CHERNENKO, A.A.

Contribution to the theory of the passage of direct current through binary electrolyte solutions. Dokl. AN SSSR 153 no.5:1129-1131 D '63. (MIRA 17:1)

1. Institut elektrokhimii AN SSSR. Predstavleno akademikom A.N. Frumkinym.

DOGONADZE, R.R.; KUZNETSOV, A.M.; CHERNENKO, A.A.

Theory of slow electrons in liquids. Elektrokhimiia 1 no.12:1434-1442 D '65. (MIRA 19:1)

1. Institut elektrokhimii AN SSSR. Submitted August 4, 1965.

CHERNENKO, A.D.

18(5) SOV/148-59-1-8/19

AUTHORS: Levin, A.M., Docent, Candidate of Technical Sciences; Teder, L.I.; Glasov, A.N.; Monastyrskiy, I.Ya.; Chernenko, A.D. and Alyavdin, V.A., Engineers

TITLE: Metal Refining in Intensified Smelting of Structural Electric Steel (Rafinirovaniye metalla pri intensifikatsii plavki konstruktsionnoy elektrostali)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Chernaya metallurgiya, 1959, Nr 1, pp 71-81 (USSR)

ABSTRACT: Comparative tests were carried out on kinetics of harmful impurities with the use of conventional and experimental methods of structural steel smelting. The basic peculiarities of the experimental technology which caused intensification of smelting and reduced the smelting time by one hour, included: dephosphorization during the smelting process; use of gaseous oxygen; termination of smelting combined with oxidising blowing-through; reduced quantity of burning-out carbon; preliminary deoxidation with silico-manganese and early addition of ferrosilicon plus coke dust, and ferrochrome; metal treatment by slag of the same metal at the moment of discharge. Results

Card 1/3

of the tests were compared and the following conclusions were made: Dephosphorization did not depend on the basicity of the slag and on the temperature, whereas the ferrous oxide content had a strong effect on phosphorus distribution between the metal and the slag; due to metal treatment by slag of the same metal, the desulfurization rate in the test method was higher than in the conventional technology; a strong effect of ferrous oxide on the desulfurization coefficient in the ladle was observed and therefore slag deoxidation prior to the discharge was imperative. The decrease of burning-out carbon did not increase the hydrogen content. Preliminary deoxidation and early addition of ferrosilicon dust caused speeded-up elimination of oxygen. Prior to the addition of agents with higher reducing capacities than those of carbon, the oxygen content depends on the carbon content and, in the case of "12KhN2A" steel on the silicon content. Mixing of the metal with the slag caused a decrease of the oxygen content during the discharge. The determination of non-metallic impurities was carried out by Engineer S.N. Yeremenko, who stated that, in spite of the shortened reduction time, intensified deoxidation created favorable conditions for eliminating impurities. The

Card 2/3

mixture of the metal with the reducing slag had a positive effect on the decrease of non-metallic impurities. The described method ensures the production of high quality metal. The author presents graphs comparing changes of the impurity content in experimental and conventional methods.
There are 13 graphs and 1 Soviet reference.

ASSOCIATIONS: Sibirskiy metallurgicheskiy institut (Siberian Institute of Metallurgy). Kuznetskiy metallurgicheskiy kombinat (Kuznetsk Metallurgical Combine)

SUBMITTED: October 25, 1958

Card 3/3

Chernenko, A.D

SOV/133-59-4-10/32

AUTHOR: Levin, A.N., Docent, Teder, L.I., Monastyrskiy, V.Ya., Glazov, A.F., Alyavdin, V.A., and Chernenko, A.D., Engineers

TITLE: Intensification of Smelting Structural Electric Steel (Intensifikatsiya plavki konstruktsionnoy elektrostali)

PERIODICAL: Stal', 1959, Nr 4, pp 323-327 (USSR)

ABSTRACT: An investigation of the possibilities of intensifying the electric smelting process carried out on the Kuznetsk Metallurgical Combine during 1956-1957 is described. For this purpose 100 heats of structural steels were carried out (table 1) in which the following methods of intensification of smelting were tested: 1) the use of oxygen for the oxidation of admixtures; 2) combining of the end of the melting period with the beginning of oxidation; 3) dephosphorization of metal during melting; 4) drawing the amount of burned out carbon (up to 0.2%); 5) intensification of the deoxidation by the use of a preliminary precipitation deoxidation with complex deoxidants and with in addition of powdered ferrosilicon after the making of a reducing slag together with powdered coke; tapping of metal

Card 1/3

together with slag with an energetic stirring; 6) intensification of the desulphurisation process; 7) intensification of alloying by starting it at the beginning of the reducing period. The comparison of changes in the composition of metal and slag during smelting by the usual and experimental practices for steel 40Kh is given in Fig. 1 and 2 respectively, the comparison of mechanical properties of metal produced by the usual and experimental practices - table 2, mean duration of the individual smelting periods and whole heats - table 3. It is concluded that the experimental technology of melting electric structural steels can be used with advantage. The investigation of the metal produced by the experimental technology indicated that it is of satisfactory quality which was confirmed by a considerable decrease in the proportion of out of grade steel (from 0.872 to 0.186%). The mean duration of a heat is decreased by 1 hour which under operating conditions of the melting shop on the work increased the productivity of a furnace by 14% and

Card 2/3

decreases the specific power consumption by 80 kwhr/ton of steel. There are 2 figures, 3 tables and 11 references of which 9 are Soviet, 1 German and 1 American.

ASSOCIATION: Sibirskiy Metallurgicheskiy Institut i Kuznetskiy Metallurgicheskiy Kombinat (Siberian Metallurgical Institute and the Kuznetsk Metallurgical Combine)

Card 3/3

A. I. Chernenko

24(7) PHASE I BOOK EXPLOITATION SOV/1700

Lvov. Universitet

Materialy X Vsesoyuznogo soveshchaniya po spektroskopii, 1956. t. II: Atomnaya spektroskopiya (Materials of the 10th All-Union Conference on Spectroscopy, 1956. Vol 2: Atomic Spectroscopy) [Lvov] Izd-vo L'vovskogo univ., 1958. 568 p. (Series: Its: Fizicheskiy sbornik, vyp.4(9)) 3,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po spektroskopii.

Editorial Board: G.S. Landsberg, Academician, (Resp. Ed.); B.S. Neporent, Doctor of Physical and Mathematical Sciences; I.L. Fabelinskiy, Doctor of Physical and Mathematical Sciences; V.A. Fabrikant, Doctor of Physical and Mathematical Sciences; V.G. Koritskiy, Candidate of Technical Sciences; S.M. Rayskiy, Candidate of Physical and Technical Sciences; L.K. Klimovskaya, Candidate of Physical and Mathematical Sciences; V.S. Miliyanchuk (Deceased), Doctor of Physical and Mathematical Sciences; A.Ye. Glauberman, Doctor of Physical and Mathematical Sciences; Ed.: S.L. Gasser; Tech. Ed.: T.V. Saranyuk.

PURPOSE: This book is intended for scientists and researchers in the field of spectroscopy, as well as for technical personnel using spectrum analysis in various industries.

COVERAGE: This volume contains 177 scientific and technical studies of atomic spectrography presented at the 10th All-Union Conference on Spectroscopy in 1956. The studies were carried out by members of scientific and technical institutes and include extensive bibliographies of Soviet and other sources. The studies cover many phases of spectroscopy: spectra of rare earths, electromagnetic radiation, physicochemical methods for controlling uranium production, physics and technology of gas discharge, optics and spectroscopy, abnormal dispersion in metal vapors, spectroscopy and the combustion theory, spectrum analysis of ores and minerals, photographic methods for quantitative spectrum analysis of metals and alloys, spectral determination of the hydrogen content of metals by means of isotopes, tables, and atlases of spectral lines, spark spectrographic analysis, statistical study of variation in the parameters of calibration curves, determination of traces of metals, spectrum analysis in metallurgy, thermochemistry in metallurgy, and principles and practice of spectrochemical analysis.

Card 2/31

Materials of the 10th All-Union Conference (Cont.) SOV/1700

Card 17/31

SOV/124-58-11-12936

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 154 (USSR)

AUTHOR: Chernenko, A. I.

TITLE: Study of the Processes of Vaporization and Luminescence of Matter in an Electric Arc (Izucheniye protsessov paroobrazovaniya i svecheniya veshchestva v elektricheskoy duge)

PERIODICAL: Dokl. 7-y Nauchn. konferentsii, posvyashch. 40-letiyu Velikoy Oktyabr'sk. sots. revolyutsii. Nr 2. Tomsk. Tomskiy un-t, 1957, pp 121-122

ABSTRACT: Bibliographic entry

Card 1/1

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 196 (USSR) SOV/137-58-12-25480

AUTHOR: Chernenko, A. I.

TITLE: A Study of the Processes of Vaporization of Elements in the Electric Arc (Izucheniye protsessov paroobrazovaniya veshchestv v elektricheskoy duge)

PERIODICAL: Izv. vyssh. uchebn. zavedeniy. Fizika, 1958, Nr 1, pp 140-146

ABSTRACT: The study of the kinetics of vaporization of an element placed in the pit of a carbon electrode was achieved by X-ray photography of the electrodes. Sharp sequence X-ray photographs of electrodes with an 0.3 sec exposure were obtained one second apart. All the metals investigated (Pb, Al, Bi, Cu, Zn, Sn, Ni, Ag, Fe, Hg, and others) form a regularly shaped drop in the initial period of the burning of the arc. With most of the metals investigated condensation of the element on the upper electrode and the formation of evaporation-resistant compounds are observed. Cu, Ni, and Zn are diffused into the electrode. Many of the compounds and minerals are reduced to metals in the arc. Diffusion of BaO in the electrode is observed in the course of its vaporization. Count of the number of frames on the X-ray film

Card 1/2

A Study of the Processes of Vaporization of Elements in the Electric Arc SOV/137-58-12-25480

permits one to determine the time of the complete evaporation of a specimen. In this way the kinetics of vaporization were investigated in detail, and it was revealed that the vaporization of elements in the pit of the electrode can be examined from the standpoint of the theory of thermal vaporazation of small bodies. The volatility of the following elements was determined: Bi, Tl, Pb, Sn, Ni, Fe, Mn, Ag, Hg, As, Te, Cd, Zn, Sb, Cu, In, Ga, Ge, Tl, Th, Ta, Mo, and W. Bibliography: 11 references.

A. Sh.

ASSOCIATION : Institut geologii Vostochnosibirskogo filiala AN SSSR.

Card 2/2

GNEVUSHEV, M.A.; GOMON, G.O.; CHERNENKO, A.I.

Effect of the chromium content of pyrope on the height of maximal curves of spectral absorption. Zap. Vses. min. ob-va 87 no.1:85-89 '58. (MIRA 11:6)

1. Amakinskaya ekspeditsiya Glavuralsibgeologii, st. Nyurba.
(Chromium--Spectra) (Garnet)

RAYKHBAUM, Ya.D.; KOSTYUKOVA, Ye.S.; CHERNENKO, A.I.; MALYKH, V.D.

Measuring the evaporation rate of elements and their compounds in an electric arc. Fiz.sbor. no.4:285-289 '58. (MIRA 12:5)

(Electric arc) (Evaporation)

ChERNENKO, A. I. Cand Phys-Math Sci — (diss) "Study of Processes of Vapor-Formation and Radiance of Substances in an Electrical Arc During Spectral Analysis," Irkutsk, 1960, 11 pp, 150 copies (Irkutsk State U im A. A. Zhdanov) (KL, 46/60, 123)

PLASTININ, V.V.; prinimala uchastiye: CHERNENKO, A.I.

Spectral analysis of mica for alkali metals. Zav.lab. 27 no.7:856-857 '61. (MIRA 14:7)

1. Irkutskiy gosudarstvennyy universitet imeni A.A. Zhdanova.
(Mica--Spectra) (Alkali metals--Spectra)

SREDIN, V.V., inzh.; BURSHTEYN, Ya.I.; DERGUNOV, V.I.; TARASENKOV, P.M.; CHERNENKO, A.I.

Laying pipes above ground at oil refineries. Stroi. truboprov. 6 no.3:16-18 Mr '61. (MIRA 14:3)

1. Institut Lengiprogaz, Leningrad.
(Pipe)

CHERNENKO, A.K.

First general assembly of the Siberian Branch of the Academy of Sciences of the U.S.S.R. Izv. Sib. otd. AN SSSR no.8:139-142 '58. (MIRA 11:10)

(Siberia--Research)

CHERNENKO, A.K.

Second general meeting of the Siberian Branch of the Academy of Sciences of the U.S.S.R. Izv.Sib.otd.AN SSSR no.12:93-94 '58.(MIRA 12:3)
(Academy of Science of the U.S.S.R.)

28(0)
AUTHORS: Lavrent'yev, M. A., Academician, SOV/30-59-1-8/57
Chernenko, A. K.

TITLE: Development of Science in Siberia (Razvitiye nauki v Sibiri)

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 1, pp 65-67 (USSR)

ABSTRACT: In eastern USSR a great scientific center, the Sibirskoye otdeleniye Akademii nauk SSSR (Siberian Branch of the Academy of Sciences, USSR), is growing and developing. A plenary meeting of the Section took place in Novosibirsk, the task of which was the approval of the working scheme for 1959. More than 5,000 workers are building institutes of hydrodynamics, geology and geophysics, nuclear physics, and others. The pace of the work is still insufficient for the requirements. Scientists approved their first summarized working scheme, including the fields of physical-mathematical, technical, mathematical, and mechanical sciences. The examination of mechanical properties of polymers, the fields of heat physics and chemical sciences are also mentioned. The prospects of discovering petroleum, gas, and other deposits shall also be examined. In addition, the history of the

Card 1/2

peoples of Siberia and the Far East shall be studied.
There are 5 figures.

CHERNENKO, A.K., MIRONOV, K.Ye.

Combined learned councils of the Siberian division of the Academy of Sciences of the U.S.S.R. Izv. Sib. otd. AN SSSR no.7:126-127 '59. (MIRA 12:12)
(Siberia--Research)

CHERNENKO, A.K.

General assembly of the Siberian Branch of the Academy of Sciences of the U.S.S.R. Izv.Sib.otd.AN SSSR no.11:107-108 '59. (MIRA 13:4)
(Siberia--Academy of Sciences of the U.S.S.R.)

CHERNENKO, A.K.

United learned council on the physical and mathematical, and technical sciences. Izv.Sib.otd.AN SSSR no.3:129-131 '60.
(MIRA 13:10)

(Siberia--Academy of Sciences of the U.S.S.R.)

CHERNENKO, A. K.

Consolidated learned council on the physicomathematical and technical sciences. Izv.Sib.otd.AN SSSR no.8:158 '60.
(MIRA 13:9)

(Academy of Sciences of the U.S.S.R.)

CHERNENKO, A.K.

General assembly of the Siberian Division of the Soviet Academy of Sciences. Izv.Sib.otd.AN SSSR no.12:135-136 '60. (MIRA 14:2)
(Academy of Sciences of the U.S.S.R.)

CHERNENKO, A.K.

Joint Academic Council on the Physicomathematical and Technical Sciences. Izv.Sib.otd.AN SSSR no.12:136-137 '60. (MIRA 14:2)
(Academy of Sciences of the U.S.S.R.)

S/200/61/000/001/005/005
D223/D305

AUTHOR: Chernenko, A. K.

TITLE: Symposium on some problems in mathematics and mechanics

PERIODICAL: Akademiya nauk SSSR. Sibirskoye otdeleniye. Izvestiya, no. 1, 1961, 123-124

TEXT: On November 17-19, 1960, a symposium on problems in mathematics and mechanics was held in Novosibirsk in the Akademgorodok. Participating in this symposium were some well-known Soviet scientists. The papers included in the program of the symposium were grouped mainly around work in mathematic and mechanics developed largely by the Academician M. A. Lavrent'yev. The symposium opened with a paper by Academician M. A. Lavrent'yev entitled: "Some Problems in the Motion of Liquids with a Free Surface". A survey of investigations on stability carried out by the Academy of Sciences UkrSSR under the guidance of M. A. Lavrent'yev was given by Academician A. Yu. Ishlinskiy (MGU). Academician A. A. Dorodnitsyn of the Vychislitel'nyy tsentr (Computer Center) AS USSR presented a paper on "Methods of Solving Surface Layer Equations". Doctor of Techni-

Card 1/5

Symposium...

cal Sciences G. S. Migirenko of the Institut gidrodinamiki (Institute of Hydrodynamics) Siberian Department AS USSR, clarified some problems on dynamic disintegration: Doctor of Physico-Mathematical Sciences N. N. Moiseyev spoke on the results of investigations on non-linear waves in a solid medium carried out in the Computer Center of the AS USSR. Speaking on the "Vapor Cycle and some Problems of Energy Connected with this" was Academician S. A. Khristianovich of the Institut teoreticheskoy i prikladnoy mekhaniki (Institute of Theoretical and Applied Mechanics) Siberian Department, AS USSR. Academican L. I. Sedov, Institut mekhaniki (Institute of Mechanics) MGU presented a paper on the "Principal Conceptions of Mechanics of a Solid Medium". P. Ya. Kochina, (Institute of Hydrodynamics, Siberian Department, AS USSR) spoke on applying the theory of complex alternating functions in the problem of filtration. Academician S. L. Sobolev, Institut matematiki (Institute of Mathematics) Siberian Department, AS USSR, reported on the results of investigation on cubic formulae. Academician I. N. Vekua, Novosibirskiy gos. un-t. (Novosibirsk State University) dealt in his paper with general anal-

ytical functions and quasiconforming reflections. Some problems of the theory of equations of mixed compound type were presented by Member of the AS USSR A. V. Bitsadze (Institute of Mathematics, Siberian Department, AS USSR). The joint paper of Doctors of Physico-Mathematical Sciences, L. D. Kudryavtsev and S. M. Nikol'skiy of the Matematicheskiy institut im. V. A. Steklova (Institute of Mathematics im. V. A. Steklov) AS USSR, was dedicated to theorems of enclosures (envelopes) and their use for the solving of elliptical equations. Doctor of Physico-Mathematical Sciences L. I. Volkovyskiy of Permskiy gos. un-t (State University of Perm') prepared a paper on the theme "Singular Integral Equations and the Theory of Potential or Stretched Surfaces." On algebraic constructions, a report was prepared by Academician A. I. Mal'tsev (Institute of Mathematics, Siberian Department, AS USSR). Corresponding Member of the AS USSR A. D. Aleksandrov (LGU) prepared a paper "The Principle of Maximum." On new results and the constructive theories of functions, reported Corresponding Member of the AS USSR, Academician of the AS Armenian SSR, S. N. Mergelyan (Computer Center AS Armenian SSR. Corresponding Member of the AS USSR L. A. Galin (Institute

Symposium...

of Mechanics AS USSR) in his speech dealt with the contact problems of the theory of elasticity with variations in the elasticity modulus... Candidate of Physico-Mathematical Sciencees K. Ye. Gubkin Institut khimicheskoy fiziki (Institute of Physical Chemistry) AS USSR contributed a report on the "Diffraction of Feeble Shock Waves at Small Angles." Candidate of Physico-Mathematical Sciences S. K. Godunov spoke on some paradoxical quasilinear equations. Candidate of Physico-Mathematical Sciences Yu. G. Reshetnyak discussed quasi-conforming reflections in space. Doctor of Physico-Mathematical Sciences S. G. Kreyn of Voronezhskiy gos. un-t (State University of Voronezh) developed a series of questions on interpolation theorems in the theory of operators. Doctor of Physico-Mathematical Sciences A. A. Nikol'skiy (Institute of Mechanics AS USSR) dedicated his paper to the motion of bodies in a rotating fluid. On the solution of axi-symmetrical problems of the theory of elasticity using analytical functions, spoke Doctor of Technical Sciences A. Yu. Aleksandrov Novosibirskiy institut inzhenerov zheleznodorozhnogo transporta (Novosibirsk Institute of Railroad Engineers). Doctor of

Card 4/5

Symposium...

Physico-Mathematical Sciences P. F. Filchakov (Institute of Mathematics AS USSR) reported on the solution of problems in pressure filtrations. The papers presented at the symposium will be published as a separate publication.

Card 5/5

S/200/61/000/006/004/004
D206/D303

AUTHOR: Chernenko, A.K.

TITLE: At the joint scientific council for the physico-mathemtical and technical sciences

PERIODICAL: Akademiya nauk SSSR. Sibirskoye otdeleniye. Izvestiya. no. 6, 1961, 134-135

TEXT: The regular meeting of the Ob''yedinennyy uchenyy sovet po fiziko-matematicheskim i tekhnicheskim naukam (Joint Scientific Council for Physico-Mathematical and Technical Sciences) of the Siberian Division AS USSR took place on March 21-23, 1961. The All-Union Academic Commission recently broadened the scope of the Council and authorized its sections to undertake the examination of theses. On March 21, at the meeting of the Technical Sciences Section (Chairman - K.B. Karandeyev, Corresponding Member, AS USSR; Scientific secretary - Professor P.O. Pasnkov), V.M. Kuznetsov presented his Candidate's thesis - "Some Aspects of the Effect of a Ground Explosion" (Official examiner - Professor G.S. Migirenko). E.A. Antonov

Card 1/4

S/200/61/000/006/004/004
D206/D303

At the joint scientific council...

received a Candidate's degree for his thesis: "Some Aspects of the Theory and Practice of Impact Water-Jets". The official examiners - T.F. Gorbachev, Corresponding-Member AS USSR, Professor V.S. Muchnik, author of the system of hydraulic coal-extraction, and B.V. Sudnisnikov, manager of the drilling mechanization laboratory of the Siberian Division's Mining Institute - noted that his work would contribute towards solving the problem of the hydraulic extraction of coal and ores; this research is part of the program for creating impact hydraulic equipment and was carried out at the Division's Institut gidrodinamiki (Institute of Hydrodynamics) under the direction of B.V. Boytsekhovskiy. The devised jet has already been successfully tested at the Bochatskiy coal quarry in the Kuzbass. Such equipment permits the attainment of dynamic presssures in the water jet of 6000 - 9000 atm and the realization of jet velocities of 1300 - 1500 m/sec. The next day O.V. Sosnin presented his Candidate's thesis - "Irregular Creep of Turbine Discs" (Official examiners: Professor L. Ya. Aleksandrov, N.A. Zheltukhin and S.M. Belonosov). At the meeting of the Physico-Mathematical Sciences Section (Chairman - D.V. Shirkov, Corresponding Member AS USSR;

Card 2/4

At the joint scientific council...

scientific secretary - A.A. Naumov) Yu. P. Krasovskiy of the Rostov-on-Don State University received a Candidate's degree for his thesis: "Fixed Waves of Finite Amplitude" (official examiners - Professor N.N. Moiseyev, Professor M.A. Krasnosel'skiy, L.V. Ovsyannikov). On March 23 there were plenary meetings of the Joint Scientific Council (Chairman - Academician M.A. Lavrent'yev: scientific secretary - E.I. Grogolyuk, Corresponding Member AS USSR) at which the submission of doctoral theses and the conferment of Candidate's degrees occurred. L.V. Ovsyannikov successfully submitted his Doctor's thesis - "Grouped Properties of Differential Equations" at the morning meeting. The official examiners - Academican A.I. Mal'tsev, A.V. Bitsadze, Corresponding Member, AS USSR and N.N. Moiseyev - highly praised his work as a fundamental contribution to mathematical sciences. At the evening meeting G.D. Suvorov of the Tomsk State University presented his thesis - "Main Properties of Some General Classes of Topologic Reflections of Plane Areas with Variable Boundaries" - which is a further development of the ideas of Academician M.A. Lavrent'yev regarding the theories of quasi-conformal reflections; his work was well received by the official examiners - Prof-

At the joint scientific council...

essor L.D. Kudryavtsev, Professor A.F. Leont'yev and Professor L.I. Volkovyskiy. The Scientific Council planned the future development of the physico-mathematical and technical science establishments of the Siberian Division for the period 1962-1965; in particular, the Council recognized the expediency of founding an institute of high-tensions and an institute of physics, atmospherics and hydrophysics at Novosibirsk in 1963. It also acknowledged the need for organizing a laboratory of rock- and geo-magnetism in the Physics Institute of the Siberian Division (at Krasnoyarsk) and for creating in the Radiophysics and Electronics Institute two new sections: a section for the electronics of ultrahigh frequencies and a section for nuclear electronics.

Card 4/4

S/200/61/000/007/006/006
D238/D302

AUTHOR: Chernenko, A.K.

TITLE: Theses defended (at the meeting of the combined scientific council for physico-mathematical and technical sciences)

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Sibirskoye otdeleniye, no. 7, 1961, 129 - 132

TEXT: The Ob"yedinennyy uchenyy sovet po fiziko-matematicheskim i tekhnicheskim naukam (Council for Physico-Mathematical Sciences) of the Siberian Section, AS USSR met on May 15-18, 1961, when a number of theses for doctorate and candidate degrees were defended. S.I. Pokhozhayev of the Institut gidrodinamiki SO, AN SSSR (Hydrodynamics Institute, Siberian Branch AS USSR) presented a thesis entitled "An investigation of the boundary value problem for an equation $\Delta U = U^2$". This equation was investigated for the case when the circular region, radius R, and the boundary condition U/r =

Card 1/6

Theses defended (at the ...

$\varphi(S)$ have a special form U/r = C. A.T. Gaynov of the Institut matematiki, SO AN SSSR (Mathematical Institute, Siberian Branch AS USSR) presented a thesis on "Some problems of the theory of non-associative rings". The work investigated certain classes of non-associative rings and algebra putting forward a new theory of free commutative and anti-commutative algebraic products and a simpler proof of Al'bert's theory using the latter's concept of differential substitution. Ya.I. Kanel' presented a thesis entitled "The equations of combustion theory for large values of time". The work investigated certain problems of the heat theory of combustion when the diffusion coefficient is equal to the temperature conductivity coefficient and the initial distribution of material and heat guarantees a similarity of concentration and temperature for the entire process. The stability of the steady state wave relative to initial disturbances was demonstrated. Concurrently, theses were also defended at the meeting of the Sektsiya tekhnicheskikh nauk (Section for Technical Sciences). V.P. Sdobyrev of the Institut mekhaniki AN SSSR (Institute of Mechanics, AS USSR) read a thesis "Criteria for

prolonged stability for certain alloys when under tension". The simultaneous effect of expansion and torsion on the stability of tubular models of heat stable alloys was studied and the criteria for prolonged stability in plane tension states worked out. The half-sum of the maximal chief tension and the intensity of the normal tension is a linear function of the logarithm of the destruction time and independent of the type of tension. This author's results have already found use in gas turbine construction factories in calculations concerning the most heavily loaded parts of machines. G.R. Bochkarev of the Institut gornogo dela, SO, AN SSSR (Coal Mining Institute, Siberian Branch AS USSR) presented a thesis "The effect of certain constructional and technological factors on the condensation of coal slime in a hydrocyclone". He investigated the effect of constructive parameters on hydrocyclone productivity, found the optimal pressure and parameter values for slime condensation and a method for controlling the whole process automatically; the results have already been used in a number of coal dressing factories in the Kuzbass. S.G. Skopin presented "Problems of work-

Theses defended (at the ...

ing large coal strata in the Tom'-Usinskiy region of the Kuzbass". The work investigated strata mining in this area and made recommendations as to the permissible amount of rock uncovering and for increasing productivity and lowering the cost price of the coal, as well as pointing out the wisdom of using hydraulic methods of mining in this region. B.A. Movchan of the Institut elektrosvarki imeni Ye.O. Patona AN USSR (Institute of Electrowelding imeni Ye.O. Paton, AS UkrSSR) presented "Microscopic irregularities in cast alloys". The author indicated ways of regulating the size and form of physical and chemical irregularities and established reasons for heat fractures during polygonization and worked out methods for overcoming these and brittle destruction, particularly on welded joints. B. V. Shabat's thesis "Non-linear hyperbolic and spatial problems of isogonal transformation" was concerned with the development of quasi-conformal transformation and extended the use of the theory to more general systems of hyperbolic type. M.M. Lavrent'ev of the Mathematical Institute, Siberian Branch, AS USSR presented a thesis on "Certain incorrect problems of mathematical physics" and solved a series of geophysical problems of considerable mathematical diffi-

Theses defended (at the ...

culty and formulated some general methods for the solution of problems in this sphere. A.A. Dezin of the Matematicheskiy institut imeni V.A. Steklova AN SSSR (Mathematical Institute imeni V.A. Steklov AS USSR) presented a thesis on "Invariant differential operators and boundary value problems". The work dealt with first order equation systems and new boundary prolems were discovered for the heterogeneous multi-dimensional system of Koshi-Riman and their correctness demonstrated by methods of contemporary functional analysis. O.A. Zhautykov, Head of the Sektor matematiki AN Kaz. SSR (Mathematical Sector AS Kaz SSR) presented a thesis "The investigation of the counting system theory of differential equations" which investigated the theory of first order partial differential equations, where the unknown depends on a denumerable set of variables and the counting systems in ordinary and partial differential equations. S.M. Belonosov, Senior Assistant at the Mathematical Institute, Siberian Branch, AS USSR presented a thesis "Fundamental plane static problems of elasticity theory for singly connected and doubly connected regions" which proposed a new method of solving problems of elastic

Card 5/6

Theses defended (at the ...

equilibrium, applicable to both regions including those containing angular points. The method appears to be suitable for the numerical solution of elasticity theory problems on electronic digital computers. At the plenary session of the scientific committee it was decided to petition for the award of a doctor's degree to M.M. Dokuchayev Chief Engineer Soyuzvzryvprom, without hearing a thesis for his outstanding work in the theory and practice of explosions and their use in the national economy. The Committee examined eleven other doctors' and candidates' theses [Abstractor's note: No information given on these].

Card 6/6

GROSSGEYM, V.A.; CHERNENKO, A.M.

Attachment for the Vul'f net. Raved.i okh.nedr 28 no.3:46-47 Mr '62. (MIRA 15:4)

1. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologorazvedochnyy institut.
(Crystallography)

84491
S/112/59/000/14/068/085
A052/A001

9,3220

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 14, p. 239, # 30241

AUTHOR: Chernenko, A.P.

TITLE: Methods of Analysis of Non-Linear Processes

PERIODICAL: Sb. Leningr. in-ta inzh. zh.-d. transp., 1958, No. 161, pp. 62-90

TEXT: The existing methods of analysis of non-linear processes are discussed and their comparative evaluation is given. I. Methods of harmonic analysis using the power polinomial in a pure form (Kotel'nikov's method). The characteristic of the non-linear element is expressed by power series. To this element the sum of voltages with different frequencies is supplied. II. Methods leading to double Fourier series. a) W.R. Bennett's method. The characteristic of the non-linear element is presented by a linear-broken line. The current in the non-linear element is a function of connected voltages and is presented by a n-multiple Fourier series where n is the number of connected voltages.

Card 1/3

84491
S/112/59/000/014/068/085
A052/A001

Methods of Analysis of Non-Linear Processes

III. Methods leading to Bessel functions. a) A.C. Bartlett's method. The non-linear element is a triode with a characteristic expressed by a power series. Modulation products can be computed by Bessel functions. b) L.I. Yaroslavskiy's method. The characteristic of the non-linear element is represented by a sum of elementary broken lines. Eight typical broken lines and their equations are given. Combination frequencies are concealed in Bessel functions. c) I.V. Basik's method. The author makes use of the method suggested by Bartlett but applies it to a tube with many control electrodes with the result that the method becomes a generalized one. d) G.V. Dobrovol'skiy's method. Non-linear multipolars are considered in application to frequency converters. The characteristic of the non-linear element is approximated by an exponential polinomial. Essentially the Dobrovol'skiy's method enables to solve any problem of analysis of non-linear processes in a non-linear multipolars with any degree of accuracy. e) N.N. Krylov's method. The non-linear element is an electronic tube with a characteristic approximated by an exponential function. For approximation of the anode characteristic of the electronic tube Krylov suggested the hyperbolic tangent function. A comparative evaluation of the mentioned methods is made on a particular example. The formula derived by Basik expresses at the same time all harmonic and combination components, but the calculation by this method is

Card 2/3

Methods of Analysis of Non-Linear Processes

more cumbersome than by V.A. Kotel'nikov's method. The methods of Bartlett, Bennett, Yaroslavskiy and Krylov consider the action of only for on the non-linear element two voltages with different frequencies. Therefore in case of a greater number of voltages these methods cannot be applied. The complexity of Dobrovol'skiy's method renders its use difficult. The methods of V.A. Kotel'-nikov and I.V. Basik are most expedient from the viewpoint of engineering calculation..

N.I.S.

Translator's note: This is the full translation of the original Russian abstract.

Card 3/3

CHERNENKO, A.P.

PHASE I BOOK EXPLOITATION SOV/4426

Leningrad. Institut inzhenerov zheleznodorozhnogo transporta

Avtomatika, telemekhanika i svyaz' (Automation, Telemechanics, and Communications) Moscow, Transzheldorizdat, 1960. 230 p. (Series: Its: Sbornik, vyp. 169) 1,000 copies printed.

General Ed.: V. N. Listov, Professor; Ed.: G. I. Marenkova, Engineer; Tech. Ed.: Ye. N. Bobrova.

PURPOSE: This book is intended for technical personnel and scientists engaged in the fields of automation, telemechanics, and communications.

COVERAGE: This collection of articles presents various methods of analysis and synthesis of electric circuits. New designs are described and ways of improving technical and economic indices of communication instruments investigated. The articles contain computations for individual types of communication and telemechanical systems. No personalities are mentioned. Some of the articles are accompanied by references.

AVAILABLE: Library of Congress

Card 11/11

JP/rm/ec
11-2-60

CHERNENKO, A. P., Cand Tech Sci -- (diss) "Nonlinear distortions in frequency transformers and group track of multichannel communication systems." Leningrad, 1960. 14 pp; (Ministry of Railroads USSR, Leningrad Order of Lenin Inst of Railroad Transport Engineers im Academician V. N. Obraztsov); number of copies not given; price not given; (KL, 22-60, 140)

CHERNENKO, A.P.

Effect of the inversion of a group of telephone channels on the strength of nonlinear interferences. Elektrosviaz' 15 no.5:51-57 My '61. (MIRA 14:6)
(Telephones)

CHERNENKO, A.R.; SIMFOROV, G.Ye.; SHKUTA, E.I.; TEREKHOV, I.P.; POLYANSKIY, F.S.; PISANKO, K.S.; SHENDRIK, V.K.; AL'TSHULER, M.A.; RIVKIN, I.D.; ENGEL', Ya.R.; CHETYRKIN, M.I., red.izd-va; PYL'NEN'KIY, A.A., red.izd-va; OSVAL'D, E.Ya., red.izd-va; PROZOROVSKAYA, V.L., tekhn.red.

[Sharp increase in the labor productivity of Krivoy Rog Basin miners; practices in the "Bol'shevik" and "Gigant" mines] Krutoi pod"em proizvoditel'nosti truda gorniakov Krivbassa; iz opyta raboty shakht "Bol'shevik" i "Gigant." Moskva, 1960. 173 p. (MIRA 13:11)
(Krivoy Rog Basin--Iron mines and mining--Labor productivity)

MALAKHOV, G.M., prof., doktor tekhn.nauk; SHKUTA, E.I.; CHERNENKO, A.R.; VASHCHENKO, V.S.

For the highest possible labor productivity in underground mines. Gor. zhur. no. 11:3-7 N '60. (MIRA 13:10)

1. Krivorozhskiy gornorudnyy institut (for Malakhov). 2. Glavnyy inzh. rudnika im. Dzerzhinskogo (for Shkuta). 3. Nachal'nik shakhty Gigant krivorozhskogo rudnika im. Dzerzhinskogo (for Chernenko). 4. Glavnyy inzhener shakhty Gigant krivorozhskogo rudnika im. Dzerzhinskogo (for Vashchenko).
(Mining engineering--Labor productivity)

CHERNENKO, A. R., inzh.

Technical progress is the basis for increasing labor productivity. Izv. vys. ucheb. zav.; gor. zhur. no.10:8-12 '61. (MIRA 15:10)

1. Krivorozhskaya shakhta "Gigant".

(Stoping(Mining)) (Automatic control)

MALAKHOV, G.M., prof., doktor tekhn.nauk; ZHELTETSKIY, A.Ye.; CHERNENKO, A.R.; VASHCHENKO, V.S.; NIKULIN, S.Ye., kand.tekhn.nauk; LINNIK, G.F., kand.tekhn.nauk; LAVRINENKO, V.F., kand.tekhn.nauk; SULIMA, G.S., gornyy inzh.

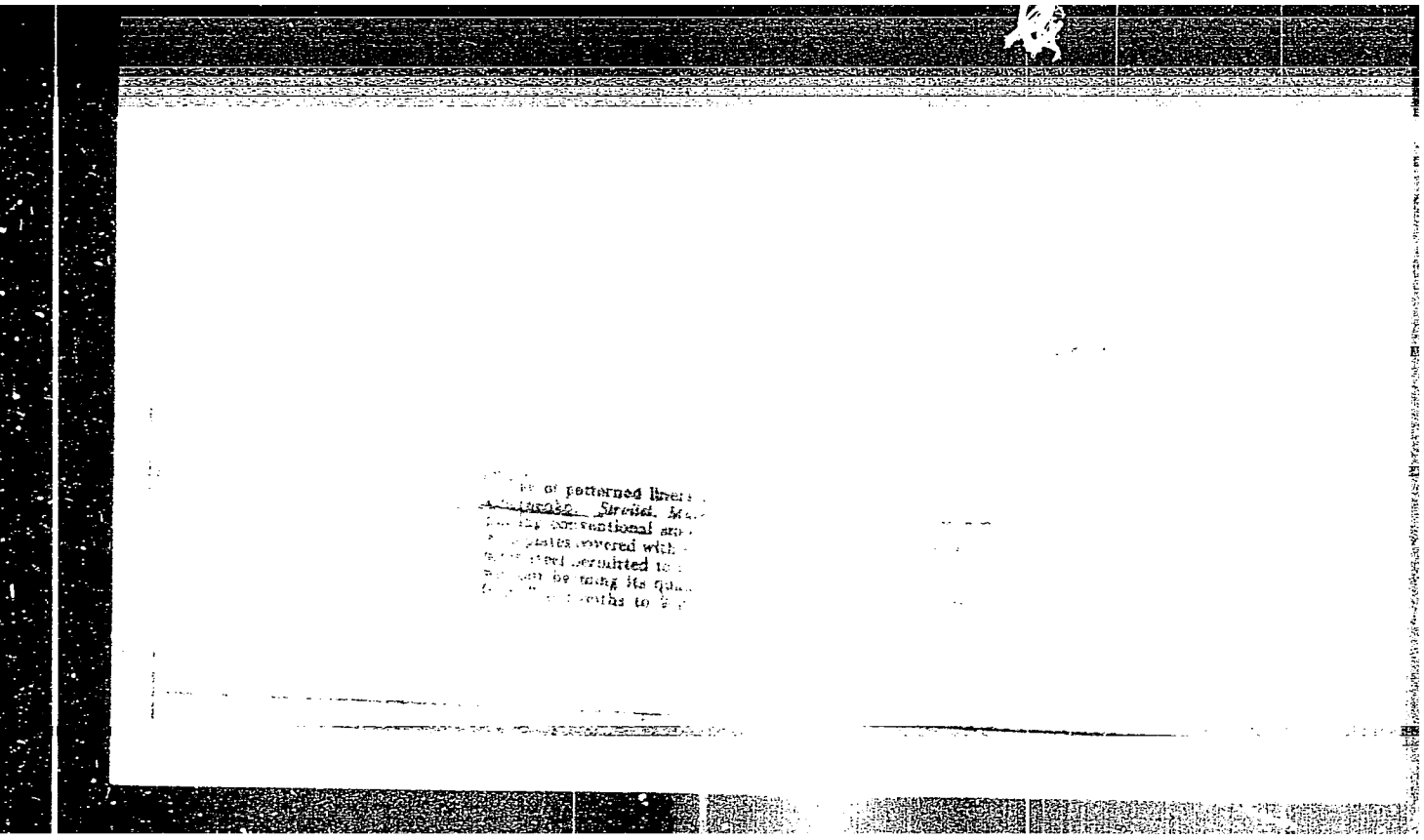
Breaking ore in a "compressed" medium in the Dzerzhinskiy Mine was not worthwhile. Gor.zhur. no.8:21-25 Ag '62. (MIRA 15:8)

1. Glavnyy inzh. rudoupravleniya im. Dzerzhinskogo (for Zheltetskiy). 2. Zaveduyushchiy shakhtoy "Gigant" rudoupravleniya im. Dzerzhinskogo (for Chernenko). 3. Glavnyy inzh. shakhty "Gigant" rudoupravleniya im. Dzerzhinskogo (for Vashchenko).
(Krivoy Rog Basin--Mining engineering)

CHERNENKO, A.K., inzh.; LUBENETS, V.A., inzh.; LYASH, I.S., inzh.; KUNETS, G.O., inzh.; DOLINSKIY, N.A., inzh.

Making a drift with the use of a mine corveyor. Shakht. stroi. 9 no.6:24-25 Je '65. (MIRA 18:7)

1. Rudnik imeni Kominterna, Krivorozhskiy basseyn (for Chernenko, Lubenets, Lyash). 2. Nauchno-issledovatel'skiy gornorudnyy institut, Krivoy Rog (for Kunets, Dolinskiy).



AREF'YEV, V.A., inzhener; CHERNENKO, A.S., inzhener; TKACHEV, V.V., inzhener.

Increasing ball mill productivity. TSement 23 no.1:21-23 Ja-F '57.
(Crushing machinery) (MLRA 10:4)

CHERNENKO, A.V. (Dnepropetrovsk)

Lesion of the nervous system in bronchiectasis. Vrach.delo no.4: 85-90 Ap'63. (MIRA 16:7)

1. Dnepropetrovskaya oblastnaya klinicheskaya bol'nitsa imeni I.I.Mechnikova.
(BRONCHIECTASIS) (BRAIN--DISEASES)

CHERNENKO, A.Z., veterinarnyy vrach.

Internal use of white hellebore concentrate. Veterinariia 33 no.3; 69 Mr '56. (MLRA 9:5)

1. Rayonnaya veterinarnaya lechebnitsa Tomashpol'skogo Rayona, Vinitskoy oblasti.

(HELLEBORE)

CHERNENKO, D. M. (Docent, Cand. Tech. Sci.)

"Protection of Under water Parts of Ship Bodies from Corrosion and Rust."

Schiffbautechnik, June 1958

Polytechnical Inst. Leningrad

BULGARIA/Chemical Technology. Chemical Products. Corrosion. Corrosion. Protection. H-4

Abs Jour : Ref Zhur - Khimiya, 1958, No 22, 74341

Author : Chernenko D.
Inst : Not Given
Title : Physico-Chemical Treatment of Boat Bottoms for the Prevention of Marine Growths.

Orig Pub : Tezhka promishlenost, 1958, 7, No 1, 33-34

Abstract : As a method of preventing marine growth on the submerged portion of boat bottoms it is recommended to have them covered with a thin layer of Cu applied by means of an electric spray gun. Such a layer is almost insoluble in water, is highly toxic to marine life, has high corrosion resistive properties, has an increased hardness, and has improved resistance to abrasion. The power consumption in the described application comprizes 0.8 KW Hr/m^2, consumption of Cu is 15 gr/m^2, and the cost of application is 7 roubley, 65 kopeyek /m^2. The useful life of the above coating, when applied in

Card : 1/2

4

BULGARIA/Chemical Technology. Chemical Products. Corrosion. H-4
Corrosion Protection.

Abs Jour : Ref Zhur - Khimiya, 1958, No 22, 74341

accordance with the indicated method of protection is extended up to 26-28 months.

Card : 2/2

CHERNENKO, D. M.

Normalizatsiia modifitsirovannogo chuguna. (Vestn. Mash., 1950, no. 6, p. 39-40)

(Normalizing of modified cast iron.)

DLC: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

CHERNENKO, D.

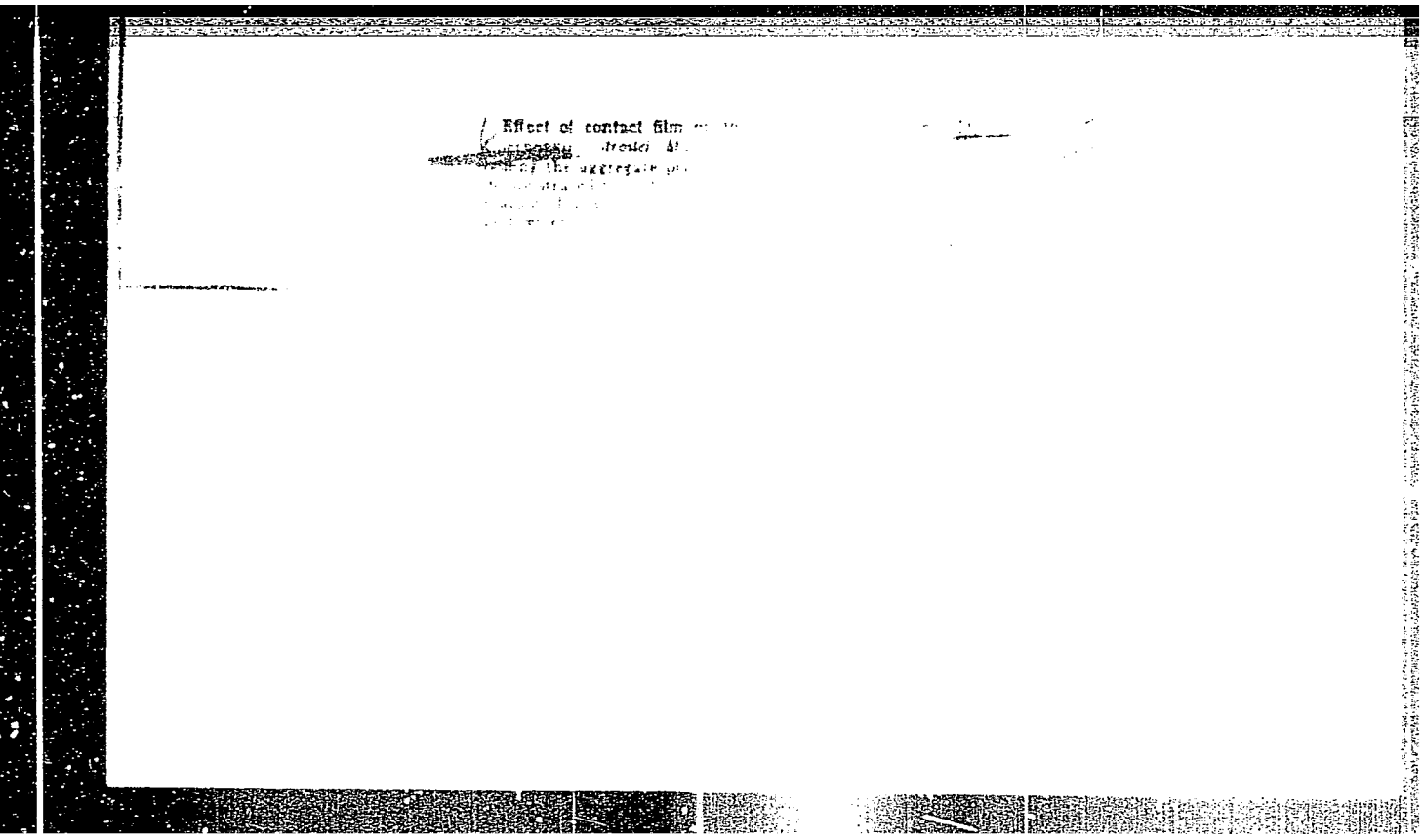
CHERNENKO, D. Effect of carbon in steel on its cohesion with cement stone. Tr. from the Russian p. 13.

Vol. 3, no. 11, 1956
STROITELSTVO
TECHNOLOGY
Bulgaria

So: East European Accession, Vol. 6, No. 5, May 1957

CHERNENKO, D.N.

Technical and economic advantages in using molds with surface drying. Trudy LPI no.186:57-59 '56. (MLRA 10:7)
(Molding (Founding))



CHERNENKO, D.

On the cohesion between concrete and steel.

p. 14 (STROITELSTVO) Vol. 4, no. 7, 1957,
Sofiia, Bulgaria

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

CHERNENKO, D.

Analysis of effectivness of technological methods for preparing cutters of steel for drills; from the experiences of the Soviet Union factories. Tr. from the Russian.

P. 41, (Teshka Promishienost) Vol. no. 5, May 1957, Sofia, Bulgaria

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

CHERNENKO, D.

TECHNOLOGY

Periodicals: STROITELSTVO. Vol. 5, No. 9, 1958.

CHERNENKO, D. Influence of the quality of the surface of steel on the contact layer in its cohesion with cement stone. p. 26.

Monthly List of East European Accessions (EEAI) LC Vol. 8. No. 4, April 1959. Unclass.

CHERNENKO, D.M., dots. k. t. n.

Application of reinforced concrete in machine building. Mashinostroene 13 no.9:46-47 S '64.

1. M.I.Kalinin Leningrad Polytechnic Institut.

CHERNENKO, D.M.

Some technical and economic features of using steel concrete in machinery manufacturing. Trudy LPI no.244:94-98 '65.
(MIRA 18:5)

LEVIN, S.L., prof., doktor tekhn.nauk; KONOVALOV, V.S., inzh.; CHERNENKO, F.A., inzh.; KUZNETSOV, M.P., inzh.; SOLOGUB, S.L., inzh.

Some problems of smelting and pouring rimmed chromium steel. Izv.vys.ucheb.zav.; chern.met. no.10:15-22 O '58. (MIRA 11:12)

1. Dnepropetrovskiy metallurgicheskiy institut i metallurgicheskiy zavod imeni Dzerzhinskogo.
(Chromium steel--Metallurgy)

CHERNENKO, E.A.

AUTHORS: Dorfel', A.G., Dubina, Yu.G., Kotin, A.G., Myzhonkov, M.I., Sologub, E.N., Tret'yakov, Ye.V., Ehairov, V.I., Chernenko, E.A. and Shneyerov, Ya.A.

TITLE: Efficiency of the Use of Sinter and Briquettes Instead of Ore and Limestone in Open-Hearth Furnaces (Effektivnost' primeneniya v martenovskikh pechakh aglomerata i briketov vmesto rudy i izvestnyaka)

PERIODICAL: Stal', 1959, Nr 5, pp 400 - 407 (USSR)

ABSTRACT: In order to compare the efficiency of using fluxed sinter and ore-lime briquettes instead of ore and limestone in open-hearth furnaces as well as to determine the optimum composition of the above agglomerated materials, experimental heats were carried out in 370-ton open-hearth furnaces at the imeni Dzerzhinskiy Works during 1957-1958. Altogether 65 heats with briquettes, 76 with sinters of various compositions and 90 comparative heats using ore and limestone were made. All heats were made in the same furnaces and during the same periods. The composition of briquettes and sinters tested is given in Table 1 (basicity of briquettes varied from 0 - 5.4 and of

Card1/4

sinters from 0.4 to 2.2). Changes in the masses of FeO content in slag in the course of melting are shown in Figures 1 and 2, respectively, the main indices of the experimental and comparative heats in Table 2, the comparison of the amounts of CaO, SiO_2 and ΣFeO transferred to slag from various granular materials - Table 3, changes in the SiO_2 content of slag in the course of melting for various heats - Figures 3 and 8, the same changes in slag basicity - Figure 4, the same changes in the P_2O_5 content - Figure 5, the same changes in the CaO content - Figure 6, the same changes in the ΣFeO and CaO and ΣFeO contents - Figures 7 and 11, the same changes in the content of sulphur - Figure 10. It was found that the use of fluxed briquettes or sinters instead of ore and limestone leads to a considerably faster formation of slag during the melting down period, to an earlier slag removal and to a corresponding decrease in the melting

Card2/4

period. The use of fluxed briquettes or sinter of a basicity 2.0 - 2.5 without additions or with minimal additions of ore and limestone made it possible: 1) to decrease the melting period in 370-ton furnaces by 40-45 min with an increase in the furnace productivity of 6-7%; 2) to decrease the duration of heating up successive layers of granular materials during the charging period as well as their heating after the charging is completed (which permitted a further decrease of 10-15 min in the duration of heats); 3) to increase slag basicity of slag at the beginning of the melting period and to decrease the FeO content in the slag at the end of this period; 4) to increase the dephosphorizing and desulphurizing ability of slag due to its earlier formation and higher basicity throughout the whole course of melting and 5) to exclude blow-outs from the furnace during melting. The briquettes and sinters can also be used with success during refining. The organization of a large-scale

Card3/4

production of fluxed briquettes and sinters for the open-hearth furnaces and their wide application in steel-making practice is recommended. There are 11 figures, 3 tables and 6 Soviet references.

ASSOCIATIONS: Ukrainskiy institut metallov (Ukrainian Institute of Metals) and Zavod imeni Dzerzhinskogo (imeni Dzerzhinskiy Works)

Card 4/4

VIDISHEV, V.Ye., inzh.; CHAPLYGIN, Yu.V., inzh.; CHERNENKO, G.G., inzh.

Transformation of an open-hearth furnace for a combined heating with the use of natural gas. Mashinostroenie no.4:41-46 Jl-Ag '62. (MIRA 15:9)

1. Luganskiy teplovozostroitel'nyy zavod.
(Lugansk--Open-hearth furnaces)

L 5286-66 EWP(e)/EWT(m)/EWP(i)/ETC/EWG(m)/EWP(t)/EWP(b)/EWA(h) IJP(c)
ACC NR: AP5022036 JD/JG/AT/WH SOURCE CODE: UR/0286/65/000/014/0104/0104

AUTHORS: Marchenko, N. A.; Anfimova, A. N.; Chernenko, G. G. 39 B

ORG: none

TITLE: A method for deep anodizing of aluminum and its alloys. Class 48, No. 173086

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 104

TOPIC TAGS: aluminum, aluminum alloy, anodizing, sulfuric acid

ABSTRACT: This Author Certificate presents a method for deep anodizing of aluminum and its alloys in a solution of sulfuric acid. To obtain oxide films with high wear resistance, the process is conducted with the initial current density of 18-20 a/dm^2 which is allowed to drop spontaneously to 6-7 a/dm^2 at the temperature of 15-20C.

SUB CODE: MM/ SUBM DATE: 28Mar61/ ORIG REF: 000/ OTH REF: 000/

Card 1/1

0901 0488

L 04202-67 EWT(m)/EWP(j)/T IJP(c) RM
ACC NR: AP6030022 (A) SOURCE CODE: UR/0020/66/169/005/1102/1103

AUTHOR: Oreshkin, I. A.; Chernenko, G. M.; Tinyakova, Ye. I.; Dolgoplosk, B. A. (Academician)

34
B

ORG: Institute of Petrochemical Synthesis im. A. V. Topcheviy, Academy of Sciences SSSR (Institut neftekhimicheskogo sinteza Akademii nauk SSSR)

TITLE: π-allyl derivatives of chromium and titanium as catalysts for steoreospecific polymerization of butadiene

SOURCE: AN SSSR. Doklady, v. 169, no. 5, 1966, 1102-1103

TOPIC TAGS: chromium, titanium, polymerization catalyst, polybutadiene

ABSTRACT: Stereospecific polymerization of butadiene was studied at 20-80°C using 2.7 mol/l concentration of butadiene in toluene and 0.2 mol/% (based on butadiene) of chromium and titanium triscrotylates as catalysts. The polymerization duration was 2-68 hr. In some experiments the catalysts were supplemented with $NiCl_2$ (MR_3:$NiCl_2$= = from 1:8 to 1:24) with TiJ_4(MR_3:TiJ_4=1:1), or with O_2 (Mr_3:O_2=1:0.5). The chromium system was prepared by reacting anhydrous $CrCl_3$ with crotylmagnesiumchloride in an ether toluene mixture (1:2 by volume) at -10° to -20°C. The titanium system was prepared by reacting anhydrous $TiCl_3$ with biscrotyl magnesium in diethyl ether solvent at -5°C; the ratios of $TiCl_3$ to R-Mg was from 5:1 to 12:1. The polymer yields varied from 6.1

UDC: 542.952+541.64

Card 1/2

L 04202-67
ACC NR: AP6030022

to 100%. It was found that pure $(C_4H_7)_3Cr$ or $(C_4H_7)_3Ti$ yielded a polymer with 81-83% of 1,2-units. The addition of $NiCl_2$ or TiJ_4 to either chromium or titanium triscrotonate was found to result in a polymer with 85-93% of 1,4-cis units. In the presence of O_2 or chromium oxide, the polymer showed 92.5-99% of 1,3-trans units. Orig. art. has: 2 tables.

SUB CODE: 07/ SUBM DATE: 18Jan66/ ORIG REF: 004/ OTH REF: 002

Card 2/2 LC

SAKSONOV, P.P.; CHERNENKO, G.T.

Effect of mercamine on the motor function of the gastrointestinal tract. Farm.i toks. 22 no.6:550-554 N-D '59. (MIRA 13:5)
(ETHANETHIOL)
(DIGESTIVE ORGANS)

BELAY, V.Ye.; VASIL'YEV, P.V.; SAKSONOV, P.P.; CHERNENKO, G.T.

Reactivity of the organism to durgs in radiation sickness.
Med.rad. no.11:72-78 '61. (MIRA 14:11)
(RADIATION SICKNESS)

SAKSONOV, P.P., polkovnik meditsinskoy sluzhby; VASIL'YEV, P.V.; polkovnik meditsinskoy sluzhby; BELAY, V.Ye., podpolkovnik meditsinskoy sluzhby; CHERNENKO, G.T., podpolkovnik meditsinskoy sluzhby

Characteristics of the action of drugs in acute radiation sickness; a review of the literature. Voen. - med. zhur. no.1: 44-50 1963. (MIRA 17:8)

L 41619-65 EWG(j)/EWT(m) GS

ACCESSION NR: AT5008046 S/0000/64/000/000/0211/0219

AUTHOR: Saksonov, P. P.; Vasil'yev, P. V.; Belay, V. Ye.; Vedernikov, A. N.; Chernenko, S. T.

TITLE: [illegible]

SOURCE: Patogenez, eksperimental'naya profilaktika i terapiya luchevykh porazheniy [illegible] prevention [illegible] of radiation [illegible]; sbornik

L 41619-65

ACCESSION NR: AT5008046

tration of the protective agent. Orig. art. has: 5 tables.

CHERNENKO, G.T.

Effect of mercamine on diuresis and survival of rats following poisoning with mercuric chloride. Farm.i toks. 28 no.3:355-357 My-Je '65. (MIRA 18:[illegible])

1. Rukovoditel' raboty - doktor med. nauk P.P.Sakh[illegible].

CHERNENKO, G.T.

Mercamine. Med. rad. 9 no.11:65-70 N '64.

(MIRA 18:9)

S/081/62/000/008/024/057
B160/B101

11.1000

AUTHORS: Kaptel', O. I., Kuznetsov, Ye. L., Khozhaylov, N. K., Chernenko, G. V.

TITLE: Float instrument with ultrasonic positioning of the float, for measuring the density of a liquid under pressure

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 8, 1962, 148, abstract 8Ye12 (Sb. "Primeneniye ul'traakust. k issled. veshchestva", no.14. M., 1961, 323 - 336)

TEXT: The calculations for a float-type instrument for determining the density of a liquid under pressure are given and its sensitivity is indicated. Electrical and ultrasonic methods of positioning the float are discussed. The maximum error in density introduced by the electrical method is $7 \cdot 10^{-5}$ g/cm^3. Calculations are given for an ultrasonic float-positioning method based on the changes in amplitude of a reflected pulse which accompany changes in the orientation of the reflector and crystal planes in relation to each other. The ultrasonic method was checked experimentally. At a frequency of 30 Mc/s the ultrasonic method provides

Card 1/2

S/081/62/000/008/024/057
Float instrument with ultrasonic... B160/B101

sufficient accuracy in determining the density of a liquid. The instrument was calibrated with mixtures of alcohol and water. Check measurements show the mean arithmetic error in determining density to be about 0.4%. The results of measuring the densities of petroleum in strata of the Chubovka deposit at pressures of 35-300 atm are given. The petroleum's coefficient of compressibility is $6 \cdot 10^5$ g/cm^{2}atm. [Abstracter's note: Complete translation.]

Card 2/2

CHERNENKO, I.

Expert teaching of accelerated work. Prof.-tekh. obr. 18 no.8:22 Ag '61. (MIRA 14:9)
(Farm mechanization—Study and teaching)

AUTHOR: Chernenko, I., Deputy Principal 27-58-7-7/27

TITLE: Closer to the Requirements of Life! (Blizhe k trebovaniyam zhizni!)

PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1958, Nr 7, pp 15-16 (USSR)

ABSTRACT: In February 1957, new curricula and programs were introduced in schools for the Mechanization of Agriculture. According to the author, only 24 hours of the 250 hours provided for the study of agricultural machinery are reserved for problems covering the organization and execution of tractor work. Owing to the further development of the collective farm system and the reorganization of the machine and tractor stations (MTS), the responsibility of the agricultural mechanizer is growing in importance. For that reason, more time should be devoted to studies concerning the organization of tractor work. The reconditioning of agricultural machinery is another subject that should be taught more thoroughly.

ASSOCIATION: Uchilishche mekhanizatsii sel'skogo khozyaystva Nr 3 - Chernigovskaya oblast' (School for Mechanization of Agriculture Nr 3 - Chernigov Oblast)

Card 1/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308510005-9"

Closer to the Requirements of Life! 27-58-7-7/27

1. Agriculture--USSR 2. Machines--Development 3. Personnel--Study and teaching

Card 2/2

CHERNENKO, I.

Construction on a contract basis in the Maritime Territory. Sel'. stroi. 15 no.11:4-5 N '60. (MIRA 13:11)

1. Upravlyayushchiy trestom "Primorstroy."
(Maritime Territory--Construction industry)

MISHCHENKO, O.S., doktor med. nauk; CHERNENKO, I.A.[translator]; DEMCHENKO, L.O., red.; BYKOV, M.M., tekhn. red.

[Prevention of helminthic diseases in children] Zapobihannia hlistiarym zakhvoriuvanniam u ditei. Kyiv, Derzh. med. vyd-vo URSR, 1961. 14 p. (MIRA 15:3)

(CHILDREN--DISEASES)
(WORMS, INTESTINAL AND PARASITIC)

BABKO, Igor' Mikhaylovich, kand. med. nauk; CHERNENKO, I.A. [translator]; KOSHEL', M.G.[Koshel', M.H.], red.; BOYKO, V.P.[Boiko, V.P.], tekhn. red.

[Milk formulas for the feeding of young children] Molochni sumishi dlia vyhodovuvannia ditei rann'oho viku. Vyd.2., perer. i dop. Kyiv, Derzhmedvydav URSR, 1963. 43 p. (MIRA 16:12)

(MILK AS FOOD) (CHILDREN--NUTRITION)

CHERNENKO, I.F., inzhener.

Best blacksmith in Leningrad. Mashinostroitel' no.11:21 N '57.
(MIRA 10:10)
(Burlakov, Ivan Efimovich)

CHERNENKO, I.M.

Underground waters of the northern part of the Aral Sea region as a source of water supply for pastures. Vest. AN Kazakh.SSR 21 no.2:39-45 F '65. (MIRA 18:3)

BARILENKO, V.P.; YEMEL'YANOVA, G.F.; CHERNENKO, I.N. (Dnepropetrovsk)

Activity of the Red Cross Society in the program of the departments of public health organization. Sov. zdrav. 19 no.7:39-41 '60. (MIRA 13:8)

1. Iz kafedry organizatsii zdravookhraneniya (zav. G.F. Yemel'yanova) Dnepropetrovskogo meditsinskogo instituta i Dnepropetrovskogo oblastnogo komiteta Obshchestva Krasnogo (predsedatel' I.N. Chernenko).
(PUBLIC HEALTH ADMINISTRATION--STUDY AND TEACHING)

MOZHEYKO, I.A., kand. tekhn. nauk (Tiraspol'); CHERNENKO, I.P., inzh. (Tiraspol')

Measures for the melioration of the floodlands of small rivers in Moldavia. Gidr. i mel. 16 no.8:10-14 Ag '64. (MIRA 17:10)

CHERNENKO, I. S. (Postgraduate Student), KIRILLOV, M. N. (Professor) Omsk Veterinary Institute.

"Treatment of posthitis in bulls by surgical operation," Veterinariya, Vol. 37, No. 12, p. 54, 1960.

KIRILLOV, M.N., prof.; CHERNENKO, I.S., aspirant

Operative treatment of posthitis in bulls. Veterinariia 37 no.12:54 D '60. (MIRA 15:4)

1. Omskiy veterinarnyy institut.
(Bulls--Diseases and pests) (Penis--Diseases)

CHERNENKO, I.S., assistent; PETROV, V.G., student

Surgical method for treating balanoposthitis in bulls. Veterinariia 42 no.7:82-83 Jl '65. (MIRA 18:9)

1. Omskiy veterinarnyy institut.

CHERNENKO, I.S., assistent

Use of aminazine in surgery. Veterinariia 40 no.7:55-56 Jl '63. (MIRA 16:8)

1. Omskiy veterinarnyy institut.
(Chlorpromazine) (Anesthesia in veterinary surgery)

AUTHORS: Gulyaev, A. P. and Chernenko, I. V. (TsNIITMASh).

TITLE: Influence of the deformation at low temperatures on the phase transformations and the properties of austenitic 1X18H9T steel. (Vliyanie deformatsii pri nizkikh temperaturakh na fazovye prevrashcheniya i svoystva austenitnoy stali 1X18H9T).

PERIODICAL: "Metallovedenie i Obrabotka Metallov", (Metallurgy and Metal Treatment), 1957, No.5, pp. 2-7 (U.S.S.R.).

ABSTRACT: The aim of the here described work was to investigate the influence of deformation at sub-freezing temperatures on the transformation of austenite into martensite and the resulting changes in the mechanical properties of the steel. Specimens of steel containing 0.12% C, 0.48% Si, 1.14% Mn, 0.028% P, 0.02% S, 16.9% Cr, 10.5% Ni, 0.61% Ti, were hardened from 1050°C in water (fullest solution of carbides in the austenite) and some of the specimens were subsequently stabilised by annealing at 800°C for 100 hours (intensive separating out of carbides). The austenite to martensite transformation under the influence of plastic deformation was studied at temperatures +100, +80, +20, 0, -20, -74, -95 and -196°C. The deformation was effected by torsion since in this case the cylindrical shape of the specimen is conserved until fracture and there is a uniform deformation along the entire length of the specimen.

Card 1/3

Influence of the deformation at low temperatures on the phase transformations and the properties of austenitic 1X18H9T steel. (Cont.)

The graphs, Fig.1, show the influence of the degree of deformation and of the deformation temperature on the percentage of the forming magnetic phase; the graphs, Fig.2, show the influence of the temperature of deformation on the quantity of deforming martensite; the graph, Fig.3, shows the influence of the percentage of martensite on the hardness; the graph, Fig.4, shows the curves of transformation of martensite into austenite during heating; the graph, Fig.5, shows the transformation of the martensite into austenite during heating for the case of deformation at the temperatures 0°, -20° and -196°C; the graphs, Fig.6, show the influence of the degree of deformation on the mechanical properties of the steel deformed at various temperatures. It was found that 18-9 austenitic steels which contain Ti and have an austenitic structure at room temperature undergo γ to α_2 transformation as a result of plastic deformation at lower than room temperatures. The quantity of martensite increases with increasing degree of deformation and with decreasing deformation temperature. The increase in the quantity of the magnetic phase is largest in the case of deformation at about -70°C, up to 80% deformation (torsion).

Influence of the deformation at low temperatures on the phase transformations and the properties of austenitic 1X18H9T steel. (Cont.)

A further decrease in temperatures and an increase in the degree of deformation bring about only an insignificant increment in the martensite quantity. In the case of heating of the deformed specimens at 300 to 500°C an inverse α_2 to γ_2 transformation takes place; the initial temperature of this transformation depends on the quantity of the martensite forming during the process of deformation. The deformation leads to an increase in the strength and a decrease in the plasticity of the metal; for an equal degree of deformation the increase in strength will be larger if the deformation is accompanied by martensite formation. Austenite forming as a result of the reverse α_2 to γ_2 transformation has a higher yield point and relative elongation than austenite of equal strength in which no γ to α_2 transformations took place. Six figures.

Card 3/3

CHERNENKO, I. V.: Master Tech Sci (diss) -- "Investigation of the effect of re-formation by twisting on the phase transformations and mechanical properties of 1Kh18N9T steel". Moscow, 1959, published by the TsBNTI of Heavy Machinebuilding. 15 pp (Main Admin of Sci Res and Design Organizations of the Gosplan USSR, Central Sci Res Inst of Technology and Machinebuilding TsNIITMash), 150 copies (KL, No 12, 1959, 130)

CHERNENKO, I. V.

18(7) PHASE I BOOK EXPLOITATION SOV/3355

Akademiya nauk SSSR. Institut metallurgii. Nauchnyy sovet po problemam zharoprochnykh splavov

Issledovaniya po zharoprochnym splavam, t. IV (Studies on Heat-resistant Alloys, vol. 4), Moscow, Izd-vo AN SSSR, 1959. 400 p. Errata slip inserted. 2,200 copies printed.

Ed. of Publishing House: V. A. Klimov; Tech. Ed.: A. P. Guseva; Editorial Board: I. P. Bardin, Academician; O. V. Kurdyumov, Academician; M. V. Ageyev, Corresponding Member, USSR Academy of Sciences; I. A. Oding, I. N. Pavlov, and I. P. Zudin, Candidate of Technical Sciences.

PURPOSE: This book is intended for metallurgists concerned with the structural metallurgy of alloys.

COVERAGE: This is a collection of specialized studies of various problems in the structural metallurgy of heat-resistant alloys. Some are concerned with theoretical principles, some with descriptions of new equipment and methods, others with properties of specific materials. Various phenomena occurring under specified conditions are studied and reported on. For details, see Table of Contents. The articles are accompanied by a number of references, both Soviet and non-Soviet.

Table of Contents

Studies (Cont.) SOV/3355

Chernenko, I. V. Effect of Plastic Deformation at Low Temperatures on the Heat-resistant Properties of Type 18-8-Ti Austenitic Steel 214

Savitskiy, Ye. M., and M. A. Tylkina. Recrystallization of the Refractory Metals Titanium, Hafnium, Tantalum, Rhenium, and Tungsten, and Their Alloys 218

Oridoroga, V. N., V. I. Trefilov, and A. K. Butylenko. Effect of Structure on Plasticity of Chromium 226

Agreev, M. V., and V. A. Trapeznikov. Production of Pure Chromium 237

Svechnikov, V. N., Yu. A. Kocherzhinskiy, V. M. Pan, Yu. Ye. Kayatranko, and A. K. Shutov. A Study of the Chromium-Niobium-Vanadium System 248

Orum-Orzhinskiy, M. K., and D. I. Prokofyev. Constitution Diagram of the Ternary System Chromium-Tungsten-Molybdenum 257

Card 8/12