KALMYKOVA, K.P. (Leningrad)

On Apothecary Island. Zdorov'e 6 no. 11:8 N '60. (MIRA 13:10)
(LENINGRAD--MEDICAL MUSEUMS)

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 125 (USSR) SOV/124-58-5-5802

AUTHORS: Narzullayev, B. N., Kalmykova, L. G.

TITLE: Physical Theories on the Strength of Solids (Review of Modern Concepts) [Fizicheskiye teorii prochnosti tverdykh tel (Obzor sovremennykh predstavleniy)]

PERIODICAL: Tr. AN TadzhSSR, 1956, Vol 54, pp 103-114

ABSTRACT: A survey-type article. The universally accepted theory of brittle failure (Griffith theory) is examined and it is pointed out that the stress is not the only factor causing mechanical failure. The time element in strength problems which previously was regarded as a secondary parameter now assumes a primary significance and serves as the principal subject of investigation by the authors. An explanation of the strength of solids as a function of time is given according to Murgatroyd and Orowan. It is pointed out that the time-bound character of the strength makes imperative a reconsideration of the established notions on the strength limits as characteristics independent of the duration of stress application. Bibliography: 21 references.

Card 1/1 1. Solids--Theory 2. Solids--Mechanical properties 3. Solids--Physical properties

L. S. Bryukhanova

KALMYKOVA, L.G., nauchnyy sotrudnik

Quantitative perimetry in diseases of the optic nerve. Oft.zhur. 12 no.2:78-82 '57. (MIRA 10:11)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta glaznykh bolezney im. prof. Girshmana (dir. - chlen-korrespondent AMN SSSR. prof. I.I.Merkulov)
(PERIMETRY)

KALMYKOVA, L.G., nauchnyy sotrudnik

Quantitative perimetry in diseases of the optic nerve. Vop. neirooft. [illegible]92 '61. (MIRA 14:9)
(OPTIC NERVE—DISEASES) (PERIMETRY)

PARFENOV, A.I.; SHUL'TS, M.M.; KOCHERGINA, N.N.; IVANOV, V.P.; YEVNINA, S.B.; KALMYKOVA, L.P.; AGEYEVA, Ye.D.

Electrode properties and chemical stability of a number of multicomponent lithium silicate glasses. Vest. LGU 18 no.4: 163-166 '63. (MIRA 16:3)
(Electrodes, Glass) (Lithium silicates) (Oxides)

L 42142-66 EWP(e)/EWT(m)/EWP(j)/T DS/RM/WH

ACC NR: AP6022424 SOURCE CODE: UR/0364/66/002/004/0420/0425

59
58
B

AUTHOR: Bobrov, V. S.; Shul'ts, M. M.; Kalmykova, L. P.

ORG: Leningrad State University imeni A. A. Zhdanov (Leningradskiy gosudarstvennyy universitet)

TITLE: Coordination state of boron in lithium borate glasses, based on a study of their electrode properties.

SOURCE: Elektrokhimiya, v. 2, no. 4, 1966, 420-425

TOPIC TAGS: borate glass, lithium glass, electrode potential, ACID BASE EQUILIBRIUM, BORON, CHEMICAL BONDING, COORDINATION CHEMISTRY

ABSTRACT: The electrode behavior of glasses of the Li_2O-B_2O_3 system was studied by recording the potential of the glass electrode versus the pH (i. e., plotting E-pH curves) in a universal water-alcohol buffer solution containing 0.1 mole of Li ions per liter, 85% ethyl alcohol, and also hydrobromic, salicylic, monochloroacetic, and benzoic acids (0.05 M each). It was found that the coordination state of boron manifests itself in the electrode behavior of the glasses. An increase in the content of Li_2O to 42 mole % causes an increase in the relative content of strongly acidic ionogenic groups $[BO_{4/2}]^-H^+$ of tetracoordinated boron. The electrode behavior of the glasses was shown to reflect the influence of various ionogenic groups of tetracoordinated boron, which are characterized by a marked stability of their bond with hydrogen ions. The observed correlation between the electrode behavior of glasses and the coor-

Card 1/2 UDC: 541.135.53

L 42142-66

ACC NR: AP6022424

dination state of boron indicates that the "electrode" method is sufficiently sensitive for studies of structural transformations in lithium borate glasses. Authors are deeply grateful to M. D. Anikiyeva for assistance in the analysis of the glasses. Orig. art. has: 3 figures and 1 table.

SUB CODE: 07/ SUBM DATE: 01Jul65/ ORIG REF: 017/ OTH REF: 001

Card 2/2 MLP

L 38163-66 EWT(m)/EWP(a) WW

ACC NR: AP6019236 (A) SOURCE CODE: UR/0364/66/002/003/0288/0294

AUTHOR: Bobrov, V. S.; Shul'ts, M. M.; Kalmykova, L. P.

ORG: Leningrad State University im. A. A. Zhdanov (Leningradskiy gosudarstvennyy universitet)

TITLE: Differentiation of the bond stability of a hydrogen ion in lithium borosilicate glass

SOURCE: Elektrokhimiya, v. 2, no. 3, 1966, 288-294

TOPIC TAGS: borate glass, lithium, ~~hydrogen bond~~, molecular structure, electrode, electric potential, acid solution, ion, electrochemistry, HYDROGEN BONDING, SILICATE GLASS, BONDING PROPERTY

ABSTRACT: A new type of experimental curve (potential - pH) composed of 3 steps and linear portions is developed for the study of hydrogen bond stability and boron atom coordination in the Li_2O-B_2O_3-SiO_2 system. The displacement of the curves obtained in buffer solutions as a function of B_2O_3 content (in the glass electrode) was related to the grouping of bond stabilities of hydrogen ions "differentiation effect". Four different types of curves having as many as 3 steps and linear portions of varying slope and/or levels were obtained. Curves are given for glass with a Li_2O content of 33 mol% and boron anhydride contents ranging from 0 to 20%. The addition of as little as 5% B_2O_3 shifted the E - pH curve downwards and changed the linear 0% line into one

Card 1/2 UDC: 541.135.53

having 3 slopes. The initial slopes were related to the ionic group [BO 4/2]$^{-}H^{+}$, where boron had a coordination of four. At higher pH levels the appearance of the ionic groups [SiO 3/2]OH caused the slope changes. These two regions were separated by a linear slope of 18 mv/pH as a result of the intermediate mixing of the two ionic groups. The three-stepped character of the curves was maintained under a variety of experimental conditions. A section of the Na_2O-B_2O_3-SiO_2 ternary, in which boron has a coordination of four, was shown with points indicating the range of compositions used experimentally. About half the points fell within that region. Data are presented for the 11 mol% B_2O_3 triangular section for Li_2O contents ranging from 24 to 39%. Again, the differentiation effect occurred and the slope changes were interpreted as before; [BO 4/2]$^{-}H^{+}$, [BO 2/2]OH and [SiO 3/2]OH are related to slope changes a, b and c respectively. Orig. art. has: 4 figures.

SUB CODE: 07,11/ SUBM DATE: 31Mar65/ ORIG REF: 011/ OTH REF: 000

3(5)

AUTHOR: Kalmykova, M. A.

SOV/20-127-2-50/70

TITLE: On the Biostratigraphic Distribution of the Marine Upper Paleozoic Sediments of the Darvaz

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 2, pp 411-414 (USSR)

ABSTRACT: The sediments mentioned in the title are widely distributed in the Darvaz and form an almost meridional, more than 500 m thick stratum. The upper part of Permian lacks, as a rule, so that the Upper Paleozoic is superimposed by Mesocenozoic deposits. A survey of the division of the mentioned sediments (Refs 3-6, 11-13) is given. Table 1 shows a comparison of the references 11 and 12 with the references 4 and 5. The author sorted out 8 fusulinide zones on the strength of an investigation of the fusulinide layers in 7 rivers. They correspond, according to their extent, to the stages or parts of the stages to the references 9-11 and to the horizons of the scheme in references 1 and 2: (I) Zone of Fusulinella and Fusulina (C_2^{2-2}). (II) Zone of Triticites

and Pseudofusulina (C_3^{1-2}). (III) Zone of Schwagerina and the primitive Parafusulina (P_I^I). (IV) Zone Parafusulina, Pseudoschwagerina, Pseudofusulina kraffti, Ps. vulgaris (P_I^{2a}). (V) Zone with Misellina, Brevaxina, Parafusulina (P_I^{2b}). (VI) Zone with Misellina claudiae (P_2^{2a}). (VII) Zone Polydiexodina (P_2^I). (VIII) Zone Reichelina (P_2^2).

The first zone rests transgressively upon the Middle Paleozoic sediments (Lower Carboniferous up to Silurian inclusively), usually with an angular discordance (Refs 2,7,8,9). The second zone rests concordantly upon limestones of the Verkhne-Moskovskaya lower stage of Middle Carboniferous and is superimposed by schists and tuff-sandstones of the

On the Biostratigraphic Distribution of the Marine Upper Paleozoic Sediments of the Darvaz

SOV/20-127-2-50/70

Charymdarinskaya suite. The zones (III) - (V) contain the suites Gundarinskaya, Safetdaronskaya, and Charymdarinskaya. Their boundaries are not stable. This confirms the assumption that these 3 suites are according to their extension of different age and that they represent facial analogs in individual sections of the Darvaz. There are 1 table and 13 Soviet references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut (All-Union Scientific Research Institute of Geology)

PRESENTED: February 11, 1959, by D. V. Nalivkin, Academician

SUBMITTED: January 19, 1959

Card 3/3

ANOSOVA, A.N.; BENSH, F.R.; GROZDILOVA, L.P.; DOBROKHOTOVA, S.V.; KALMYKOVA, M.A.; KIREYEVA, G.D.; LEBEDEVA, N.S.; MIKLUKHO-MAKLAY, A.D.; RAUZER-CHERNOUSOVA, D.M.; SHCHERBOVICH, S.F.

Revision of the taxonomy of the genus Schwagerina and genera close to it. Vop. mikropaleont. no.8:60-75 '64.

(MIRA 18:5)

KALMYKOVA, M.A.

Comparison of the Permian of Darvaz with the coeval sediments of adjacent regions. Trudy VSEGEI 93:161-174 '64. (MIRA 18:7)

KALMYKOVA, M.A.

Biostratigraphic correlation according to Foraminifera in the Lower Permian sediments of the Pinega Basin. Dokl. AN SSSR 163 no.5:1221-1224 Ag '65. (MIRA 18:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy Institut. Submitted February 5, 1965.

KALMYKOVA, M.S.

Nurses and Nursing

Activities of the Nursing Council of the Botkin Hospital in 1951.
Med.sestra, No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952.

POPOV, I.S.; VARTAPETOVA, Ye.M.; KALMYKOVA, N.V.

Tinea imbicata ("Tokelau"). Vest.venor. no3:51-53 May-Jun [illegible]:11)

1. Prof. Popov; Assistant Vartapetova; Senior Laboratory Worker Kalmykova.

BEZNOS, T.I.; RAFALOVICH, S.M.; BOGUSLAVSKAYA, A.V.; DOLGIKH, A.I.; KAMYKOVA, M.V. (Khar'kov)

Role of fungi in complications from treatment with antibiotics. Vrach. delo no.8:76-78 Ag '60. (MIRA 13:9)

1. Ukrainskiy nauchno-issledovatel'skiy kozhno-venerologicheskiy institut, Detskaya bol'nitsa Yuzhnoy zheleznoy dorogi i Chetvertyy kozhno-venerologicheskiy dispanser.
(FUNGI, PATHOGENIC) (ANTIBIOTICS)

PESHKOVSKAYA, Mariya Mikha[illegible]; ANDREYEV, Mikhail Vikent'yevich; KALIKOVA, Nataliya B[illegible]; MALINOVA, Revekka Davydovna; SASHINA, Yelena Konstantinovna; KHUTORSKAYA, Ye.S., red.

[Technical and economic calculations in enterprises of the chemical industry] Tekhniko-ekonomicheskie raschety na predpriiatiiakh khimicheskoi promyshlennosti. Moskva, Vysshaia shkola, 1965. 358 p. (MIRA 18:12)

TIZDEL', R.R.; KARPYSHEV, Ye.S.; MOLOKOV, L.A.; KONYAROVA, L.P.; PESTOVSKIY, K.N.; ZENKOV, M.V.; KIRICHENKO, N.I.; NEYSHTADT, L.I.; MALYAROVA, I.Ye.; PIRTSKHALAYSHVILI, G.P.; KALMYKOVA, N.I.; BELYY, L.D., doktor geol.-miner. nauk; BOROVOY, A.A., red.; GOTMAN, T.P., red.; LARIONOV, G.Ye., tekhn. red.

[Geology and dams]Geologiia i plotiny. Pod obshchei red. A.A. Borovogo. Moskva, Gosenergoizdat,(Its Materialy po proektirovaniiu gidroenergeticheskikh uzlov. Seriia 2: Izyskaniia) Vol.2. 1962. 151 p. (MIRA 15:9)

1. Moscow. Vsesoyuznyy gosudarstvennyy proyektnyy institut "Gidroenergoproekt." 2. Vsesoyuznyy gosudarstvennyy proyektnyy institut , Moscow (for all except Borovoy, Gotman, Larionov).

(Geology) (Dams)

KALMYKOVA, N.M.

Analytical representation of fields of meteorological elements.
Trudy TSIP no.46:79-83 '56. (MLRA 9:12)
(Meteorology)

KALMYKOVA, N.M. Cand Geog Sci -- (diss) "Formation of ~~the~~ a Siberian anti-cyclon."Mos,1957. 11 pp 21 cm. (Main Administration of the Hydrometeorological ~~Office~~ Service under the Council of Ministers USSR. Central Inst of ~~Prognoses~~ Forecasts). 110 copies. (KL, 23-57, 110).

KALMYKOVA, N. M.

144. Formation of Siberian Anticyclone

"On the Formation of the Siberian Anticyclone," by N. M. Kalmykova, presents a brief historical-statistical study of the temperature anomalies of the cities of Yeniseysk and Chita during periods (September) of early and late formation of the Siberian anticyclone, and states that the diversity of temperature anomalities of Yeniseysk and Chita in August can be utilized as a prognostic index. (Meteorologiya i Gidrologiya, No 4, Apr 57, pp 20-24) (U)

KALMYKOVA N. M.

PHASE I BOOK EXPLOITATION SOV/3794
SOV/49-M-74

Moscow. Tsentral'nyy institut prognozov

Voprosy dolgosrochnykh prognozov pogody (Problems in Long-Range Weather Forecasting) Moscow, Gidrometeoizdat, 1959. 72 p. (Series: Its: Trudy, vyp. 74) 800 copies printed.

Sponsoring Agency: USSR. Sovet Ministrov. Glavnoye upravleniye gidrometeorologicheskoy sluzhby.

Ed. (Title page): N.A. Bagrov; Ed. (Inside book): V.I. Tarkhunova; Tech. Ed.: I.M. Zarkh.

PURPOSE: The publication is intended for scientific workers, employees of the weather forecasting service, and students of hydrometeorological institutes and universities.

COVERAGE: This is a collection of 7 articles dealing with the problem of long-range weather forecasting. Some articles contain specific recommendations for charting monthly or mean-range forecasts, and others deal with the theoretical problems of weather forecasting.

Card 1/3

No personalities are mentioned. References are given at the end of each article.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress

Card 3/3

JA/cdw/jb
7-28-60

KALMYKOVA, N.M.

Forecasting the mean monthly temperature anomaly in the European part of the U.S.S.R. and Western Siberia. Trudy TSIP no.97:93-101 '60. (MIRA 14:3)

(Weather forecasting)

KALMYKOVA, N.M.

Temperature anomaly of the winters in the region of the formation of the Siberian anticyclone in connection with the intensity of its development. Trudy TSIP no.123:63-77 '63. (MIRA 16:9)

3

L 53047-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG
ACCESSION NR: AP5012970 UR/0078/65/010/005/1131/1137
546.55:541.49+661.863/.868.7

AUTHOR: Dyatlova, N. M.; Temkina, V. Ya.; Belugin, Yu. F.; Lavrova, O. Yu.; Bertina, L. E.; Iozefovich, F. D.; Kalmykova, N. N.; Zhirov, Ye. P. 20 B

TITLE: Complexing of beta-hydroxyethyliminodiacetic acid with rare earth elements

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 5, 1965, 1131-1137 27

TOPIC TAGS: beta-hydroxyethyliminodiacetic acid, rare earth complex formation, dysprosium separation, yttrium separation, rare earth element, complex compound

ABSTRACT: The authors studied the capacity of β-hydroxyethyliminodiacetic acid to form complexes with rare earth elements, determined the composition of the complexes formed, and calculated the instability constants of the latter and the dissociation constants of the complexing agent. Such quantitative characteristics of complex-forming processes facilitate the determination of optimum conditions of separation and purification of rare earth elements. The appreciable differences between the instability constants of the complexes show that this complexing agent can be used for the separation of rare earth metals. The difference in the pK of

Card 1/2

L 53047-65

ACCESSION NR: AP5012979

the complexes of dysprosium and yttrium, equal to 0.71, is particularly notable, since it exceeds any previous value attained with other complexing agents. Experiments involving the separation of a binary mixture containing 30% Y_2O_3 and 70% Dy_2O_3 by means of β-hydroxyethyliminodiacetic acid were very successful. It was found that as the atomic number of the rare earth metal increases, the stability of the complexes rises sharply at first (from lanthanum to europium), then remains approximately constant (from europium to lutetium). Orig. art. has: 8 figures, 2 tables, and 11 formulas.

ASSOCIATION: none

SUBMITTED: 16Sep63 ENCL: 00 SUB CODE: IC, GC

NO REF SOV: 001 OTHER: 011

Card 2/2

BC

B-I-5

PROCESSES AND PROPERTIES INDEX

Determination of small amounts of chromium in wrought iron with diphenylcarbazide. P. K. Kutsomushki and N. V. Kalmykova (Zavod. Lab., 1932, No. 7, 30—41).—A 0·2-g. sample is dissolved in 10 c.c. of 10% H_2SO_4, 8—10 drops of HNO_3 (d 1·4) are added, and oxides of N are expelled by boiling. 2 c.c. of 0·6% $AgNO_3$ and 2 c.c. of 15% $(NH_4)_2S_2O_8$ are added, and the solution is boiled to destroy excess persulphate, 4 c.c. of 0·2% NaCl being then added. After the disappearance of the MnO_4' colour, 15—20 c.c. of cold H_2O are added and the solution is cooled rapidly. $Fe(OH)_3$ is pptd. with 40 c.c. of 75% Na_2CO_3, and the whole made up to 100 c.c. and filtered. To 50 c.c. of the filtrate 20 c.c. of dil. (1 : 3) H_2SO_4 and 5 c.c. of 0·1% diphenylcarbazide are added, and the vol. is made up to 100 c.c. The colour is matched against that from known amounts of $K_2Cr_2O_7$. The method is quicker than that of Agnew (B., 1931, 297).

Ch. Abs. (e)

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

BC

B-I-5

Svoboda method of determining sulphur [in iron and steel] by combustion. E. I. FOGELSON, N. V. KALININA, and M. I. PINKHNOVSKII (Zavod. Lab., 1934, 3, 607—612).—Minor improvements of the Svoboda method are suggested; applying these, the method gives results identical with those given by Schulte's method for grey and malleable cast Fe, slightly higher for white cast Fe, considerably higher for high-speed steels, and slightly lower for C steels. R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

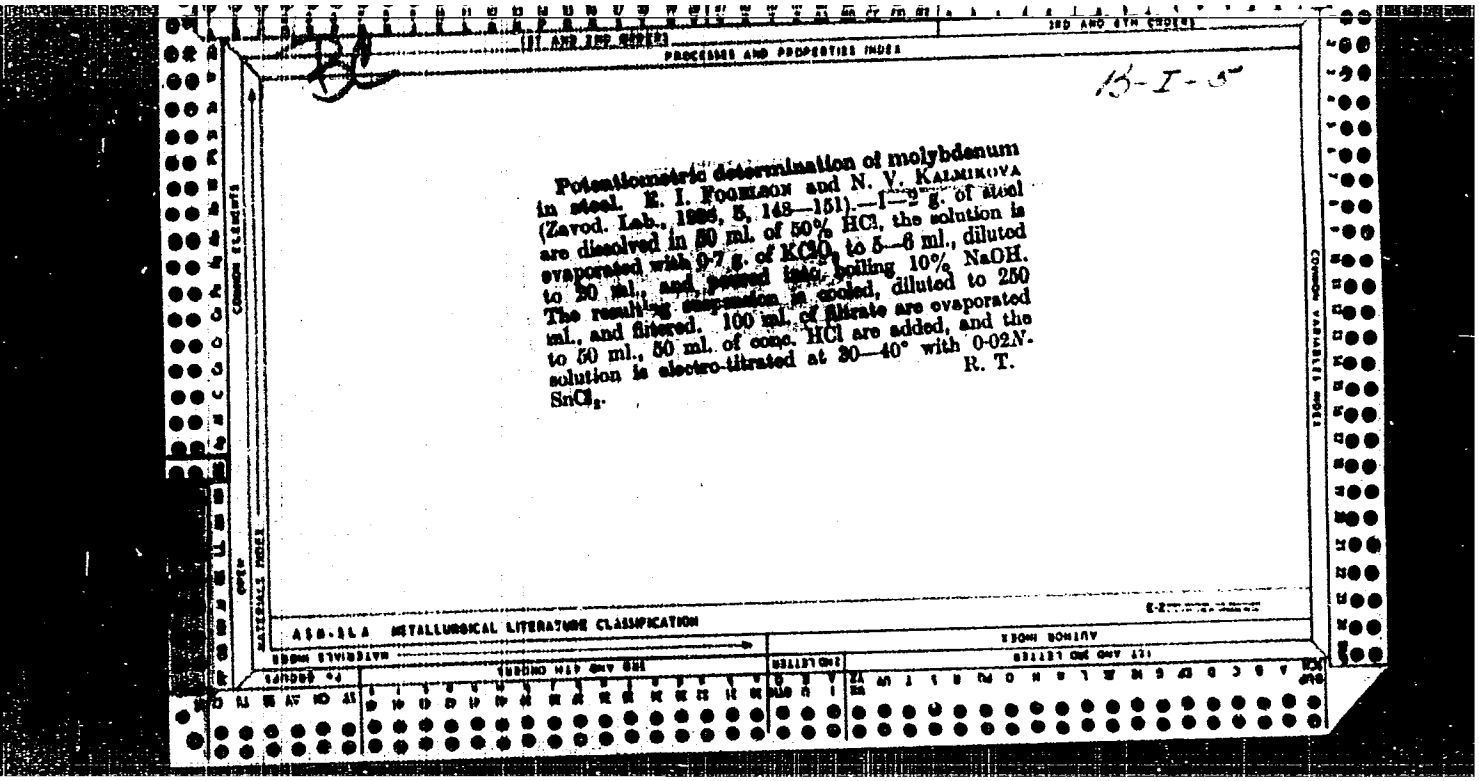
PROCESSES AND PROPERTIES INDEX

Ca

21

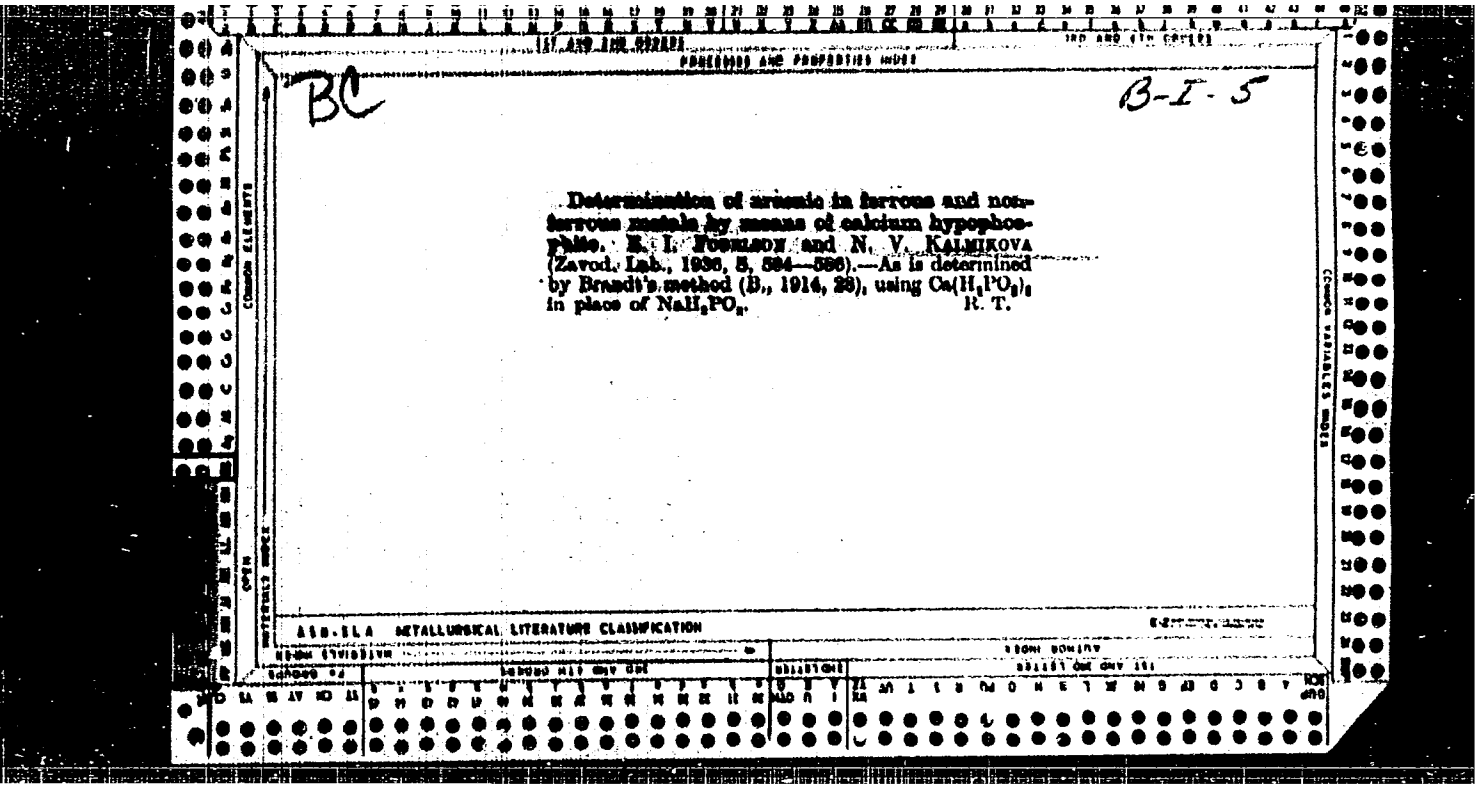
Application of volumetric analysis of sulfates to the determination of sulfur in coke. R. I. Fogel'son and N. V. Kalmuikova. *Zavodskaya Lab.* 4, 342-4 (1935). Accurate results were obtained by decompg. a coke sample with the Eschka mixt. and detg. the sulfate by the Kosegi method (C. A. 23, 3874). The results may be improved by filtering off $BaSO_4$ and $BaCrO_4$. Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



15-I-5

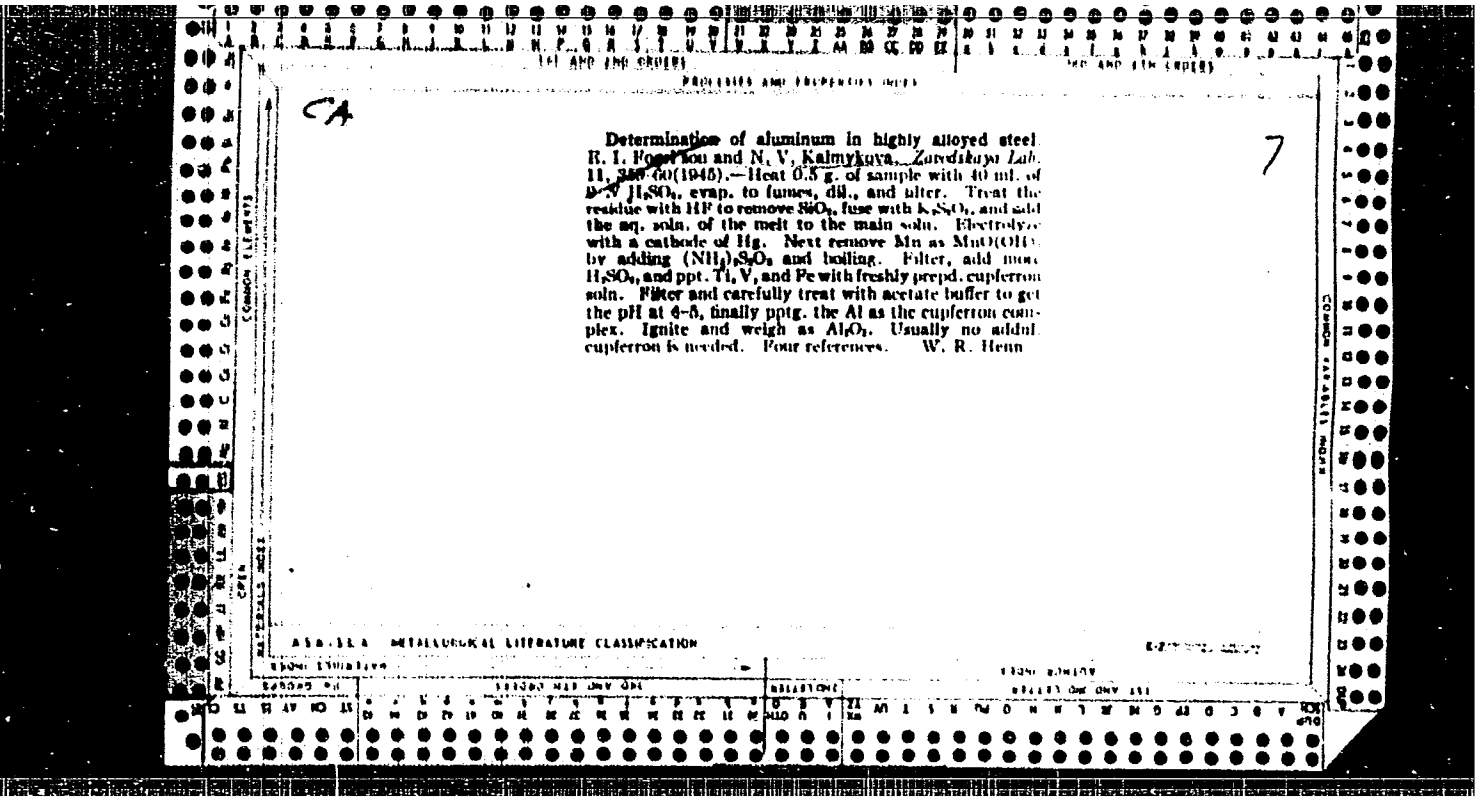
Potentiometric determination of molybdenum in steel. E. I. Fogelson and N. V. Kalmikova (Zavod. Lab., 1939, 8, 148—151).—1—2 g. of steel are dissolved in 30 ml. of 50% HCl, the solution is evaporated with 0·7 g. of $KClO_3$ to 5—6 ml., diluted to 20 ml., and poured into boiling 10% NaOH. The resulting suspension is cooled, diluted to 250 ml., and filtered. 100 ml. of filtrate are evaporated to 50 ml., 50 ml. of conc. HCl are added, and the solution is electro-titrated at 30—40° with 0·02*N*-$SnCl_2$. R. T.



BC

B-I-5

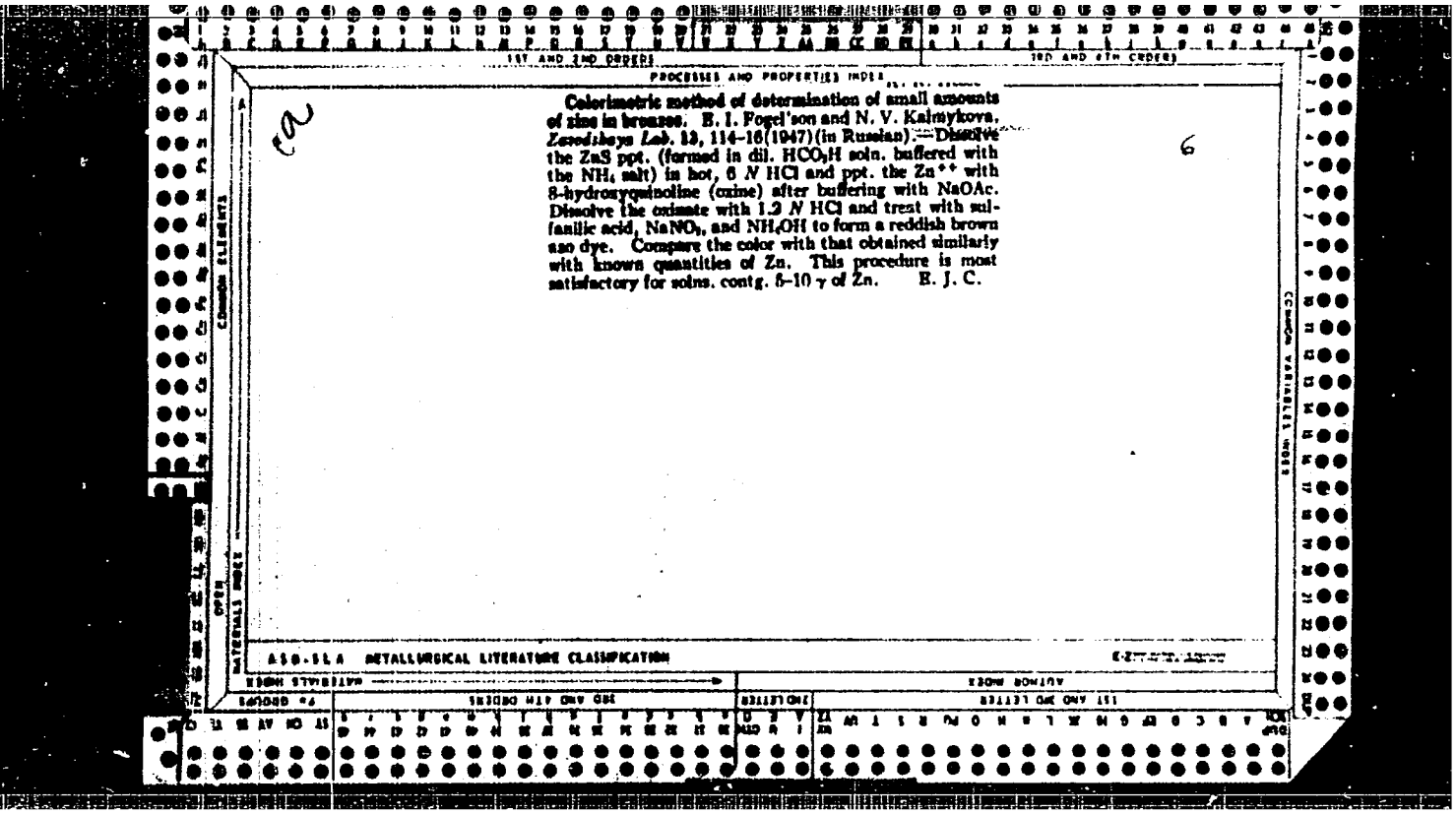
Determination of arsenic in ferrous and non-ferrous metals by means of calcium hypophosphite. E. I. TUGOLSON and N. V. KALMIKOVA (Zavod. Lab., 1936, 5, 584—586).—As is determined by Brandt's method (B., 1914, 28), using $Ca(H_2PO_2)_2$ in place of NaH_2PO_2. R. T.



CA

7

Determination of aluminum in highly alloyed steel. R. I. Fogel'son and N. V. Kalmykova. *Zavodskaya Lab.* 11, 389-90(1945).—Heat 0.5 g. of sample with 40 ml. of 1:7 H_2SO_4, evap. to fumes, dil., and filter. Treat the residue with HF to remove SiO_2, fuse with $K_2S_2O_7$, and add the aq. soln. of the melt to the main soln. Electrolyze with a cathode of Hg. Next remove Mn as $MnO(OH)_2$ by adding $(NH_4)_2S_2O_8$ and boiling. Filter, add more H_2SO_4, and ppt. Ti, V, and Fe with freshly prepd. cupferron soln. Filter and carefully treat with acetate buffer to get the pH at 4–5, finally ppt'g. the Al as the cupferron complex. Ignite and weigh as Al_2O_3. Usually no addnl. cupferron is needed. Four references. W. R. Henn



Colorimetric method of determination of small amounts of zinc in bronzes. B. I. Fogel'son and N. V. Kalmykova, *Zavodskaya Lab.* 13, 114–16(1947)(in Russian).—Dissolve the ZnS ppt. (formed in dil. HCO_2H soln. buffered with the NH_4 salt) in hot, 6 *N* HCl and ppt. the Zn^{++} with 8-hydroxyquinoline (oxine) after buffering with NaOAc. Dissolve the oxinate with 1.2 *N* HCl and treat with sulfanilic acid, $NaNO_2$, and NH_4OH to form a reddish brown azo dye. Compare the color with that obtained similarly with known quantities of Zn. This procedure is most satisfactory for solns. contg. 5–10 γ of Zn. E. J. C.

ACC NR: [illegible] SOURCE CODE: [illegible]

INVENTORS: [illegible], V. S.; Kalmykova, O. V.

ORG: none

TITLE: A device for measuring the coefficient of light diffusion. Class 42, No. [illegible]

SOURCE: Izobret prom obraz tov zn, no. 15, [illegible], 96

TOPIC TAGS: light diffusion, measuring instrument, optic lens

ABSTRACT: This Author Certificate presents a device for measuring the coefficient of light diffusion of, say, long-focus objective lenses. The device includes a photometric sphere and a "black body" (see Fig. 1). The design reduces the size of the

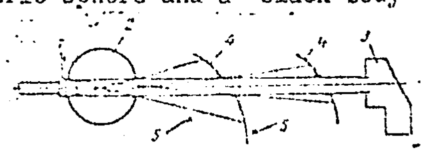


Fig. 1. 1 - test objective lens; 2 - photometric sphere; 3 - black body; 4 - spherical segments; 5 - auxiliary light sources

instrument and increases the precision of the measurements. The device contains auxiliary light sources and spherical segments positioned along the optical axis of the test objective lens in such a way that only the light beams from the interior

Card 1/2 UDC: 535.241.62

L 10093-67

ACC NR: AP6029937

surface of the segments and from the "black body" fall on the entrance aperture of the test objective lens. The auxiliary light sources are located at the center of curvature of the segments. Orig. art. has: 1 figure.

SUB CODE: 14, 20/ SUBM DATE: 24May65

KALMYKOVA, O.V.

Calculating the resolving power of objectives in photographing lined and radial test plates located in the focal plane of objectives of collimators. Opt.-mekh.prom. 25 no.5:26-27 My '58. (MIRA 11:9)
(Collimators) (Photographic optics)

L 16823-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD
ACCESSION NR: AP3003280 S/0286/63/000/003/0060/0060

AUTHOR: Kalmy*kova, S. B.; Izmaylov, A. V.

TITLE: Composition of solution for chemical nickel plating of magnesium alloys. Class C 23f; 48a, 6 sub 05. No. 152994

SOURCE: Byul. izobreteniy i tovarnykh znakov, no. 3, 1963, 60

TOPIC TAGS: nickel plaing composition, magnesium alloy, nickel sulfate, ammonium hypophosphate, sodium pyrophosphate

ABSTRACT: Composition of a solution for chemical nickel plating of magnesium alloys using nickel sulfate; its distinguishing feature is that in order to increase the strength of the coating on the base, the solution contains (in grams per liter):

Nickel sulfate	20
Ammonium hypophosphite	30
Sodium pyrophosphate	50

Card 1/2 1

IZMAYLOV, A.V.; KALMYKOVA, S.B.; SHEBUKROVA, L.A.; BALASHOV, A.A.

Electroless nickel plating of magnesium in pyrophosphate solutions. Izv. vys. ucheb. zav.; khim. i khim. tekh. 7 no.4:693-694 '64. (MIRA 17:12)

1. Kafedra fizicheskoy i kolloidnoy khimii Moskovskogo tekhnologicheskogo instituta myasnoy i molochnoy promyshlennosti.

S/020/60/133/04/16/031
B019/B060

AUTHORS: Kalmykova, S. S., Shestopalov, V. P.

TITLE: The Theory of the Modified Spiral With a Counter Winding

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 4, pp. 813-816

TEXT: Fig. 1 shows the system defined by the authors as a modified spiral with counter winding. The same figure also depicts five cases of different current distributions in the modified spiral. For the case (Fig. 1) in which the longitudinal component of the electric field on the axis differs from zero, the Fourier coefficients of the currents are given by the equation system (1). The dispersion equation of the system for this case is written down with formula (2). By a comparison of the dispersion curve, shown in Fig. 2, with that of a double spiral with a counter winding, it is shown that there are no differences between them in the region of longer waves. The physical causes of these properties of the spirals are discussed. Subsequently, the authors compare with the help of a diagram (Fig. 3) between the energy densities of the first

The Theory of the Modified Spiral With a Counter Winding

S/020/60/133/04/16/031
B019/B060

three components of an ordinary spiral, a double spiral with a counter winding, and that of the system considered here. The advantages offered by the system investigated here, which basically consist of a considerably lower stored energy of the system, are discussed. A comparison of the impedances of the three systems considered here, is made in Fig. 4. The impedance of the system under investigation is found to be larger compared to the other two. Finally, the authors discuss the dispersion equations for the other four cases of current distribution (Fig. 1) and then state that a comparison of the results obtained here with those from other papers (Refs. 7, 8, 9) yields a good agreement between theory and experiments. There are 4 figures and 9 references: 6 Soviet and 3 US.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo (Khar'kov State University imeni A. M. Gor'kiy)

PRESENTED: March 4, 1960, by M. A. Leontovich, Academician

SUBMITTED: March 3, 1960

Card 2/2

S/057/61/031/003/010/019
B125/B209

9.1300 (also 1130)

AUTHORS: Shestopalov, V. P. and Kalmykova, S. S.

TITLE: The theory of a modified spiral with cross winding

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 3, 1961, 327-335

TEXT: The authors study the equations and the distribution of the power flux in a modified spiral with cross winding. The spatial modification of a double spiral which has been thoroughly investigated by S. D. Vagner and N. I. Van'chkova (ZhTF,29,12,1475,1959), as well as by E. Johnson and L. Malter (Phys.Rev.,80,58,1950), is termed a modified spiral with cross winding. It conserves the symmetry of a double spiral with cross winding, but can easier be manufactured and facilitates heat abduction. The dispersion equation of this system is ascertained by the method of variations in the form suggested by G. V. Kisun'ko. Thus, the solution of the boundary problem is strictly limited to the postulate that the functionals

$$\left.\begin{aligned}\delta K^{\mathcal{E}}(\mathcal{E}) &= 2\int_S (\delta\mathcal{E}, -\mathbf{j}_0^{\mathcal{E}} + \mathbf{j}_1^{\mathcal{E}}(\mathcal{E}) + \mathbf{j}_2^{\mathcal{E}}(\mathcal{E}))\,ds = 0,\\ \delta K^{\mathcal{H}}(\mathcal{H}) &= 2\int_S (\delta\mathcal{H}, -\mathbf{j}_0^{\mathcal{H}} + \mathbf{j}_1^{\mathcal{H}}(\mathcal{H}) + \mathbf{j}_2^{\mathcal{H}}(\mathcal{H}))\,ds = 0,\end{aligned}\right\}$$

Card 1/11

20926

be steady. $\mathfrak{E}$ and $\mathfrak{H}$ denote the field strengths on the surface S dividing the volume V into the regions 1 and 2; $\vec{j}_0^{\,e,h}$ denotes the electric current and magnetic flux, $j_{1,2}^{e,h}$ the linear homogeneous operators of the magnetic and the electric impedance, respectively, on the surface S on the side of region 1 and 2, respectively. When the Ritz method is employed, and $\mathfrak{E}$ and $\mathfrak{H}$ are approximated by linear combinations $a_1\omega_1 + a_2\omega_2 + \ldots + a_n\omega_n$, the condition (1) for the functional $K^{e,h}$ will consist of the system of equations $\partial K^{e,h}/\partial a_i = 0$ representing the variated parameters. These equations play the role of approximate boundary conditions. Fig. 1 shows the modified spiral with the counter-winding and the path of the currents on its surface. The current is approximated by the double Fourier expansion

$$j = \sum_{n,\,m} j_{n,m} e^{i\frac{2\pi nz}{D}} e^{im\varphi} e^{ih_n z}. \tag{2}$$

$$\left.\begin{aligned} E_z &= \sum_{n,\,m} \begin{Bmatrix} I_m(\beta_n a) K_m(\beta_n r) \\ K_m(\beta_n a) I_m(\beta_n r) \end{Bmatrix} i \frac{\beta_n^2 a^2}{ka} \left(j_{rnm} - \frac{h_n a m}{\beta_n^2 a^2} j_{\varphi nm} \right) e^{-ih_n z} e^{im\varphi} e^{i\omega t}, \\ H_z &= \sum_{n,\,m} -\beta_n a \begin{Bmatrix} I'_m(\beta_n a) K_m(\beta_n r) \\ K'_m(\beta_n a) I_m(\beta_n r) \end{Bmatrix} j_{\varphi nm} e^{-ih_n z} e^{im\varphi} e^{i\omega t}, \end{aligned}\right\} \tag{3}$$

Card 2/11

I_m, K_m are the modified Bessel functions of m-th order, $\beta_n^2 = h_n^2 - k^2$, $h_n = h_0 + (2\pi n)/D$, $h_0 = \omega/v_0$, $k = \omega/c$ (ω - frequency, c - velocity of light). The authors employ the expansion $\vec{j} = \sum_{n,m} \vec{a}_{\mu\nu} \omega_{\mu\nu}$. The problem is solved in simple one-term approximation. When the charges do not accumulate on the band edges, j_z and j_φ read as follows:

$$j_z = \begin{cases} -\frac{A}{2b}\left(\frac{D}{2} - b + z\right), & -\frac{D}{2} - b \leq z \leq -\frac{D}{2} + b, & \pi - \varphi_0 \leq \varphi \leq \pi + \varphi_0; \\ \frac{A}{2b}\left(\frac{D}{2} + b + z\right), & -\frac{D}{2} - b \leq z \leq -\frac{D}{2} + b, & -\varphi_0 \leq \varphi \leq \varphi_0; \\ A, & -\frac{D}{2} + b \leq z \leq -b, & -\varphi_0 \leq \varphi \leq \varphi_0; \\ -\frac{A}{2b}(z - b), & -b \leq z \leq b, & -\varphi_0 \leq \varphi \leq \varphi_0; \\ \frac{A}{2b}(z + b), & -b \leq z \leq b, & \pi - \varphi_0 \leq \varphi \leq \pi + \varphi_0; \\ A, & b \leq z \leq \frac{D}{2} - b, & \pi - \varphi_0 \leq \varphi \leq \pi + \varphi_0. \end{cases} \quad (4)$$

Card 3/11

The theory of a modified spiral with cross...

$$j_\varphi = \begin{cases} -\frac{aA}{2b}(\pi-\varphi_0) \\ \frac{aA}{2b}\varphi_0 \\ -\frac{aA}{2b}\varphi_0 \\ -\frac{aA}{2b}\varphi \end{cases} -\frac{D}{2}-b\leq z\leq -\frac{D}{2}+b \begin{cases} \pi-\varphi_0\leq\varphi\leq\pi+\varphi_0; \\ \pi+\varphi_0\leq\varphi\leq-\varphi_0; \\ \pi-\varphi_0\leq\varphi\leq\varphi_0; \\ -\varphi_0\leq\varphi\leq\varphi_0; \end{cases} \quad (5)$$

$$\begin{cases} \frac{aA}{2b}\varphi \\ -\frac{aA}{2b}\varphi_0 \\ \frac{aA}{2b}\varphi_0 \\ \frac{aA}{2b}(\pi-\varphi) \end{cases} -b\leq z\leq b \begin{cases} -\varphi_0\leq\varphi\leq\varphi_0; \\ \pi+\varphi_0\leq\varphi\leq-\varphi_0; \\ \pi-\varphi_0\leq\varphi\leq\varphi_0; \\ \pi-\varphi_0\leq\varphi\leq\pi+\varphi_0. \end{cases}$$

The Fourier coefficients are then determined by

Card 4/11

The theory of a modified spiral with cross...

$$\left.\begin{aligned} j_{s00} &= A2\varphi_0 D; \quad j_{smn} = \frac{A}{2b}\frac{\sin m\varphi_0}{im}\frac{2\sin\frac{2\pi nb}{D}}{\left(\frac{2\pi n}{D}\right)^2}[(-1)^n-1][(-1)^m-1];\\ j_{\varphi 00} &= 0; \quad j_{\varphi mn} = \frac{aA}{2b}\frac{\sin m\varphi_0}{m^2}\frac{2\sin\frac{2\pi nb}{D}}{i\frac{2\pi n}{D}}[(-1)^n-1][(-1)^m-1]. \end{aligned}\right\} \quad (6)$$

and the dispersion equation has the following form:

$$I_0(\beta_0 a)K_0(\beta_0 a)\beta_0^2 a^2 + 4\frac{a^2}{D^2}\sum_{n,\ m\neq 0}\left\{I_m(\beta_n a)K_m(\beta_n a)\left(\frac{a\beta_n}{2\pi na/D}-\frac{h_n a}{\beta_n a}\right)^2 + \right.$$

$$\left. + I'_m(\beta_n a)K'_m(\beta_n a)\frac{k^2a^2}{m^2}\right\}\frac{\sin^2 m\varphi_0}{m^2\varphi_0^2}\frac{\sin^2\frac{2\pi nb}{D}}{\left(\frac{2\pi nb}{D}\right)^2}\times$$

$$\times[(-1)^n-1][(-1)^m-1]=0. \quad (7)$$

This equation differs from the equation of a spiral with counter-winding above all in the double sum and, besides the zeroth harmonic, it contains

only odd harmonics with respect to z and φ. The following are the conditions for zeroth and first resonance: $h_0 D/2\pi \ll 1$; $h_{-1} D/2\pi \ll 1$ (8). In this case, Eq. (7) assumes the form

(9)

where $const_1$ and $const_2$ depend on the parameters of the system. With long waves, there are no essential differences between the dispersion curve of a spiral with cross winding and its modifications, for the structure of both systems differs only insignificantly, and their dispersive properties are much alike. A shorter radius of the system improves dispersion but increases the ratio v_Φ/c. A broadening of the metal band has a similar effect. The following holds for any parameters: At $0.3\text{-}0.4 \ll ka \ll 0.8\text{-}0.9$, phase velocity v_Φ and group velocity v_{gr} decrease. Near $ka \approx 1$ (0.8 - 0.9), v_Φ has a minimum and v_{gr} tends toward zero. For $\infty < \lambda_g < D$ in the range $0.3 \ll ka \ll 0.8$, the zeroth harmonic becomes the minus-first, spatial

resonance is not present, and the higher harmonics make a considerable contribution to dispersion. The energy transferred by the main component of the field is significant only in the range of zeroth resonance, and decreases considerably already at ka = 0.2. Fig. 6 shows the energy density W for the first three components of an ordinary spiral (I), a double spiral with cross winding (II), and of the system under consideration (III). The impedances of these systems are intercompared in Fig. 7. In the range of λ_g, the differences in the configurations of the spirals become essential and their dispersive properties differ greatly. The dispersion equation for the case 1b reads as follows:

$$\left\{\sum_{m\neq 0} I_m(\beta_0 a)\,K_m(\beta_0 a)\,\frac{D^2}{a^2}\,\beta_0^2 a^2 \frac{\sin^4\frac{m\varphi_0}{2}}{m^2}\left[(-1)^m+1\right]-\right.$$

$$-k^2a^2\varphi_0^4\sum_{n\neq 0} I_1(\beta_n a)\,K_1(\beta_n a)\,\frac{\sin^2\frac{2\pi nb}{D}}{\left(\frac{2\pi nb}{D}\right)^2}\left[(-1)^n-1\right]+8\sum_{m,\,n\neq 0} I_m(\beta_n a)K_m(\beta_n a)\times$$

$$\left.\times\left(\frac{\beta_n a}{\frac{2\pi an}{D}}-\frac{h_n a}{\beta_n a}\right)^2+\frac{k^2a^2}{m^2}I'_m(\beta_n a)\,K'_m(\beta_n a)\right\}\frac{\sin^2\frac{2\pi nb}{D}}{\left(\frac{2\pi nb}{D}\right)^2}\frac{\sin^4\frac{m\varphi_0}{2}}{m^2}\times$$

$$\times\left[(-1)^n-1\right]\left[(-1)^m+1\right]=0 \qquad (11)$$

Card 7/11

The theory of a modified spiral with cross...

The last case is of academic interest only. There are 7 figures and 7 references: 5 Soviet-bloc and 2 non-Soviet-bloc. The two references to English-language publications read as follows: M. Chodorow, E. L. Chu. J.appl.Phys.,26,33,1955; S. K. Birdsall, T. E. Everhard, IRE Trans. on electron devices,E.Д. - 3,4,1956.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo (Khar'kov State University imeni A. M. Gor'kiy)

SUBMITTED: July 5, 1960

Card 8/11

27173
S/057/61/031/009/013/019
B104/B102

9,1300

AUTHORS: Shestopalov, V. P., Trem'yakov, O. A., and Kalmykova, S. S.

TITLE: Dispersion properties of a split waveguide with narrow baffle plates

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 9, 1961, 1104-1111

TEXT: A new kind of slowing-down systems called "split waveguide with narrow baffle plates" is described. From the standpoint of general symmetry, the system corresponds to a bifilar helix (c.f. Fig. 1). It is shown that the existence of narrow baffle plates changes considerably the dispersion properties of the system studied. The system was studied by a method developed by M. Chodorow et al. (J. Appl. Ph., 26, no. 1, 1956) on the basis of the dispersion equation

$$\sum_{m,n}{}'\left\{\left[m^2\frac{h_n^2a^2}{\beta_n^2a^2}I_mK_m+k^2a^2I'_mK'_m\right]|J_{\varphi_{mn}}|^2+\beta_n^2a^2I_mK_m|J_{z_{mn}}|^2-\right.$$
$$\left.-mh_naI_mK_m(J^*_{\varphi_{mn}}J_{z_{mn}}+J_{\varphi_{mn}}J^*_{z_{mn}})\right\}=0, \qquad (1)$$

Card 1/6

Dispersion properties of a split ...

numerically by successive approximation. The roots of these equations are given in Table 4. Fig. 3 shows the dispersion curves in coordinates, as used by Chodorow in Ref. 2. It is concluded that the system studied has the same quantity of spatial harmonics as the bifilar winding investigated by Chodorow. There are 4 figures, 4 tables, and 6 references: 2 Soviet and 4 non-Soviet. The three references to English-language publications read as follows: L. Stark, J. Appl. Ph., 25, no. 9, 1954; C. K. Birdsall et al., IRE Trans. on ED, Ed-3, no. 4, 1956; I. E. Newin, IRE Trans. on Ed, 1959, April, p. 1959.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo (Khar'kov State University imeni A. M. Gor'kiy)

SUBMITTED: July 8, 1960

24,2120 (1049, 1532, 1538, 1482)

30100
S/057/61/031/011/015/019
B125/B102

AUTHOR: Kalmykova, S. S.

TITLE: The problem of coordinating plasma waveguides

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 11, 1961, 1374-1378

TEXT: The author considers a cylindrical semiinfinite plasma waveguide, i. e., an undamped plasma wave propagating in a plasma column, which is excited by an axisymmetric E-wave from a semiinfinite waveguide device of another type. At the waveguide junction, the discontinuous variation of impedance excites, in the general case, normal oscillations of both waveguides. Only the superposition of all natural waves of the total set satisfies the boundary condition at the junction. The amplitudes of these waves are found by equalizing the tangential field components of both sides of the connection. Two infinite systems of equations for the amplitudes of the natural oscillations of both waveguides follow from these boundary conditions. These systems are difficult to solve in the general case. The coefficient of reflection on the inhomogeneity, however, may be found by calculating the input impedance for the incident wave.

Card 1/5

The problem of...

Practically interesting are those incident waves which are nearly completely transformed into the waves to be excited. Such a transformation can be attained if the impedances of the exciting and the excited system differ only slightly. This difference is used as a small parameter. The following two limiting cases are investigated: (1) For a high number of electrons per unit length of the plasma waveguide ($\omega_0^2 a^2/c^2 \gg 1$), the low-frequency impedance differs only slightly from unity. Therefore, the waveguide must be supplied coaxially (dispersion-free). The spectrum of the natural oscillations of a plasma column is given by

$$\frac{J_0(k''_\perp a)k''_\perp a}{\varepsilon J_1(k''_\perp a)} = k'_\perp a \frac{J_0(k'_\perp b)N_0(k'_\perp a) - N_0(k'_\perp b)J_0(k'_\perp a)}{J_0(k_\perp b)N_1(k'_\perp a) - N_0(k'_\perp b)J_1(k'_\perp a)}. \quad (12).$$

With $E_r(0,r) = \varphi_1(r)/\varepsilon(r)$,

$$\mathrm{Re}\left(\frac{I_1^*(0)}{V_1^*(0)}\right) = 1 - \frac{1}{2\frac{\omega_0 a}{c}\ln\frac{b}{a}}\left(1 - \frac{k^2a^2}{2}f\left(\frac{b}{a}\right)\right), \quad f\left(\frac{b}{a}\right) = 1 + \frac{2}{\ln\frac{b}{a}} + \frac{b^2}{a^2\ln\frac{b}{a}} \quad (13)$$

Card 2/5

The problem of...

holds. If $H_\varphi(0,r) = \varphi_1(r)$,

$$\mathrm{Re}\left(\frac{I_1^*(0)}{V_1^*(0)}\right) = 1 - \frac{1}{2\frac{\omega_0 a}{c}\ln\frac{b}{a}}\left(1 + \frac{k^2a^2}{2}f\left(\frac{b}{a}\right)\right). \qquad (14)$$

holds. If $(k^2a^2/2)f(b/a) \ll 1$ the input admittance is equal to $1 - 1/(2\frac{\omega_0 a}{c}\ln\frac{b}{a})$, and the reflection coefficient is $R = 1/(\frac{4\omega_0 a}{c}\ln\frac{b}{a})$ (15). (2) If $\omega_0^2a^2/c^2 \ll 1$, the plasma waveguide can be excited by an ordinary cylindrical waveguide. Then

$$\mathrm{Re}\left(\frac{I_1^*(0)}{V_1^*(0)}\right) = \frac{1}{\sqrt{1-\frac{\nu_1^2b^2}{k^2b^2}}}\left\{1 + \pi\frac{N_0(\nu_1 b)}{I_1(\nu_1 b)}\frac{\nu_1^2a^2}{4}(1-\varepsilon)\frac{\nu_1 b}{k^2b^2-\nu_1^2b^2} - \right.$$

$$\left. - \frac{\pi^2}{8}\frac{N_0^2(\nu_1 b)\nu_1^2}{k^2}\frac{\omega_0^2a^2}{c^2}\right\}. \qquad (17)$$

holds for $E_r(0,r) = \varphi_1(r)/\varepsilon(r)$, and

Card 3/5

The problem of...

$$\mathrm{Re}\left(\frac{\Gamma_1(0)}{V_1(0)}\right) = \frac{1}{\sqrt{1 - \nu_1^2 b^2/k^2 b^2}} \left\{1 + \pi \frac{N_0(\nu_1 b)}{J_1(\nu_1 b)} (1 - \varepsilon) \frac{\nu_1 b}{k^2 b^2 - \nu_1^2 b^2} + \frac{\pi^2}{8} \frac{N_0^2(\nu_1 b)\nu_1^2}{k^2} \frac{\omega_0^2 a^1}{c^2}\right\}. \quad (18)$$

for $H_\varphi(0,r) = \varphi_1(r)$. An interchange of φ_1 and ψ_1 yields the same results as in the above-mentioned case. A first-term approximation for the field at the boundary $E_r(0,r)$ or $H_\varphi(0,r)$ is not sufficient. Only the upper limit of the reflexion coefficient can be given as

$$R = \frac{\pi}{2} \frac{N_0(\nu_1 b)}{J_1(\nu_1 b)} \frac{\nu_1^2 a^2}{4} (1 - \varepsilon) \frac{\nu_1 b}{k^2 b^2 - \nu_1^2 b^2}. \quad (19)$$

The imaginary part of the admittance is smaller than $10^{-2}(\omega_0^2 a^2/c^2)^2$.

The method by B. Z. Katsenelenbaum (Radiotekhnika i elektronika, 3, no. 7, 1958) for calculating waveguides filled with inhomogeneous dielectrics

Card 4/5

The problem of...

can be applied. There are 2 figures and 4 references: 2 Soviet and 2 non-Soviet. The two references to English-language publications read as follows: C. M. Anguloa. W. S. Chang. Trans. IRE on Ant. a Prop., AP-7, no. 3, 1959; E. L. Chua. W. W. Hansen. J. Appl. Phys., 18, no. 3, 1947.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo (Khar'kov State University imeni A. M. Gor'kiy)

SUBMITTED: November 9, 1960

Card 5/5

L 16815-63 EWT(d)/BDS/KEC-2 AFFTC/ASD/ESD-3/APGC Pg-4/Pl-4

ACCESSION NR: AR3006320 S/0058/63/000/007/H023/H023

SOURCE: RZh. Fizika, Abs. 7Zh143

AUTHOR: Kalmy*kova, S. S.

TITLE: Reflection of electromagnetic waves from the end of a semi-infinite waveguide

CITED SOURCE: Uch. zap. Khar'kovsk. un-t, v. 127, 1962, Tr. Radiofiz. fak., v. 6, 23-28

TOPIC TAGS: wave propagation, surface wave , impedance plane, scattering, waveguide

TRANSLATION: The problem consists of determining the amplitudes of the scattered waves and the reflection coefficient from the end of a semi-infinite plane dielectric plate. Assuming the plate to be sufficiently thin, the author replaces it by an impedance surface.

Card 1/2

I 16845-63
ACCESSION NR: AR3006320

Using the lemma of I. M. Rapoport ("Dokl. AN SSSR" 1948, 59, 1403), the author shows that the system of boundary conditions of the given problem is equivalent to the Hilbert inhomogeneous boundary problem for two piecewise-holomorphous functions, and for the homogeneous plate it reduces to the problem for one piecewise-holomorphous function. An integral expression is presented for the amplitude of the scattered wave and it is shown how to obtain the theoretical relations. An analogous method is used for the analysis of the problem of reflection from the end of a thin annular dielectric waveguide, where the waveguide is likewise replaced by a cylindrical impedance surface. In view of the absence of general methods for solving such a problem the integral equations for the scattered waves are given for the case of a thin plasma rod. For large transverse dimensions of the waveguide, it is considered sufficient to consider the reflection of the surface wave from the impedance jump on the junction between two infinite dielectrics. Integral expressions are written out for the amplitudes of the scattered waves. V. Vzyatyshev.

DATE ACQ: 15 Aug 63 SUB CODE: GE, MM ENCL: 00

Card 2/2

ACCESSION NR: AP4040928 S/0185/64/009/006/0593/0598

AUTHOR: Kalmy*kova, S. S.

TITLE: Reflection of an electromagnetic wave at the open end of a waveguide

SOURCE: Ukrayins'ky*y fizy*chny*y zhurnal, v. 9, no. 6, 1964, 593-598

TOPIC TAGS: Plasma waveguide, electromagnetic wave propagation, electromagnetic wave diffraction, waveguide attenuation, electromagnetic wave reflection

ABSTRACT: The diffraction of a surface wave is considered for the case of its propagation along a cylindrical waveguide ($r \leq a$). The waveguide is filled with an anisotropic dielectric described by a piecewise continuous dielectric constant tensor:

$$\epsilon(z>0) \neq \epsilon(z<0);$$
$$\epsilon = 1 \text{ for } r>a.$$

An exact integral equation is obtained for the fourier components of the dispersed field in the case when an ideally conducting diaphragm is placed at the end of the waveguide ($r=a$, $z=0$). This equation is then applied to the solution of the problem of the reflection of a surface wave, propagated along a thin ($a \ll \lambda$) plasma

Card 1/2

ACCESSION NR: AP4040928

waveguide, at the open end of the waveguide. For the case of a small skin depth ($\delta<<a$) the amplitudes are determined of surface waves excited by the incident wave. The cases of strong and weak magnetic fields are considered. "The author takes this opportunity to express great thanks to V. P. Shestopalov for his continuous assistance with the work, and likewise to V. J. Kury*lko for proposing the theme." Orig. art. has 16 numbered equations.

ASSOCIATION: Khar'kivs'ky*y derzhuniversy*tet im. O. M. Gor'kogo (Kharkov State University)

SUBMITTED: 05Nov63 ENCL: 00

SUB CODE: EM, EC NO REF SOV: 006 OTHER: 001

Card 2/2

KALMYKOVA, S.S.; KURILKO, V.I.

Diffraction of a surface wave on an ideally conducting wedge. Dokl. AN SSSR. 154 no.5:1066-1068 F'64. (MIRA 17:2)

1. Khar'kovskiy gosudarstvennyy universitet. Predstavleno akademikom M.A. Leontovichem.

L 11225-66 EWP(m)/EWT(1)/EWA(d)/ETC(m)-6/EWA(1) WW

ACC NR: AP5024900 UR/0382/65/000/003/0051/0053

AUTHOR: Kalmykova, S.S.; Kurilko, V.I.

18
B

ORG: None

TITLE: Excitation of a magnetohydrodynamic waveguide by a coaxial one.

SOURCE: Magnitnaya gidrodinamika, no. 3, 1965, 51-53

TOPIC TAGS: magnetohydrodynamic theory, magnetohydrodynamic waveguide

ABSTRACT: The matching of a cylindrical coaxial waveguide with an (inner) semiinfinite magnetohydrodynamic plasma waveguide is studied. Of particular interest is the excitement of the axially symmetric E-wave in the magnetohydrodynamic waveguide by the TEM wave of the coaxial cable. The plasma waveguide serves as a continuation of the inner tube of the coaxial cable; low magnetohydrodynamic frequencies ($\omega \ll \omega_{ci}$, where ω_{ci} is the gyrofrequency of the ions) are postulated. The arrangement is shown in Fig. 1. The assumptions made permit to reduce the exact problem of finding the Fourier components to a solution of a Fredholm integral equation of the second kind. For high plasma densities, ($\omega_0^2 a^2 \gg c^2$), the equation can be conviniently solved by an iterative process. Under various assumed limits and relative magnitudes of the problem parameters, formulas for the reflection factor of the exciting coaxial waves, (1) and (2),

Card 1/2

UDC 533.951:588.566

L 14225-66
ACC NR: AP5024900

and several expressions for the amplitude ratios of the excited waves, T_n, are obtained, expressions (3), (4), (5) and (6).

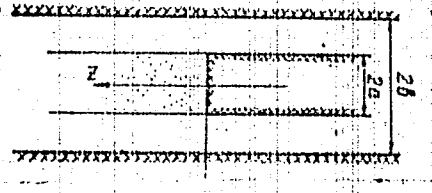


FIG. 1.

$$R=-\frac{\delta}{2a\ln b/a}\left[1-\frac{2}{3}(\varepsilon_\perp-1)^{1/2}\right];\quad \varepsilon_\perp-1\ll 1 \quad (1)$$

$\delta=c/\omega_0$;

$$R=-\frac{\delta}{3a\varepsilon_\perp\ln b/a}.\quad \varepsilon_\perp\gg 1. \quad (2)$$

$$T_n=\frac{2}{\ln b/a}[\lambda_n^2+\ln^{-2} b/a]^{-1};\quad \varepsilon_\perp-1\ll\frac{\lambda_n^2\delta^2}{a^2}\ll 1,\quad J_1(\lambda_n)=0 \quad (3)$$

$$T_n=\frac{2}{\lambda_n^2\varepsilon_\perp\ln b/a}\left[\frac{\lambda_n^2\delta^2}{a^2}\right]^2;\quad \frac{\lambda_n^2\delta^2}{a^2}\ll 1\ll\varepsilon_\perp,\quad J_1(\lambda_n)\simeq 0 \quad (4)$$

$$T_n=\frac{2}{\lambda_n^2\varepsilon_\perp\ln b/a};\quad a^2\ll\lambda_n^2\delta^2\ll\lambda^2. \quad (5)$$

$$\left.\begin{aligned} &T_n=\frac{2}{\lambda_n^2\ln b/a}\left[\frac{\lambda_n^2\delta^2}{a^2(\varepsilon_\perp-1)}\right]^2;\\ &\frac{\delta^2\lambda_n^2}{a^2}\ll\varepsilon_\perp-1\ll 1,\quad J_1(\lambda_n)\simeq 0; \end{aligned}\right\} \quad (6)$$

Dependence of these coefficients upon the magnetic field is discussed. Orig. art. has 1 fig., 9 formulas.

SUB CODE: 20 SUBM DATE: 04Jan65/ ORIG REF: 002 Oth REF: 000

Card 2/2

KALMYKOVA, S.S. (Khar'kov)

Diffraction of a plane wave at the junction of an ideally conducting w[illegible]e and a dielectric one. Prikl. mat. i mekh. 29 no.2:361-363 Mr-Ap '65. (MIRA 18:6)

L 08801-67 EWT(1)/EWP(m) IJP(c) GD

ACC NR: AT6020570 (N) SOURCE CODE: UR/0000/65/000/000/0098/0100

AUTHOR: Kalmykova, S. S.; Kurilko, V. I. 75

ORG: none

TITLE: Excitation of a magnetohydrodynamic waveguide by a coaxial waveguide

SOURCE: AN UkrSSR. Vysokochastotnyye svoystva plazmy (High frequency properties of plasma). Kiev, Naukovo dumka, 1965, 98-100

TOPIC TAGS: MHD, waveguide, coaxial waveguide, plasma density, strong magnetic field

ABSTRACT: The generation of an axially symmetric *E*-wave in an MHD waveguide by a coaxial waveguide is discussed. Plasma temperature is neglected, allowing the use of a tensor for the dielectric without spatial dispersion. Electric and magnetic field equations are derived and a reflection coefficient at the boundary adjoining the two waveguides is derived for the case of a dense plasma. It is pointed out that in computing the amplitude of the waves in the MHD waveguide, four different regimes are observed. For each one of these, the amplitude of the magnetic field is derived. These results show that the waves can be excited effectively by a coaxial waveguide only in the presence of sufficiently strong magnetic fields. In the case of low fields, only surface waves are excited. In intermediate cases, some high harmonics are weakly excited. Orig. art. has: 5 formulas.

SUB CODE: 20/ SUBM DATE: 19Nov65/ ORIG REF: 003

Card 1/1 nst

ACC NR: AR7000891 SOURCE CODE: UR/0058/66/000/009/H033/H033

AUTHOR: Kalmykova, S. S.; Kurilko, V. I.

TITLE: Theory of electromagnetic wave scattering on an inhomogeneity in a dielectric waveguide

SOURCE: Ref. zh. Fizika, Abs. 9Zh241

REF SOURCE: Radiotekhnika. Resp. mezhved. nauchno-tekhn. sb., vyp. 1, 1965, 165-171

TOPIC TAGS: dielectric waveguide, electromagnetic wave scattering, waveguide, plasma waveguide

ABSTRACT: The problem of scattering of an axially symmetrical E-type surface wave of a dielectric anisotropic waveguide on an inhomogeneity represented by a sudden variation of the dielectric constant tensor is solved. At the point of sudden variation, the homogeneous sectors of the waveguide are divided by an infinitely thin, ideally conductive diaphragm. Starting from Maxwell equations, the authors write expressions for field vectors of the surface wave inside and outside of the waveguide which, in addition to known values, include also integral terms

Card 1/2

Card 2/2

KAIMYKOVA, T.I.

Foliar feeding of tea plants. Tzv.TSKHA no.4:193-207 '62. (MIRA 15:12)

(Tea—Fertilizers and manures)

KAMNYKOVA, T.I., starshiy laborant.

Testing herbicides on tea plantations in Krasnodar Territory.
Izv. TSKHA no.6:134-147 '64 (MIRA 18:1)

1. Kafedra vinogradarstva i subtropicheskikh kul'tur Moskovskoy ordena Lenina sel'skokhozyaystvennoy akademii imeni K.A. Timiryazeva. Nauchnyy rukovoditel' prof. A.D. Aleksandrov.

MAGIDSON, I.A.; KARSANOV, G.V.; GERASIMOVA, M.I.; KALMYKOVA, T.V.

Investigation of the chlorination of chromium ores. Zhur. prikl. khim. 34 no.5:953-962 My '61. (MIRA 16:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.
(Chlorination) (Chromium ores)

S/080/61/034/011/002/020
D202/D301

AUTHORS: Magidson, I.A., Karsanov, G.V., Kalmykova, T.V., and Gerasimova, M.I.

TITLE: Selective chlorination of chromium ore

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 11, 1961, 2391 - 2398

TEXT: The kinetics of chlorination of chromium ore components with a limited amount of carbon were studied. As starting materials a chromium ore, containing Cr_2O_3 - 56, FeO - 4; Fe_2O_3 - 11; Al_2O_3 - 11, SiO_2 - 3 and MgO - 15 %, and coal as reducing agent were used. These materials were ground, bricketed into tablets (8 mm in diameter and 3 - 4 mm thick), carbonized at 800°C and chlorinated in a 45 mm quartz tube, heated electrically. In the first experimental series the chlorination was carried out with and without coal, its amount being varied from 1.75 to 8.75 %; the rate of flow of the chlorine being 0.25 l/min., the temperature 900°, weight of samples 25 g. The authors found that iron elimination without reducing agent

Card 1/3

Selective chlorination of ...

proceeded much more slowly and less completely than with about 2 % of the coal; under these conditions the iron elimination was completed in an hour, leaving a practically iron-free ore; but when coal content was augmented the elimination was slackened (practically finished in 3 hours) and chromium losses increased considerably (5 and 20 % respectively). In further experiments the author investigated the effect of the chlorine flow rate and that of ore and coal particle size on the chlorination of iron oxides. It was found that chlorine flow in the range 0.15 - 0.5 l/min. did not affect chlorination of the iron, but increased Cr losses. To avoid these losses the temperature was lowered to 700°C, but then iron elimination proceeded much more slowly and although at the beginning of chlorination, Cr losses were practically the same as at 900°, the whole process lasted so long that total losses rose from 7 to 15 %. Particle size of the ore did not affect elimination of the iron which was completed in an hour (Cl flow = 0.15 l/min, coal $\sim$2 %) but did affect Cr losses; with coarser ore (0.30 mm) they amount to 4 %, with finer grains - (0.07 mm) they rose to 7 %. All experimental results are given in the article, as well as a plan of a continuously working laboratory chlorination installation, on which

it is seen that the chlorination was carried out with a chlorine-argon mixture. On this equipment the last experimental series was carried out under following conditions: coal - 2 %; particle size; ore 0.30 mm, coal 0.15 mm; chlorine flow - 0.3 l/min; temperature 900°C, time - 1 hour, the obtained product containing Cr_2O_3 = 65.7% Fe ~ 0.02 % and the Cr losses being about 7 %. In the authors' opinion this product is suitable for production of metallic chromium. It is also mentioned that chromium ore chlorination experiments were carried out in the USSR in 1959 and 1960 by A.M. Polyakov and T.S. Shibneva in Unikhim (Ural Scientific Research Chemical Institute). There are 8 figures, 2 tables, and 14 references: 2 Soviet-bloc and 12 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: C. Hart, Canad.pat. 365,253, 1937; A.J. Gailey, Canad.Pat. 409,796, 1943; H. Erasmus, U.S. pat.2,480,184, 1949; H.S. Cooper, U.S.pat. 2,752,301, 1956.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metalurgii (Central Research Institute of Ferrous Metallurgy)

SUBMITTED: February 6, 1961

Card 3/3

S/137/62/000/005/041/150
A006/A101

AUTHORS: Magidson, I. A., Karsanov, G. V., Gerasimova, M. I., Kalmykova, T. V.

TITLE: Developing technological schemes of the chlorination process of chrome ore

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 24 - 25, abstract 50156 ("Metallurg. i khim. prom-st' Kazakhstana. Nauchno-tekhn. sb." 1961, no. 4 (14), 15 - 23)

TEXT: Two technological schemes of obtaining dehydrated Cr chloride by chlorination of Cr ore were checked in large-scale laboratory tests. Scheme 1 was based on the possibility of using a shaft chlorinator with a through muffle permitting the continuous unloading from the apparatus of the solid unchlorinated residue; scheme no. 2 is based on the use of a shaft electric resistance furnace. In this case $MgCl_2$ formed during chlorination must be filtered through a porous bottom-checker and removed from the furnace in the form of a liquid melt. Several experiments by scheme 1 were conducted at 18 - 48 hour duration of the process. Chlorination was performed at 950°C and 0.5 liter/min Cl_2 supply

Card 1/2

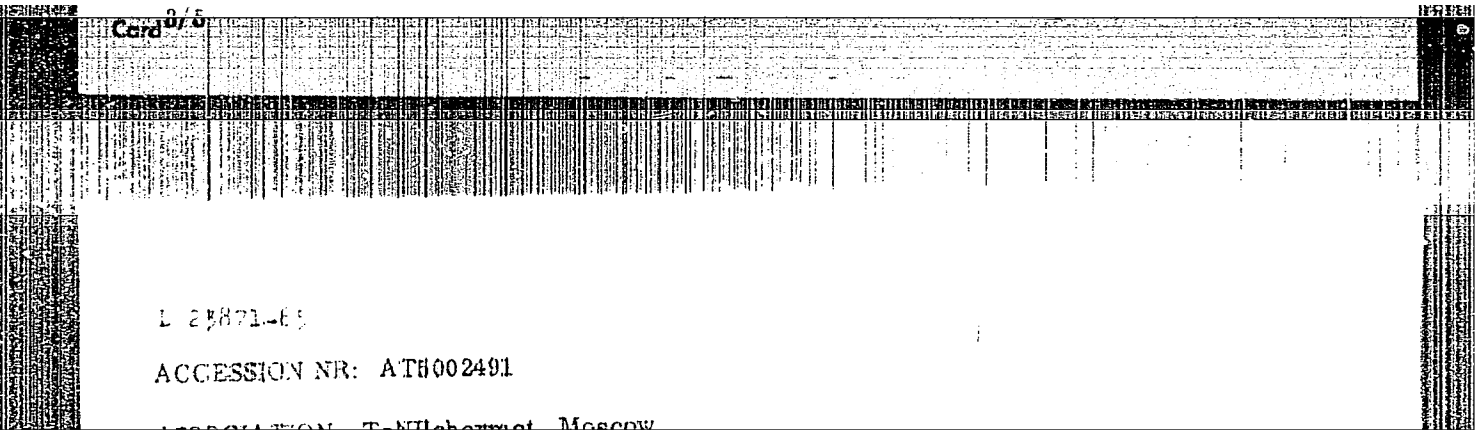
Developing technological schemes of...

rate. The size of coke particles was -2+1 mm, the coke-to-ore ratio was 1.5 : 1, the height of the charge column to be chlorinated was 150 mm. The average Cr extraction from the ore was 98 - 99%. Cr extraction into "pure" fraction of Cr chloride was 75-78%. Cr extraction from the ore according to scheme 2 attained 98%. At an increased rate of the gas flow in the chlorinator, extraction increased up to 99.0 - 99.8%. Cr extraction into "pure" fraction attained 80%. There are 16 references.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2



MAGIDSON, I.A.; KARSANOV, G.V.; KALMYKOVA, T.V.

Role of carbon in high temperature chlorination of chromium ores. Zhur. prikl. khim. 36 no.10:2132-2138 O '63.
(MIRA 17:1)

ACC NR: AP6034025 SOURCE CODE: UR/0080/66/039/010/2207/2210

AUTHOR: Magidson, I. A.; Karsanov, G. V.; Kalmykova, T. V.; Cheremisina, N. V.

ORG: none

TITLE: Behavior of beryllium metal in aqueous solutions of nitric, boric and oxalic acids

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 10, 1966, 2207-2210

TOPIC TAGS: beryllium, beryllium corrosion, beryllium dissolution, nitric acid ~~corrosion~~, boric acid ~~corrosion~~, oxalic acid ~~corrosion~~, AQUEOUS SOLUTION, CORROSION RATE

ABSTRACT: The behavior of compact 99.8%-pure beryllium specimens in aqueous nitric, boric and oxalic aqueous solutions at various temperature has been investigated. It was found that beryllium dissolution with an increase of temperature from 25 to 60C rises in 50% nitric-acid solution from 0.01 to 0.4 $g/m^2 \cdot hr$, in 35% solution from 0.2 to 0.9 $g/m^2 \cdot hr$, and in 15% solution from 30 to 55 $g/m^2 \cdot hr$. Further decrease in solution concentration reduces the dissolution rate. The dissolution rate of beryllium in 10—25% nitric-acid solution containing 530—335 g/l iron nitrate is 0.01—0.5 $g/m^2 \cdot hr$, i.e., is the same as in 50% nitric-acid solution free of iron nitrate. The beryllium dissolution rate in 50% oxalic-acid solution rises from 5 to 60 $g/m^2 \cdot hr$ as temperature increases from 40 to 80C; in 10% boric-acid solution

Card 1/2 UDC: 669.725 : 661

ACC NR: AP6034025

at 50—90C it does not exceed 0.02 g/m^2·hr, which means that even at 90C the boric acid dissolves beryllium at the same rate as 45—50% nitric-acid solution at 25C. Orig. art. has: 3 figures.

SUB CODE: 11/ SUBM DATE: 29Oct64/ ORIG REF: 003/ OTH REF: 004/

Card 2/2

BOGDANOV, M.N.; SPIRINA, I.A.; ZHMAYEVA, I.V.; KALMYKOVA, V.D.

Synthesis and properties of some polyamides with reactive groups. Vysokom. soed. 5 no.12:1805-1808 D '63.
(MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.

ACC NR: AP6025616 SOURCE CODE: UR/0413/66/000/013/0075/0075

AUTHORS: Bogdanov, M. N.; Kalmykova, V. D.; Spirina, I. A.

ORG: none

TITLE: A method for improving the thermal stability of polyamides. Class 39, No. 183371

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 75

TOPIC TAGS: thermal stability, polyamide resin, synthetic fiber

ABSTRACT: This Author Certificate presents a method for improving the thermal stability of polyamides, e.g., polyamides containing aromatic or naphthenic rings. The method provides for the use of hydroxybiphenyl as the thermal stabilizer in the production of polyamide fibers by melt spinning. [04]

SUB CODE: 07/ SUBM DATE: 07Aug61 / ATD PRESS: 5059

Card 1/1

UDC: 678.675'524'5.048.5

ACCESSION NR: AT4033982 S/0000/63/000/000/0037/0041

AUTHOR: Bogdanov, M. N.; Kalmy*kova, V. D.; Mandrosova, F. M.; Zhmayeva, I. V.; Okromchedlidze, N. P.; Sedy*kh, N. V.

TITLE: Synthesis and properties of fiber-forming polyalkyleneterephthalamides

SOURCE: Geterotsepny*ye vy*sokomolekulyarny*ye soyedineniya (Heterochain macromolecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 37-41

TOPIC TAGS: synthetic fiber, artificial silk, terephthalic acid, terephthalamide, polyalkylene terephthalamide, Alpha Omega diamine, Kapron

ABSTACT: A large number of polyamides based on terephthalic acid and unbranched α,ω-diamines with 8-16 methylene groups in the chain were synthesized and investigated with respect to their thermomechanical properties. The methods and conditions of synthesis are described. Effective additives were the aromatic hydroxy compounds, such as the isomers of hydroxyphenyl- and hydroxydiphenylmethane, which in an amount of 30-50% gave spinnable high-molecular-weight polyamides resistant to crystallization up to 320-340C. These are very suitable for spinning high-melting fibers. The limiting temperature of crystallization for polyamides from various terephthalates decreased to 280C or below. The synthesized polyamides were high-melting, strong, white substances, soluble only in concentrated

Card 1/2

ACCESSION NR: AT4033982

H_2SO_4. The thermal stability of the resulting fibers was tested by strength loss at 140C. A comparison of the thermodynamic curves of synthesized high-melting monofilaments and polycaproamide filaments showed that the differences in the relative variation of fiber length during heating are relatively small and the maximum difference in the temperature of incipient deformation does not exceed 40C. Fibers made from polyalkyleneterephthalamide, regardless of the much higher melting point, differ only slightly in thermal stability from Kapron fiber. The conditions of preparation and the properties (viscosity, melting points) of various polyalkyleneterephthalamides as well as the spinning conditions and fiber properties (strength, etc.) are tabulated. Orig. art. has: 1 figure and 3 tables.

ASSOCIATION: Vsesoyuzny*y nauchno-issledovatel'skiy institut iskusstvennogo volokna (All-Union Scientific Research Institute of Synthetic Fibers)

SUBMITTED: 15May62 DATE ACQ: 30Apr64 ENCL: 00

SUB CODE: OC, MT NO REF SOV: 005 OTHER: 014

Card 2/2

VOLOKHINA, A.V.; KUDRYAVTSEV, G.I.; RAYEVA, M.V.; BOGDANOV, M.N.; KALMYKOVA, V.D.; MANDROSOVA, F.M.; OKROMCHEDLIDZE, N.P.

Polycondensation of diamine salts of terephthalic and hexahydroterephthalic acids in the solid phase. Khim. volok. no.6:30-33 '64. (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskustvennogo volokna.

KALMYKOVA, V. G. Cand. Geograph. Sci.

Dissertation: "The Kulundinskaya Steppe and its Lakes." Moscow State Pedagogical Inst. imeni V. I. Lenin 3 Feb 47.

SO: Vechernyaya Moskva, Feb, 1947

KALMYKOVA, Valentina Grigor'yevna; KOREPANOV, Yakov Alekseyevich; [illegible], Aleksandr Aleksandrovich; MAYEVSKIY, Viktor Iosifovich; SHIROKOV, Boris Arkad'yevich; BOCHAROV, M.M., kand.geograf.nauk, red.

[Excursions for studying the nature of the native land; collection of articles] Ekskursii po izucheniiu prirody rodnogo kraia; sbornik statei. Pod red. M.M.Bocharova. Kalinin, Knizhnoe izd-vo, 1955. 164 p. (MIRA 12:10)

(Nature study)

KALMYKOVA, V.

Soil science excursions in secondary schools. Geog. v shkole 19 no.3: 43-47 My-Je '56. (MLRA 9:9)
(School excursions) (Soils)

KALMYKOVA, Valentina Grigor'yevna; OVDIYENKO, Ivan Kharitonovich; KOSTINSKIY, D.N., red.; GLEYKH, D.A., tekhn.red.

[Northwest China; a geographical study] Severo-Zapadnyi Kitai; geograficheskii ocherk. Moskva, Gos. izd-vo geogr. lit-ry, 1957. 190 p. (MIRA 11:4)
(Northwest China--Physical geography)

KALMYKOVA, V. G.

SOV-26-58-11-40/49

AUTHOR: Zakulenkov, L.D., Candidate of Geographical Sciences (Kalinin)

TITLE: The Nature and Economy of Northwest China (Priroda i khozyaystvo severozapadnogo Kitaya)

PERIODICAL: Priroda, 1958, Nr 11, pp 116 - 117 (USSR)

ABSTRACT: The author reviews the book "Severo-Zapadnyy Kitay" (Northwest China) by V.G. Kalmykova and I.Kh. Ovdiyenko, published by the State Publishing House for Geographical Literature, 1957, 191 pages.

1. China---Geography 2. Geography---Economic aspects

Card 1/1

KALMYKOVA, V. I.

"Influence of Certain Neurotropic Pharmacological Agents on the Metabolism of Thiamine in Healthy Individuals and in Patients with Ulcerous and Hypertensive Diseases." First Moscow Order of Lenin Med Inst, Moscow, 1955
(Dissertation for the Degree of Candidate of Medical Sciences)

SO: Knizhnaya Letopis', No. 32, 6 Aug 55

KALMYKOVA, V.I., kandidat meditsinskikh nauk

Thiamine metabolism in peptic ulcer. Terap.arkh. 28 no.7:51-60 '56.
(MLRA 10:1)

1. Iz kliniki fakul'tetskoy terapii sanitarno-gigiyenicheskogo fakul'teta (zav. - prof. A.G.Gukasyan) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.

(PEPTIC ULCER, metabolism
vitamin B_1)
(VITAMIN B_1, metab.
in peptic ulcer)

VIKHLYAYEVA, Ye.M.; KALMYKOVA, V.I. (Moskva)

Combined use of sex steroid hormones in the climateric syndrome in patients with hypertension and arteriosclerosis. Klin.med. no.3:105-112 '62. (MIRA 15:3)

(HYPERTENSION) (ARTERIOSCLEROSIS)
(CLIMACTERIC) (HORMONES, SEX)

KAIMYKOVA, V.I.

Effect of acute fat loads on blood serum lipoids in clinically normal subjects and in atherosclerosis in eldery and senile patients. Terap.arkh. 34 no.2:31-38 '62. (MIRA 15:3)

1. Iz kafedry fakul'tetskoy terapii (zav. - prof. A.G. Gukasyan) sanitarno-gigiyenicheskogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(LIPIDS) (ARTERIOSCLEROSIS) (FAT--PHYSIOLOGICAL EFFECT)

KALMYKOVA, V.N., arkhitektor

Light-type poultry houses. Ptitsevodstvo 9 no.5:36-42 My '59.
(MIRA 12:7)

(Poultry houses and equipment)

KALMIKOVA V.N.

EXCERPTA MEDICA Sec 16 Vol 7/11 Cancer November 59

4603. **Comparison of the antigenic composition of tumorous, embryonal and adult tissues (Russian text)** KALMYKOVA V. N. and EROSHKINA A. M. Inst. of Exp. Pathol. and Ther. of Cancer, Moscow *Vopr. Onkol.* 1959, 5/2 (131-135) Tables 3

Protein fractions from different tissues were studied by the method of anaphylaxis with desensitization of guinea-pigs. Embryonal tissue as well as muscular and connective tissue contained antigens that were lacking in the corresponding tissues of the adult, but were present in sarcomatous tissue (rhabdomyosarcoma, spindle-cell, polymorphocell, fibro-, chondro- and osteosarcoma). Besides mutual antigens, sarcomatous tissue contains antigens that are absent both in embryonal and adult tissues.

KROLEVETS, K.M.; MISHCHENKO, S.V.; KALMYKOVA, V.P.; MAL'TSEVA, N.D.

Photorelay equipped with a germanium phototriode. Avtom.i prib. no.1:59-62 Ja-Mr '62. (MIRA 15:3)

1. Institut avtomatiki Gosplana USSR.
(Electric relays)

KALMYKOVA, V.V.

Characteristics of agroclimatic conditions for the cultivation of corn in the Maritime Territory. Trudy Dal'nevost.NIGMI no.6:3-29 '58. (MIRA 12:1)
(Maritime Territory--Corn (Maize)) (Crops and climate)

KALMYKOVA, V.V.

Regions of the Far East with suitable climatic conditions for the cultivation of corn. Trudy Dal'nevost.NIGMI no.7:74-106 '59.
(MIRA 13:6)

(Soviet Far East--Corn (Maize))
(Crops and climate)