MOROZOV, I.A.; GAMEROV, S.L.; CHERNYSHEV, A.F.; DOLMATOV, A.A., kand. tekhn. nauk, retsenzent; SARANTSEV, Yu.S., inzh., red.

[All-metal passenger cars] TSel'nometallicheskie passazhirskie vagony. Moskva, Mashinostroenie, 1965. 254 p. (MIRA 18:9)

CHERNYSHEV, A.I.; PANITKOV, M.

Treatment of keratitis by a novocaine block of the optic nerve. Veterinariia 38 no.6:58 Je '61. (MIRA 16:6)

1. Glavnyy veterinarnyy vrach Pochinkovskogo rayona Gor'kovskoy oblasti (for Chernyshev).
(Novocaine) ((Cornea--Diseases)
(Pochinki District--Cattle--Diseases and pests)

CHERNYSHEV, A.K., inzh.

Nomogram for determining the viscosity of liquid ammonium.
Khol.tekh. 40 no.2:76 Mr-Ap '63. (MIRA 16:4)
(Ammonium--Testing)

CHERNYSHEV, A.K.

Nomograms for determining the properties of ethyl alcohol. Spirt. prom. 29 no.8:24-26 '63. (MIRA 17:2)

1. Kemerovskiy filial Gosudarstvennogo nauchno-issledovatel'skogo i proyektnogo instituta azotnoy promyshlennosti i produktov organicheskogo sinteza.

CHERNYSHEV, Aleksandr Kharitonovich; SOBOLEVSKIY, A.G., red.; YEMZHIN, V.V., tekhn. red.

[An all-wave amateur radio receiver]Vsevolnovyi liubitel'skii radiopriemnik. Moskva, Gosenergoizdat, 1962. 23 p. (Massovaia radio biblioteka, no.434) (MIRA 15:12)
(Radio—Receivers and reception)

BLEKIS, V.K., inzh.; KAGAN, I.L., inzh.; CHUBUKOV, A.A., inzh.; SHUL'MAN, I.Ye., inzh.; CHERNYSHEV, A.K., inzh.

Portable OSN-IM equipment for welding in carbon dioxide. Svar. proizv. no.5:29-30 My '64. (MIRA 18:11)

1. Nauchno-issledovatel'skiy institut tekhnologii mashinostroyeniya, Rostov-na-Donu.

CHERNYSHEV, A.M.

BARDIN, Ivan Pavlovich, 1883- , akademik; TSYLEV, L.M.; KUDRYAVA, A.V.; CHERNYSHEV, A.M.

[Viscosity and mineralogical composition of primary blast-furnace slag] Viazkost' i mineralogicheskii sostav pervichnykh domennykh shlakov. Moskva, Izd-vo Akademii nauk SSSR, 1951. 33 p. (MLRA 6:11)
(Slag)

CHERNYSHEV, A.M.

J. of the Iron & Steel Inst.
V-176 Feb 1954
Treatment & Use of Slags

B.T.R.
V.3, No.3
Dec. 1954

Chem. Abst.
Vol. 48, No. 4
25 Feb, 54

The Mechanism of the Viscosity of Blast-Furnace Slags. A. M. Chernyshev, L. M. Teylov, and A. V. Rudnova. (*Izvestiya Akademii Nauk S.S.S.R., Otdelenie Tekhnicheskikh Nauk*, 1953, (7), 1044–1057). [In Russian]. On the basis of the ionic theory of slags a theoretical interpretation of changes in the viscosity of slags with changes in their chemical composition is attempted. It is concluded that the viscosity of a homogenous liquid slag is governed mainly by the size of silicate anions : The greater the size of silicate anions and the concentration of large silicate aggregates, the stronger is the interlocking of the individual slag layers. The size of the complex silicate anions depends on the ratio of the number of oxygen atoms to the number of silicon atoms in the slag. The larger this ratio is, the smaller are the silicate aggregates and *vice versa*. Therefore, with increasing concentration in the slag of CaO, MgO, TiO_2, MnO, FeO, and Na_2O, i.e., oxides which do not form complex aggregates in a liquid slag, the viscosity of the slag is decreased because of the increase in the oxygen/silicon ratio.—v. g.

CHERNYSHEV, A.M.

24(6) PHASE I BOOK EXPLOITATION SOV/2117

Soveshchaniye po eksperimental'noy tekhnike i metodam vysokotemperaturnykh issledovaniy, 1956

Eksperimental'naya tekhnika i metody issledovaniy pri vysokikh temperaturakh; trudy soveshchaniya (Experimental Techniques and Methods of Investigation at High Temperatures; Transactions of the Conference on Experimental Techniques and Methods of Investigation at High Temperatures) Moscow, AN SSSR, 1959. 789 p. (Series: Akademiya nauk SSSR. Institut metallurgii. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali) 2,200 copies printed.

Resp. Ed.: A.M. Samarin, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: A.L. Bankvitser.

PURPOSE: This book is intended for metallurgists and metallurgical engineers.

COVERAGE: This collection of scientific papers is divided into six parts: 1) thermodynamic activity and kinetics of high-temperature processes 2) constitution diagram studies 3) physical properties of liquid metals and slags 4) new analytical methods and production of pure metals 5) pyrometry, and 6) general questions. For more specific coverage, see Table of Contents.

Experimental Techniques and Methods (Cont.) SOV/2117

Ol'shanskiy, Ya.I. (Deceased). On Certain Phenomena in Substances With Mixed Electron-Ion Conductivity 402

Chernyshev, A.M. Viscosimetry of Metallurgical Slags 411
The author describes the principal types of viscosimeters for determining the viscosity of slags, i.e., those with rotating coaxial cylinders (in practice a rotating crucible and spindle), those with oscillating spindle, and the falling-drop type.

Musorin, G.V., and A.F. Kholodov. A Study of the Viscosity of Slags of the Reducing Period in Electric Melting 430
An experimental method was developed for studying the viscosity of slags of the reducing period of the electric melting of steel. It was shown that special crucibles have to be used for measuring the viscosity of white slags. A method was developed for measuring the viscosity of carbide slags in the electric melting of steel in graphite crucibles. The effect of the basicity of synthetic slags on their viscosity was demonstrated. Data were obtained showing the viscosity of slags withdrawn at various intervals during the reducing period. It was shown that the viscosity of these slags depends on their chemical composition and is determined by the percentile ratio of CaO to SiO_2-CaF_2.

CHERNYSHEV, A.M.; TSYLEV, L.M.; GESS-DE-KAL'VE, B.A.

Determining the moisture content of a blast furnace blow. (MIRA 14:5)
Trudy Inst. met no.4:53-57 '60.
(Blast furnaces)
(Hygrometry)

S/180/60/000/004/027/027
E071/E433

AUTHOR: Chernyshev, A.M.

TITLE: Summary of the Activities of the Institute of Metallurgy imeni A.A.Baykov of the Academy of Sciences of the USSR for 1959

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1960, No.4, pp.189

TEXT: During the meeting of the Scientific Council of the Institute on January 28, 1960, A.M.Samarin (Member-correspondent of the Academy) made a report on the activities of the Institute during 1959. In the paper the reported activities are outlined in general terms: 1) Determination of physico-chemical constants of metals, their alloys and compounds; 2) Investigations in the field of physics of metals and alloys; 3) Theories of metallurgical processes including development of new processes; 4) New methods of investigation and development of new apparatus. Re: 1: Work on the determination of the structure of liquid metals and slags and the activity coefficients of their components is mentioned. Determination of the surface tension of high purity liquid iron permitted establishing that carbon and

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S/180/60/000/004/027/027
E071/E433

Summary of the Activities of the Institute of Metallurgy imeni A.A.Baykov of the Academy of Sciences of the USSR for 1959

manganese are not surface active substances and that oxygen and sulphur sharply decrease the surface activity of iron. The phenomenon of migration of carbon in liquid metal under the influence of a gravitational field was established. The electric conductivity and viscosity in a number of binary, ternary and quaternary metallic and oxide systems was studied. The relationship between the main properties of the molten system of ferrous oxide - calcium oxide - zinc oxide - silica with the phase diagram was established. Re. 2: The relationship between fatigue and physical properties and changes in the latter during the creep process on the density of dislocations was established. It was found that the strength of alloys is determined mainly by specific features of the mechanism of their plastic flow and not by interatomic forces in their crystal lattices. The theory of the distribution of heat during contact resistance welding was developed. Some specific features of the influence of small admixtures on the dilution of solid solutions based on metals from transition groups were investigated. A crystallochemical theory

Summary of the Activities of the Institute of Metallurgy imeni A.A.Baykov of the Academy of Sciences of the USSR for 1959

of oxidation of alloys based on nickel and chromium was developed and the mechanism of formation of peritectic compounds was explained, two criteria of the appearance of semiconductivity were deduced. Re. 3: The main parameters of the reduction processes of iron oxides in a fluidized bed, dephosphorization of pig iron and steel, carbothermal reduction of chromium oxides and vanadium oxides in vacuo were established. The mechanism and kinetics of the reduction of structurally free and combined oxides of copper, zinc and tin with carbon monoxide were studied. The basic equation for the characteristic parts of the rolling process with a non-uniform distribution of pressure and friction forces was derived. The main object of these investigations is a study of the kinetics and the mechanism of these processes. Re. 4: New methods of investigation and new apparatus were developed; a precision apparatus for measuring vapour pressure and heat of evaporation of metals; a new method of determining optical and true temperatures of radiating surfaces; a linear accelerator

S/180/60/000/004/027/027
E071/E433

Summary of the Activities of the Institute of Metallurgy imeni A.A.Baykov of the Academy of Sciences of the USSR for 1959

for 2 to 5 MeV with the beam of accelerated electrons lead out; an apparatus for high temperature thermal analysis; an apparatus for a localized X-ray analysis on a surface of $2\mu^2$ and a new source of a high intensity heat were developed. 575 Papers and 7 monographs were published or submitted for publication during 1959. The following participated in the discussion: I.M.Pavlov (Correspondent member of the Academy), N.P.Shchapov, Ye.M.Savitskiy, D.Ya.Svet (Professors), K.A.Osipov (Doctor of Technical Sciences) and others.

Card 4/4

CHERNYSHEV, A.M.

Preparing nodules and their use in smelting. Metallurg 7 no.1: 13-18 Ja '62. (MIRA 15:1)

1. Institut metallurgii AN SSSR.
(Sintering)

CHERNYSHEV, A.M.

Thermodynamic derivation of the diagrams of state of two-component systems. Zhur. fiz. khim. 36 no.9:2072-2074 S '62.
(MIRA 17:6)

1. Institut metallurgii imeni Baykova.

CHERNYSHEV, A.M.; KISELEV, G.P.; GESS-de-KAL'VE, B.A.; TSYLEV, L.M.

Investigating certain properties of fluxed ore and fuel granules. Trudy Inst. met. no.12:3-12 '63. (MIRA 16:6)

(Sintering)
(Granular materials--Testing)

CHERNYSHEV, A.M.

"Rule of common tangents" in the thermodynamic construction of constitutional diagrams of binary systems. Trudy Inst. [illegible]. no.14: 25-28 '63 (MIR 17:8)

KANAVETS, P.I.; GESS, B.A.; MELENT'YEV, P.N.; CHERNYSHEV, A.M.; CHERNYKH, V.I.; SPORIUS, A.E.

Method of chemical catalysis for nodulizing finely ground materials without sintering. Trudy IGI 22:5-30 '63. (MIRA 16:11)

CHERNYSHEV, A.M.; GESS, B.A.; KANAVETS, P.I.; MELENT'YEV, P.N.; KISELEV, G.P.; TSYLEV, L.M.; BORISOV, Yu.I.; CHERNYKH, V.I.

Metallurgical properties of granules prepared by the method of chemical catalysis. Trudy IGI 22:39-49 '63. (MIRA 16:11)

KANAVETS, P.I.; GESS, B.A.; SPORIUS, A.E.; MELENT'YEV, P.N.;
CHERNYSHEV, A.M.; CHERNYKH, V.I.; KHAYLOV, B.S.; BORISOV, Yu.I.

Experimental pilot plant stand for the nodulizing of finely ground materials by the method of chemical catalysis. Trudy IGI 22:57-69 '63. (MIRA 16:11)

CHERNYSHEV, A.M.; GESS, B.A.; KANAVETS, P.L.; MELENT'YEV, P.N.; KHODAK, L.Z.; SOKOLOV, G.A.; BORISOV, Yu.I.; CHERNYKH, V.I.; Prinimali uchastiye: VAVILOV, N.S.; MAKARCHENKO, V.G.; KISELEV, G.P.; VOLNISTOVA, R.A.; MOREYEVA, G.P.

Testing granules made by the method of chemical catalysis in a laboratory shaft furnace. Trudy IGI 22:70-78 '63. (MIRA 16:11)

KANAVETS, P.I.; GESS, B.A.; SPORIUS, A.E.; CHERNYSHEV, A.M.; MELENT'YEV, P.N.; GHERNYKH, V.I.; KHROMYAK, R.P.; KHAYLOV, B.S.; BORISOV, Yu.I.; TSYLEV, L.M.; SOKOLOV, V.S.; Prinimali uchastiye: MARKIN, A.A.; GORLOV, M.Ya.; VORONOV, Yu.G.; BULAKHOV, K.A.; KREMYANSKIY, V.L.; ARSHINOV, G.P.; MAZUN, A.E.; PISARNITSKIY, I.M.; BOKUCHAVA, O.A.; KIRILLOV, M.V.; TSELUYKO, P.I.; POLYAKOV, G.O.; REZKOV, A.S.; ZHUCHKOV, M.I.; ROMASHKIN, A.S.; ZUBKOV, A.S.; KOZLOV, N.N.

Pilot plant for the nodulizing of finely ground charge mixtures by the method of chemical catalysis. Trudy IGI 22: 93-109 '63. (MIRA 16:11)

GESS, B.A.; CHERNYSHEV, A.M.; KANAVETS, P.I.; MELENT'YEV, P.N.; KHROMYAK, R.P.; VORONOV, Yu.G.; TSYLEV, L.M.; CHERNYKH, V.I.; BORISOV, Yu.I.; SPORIUS, A.E.; Prinimali uchastiye: TOLEROV, D.D.; MINKIN, V.M.; MARKIN, A.A.; GORLOV, M.Ya.; KHAYLOV, B.S.

Experimental blast furnace smelting with replacement in the charge of 20-per cent of the fluxed sinter by granules prepared by chemical catalysis. Trudy IGI 22:110-113 '63. (MIRA 16:11)

KANAVETS, P.I.; MELENT'YEV, P.N.; CHERNYKH, V.I.; GESS, B.A.; SPORIUS, A.E.; CHERNYSHEV, A.M.

Using chemical catalysis for nodulizing charge mixtures composed of various raw materials. Trudy IGI 22:114-125 '63. (MIRA 16:11)

KANAVETS, P.I.; MELENT'YEV, P.N.; SPORIUS, A.E.; CHERNYKH, V.I.; YENIK, G.I.; IVLEVA, A.S.; GESS, B.A.; CHERNYSHEV, A.M.

Obtaining metallurgical coke from weakly-caking coals by the preliminary granulation of coal charge mixtures prior to coking. Trudy IGI 22:154-168 '63. (MIRA 16:11)

CHERNYSHEV, A. N.

"Investigation of Nonsteady Processes in Blast Furnace Skips." Cand Tech Sci, Dnepropetrovsk Metallurgical Inst, Dnepropetrovsk, 1954. (RZhMekh, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

KOZHEVNIKOV, S.N., doktor tekhn.nauk, prof.; CHERNYSHEV, A.N., kand.tekhn. nauk

Investigating nonuniform processes in blast furnace skip hoists. Izv. vys. ucheb. zav.; chern.met. no.5:89-101 My '58. (MIRA 11:7)

1.Chlen-korrespondent AN USSR (for Kozhevnikov). 2.Dnepropetrovskiy metallurgicheskiy institut.
(Blast furnaces) (Hoisting machinery)

KOZHEVNIKOV, S.N.; CHERNYSHEV, A.N., kand.tekhn.nauk; PRAZDNIKOV, A.V., inzh.

Experimental investigation of cold pipe-rolling mills. Izv. vys.ucheb.zav.; chern.met. no.6:91-98 Je '58. (MIRA 12:8)

1. Dnepropetrovskiy metallurgicheskiy institut. 2. Chlen-korrespondent AN USSR (for Kozhevnikov). Rekomendovano kafedroy avtomatizatsii i teorii mekhanizmov i mashin Dnepropetrovskogo metallurgicheskogo instituta.
(Rolling mills) (Pipe, Steel)

KOZHEVNIKOV, S.N.; PRAZDNIKOV, A.V., inzh.; CHERNYSHEV, A.N., kand.tekhn. nauk; GRINBERG, S.D., inzh.

Possibilities of increasing the output of a pilgrim pipe rolling mill. Izv. vys. ucheb. zav.; chern. met. no.7:91-107 Jl '58.

1. Dnepropetrovskiy metallurgicheskiy institut. 2. Chlen-korrespondent AN USSR (for Kozhevnikov).
(Rolling mills)

L 11158-67 EWP(k)/EWP(h)/EWT(d)/EWP(l)/EWP(v)

ACC NR: AP6034637 SOURCE CODE: UR/0102/66/000/004/0003/0007

AUTHOR: Hrushko, V. L. -- Grushko, V. L. (Dnipropetrovs'k); Chernyshov, O. N. -- Chernyshev, A. N. (Dnipropetrovs'k)

37
36

ORG: none

14

TITLE: Synthesis of an automatic-control system with nonlinear feedback which provides stable transmission of given transient response

SOURCE: Avtomatyka, no. 4, 1966, 3-7

TOPIC TAGS: servosystem, electronic amplifier, automatic control, nonlinear feedback, transient response

ABSTRACT: The authors propose a unit with a nonlinear functional converter $F(x_{output})$ in the primary feedback circuit for stable transmission of a given transient response in a closed loop of a nonlinear servosystem under fixed initial conditions and possible disturbances. A method is described for determining the characteristics of the functional converter with the aid of an inverse open-loop electronic model. Data are supplied for designing the inverse model and for a method of approximating nonlinear characteristics of elements of the automatic-

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L 11158-67

ACC NR: AP6034637

control system by smooth curves. The paper includes results for the synthesis of nonlinearity of the $F(x_{output})$, and investigations of transient response stability under the effect of disturbances in a servosystem designed with the Leonard circuit with an amplidyne and electronic amplifiers. The research was carried out at the Dnepropetrovsk Institute of Metallurgy. Orig. art. has: 5 figures and 7 formulas. [Based on authors' abstract]

SUB CODE: 13/ SUBM DATE: 21Mar66/ORIG REF: 003/

Card 2/2 mlr

CHERNYSHEV, A.N.

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 417 - I

BOOK Call No.: AF597645

Author: CHERNYSHEV, A. N.
Full Title: PHOTOREPRODUCING CAMERA FV
Transliterated Title: Fotoreproduktsionnyy apparat FV

Publishing Data
Originating Agency: None
Publishing House: State Publishing House "ISKUSSTVO"
Date: 1953 No. pp.: 71 No. of copies: 3,000
Editorial Staff: None

Text Data
Coverage: This booklet describes the Soviet photoreproducing vertical camera FV which replaces the previous model FA-1. This new model is used at the present time in most Soviet polygraphical establishments. It is better adapted for quality polygraphical reproduction and multicolor printing. It is designed for negative, diapositive and color printing, and prints books, journals and newspapers. It is equipped with the lens "Industar-11" with a 36cm focal length and a f/9 aperture. The maximum enlargement is 1.5:1 and the maximum reduction 1:1.25. No special features in this camera have been noticed as this camera resembles known types of vertical reproducing cameras.

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Fotoreproduktsionnyy apparat FV AID 417 - I

TABLE OF CONTENTS

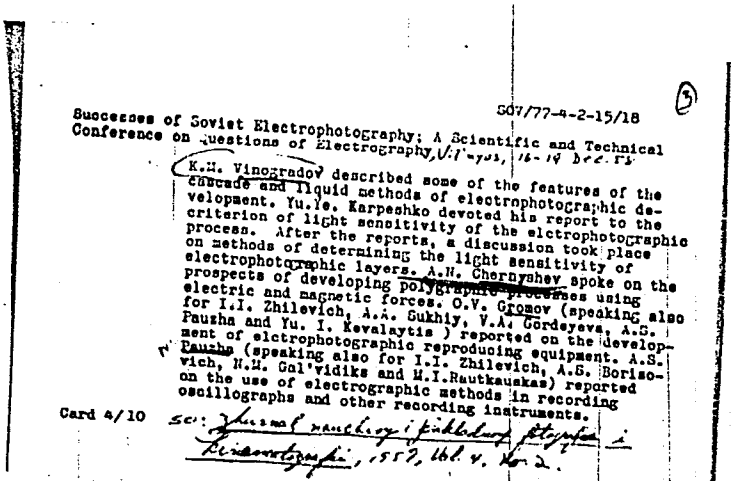
Purpose: Not specified
Facilities: None
No. of Russian and Slavic References: None
Available: A.I.D., Library of Congress.

CHERNYSHEV, A.N., dotsent, kandidat tekhnicheskikh nauk.

Method of calculating some basic parameters for photoreproduction apparatus used in printing. Nauch.trudy MZPI no.2:203-226 '55. (MLRA 9:3)

(Photographic optics) (Cameras)

Chernyshev, A.N.



SOV/77-4-2-15/18

Successes of Soviet Electrophotography; A Scientific and Technical Conference on Questions of Electrography, Ul'yanovsk, 16-19 Dec. 57

K.M. Vinogradov described some of the features of the cascade and liquid methods of electrophotographic development. Yu.Ye. Karpeshko devoted his report to the criterion of light sensitivity of the electrophotographic process. After the reports, a discussion took place on methods of determining the light sensitivity of electrophotographic layers. A.N. Chernyshev spoke on the prospects of developing polygraphic processes using electric and magnetic forces. O.V. Gromov (speaking also for I.I. Zhilevich, A.A. Sukhiy, V.A. Gordeyeva, A.S. Paushs and Yu. I. Kevalaytis) reported on the development of electrophotographic reproducing equipment. A.S. Paushs (speaking also for I.I. Zhilevich, A.S. Borisovich, N.M. Gal'vidiks and M.I.Rautkauskas) reported on the use of electrographic methods in recording oscillographs and other recording instruments.

Card 4/10

Sc: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, 1957, Vol 4, No 2.

NEMIROVSKIY, Ye.L.; CHERNYSHEV, A.N., kand.tekhn.nauk, red.; TROITSKAYA, L.P., red.; ZOTOVA, N.V., tekhn.red.

[Electrography; collected translations from foreign periodicals] Voprosy elektrografii; sbornik perevodov iz inostrannoi periodicheskoi literatury. Pod obshchei red. A.N.Chernysheva. Moskva, Izd-vo inostr.lit-ry, 1960. 257 p. (MIRA 14:1)
(Xerography)

KHAYKEVICH, Adol'f Adol'fovich; CHERNYSHEV, A.N., kand. tekhn. nauk, red.; MAKOVSKAYA, R.P., red.

[Construction and kinematic design of mechanisms and systems for scale changes in automatic electric engraving machines; manual for students of the Faculty of Mechanical Engineering] Konstruktsiia i kinematicheskii raschet mekhanizmov i sistem izmeneniia masshtaba v elektrograviroval'nykh avtomatakh; uchebnoe posobie dlia studentov mekhaniko-mashinostroitel'nogo fakul'teta. Moskva, Poligraficheskii institut, 1964. 54 p.
(MIRA 18:7)

CHERNYSHEV, A. P.

CHERNYSHEV, A. P.--"The Growth and Development of Oak and Certain Allied Species on Various Types of Slopes (Various Exposures) and the Influence of Such Plants on the Moisture of the Soil of the Manychuskiy Forestry Camp, Rostov Oblast, and the Donetskiy Camp, Kamenskiy Oblast." Min Higher Education USSR, Novocherkassk Melioration Engineering Inst., Novocherkassk, 1956. (Dissertations for the Degree of Doctor of Agricultural Sciences.)

KNIZHNAYA LETOPIS
No. 41, October 1956

CHERNYSHEV, A.P.; KONDRATENKO, I.V.; POLYAKOV, P.V.; SOLOV'YEVA, P.N.; ANIGIN, A.F.

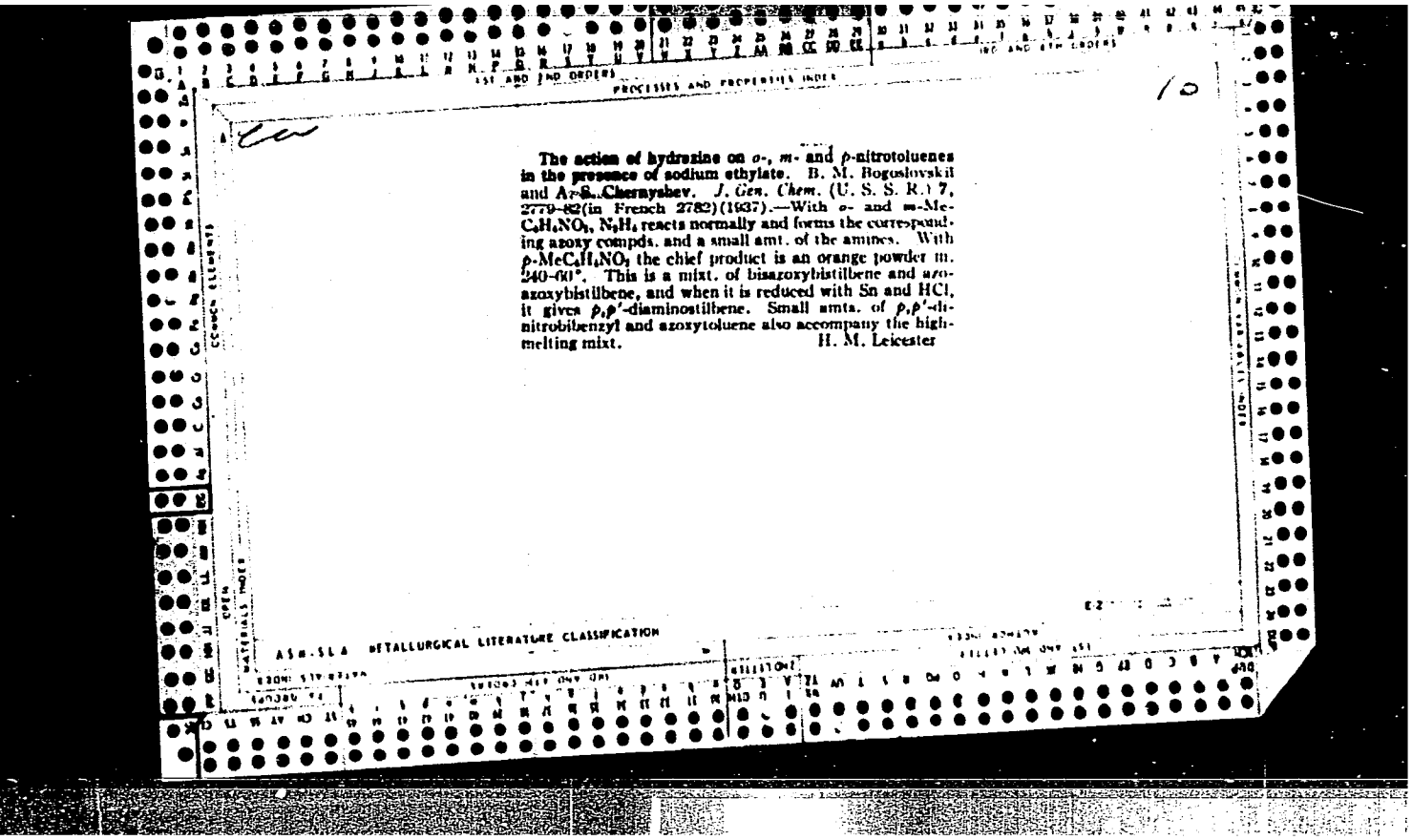
Cableless circuit for the automation of belt and single-chain scraper conveyers in a coal mine. Prom.energ. 16 no.6:10-11 Je '61. (MIRA 15:1)

(Conveying machinery) (Automatic control)

GERASIMOV, D.A., inzh.; GROSH, K.A., inzh.; CHERNYSHEV, A.S., inzh.

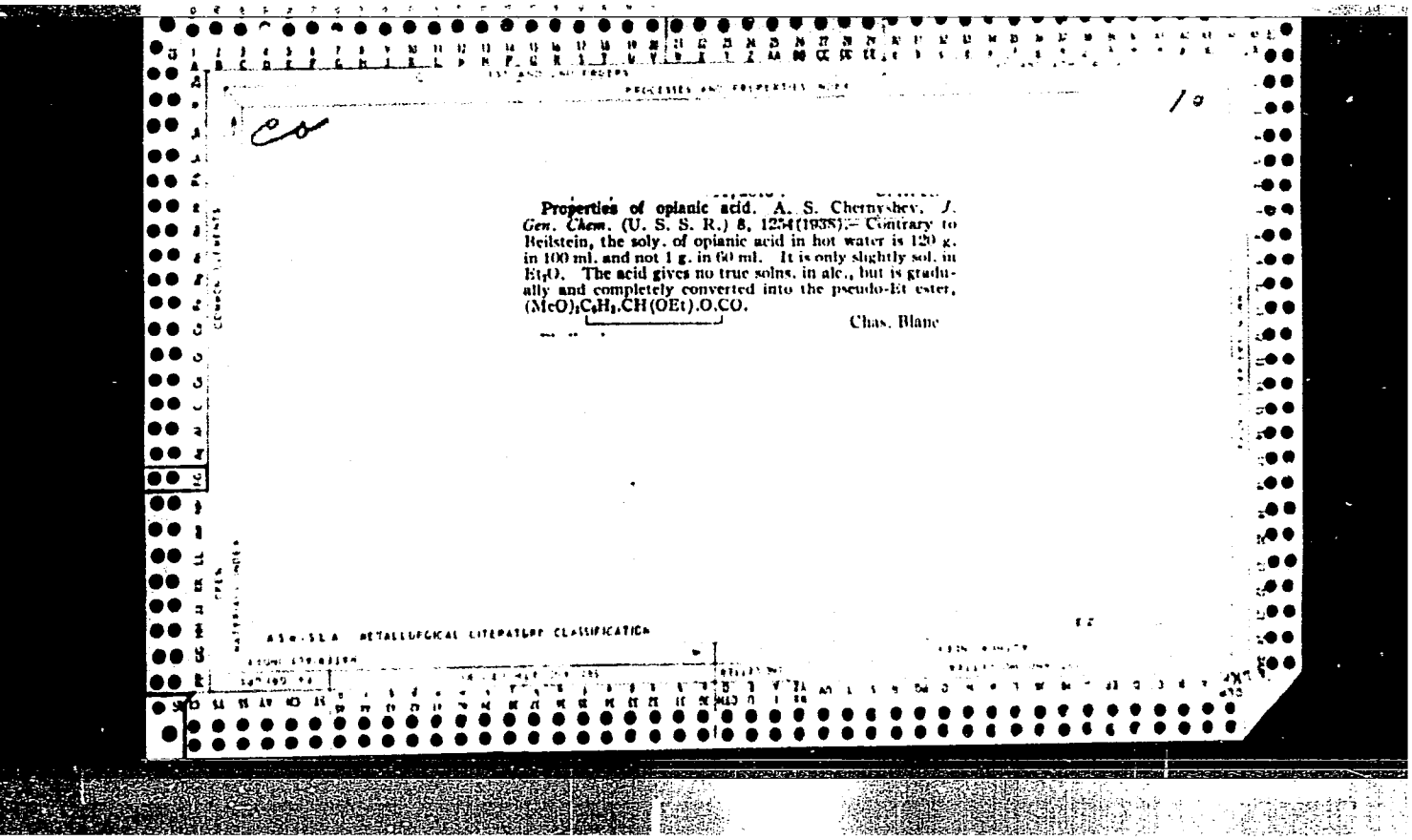
Making large foundation blocks in construction yards under winter conditions. Biul.stroi.tekh. 12 no.9:6-7 S '55. (MIRA 12:1)

1. Trest Chelyabmetallurgstroy.
(Foundations) (Concrete blocks--Cold weather conditions)



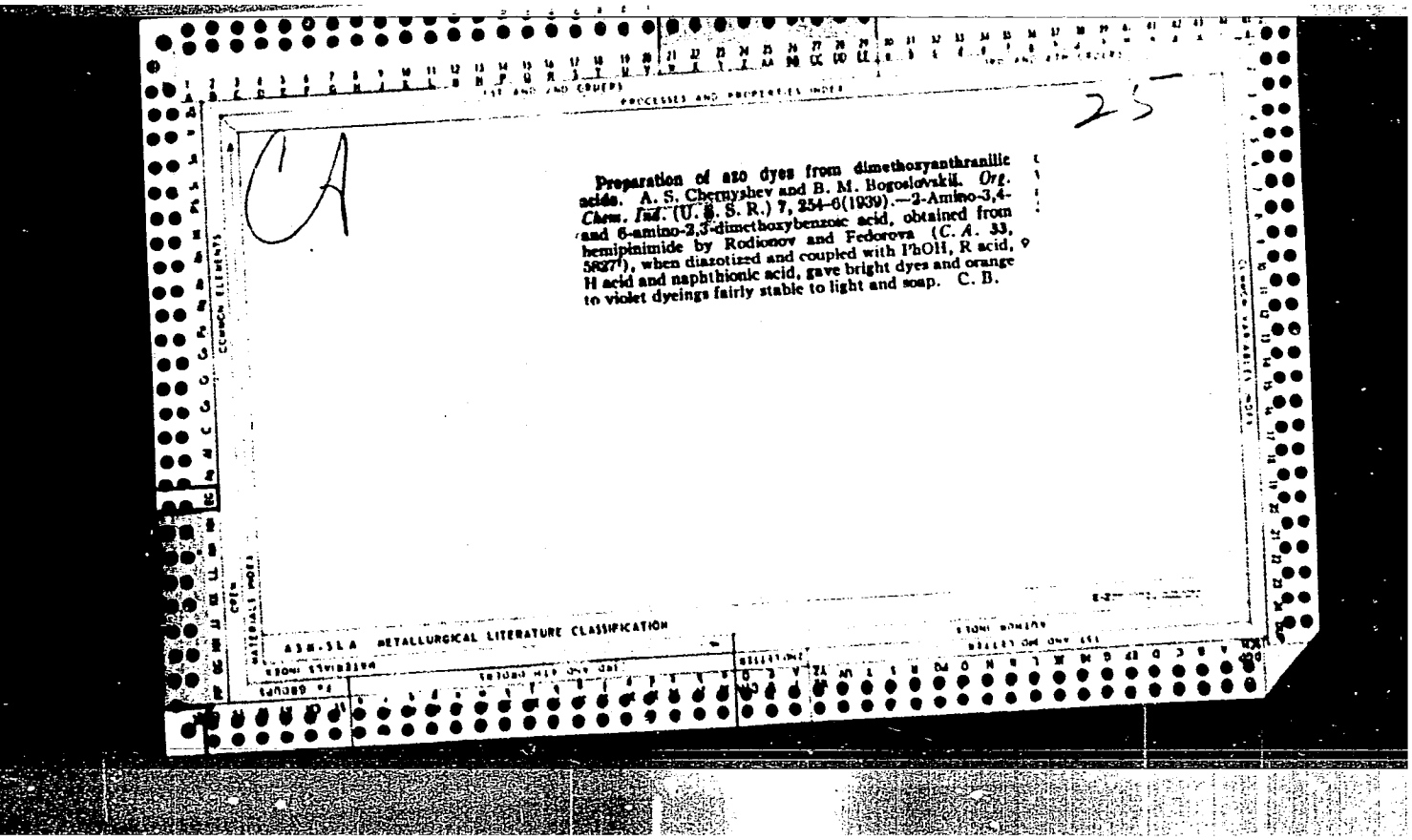
The action of hydrazine on *o*-, *m*- and *p*-nitrotoluenes in the presence of sodium ethylate. B. M. Bogoslovskii and A. S. Chernyshev. *J. Gen. Chem.* (U. S. S. R.) 7, 2779–82 (in French 2782) (1937).—With *o*- and *m*-$MeC_6H_4NO_2$, N_2H_4 reacts normally and forms the corresponding azoxy compds. and a small amt. of the amines. With *p*-$MeC_6H_4NO_2$ the chief product is an orange powder m. 240–60°. This is a mixt. of bisazoxybistilbene and azoazoxybistilbene, and when it is reduced with Sn and HCl, it gives *p*,*p*'-diaminostilbene. Small amts. of *p*,*p*'-dinitrobibenzyl and azoxytoluene also accompany the high-melting mixt.

H. M. Leicester



Properties of opianic acid. A. S. Chernyshev. *J. Gen. Chem.* (U. S. S. R.) 8, 1254(1938).—Contrary to Beilstein, the soly. of opianic acid in hot water is 120 g. in 100 ml. and not 1 g. in 60 ml. It is only slightly sol. in Et_2O. The acid gives no true solns. in alc., but is gradually and completely converted into the pseudo-Et ester, $(MeO)_2C_6H_3.CH(OEt).O.CO$.

Chas. Blanc



CA

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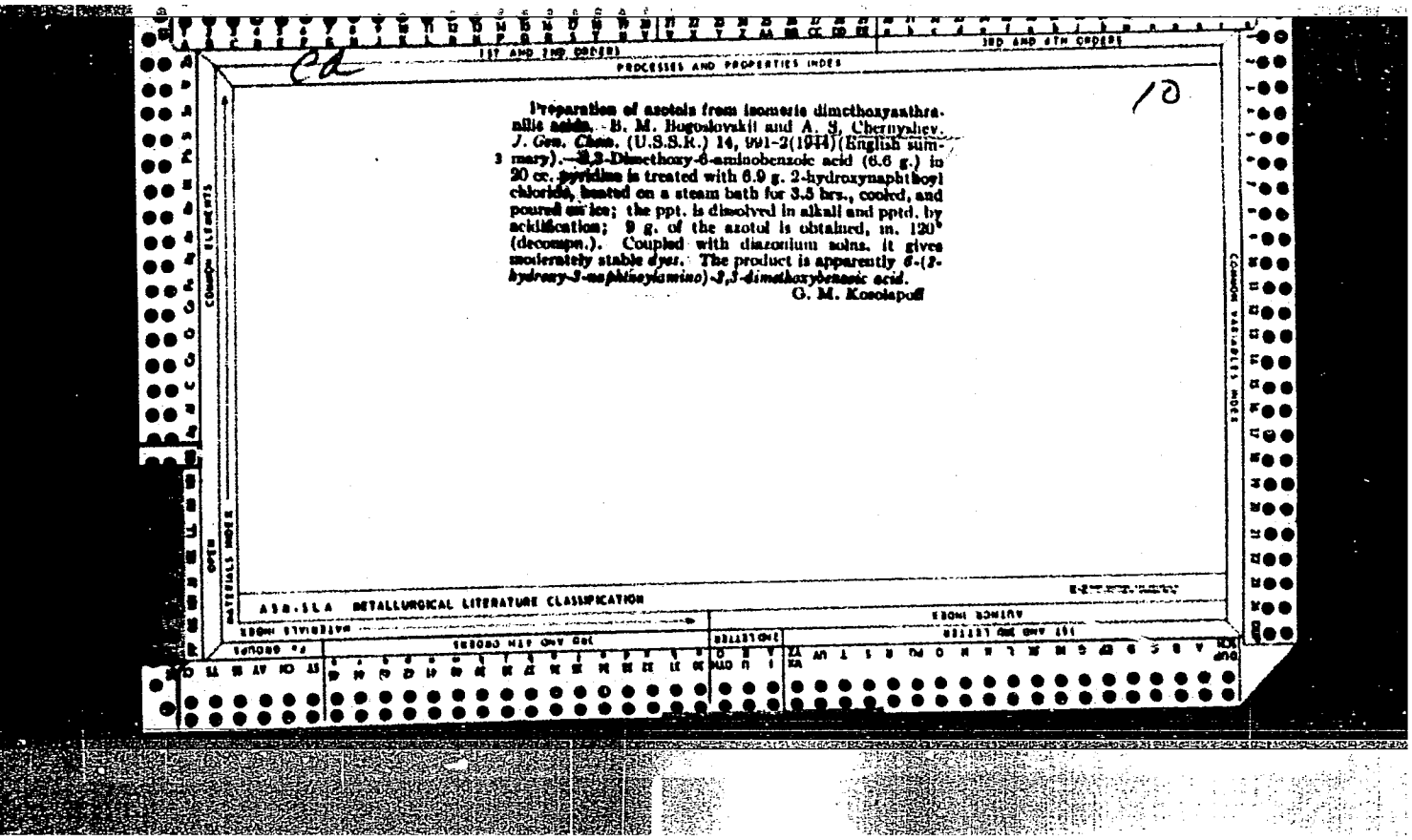
Preparation of azo dyes from dimethoxyanthranilic acids. A. S. Chernyshev and B. M. Bogoslovskii. *Org. Chem. Ind.* (U. S. S. R.) 7, 254-6(1939).—2-Amino-3,4- and 6-amino-2,3-dimethoxybenzoic acid, obtained from hemipinimide by Rodionov and Fedorova (*C. A.* 33, 5827⁹), when diazotized and coupled with PhOH, R acid, H acid and naphthionic acid, gave bright dyes and orange to violet dyeings fairly stable to light and soap. C. B.

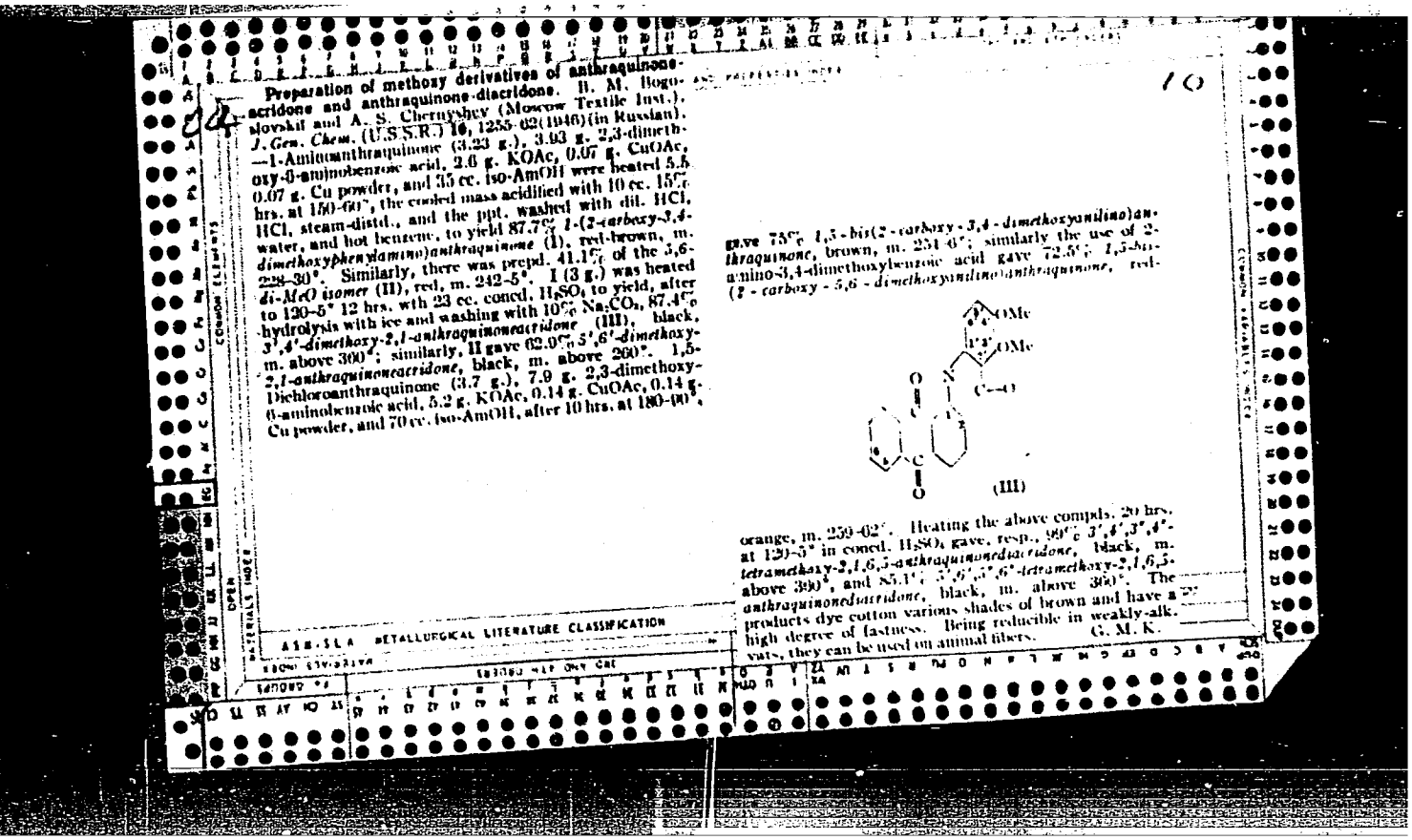
A3M-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

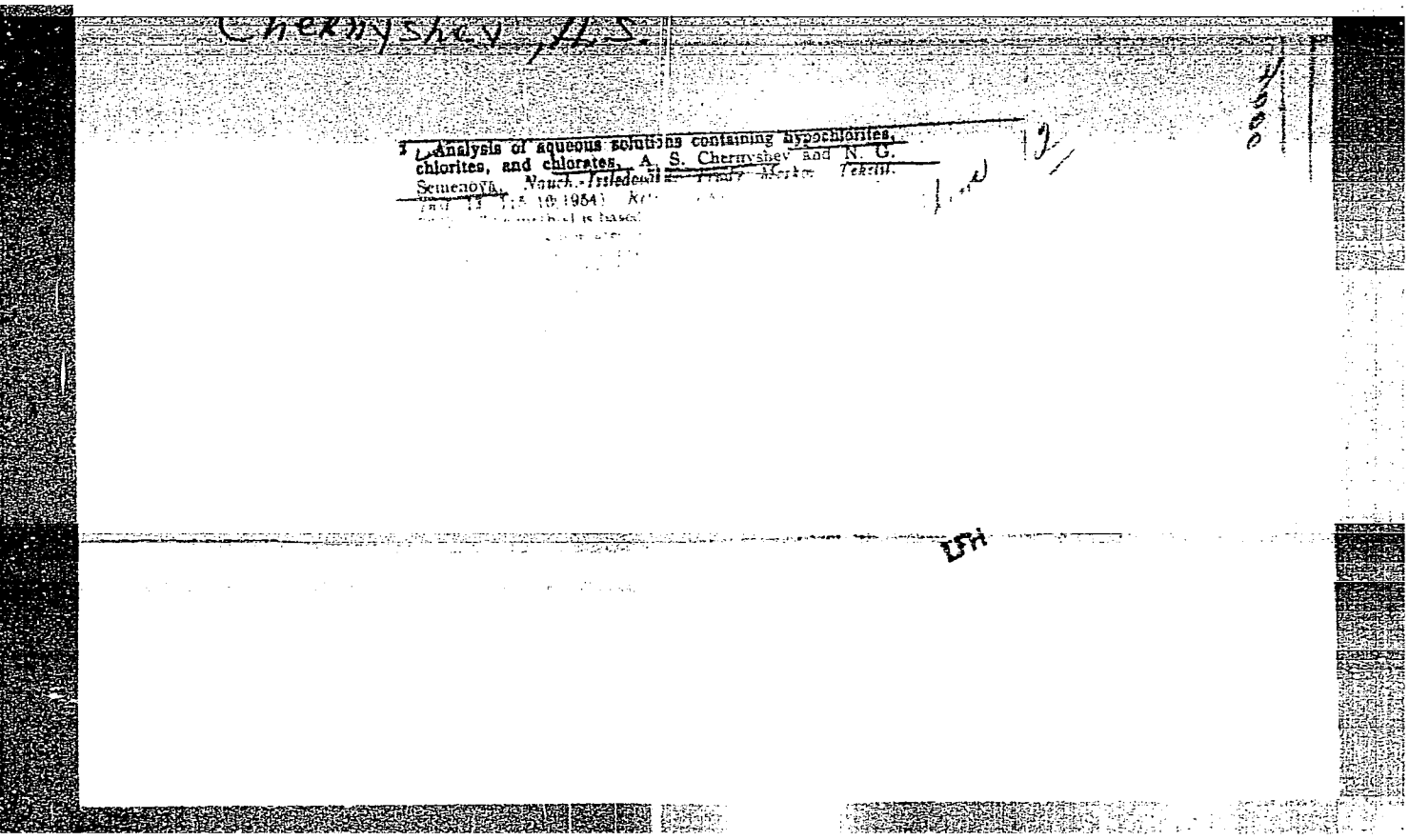
Preparation of azotols from isomeric dimethoxyanthranilic acids. B. M. Bogoslovskii and A. S. Chernyshev. *J. Gen. Chem.* (U.S.S.R.) 14, 991-2(1944)(English summary).—2,3-Dimethoxy-6-aminobenzoic acid (6.6 g.) in 20 cc. pyridine is treated with 6.9 g. 2-hydroxynaphthoyl chloride, heated on a steam bath for 3.5 hrs., cooled, and poured on ice; the ppt. is dissolved in alkali and ppt'd. by acidification; 9 g. of the azotol is obtained, m. 120° (decompn.). Coupled with diazonium salts, it gives moderately stable *dyes*. The product is apparently *6-(2-hydroxy-3-naphthoylamino)-2,3-dimethoxybenzoic acid*.
G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Preparation of methoxy derivatives of anthraquinone-acridone and anthraquinone-diacridone. B. M. Bogoslovskii and A. S. Chernyshev (Moscow Textile Inst.). *J. Gen. Chem.* (U.S.S.R.) **16**, 1255-62(1946)(in Russian). —1-Aminoanthraquinone (3.23 g.), 3.93 g. 2,3-dimethoxy-6-aminobenzoic acid, 2.6 g. KOAc, 0.07 g. CuOAc, 0.07 g. Cu powder, and 35 cc. iso-AmOH were heated 5.5 hrs. at 150-60°, the cooled mass acidified with 10 cc. 15% HCl, steam-distd., and the ppt. washed with dil. HCl, water, and hot benzene, to yield 87.7% *1-(2-carboxy-3,4-dimethoxyphenylamino)anthraquinone* (I), red-brown, m. 228-30°. Similarly, there was prepd. 41.1% of the 3,6-*di-MeO isomer* (II), red, m. 242-5°. I (3 g.) was heated to 130-5° 12 hrs. with 23 cc. concd. H_2SO_4 to yield, after hydrolysis with ice and washing with 10% Na_2CO_3, 87.4% *3',4'-dimethoxy-2,1-anthraquinoneacridone* (III), black, m. above 300°; similarly, II gave 62.9% *3',6'-dimethoxy-2,1-anthraquinoneacridone*, black, m. above 260°. 1,5-Dichloroanthraquinone (3.7 g.), 7.9 g. 2,3-dimethoxy-6-aminobenzoic acid, 5.2 g. KOAc, 0.14 g. CuOAc, 0.14 g. Cu powder, and 70 cc. iso-AmOH, after 10 hrs. at 180-90°, gave 75% *1,5-bis(2-carboxy-3,4-dimethoxyanilino)anthraquinone*, brown, m. 251-6°; similarly the use of 2-amino-3,4-dimethoxybenzoic acid gave 72.5% *1,5-bis(2-carboxy-5,6-dimethoxyanilino)anthraquinone*, red-orange, m. 259-62°. Heating the above compds. 20 hrs. at 130-5° in concd. H_2SO_4 gave, resp., 99% *3',4',3'',4''-tetramethoxy-2,1,6,5-anthraquinonediacridone*, black, m. above 390°, and 85.1% *3',6',3'',6''-tetramethoxy-2,1,6,5-anthraquinonediacridone*, black, m. above 360°. The products dye cotton various shades of brown and have a high degree of fastness. Being reducible in weakly-alk. vats, they can be used on animal fibers. G. M. K.

(III)



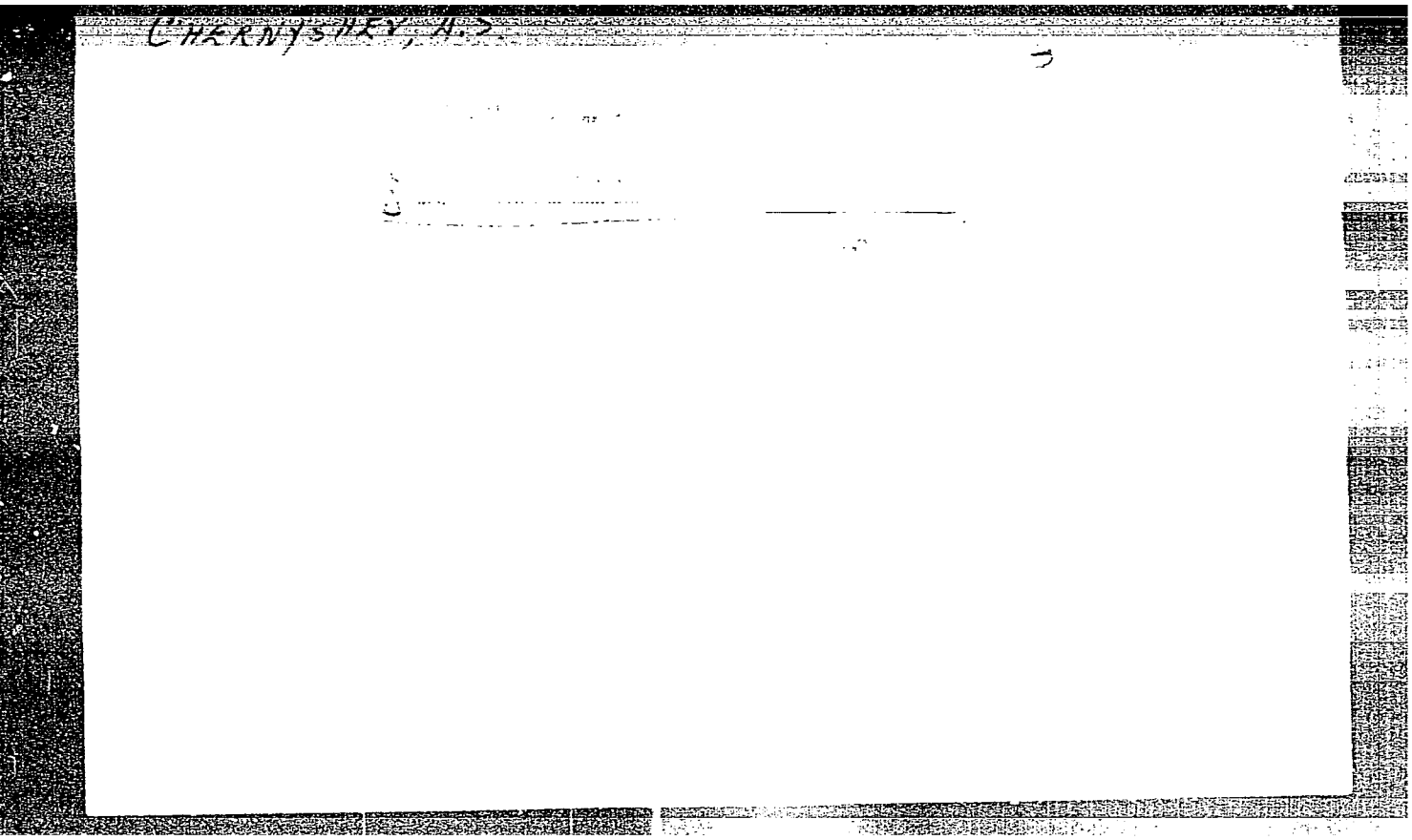
Chernyshev, A. S.

3 Analysis of aqueous solutions containing hypochlorites, chlorites, and chlorates. A. S. Chernyshev and N. G. Semenova. Nauch.-Issledovat. [illegible] Tekstil.

CA

Organic Chemistry - 10

A note concerning the article by V. N. Ufimtsev on the bisulfite compound of 1,4-naphthoquinone. D. A. Bochvar, A. S. Chernyshev, and M. M. Shemyakin. *J. Gen. Chem. U.S.S.R.* 20, 2195–7(1950)(Engl. translation).—See *C.A.* 45, 5071c. H. L. M.



CHERNYSHEV, A.S.

RUMANIA/Inorganic Chemistry - Complex Compounds. C.

Abs Jour : Ref Zhur - Khimiya, No 9, 1957, 30289

Author : Chernyshev, A.S., Shtutser, V.V., Semenova, N.G.
Inst :
Title : Chlorites, Their Preparation, Uses and Properties.

Orig Pub : Am. Rom.-Sov. Ser. chim., 1956, 10, No 4, 70-80

Abst : A translation. See RZhKhim, 1956, 42906.

Card 1/1

5(1)
AUTHORS: Shtutser, V. V., Chernyshev, A. S., Semenova, N. G.

06223
SOV/64-59-6-15/28

TITLE: Production of Sodium Chlorite by Reducing Chlorine Dioxide With Zinc

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 6, pp 513 - 515 (USSR)

ABSTRACT: The possibility of producing chlorite by means of the action of ClO_2 on granulated zinc has already been pointed out by Bray (Ref 7) and Bigorgne (Ref 8). In the present case the possibility of using zinc dust and cast zinc was investigated. Chlorine dioxide for the experiments with zinc dust was obtained from chlorates and oxalic acid besides sulphuric acid (Ref 10) and solutions of 0.3 - 0.35 mol ClO_2 per 1 l of water were prepared. The ClO_2 concentration was determined iodometrically, chloride traces argentometrically, and the CO_2 content by means of $Ba(NO_3)_2$. Zinc dust was added to the ClO_2 solution, which was filtered after the disappearance of

Card 1/2

the ClO_2 smell; soda lye was then added to the zinc chlorite solution, and the zinc hydroxide was filtered off. By evaporating the solution a product containing 84.8% $NaClO_2$, 7.8% NaCl, and 6.6% $NaClO_3$ was obtained. If ClO_2 solutions are thoroughly mixed with granulated zinc or zinc foil, the results will be analogous to those mentioned above; however, the reaction will be much slower than in the case of zinc dust. A suitable production of chlorite consists in submerging a short-circuited carbon- and zinc electrode into a ClO_2 solution, thus obtaining a galvanic element $Zn|ClO_2/ClO_2|C$. From the resulting zinc chlorite sodium chlorite may be obtained (as mentioned above) by means of soda lye and soda. One of the experiments resulted in a final product of the composition: 86.6% $NaClO_2$, 12.1% NaCl, and 1.0% $NaClO_3$. There are 11 references, 3 of which are Soviet.

L 16187-65 EWG(j)/EWT(m)/EPF(c)/EPR/EWP(j)/T/EWP(t)/EWP(b) Pc-4/Pr-4/Ps-4
IJP(c)/RPL/SSD(a)/BSD/ASD(a)-5/...

ACCESSION NR: AP4044742

AUTHORS: Bogdanov, G.A.; Semenova, N. I.; Cherny'shev, A. S.

TITLE: Catalytic decomposition of hydrogen peroxide in the presence of $NiSO_4$ and Na_3MoO_4

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 7, no. 3, 1964, 406-410

TOPIC TAGS: hydrogen peroxide, catalytic decomposition, reaction kinetics, energy of activation, entropy of activation, equilibrium constant, nickel peroxomolybdate, synthesis, nickel sulfate containing catalyst, sodium molybdate containing catalyst

ABSTRACT: The kinetics were studied of the catalytic decomposition of H_2O_2 in neutral and acid solutions when $NiSO_4$ and Na_3MoO_4 were simultaneously present. The reaction ... first-order ... of temperature (15-55C) or acidity ... solution (energy of activation = 14.4-14.9 kcal/mol, almost independent of acidity, although increased acidity retarded the catalytic process somewhat).

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L 16187-65
ACCESSION NR: AP4044742

Therefore the nature of the intermediate products was the same regardless of temperature and pH. The entropy of activation and the equilibrium constant of the intermediate complex was calculated; the decomposition of the latter was a monomolecular process. If the concentration of the $NiSO_4$ was much greater than that of the Na_2MoO_4 the order of the reaction was higher, approaching second order. The nickel ions can either accelerate (at the start of the reaction) the action of the Na_2MoO_4 or retard [illegible] creased). It was assumed that [illegible] molybdates were formed as intermediate products. For [illegible] the precipitates of $NiMoO_5.nH_2O$ and the unstable $NiMoO_6.nH_2O$, $NiMoO_7.nH_2O$ and $NiMoO_8.nH_2O$ were synthesized. Orig. art. has: 1 figure and 2 tables.

ASSOCIATION: Moskovskiy tekstil'nyy institut, Kafedra obshchey i neorganicheskoy khimii (Moscow Textile Institute, Department of General and Inorganic Chemistry)

SUBMITTED: 02Jul62 ENCL: 00

SUB CODE: IC, GC NR REF SOV: 007 OTHER: 000

Card 2/2

S/0048/64/028/007/1173/1180

ACCESSION NR: AP4042962

AUTHOR: Pyatov, N.I.; Chernyshev, A.S.

TITLE: Three-quasiparticle states in deformed nuclei /Report, 14th Annual Conference on Nuclear Spectroscopy held in Tibilisi 14-21 Feb 1964/

SOURCE: AN SSSR. Izv. Seriya fizicheskaya, v.28, no.7, 1964, 1173-1180

TOPIC TAGS: nuclear spectroscopy, nuclear structure

ABSTRACT: Three-quasiparticle levels of the type (2n,p) and 2p,n) in deformed nuclei are discussed theoretically. The wave functions of S.G.Nilsson (Kgl.danske vid. selskab.Mat.-fys.medd.29,No.16,1955) are employed, as well as much of his notation. Two-body forces are introduced between the quasiparticles, the potential of which is proportional to the delta function of the relative coordinates and represents a mixture of Wigner and Bartlett forces. The multiplet separation is calculated by first order perturbation theory. The angular momentum coupling rules were determined in the large deformation limit by the method previously employed for two-quasiparticle states (N.I.Pyatov, Izv.AN SSSR,Ser.fiz.27,1436,1963). It was found that the most energetic state is that in which the spins of the like nucleons are parallel,

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and that this state is followed by that in which all three spins are parallel. The parameters of the interaction potential were determined from known two-quasiparticle states of the even-mass nuclei Gd^{156}, Ho^{166}, Yb^{172} and W^{182}, and coefficients were calculated and tabulated with which the multiplet separations can be easily calculated for a large number of configurations. Several configurations with multiplet separation of the order of 1 MeV are discussed. It was found that the relative positions of the three lower levels of the quartet depend strongly on the ratio of Bartlett to Wigner force in the interaction. The authors discuss the occurrence of three-quasiparticle states in Lu^{177} and Hf^{177} and the possibility of observing them by means of the β- and γ-transitions in the decay chain $Yb^{177} \rightarrow Lu^{177} \rightarrow Hf^{177} \leftarrow Ta^{177}$, for which a hypothetical decay scheme is presented. This discussion includes an interpretation of the 969 keV isomeric state of Lu^{177} with spin 23/2 (M.Jorgensen, O. B.Nielsen and G.Sidenius, Phys.Lett.1,321,1962) and a $23/2^+$ state of Hf^{177} which, the authors note at the end, has been recently found (L.Kristensen, M.Jorgensen, O. B.Nielsen and G.Sidenius, Phys.Lett.8,57,1964; P.Alexander, F.Boehm and E.Kankeleit, Phys.Rev.133,B284,1964). "In conclusion, the authors express their gratitude to V. G.Solov'yev for his constant interest and assistance in the work, K.Ya.Gromov for valuable discussions, and Om San Kha for performing the numerical computations."
Orig.art.has: 11 formulas, 3 figures and 2 tables.

ACCESSION NR: AP4042962

ASSOCIATION: Laboratoriya teoreticheskoy fiziki Ob"yedinennogo instituta yaderny*kh issledovaniy (Theoretical Physics Laboratory, Joint Institute for Nuclear Research)

SUBMITTED: 21Nov63

ENCL: 00

SUB CODE: NP

NR REF SOV: 003

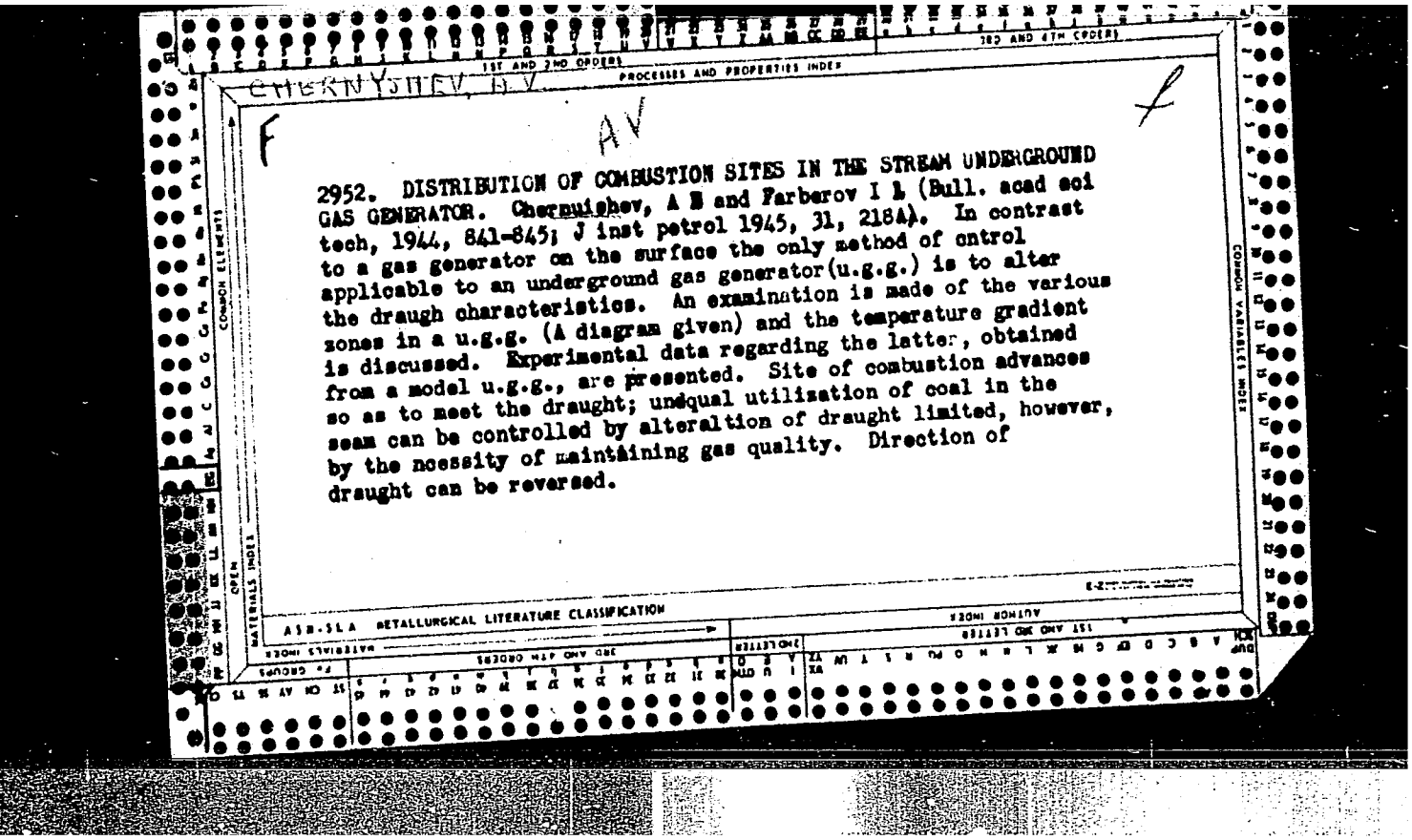
OTHER: 005

3/3

CHERNYSHEV, A.V., inzh.; ZHDED, A.A., inzh.

P.A.Iapshin brigade of communist labor. Shakht. stroi. 6 no.3: 24-25 Mr '62. (MIRA 15:3)

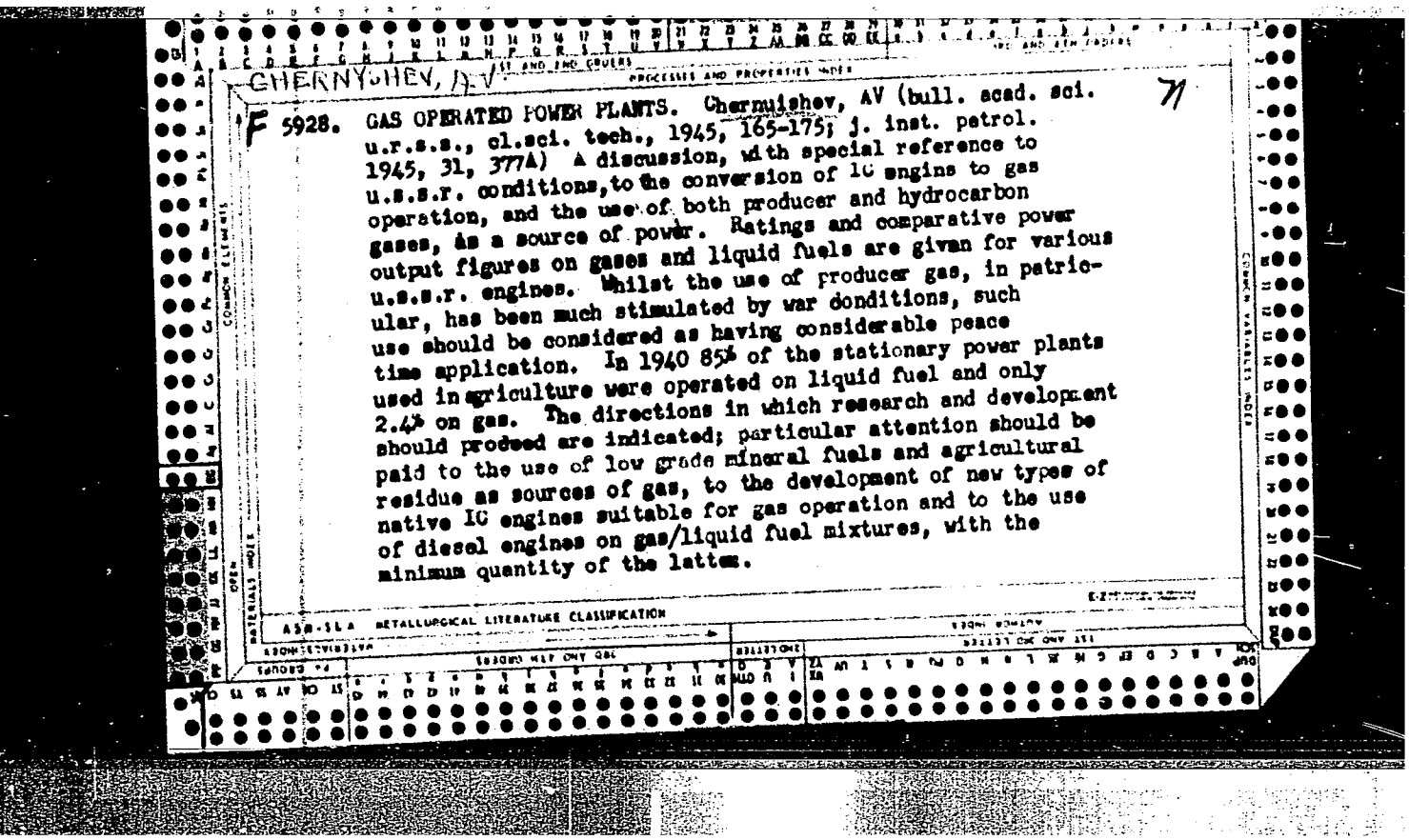
1. Novomoskovskiy Dom inzhenera i tekhnika (for Chernyshev).
2. Shakhta No.66 kombinata Tulaugol' (for Zhded).
(Tula Basin--Coal mines and mining)



CHERNYSHEV, A. V.

F AV f

2952. DISTRIBUTION OF COMBUSTION SITES IN THE STREAM UNDERGROUND GAS GENERATOR. Chernuishev, A B and Farberov I L (Bull. acad sci tech, 1944, 841-845; J inst petrol 1945, 31, 218A). In contrast to a gas generator on the surface the only method of ontrol applicable to an underground gas generator(u.g.g.) is to alter the draugh characteristics. An examination is made of the various zones in a u.g.g. (A diagram given) and the temperature gradient is discussed. Experimental data regarding the latter, obtained from a model u.g.g., are presented. Site of combustion advances so as to meet the draught; unequal utilisation of coal in the seam can be controlled by alteraltion of draught limited, however, by the nocessity of maintaining gas quality. Direction of draught can be reversed.



CHERNYSHEV, A.V.

F 5928. GAS OPERATED POWER PLANTS. Chernyshev, AV (bull. acad. sci. u.r.s.s., cl.sci. tech., 1945, 165-175; j. inst. petrol. 1945, 31, 377A) A discussion, with special reference to u.s.s.r. conditions, to the conversion of IC engins to gas operation, and the use of both producer and hydrocarbon gases, as a source of power. Ratings and comparative power output figures on gases and liquid fuels are given for various u.s.s.r. engines. Whilst the use of producer gas, in particular, has been much stimulated by war donditions, such use should be considered as having considerable peace time application. In 1940 85% of the stationary power plants used in agriculture were operated on liquid fuel and only 2.4% on gas. The directions in which research and development should proceed are indicated; particular attention should be paid to the use of low grade mineral fuels and agricultural residue as sources of gas, to the development of new types of native IC engines suitable for gas operation and to the use of diesel engines on gas/liquid fuel mixtures, with the minimum quantity of the latter.

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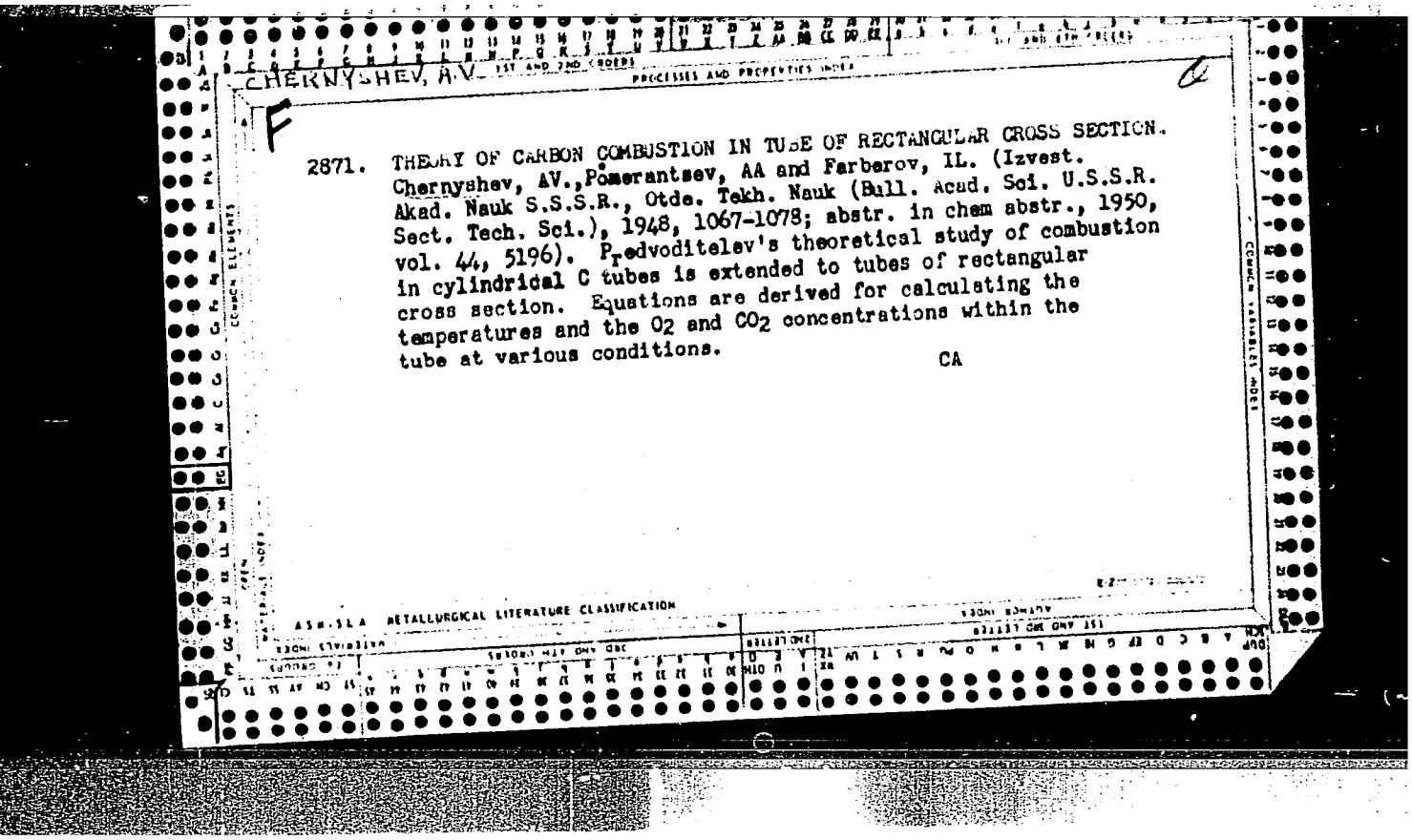

CHERNYSHEV, A.V.

F

2871. THEORY OF CARBON COMBUSTION IN TUBE OF RECTANGULAR CROSS SECTION. Chernyshev, AV., Pomerantsev, AA and Farberov, IL. (Izvest. Akad. Nauk S.S.S.R., Otde. Tekh. Nauk (Bull. Acad. Sci. U.S.S.R. Sect. Tech. Sci.), 1948, 1067-1078; abstr. in chem abstr., 1950, vol. 44, 5196). Predvoditelev's theoretical study of combustion in cylindrical C tubes is extended to tubes of rectangular cross section. Equations are derived for calculating the temperatures and the O_2 and CO_2 concentrations within the tube at various conditions.

CA

CHERNYSHEV, A.V.

Peculiarities of testing a KAM and ET relay for 0.1 - 0.2 ampère. Energetik 3 no.5:16 O '53. (MLRA 6:10)
(Electric relays)

CHERNYSHEV, A.V., master.

Removing armature vibration in a small voltage relay model EN. Rab.energ. 3 no.5:17 My '53. (MLRA 6:5)
(Electric relays)

CHERNYSHEV,A.V., inzhener

Determining the working accuracy of disk and ca rier couplings depending on technological and design factors. [Trudy] MVTU no.30:112-118 Ap-My'55. (MLRA 8:10)
(Couplings) (Calculating machines)

YAKHIN, A.B.; CHERNYSHEV, A.V.

Problems in automatization and precision in the production of machines and instruments. Priborostroenie no.2:27-31 F '56. (MLRA 9:8)

(Automation) (Machine-tool industry) (Insturments)

CHERNYSHEV, A.V.

9(7) PHASE I BOOK EXPLOITATION SOV/1569

Moscow. Vysshaye tekhnicheskoye uchilishche

Tekhnologiya priborostroyeniya; sbornik statey (Instrument-making Technology; Collection of Articles) Moscow, Oborongiz, 1958. 185 p. (Series: Its: /Trudy/ vyp. 90) 3,800 copies printed.

Ed.: A.N. Malov, Candidate of Technical Sciences; Chief Ed.: A.S. Zaymovskaya, Engineer; Ed. of Publishing House: E.A. Shekhtman; Tech. Ed.: N.A. Pukhlikova.

PURPOSE: This collection of articles is intended for workers in scientific and research institutes and instrument manufacturing plants and for teachers and students in vtuzes.

COVERAGE: The book deals with problems of automatic machine tool adjustments. It analyzes errors in setting up cutting tools and reviews basic technological calculations connected with the introduction of programming. Several articles are devoted to the analysis of pressure in machining parts and to the assembly operations in instrument manufacturing. A brief biography of Professor Abram Borisovich Yakhin (1901-1957) precedes the first article. No personalities are mentioned. There are no references.

Card 1/3

AVAILABLE: Library of Congress

JG/sfm
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CHERNYSHEV, A.V., inzh.; SAMCHENKO, V.V., inzh.

Record speed of mining with use of cutter-leaders in the Moscow Basin. Shakht. stroi. no.8:21-23 Ag '58. (MIRA 11:9)
(Moscow Basin--Coal mines and mining) (Coal mining machinery)

CHERNYSHEV, A.V.

Technological calculations connected with the promotion of program control. [Trudy] MVTU no.90:110-152 '58. (MIRA 12:3)
(Machine tools--Numerical control)

PHASE I BOOK EXPLOITATION SOV/5196

Chernyshev, Aleksandr Vasil'yevich, and Abram Borisovich Yakhin (deceased)

Avtomatizatsiya obrabotki na metallorezhushchikh stankakh s primeneniyem programmnogo upravleniya (Application of Program Control in the Automation of Machine-Tool Operations) Moscow, Mashgiz, 1959. 194 p. Errata slip inserted. 8,500 copies printed.

Reviewer: B.V. Grigor'yev, Candidate of Technical Sciences; Ed.: V.A. Andreyev, Candidate of Technical Sciences; Ed. of Publishing House: M.S. Yeliseyev; Tech. Ed.: Z.I. Chernova; Managing Ed. for Literature on Machine Building and Instrument Construction: N.V. Pokrovskiy, Engineer.

PURPOSE: This book is intended for engineers at machine-building plants, and for scientific-research and design personnel engaged in the study of machine-tool program control.

COVERAGE: The author discusses a series of automation systems of mechanical-machining operations which utilize the principle of program control. Concepts concerning storage elements, number language, and the automatic adjustment and

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tuning of machine tools are considered, along with examples of automated processes for the mechanical machining of machine parts (shafts, bushings, shaped parts, etc.) No personalities are mentioned. There are 112 references: 61 Soviet, 50 English, and 1 German.

TABLE OF CONTENTS:

CHERNYSHEV, A.V., inzh.; SAMCHENKO, V.V., inzh.

One thousand six hundred and seventy meters of drift in one month. Shakht.stroi. no.3:25-28 Mr '59. (MIRA 12:4)
(Coal mines and mining)

CHERNYSHEV, A.V.

PHASE I BOOK EXPLOITATION SOV/4397

Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti

Priborostroyeniye i izmeritel'naya tekhnika (Instrument Manufacture and Measurement Technique) Moscow, Mashgiz, 1960. 462 p. Errata slip inserted. 3,000 copies printed.

Ed.: A.N. Gavrilov, Doctor of Technical Sciences, Professor; Tech. Ed.: A. Ya. Tikhanov; Managing Ed. for Literature on Machine and Instrument Construction (Mashgiz): N.V. Pokrovskiy, Engineer.

PURPOSE: This collection of articles is intended for scientific and technical personnel in the instrument industry.

COVERAGE: The 23 articles deal with the present state and the outlook for the development of instrument manufacture and measurement technique. New problems of design, construction, and manufacture of instruments are discussed in the first two sections. Emphasis is given to problems of automation and mechanization of production and to the application of new techniques in program control, ultrasonics, and chipless working of metals. The third section deals with new measurement methods involving the use of ultrasonics and radio isotopes. Some theoretical aspects of metrology and measurement technique are also discussed in this section. No personalities are mentioned. References accompany several of the articles.

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(13)

CHERNYSHEV, A.V., inzh.

Economical use of scarce non ferrous metals. Zhel.dor.transp. 42 no.2:77 F '60. (MIRA 13:5)

1. Nachal'nik depo Sortavala Oktyabr'skoy dorogi, g.Sortavala.
(Railroads--Repair shops--Equipment and supplies)

17000

27368
S/194/61/000/003/032/046
D201/D306

AUTHOR: Chernyshev, A.V.

TITLE: Application of programmed control in instrument production

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 3, 1961, 51, abstract 3 V434 (V sb. Priborostr. izmerit. tekhnika, M., Mashgiz, 1960, 139-161)

TEXT: The main tendencies are considered of the possible use of various systems (C (S)) of programmed control (ПУ (PU)) for automation (A) of all stages of instrument making. Special notice is taken of problems of automation in small batch production of instruments. A description is given of a system of programmed control in producing cams, in which the program of the bench operation is presented in the form of numbers which correspond to the fulcrums of the cutter trajectory center. The bloc diagram is discussed of the follow up system of a bench with the information recorded on a

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Application of programmed control...

magnetic tape by phase modulated signals. A detailed description is given of automatic processing of body details on a coordinate boring machine with digital programmed control, with the information taken from a perforated card. For producing shafts and bearings, systems are suggested, in which the program is fed by means of switches and rotating discs and for small batches of parts - a system with the program stored on a magnetic tape and worked by a specialized worker when processing the first of the lot. A short description of automatic assembly routes is given. In winding function generating potentiometers, the potentiometric, cam-operated and numerical systems are used for determining the winding pitch and constant tension of the windings. A machine is used for assembly operations. The machine connects the conductors to a modular construction panel; a pneumatic head is used to position the connectors between the contacts. The program is registered on a perforated tape. The efficiency of the programmed control is noted as applied for locating vertically mounted components in printed boards and for assembly of printed boards themselves. The examples

27368

Application of programmed control... S/194/61/000/003/032/046
D201/D306

are shortly considered of using programmed control for automatic control operations and for determining the programming for technological processes. 13 figures. [Abstracter's note: Complete translation]

X

Card 3/3

TORNUYEV, V.A.; CHERNYSHEV, A.V.

For high labor productivity in the operation of the OMKY complex in the mines of Tula Economic Council. Ugol' 37 no.11:4-8 N '62. (MIRA 15:10)

1. Glavnyy inzh. zhakhty No.2 "Zubovskaya" Tul'skogo soveta narodonogo khozyaystva (for Tornuyev). 2. Starshiy inzhener Podmoskovnogo nauchno-issledovatel'skogo i proyektno-konstruktorskogo ugol'nogo instituta (for Chernyshev).

(Tula Basin--Coal mines and ining--Labor productivity)
(Coal mining machinery)

CHELNOKOV, N.I.; KRAVTSOV, I.Ye.; GOL'DEN, D.V.; CHERNYSHEV, A.V.

Solution of some problems using electromechanical differential analyzers. Trudy MEI no.41:187-200 '62. (MIRA 16:7)

(Electronic differential analyzers)
(Counting devices) (Automatic control)

ACC NR: AR6035070 SOURCE CODE: UR/0282/66/000/008/0052/0053

AUTHOR: Yepifanova, V. I.; Gorokhov, V. S.; Chernyshev, B. A.; Narinskiy, G. B.

TITLE: VNIIKIMASH BR-6 nitrogen and oxygen plant

SOURCE: Ref. zh. Khimicheskoye i kholodil'noye mashinostroyeniye, Abs. 8.47.369

REF SOURCE: Tr. Vses. n.-i. in-ta kriogen., kislorodn. i kompressorn. mashinostr., vyp. 10, 1965, 3-46

TOPIC TAGS: nitrogen, oxygen, ammonia

ABSTRACT: The All-Union Scientific-Research Institute for Oxygen Equipment developed a VNIIKIMASH type BR-6 machine designed to produce 15,000 m^3 per hour of nitrogen with a 0.002% content of O_2; 7840 m^3 per hour of low-purity oxygen with 95% O_2; and 160 m^3 per hour of high-purity oxygen with a 99.5% concentration of O_2. As a basis for the development of the new equipment, the designers used the G-6800 air-fractioning unit with production capacity of 5400 m^3/hr of nitrogen with 0.02—0.05% O_2, and 1400 m^3/hr of oxygen with a

Card 1/2 UDC: 621.59

ACC NR: AR6035070

90—92% concentration of O_2. The latter did satisfy the industrial demands for ammonia with respect to both quality and quantity as well, or with regard to the flow chart and equipment. The new BR-6 plants have been providing adequate supplies of pure nitrogen and technical oxygen to synthetic ammonium other chemical plants. The BR-6 plant consists of several air turbocompressors an air-fractioning unit, turboexpanders, a controlling and measuring instrument panel, switching mechanism, preheaters, and other equipment. Unlike the G-6800 machine operating at two pressure levels, the BR-6 nitrogen-oxygen plant is designed for a low pressure level, a system used earlier only in technical oxygen plants. The low-pressure system makes it possible to eliminate reciprocating engines, chemical air purifiers for removing carbon dioxide from the air, an ammonium refrigeration unit, and reversible heat exchangers for freezing out the moisture thus resulting in a highly efficient unit, simple in construction and dependable and convenient in operating. The principal considerations in designing the BR-6 plant were (on comparison basis) a flow chart with an improved organization of heat exchange, removal of air impurities, rectification, and refrigeration cycle. Orig. art. has: 7 bibliographic titles, and 16 diagrams. [KP]

SUB CODE: 07/

Card 2/2

CHERNYSHEV, B.A., inzh.

Line manufacture of screens. Mekh.i avtom.proizv. 16 no.12: 23 D '62. (MIRA 16:1)

(Radio--Equipment and supplies)

CHERNYSHEV, B. A.

"A New Method of Preparing the Tool for Planting Rivets in an Automatic Riveter," Stanki i Instrument, No. 9, 1948.

CHERNYSHEV, B.A.

CHERNYSHEV, Boris Andreyevich; KLEYMENOVA, K.F., redaktor; POLOSINA, A.S., tekhnicheskiy redaktor.

[Physics and chemistry in oil refining] Fizika i khimiia v pererabotke nefti. Moskva, Gos.nauchno-tekhn.izd-vo neftianoi i gorna-toplivnoi lit-ry, 1955. 256 (MLRA 8:12)
(Petroleum--Refining)

L 36287-66

ACC NR: AT6016840

the basic features of the apparatus and the selection and development of the technological design of the unit and technological diagrams. The following main components are treated in detail: regenerators, carbon dioxide freezing traps, fractionating columns, condensers-evaporators, supercoolers, N and O reheaters, technical oxygen column, block housing, armature, compressed-gas motor, and the remote and automatic control system. The results of a test run of the apparatus are presented. The article concludes with a brief comparison of the apparatus with the characteristics of the "Linde" (West Germany) and "Kobe-Steel" (Japan) devices. The BR-6 is already in use in chemical enterprises of the Soviet Union, Rumania, Hungary, and Bulgaria. Orig. art. has: 16 figures and 5 tables.

SUB CODE: 07/ SUBM DATE: 00/ ORIG REF: 007

Card 2/2 ΔS

ACC NR: AR6032311 SOURCE CODE: UR/0081/66/000/010/L007/L007

AUTHOR: Yepifanova, V. I.; Gorokhov, V. S.; Chernyshev, B. A.; Narinskiy, G. B.

TITLE: Nitrogen-oxygen plant VNIIKIMASH BR-6

SOURCE: Ref. zh. Khimiya, Part II, Abs. 10L55

REF SOURCE: Tr. Vses. n.-i in-ta kriogen., kislorodn. i kompressorn. mashinostr., vyp. 10, 1965, 3-46

TOPIC TAGS: nitrogen, oxygen, oxygen plant, nitrogen plant

ABSTRACT: The technical characteristics of the equipment are given and its basic features are pointed out. The flow chart is presented and the basic equipment is analyzed. A comparison is made of the VNIIKIMASH BR-6 plant with those manufactured by foreign firms. Orig. art. has: 7 reference items. M. Gusev. [Translation of abstract]

SUB CODE: 07/

Card 1/1

CHERNYSHEV, B.

Training students for practical work in shcools of the taiga region. Politekh.obuch. no.11:94 N '58. (MIRA 11:12)

1. Zaveduyushchiy Alygdzherskoy sredney shkoloy, Tofalariya, Sibir'.

(Tofalariya--Activity programs in education)

CHERNYSHEV, B., inzh.; SHALATOV, A., inzh.

Preventing the dazzling of drivers. Avt. transp. 37 no.7:45-47 Jl '59. (MIRA 12:10)
(Automobiles--Lighting)

CHERNYSHEV, B.; RUDAK, Ye.; KRUSHENOK, D.

A copper mine after its system of wages was put in order. Sots. trud no.9:98-106 '58. (MIRA 11:10)

1.Nachal'nik otdela truda i zarabotnoy platy Upravleniya tsvetnoy metallurgii Sverdlovskogo sovnarkhoza (for Chernyshev). 2.Nachal'nik laboratorii organizatsii proizvodstva instituta "Unipromed'" (for Rudak). 3.Nachal'nik otdela truda i zarabotnoy platy Degtyarskogo mednogo rudnika (for Krushenok).
(Degtyarsk--Copper mines and mining)
(Wages and labor productivity)

CHERNYSHEV, B.

Several results of the work under new conditions. Sots. trud 5 no.9: 57-62 S '60. (MIRA 13:10)
(Sverdlovsk Province--Nonferrous metal industries)

CHERNYSHEV B.A.

DYKHNO, N.M., kand.khim.nauk; CHERNYSHEV, B.A., inzh.; SLIN'KO, M.G., kand.khim.nauk.

Removal of argon from oxygen by means of catalytic hydrogenation. Kislorod 10 no.4:14-24 '57. (MIRA 11:2)
(Argon) (Oxygen) (Hydrogenation)

L 16473-65 EWG(j)/EWT(m)/EPF(c)/EPF(n)-2/EPR/EWP(t)/EWP(b) Pr-4/Ps-4/Pu-4
IJP(c)/RPL/Pa-4/[illegible]

ACCESSION NR AM[illegible] BOOK

Yepifanova, V. [illegible]

[illegible]

ences ; Morozov, [illegible] (Cand[illegible]

I. (Engineer)

Purifying air by deep cooling; technology and apparatus, in two volumes. V. 2: Industrial plants, machinery and accessory equipment (Razdeleniye vozdukha metodom glubokogo okhlazhdeniya: tekhnologiya i oborudovaniye. v dvukh tomakh. t. 2: Promy'shlenny'ye ustanovki, mashinnoye i vspomogatel'noye oborudovaniye), Moscow, Izd-vo "Mashinostroyeniye", 1964, 591 p. illus., biblio., index. Errata slip inserted. 3,000 copies printed.

TOPIC TAGS: oxygen generation, argon, crypton, neon, xenon, centrifugal

Card 1/3

L 16473-65
ACCESSION NR AM4049552

compressor, pump, liquid oxygen, liquid nitrogen, air purification

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L 16473-65
ACCESSION NR AM4049552

SUB CODE:GC SUBMITTED: 08Feb64 NR REF SOV: 060

OTHER: 029

Card 3/3

CHERNYSHEV, B.G.

Extrapleural pneumonolysis with cavity suturing. Probl.tub. 36 no.7:108-109 '58. (MIRA 12:8)

1. Iz Kadiyevskogo protivotuberkuleznogo dispansera (Voroshilovgradskaya oblast').
(TUBERCULOSIS) (PLEURA--SURGERY)

CHERNYSHEV, Boris Ivanovich; SEMINA, V.I., red.; PECHERSKAYA, T.I., tekhn. red.

[In the land of reindeer paths]V kraiu olen'ikh trop. Irkutsk, Irkutskoe knizhnoe izd-vo, 1962. 61 p. (MIRA 15:12)
(Karagasses)

ROZHNYATKOVSKIY, A.F., dots., kand. tekhn. nauk; CHERNYSHEV, D.F., starshiy prepodavatel'; KOROLEV, A.M., tekhn. red.

[Technological fundamentals and norms for the design of machine parts; manual] Tekhnologicheskie osnovy i normy proektirovaniia detalei mashin; uchebnoe posobie. Moskva, Mosk. inzhenerno-ekon. in-t im. S.Ordzhonikidze, 1959. 119 p. (MIRA 15:3)
(Machinery—Design)

CHERNYSHEV, D.G., inzh.

Modernization of the MD-1000 extractor. Masl.-zhir.prom. 25 no.11:36-38 '59. (MIRA 13:3)

1. Uryupinskiy maslobekstraktsionnyy zavod.
(Uryupinsk--Extraction apparatus)
(Sunflower seed)

LENIN, V.I., STEKLOV, V., sostavitel', FOTIYEVA, L., sostavitel', CHERNYSHEV, D.I., red.; BORULYA, V.L., red.; VORONIN, K.P., tekhn.red.

[Electrification] Ob elektrifikatsii. [Moskva] Gosenergoizdat, 1958. 382 p. (MIRA 11:9)
(Electrification)