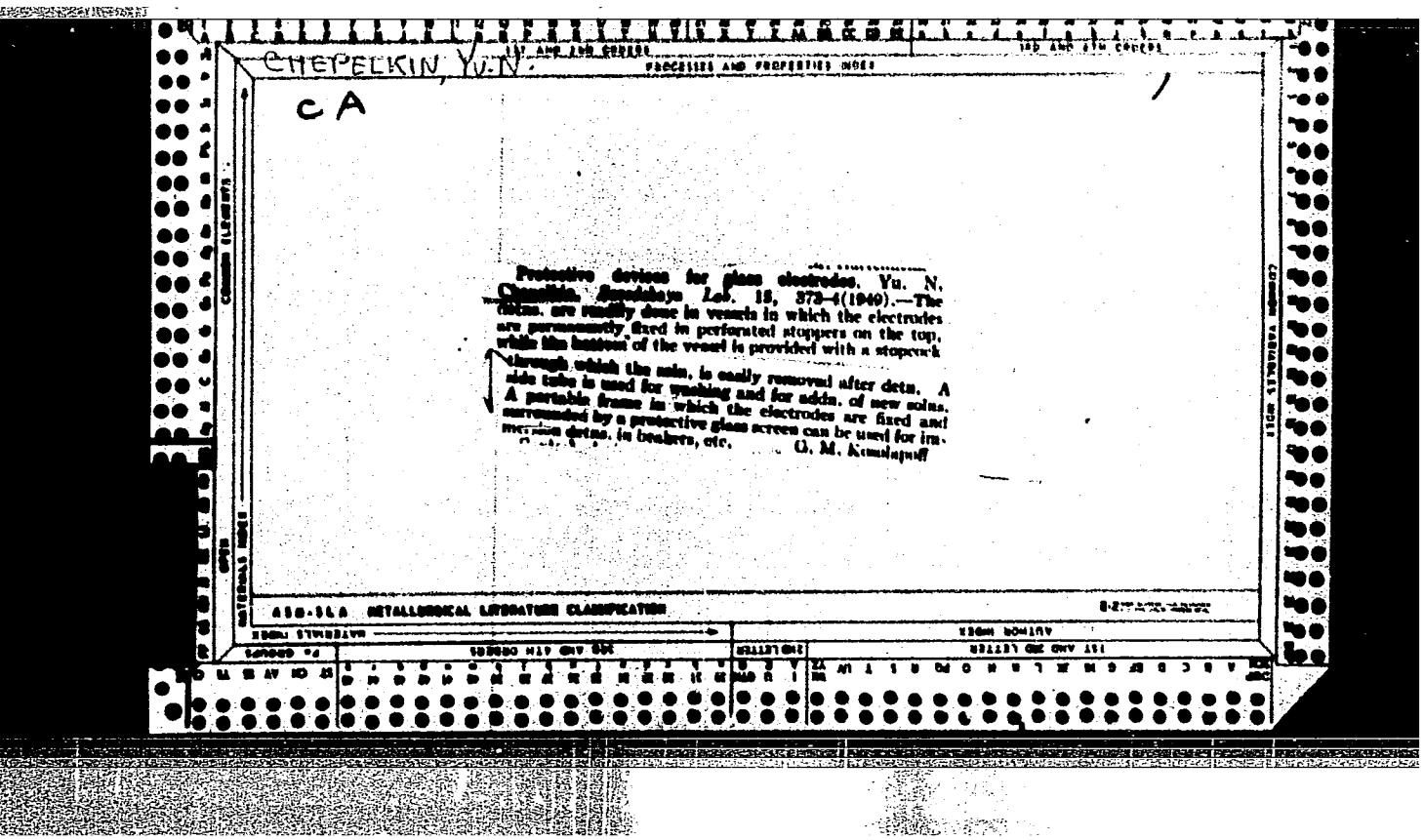
CHEPELKIN, Yu.N.

Ca

7

Rapid determination of sulfate in bisulfite, sulfite and thiosulfate liquors. M. A. Portnov and Yu. N. Chepelkin. *Zavodskaya Lab.* 8, 661–5(1939).—The benzidine method was found to be suitable for detg. SO_4 ions in bisulfite, sulfite and thiosulfate. The content of SO_3, SO_4 and SO_4 ions in the mother liquors obtained in the manuf. of thiosulfate can be detd. in about 1 hr. by the combined methods of Kurtenaker-Wollak (cf. *C. A.* 21, 1041) and Raschig (cf. *C. A.* 20, 31(4)). B. Z. Kamich

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION


CHEPELKIN, Yu. N.

CA

Protective devices for glass electrodes. Yu. N. Chepelkin. *Zavodskaya Lab.* 15, 373–4(1949).—The [illegible] are readily done in vessels in which the electrodes are permanently fixed in perforated stoppers on the top, while the bottom of the vessel is provided with a stopcock through which the soln. is easily removed after detn. A side tube is used for washing and for addn. of new solns. A portable frame in which the electrodes are fixed and surrounded by a protective glass screen can be used for im- [illegible] detns. in beakers, etc. O. M. Kosolapoff

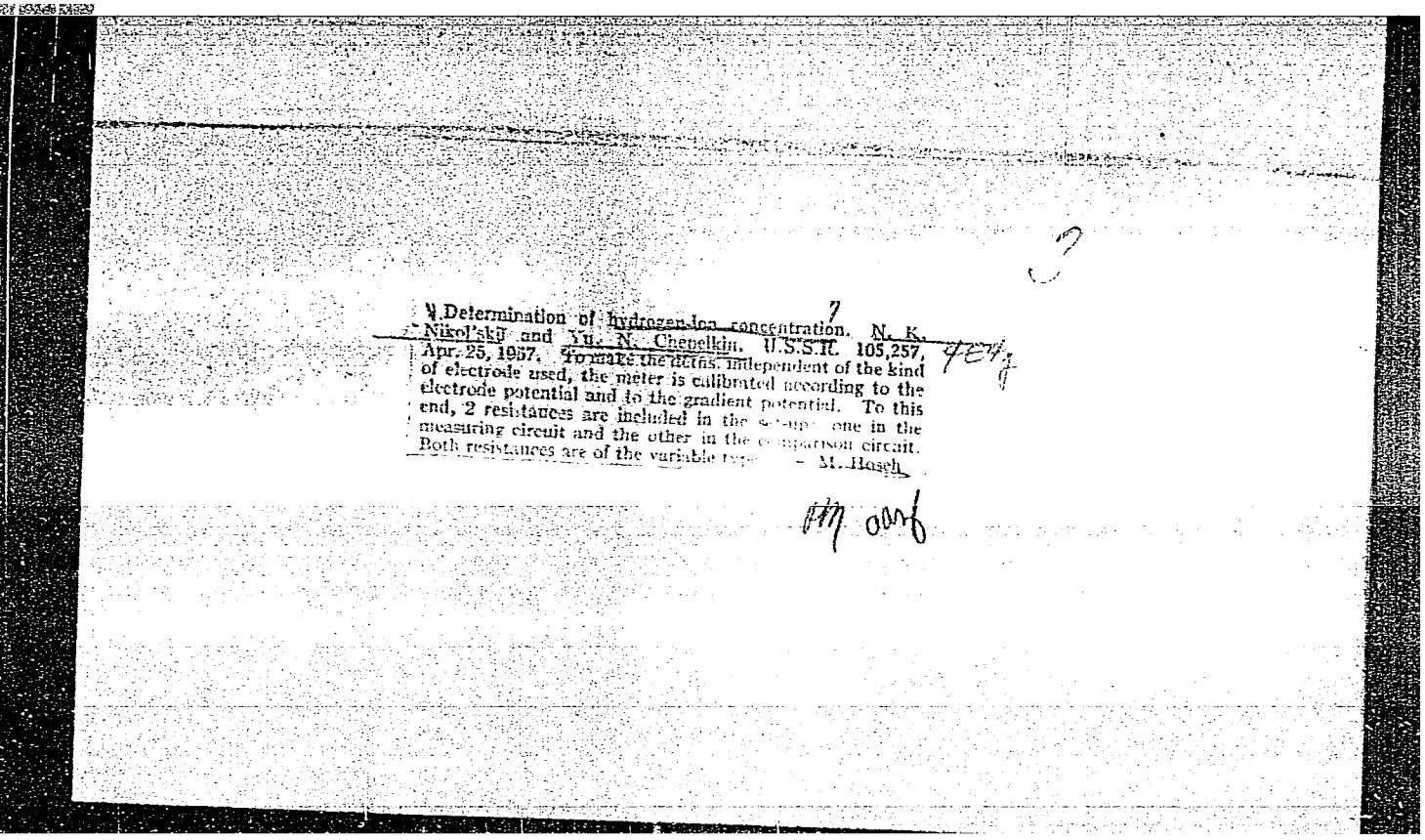
CHEPELKIN, YU. N.

CA

Y

Industrial-type calomel electrodes. N. K. Nikol'skii and Yu. N. Chepelkin. *Zavodskaya Lab.* 15, 613(1949).—These calomel electrodes have been specially designed for detg. pH of flotation slurries. A characteristic feature is a capillary constriction in the electrode tube to prevent loss of contact between the Pt wire and Hg. The half-cell consists of the calomel electrode and a jacket filled with satd. KCl soln. The electrode proper consists of a 6-mm. (outside-diam.) glass tube with a partition in which the Pt wire is held. One end of the Pt wire is joined to a Cu lead wire and the other end is immersed in Hg in the capillary constriction. Modifications to withstand vibrations during tests are shown.

B. Z. Kamich



Determination of hydrogen-ion concentration. N. K. Nikol'skii and Yu. N. Chepelkin. U.S.S.R. 105,257, Apr. 25, 1957. To make the meter independent of the kind of electrode used, the meter is calibrated according to the electrode potential and to the gradient potential. To this end, 2 resistances are included in the [illegible] one in the measuring circuit and the other in the comparison circuit. Both resistances are of the variable type. — M. Hosch

CHEPELKIN, Yu. N.

N. K. Nikol'skiy, I. P. Kell', Yu. O. Tennison and Yu. N. Chepelkin (Mekhanobr)

"The determination of the residual sulphur-ion concentration in the pulp with the aid of a silver-sulphide electrode"

report presented at the 4th Scientific and Technical Session of the Mekhanobr Inst, Leningrad, 15-18 July 1958

KONDRAT'YEV, Nikolay Yevgen'yevich, starshiy nauchnyy sotrudnik; CHEBOTAREV, A.I., otv.red.; CHERKASINA, L.A., red.; YASNOGORODSKAYA, M.M., red.; SERGEYEV, A.N., tekhn.red.

[Design of reservoir coast changes; practical manual] Raschety beregovykh pereformirovanii na vodokhranilishchakh; prakticheskoe posobie. Leningrad, Gidrometeor.izd-vo, 1960. 62 p. (MIRA 14:1)

1. Gosudarstvennyy gidrologicheskiy institut (for Kondrat'yev).
(Coast changes) (Reservoirs)

BARANOV, Ivan Vasil'yevich; CHEPELKINA, L.A., red.; SERGEYEV, A.N., tekhn. red.

[Limnological types of lakes of the U.S.S.R.] Limnologicheskie tipy ozer SSSR. Leningrad, Gidrometeoizdat, 1961. 275 p. (MIRA 15:5)

(Lakes) (Limnology)

BYKOV, Nikolay Ivanovich; BORSUK, V.N., otv. red.; CHEPELKINA, L.A., red.; ALEKSEYEV, A.G., tekhn. red.

[Agronomic characteristics of soil moisture conditions in the middle Volga Valley]Agrogidrologicheskie svoistva pochv Srednego Povolzh'ia; spravochnik. Leningrad, Gidrometeoizdat, 1962. 225 p. (MIRA 15:11)
(Volga Valley--Soil moisture)

VERIGO, Stefaniya Antonovna; RAZUMOVA, Lyubov' Aleksandrovna; KULIK, M.S., otv. red.; CHEPELKINA, L.A., red.; VOLKOV, N.V., tekhn. red.; SUVOROVA, L.D., tekhn. red.

[Soil moisture and its role in agricultural production] Pochvennaia vlaga i ee znachenie v sel'skokhoziaistvennom proizvodstve. Leningrad, Gidrometeoizdat, 1963. 288 p. (MIRA 16:6)
(Soil moisture) (Agriculture)

SHUL'TS, Viktor L'vovich; KOZIK, Ye.M., otv. red.; CHEPELKINA, L.A., red.; NIKOLAYEVA, G.S., tekhn. red.

[Rivers of Central Asia] Reki Srednei Azii. Leningrad, Gidrometeoizdat. Pt.1. 1963. 301 p. (MIRA 16:10)
(Soviet Central Asia--Rivers)

IVANOV, K.Ye., doktor geogr. nauk, prof.; ROMANOV, V.V., kand. tekhn. nauk; SIDORKINA, L.M., kand.geogr. nauk; SHIFMAN, N.M., inzh.; BAVINA, L.G., inzh.; GALINOVSKAYA, I.A., inzh.; KOZHINA, Z.M., red.; CHEPELKINA, L.A., red.; SHATILINA, M.K., red.; BRAYNINA, M.I., tekhn. red.

[Hydrological calculation in the drainage of bogs and swampy soils] Gidrologicheskie raschety pri osushenii bolot i zabolochennykh zemel'. Pod red. K.E.Ivanova. Leningrad, Gidrometeoizdat, 1963. 447 p. [Supplement no.9. Maps] Prilozhenie no.9. Karty. (MIRA 16:12)

1. Leningrad. Gidrologicheskiy institut.
(Drainage)

SKLYAROV, V.M., otv. red.; GRIBANOV, N.N., red.; MUROMTSEV, A.M., red.; POGOSYAN, Kh.P., red.; PROTOPOPOV, V.S., red.; RUDNEV, G.V., red.; SOKOLOV, A.A., red.; SOLOV'YEV, V.A., red.; USMANOV, R.F., red.; ZHDANOVA, L.P., red.; RUSAKOVA, G.Ya., red.; CHEPELKINA, L.A., red.; KOLESOVA, Z.M., tekhn.red.

[Man and the elements; hydrometeorologic desk calendar for 1964] Chelovek i stikhiia; nastol'nyi gidrometeorologicheskii kalendar' 1964. Leningrad, Gidrometeorologicheskoe izd-vo, 1963. 154 p. (MIRA 17:2)

SALAZANOV, Vladimir Vasil'yevich; PODVISHENSKAYA, N.Ya., kand. tekhn. nauk, otv. red.; CHEPELKINA, L.A., red.

[Spring runoff of the rivers in the upper Dnieper Basin; conditions governing their formation and the forecasting methods] Vesennii stok rek basseina Verkhnego Dnepra; usloviia formirovaniia i metody prognozov. Leningrad, Gidrometeoizdat, 1964. 141 p. (MIRA 17:6)

SHMIDTS, Sergey Viktorovich; CHEPELKINA, L.A., red.

[Safety techniques in hydrological work] Tekhnika bezopasnosti pri gidrologicheskikh rabotakh. Leningrad, Gidrometeoizdat, 1964. 170 p. (MIRA 17:9)

GOTLIB, Yakov L'vovich; ZAYMIN, Yevgeniy Yevgen'yevich; RAZZORENOV, Fedor Fedorovich; TSEYTLIN, Boris Semenovich; CHEPELKINA, L.A., red.

[Thermal properties of ice on the Angara River] Ledotermika Angary. [By] IA.L.Gotlib i dr. Leningrad, Gidrometeoizdat, 1964. 196 p. (MIRA 17:6)

KHMALADZE, Grigoriy Nikolayevich; YEGIAZAROV, I.V., akademik, retsenzent; LOPATIN, G.V., doktor geogr. nauk, retsenzent; LISITSYNA, K.N., nauchn. sotr., retsenzent; BOGOLYUBOVA, I.V., nauchn. sotr., retsenzent; KHERKHEULIDZE, I.I., red.; CHEPELKINA, L.A., red.

[Suspended sediments of the rivers of the Armenian S.S.R.] Vzveshennye nanosy rek Armianskoi SSR. Leningrad, Gidrometeoizdat, 1964. 245 p. (MIRA 17:9)

1. Laboratoriya nanosov Gosudarstvennogo gidrologicheskogo instituta (for Lisitsyna, Bogolyubova).

DEN'SOV, Yuriy Mikhaylovich; SHUL'TS, V.L., red.; CHEPELKINA, L.A., red.

[System for calculating the discharge hydrograph of mountain rivers] Skhema rascheta gidrografa stoka gornykh rek. Leningrad, Gidrometeoizdat, 1965. 102 p. (MIRA 18:7)

SHUL'TS, Viktor L'vovich; KOZIK, Ye.M., otv. red.; CHEPELKINA, L.A., red.

[Rivers of Central Asia] Reki Srednei Azii. Leningrad, Gidrometeoizdat. Pts. 1 - 2. 1965. 691 p. (MIRA 18:5)

GRUSHEVSKIY, M.S., red.; KUCHMENT, L.S., red.; CHEPELKINA, L.A., red.

[Electronic computers in hydrology; a collection of translations] Elektronnye vychislitel'nye mashiny v gidrologii; sbornik perevodov. Leningrad, Gidrometeoizdat, 1965. 233 p. (MIRA 18:10)

BYKOV, Vasiliy Dmitriyevich; VASIL'YEV, Andrey Vasil'yevich; CHEBOTAREV, A.I., otv. red.; CHEPELKINA, L.A., red.

[Hydrometry] Gidrometriia. Izd.2., perer. i dop. Leningrad, Gidrometeoizdat, 1965. 498 p. (MIRA 19:1)

LIOZINA, Ye.M.; CHEPELOVA, M.A.; TARTAKOVSKAYA, B.E.

Volume of circulating boood in some diseases of the hemopoietic organs; isotope method. Vest.rent. i rad. 31 no.5:21-26 S-O '56. (MLRA 10:1)

1. Iz otdela klinicheskoy gematologii i laboratorii izotopov (zav. - prof. D.N.Yanovskiy) Ukrainskogo instituta klinicheskoy meditsiny imeni akad. N.D.Strazhesko (dir. - prof. A.L.Mikhnev)

(BLOOD VOLUME, determ.
isotope method)

L 24667-65 EWT(1)/T/EEC(b)-2 IJP(c)/SSD(c)/AFWL/SSD/RAEM(a)/ESD(gs)/ESD(t)

ACCESSION NR: AP4046665 S/0185/64/009/009/1026/1026

AUTHOR: Zakharko, Ya. M.; Chepelyev, V. V.

TITLE: The asymmetry of the impulse amplitude (pulse-heigth) differential distribution curves of x-ray detectors of NaI(Tl) crystals.

SOURCE: Ukrayins'ky*h fizy*chny*y zhurnal, v. 9, no. 9, 1964, 1026

TOPIC TAGS: NaITl crystal, pulse height curve, x ray detector, scintillation detector, luminescence quenching center, photomultiplier, single channel scintillation spectrometer

ABSTRACT: NaI(Tl) crystals produced for operation as x-ray detectors in the 4-20 kev energy region were characterized by distinct asymmetry from the low amplitude side regardless of the light reflecting material or method of preparing the unit surface. Curve 1 of the enclosed figure shows a typical differential distribution of the impulse amplitude of a single channel scintillation spectrometer with an FEU-35 photomultiplier for CuK_{α} radiation. The parameters established after

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L 24667-65
ACCESSION NR: AP4046665

6-8 months at room temperature are shown in curve 2: the curve became symmetrical and its amplitude peak was increased. It was indicated that the observed effects are associated with nonuniformity of the scintillation due to uneven distribution of the activating additive or some unidentified luminescence quenching centers during the NaI(Tl) crystal growing process. Asymmetry from the high amplitude side described by J. T. Wright (J. Sci. Instrum., 31, 462, 1954) and by W. Hink (Zs. Phys., 169, 289, 1962), was not observed in these detectors except when the scintillation intensity was artificially reduced, e.g., by introduction of neutral filters between the container outlet window and the photomultiplier. Orig. art. has: 1 figure

ASSOCIATION: L'vis'ky*y derzhuniversy*tet im. I. Franka (Lvov State Institute)

SUBMITTED: 27Mar64 ENCL: 01

SUB CODE: NP, GC NO REF SOV: 001 OTHER: 003

Card 2/3

L 24667-65

ACCESSION NR: AP4046665

ENCLOSURE: 01

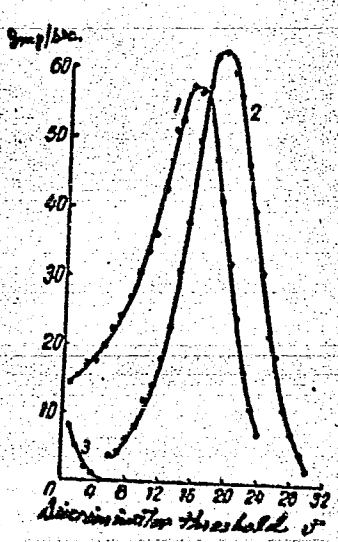


fig. 1

Effect of natural aging of crystal on the differential distribution of the impulse amplitude of the x-ray detector for CuK -radiation.

1. detector prepared from fresh monocrystal
2. the same detector after 6 months storage
3. distribution of FEU-35 noise

Card

L 28879-66 EWT(m)

ACC NR: AP6016047 SOURCE CODE: UR/0185/66/011/005/0538/0539

31
B

AUTHOR: Zakharko, Ya. M.; Chepelyev, V. V.

ORG: L'vov State University im. I. Franko (L'vivs'kyy derzhuniversytet)

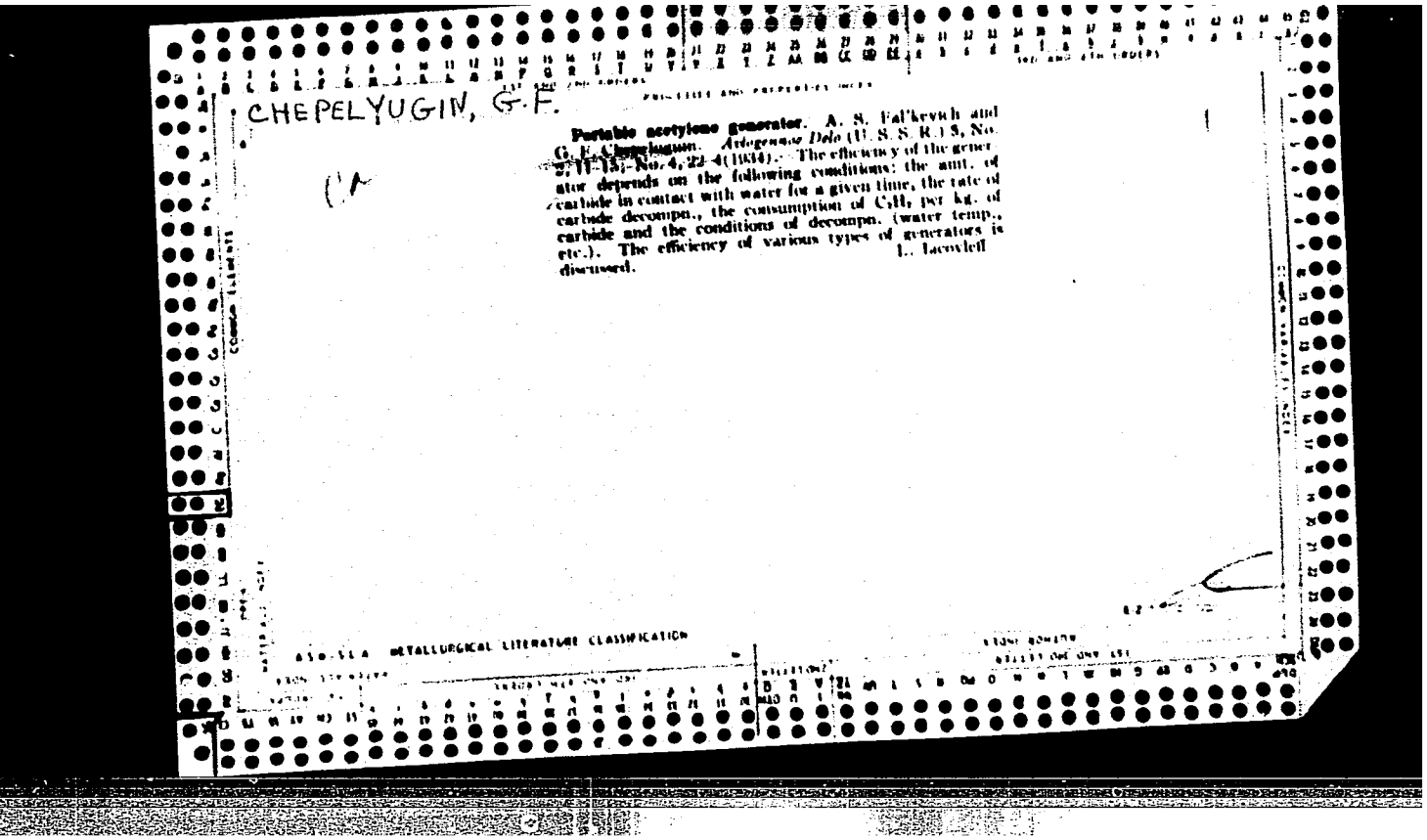
TITLE: Influence of x-irradiation on resolution of a NaI(Tl) scintillator

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 11, no. 5, 1966, 538-539

TOPIC TAGS: x ray effect, scintillator, activated crystal, Gamma spectrometer

ABSTRACT: This is a continuation of earlier work (Izv. AN SSSR ser. fiz. v. 29, 78, 1965) where it was shown that exposure of NaI(Tl) crystals to hard x-irradiation affects adversely the resolution of γ spectrometers. The present article reports the experimentally obtained intrinsic resolution of irradiated crystals and the causes of this effect. Round plates of 30 mm diameter and 5 mm thickness cut from crystals grown by the Kiropoulos method were exposed to doses of 300-350 r/min. The resolution was measured with a scintillation spectrometer using an FEU-43 photomultiplier several hours after the irradiation, when the phosphorescence of the crystal completely stopped. Several weeks after a 60-minute irradiation the resolution was still 40-45% below the initial value, and the amplitude of the photopeak was ~15% below the initial value. The small decrease in the average photopeak amplitude, compared with the appreciable deterioration of the resolution, is the consequence of inhomogeneities of the optical yield, due to the different absorption of the x-rays in the scintillator material. This was confirmed by a separate test of the variation of the light yield with the thickness of the scintillating crystal. Orig. art. has: 1 figure and 1 table. [02]

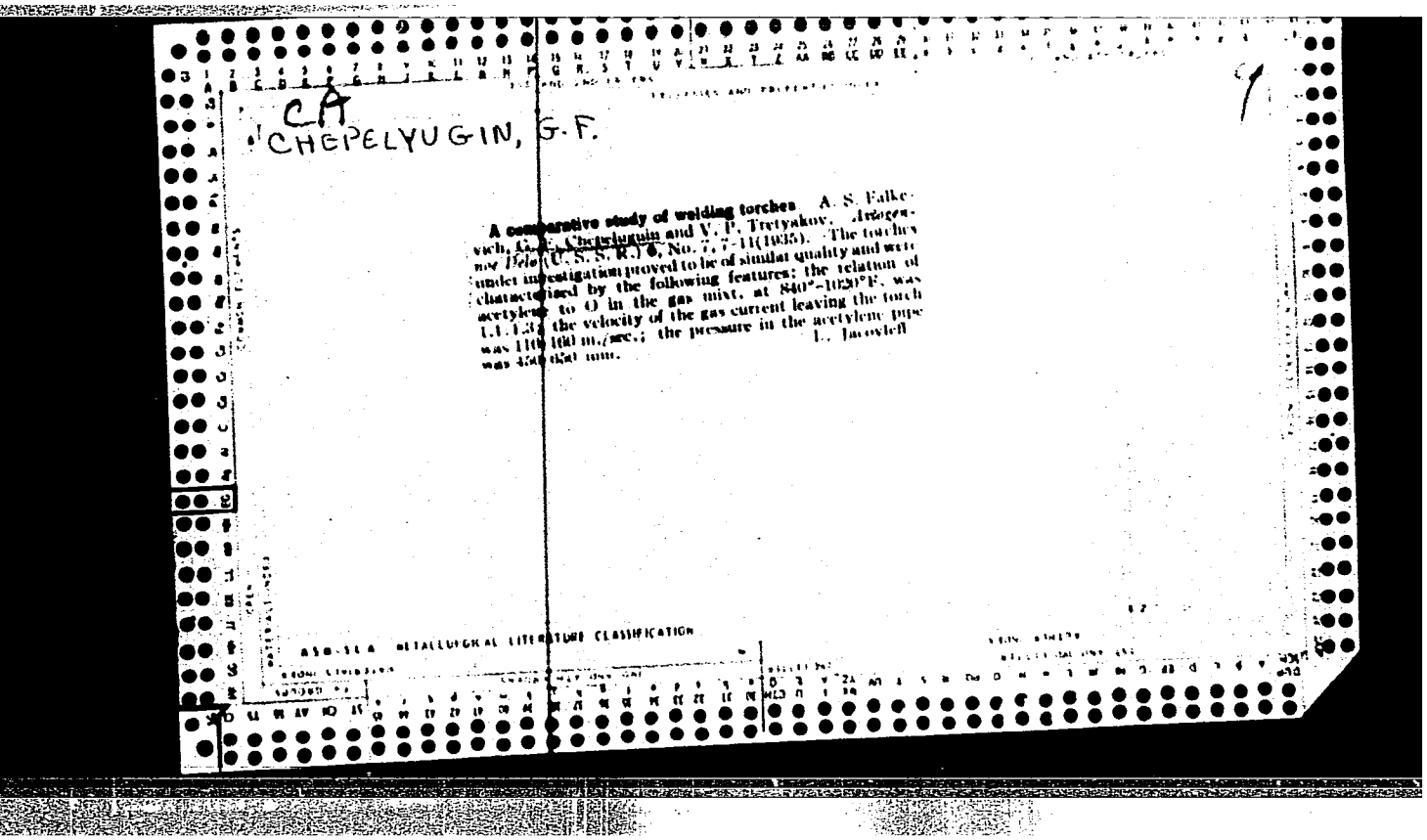
Card 1/1 SUB CODE: 20/ SUBM DATE: 30Jun65/ ORIG REF: 005/ ATD PRESS: 5005



CHEPELYUGIN, G.F.

Portable acetylene generator. A. S. Fal'kevich and G. F. Chepelyugin. *Avtogennoe Delo* (U. S. S. R.) 5, No. 11-12, No. 4, 22-4 (1934).—The efficiency of the generator depends on the following conditions: the amt. of water depends on the following conditions: the amt. of carbide in contact with water for a given time, the rate of carbide decompn., the consumption of C_2H_2 per kg. of carbide and the conditions of decompn. (water temp., etc.). The efficiency of various types of generators is discussed. L. Iacovleff

A50-51A METALLURGICAL LITERATURE CLASSIFICATION

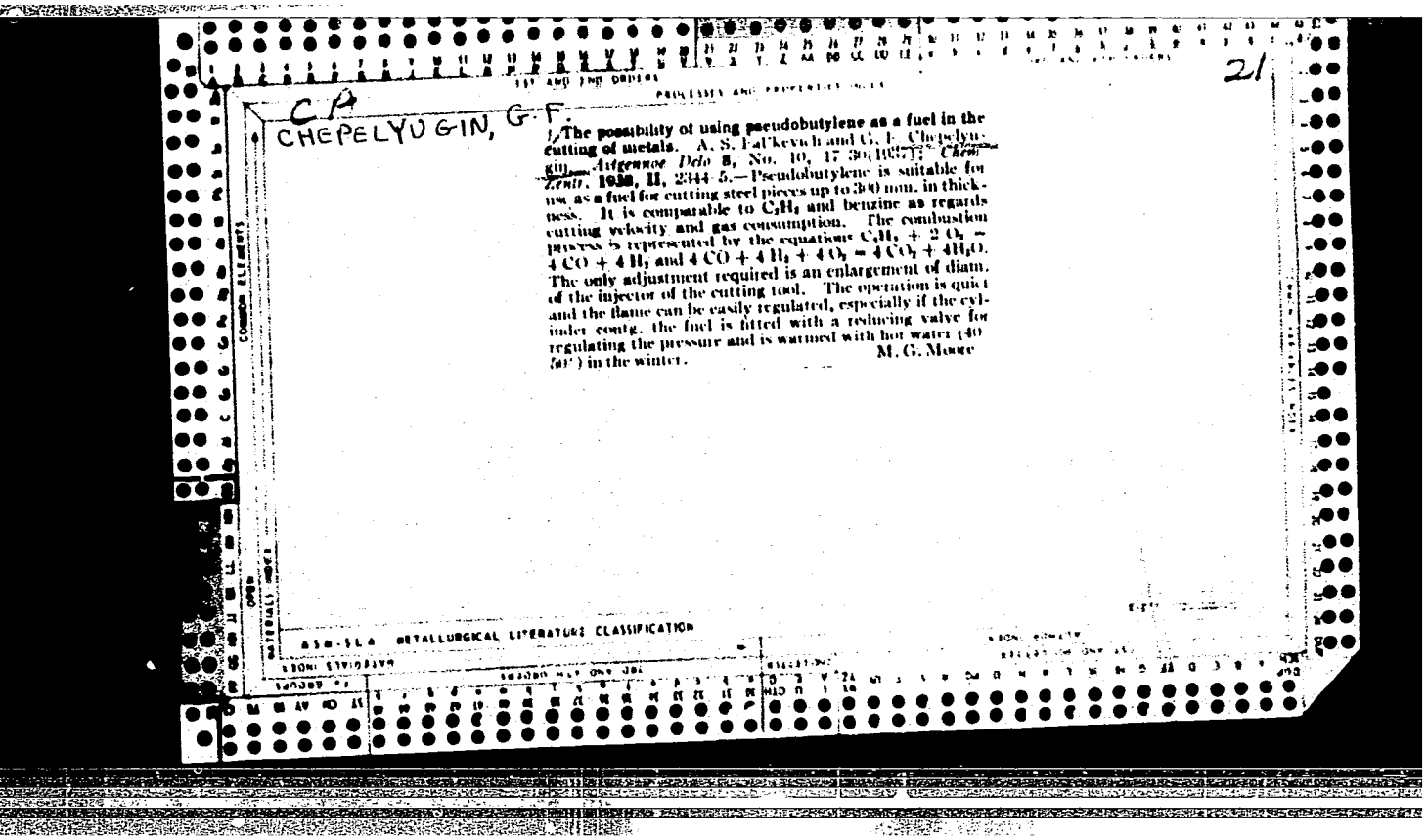


CA

CHEPELYUGIN, G.F.

A comparative study of welding torches A. S. Falke-
vich, G. F. Chepelyugin and V. P. Tretyakov. Avtogen-
noe Delo (U. S. S. R.) 6, No. 7, 7-11(1935). The torches
under investigation proved to be of similar quality and were
characterized by the following features: the relation of
acetylene to O in the gas mixt. at 840°-1020°F. was
1:1.13; the velocity of the gas current leaving the torch
was 110-160 m./sec.; the pressure in the acetylene pipe
was 450-650 mm.
L. Jacovleff

A50-51A METALLURGICAL LITERATURE CLASSIFICATION



CP

CHEPELYUGIN, G. F.

21

The possibility of using pseudobutylene as a fuel in the cutting of metals. A. S. Falkevich and G. F. Chepelyugin. *Avtogennoe Delo* 8, No. 10, 17-20(1937). *Chem. Zentr.* 1938, II, 2344-5.—Pseudobutylene is suitable for use as a fuel for cutting steel pieces up to 300 mm. in thickness. It is comparable to C_2H_2 and benzine as regards cutting velocity and gas consumption. The combustion process is represented by the equations $C_4H_8 + 2O_2 = 4CO + 4H_2$ and $4CO + 4H_2 + 4O_2 = 4CO_2 + 4H_2O$. The only adjustment required is an enlargement of diam. of the injector of the cutting tool. The operation is quiet and the flame can be easily regulated, especially if the cylinder contg. the fuel is fitted with a reducing valve for regulating the pressure and is warmed with hot water (40° in the winter.

M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CHEPELYUGINA, M. F.

"The Role of Afferentation in Construction of Motive Actions," Thesis for degree of Cand. Biological Sci. Sub 22 Jun 50, Acad Med Sci USSR

Summary 71, 4 Sept 52. Dissertations Presented for Degrees in Sci. and Engineering in Moscow in 1950. From Vechernyaya Moskva. Jan-Dec 1950.

SERDYUKOVA, M.; CHEPELYUK, B.

Projection camera for a trichinelloscope. Mias. ind. SSSR 32 no.3:47 '61. (MIRA 14:7)

1. Vinnitskaya myasokontrol'naya stantsiya No.1.
(Trichinella spiralis)
(Meat industry—Equipment and supplies)

CHEPELYUK, M.A.; BAKKER, E.T.

Q fever in Pavlodar Province; preliminary report. Zdrav. Kazakh. 17 no.6:46 '57. (MIRA 12:6)

1. Iz Pavlodarskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.

(PAVLODAR PROVINCE--Q FEVER)

EXCERPTA MEDICA Sec 17 Vol 5/7 Public Health July 59

1894. MATERIAL FOR THE STUDY OF Q FEVER IN THE PROVINCE OF PAVLODARSK (Russian text) - Chepelyuk M. A. and Bekker E. T. Pavlodarsk Prov. Sanit.-Epidemiol. Station, Pavlodarsk, USSR - ZDRAVOOKHR. KAZ. 1958, 18/6 (20-23)

The diagnosis of Q fever was first confirmed in the region by positive CFT with patients' sera and the rickettsial antigen of C. burnetii. The incidence of Q fever is seasonal (March-June), probably owing to seasonal frequencies of exposure to ticks, among which Dermacentor marginatus was found to be naturally infected with Q fever rickettsiae. Q fever was highly prevalent among meat-packers, and of low incidence in dairy personnel.

Anigstein - Galveston, Tex. (L, 17)

CHEPELYUK, M.A.; BEKKER, E.T.

Bacteriological characteristics of brucellosis in Pavlodar Province. Zdrav. Kazakh. 22 no.9:58-61 '62.
(MIRA 17:2)

1. Iz Pavlodarskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.

AID P - 4591

Subject : USSR/Aeronautics - tactics

Card 1/1 Pub. 135 - 3/23

Author : Chepelyuk, S. G., Hero of Sov. Union, Candid. in Mil. Sci., Guards Maj.

Title : Destruction of ground targets from hedge-hopping flight

Periodical : Vest. vozd. flota, 3, 19-25, Mr 1956

Abstract : The advantages of hedgehopping attacks and the methods of carrying out of such attacks are described in detail. Two sketches. The article is of informative value.

Institution : None

Submitted : No date

BOGDANOVICH, B.N.; CHEPENETS, E.N.

Ligation of the main bronchus in pulmonary tuberculosis.
Probl. tub. 40 no.6:103-104 '62 (MIRA 16:12)

1. Iz tuberkuleznogo sanatoriya "Sosnovka" Ministerstva zdravo-okhraneniya BSSR (glavnyy vrach T.S.Shatkovskaya).

SHEPENETS, E.N.

Case of bronchogenic cyst of the mediastinum and tuberculoma of the lung. Prob. tub. no.1:85-86 '65. (MIRA 18:12)

1. Torakal'noye otdeleniye legochnogo tuberkuleza Oblastnogo protivotuberkuleznogo dispansera (glavnyy vrach G.I. Lucher'), Cholyabinsk.

DEVYATNIN, V.A.; MEL'NIKOVA, Ye.Ya.; CHEPENKO, A.I.

Vitamin A, B_1 and B_2 content of cheese. Trudy VNIVI 6:240-242 '59. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut. Khimiko-analiticheskaya laboratoriya.
(CHEESE) (VITAMINS)

AKCHURINA, R.M.; CHEPENKO, N.K.

Advanced method for painting and drying metal containers in lacquer and paint factories. Lakokras. mat. i ikh prim. no.6: 64-66 '61. (MIRA 15:3)
(Painting, Industrial--Equipment and supplies)

MAYZEL', Boris Isaakovich; OKUN', Boris TSalerovich; CHEPENKO, Nata Konstantinovna; EFROS, M.M., red.

[Use of the combustion products of natural gas in convection drying chambers for drying protective paint coatings] Konvektsionnye sushil'nye kamery s ispol'zovaniem produktov sgoraniia prirodnogo gaza dlia sushki lakokrasochnykh pokrytii. Leningrad, 1965. 25 p. (MIRA 18:7)

OKHATSIMSKAYA, M., RASTRUSIN, Y., RAKITYANSKY, I., CHEPETNOV, R.

"Laws of excitation of short-period oscillations in middle latitudes."

report presented at the Intl. Association of Geomagnetism and Aeronomy, Symposium on Rapid Geomagnetic Variations, Utrecht, Netherlands, 1-4 Sep 59.

CHEPIAKOV, V.D.

Case of degeneration of myositis ossificans into a malignant tumors. Khirurgiia 35 no. 11:122-123 N '59. (MIRA 14:1)
(MUSCLES—DISEASES) (LEGS—CANCER)

4

25425 S/137/61/000/006/019/092
A006/A101

18 3100

AUTHORS: Tsyb, P.P., Getskin, L.S., Vartanyan, A.M., Fel'dman, V.G., Anosova, T.V., Akylbekov, A.A., Levina, A.A., Chepick, M.N.

TITLE: Extracting indium from lead plant dusts

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no, 6, 1961, 19, abstract 60166 ("Sb. nauchn. tr. Vses. n.-i. gornometallurg. in-t tsvetn. met", 1960, no. 6, 377 - 388)

TEXT: The authors describe a technological system of In extraction from dusts of lead production, using the method of dust sulfatizing at the beginning of the process. Extraction of In into 1-st class metal from the content in the initial dust (In 0.003 - 0.006%) is about 60%.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 1/1

L 46243-66 EWT(m)/EWP(e)/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AP6023916 SOURCE CODE: UR/0363/66/002/007/1218/1224

AUTHOR: Kuz'ma, Yu. B.; Chepiga, M. V.; Plakhina, A. M. 45 B

ORG: L'vov State University im. Iv. Franko (L'vovskiy gosudarstvennyy universitet)

TITLE: Phase equilibria in the systems Cr-Co-B, Mn-Fe-B, and Mn-Co-B

SOURCE: AN SSSR. Izv. Neorg materialy, v. 2, no. 7, 1966, 1218-1224

TOPIC TAGS: phase equilibrium, metal phase system, chromium compound, boron compound, iron compound, manganese compound, cobalt compound

ABSTRACT: The study constitutes a part of systematic investigations being carried out in the Inorganic Chemistry Department of L'vov University (Kafedra neorganicheskoy khimii L'vovskogo universiteta), concerned with the phase diagrams of ternary systems of two transition metals with boron and the crystal structures of the ternary compounds formed. The systems Cr-Co-B, Mn-Fe-B, and Mn-Co-B were studied by x-ray structural analysis and in part by microstructural analysis, and the isothermal sections of these systems at 800°C were plotted. The compound $Cr_2Co_{21}B_6$ (τ phase), having a $W_2Cr_{21}C_6$-type structure (a = 10.471 Å), exists in the Cr-Co-B system. The boride Co_2B dissolves up to 30 at. % Cr. The presence of continuous solid solutions (Mn, Fe_2)B and (Mn, Fe)B was confirmed in the Mn-Fe-B system. A ternary compound (τ phase) with a $W_2Cr_{21}C_6$-type structure (a = 10.518-10.641 Å) is formed in the Mn-Co-B system; the

Card 1/2 UDC: 541.123.3

L 46243-66

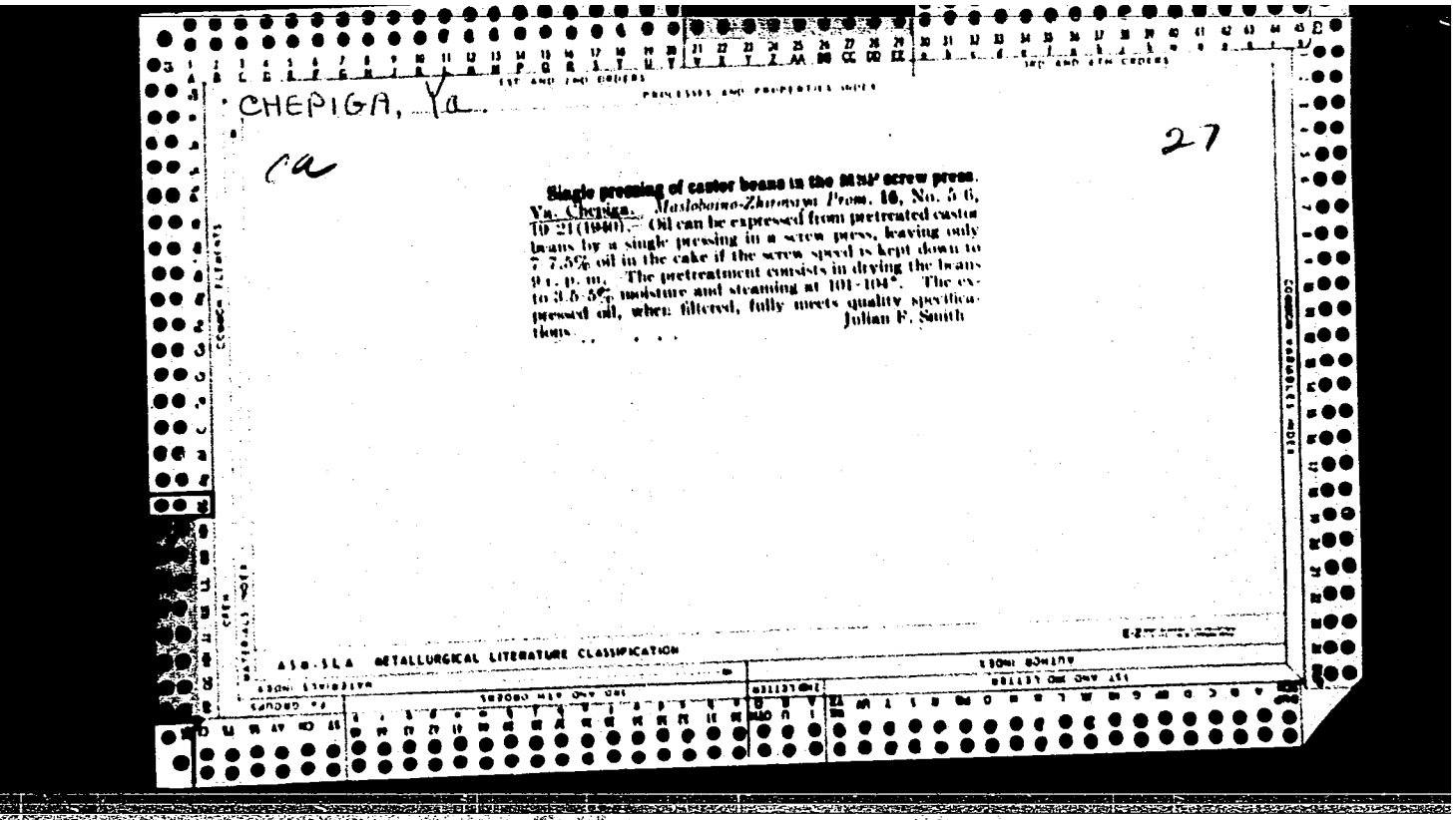
ACC NR: AP6023916

region of homogeneity of the τ phase is located between 10 and 40 at. % Mn. The existence of $(Mn, Co)_2B$ and (Mn, Co)B solid solutions was confirmed. Orig. art. has: 5 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: 140ct65/ ORIG REF: 010 / OTH REF: 004

hs

Card 2/2



CHEPIGA, Ya.

ca

27

Single pressing of castor beans in the [illegible] screw press. Ya. Chepiga. *Masloboino-Zhirovoe Prom.* 16, No. 5-6, 19-21 (1940).—Oil can be expressed from pretreated castor beans by a single pressing in a screw press, leaving only 7.5% oil in the cake if the screw speed is kept down to 9 r. p. m. The pretreatment consists in drying the beans to 3.5-5% moisture and steaming at 101-104°. The expressed oil, when filtered, fully meets quality specifications. Julian F. Smith

A58-SLA METALLURGICAL LITERATURE CLASSIFICATION

USSR/ Engineering - Cast-iron shafts

Card : 1/1

Authors : Ceredenko, B. N., Cand. Tech. Sc.; Chepigin, G. V., Can. Tech. Sc.

Title : Resistence to wear and dependability in operation of crankshafts of high-strength cast iron.

Periodical : Vest. Mash., 34, Ed. 6, 65 - 68, June 1954

Abstract : Numerical values are given for the resistance of high-strength cast iron to various kinds of strains. An analysis is made of the results obtained by experimenting both with steel and high-strength cast iron for tractor engine crankshafts, and such experiments lead to the conclusion that the high-strength cast iron may be used as a substitute for steel in crank shafts and other parts. Graphs; tables; drawing; illustration.

Institution : ...

Submitted : ...

CHEPIGIN, G.V., kand.tekhn.nauk; GUL', N.S., inzh.; CHIZHOV, A.P., inzh. KHESIN, A.Ya.

Results of the operational tests of a full-flow RMTs device on the SMD diesel engine. Trakt. i sel'khozmash. 32 no.6:12-14 Je '62. (MIRA 15:6)

1. Dnepropetrovskiy sel'skokhozyaystvennyy institut (for Chepigin, Gul', Chizhov). 2. Gosudarstvennoye spetsial'noye konstruktorskoye byuro po dvigatelyam (for Khesin).
(Tractors—Oil filters)

CHEPIGIN, G. V., inzh.; NEKHAY, S. M., inzh.; GUL', N. S., inzh.; CHIZHOV, A. P., inzh.

Replacing the double-cleaning oil filter with a full-flow centrifuge. Mashinostroenie no.5:95 S-O '62. (MIRA 16:1)

(Tractors—Engines—Oil filters)

CHEPIGIN, G.V., kand. tekhn. nauk; GUL', N.S., inzh.; CHIZHOV, A.P., inzh.

Use of cast-iron crankshafts in motor-vehicle and tractor engines. Mashinostroenie no.5:112-113 S-O '63. (MIRA 16:12)

1. Dnepropetrovskiy sel'skokhozyaystvennyy institut.

FINKEL'SHTEYN, David Naumovich; RYABCHIKOV, D.I., otv. red.; CHEPIGO, K.V., red.

[Pure substance] Chistoe veshchestvo. Moskva, Nauka, 1965. 167 p. (MIRA 19:1)

1. Chlen-korrespondent AN SSSR (for Ryabchikov).

L 35912-66 EWT(m)/EWP(j) RM

ACC NR: AP6014893 SOURCE CODE: UR/0076/65/039/012/2951/2957

AUTHOR: Nurmukhametov, R. N.; Chepigo, O. S.; Shvayka, O. P.

ORG: Moscow Physico-chemico Scientific Research Institute im. L. Ya. Karpov (Moskovskiy nauchno-issledovatel'skiy fiziko-khimicheskiy institut)

TITLE: The structural luminescence and absorption spectra of solutions of aryloxydiazoles and some aryl ethylenes at 77°K

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 12, 1965, 2951-2957

TOPIC TAGS: absorption spectrum, luminescence spectrum, ethylene

ABSTRACT: The spectra were taken by the Shpol'skiy method in n-hydrocarbons and methyl cylohexane at 77°K on a Hilger spectrometer. The average concentration of the solutions was approximately 10^{-4} moles/liter. The spectra obtained are exhibited in a number of figures. It was established that a majority of the compounds studied exhibited only fluorescence, while phosphorescence was absent. The structure of the spectra has a periodic form. The article interprets other vibrational frequences by analogy with known interpretations of the spectra of aryl ethylenes. In compounds with the general structure

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L 35912-66

ACC NR: AP6014893

R_1--X--R_2 (where R_1 and R_2 are aryl nuclei and the X group is either ethylene or oxydiazole) there is observed an identical nature of the π- bond, which presupposes an identical mechanism for the formation of the vibrationsl structure of the bands of these compounds. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 07, 20/ SUBM DATE: 01Aug64/ ORIG REF: 011/ OTH REF: 003

Card 2/2

CHEPIGO, S. V.

Chepigo, S. V. "For the development and the complete utilization of planned capacities in hydrolysis plants", Gidrolis. prom-st' SSSR, 1949, No. 6, p. 1-4.

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

CHEPIGO, S.V.

Production of charcoal from hydrolytic lignin. S. V. Chepigo, I. Nezamutdenko, and A. A. Bannikova. *Gidroliz. i Lesokhim. Prom.* 8, No. 3, 13-14(1955).—Charcoal (I) of high discoloration power (II) can be obtained from various sources (cottonseed and sunflower-seed hulls, corn husks, straw, sawdust, lignite) by treatment with concd. H_2SO_4. The quality of I depends on the amt. and concn. of acid, time and temp. of the dehydration reaction, the fineness and moisture content of the raw material, and the degree of purification. The optimum II is reached at 250% of H_2SO_4, based on the dry lignin. The yield depends on the temp. of the reaction mass, the time of reaction, and the concn. of acid. An acid with the sp. gr. of less than 1.75 gives a product of inferior quality. The optimum temp. for the formation of I corresponds to the max. temp. evolved during dehydration (160-80°). Keeping the reaction temp. at 170-90° for more than 10 min. lowers the yield of I, and prolonged heating (30 min.) diminishes II. The dimension of the particle of the starting material does not affect II significantly. The temp. of the wash water and the amt. of washing do not lower II. The equipment for a continuous process consists of a reaction drum with a shaft mixer, a filter tank, and storages for the raw material and products. T. Jurecic

(2)

CHEPIGO, S.V.

USSR/Chemical Technology - Chemical Products and Their Application. Wood Chemistry Products. Cellulose and Its Manufacture. Paper, I-23

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63364

Author: Chepigo, S. V.

Institution: None

Title: Production of Activated Charcoal - Collactivite from Vegetable Materials

Original Periodical: Tr. in-ta lesokhoz. problem AN Latv. SSR, 1955, 8, 69-79

Abstract: Collactivite (K) is obtained on treating vegetable materials with H_2SO_4. In comparison with activated charcoals (AC) it contains less carbon (63% in lieu of 88-98%) and more oxygen and hydrogen. Adsorption characteristics of K are higher than those of AC. In addition to adsorption, due to the presence in K of active functional groups (COOH, OH, SO_3, CO) there take place chemosorption and ion-exchange reactions. It is recommended to store K in moist condition since drying lowers the adsorptive properties of K.

Card 1/1

CHEPIGO, S.V.

Reduction in losses in the manufacture of xylose. N. A. Vasyunina, S. V. Chepigo, and S. V. Pavlov. *Gidrolis. i Lesokhim. Prom.* 9, No. 4, 15-17 1956. — In order to increase the amt. of xylose, obtained by hydrolysis of cotton-seed hulls, each step of the process was carefully studied and recommendations made as follows: (a) more effective mixing of the hydrolyzed mass during the addn. of accurately measured milk of lime; (b) improved filter presses; (c) continuous evapn. of the xylose sirup; (d) a more suitable ion-exchange purifying bed, etc. Elisabeth Barabash

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All Union Sci Res. Inst. Hydrolysis & Sulphur. Industry.