

CHERNYKH, V.M. (Moskva)

Method for staining of sections of burned skin. Arkh. pat. 21
no. 9:73-74 '59. (MINA 14:3)
(SKIN) (STAINS AND STAINING (MICROSCOPY))

ACC NR: AR6036288

SOURCE CODE: UR/0285/66/000/009/0019/0019

AUTHOR: Chernykh, V. N.

TITLE: Use of acoustic vibration energy for the atomization of liquid fuel

SOURCE: Ref. zh. Turbostroyeniye, Abs. 9. 49. 118

REF SOURCE: Sb. tr. Leningr. in-t inzh. zh.-d. transp., vyp. 246, 1966, 85-90

TOPIC TAGS: atomization, liquid fuel, ~~liquid fuel atomization~~, acoustic vibration energy, HF VIBRATION, FUEL ATOMIZER

ABSTRACT: High-quality fuel dispersion can be obtained by means of h-f vibration energy. It is noted that liquid fuel atomizers in which sound energy is generated by aerodynamic converters are both simple and economical. A liquid fuel atomizer in which acoustic energy is generated by means of an "eddy whistle" is described. The results of an experimental investigation of the influence of acoustic vibrations generated by the "eddy whistle" on the degree of atomization dispersion as well as a diagram of the experimental system, are given. Based on these results, it is concluded that acoustic vibrations generated by an "eddy whistle"

Card 1/2

UDC: 66'.069.83:662.6/.8

CHERNYKH, V.P.; ARSHINOV, F.L.

Planning, installation and operation of a pneumatic dust
elimination system in the agglomeration plant of the Southern
~~Ural~~ Nickel Combine. TSvet.met. 28 no.2:16-23 Mr-Ap '55.
(MIRA 10:10)

(Ore dressing) (Pneumatic-tube transportation)
(Dust--Removal)

CHERNYKH, Vladimir Petrovich; NLRIZIVA, E.T., red.

[Effect of specialization upon the level of labor productivity] Vliyanie spetsializatsii na uroven' proizvoditel'nosti truda. Moskva, Ekonomika, 1965. 99 p.
(MIRA 18:9)

CHERNYKH, V.V.

AID P - 5258

Subject : USSR/Engineering

Card 1/1 Pub. 11 - 9/15

Authors : Sterenbogen, Yu. A., V. V. Chernykh, D. P. Antonets,
and A. S. Iskra (Electrowelding Institute im. Paton, ~~RSFSR~~
Nov-Kramatorsk Heavy Machine-Building Plant, Zhdanov
Machine-Building Plant)

Title : Special features of the resistance slag welding of
22K plate steel.

Periodical : Avtom. svar., 4, 96-103, Ap 1956

Abstract : The authors describe some chemical and mechanical
characteristics of the 22K plate steel, the welding of
this steel 200 to 270mm thick, and the tests given the
finished specimens. The SvLOG2 electrode wire and the
FTs-7 flux were used. Five tables, 2 photos and 1 draw-
ing.

Institution : As above

Submitted : No date

CHERNYKH, V.V.

AID P - 5263

Subject : USSR/Engineering

Card 1/1 Pub. 11 - 14/15

Authors : Rosenberg, O. O. (Electrowelding Institute im. Paton) and V. V. Chernykh (Novo-Kramatorsk Heavy Machine-Building Plant im. Stalin).

Title : Resistance slag welding of framework for forging and stamping power presses.

Periodical : Avtom. svar., 4, 124-129, Ap 1956

Abstract : The authors outline the design of the 200-ton framework and the welding of component parts. The framework is made for a 4,000 ton power press. One photo, 4 drawings and 1 table.

Institution : As above

Submitted : No date

ЧЕРНЫХ, В. В.

SUBJECT: USSR/Welding 135-2-5/12

AUTHORS: Guzenko, I.G., Engineer, and Chernykh, V.V., Engineer.

TITLE: Introducing electric slag-welding at the New-Kramatorsk Machine-building plant (Vnedreniye elektroshlakovoy svarki na Novo - Kramatorskom mashinostroitel'nom zavode (gorod Kramatorsk).

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, #2, pp 15-18 (USSR)

ABSTRACT: The plant's experience in slag-welding heavy parts (rolling mill frames of up to 900 x 900 mm in size, hydraulic turbine shafts, etc.). Referred to as completed or as yet in production are items as specified in the following:

A series of die-forging presses of 4,000 tons and 6,300 tons, with frames especially designed for slag-welding on the automatic machine A-372-M, turbine shafts for the Varvarinskaya hydro-electric plant (Varvarinskaya ГЭС); the first turbine shaft for the Kuybyshevskaya hydro-electric plant (Kuybyshevskaya ГЭС); one turbine shaft for the Kamskaya hydro-electric plant; production of welded turbine shafts of the type of the Kuybyshevskaya and the Stalingradskaya hydro-electric plants and still larger shafts being made possible.

Card 1/4

TITLE: Introducing electric slag-welding at the New-Kramatorsk Machine-building plant (Vnedreniye elektroshlakovoy svarki na Novo - Kramatorskom mashinostroitel'nom zavode (gorod Kramatorsk)).

135-2-5/12

The capacity of available equipment is sufficient for welding circular joints on steel 35 up to an outside diameter of 2.5 m and a wall thickness of 400 mm.

Experimental multi-electrode welding machine A-395 has been used for welding the smaller frames composed of castings welded together. A new automatic welder, A-480, has been designed and the welding technology for welding big sections with application of a continuous plate (Abstractor's comment: apparently a sheet, or plate used as melting electrode) has been developed at the Electric Welding Institute im. Paton, and in 1956 this new method has been introduced at the New Kramatorsk plant for production of big rolling mill frames. One example of such work is the 90 tons frame for the Ashinskiy metallurgical plant. This stand consists of four parts, with cross sections up to 750 x 780 mm at the bottom, and 725 x 750 mm at the top.

The "continuous plate" electrodes have been applied in the production of four heavy stands for the Ashinskiy and the Zaporozhskiy metallurgical plants.

Card 2/4

TITLE:

Introducing electric slag-welding at the New Kramatorsk Machine-building plant (Vnedreniye elektroshlakovoy svarki na Novo - Kramatorskom mashinostroitel'nom zavode (gorod Kramatorsk)).

135-2-5/12

Two 77-tons frames of maximum section width of 900 mm - for the Chelyabinskij metallurgical plant - are being built (as the first in this design type) of heavy rolled stock, with a 36 % economy in weight in comparison with the cast design. The parts of this frames are designed for welding on welder A-372, the final assembling after intermediate heat treatment will be done on welder A-480. The material of the rolled elements in this frame is steel 3, of the cast elements - steel 25J. Also mentioned is a press crosshead composed of two steel castings of 30 tons and 7.5 tons in weight respectively which has been joined on the automatic welder A-401 (which is designed for circular welds of large width). The plant has designed and built a special stand(shown in photograph # 3) for welding such welds.

Serious drawbacks of slag-welding process is the liability of the weld metal to develop hot cracks, and the brittle breakdown of the base metal - cast as well as rolled - as the slightest stress concentrations (defects in metal, or notches). The access to some spots in complex workpieces is too difficult

Card 3/4

TITLE: Introducing electric slag-welding at the New Kramatorsk Machine-building plant (Vnedreniye elektroshlakovoy svarki na Novo - Kramatorskom mashinostroitel'nom zavode (gorod Kramatorsk)).

135-2-5/12

for the machine A-372-M, and the welding technology for such welds is yet in development stage. Not satisfactory are also special devices for moving the welding equipment, tilting the workpiece for assembling the components. Not yet solved is the problem of closing the weld in welding circular seams on very heavy sections.

Two new slag-welding methods - with a fusing holder tip, and with a "continuous plate" - are yet to be assimilated in the plant.

The article contains 5 photographs and 2 drawings.

INSTITUTION: New Kramatorsk machinebuilding plant (Novo-Kramatorskiy mashinostroitel'nyi zavod).

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress

Card 4/4

CHERNYKH, VV.

SOV/122-58-7-27/31

AUTHORS: Byalkovskaya, V.S., Candidate of Economic Sciences and
Chernykh, V.V., Engineer

TITLE: The Economic Effectiveness of the Manufacture of Large
Welded Components (Ekonomicheskaya effektivnost'
proizvodstva krupnykh svarnykh izdelyi)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 7, pp 79 - 83 (USSR)

ABSTRACT: Electric slag welding has removed many limitations which existed in fabricating by welding of large machine components. In a study carried out by the chair for the organisation of mechanical enterprises within the Moskovskiy inzhenerno-ekonomicheskiy institut (Moscow Engineering and Economic Institute) imeni Ordzhonikidze in co-operation with the Zavod tyazhelogo mashinostroyeniya (Heavy Engineering Works) of Kramatorsk, the economic effectiveness of making large welded components has been examined. Basic components were chosen in three groups, namely, welded from forgings, welded from castings and welded with rolled steel. The comparison covered metal utilisation, labour cost, duration of manufacturing cycle and production cost. In the absence of prices for unique facilities, their utilisation was not examined.

Card1/2 Tables 1, 2 and 3 reproduce summaries of the analysis for

Stapled card
being rerun.

ACC NR: AR6036288

SOURCE CODE: UR/0285/66/000/009/0019/0019

AUTHOR: Chernykh, V. N.

TITLE: Use of acoustic vibration energy for the atomization of liquid fuel

SOURCE: Ref. zh. Turbostroyeniye, Abs. 9. 49. 118

REF SOURCE: Sb. tr. Leningr. in-t inzh. zh.-d. transp., vyp. 246, 1966, 85-90

TOPIC TAGS: atomization, liquid fuel, ~~liquid fuel atomization~~, acoustic vibration energy, HF VIBRATION, FUEL ATOMIZER

ABSTRACT: High-quality fuel dispersion can be obtained by means of h-f vibration energy. It is noted that liquid fuel atomizers in which sound energy is generated by aerodynamic converters are both simple and economical. A liquid fuel atomizer in which acoustic energy is generated by means of an "eddy whistle" is described. The results of an experimental investigation of the influence of acoustic vibrations generated by the "eddy whistle" on the degree of atomization dispersion as well as a diagram of the experimental system, are given. Based on these results, it is concluded that acoustic vibrations generated by an "eddy whistle"

Card 1/2

UDC: 66'. 069. 83:662. 6/. 8

ACC NR: AR6036288

improve atomization. The quality of dispersion improves with an increase in the frequency of sound vibrations. The optimal vibration frequency insuring the required fineness of atomization can be experimentally determined in each case.
[DW]
[Translation of abstract]

SUB CODE: 20 /

Card 2/2

SOV/122-58-7-27/31

The Economic Effectiveness of the Manufacture of Large Welded Components

the three listed groups. Comparing forged components and those welded from forgings, an economy of metal is invariably achieved. The labour cost varies even in similar components but is mostly greater in the welded design. Differences in the length of the production cycle are mostly marginal and so are differences in total cost. However, increased production can be achieved with existing facilities which yields large savings. A similar picture is apparent in comparing integrally cast components with those welded from castings. The differences in total cost are even smaller and in two of the six instances are in favour of integral casting. In one of these two cases, the balance has been reversed by re-design of the welded version. Comparing integrally cast components with those welded from rolled metal, the welded component is more expensive in two out of four cases. In all instances, increased production without new facilities yields substantial savings. There are 3 tables.

Card 2/2

CHERNYKH, V.V.

898 / 34

111

Akademija nauk URSR, Kiev, Institut elektrosvarki iemel' siedenska Ya.O. Petosa
Vsesoyuznyj nauchno-tekhnicheskij spetsial'nyj predvoblyedenijskij, 2 (Introduction of
New Welding Methods in Industry) Collection of articles, No. 2 Kiev, Gos.
Lesnoj tsentr. Lit-77 Otsentralnyj SSSR, 1959. 194 p. Karta slajp inserir.
5000 kompleksov izritirani.

W. V. Gutschmidt: Ztsch. f. S. Geschichte.

काला विद्युत की विकास से जुड़ी विषयों पर विवेचन।

PURPOSE: This book is intended to introduce a discussion of welding techniques and problems by coverage: The book contains a discussion of welding techniques and problems in the field of metal fabrication. Much attention is given to problems in the

Academy of the Ukrainian Academy of Sciences
There are no references.
LITERATURE CITED
1. A. S. [Engincer], Ph. A. [Strelcinskii]. Candidate of Technical Sciences, Institute of Electrotechnical Engineering.

117
[Conduits of Technical Sciences],
Kingsbridge Electro-steel Works of Great-plate
Plants].—Electro-steel Works of Great-plate
Plants] (General Boiler Plant), and v. Chisholm (Lagging) 117
lized in New York, Boston, Philadelphia, and v. Chisholm (Lagging) 117
New York, Newark, Newark, New Jersey, Boston, Worcester, Massachusetts, New
England, and v. Chisholm (Lagging) 117

Department of Engineering, [Graduate of Technical Sciences], A. E. Seifertová
[Engineer], Institute of Mathematics, Faculty of Mathematics and Physics, Charles University, Prague, Czech Republic.

Institute: Israel Te. O. Petach-Tikva, 1915; Tel Aviv, 1925; Rehovot, 1937; Herzliya, 1947; Ramat-Gan, 1952. S. O. Ordnance Department: Podolsk Military Machine Plant (Podolsk, S. O. Ordnance Department). Electro-Optics Division (Podolsk Machine Plant, S. O. Ordnance Department). Institute of Large Flanges of Izhora, S. O. Ordnance Department.

*University of S. M. [Candidate of Technical Sciences], V. P. Makarovskiy
University of S. P. Korolev [Candidate of Technical Sciences], Institute of Electrovacuum Electronics
[Candidate of Technical Sciences], I. G. Petrenko, I. S. Strelas*

68
K. O. Petson [Electric Welding Institute], and T. P. Sherry [Thermologist or a
polishing]. Board of Medicine Office, and T. P. Sherry [Thermologist or a
polishing]. Electric-Steel Automobile Arc Welding of Medium and Large
Weldings [abstr.]. Electr. Engg.

—
Institute of Technical Sciences, V. P. Subbotin
Polytechnic Institute of Tashkent, Institute
[Senior Engineer], I. G. Privalov [Electric Welding Institute] metal-
electroarc welding, I. G. Petrun [Electric Welding Institute] electron-beam welding.

Y. O. Petrow], in A. Volken, *Shop Processes*; *Shop processes as applied to metallurgical plants* mainly served I. N. G. Z. Kravtsov [the project director] for all metallurgical plants in G. I. Petrovskoye [V. P. Gor'kov (shop supervisor); V. V. Kostylev (shop supervisor); V. V. Vorob'ev (Alchevsk plant)].

Leibnitz, R.-L. [Candidate of Technical Sciences], S. I. Mandel'shtam, Ph.D. [Technical Sciences; Institute of Electrotechnical Research, The Technological Institute]

Corporation. G. E. (President); W. C. McRae, (Vice-President); W. C. McRae, (Secretary); W. C. McRae, (Treasurer); G. P. Davis, (Chief Engineer); G. P. Davis, (Chief of Research and Development Work); and F. A. Zabelo, (Chief Engineer).
Electric Welding Institute. Located at 1000 University Street, Seattle, Washington.
Engineers' Surveyor's Society. The Society is composed of surveyors engaged in the surveying of land, water, and air space, and in the preparation of maps, plans, and charts, and in the preparation of reports and memoranda relating thereto.
Engineering Department of the California Pipe Line Corporation. Located at 1111 Market Street, San Francisco, California.
Mechanics' Institute. Located at 1000 University Street, Seattle, Washington.

— 108 —
Gleaves, Dicks (Main Administration of the Gas Industry of Canada) —
Glavco — Methods of Welding in Pipeline Construction —

Reverente, Juanito O. *reduced* to M. C. Patosa (Electric Holding
Price); Instituto elektrobras will be M. C. Patosa (Electric Holding
Institute) until Yo. O. Patosa, M. C. *Administrator for Petroleum Marketing*];
Urquiza, Federico, (Urquiza), M. C. *Administrator for Petroleum Marketing*
and Yo. F. Martínez (Head of Construction and Assembly Administration
and Procurement [reduced] to M. C. Martínez, M. C. *Ministry of Coa-*

No. TOJ-Treat 7, Ministerio de Hacienda (Circular Circular 71). Introduction of the Method for Seditance in the Petroleum Industry.

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5"

25(5)

SOV/125-59-3-1/13

AUTHOR: Voloshkevich, G.Z., Dudko, D.A., Chernykh, V.V., and Yeregin, L.P.

TITLE: New Method for Electro-Welding with Covered Electrode by Melting Work Pieces (Novyy sposob elektroshlakovoy svarki plavyashchimsya mundshtukom)

PERIODICAL: Avtomaticheskaya svarka, 1959, Vol 12, Nr 3, pp 3-7 (USSR)

ABSTRACT: By this new method it is possible to weld intricate profiles of practically any thickness. It is characterized by thin pieces of tubing (Fig. 1a), conducting the leads for the supply of electricity, which are welded to melting work pieces (Fig. 1a) of steel Ms-1. Insulation between the two pieces to be welded is provided by glass in prismatic shape. (Fig. 1 and 4). When the welding process is in progress, this gives rise to a pool of slag and a pool of metal (Fig. 1,5 and 6). Fig. 2,3 and 5 give instances of parts of a water turbine to be welded. Fig. 4 shows the welding of a difficult defect.

Card 1/2 The manufacture of a large ram (Fig. 6 and 7) by this

SOV/125-59-3-1/13

New Method for Electro-Welding with Covered Electrode by Melting Work Pieces

welding process is mentioned as a particular feat. With a dimension of 3120 x 2020 mm of the surfaces to be joined by welding, the process was finished within 14 hours by using 12 melted work pieces. There are 5 diagrams and 2 photographs.

ASSOCIATION: Ordena trudovogo krasnogo znameni institut elektrosvarki im. Ye. O. Patona AN USSR. (Order of the Red Banner of Labor Institute for Electro-Welding *imeni Ye. O. Paton*, AS UkrSSR) Novo-kramatorskiy mashinostroitel'nyy zavod (Novo-Kramatorskiy Factory for Machine Construction)

SUBMITTED: January 17, 1959

Card 2/2

TSINKALOV, A.M.; CHERNYKH, V.V.

Welded and forged parts for high-duty forging and pressing equipment. Sbor. Novo-Kram. mashinostroi. zav. no.3:104-111 '59. (MIRA 17:1)

CHERNYKH, V. V.

PLATE I BOOK EXPLOITATION SOV/5078

Akademicheskaya Nauka UkrSSR, Kiev. Institut elektrosvarkivaniya
 Vyd. 3. (Introduction of New Welding Methods in Industry),
 Collection of Articles. v. 3) Kiev, Gos. Izd.-vo tekhn. lit-ry
 UkrSSR, 1960. 207 p., 5,000 copies printed.
 Sponsoring Agency: Ordona Trudovogo Krasnogo Znameni Institut
 Elektrosvarki imeni akademika Ye. O. Patona Akademii nauk
 Ukrainskoy SSR.

Ed.: M. Pisarenko; Tech. Ed.: S. Matusevich.

PURPOSE: This collection of articles is intended for personnel in
 the welding industry.

COVERAGE: The articles deal with the combined experiences of the
 Institut elektrosvarki imeni Ye. O. Patona (Electric Welding
 Institute imeni Ye. O. Paton) and several industrial enterprises
 in solving scientific and engineering problems in welding
 technology. Problems in the application of new methods of
 channelled welding and electroslag welding in industry are discussed.
 This is the third collection of articles published under the same
 title. The Foreword was written by B. Ye. Paton, Academician of
 the Academy of Sciences Ukrainian SSR and Lenin prize winner.
 There are no references.

TABLE OF CONTENTS

Ishra, A. S. [Engineer], Yu. A. Sternenbogen [Candidate of Technical Sciences], L. M. Khrundtschev [Engineer, Electric Welding Institute imeni Ye. O. Paton], D. P. Antonov [Engineer, Zhdanovskiy zavod imeni N. I. Usova (Zhdanov Plant imeni N. I. Usova)], V. I. Rabinovich [Engineer, Barnaulskiy metal'nyy zavod (Barnaul Steel Plant)], and V. G. Chistyakov [Engineer, Novokuznetsk Machine Plant]. Electroslag Welding of Steel-Plate Structures	17
Ishra, A. S. [Engineer], A. M. Makarev [Candidate of Technical Sciences], and I. V. Novikov [Senior Engineer, Electric Welding Institute imeni Ye. O. Paton]. Electroslag Welding of Structures for Chemical Equipment Made from Medium-Alloy Steel Forged Sections	32
Kedrov, A. I. [Candidate of Technical Sciences], A. M. Kuznetsov [Engineer, Electric Welding Institute imeni Ye. O. Paton], and I. M. Gezelski [Senior Engineer, Electric Welding Institute imeni Ye. O. Paton]. Electroslag Welding of Structures for Chemical Equipment Made from Medium-Alloy Steel Forged Sections	32
Gurevich, S. M. [Candidate of Technical Sciences], V. P. Saronnikov [Engineer, Electric Welding Institute imeni Ye. O. Paton], and I. M. Gezelski [Senior Engineer, Electric Welding Institute imeni Ye. O. Paton]. Electroslag Welding of Large Planges Made of 1Kh18N9Ti (titanium Steel)	51
Sorokin, G. Z. [Engineer, Electric Welding Institute imeni Ye. O. Paton], P. A. Zanko [Head of Welding Laboratory imeni Ye. O. Paton], and A. N. Turzhitsky [Chief of the Bureau for Gas-line Construction of Glavgas SSSR (Main Administration of Main Gas Pipelines)]. Mechanized Methods of Welding	64

34849

S/135/62/000/003/001/00

A006/A101

18. III

AUTHORS:

Kudryavtsev, I. V., Professor, Doctor of Technical Sciences,
Savvina, N. M., Candidate of Technical Sciences, Chernykh, V. V.
Engineer

TITLE:

The fatigue strength of alloyed steel joints produced by electric
slag welding

PERIODICAL: Svarochnoye proizvodstvo, no. 3, 1962, 1 - 5

TEXT: The authors investigated fatigue strength of joints of 40XH (40KhN),
34XM (34KhM), 15ГН4М (15GN4M), 22K and 20ГСЛ +22K (20GSLe+22K) steels, welded
by the electric slag method and subsequently subjected to heat treatment,
(quench-hardening, tempering, normalizing). Fatigue tests were made with pris-
matic plates (535x75x50 mm), surface-hardened by stamping on a horizontal milling
machine with the aid of an impact device. The mechanical properties of the base
and weld metal were determined and compared to those of carbon and low alloy
steels. The following results were obtained. The fatigue strength of electric
slag welded joints of rolled 22K steel, determined on specimens of 50x75 mm sec-
tion, which had been subjected to heat and mechanical treatment after welding,
is

Card 1/2

X

The fatigue strength of...

S/135/62/000/003/001/009
A006/A101

is only slightly below the fatigue strength of the base metal. The endurance limit of weld joints of 20JSL+22K steel is not below that of 22Kh22N steel joints. The endurance limit of the welds was in all cases close to that of the base metal. The technology of electric slag welding large size forged work pieces of the investigated alloyed high-strength steels was developed and assimilated at the Novokramatorsk Machinebuilding Plant. It assures high strength of the weld joints. Non-observation of the welding conditions entails the appearance of impurities in the weld and considerably reduced fatigue strength of the joint (from 19 to 14.5 kg/mm² for quenched 40KhN steel). There are 6 figures, 4 tables and 7 Soviet bloc references.

ASSOCIATIONS: EsNIIEIMASH (Kudryavtsev, Savrina); Novo-Kramatorskiy mashino-stroitel'nyy zavod (Novo-Kramatorsk Machinebuilding Plant) (Chernykh)

Card 2/2

X

CHERNYKH, V.Ya.

USSR/Photochemistry - Radiation Chemistry. Theory of
Photographic Process.

B-10

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18666 D.

Author : V.Ya. Chernykh.

Inst : Physical-Chemical Scientific Research Institute.

Title : Study of Kinetics of Hydrogen Peroxide Dissociation under
Gamma Radiation.

Orig Pub : Avtoref. diss. kand. khim. n., N.-i. fiz.-khim. in-t, M,
1956.

Abstract : No abstract.

Card 1/1

- 292 -

Chernykh, V. Ya.

20-3-39/59

AUTHORS: Chernykh, V. Ya., Pshezhetskiy, S. Ya.,
Tyurikov, G. S.,

TITLE: Kinetics of the Decomposition of Hydrogen Peroxyde Under the
Action of Gamma Rays (Kinetika razlozheniya perekisi vodoroda
pod deystviem gamma-izlucheniya)

PERIODICAL: Doklady Akad. nauk SSSR, 1957, Vol. 115, Nr 3, pp. 560-563, (USSR)

ABSTRACT: This kind of kinetics in aqueous solutions under the influence of ionizing radiation has been investigated in a number of papers, which, however, show differing results in many respects. This can apparently be traced back to the circumstance, that measurements have been executed at different and narrowly limited concentrations of H₂O₂ and, in general, in diluted solutions. It was interesting to clarify, to what extent actual kinetic laws depend on the range of concentration, in which the measurements have been executed. Of special interest were the kinetics of this reaction in concentrated solutions. The aforementioned kinetics were investigated in the wide range from 2 to 92 Mol H₂O₂. Co⁶⁰ served as a source for γ -radiation with an activity of 80 Curie and a mercury lamp PRK-2 as a source for ultraviolet radiation. The radiation intensity was varied by altering the distance from the radiation source. Kinetic of the reaction, initiated by γ -radiation: Fig 1 shows how the reaction velocity depends on the concentration of H₂O₂. From it can be seen, that this velocity as a function

Card 1/3

20-3-39/59

Kinetics of the Decomposition of Hydrogen Peroxyde Under the Action of Gamma Rays.

of the H_2O_2 concentration passes through a maximum at all temperatures. The velocity is proportional to the root from the radiation intensity at all concentrations (1,78-92,23 Mol). The dependency of the decomposition velocity on the temperature (+50, 30, 10, 1°, -4, -11, -21° and -30°). A linear dependency $lgW(1/T)$ exists in the case of all solutions. At above 10°C this straight line shows a bend. The precipitation of oxygen increases above 10°, if the solution is stirred. In this case the reaction velocity is covered up by diffusion. The production, calculated in relation to the energy absorbed, depends on the tempeerature and on the concentration and characterizes a chain process. Kinetics of thermal reaction: Below 10°C its velocity is small and hardly measurable. Fig 2 shows, that the dependency on the concentration has the same character. The average value of the activation energy amounts to $12,5 \pm 1,5$ Kcal/Mol. Kinetics of decomposition under the influence of ultra-violet radiation: Fig 3 shows the dependency on the concentration. The curve $lgW (1/T)$ has a bend at above 10°C, which can be removed by stirring. The value of the activation energy approximates the value of the reaction under the influence of γ -radiation. Equation of kinetics and the most probable mechanism of the reaction: The latter is independent of the character of initiation. Fig 4 shows,that the equation:

Card 2/3

Kinetics of the Decomposition of Hydrogen Peroxyde Under the Action of 20-3-39/59
Gamma Rays.

$$\frac{d[H_2O_2]}{dt} \sim - K \sqrt{J} \sqrt{[H_2O_2] [H_2O]}$$

can be complied with. There is a satisfactory compliance with the experiment on photo- and thermo- dissoziation in every range of concentration and at all temperatures. It can be maintained, that in a number of cases the equations of the velocity of the radiation dissociation reaction in other papers represent approximations to the actual kinetic law of reaction in various limited ranges of concentration of diluted solutions of H_2O_2 . There are 4 figures and 2 Slavic references.

ASSOCIATION: Physical-Chemical Institute imeni L. Ya. Karpov (Fiziko-khimicheskiy institut im. L. Ya. Karpova)

PRESENTED BY: Academician Kargin, V. A., February 16, 1957

SUBMITTED: February 4, 1957

AVAILABLE: Library of Congress

Card 3/3

CHERNYKH, V. Ya, PSHEZHETSKIY, S. Ya. and TYURIKOV, G. S.

"Kinetics of Decomposition of Hydrogen Peroxide Under the Action of Gamma Radiation" p.83

Trudy Transactions of the First Conference on Radioaction Chemistry, Moscow,
Izd-vo AN SSSR, 1958. 330pp.
Conference -25-30 March 1957, Moscow

KLUSHIN, D. N.; CHERNYKH, V.Ya.

Temperature dependence of the vapor pressure of tin sulfide.
Zhur.neorg.khim. 5 no.7:1409-1412 J1 '60.
(MIRA 13:7)

(Tin sulfide) (Vapor pressure)

L 41063-65 EWT(m)/EWP(b)/EWP(t) IJP(c) JD
ACCESSION NR: AR5005873

S/0081/64/000/023/V138/V138

SOURCE: Ref. zh. Khimiya, Abs. 23V13

AUTHOR: Chernykh, V. Ya.; Talanov, N. D.; Smirnova, I. N.

TITLE: Synthesis of high-purity phosphorus trichloride

CITED SOURCE: Tr. po khimii i khim. tekhnol. Gor'kiy, vyp. 2(8), 1963, 220-224

TOPIC TAGS: phosphorus trichloride, phosphorus purity, chlorine purity

TRANSLATION: A method was developed for preparing high-purity PCl_3 by synthesis from elemental P and Cl_2 with a content of total measurable impurities of $1.2 \times 10^{-4}\%$ and below. A laboratory apparatus was developed which permits the synthesis of PCl_3 and its distillation to be carried out simultaneously. The conditions of high experimental purity. Experiments showed that the principal role in the synthesis of high-purity PCl_3 is played by the quality of the starting products. The use of frequent double distillation of the PCl_3 is ineffective in improving the quality of the preparation. Authors' summary

ENCL: 00

SUB CODE: IC

Card 1/1 CC

L 4091-66 EWT(m)/EWP(t)/EWP(b) LJP(c) JD
ACC NR: AP5026487

SOURCE CODE: UR/0286/65/000/019/0016/0016

INVENTOR: Chernykh, V. Ya.; Talanov, N. D.; Gerasimova, V. D.
ORG: none

TITLE: Preparation of indium phosphide. Class 12, No. 175049 [announced by Scientific Research Institute of Fertilizers, Insecticides, and Fungicides (Nauchno-Issledovatel'skiy institut udobreniy i insektofungitsidov)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 16

TOPIC TAGS: indium phosphide, inorganic synthesis

ABSTRACT: An Author Certificate has been issued for a preparative method for indium phosphide involving the heating of metallic indium with phosphorus trichloride. To increase the yield and improve the purity of the end product, the reaction is conducted at 700—750°C with subsequent cooling of the reaction mixture to room temperature.

[BO]

SUB CODE: IC,GC/ SUBM DATE: 13Jan65/ ORIG REF: 000/ OTH REF: 000/ ATD PRESS: 4128

BVK

Card 1/1

UDC: 546.682

546.181.1.07

CHERNYKH, Ya.

Unnecessary work. Fin. SSSR 23 no.9:76-77 S '62. (MIRA 15:9)

1. Zaveduyushchiy Nizhne-Amurskim rayonnym finansovym otdelom
Khabarovskogo kraya.
(Khabarovsk Territory—Finance)

CHERNYKH, Ye. D.

CHERNYKH, Ye. D.: "An analysis of operation of follower systems under interference conditions". Leningrad, 1955. Min Higher Education USSR Leningrad Electrical Engineering Inst imeni V. I. Ul'yanov (Lenin). (Dissertation for the Degree of Candidate of TECHNICAL Sciences)

SO: Knizhnaya Letopis' No. 51, 10 December 1955

S/146/62/005/005/007/016
D201/D308

AUTHOR: Chernykh, Ye. D.

TITLE: Design of optimal follow-up systems in the presence of stationary random disturbances

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 5, no. 5, 1962, 56-64

TEXT: The author considers a method of designing follow-up systems which are acted upon by two stationary random disturbances. The method is based on determining the optimum transfer function of the open-loop system from the required optimum log magnitude characteristic, the quality and cut-off frequency of which are found from the condition of minimum of the mean square error. The proposed method of synthesis is valid for linear, no matter how complex, follow-up continuous systems and for systems acted upon by signals satisfying the laws of the theory of stationary random processes. Although the above design method is valid for frequencies within the passband of the system only, it produces results accurate enough

Card 1/2

Design of optimal ...

S/146/62/005/005/007/016
D201/D308

in practice, the signals at frequencies outside the passband being attenuated very rapidly. The method is based on an earlier work by the author (Ye. D. Chernykh, Ob odnom metode rascheta sledyashchikh sistem, rabotayushchikh v usloviyah pomekh (A method of design of follow-up systems in the presence of disturbances), Izvestiya Leningradskogo elekrotekhnicheskogo instituta im. V. I. Ul'yanova (Lenina), no. 15, 1960). There are 5 figures.

ASSOCIATION: Ryazanskiy radiotekhnicheskiy institut (Ryazan' Institute of Radio Engineering)

SUBMITTED: December 3, 1961

Card 2/2

POSTOL, G.S.; CHERNYKH, Ye.F.; KRAVTSOVA, K.K.; GLUSHKOVA, V.S.

Dynamics of rheumatic fever incidence in children in Khabarovsk Territory according to hospital data for five years. Vop. okh. mat. i det. 7 no.12:79 D:62. (MIRA 16:7)

1. Iz kliniki detskih bolezney Khabarovskogo meditsinskogo instituta i Khabarovskogo krayevogo otdela zdravookhraneniya.
(CHILDREN--DISEASES) (GYNECOLOGY)

L 45168-65 EWT(1)/EPF(n)-2/EED(b)-3
ACCESSION NR: AP5009549

Pn-4 ICP(c) SN
8/20/65/000/001/0095/0097

AUTHOR: Chernykh, Ye. M. (Voronezh)

21
B

TITLE: Velocity of sound in a reacting gas mixture

SOURCE: Prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 1, 1965, 95-97

TOPIC TAGS: sound speed, gas mixture, reacting mixture, two component mixture, chemical equilibrium, hydrogen dissociation

ABSTRACT: The author solves the one-dimensional problem of propagation of sound in a two-component mixture. An expression for the velocity of sound, under conditions of chemical equilibrium, is derived directly from equations that describe the propagation of small perturbations in a reacting medium. Numerical results obtained for the dissociation of hydrogen agree with those obtained by V. V. Kondratenko in Sov. Phys. 1964, v. 6, 5.

Notes: 1. The adiabatic approximation and thermal conductivity are neglected.

Card 1/2

ACCESSION NR: AP5009549

ASSOCIATION: None

SUBJECT: 251 002

NR REF SCV: 002

ML
Card 2/2

MIZERETSKIY N.; CHERNYKH, Yu.

Investigating the centrifugal method of clarifying of gastric juice. Mias.ind.SSSR 31 no.1:54-56 '60. (MIRA 13:5)

1. Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy promyshlennosti.
(Gastric juice)

"APPROVED FOR RELEASE: 06/12/2000

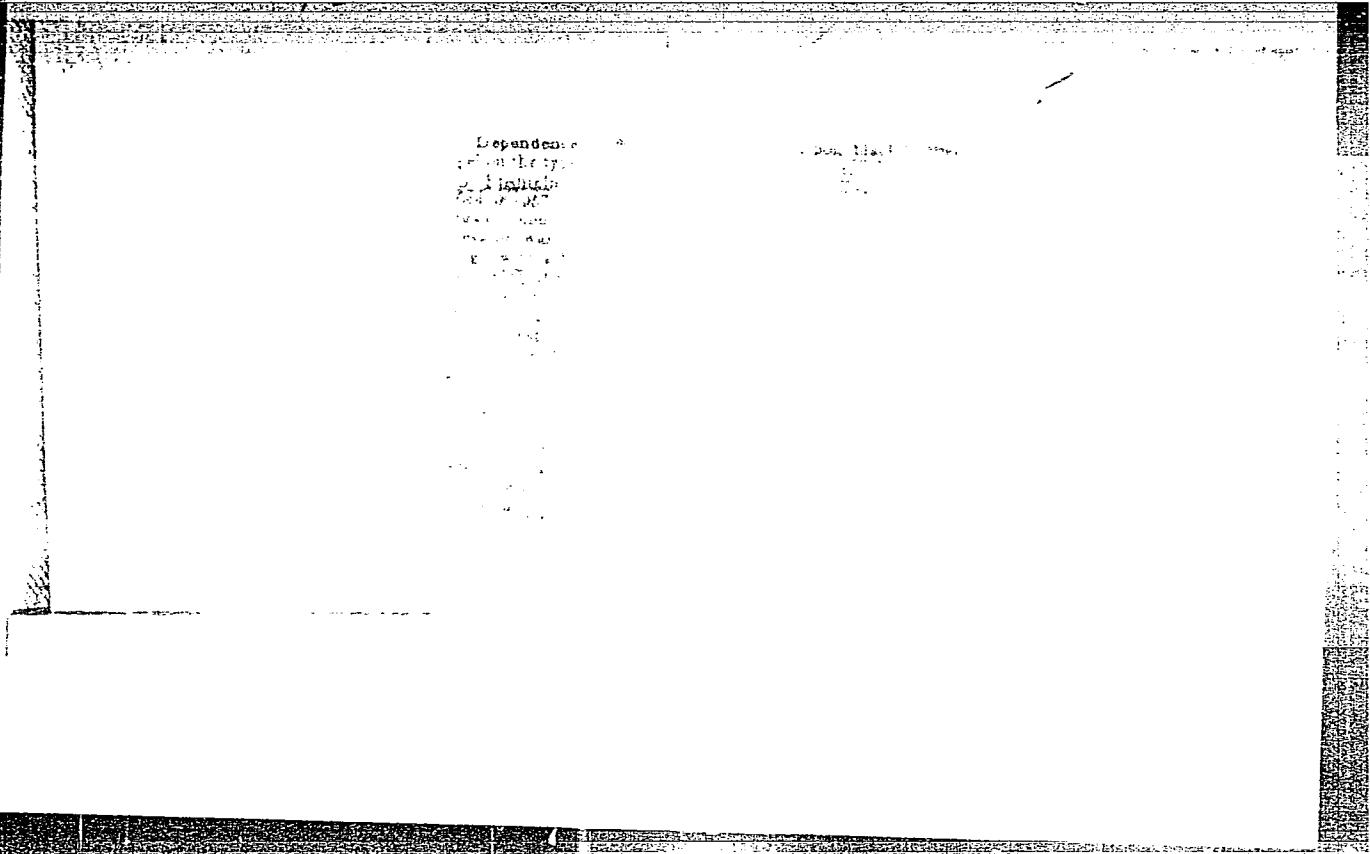
CIA-RDP86-00513R000308620016-5

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5"

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5



APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5"

ACC NR:

AP6037031

SOURCE CODE: UR/0069/66/028/006/0900/0903

AUTHOR: Chernykh, Z. V.; Epshteyn, V. G.; Tikhomirov, B. P.

ORG: Yaroslavl Technological Institute (Yaroslavskiy tekhnologicheskiy institut)

TITLE: Effect of chemical bonds between rubber and the filler on the strengthening of rubber

SOURCE: Kolloidnyy zhurnal, v. 28, no. 6, 1966, 900-903

TOPIC TAGS: chemical bonding, ~~rubber~~ filler, rubber, ~~rubber strengthening~~, carbon black, filler, vulcanization

ABSTRACT: An investigation was made of the reinforcement of rubber having functional groups of methylvinylpyridine and carboxyl rubber by acid channel and basic active furnace carbon black. A noticeable decrease in the diffusion coefficient of radioactive sulfur in rubber and carbon black mixtures takes place by combining the rubber with the basic functional groups and acid carbon black. The formation of ionic type chemical bonds between rubber and carbon black, in the case of combining the carboxyl rubber with basic active furnace carbon black or methyl-

Card 1/2

UDC: 541.18.02:541.64

ACC NR: AP6037031

vinylopyridine rubber with the acid channel black, does not considerably affect the value of the strength of the vulcanized rubbers at normal and increased temperatures. Orig. art. has: 1 figure and 2 tables. [Authors' abstract] [NT]

SUB CODE: 11/SUBM DATE: 02Jun65/ORIG REF: 003/OTH REF: 003/

Card 2/2

SOV/124-58-8-9420

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 8, p 145 (USSR)

AUTHORS: Kusov, A.B., Kuznetsova, Z.P., Chernykh, Z.V.

TITLE: On the Change Produced by Heating in the Modulus of Extensibility of Rubber (Ob izmenenii modulya rastyazheniya reziny pri nagrevanii)

PERIODICAL: Tr. Leningr. tekhnol. in-ta im. Lensoveta, 1957, Nr 42,
pp 55-62

ABSTRACT: In experiments conducted with mixtures based on various types of India rubber the authors confirm that the heating of rubber subjected to stretching causes it initially to decrease in length (i.e., causes its modulus of extensibility to increase), but thereafter to increase in length---often very markedly (its modulus of extensibility then decreasing), until the rubber fails.

From the résumé

Card 1/1

15.9120
15.9300

SOV/69-21-6-17/19

~~56~~
AUTHOR: Epshteyn, V.G. and Chernykh, Z.V.
TITLE: A Study of Bond Properties in the System Rubber-Car-
bon Black ✓
PERIODICAL: Kolloidnyy zhurnal, 1959, Vol 21, Nr 6, pp 754-761
(USSR)
ABSTRACT: This is a study of the change of vulcanisate moduli
caused by repeated heating and elongation of selected
vulcanisate specimens. The investigation was carried
out to determine the characteristics of linkage in
the system rubber-carbon black. For the experiments
the authors selected optimum vulcanisates (temperature
of vulcanization 143°C) of the non-crystallizing rub-
bers SKB⁵ and SKS-30A¹⁴ (thermo-masticated rubber with
plasticity 0.50). The mixtures were prepared according
to standard prescriptions with lamp black, furnace
black and burner black ("kanal'naya-, pechnaya-i for-

Card 1/5

SOV/69-21-6-17/19

A Study of Bond Properties in the System Rubber-Carbon Black

sunochnaya sazha") components added in dosages of 20, 40, 60, 80 and 100 parts by weight to 100 parts by weight of rubber. The investigated specimens had the form of strips 10 mm wide and 2[±]0.1 mm thick. The length of the working section of the specimen was equal to 40 mm and was determined with the distance between the gripping devices of a thermostatic tensile-testing machine of the type TsMG and T (firm "Shopper"). The specimens were stretched at a rate of 100 mm/min up to an elongation of 200%. Subsequent concentration was carried out at the same rate. The deformation cycles were repeated four times. The stress-strain curves were plotted with a self-recording device. The deformation values were calculated with regard to the length of the working section prior to elongation (other deformations were not considered). Modulus change during repeated deformations was determined at 20, 40, 70 and 100°C.

Card 2/5

SOV/69-21-6-17/19

A Study of Bond Properties in the System Rubber-Carbon Black

The effect of repeated deformation on the moduli of the vulcanisates is shown in table 1 and graph 1 and 2a,b. It could be established that the drop of the moduli depends on the type of rubber, the type of carbon black and its dosage. The effect of temperature on the moduli is shown in graph 3 and table 2. A comparative study of the data of graph 1 shows that under the conditions of high temperatures (100°C) repeated deformation calls forth a less pronounced drop of the moduli as compared with deformation carried out at 20°C. The same can be seen from a comparison of table 1 and 3 (Table 3 - change of modulus in dependence on type and content of carbon black at 100°C.) The effect of black carbon content appears as the same at 100 and at 20°C, and the basic drop of the moduli takes place during the first elongation. Rise of temperature, therefore, calls forth a change in the modulus value of carbon black vulcani-

Card 3/5

SOV/69-21-6-17/19

A Study of Bond Properties in the System Rubber-Carbon Black

sates, which depends on the type of rubber as well as on the type and content of carbon black. Change of the moduli in dependence on rise of temperature makes possible to evaluate the interaction between rubber and carbon black. It was further found that modulus drop due to deformation was more pronounced than modulus drop called forth by rise of temperature, a phenomenon which can be explained with a steric hindrance created by the carbon black chains during desorption of rubber molecules while the mixture is heated. The authors also showed the difference in carbon black and crystallite reinforcement, the rubber-black carbon bond showing a greater heat stability (Table 4). In their introductory notes the authors mention the scientist P.P. Kobeko [Ref 2]. There are 4 tables, 2 sets of graphs, 1 graph and 17 references, 12 of which are Soviet and 5 English.

W

Card 4/5

SOV/69-21-6-17/19

A Study of Bond Properties in the System Rubber-Carbon Black

ASSOCIATION: Yaroslavskiy tekhnologicheskiy institut (Yaroslavl',
Technological Institute)

SUBMITTED: June 18, 1958

Card 5/5

✓

ACCESSION NR: AT4029931

8/3087/62/001/000/0183/0188

AUTHOR: Chernykh, Z.V.; Epshteyn, V.G.

TITLE: The effect of vulcanization on the reaction of carbon black with caoutchouc

SOURCE: Yaroslavl'. Tekhnologicheskiy institut. Khimiya i khimicheskaya tekhnologiya, v.1, 1962, 183-188

TOPIC TAGS: vulcanization, carbon black, caoutchouc, polymer, deformation,

ABSTRACT: The authors state that the problem of the effect of the valent bonds between polymer molecules formed during vulcanization on the physical chemical reaction of caoutchouc with carbon black has not been brought to light in literature. The authors evaluated this physical-chemical reaction as to the value of the fall of moduli during repeated deformations or heating; i.e. as to the non-equilibrium portion of the modulus. The results are presented in tables and graphs. It was shown that a fall of moduli of the carbon black vulcanized rubber caused by repeated deformation, as well as by a temperature increase, depends on the degree of vulcanization, increasing with the rise of the latter. The nonequilibrium portion of the deformation rises with the increase of the degree of vulcanization.

Card 1/2

ACCESSION NR: AT4029931

The values of the moduli of repeated stretching, which characterized the number of chemical stable bonds, are nearer to one another at various degrees of vulcanization than the corresponding values of moduli of the first stretch. Orig. art. has: 2 figures and 3 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 29Apr64

ENCL: 00

SUB CODE: CH

NO REF Sov: 009

OTHER: 005

Cont 2/2

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5

CHERNYSH, A.; YANKOVSKIY, L.; KUNTSEVICH, V.; SVETAL'SKIY, B.

Automatic control of motorship engine operations. Rech.
transp., 1963, 22 no.9:27-28 S '63. (MIRA 16:10)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5"

KIR'YANOVA, O.S., kand.tekhn.nauk; CHERNYSH, A.A.; MANYUKOV, G.S.

Organization of the transport of local freight on sections with
lengthened haul distances. Zhel.dor.transp. 44 no.9:77-81 S
'62. (MIRA 15:9)

1. Zamestritel' nachal'nika sluzhby dvizheniya Moskovskoy dorogi
(for Chernysh). 2. Glavnyy inzh. sluzhby dvizheniya Moskovskoy
dorogi (for Manyukov).

(Railroads--Freight) (Railroads--Management)

S/102/61/000/003/003/007
D251/D302

AUTHOR: A.F. Chernysh, (Dnipropetrov'sk)

TITLE: On the problem of cybernetic control of the speed of river craft

PERIODICAL: Avtomatyka, no. 3, 1961, 36 - 44

TEXT: The author proposes a scheme of velocity control which guarantees a maximum rate of transportation with high fuel economy. After referring to the original "permissible regime" of H.Ye. Pavlenko (Ref. 1: Metodika opredeleniya dopuskayemogo rezhima dvizheniya sudov na rekakh i kanalakh, Method of Determining a Permissible Regime of the Motion of Craft on Rivers and Canals Izd-vo AN USSR, 1959), the author states that the first part of his work dealt with elaborating the principles and apparatus requires for such a scheme of control, and the second part with testing the scheme by models and in actual conditions on the river Dnipro. This article describes only the basic problem, its investigation and the first schematic solution of the cybernetic indicators and speed regulators.

Card 1/2

On the problem of cybernetic ...

S/102/61/000/003/003/007
D251/D302

The problem is expressed in the form of equations which give the regulation law, and the conditions on the amplifier, servomotor, synchronic detector and filter. A basic scheme (Fig. 2) is proposed, whose stability will be investigated in a later article. Variations of this scheme with and without trial are considered. A system of regulation by disturbances is also proposed. The author concludes by mentioning the economy in fuel which would follow from the use of such systems of control. There are 5 figures and 10 Soviet-bloc references.

SUBMITTED: December 27, 1960

Card 2/42

CHERNYSH, A.F. [Chernysh, O.F.] (Dnepropetrovsk)

Speed transducers for river vessels. Avtomatyka no.5:49-53 '61.
(Transducers) (Electronics in navigation) (MIRA 14:10)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5

CHERNYSH, A.F. [Chernysh, O.F.] (Dnepropetrovsk)

Converting attachment for depth sounding on river craft. Avtomatyka
no.1:79-84 '62. (MIRA 15:2)
(Electronics in navigation)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5"

CHERNYSH, A.F. [Chernysh, O.F.] (Dnepropetrovsk)

Optimum speed regulator for river craft. Avtomatyka no.2:79-83
'62. (MIRA 15:5)
(Ships—Electronic equipment) (Automatic control)

CHERNYSH, Aleksandr Frolovich; TITOVA, N.M., red. izd-va; RAKHLINA,
N.P., tekhn. red.

[Automatic river navigation systems] Sistemy avtomaticheskogo sudovozhdeniya na rekakh. Kiev, Izd-vo AN Ukr.SSR, 1963. 46 p. (MIRA 16:10)
(Inland navigation) (Automatic control)

KUNTSEVICH, V.M. [Kuntsevych, V.M.]; SVETAL'SKIY B.K. [Svetal's'kyi, B.K.];
MELESHEV, A.M. [Meleshev, A.M.], CHERNYSH, A.F. [Chernysh, O.F.]

Improved controller for optimum speed regulation in river craft.
Avtomatyka 8 no.5:84-89 '63.

(MIRA 17:1)

L 46132-66

ACC NR: AT6025830

(N)

SOURCE CODE: UR/3207/65/000/001/0047/0052

41

871

AUTHOR: Chernysh, A. F.

ORG: Dnepropetrovsk University (Dnepropetrovskiy Universitet)

TITLE: Transient conditions in the marine engineering system comprised of the hull-screw-motor hydromechanical complex and the speed regulator

SOURCE: Gidroaeromehanika (Hydroaemechanics), no. 1, Kharkov, Izd-vo Khar'kovskogo univ., 1965, 47-52

TOPIC TAGS: marine engineering, hydraulics, shipborne automatic control system, ship

ABSTRACT: The author studies transient processes in the system made up of the hull-screw-engine complex and the speed regulator on a ship. Expressions are given for the dynamics and stability conditions of the "hydromechanical complex-automatic speed regulator" system on river vessels with a given type of nonlinearity. Aperiodic and rapidly damping oscillatory processes are considered and the theoretical calculations are verified on the MN-7 analog computer. Analysis of the results shows that it is impossible to vary the parameters of this type of system to give aperiodic processes shorter than 40-42 sec. The theoretical calculations also show that the technical requirements of the given complex system on river vessels may be satisfied for practical purposes by near-aperiodic rapidly damping oscillatory processes. These

Card 1/2

L 46132-66

ACC NR: AT6025830

conditions reduce the duration of transition processes to 15-20 sec. Orig. art. has:
2 figures, 17 formulas.

SUB CODE: /3,09/ SUBM DATE: None/ ORIG REF: 006

Card 2/2

mjs

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5

CHERNYSH, A. M.

"Successes of Tractor Operators of the Alekseyevskiy Shelterbelt Station in Constructing Ponds of Collective Farms," Les. i step., 4, No.7, 1952

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5"

CHERNYSH, A.M.

Red Cross Society of the Kazakh S.S.R. Zdrav.Kazakh. 17
no.10/11:43-49 '57. (MIRA 12:6)

1. Zam.predsedatelya TSentral'nogo komiteta Obshchestva Kras-
nogo Kresta KazSSR.
(KAZAKHSTAN--RED CROSS)

CHERNYSH, A.M.

21(0), 31(4)

PHASE I BOOK EXPLOITATION

SOV/2257

Korotkov, Viktor Ivanovich, and Anatoliy Mefodiievich Chernysh

Korabli budushchego; atomokhody (Ships of the Future; Atomic-powered Vessels)
Moscow, Voyen. Izd-vo M-va obor. SSSR, 1959. 112 p. (Series: Biblio-
techka v pomoshch' ofitseru VMF) No. of copies printed not given.

Ed.: D. D. Kulinich; Tech. Ed.: M. P. Zudina.

PURPOSE: This book is intended for officers of the Soviet Army and Navy and
also for the general reader.

COVERAGE: The book is a popular presentation of the operational principles
of atomic reactors, the basic characteristics of the use of atomic energy
for ship propulsion, and also the future development of ships having atomic
power plants. No personalities are mentioned. There are 11 references:
5 Soviet, and 6 English (1 translated into Russian)

Card 1/3

Ships of the Future; (Cont.)

SOV/2257

TABLE OF CONTENTS:

Introduction	3
Ch. I. Atomic Energy and Atomic Reactors	7
1. Atomic energy - a new source of power for the propulsion of ships	7
2. Nuclear fission chain reaction	12
3. Thermonuclear reaction	14
4. Nuclear reactors	15
Operation of a nuclear reactor	22
Materials used for nuclear reactors	26
Thermonuclear reactors	29
	34
Ch. II. Atomic Power Plants for Ships	34
5. Special features and advantages of the use of atomic power plants in ships	34
6. Special aspects of the design of atomic ships	40
7. Possible layouts of atomic power plants for ships	42
Single-circuit configuration	44
Layout with two circulation loops	47
Layout with a gas-turbine cycles	56

Card 2/3

SOV/2257

Ships of the Future; (Cont.)

Ch. III. Ships Having Atomic Power Plants (Atomic Ships)	66
8. The atomic submarine "Nautilus"	66
9. The atomic submarine "Sea Wolf"	80
10. Surface warships having atomic power plants	86
11. Transport ships having atomic power plants	91
12. The Soviet atomic-powered ice breaker "Lenin"	97
Ch. IV. Prospects for Further Development of Ships with Atomic Power Plants	105
Bibliography	111

AVAILABLE: Library of Congress

Card 3/3

IS 1sb
10-12-5

CHERNYSH, A.P.

Vladimirovka paleolithic station. Biul.Kom.chetv.per. no.17:43-51 '53.
(MLRA 6:11)

(Vladimirovka--Stone Age) (Stone Age--Vladimirovka)

CHERNYSH, A.P.

Paleolithic site Molodova |. Biul. Kom. chetv. per. no.22:118-121
' 58. (MIRA 11:11)
(Molodova--Stone age)

CHERNYSH, A.P.

Upper Paleolithic of the middle Dniester Valley. Trudy Kom.
chetv.per. 15:5-214 '59. (MIRA 13:5)
(Dniester Valley--Stone age)

CHERNYSH, A.P.

Study of the Mousterian site in the middle Dniester, 1956-
1958. Biul. Kom. chetv. per. no.24:111-118 '60.
(MIRA 16:7)

(Dniester Valley--Stone Age)

IVANOVA, I.K.; CHECHYSH, A.P.

Absolute age of the Upper Paleolithic (Solutrean, Gravettian type) of the Dniester Valley according to radiocarbon analysis data. Dokl. AN SSSR 148 no.2:410-413 Ja '63. (MIRA 16:2)

1. Predstavleno akademikom V.N. Sukachevym.
(Dniester Valley—Geology, Stratigraphic)
(Radiocarbon dating)

ALEKSEYEV, V.A.; IVANOVA, I.K.; KOND, N.V.; CHERUVCH, A.P.

New data on the absolute age of the Late Paleolithic
formations of the Molodova V site in the middle Dniester Valley.
Dokl. AN SSSR 156 no. 2:315-317 My '64. (MIRA 17:7)

1. Predstavleno akademikom V.N.Sukachevym.

CHERNYSH, B.Ya.

Isolation of Upper Paleozoic eugeosynclinal sediments in the northwestern part of the Maritime Territory and adjacent regions. Sov.geol. 8 no.10&132-133 .0 '65.

(MIR '65)

1. Yuzhno-Primorskaya ekspeditsiya Primorskogo geologicheskogo upravleniya.

CHERNYSH, E. I. i PARASTAEVA, O.G.

25818

Perepelka yarovoy pshenitsy Dika v ozimuyu. Selektsiya i semenobodstvo. 1949,
No. 8, s. 70-71.

SO: Letopis' No. 34

CHERNYSH, G.I.; NAZAROV, I.S.

Fuel distribution in the mixing chamber of a rocket burner. Izv.
vys. ucheb. zav.; chern. met. 4 no.10:126-132 '61. (MIRA 14:11)

1. Sibirskiy metallurgicheskiy institut.
(Metallurgical furnaces--Combustion) (Gas burners)

CHERNYSH, G.I.

Heat losses with the cooling-system water in jet-type burners.
Izv. vys. ucheb. zav.; chern. met. 6 no.12:195-202 '63.
(MIRA 17:1)

1. Sibirskiy metallurgicheskiy institut.

CHERNYSH, G. I.

Gas formation in jet burner combustion chambers. Izv. vys.
ucheb. zav.; chern.met.7 no. 4:141-145 '64. (MIRA 17:5)

1. Sibirskiy metallurgicheskiy institut.

CHERNYSH, G. I.; STERLIGOV, V. V.; VAYNSHTEYN, I. L.; BAZHENOV, M. M.

Intensifying the rate of open-hearth smelting with the help of
a new fuel burning device. Izv.vys. ucheb. zav.; chern.met.
7 no. 4:146-150 '64. (MIRA 17:5)

1. Sibirskiy metallurgicheskiy institut.

CHERNYSH, G. I.

Possibility of increasing the rate of gas flow to intensify heat transmission in metallurgical furnaces. Izv.vys.ucheb.zav.; chern. met. S no. 86145-150 163. (MIRA 08:8)

1. Sibirokly metallurgicheskiy institut.

3-58-7-5/36

AUTHOR: Chernysh, I.D., Candidate of Historical Sciences

TITLE: Contact with the Life of Collective Farm Becomes More Diversified (Svyaz' s zhizn'yu kolkhoza stanovitsya raznostoronney)

PERIODICAL: Vestnik vysshey shkoly, 1958, Nr 7, pp 21-25 (USSR)

ABSTRACT: The author describes the results of contacts by the scientific staff of the L'vov Agricultural Institute with the kolkhozes of the Busk region. Many scientific workers of the institute participated: the Doctor of Agricultural Sciences I.D. Nichiporuk, Professor I.P. Zapadnyuk, Dotsents G.A. Shuruba, V.S. Starostin, N.P. Levchenko, I.V. Krokhmalyuk, Candidate of Historical Sciences D.F. Kalishenko, G.P. Obushnyy, V.M. Suslikov, Dotsent P.R. Krasitskiy, Corresponding member of the AS of the Ukrainian SSR Professor G.S. Kiyak, and others. In many conferences with the staff of the kolkhozes, estimates of needs in material and advice were made. Many lectures were delivered on various subjects. Some of the kolkhozes, which before the liaison with the Institute were in very bad shape financially and economically, improved greatly.

Card 1/2

3-58-7-5/36

Contact with the Life of Collective Farm Becomes More Diversified

ASSOCIATION: L'vovskiy sel'skokhozyaystvennyy institut (The L'vov Agricultural Institute)

Card 2/2

BACHINSKIY, G.A. [Bachyn's'kiy, H.O.]; CHERNYSH, I.V.
New cave site of fossil vertebrates in the Ukrainian Carpathians.
Dop. AN UkrSSR no. 12-1632-1633 '65. (MRA 19:1)
1. Institut zoologii AN UkrSSR. Submitted November 16, 1964.

CHERNYSH, K.; MAKHOV, G.

Recent developments in the calculation of mineral fertilizers.
Zemledelie 25 no.10:78-81 O '63. (MIRA 16:11)

MARTINKOVICH, F.S., kand.geograf.nauk; SOBOLEV, Ye.Ya., kand.geograf.nauk;
BOL'SHAKOVA, V.P., kand.ekonom.nauk; LAPETA, D.D., kand.ekonom.
nauk; GLADKIY, V.I., kand.geograf.nauk, starshiy prepodavatel';
ANICHENKO, G.V., kand.geograf.nauk; KOTT, G.Z.; TRUBILKO, N.P.,
kand.ekonom.nauk; KOROLENKO, I.K., kand.ekonom.nauk; GUTSEV, Ye.G.,
kand.geograf.nauk; CHERNENKO, V.A.; CHEBNYSH, I.P., Prinimali
uchastiye: KOZLOVA, A.I.; KOVALEVSKIY, P.V.; MAZURENKO, R.V.;
KUVEYSHA, Ye.I.; KRYLOVA, V.S.; SERZHINSKIY, I.I.; KURKINA, Z.A.;
KALECHITS, T.A.; ROMANOVSKIY, N.T., red.; KOSTEVICH, K.R., red.;
TURTSEVICH, L., red.izd-va; SIDERKO, N., tekhn.red.

[Distribution of the industry of White Russia for the processing
of agricultural raw materials] Razmeshchenie promyshlennosti BSSR
po pererabotke sel'skokhoziaistvennogo syr'ia. Minsk, 1959. 193 p.
(MIRA 13:6)

1. Akademiya nauk BSSR, Minsk. Institut ekonomiki. 2. Zaveduyu-
shchiy sektorom razmeshcheniya proizvodstva Instituta ekonomiki
Akademii nauk BSSR (for Martinkevich). 3. Institut narodnogo
khozyaystva im. V.V.Kuybysheva (for Gladkiy).

(White Russia--Industries, Location of)

CHERNYSH, L.P.

Sugar industry of White Russia. Sakh.prom. 33 no.7:13-15
J1 '59. (MIRA 12:11)

1. Institut ekonomiki AN BSSR.
(White Russia--Sugar industry)

CHERNYSH, L.P.

Direct road transportation of sugar beets is most economical.
Sakh.prom. 34 no.11;44-45 N '60. (MIRA 13:11)

1. Institut ekonomiki AN BSSR.
(Sugar beets--Transportation)

CHERNYSH, M.Ye; CHEREK, M.I.; AKIMOV, V.S.; SABADASH, Yu.S.

Setting a combined system for the thermal reforming of straight-run gasoline from lightly cracked tar at the units of thermal cracking. Khim.i tekhn. i masel 6 no.1:6-11 Ja '61.
(MIRA 14:1)

1. Upravleniye Bashneftekhimzavody i Bashkirskiy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti.
(Gasoline) (Cracking process)

Chernysh, N.S.

USSR/Cultivated Plants - Subtropical and Tropical.

M-6

Abs Jour : Ref Zhur - Biol., No 3, 1958, 11060

Author : Chernysh, N.S.

Inst : Tbilisi Scientific Research Hydrometeorological Institute.

Title : A Phenological Calendar of Tea and Citrus Crops.

Orig Pub : Tr. Tbiliessk. n.-i. gidrometeorol. in-ta, 1956, No 1, 78-83.

Abstract : A phenological calendar is given of the fundamental phases of development of tea, lemon, tangerine, and orange in Western Georgia.

Card 1/1

CHERNYSH, N. S.

307/50-53-2-24/25

3(7)

AUTHOR:

Khalnade, G. M.
Scientific Meeting at the Tbilisi Scientific Research Institute
of Hydro meteorology (Muzhavay sessiya v Tbilisskoy nauchno-
issledovatel'skom gidrometeorologicheskoym institutu)

TITLE:

Meteo柔rologiya i hidrologiya, 1959, № 2, pp. 70 - 71 (USSR)

PERIODICALS:

ABSTRACT:
In May 1958 the Tbilisskyy nauchno-issledovatel'skiy gidrometeorologicheskiy institut (Tbilisi Hydro meteorological Institute) held a meeting in which the following representatives participated: Representatives of the Central Forecasting Institute, Tbilisskyy Institut Promtodor (Main Geophysical Observatory), Tbilisskyy gidrometeorologicheskay Observaroriya (Main Geophysical Observatory), and the local administrations of the hydro-meteorological service of the Transcaucasian Republics. On the occasion of the fifth anniversary of the Tbilisi MICH on the 24th of May, G. M. Khalnade held a speech commemorating the event. G. F. Popovyan (TGP) spoke on the character of temperature distribution and circulation of the atmosphere above the Caucasus. K. I. Tepashvili and Ye. A. Kapetashvili spoke on the characteristics of the circulation processes above Transcaucasia. M. A. Zakharchishvili reported on the typification of synoptical processes carried out by him. R. I. Lomidze read two papers on theoretical questions of dynamic meteorology. V. M. Giorgishvili and T. P. Lomidze spoke on the present state of the fight against hail. T. T. Karchilashvili spoke on the great importance of precipitation on East Georgia. L. T. Beritashvili on meteorological variability of the Araks River (Araks River (GCO)) on the territorial variability in the data of precipitation and fog. G. I. Chikadze on the precipitation in Georgia in the course of 24 hours. S. T. Sushishvili on the wind energy reserves of Georgia. Sh. V. Kostava on the radiation and heat balances in the Alpine zone of the Langbegi. Fe. K. Dvali on the radiability of the atmosphere of different natural surfaces. Sh. G. Gavasheli (TGU) of the Gruazinskaya SRR on the ground temperature conditions in Tbilisi. V. Sh. Tsimaya on the method developed by him for forecasting the number of days with ice snow. V. F. Pol-

Card 1/3

lepa on a method for the calculation of the volume of rain water supply in floods. G. P. Parshulava (TGU) of the Arer-haydzhankaya SRR on the use of indices of the atmosphere circulation in hydrological forecasts. The report on the flooding of the Arer-haydzhankaya SRR M. I. Sharikyan represented on the characteristics of the formation of the winter floods on the rivers of Armenia. A. A. Petrosyan (TGUAS of Armenia) pointed to the spring role of the snow cover of the belt between 1800 and 2100 m in the formation of the water supply for spring floods on the rivers of Armenia. T. T. Beritashvili spoke on the method of forecasting the accessibility in the soil before grain cultures. M. P. Golypjan and Sh. I. Tsvartishvili spoke on the period before the opening of irrigation in Transcaucasia. O. M. Landelashvili (GUAS of the Arayatskaya SRR) and L. H. Chernysh spoke on the microclimatic conditions of the Labakinskyy massif in the Arayatskaya SRR. In all, 27 papers were read.

Card 3/1

KANDELAKI, O.M.; ENFIADZHYAN, L.A.; CHERNYSH, N.S.

Microclimatic conditions of the Lambalu massif in the Armenian
S.S.R. Trudy Tbil.NIGMI no.5:200-208 '59. (MIRA 13:6)
(Lambalu region--Microclimatology)

L 08449-67 EWP(e)/EWT(m) WH

ACC NR: AP6030774

(A)

SOURCE CODE: UR/0363/66/002/009/1630/1635

38

P

AUTHOR: Kondrat'yev, Yu. N.; Chernysh, N. V.

ORG: none

TITLE: Chemical inhomogeneity of lithium aluminosilicate glasses

SOURCE: AN SSSR: Izvestiya. Neorganicheskiye materialy, v. 2, no. 9, 1966, 1630-1635

TOPIC TAGS: lithium glass, alumina, glass property

ABSTRACT: In order to determine the dependence of the structure of lithium silicate glasses on the amount of aluminum oxide introduced into their composition, glasses of the two sections $17\text{Li}_2\text{O}\cdot x\text{Al}_2\text{O}_3\cdot(83-x)\text{SiO}_2$ and $x(\text{Li}_2\text{O}\cdot\text{Al}_2\text{O}_3)\cdot(1-x)\text{SiO}_2$ were studied. The presence of regions of chemical inhomogeneity was established by means of an Elmi-D2 electron microscope by the replica method, and the electron microscope data were correlated with the other physicochemical properties by determining the temperature dependence of the resistivity and studying the temperature of the start of crystallization by the polythermal method. The replacement of silica by alumina was found to cause a substantial increase in the inhomogeneity of the glasses. A diagram of the regions of metastable liquation in the $\text{Li}_2\text{O}\text{-}\text{Al}_2\text{O}_3\text{-}\text{SiO}_2$ system is presented, and shows that the addition of a third component to systems of limited solubility increases the homogeneity of the melts in both $\text{Li}_2\text{O}\text{-}\text{SiO}_2$ and $\text{SiO}_2\text{-}\text{Al}_2\text{O}_3$. In conclusion, the authors express their sincere thanks to V. N. Vertsner for his assistance and review of the

Card 1/2

UDC: 541.123.35:599.25

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5

L 08449-67

ACC NR: AP6030774

results. Orig. art. has: 4 figures and 1 table.

SUB CODE: 11/ SUBM DATE: 26Nov65/ ORIG REF: 009/ OTH REF: 002

Card 2/2 *left*

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308620016-5"

CHERNYSH, O.S., ekonomist

Introduction of mechanization as a means of increasing the
productivity of work. Mekh.sil' hosp. 13 no.12:15-16 D '62.
(MIRA 16:2)
(Zhitomir Province--Farm mechanization)

FRADIN, M.D., inzhener; CHERNYSH, P.V., inzhener.

The use of hidden potentialities in a rail mill. Stal' 16 no.2:
143-150 F '56. (MLRA 9:5)

1. Zavod "Azovstal'".
(Shdanov--Rolling mills)

CHERNYSH, S., delegat IV Vsesoyuznogo s"vezda Dobrovol'nogo obshchestva
sodeystviya armii, aviatsii i flotu.

Party leadership guarantees success. Za rul. 16 no.4:2-3 Ap '58.
(MIRA 13:3)

1.Sekretar' Sumskogo obkoma Kommunisticheskoy partii Ukrayny.
(Automobiles--Societies, etc.)
(Motorcycles--Societies, etc.)

GORUSHKINA, L.P.; PRIKHOD'KO, N.M.; SELIVERSTOV, A.O.; CHERNYSH, S.I.;
BESPALKO, V.K.

Use of quick-hardening mixtures. Lit. proizv. no. 2:39 F '61.
(MIRA 14:4)
(Sand, Foundry)

CHERNYSH, V.

Turbine and rotary drilling. Neftianik 6 no.8:25-26 Ag '61.
(MIRA 14:10)

1. Sotrudnik Krasnoyarskogo geologicheskogo upravleniya.
(Oil well drilling)

AVER'YANOV, V.; KUCHEROV, L. (Lozovaya, Khar'kovskaya obl.); NIKOL'SKIY, V. (Moskva); CHERNYSH, V. (Magadanskaya obl.); NEVZOROV, V. (Alma-Ata); RUSNYAK, A.; GRISHIN, G. (st. Enba, Aktyubinskaya obl.); OSIPOV, N. (Moskva); REDEMENKOV, V., inzh.

Exchange of experience. Radio no. 8:36,39,41,48,52,54,57,58 Ag
'63. (MIRA 16:9)

(Radio--Maintenance and repair)

ROZMANOVA, N.V.; PALAGINA, N.K.; KHRYCHEVA, A.I.; CHERNYSH, V.G.

Method of determining biotin in the raw material for the
yeast industry. Prikl. biohim. i mikrobiol. 1 no.5:549-
553 S-O '65. (MIRA 18:11)

1. Leningradskiy mezhotraslevoy nauchno-issledovatel'skiy
institut pishchevoy promyshlennosti.

Chernysh, V.I.

CHERNYSH, V.I.

Pribor dlia signalizatsii nachala obledeneniia samoleta. (Problemy Arktiki, 1937, no. 5, p. 123-124, diagrs.)

Title tr.: Device for indicating the beginning of ice formation on aircraft.

G600.P7 1937

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955