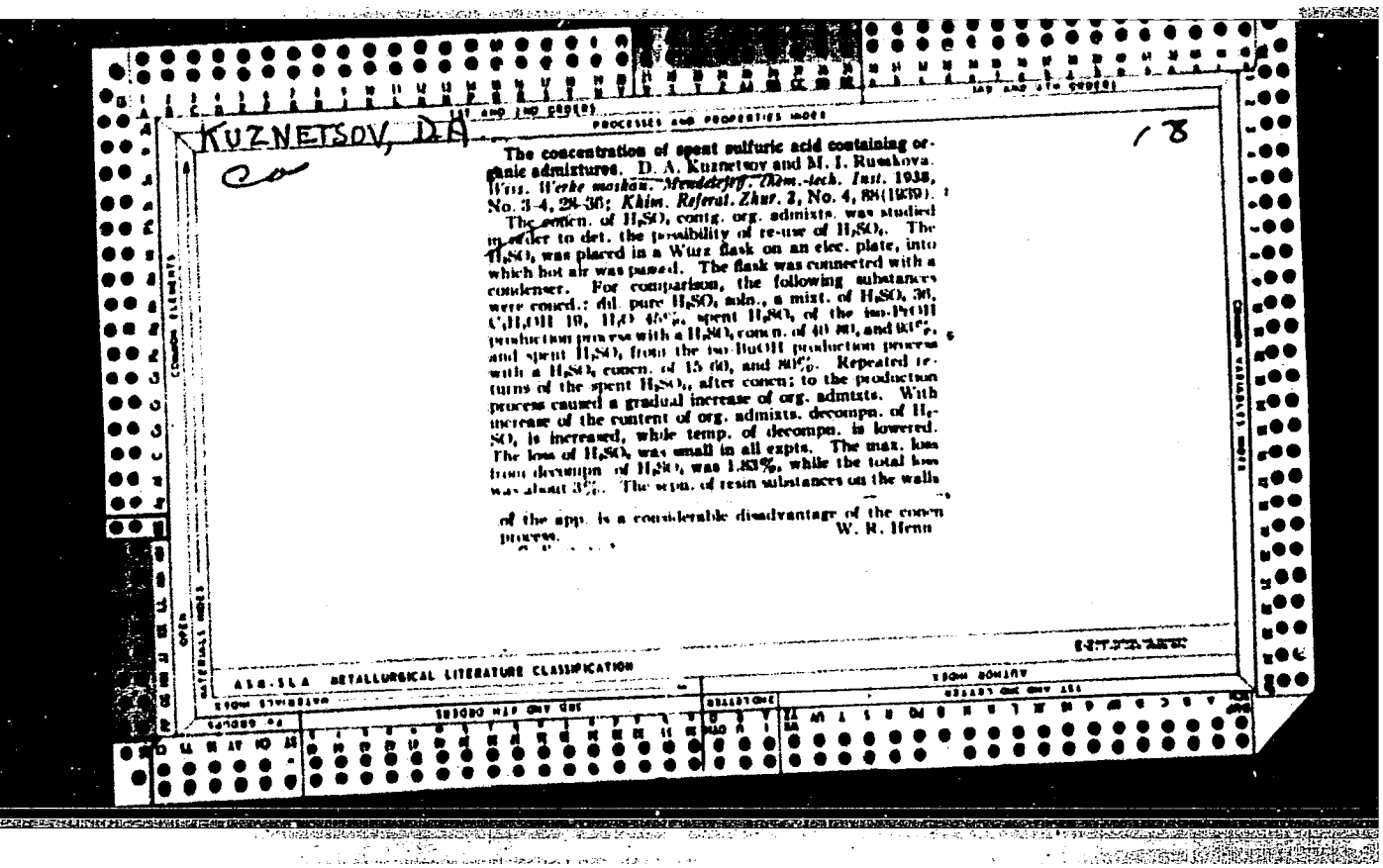
GRISHIN, L.V.; NAZAROV, B.G.; KEL'TSEV, N.V.; KUZNETSOV, D.A.; FURMER, I.E.

Determining the oil content in high-pressure gas. Gaz. prom. 9 no.9: 49-50 '64. (MIRA 17:10)



KUZNETSOV, D.A.

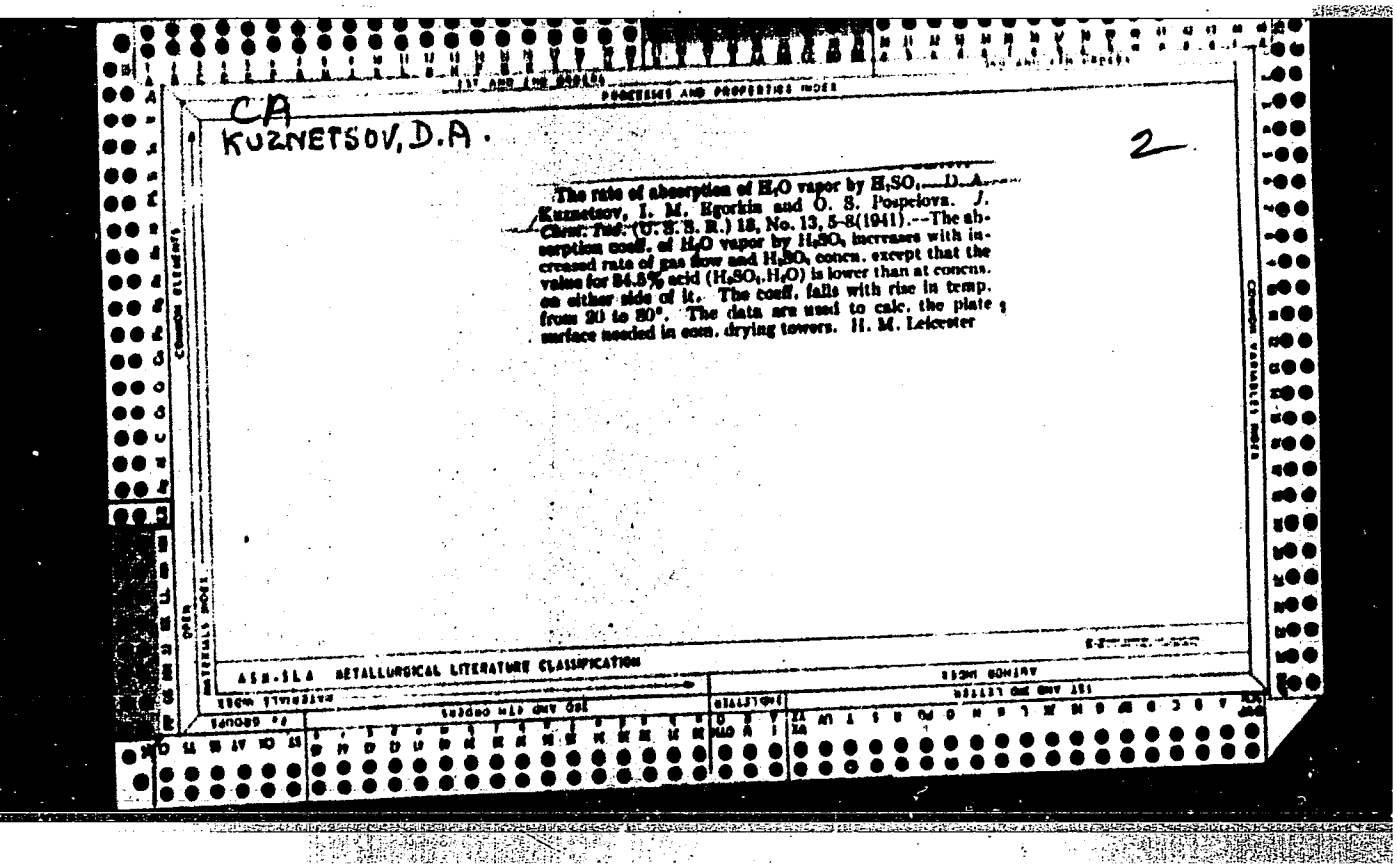
18

The concentration of spent sulfuric acid containing organic admixtures. D. A. Kuznetsov and M. I. Rusakova. *Trans. Werke mashan. Mendeleyeff. Chem.-tech. Inst.* 1938, No. 3-4, 29-36; *Khim. Referat. Zhur.* 3, No. 4, 88(1939).

The concn. of H_2SO_4 contg. org. admixts. was studied in order to det. the possibility of re-use of H_2SO_4. The H_2SO_4 was placed in a Wurz flask on an elec. plate, into which hot air was passed. The flask was connected with a condenser. For comparison, the following substances were concd.: dil. pure H_2SO_4 soln., a mixt. of H_2SO_4 30, C_4H_9OH 10, H_2O 45%, spent H_2SO_4 of the iso-$BuOH$ production process with a H_2SO_4 concn. of 40 80, and 81%, and spent H_2SO_4 from the iso-$BuOH$ production process with a H_2SO_4 concn. of 15 60, and 81%. Repeated returns of the spent H_2SO_4, after concn; to the production process caused a gradual increase of org. admixts. With increase of the content of org. admixts. decompn. of H_2SO_4 is increased, while temp. of decompn. is lowered. The loss of H_2SO_4 was small in all expts. The max. loss from decompn. of H_2SO_4 was 1.83%, while the total loss was about 3%. The resin. of resin substances on the walls

of the app. is a considerable disadvantage of the concn process.

W. R. Henn



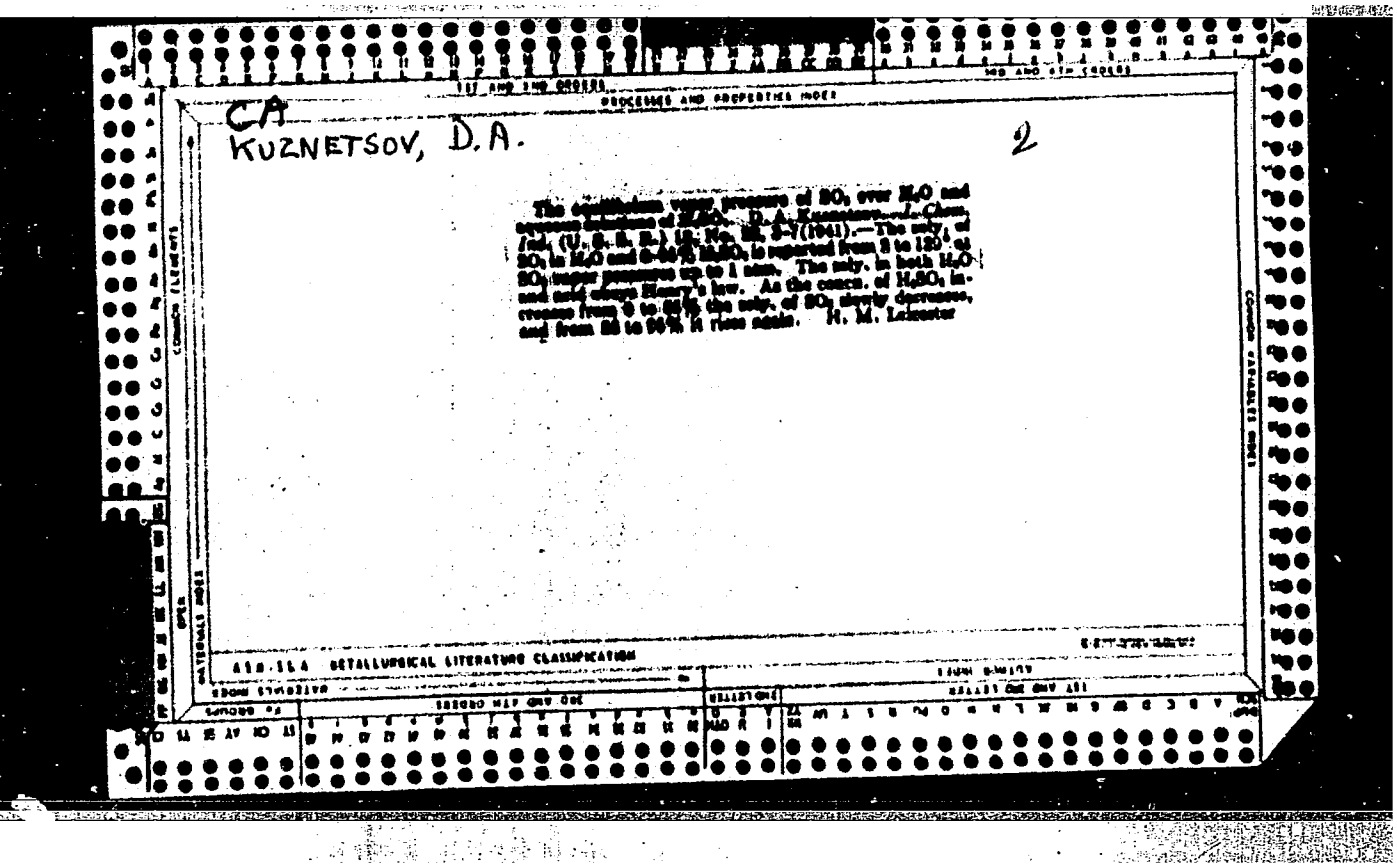
CA

KUZNETSOV, D.A.

2

The rate of absorption of H_2O vapor by H_2SO_4. D. A. Kuznetsov, I. M. Egoritin and O. S. Pospelova. *J. Chem. Ind. (U. S. S. R.)* 18, No. 13, 5-8(1941).—The absorption coeff. of H_2O vapor by H_2SO_4 increases with increased rate of gas flow and H_2SO_4 concn. except that the value for 84.5% acid ($H_2SO_4.H_2O$) is lower than at concns. on either side of it. The coeff. falls with rise in temp. from 20 to 80°. The data are used to calc. the plate surface needed in concn. drying towers. H. M. Leicester

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

KUZNETSOV, D.A.

2

The equilibrium vapor pressure of SO_2 over H_2O and aqueous solutions of H_2SO_4. D. A. Kuznetsov. *J. Chem. Ind. (U. S. S. R.)* 18: No. 10, 3-7 (1941).—The only, of SO_2 in H_2O and 0-84% H_2SO_4, is reported from 0 to 120°, as SO_2 vapor pressures up to 1 atm. The solv. in both H_2O and acid obeys Henry's law. As the concn. of H_2SO_4 increases from 0 to 60% the solv. of SO_2 slowly decreases, and from 60 to 84% it rises again. H. M. Leicester

KUZNETSOV, D.A.; MALAKHOV, A.I.

Testing of organic compounds as protective additives in casting magnesium alloys. Trudy MKHTI no.24:459-461 '57. (MIRA 11:6)
(Magnesium alloys) (Magnesium founding) (Foundry chemistry)

KUZNETSOV, D.A., dots.

Anniversary conference of Hungarian chemists. Khim.nauk i prom. 3 no.5:661-662 '58. (MIRA 11:11)
(Budapest--Chemistry--Congresses)

16(4)

AUTHORS: Kuznetsov, D. A., Koval', Zh. A., Malakhov, A. I.

SOV/163-58-4-14/47

TITLE: Influence of the Protective Fluxes Upon the Porosity of Castings Made of Magnesium Alloys (Vliyaniye zashchitnykh prisadok na poristost' otlivok iz magniyevykh splavov)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 4, pp 82-86 (USSR)

ABSTRACT: A fluor flux is used in the works of the USSR in the production of parts made of magnesium alloys when casting them in sand-molds. A great drawback of these fluxes is the high toxicity of the gases and vapors separated when, in the workrooms, the metals are cast into the molds. Here various protective fluxes developed in the USSR are recorded. A comparison is made between the porosity of ingots when adding the various protective fluxes to the material of the mold under otherwise similar testing conditions. The tests were carried out according to the method of density measurement. The results were as follows: 1) Substituting the fluor flux or a flux based on sulfur by fluxes based on gravel or urea does not cause any

Card 1/2

substantial change in the porosity of castings. 2) The character of the porosity (density) distribution curves in castings made of the primary alloy ML-5 does not permit to judge the extent of reaction of the castings with their molds. 3) When investigating samples made of secondary metal no considerable changes in the porosity distribution were observed. There are 3 figures and 7 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva (Moscow Institute of Chemical Technology imeni Mendeleyev)

SUBMITTED: April 19, 1958

LOSEV, I.P.; KUZNETSOV, D.A.; VALGIN, V.D.

Porous plastics made of low-molecular polyepoxide resins and aromatic diamines. Biul.tekh.-ekon.inform. no.10:48-50 '58. (MIRA 11:12)
(Porous materials) (Epoxide resins) (Amines)

18(2,3) SOV/128-59-5-18/35

AUTHOR: Kuznetsov, D.A., Candidate of Chemical Sciences, and Malakhov, A.I., Candidate of Technical Sciences

TITLE: Use of Boron Chloride in Casting Magnesium Alloys

PERIODICAL: Liteynoye, Proizvodstvo, 1959, Nr 3, pp 32 (USSR)

ABSTRACT: The authors refer to the methods and patents in the western hemisphere on the use of boron fluoride in casting magesium alloys as listed sub references. The authors state that for refining of magnesium-alloys, especially ML-5 boron chloride, is used. The decomposing of BCl_3 by water is described as well as the chemical equations of the possible reactions. There are 5 references, 1 of which is Soviet, 3 English and 1 German.

Card 1/1

85548

S/081/60/000/020/011/014
A006/A001

15-8110

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 20, p. 516, # 83065

AUTHORS: Losev, I.P., Kuznetsov, D.A., Valgin, V.D.

TITLE: Gasfilled Materials on Polyepoxide Resin Base. Information I

PERIODICAL: Tr. Mosk. khim-tekhnol. in-ta im. D.I. Mendeleyeva, 1959, No. 29, pp. 3-10

TEXT: Foam plastic were obtained when mixing low-molecular epoxide resin ЭД -6 (ED-6) or ЭД -5 (ED-5) (100 weight portions) with molten or fine-crushed aromatic diamine in an amount approaching the stoichiometric quantity, 2 - 10 weight portions 2,2'-azo-bis- (isobutyronitryl) and 2 weight portions of the "A equalizer". The temperature of 50 - 70°C was maintained for 20 - 30 min. The mixture obtained was poured into a mold and heated for 1 - 2 hours at 50 - 60°C and then for 1 hour at 120 - 130°C. The authors show the dependence of heat resistance of the foam plastics on the hardening time at 150°C and on the quantitative ratio of epoxide resin and m-phenylene-diamine. It is noted that the

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85548

S/081/60/000/020/011/014
A006/A001

Gasfilled Materials on Polyepoxide Resin Base. Information I

brittleness of foam plastics increases with a reduced amount of amine. The authors show the dependence of the compression strength of foam plastics on the volumetric weight, which was determined from the amount of a gas-forming agent introduced. It is noted that some physico-mechanical and dielectric characteristics of the foam plastics obtained exceed those of materials produced by domestic industry, and they can be used as filler material.

Ye. Zambrovskaya

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

Card 2/2

85569

15 8110

S/081/60/000/020/012/014
A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 20, p. 516, # 83066

AUTHORS: Losev, I.P., Kuznetsov, D.A.

TITLE: Production of Gasfilled Materials on the Base of Interaction Products of Epoxycompounds and Some Anhydrides of Dibasic Acids. Information 2

PERIODICAL: Tr. Mosk. khim-tekhnol. in-ta im. D.I. Mendeleyeva, 1959, No. 29, pp. 11-14

TEXT: Foam plastics have been obtained on the base of low-molecular ЭД-5 (ED-5) or ЭД-6 (ED-6) epoxide resins and the adduct of maleine anhydride with hexachloro cyclopentadiene in the presence of toluylene diisocyanate (up to 15%), 2,2'-azo-bis (isobutyrnitryl) and the ВНИИЖ (VNIIZh) emulsifier (3.5%). The foam plastics obtained are characterized by a considerable heat-resistance and incombustibility outside the flame source. Some prescriptions are presented and the physico-mechanical properties of synthesized foam plastics are indicated. See ref. 83065.

Ye. Zambrovskaya

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

Card 1/1

LOSEV, I.P.; KUZNETSOV, D.A.; VALGIN, V.D.

Synthesis of 1,4,5,6,7,7-hexachlorobicyclo [2.2.1]hept-5-ene-2,3-dicarboxylic acid anhydride. Trudy MKHTI no.29:15-16 '59.
(MIRA 13:11)

(Bicycloheptenedicarboxylic acid)

S/081/62/000/008/045/057
B166/B161

15.8121

AUTHORS: Losev, I. P., Kuznetsov, D. A., Valgin, V. D.

TITLE: Foam plastics based on polyepoxide resins with aromatic diamines

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 8, 1962, 552, abstract 8P27 (Sb. "Penoplastmassy". M., Oborongiz, 1960, 167 - 183)

TEXT: The production of a foam plastic based on ЭД-6 (ED-6) epoxide resin with m-phenylenediamine as curing agent is described; it is recommended as a structural and electrical insulating material at operating temperatures up to 110° in aviation, electrical engineering and other branches of industry. A study was made of the conditions of foaming of the compositions and of their influence on the structure of the foam plastic. The best physical and mechanical properties were found in foam plastics with a fine-grain texture, achieved by foaming a composition with a stoichiometric ratio of the basic components within the limits of 35.5 - 54% of the epoxy groups used. Cation-active quaternary ammonium salts (equalizer A) and non-ionogenic products type ОП-7 (OP-7) and ОП-10 (OP-10) were

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B166/B161

Foam plastics based on ...

tried as surface active agents. The optimum composition recipe is given (parts by weight): ED-6 resin 100, m-phenylene diamine 9.4 - 10.5 (stoichiometric quantity), azodinitrile of diisobutyric acid 2 - 10 (depending upon the volume weight required), equalizer A or product OP-7 2 - 4. The production process for obtaining the foam plastic is described in detail. The properties of a foam plastic with a specific gravity of 0.084 g/cm^3 at ~20° are given. [Abstracter's note: Complete translation]

Card 2/2

KUZNETSOV, D. A.; MALAKHOV, A. I.; FURMER, I. E.

Investigating the protective action of substances introduced into forming mixtures in magnesium alloy casting. Trudy MKHTI no.35: 171-176 '61. (MIRA 14:10)

(Magnesium alloys)

KUZNETSOV, D.A., prof.

More consideration should be given to the contests for the best work. Zhur. VKHO 8 no.3:345-349 '63. (MIRA 16:8)

MUKHLENOV, I.P., doktor tekhn. nauk, prof.; KUZNETSOV, D.A.; AVERBUKH, A.Ya.; TUMARKINA, Ye.S.; FURMER, I.E.; ALAVERDOV, Ya.G., red.; GOROKHOVA, S.S., tekhn. red.

[General chemical technology] Obshchaia khimicheskaia tekhnologiia. [By] I.P.Mukhlenov i dr. Moskva, Izd-vo "Vysshaia shkola," 1964. 628 p. (MIRA 17:4)

KUZNETSOV, D.A., prof.

Results of the contests of 1963 of the D.I.Mendeleev All-Union Chemical Society for the best works. Zhur.VKHO 9 no.1:106-113 '64. (MIRA 17:3)

SHMUL'YAN, I.K.; KOVAL', Zh.A.; KUZNETSOV, D.A.

Dynamics of hydraulic processes taking place on the downcomerless mesh plates. Trudy MKHTI no.47:30-34 '64. (MIRA 18:9)

SEMENOV, G.M.; KUZNETSOV, D.A.; ZUBOVA, I.Ye.

Thermodynamic study of solid phase reactions in the system calcium oxide - iron oxides. Trudy MKHTI no.47:115-118 '64. (MIRA 18:9)

KUZNETSOV, D.A.; KARETNIKOV, G.S.; ZUBOVA, I.Ye.; [illegible], G.M.

Studying the interaction of K_2CO_3 with iron oxides. Trudy MKHTI no.47:119-124 '64. (MIRA 18:9)

YEGEUBAYEV, S.Kh.; KUZNETSOV, D.A.; ZUBOVA, I.Ye.

Reduction of potassium ferrite. Trudy MKHTI no.47:125-128 '64.

Reduction of potassium ferrite. Ibid.:129-133 (MIRA 18:9)

GRISHIN, L.V.; KUZNETSOV, D.A.; KARETNIKOV, G.S.; FURMER, I.E.; YEFIMOVA, N.M.

Determining the concentration of lubricating oils in gases. Trudy MKHTI no.47:174-177 '64. (MIRA 18:9)

YEGEUBAYEV, S.Kh.; [illegible] M.A.; KAGANSKOV, L.A.; ZUBOVA, I.Ye.

Distribution of promoters in iron catalysts for ammonia synthesis.
Kin. i kat. 6 no.4:754-757 Jl-Ag '65. (MIRA 18:9)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva.

KUZNETSOV, Dmitriy Afanas'yevich; SADE, L.S., red.

[General chemical technology] Obshchaia khimicheskaia tekhnologiia. Moskva, Vysshaia shkola, 1965. 271 p. (MIRA 19:1)

L 38184-66

ACC NR: AP6013816 (N) SOURCE CODE: UR/0066/65/000/006/0005/0008

AUTHOR: Kritskiy, Ye. D.; Slyusarenko, V. I.; Kuznetsov, D. A.; Getmanets, A. I.

ORG: none

TITLE: Klimat-4 ship air conditioner

SOURCE: Kholodil'naya tekhnika, no. 6, 1965, 5-8

TOPIC TAGS: air conditioning equipment, refrigeration equipment

ABSTRACT: The Klimat-4 air conditioner is designed for year-round operation on vessels not equipped with central air conditioning systems. It controls both temperature and relative humidity and can move 1500 m^3 of air an hour. The Klimat-4 consists of a cooling unit, air heater, humidifier, fan, and automatic regulator system; freon-22 is used as a coolant. A detailed breakdown of the technical parameters and a description of each component of the air conditioner are given. It is recommended for use on ships and in hospitals, kindergartens, cafes, and restaurants. Orig. art. has: 2 figures, 2 tables.

SUB CODE: 13/ SUBM DATE: none

UDC: 628.83 : 629.12

Card 1/1 vmb

KUZNETSOV, D.A., prof.

Results of the contest organized by the All-Union Mendeleev Chemical Society for the best research work conducted in 1964. Zhur. VKHO 10 no.3:332-340 '65. (MIRA 18:8)

KUZNETSOV, D.D.

Structure of the western slope of the Voronezh Crystalline Massif. Sov. geol. 7 no.5:146-148 My '64 (MIRA 18:2)

1. Kurskaya geofizicheskaya ekspeditsiya.

Kuznetsov, D. G.

AUTHOR: Kuznetsov, D.G. Engineer, and Pavlenko, I.M. 122-2-8/23

TITLE: The cutting of round profile screw threads (Narezaniye kruglykh rez'b)

PERIODICAL: "Vestnik Mashinostroyeniya" (Engineering Journal), 1957, No.2, pp. 47 - 51 (U.S.S.R.)

ABSTRACT: Quantity cutting of round screw threads of 10-20 mm pitch is required for mechanized mine props. An enveloping die head was developed to mount straight carbide-tipped tool holders. The head, tool holders and tool geometry are illustrated. Tests led to mild steel cutting at about 230 m/min in two passes to produce a 20 mm pitch, 10 mm depth of thread.

There are 8 figures, including 2 photographs, and 4 Slavic references.

Card 1/1

AVAILABLE: Library of Congress

BOSYY, M. K., KUZNETSOV, D. I.

Anatomy - Study and Teaching

Aid of the institute to schools in conducting courses on human anatomy and physiology. Est. v shkole no. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, July, 1952. Unclassified.

KUZNETSOV, D.I.

Effect of the severity of blood loss on the sensitivity to aminazine. Eksper. khir. i anest. 7 no.5:81-83 S-O '62. (MIRA 17:10)

1. Iz eksperimental'no-khirurgicheskoy laboratorii (zav. Yu.M. Levin) Novosibirskogo nauchno-issledovatel'skogo instituta travmatologii i ortopedii (dir.- dotsent D.P. Metelkin).

CHERNYAVSKIY, L.G., inzhener; KUZNETSOV, D.I., inzhener

Overall mechanization of stripping work in mines. Mekh. trud. rab. 9 no.7:21-22 Jl '55. (MIRA 8:9)

(Strip mining)

KUZNETSOV, D.I., mladshiy nauchnyy sotrudnik (Novosibirsk, Kavaleriyskaya ul., d.220-a)

Some characteristics of aresthesia in surgery for scoliosis. Ortop., travm. i protez. 25 no.6:55-56 Je '64.

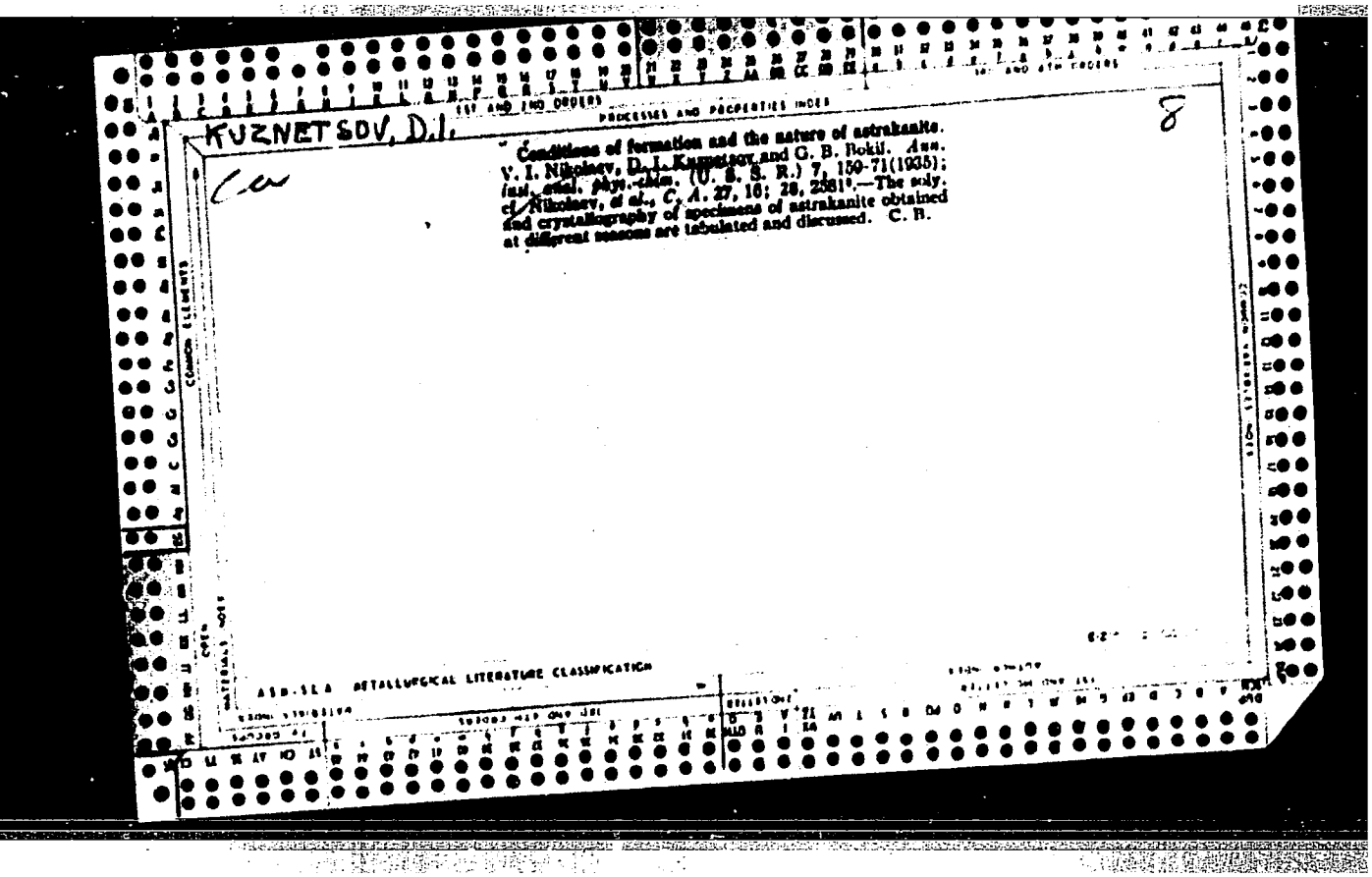
(MIRA 18:3)

1. Iz Novosibirskogo instituta travmatologii i ortopedii (dir. - dotsent D.P. Metelkin).

CHEBOTAREVA, N.M., kand. med. nauk; SLOVIKOV, B.I.; KUZNETSOV, D.I.

Characteristics of pathophysiological shifts during an experimental operation for the removal of an intracerebral hematoma using certain types of anesthesia. Trudy Inst. im. N.V. Sklif. 8:35-42 '63. (MIRA 18:6)

1. Moskovskiy oblastnoy nauchno-issledovatel'skiy klinicheskiy institut i Novosibirskiy nauchno-issledovatel'skiy institut travmatologii i ortopedii.



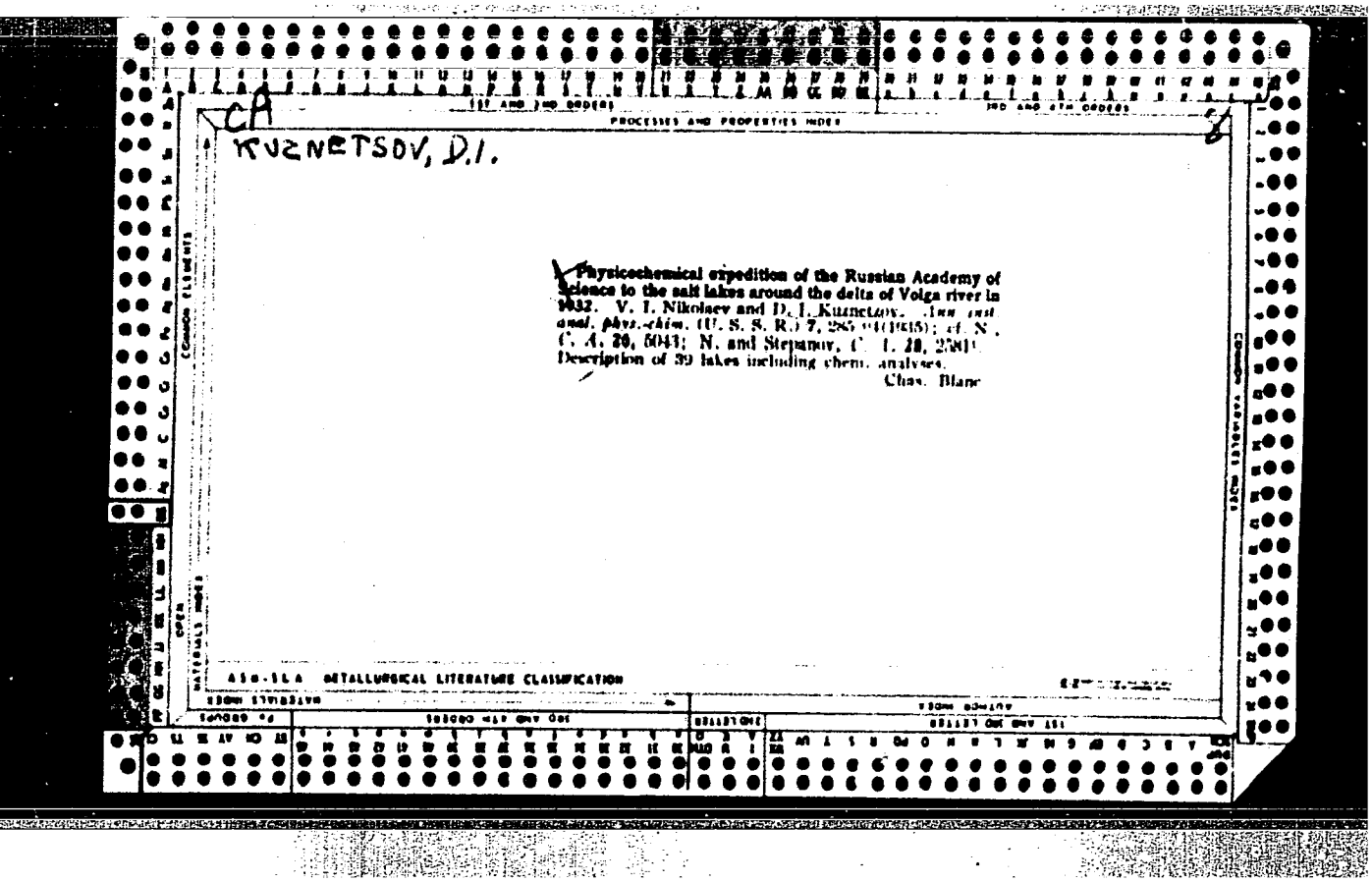
KUZNETSOV, D.I.

Ca

Conditions of formation and the nature of astrakanite. V. I. Nikolaev, D. I. Kuznetsov and G. B. Bokii. *Ann. inst. anal. phys.-chim.* (U. S. S. R.) 7, 159-71(1935); cf. Nikolaev, *et al.*, *C. A.* 27, 16; 28, 2581⁸.—The solv. and crystallography of specimens of astrakanite obtained at different seasons are tabulated and discussed. C. B.

8

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

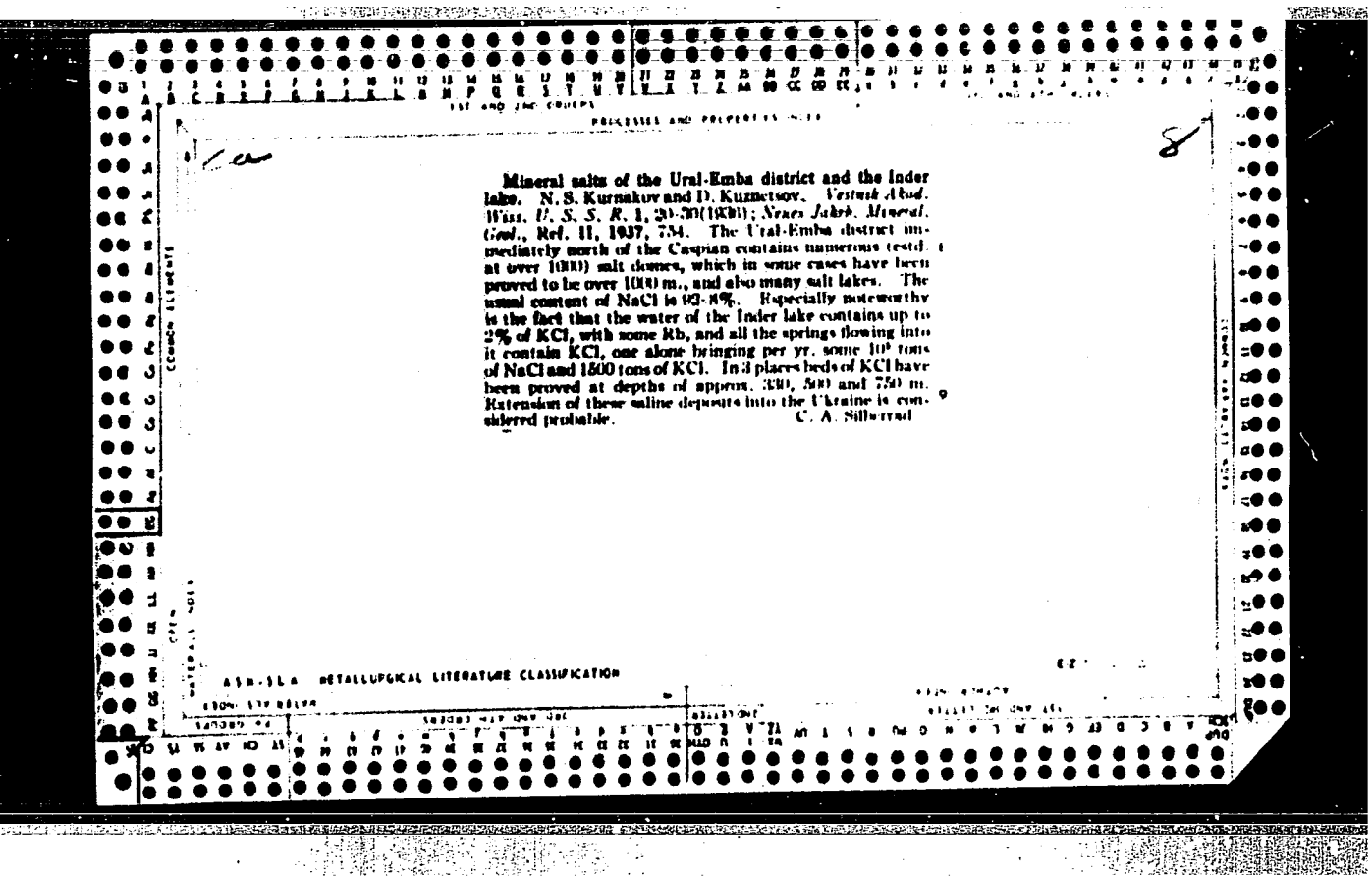


CA

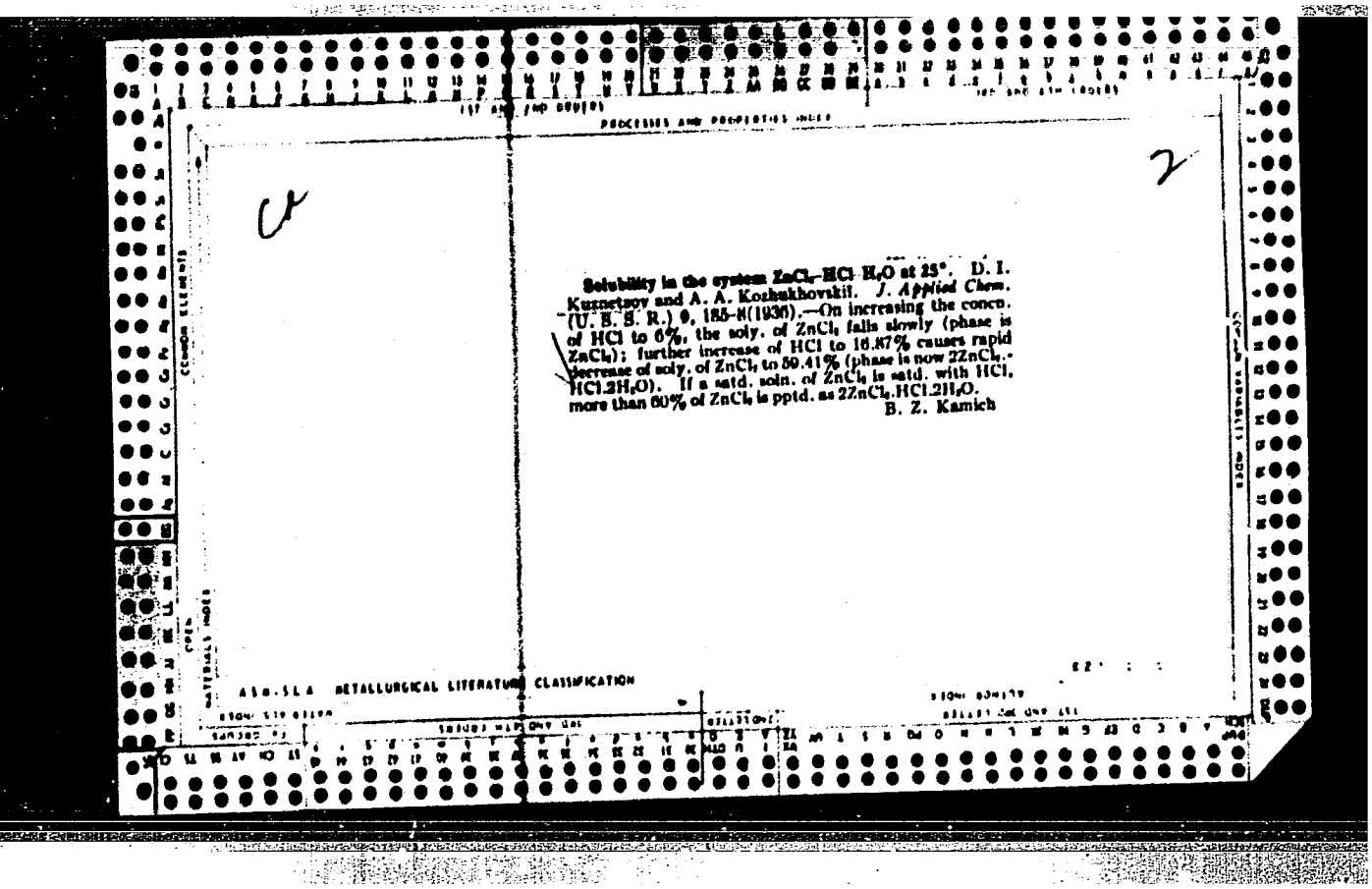
KUZNETSOV, D.I.

Physicochemical expedition of the Russian Academy of Science to the salt lakes around the delta of Volga river in 1932. V. I. Nikolaev and D. I. Kuznetsov. *Izv. inst. anal. phys.-chim.* (U. S. S. R.) 7, 285-310 (1935); cf. N., C. A. 29, 5041; N. and Stepanov, C. I. 28, 2581. Description of 39 lakes including chem. analyses.

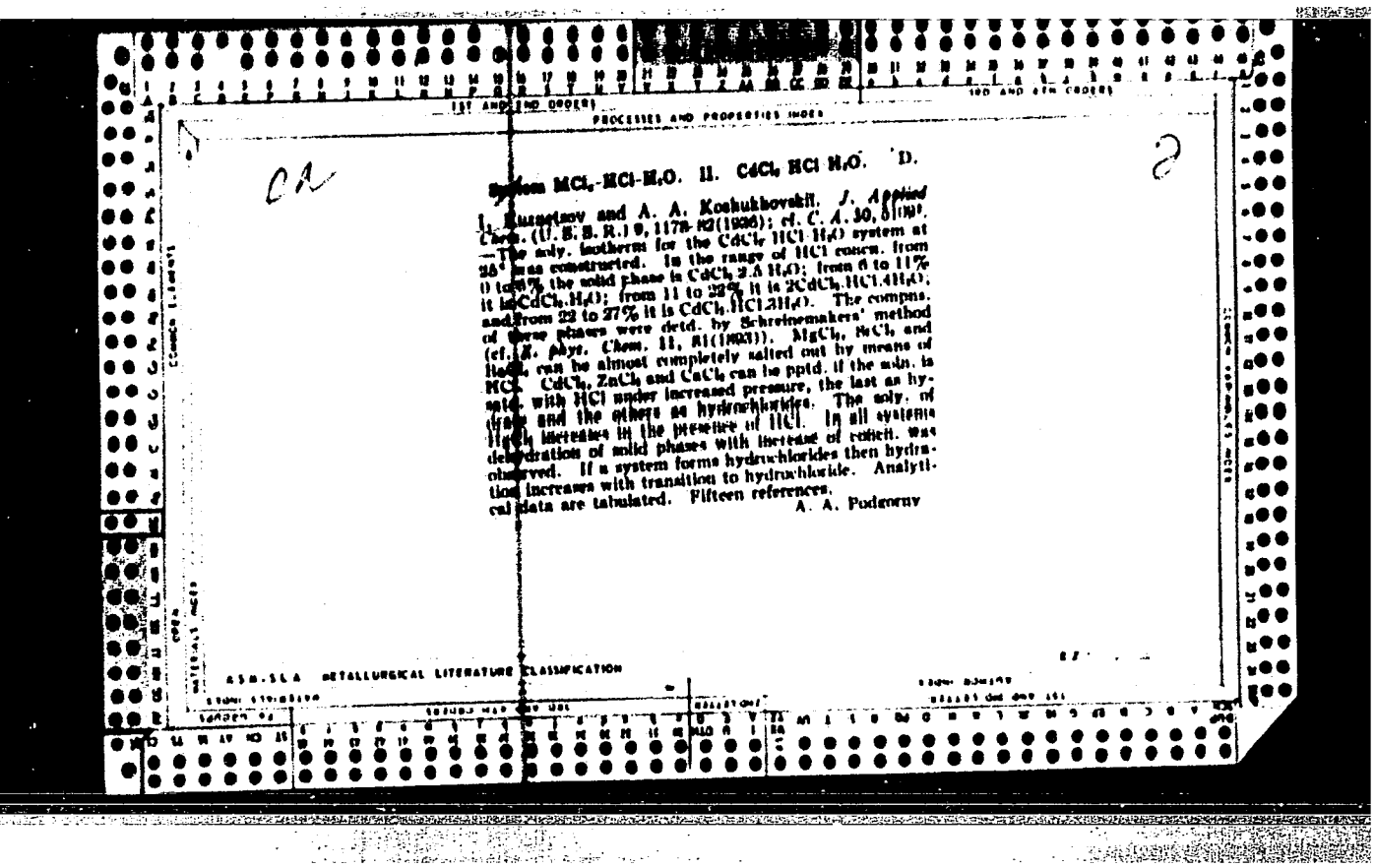
Chas. Blanc



Mineral salts of the Ural-Emba district and the Inder lake. N. S. Kurnakov and D. Kuznetsov. *Vestnik Akad. Nauk. U. S. S. R.* 1, 30-50(1936); *Neues Jahrb. Mineral. Geol.*, Ref. II, 1937, 754. The Ural-Emba district immediately north of the Caspian contains numerous (estd. at over 1000) salt domes, which in some cases have been proved to be over 1000 m., and also many salt lakes. The usual content of NaCl is 92-95%. Especially noteworthy is the fact that the water of the Inder lake contains up to 2% of KCl, with some Rb, and all the springs flowing into it contain KCl, one alone bringing per yr. some 10^5 tons of NaCl and 1800 tons of KCl. In 3 places beds of KCl have been proved at depths of approx. 330, 500 and 750 m. Extension of these saline deposits into the Ukraine is considered probable. C. A. Silberrad



Solubility in the system $ZnCl_2$–HCl–H_2O at 25°. D. I. Kurnetsov and A. A. Kozhukhovskii. *J. Applied Chem.* (U. S. S. R.) 9, 185–8(1936).—On increasing the concn. of HCl to 0%, the soly. of $ZnCl_2$ falls slowly (phase is $ZnCl_4$); further increase of HCl to 16.87% causes rapid decrease of soly. of $ZnCl_2$ to 50.41% (phase is now $2ZnCl_2$·HCl·$2H_2O$). If a satd. soln. of $ZnCl_2$ is satd. with HCl, more than 60% of $ZnCl_2$ is pptd. as $2ZnCl_2$·HCl·$2H_2O$.
B. Z. Kamich



PROCESSES AND PROPERTIES INDEX

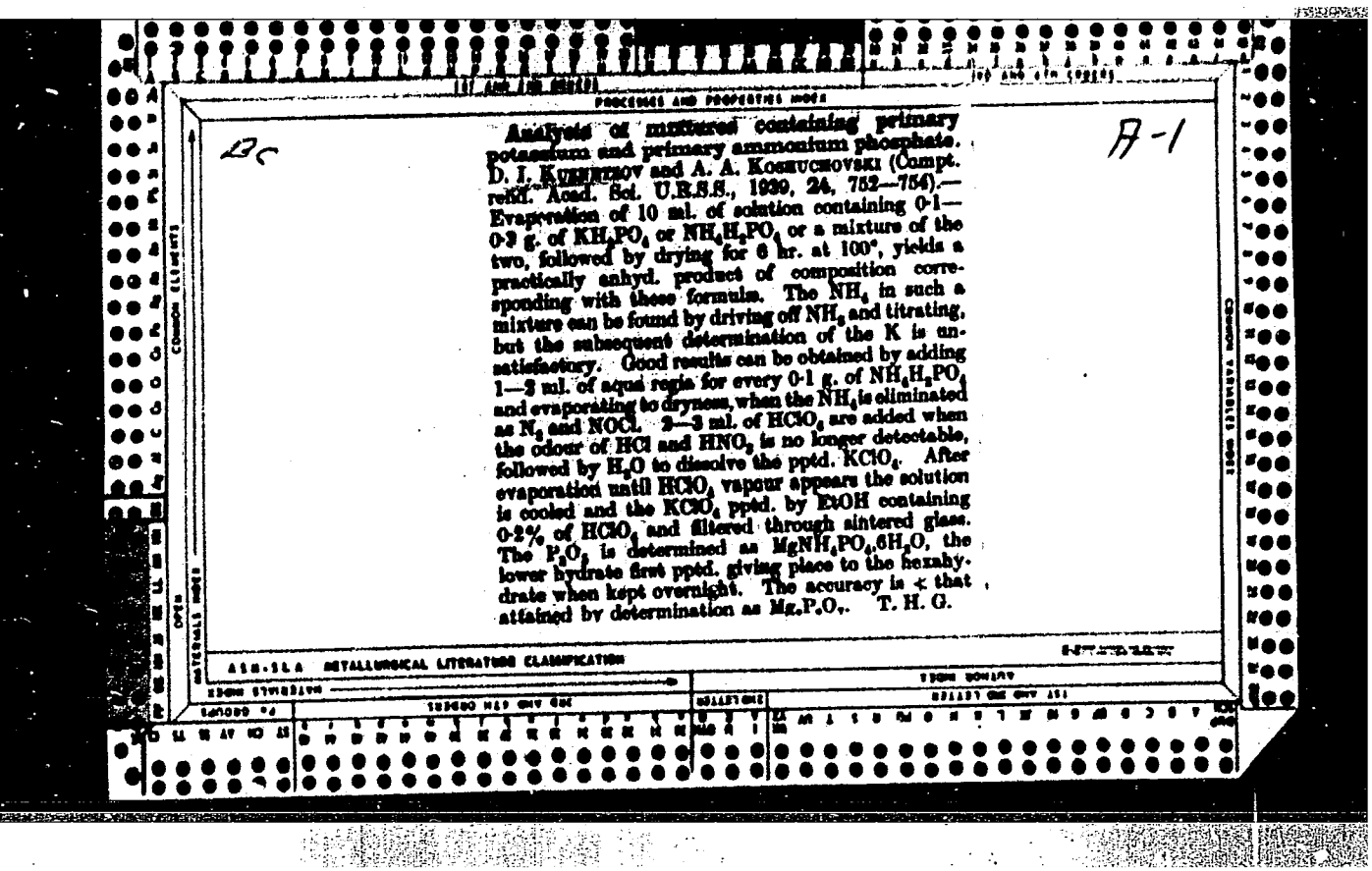
CA

System MCl_2-HCl-H_2O. II. $CdCl_2$-HCl-H_2O. D.

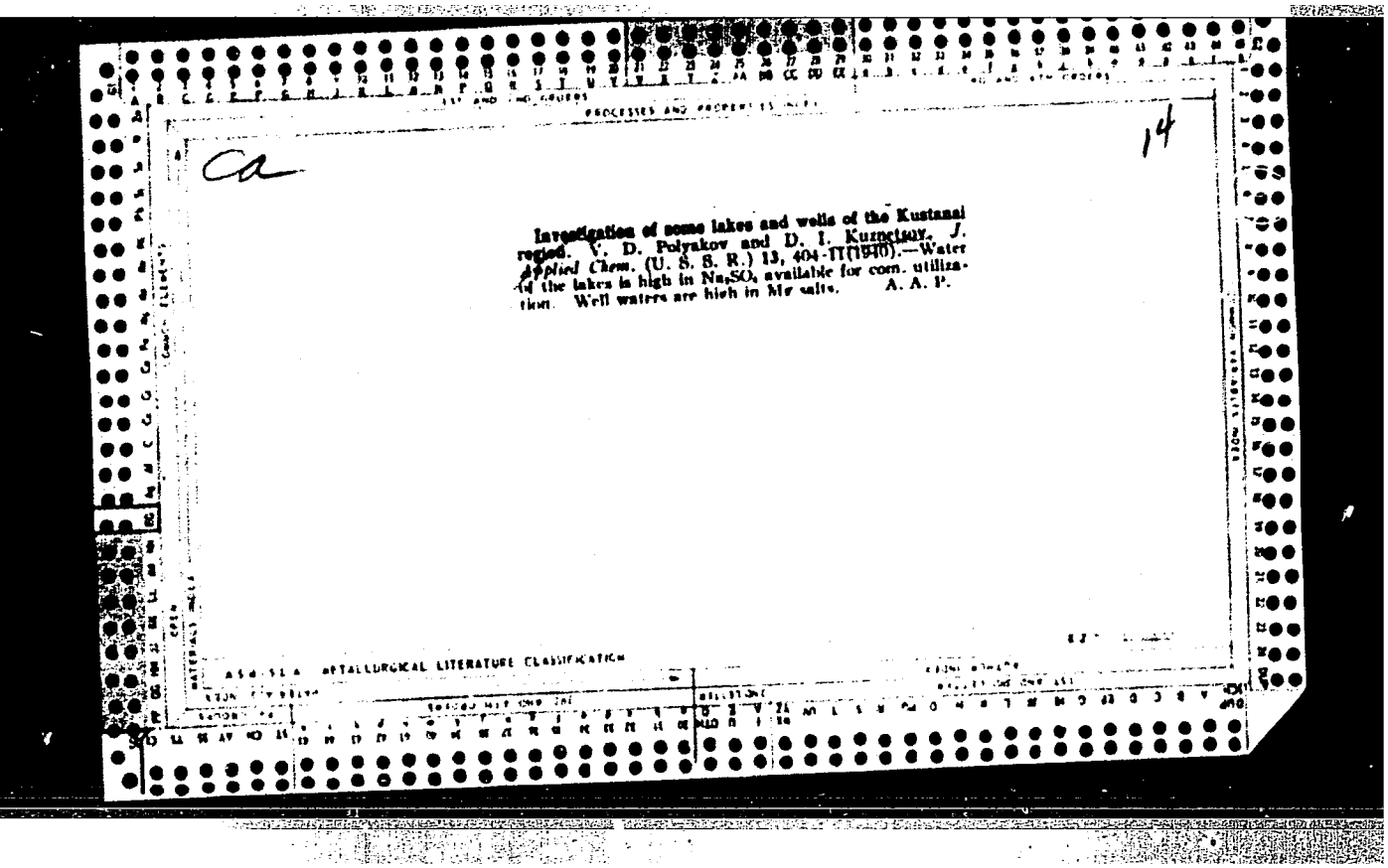
I. Kurnakov and A. A. Koshukhovskii. *J. Applied Chem. (U. S. S. R.)* 9, 1178-82(1936); *C. C. A.* 30, 5199. —The only. isotherm for the $CdCl_2$-HCl-H_2O system at 25° was constructed. In the range of HCl concn. from 0 to 11% the solid phase is $CdCl_2 \cdot 2.5\ H_2O$; from 6 to 11% it is $CdCl_2 \cdot H_2O$; from 11 to 22% it is $2CdCl_2 \cdot HCl \cdot 4H_2O$; and from 22 to 27% it is $CdCl_2 \cdot HCl \cdot 3H_2O$. The compns. of these phases were detd. by Schreinemakers' method (cf. *Z. physik. Chem.* 11, 81(1893)). $MgCl_2$, $BaCl_2$ and $HgCl_2$ can be almost completely salted out by means of HCl. $CdCl_2$, $ZnCl_2$ and $CaCl_2$ can be pptd. if the soln. is satd. with HCl under increased pressure, the last as hydrate (from and the others as hydrochlorides. The soly. of $HgCl_2$ increases in the presence of HCl. In all systems dehydration of solid phases with increase of concn. was observed. If a system forms hydrochlorides then hydration increases with transition to hydrochloride. Analytical data are tabulated. Fifteen references.

A. A. Podgorny

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION



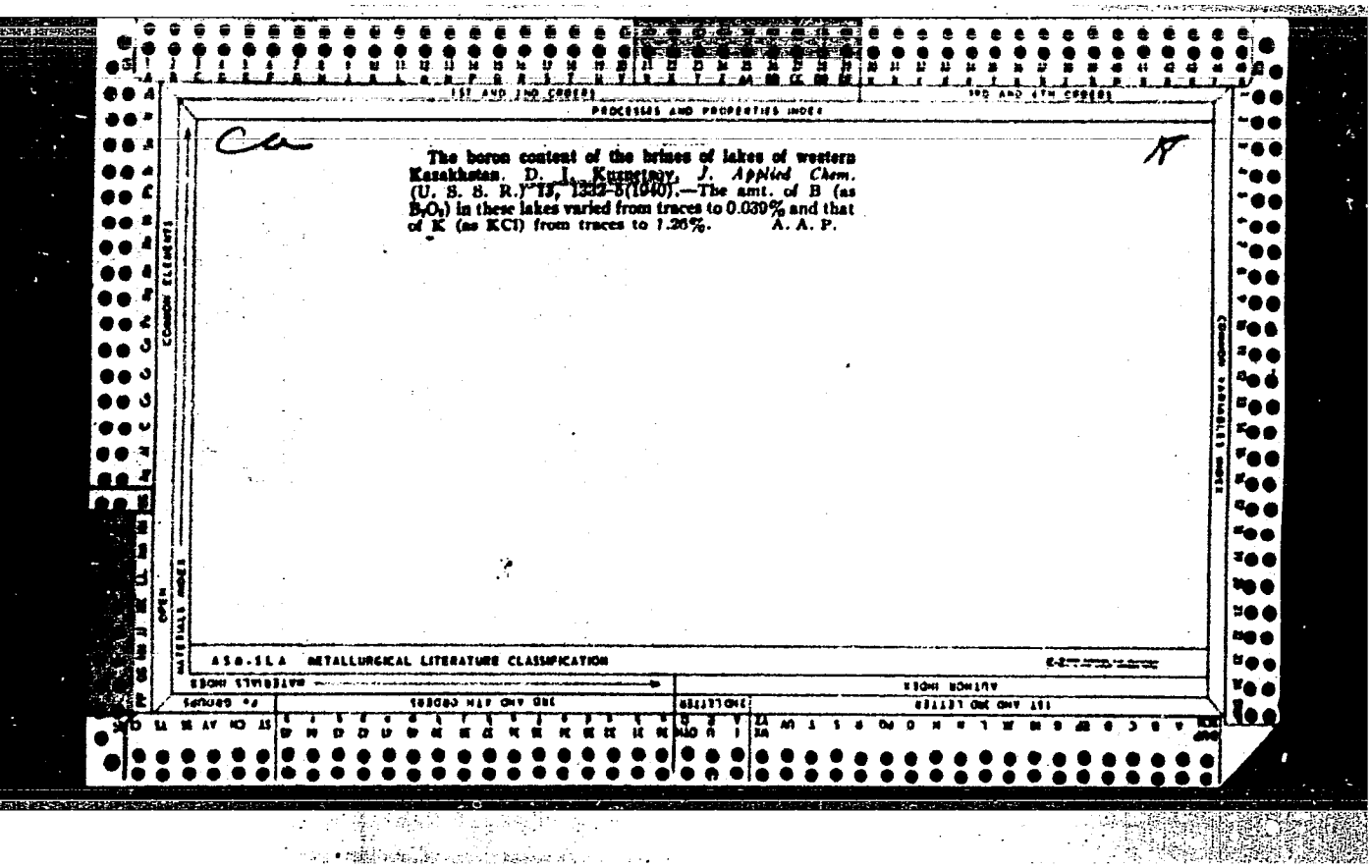
Analysis of mixtures containing primary potassium and primary ammonium phosphate. D. I. Kuznetsov and A. A. Kosmachevski (Compt. rend. Acad. Sci. U.R.S.S., 1939, 24, 752—754).—Evaporation of 10 ml. of solution containing 0·1—0·2 g. of KH_2PO_4 or $NH_4H_2PO_4$ or a mixture of the two, followed by drying for 6 hr. at 100°, yields a practically anhyd. product of composition corresponding with these formulæ. The NH_4 in such a mixture can be found by driving off NH_3 and titrating, but the subsequent determination of the K is unsatisfactory. Good results can be obtained by adding 1—2 ml. of aqua regia for every 0·1 g. of $NH_4H_2PO_4$ and evaporating to dryness, when the NH_4 is eliminated as N_2 and NOCl. 2—3 ml. of $HClO_4$ are added when the odour of HCl and HNO_3 is no longer detectable, followed by H_2O to dissolve the pptd. $KClO_4$. After evaporation until $HClO_4$ vapour appears the solution is cooled and the $KClO_4$ pptd. by EtOH containing 0·2% of $HClO_4$ and filtered through sintered glass. The P_2O_5 is determined as $MgNH_4PO_4.6H_2O$, the lower hydrate first pptd. giving place to the hexahydrate when kept overnight. The accuracy is < that attained by determination as $Mg_2P_2O_7$. T. H. G.



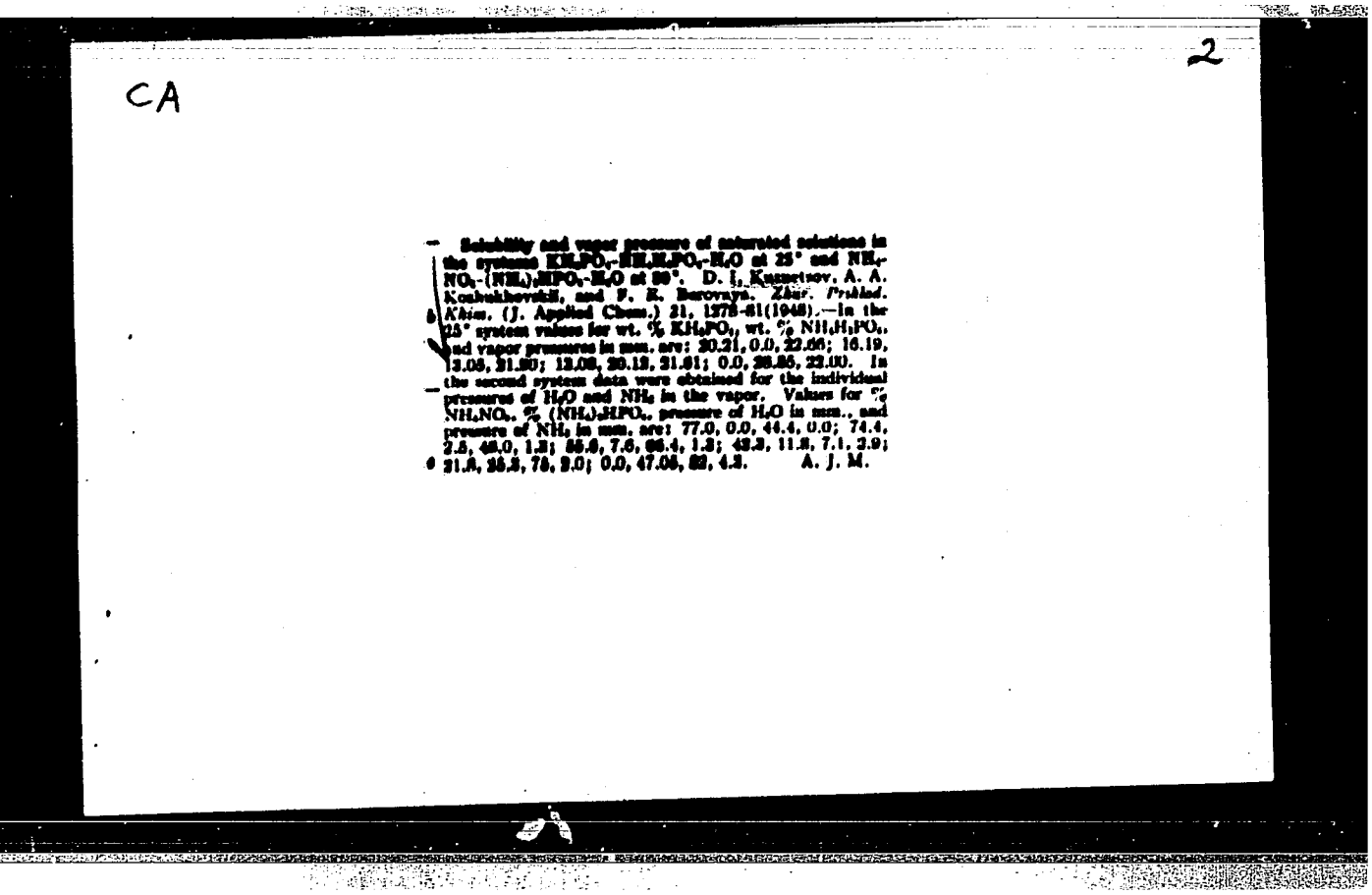
Ca

14

Investigation of some lakes and wells of the Kustanai region. V. D. Polyakov and D. I. Kuznetsov. *J. Applied Chem.* (U. S. S. R.) 13, 404-11(1940).—Water of the lakes is high in Na_2SO_4 available for com. utilization. Well waters are high in Mg salts. A. A. P.



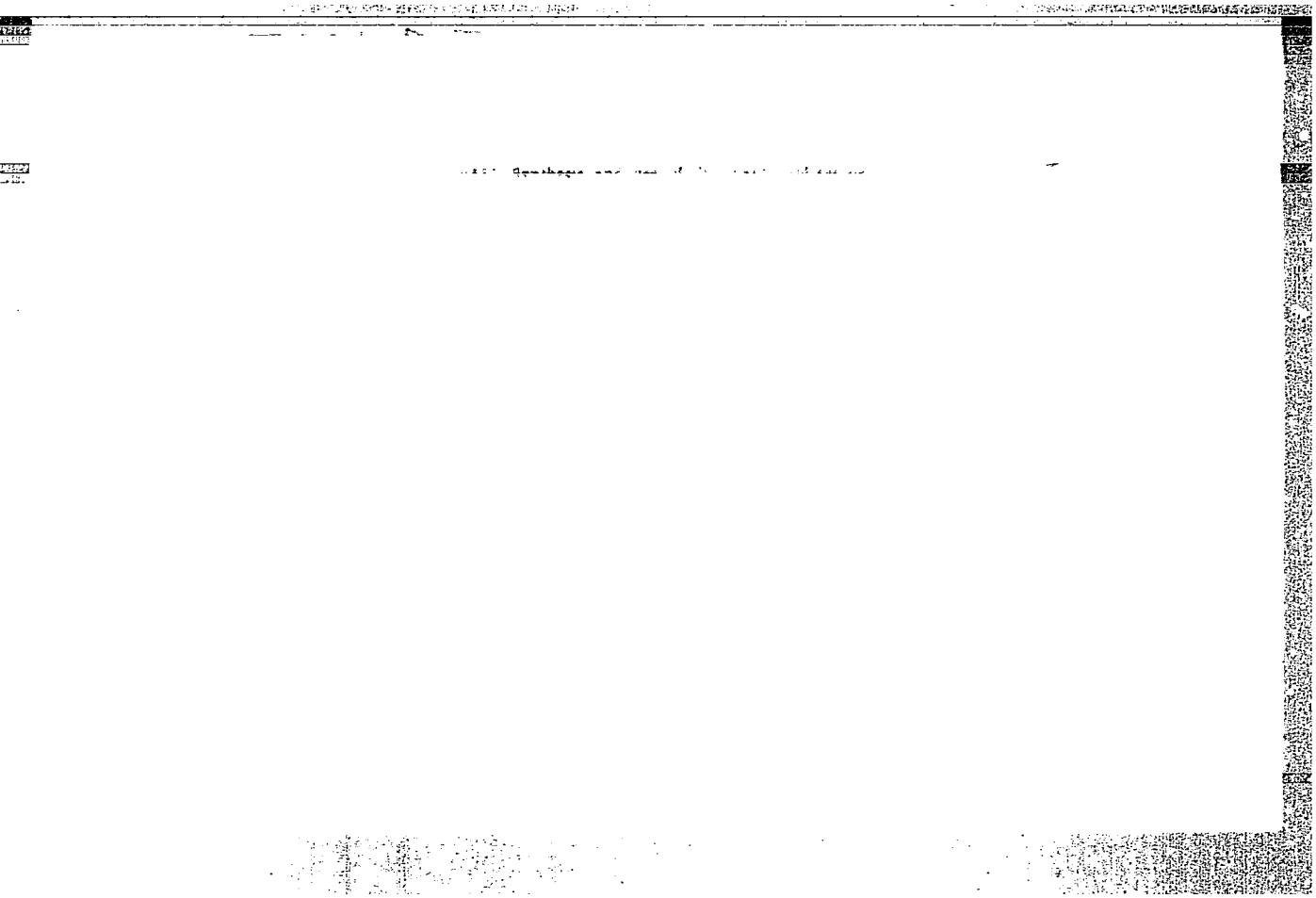
The boron content of the brines of lakes of western Kazakhstan. D. I. Kuznetsov. *J. Applied Chem.* (U. S. S. R.) 13, 1333-5(1940).—The amt. of B (as B_2O_3) in these lakes varied from traces to 0.030% and that of K (as KCl) from traces to 1.26%. A. A. P.



CA

2

Solubility and vapor pressure of saturated solutions in the systems KH_2PO_4-$NH_4H_2PO_4$-H_2O at 25° and NH_4NO_3-$(NH_4)_2HPO_4$-H_2O at 50°. D. I. Kuznetsov, A. A. Kozukhovskii, and P. E. Berovaya. *Zhur. Prikhad. Khim.* (J. Applied Chem.) 21, 1273-81(1948).—In the 25° system values for wt. % KH_2PO_4, wt. % $NH_4H_2PO_4$, and vapor pressures in mm. are: 20.21, 0.0, 22.66; 16.19, 3.06, 21.80; 13.08, 20.19, 21.61; 0.0, 28.85, 22.00. In the second system data were obtained for the individual pressures of H_2O and NH_3 in the vapor. Values for % NH_4NO_3, % $(NH_4)_2HPO_4$, pressure of H_2O in mm., and pressure of NH_3 in mm. are: 77.0, 0.0, 44.4, 0.0; 74.4, 2.5, 45.0, 1.3; 65.0, 7.6, 66.4, 1.3; 42.3, 11.8, 7.1, 3.9; 21.8, 25.3, 78, 9.0; 0.0, 47.06, 82, 4.3. A. J. M.



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GOLOVINA, A.P.; ALIMARIN, I.P., KUZNETSOV, D.I.

Uses of 8-oxyquinoline derivatives for determination of various elements. Report No. 2: Spectrophotometric determination of cobalt by quinoline-5, 8-dioxime. Vest. Mosk. un. Ser. mat., mekh., astron. fiz. khim., 12 no.5:187-191 '57. (MIRA 11:9)

1.Kafedra analiticheskoy khimii Moskovskogo gosudarstvennogo universiteta.
(Cobalt) (Spectrophotometry) (Quinoline)

KUZNETSOV, D. I., Cand of Chem Sci — "Study of the Laws of Interaction of Aromatic Sulfinic Acid Derivatives With Metals and the Quantitative Determination and Separation of Rare Metals With the Aid of Sulfinic Acids," Moscow, 1959, 11 pp (Moscow State Univ im Lomonosov) (KL, 5-60, 123)

ALIMARIN, I.P.; KUZNETSOV, D.I.

Oxidation-reduction properties of benzenesulfinic acid. Vest. Mosk.un.Ser.mat., mekh., astron., fiz., khim. 14 no.3:189-200 '59. (MIRA 13:5)

1. Kafedra analiticheskoy khimii Moskovskogo gosudarstvennogo universiteta.
(Benzenesulfinic acid) (Oxidation-reduction reaction)

KUZNETSOV, D.I.; ALIMARIN, I.P.

Synthesis of o-hydroxybenzenesulfinic acid, a new chemical reagent. Izv.AN SSSR, Otd.khim.nauk no.6:1155-1156 Je '61. (MIRA 14:6)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Benzenesulfinic acid)

KUZNETSOV, D.I.

"Les methodes de la chimie analytique. Analyse quantitative minerale" by G.Charlot. Reviewed by D.I. Kuznetsov. Zhur. anal. khim. 16 no. 4:511-512 Jl-Ag '61. (MIRA 14:7)
(Chemistry, Analytical) (Charlot, G.)

KUZNETSOV, D.I.; ALIMARIN, I.P.

Quantitative determination of some rare elements by means of -naphthalenesulfinic acid. Izv.vys.ucheb.zav.; khim.i khim. tekh. 5 no.1:26-30 '62. (MIRA 15:4)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, kafedra analiticheskoy khimii.
(Naphthalenesulfinic acid) (Metals—Analysis)

KUZNETSOV, D. I.

"Restoring and Remodelling Tools" Stanki i Instrument , 10, No. 2, 1939, Engineer

Report U-1505, 4 Oct 1951.

KUZNETSOV, D.I.

Sistema mnogokratnogo vosstanovleniia i ispol'zovaniia otrabotannogo instrumenta. (Vestn. Mash., 1951, no. 2 p. 57-65)

System of repeated resotration and utilization of used up instruments.

DLC: TN4. V4

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

1. KUZNETSOV, D.I.

2. USSR (600)

4. Technology

7. Repeated restoration of a tool. Kiev, Mashgiz, 1952

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

KUZNETSOV, D.I., inzh. VERBOVSKIY, G.G., prof., red.; DOMSKOY, Ya., red.; KUCHERSKIY, I., tekhn. red.

[Maximum utilization of tools] Mnogokratnoe ispol'zovanie instrumenta. Pod red. G.G. Verbovskogo. [Khar'kov] Khar'kovskoe knizhno-gazetnoe izd-vo, 1952. 66 p. (MIRA 11:9)

1. Khar'kovskiy traktornyy zavod (for Kuznetsov).
(Cutting tools)

KUZNETSOV, D.I., inzhener; KAMENICHNYY, I.S., inzhener, retsenzent; [redacted], M.P., kandidat tekhnicheskikh nauk, retsenzent; RUBINSKIY, Ya., tekhnicheskiy redaktor

[Manual on the liquid cyaniding of tools] Pamiatka po zhidkostnomu tsianirovaniiu instrumenta. Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1953. 67 p. [Microfilm] (MLRA 9:8)
(Cementation (Metallurgy)) (Cutting tools)

KUZNETSOV, D.I.; ITKIN, A.L.; SOROKA, M.S., redaktor; RUDENSKIY, Ya.V., tekhnicheskiy redaktor

[Repeated reconditioning of tools and instruments] Mnogokratnoe vosstanovlenie instrumenta. 2-e izd., ispr. i dop. Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, Ukrainskoe otd-nie, 1955. 196 p. (MLRA 8:8)
(Tools) (Instruments)

KUZHETSOV, D.I.

Maintenance of steel tapping and slag holes in open-hearth furnaces. Metallurg no.8:16-19 Ag '56. (MLRA 9:10)

1.Pervyy podruchnyy stalevara martenovskogo tsekha no.1 Kuznetskogo metallurgicheskogo kombinata.
(Open-hearth furnaces)

KUZNETSOV, Dmitriy Ivanovich; ITKIN, Abram L'vovich; DASHEVSKIY, I.I., retsenzent; CHISTYAKOVA, L.G., inzh., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Repeated reconditioning of metal-cutting tools] Mnogokratnoe vosstanovlenie instrumentov. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 277 p. (MIRA 14:6)
(Metal-cutting tools)

PETLYAKOV, M.M., inzh.; SHAPOVALOV, A.P., inzh.; GUSAKOV, A.N., inzh.; UDOVICHENKO, N.V., inzh.; BESPALOV, V.N., inzh.; KUZNETSOV, D.K., inzh.

Obtaining a flat sheet of transformer steel. Stal' 25 no.12: 1132-1134 D '65. (MIRA 18:12)

1. Novolipetskiy metallurgicheskiy zavod i TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii imeni I.P. Bardina.

KUZNETSOV, Dmitriy Mikhaylovich; KONONOVA, V.S., red.; GORYACHKINA, R.A., tekhn. red.

[Manual for the operator of a wheeled scraper] Pamiatka mashinistu skrepera. Moskva, Avtotransizdat, 1963. 29 p. (MIRA 16:12)

(Road machinery)

SOV/123-59-20-82999

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 20, p 83 (USSR)

AUTHOR: Kuznetsov, D.P.

TITLE: Calculating the Stress of Extrusion of Hollow Cylindrical Machine Parts

PERIODICAL: V sb.: Novoye v kuznechno-shtampovochn. tsekhakh Leningrada. Leningrad, 1958, pp 137 - 153

ABSTRACT: Based on an analysis of the deformed state of the blank, which was carried out on the results of experiments in which different methods were used, the author suggests formulae for the determination of the maximum extrusion stress arising during the direct extrusion of cylindrical machine parts from thick-bottomed cap-shaped blanks, and for reverse extrusion of cylindrical machine parts by plunger dies with plane face ends from dies with plane bottoms. Tables are also given of the shape factor, which make it possible to apply the given formula for the determination of stress if tools with other shapes are applied. Derivations of formulae and examples of their application are given.

Card 1/1 Ye.A.I.

KUZNETSOV, D.P.

Stressed-deformed state of billets during straight extrusion.
Kuz.-shtam.-proizv. 1 no.5:20-23 My '59. (MIRA 12:10)
(Extrusion (Metals))

SOV/122-59-2-14/34

AUTHOR: Kuznetsov, D.P., Candidate of Technical Sciences

TITLE: Stressed State of Blanks with Reverse Deep Drawing of Hollow Cylindrical Parts (Napryazhenno-deformirovannoye sostoyaniye zagotovok pri obratnom vydavlivanii polykh tsilindricheskikh detaley)

PERIODICAL: Vestnik Mashinostroyeniya, 1959, Nr 2, pp 40-44 (USSR)

ABSTRACT: Studies are made of the flow of material with aluminium, dural, brass and steel blanks pressed under flat ended tools at 0.05 to 0.15 mm/sec in hydraulic presses and at speeds up to 300 mm/sec in mechanical presses. The blanks were drawn into cups with height to diameter ratio of 0.3 and above and wall thickness from 1 to 4 mm. Illustrations show the flow pattern at various stages of the draw determined by a grid laid into the blank. The flow pattern is little affected by the speed of draw. An undeformed dead area remains under the flat end of the tool in some cases depending on the degree of lubrication. Parts of the blank, flowing into the gap between tool and die are not plastically deformed. Metallographic analysis shows considerable change in the

Card 1/3

Stressed State of Blanks with Reverse Deep Drawing of Hollow Cylindrical Parts

microstructure of the metal in the course of extrusion. The inner wall of the cup in contact with the tool shows greatest deformation. The top of the cup is least deformed. By using layered blanks of differently coloured copper and tombak the flow pattern could be studied in the sectioned drawn product - this reveals that the flow pattern is continuous and the metal structure is not ruptured even at points of greatest deformation. The flow pattern was analysed from deformation of the grid pattern for blanks at the stage of draw illustrated in Fig 4. Graphs in Fig 5a are for a brass blank and in Fig 5b for a dural plank and show the components of deformation at the axis of symmetry in the base and also through the wall. Axial, radial, tangential and shear stresses calculated from the deformation components at section ABVGD in Fig 4 are plotted in Fig 6. From these stresses the force of deformation was calculated. The component P_1 resulting from axial stresses was calculated to be 48.1 tons and component P_2 resulting from shear stresses to be

Stressed State of Blanks with Reverse Deep Drawing of Hollow Cylindrical Parts

5.46 tons by integration over the stress profiles. These total 53.56 tons which gives good agreement with the actual deformation force of 50.5 tons. There are 6 figures, 1 table and 2 Soviet references.

Card 3/3

VAYNTRAUB, David Abramovich; KUZNETSOV, Dmitriy Petrovich; FILINA, Irina Stepanovna; SHILOV, Viktor Stepanovich; TSUKKER, G.Ye., red.; FREGER, D.P., red.izd-va

[Cold extrustion; a review] Kholodnoe vydavlivanie; obzor. Leningrad.(Leningradskii dom nauchno-tekhnicheskoi propagandy. Seriia: Goriachaia i kholodnaia obrabotka metallov davleniem) No.2. 1961. 47 p. (MIRA 15:6)

(Extrustion (Metals))

VAYNTRAUB, David Abramovich; KUZNETSOV, Dmitriy Petrovich; FILINA, Irina Stepanovna; SHILOV, Viktor Stepanovich; TSUKKER, G.Ye., red.; FREGER, D.P., red. izd-va

[Cold extrusion] Kholodnoe vydavlivanie; obzor. Leningrad. Mo.l. 1961. 62 p. (MIRA 15:4)
(Extrusion (Metals))

29374
S/182/61/000/011/001/005
D038/D113

11310

AUTHOR: Kuznetsov, D. P.

TITLE: Perfecting the technology of producing hollow cylindrical parts with a flange

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, no. 11, 1961, 6-9

TEXT: New extrusion processes of producing hollow cup-shaped parts with a flange are discussed, as the present methods include too many operations, 30-50% of the metal is wasted, and up to 10% of the rejects are due to cracks occuring in the flange. The author suggests three alternative methods, each including the following operations: (1) blank cutting, heading, indirect extrusion and calibration; (2) cutting and upsetting of blanks, direct and indirect extrusion and calibration; (3) cutting and upsetting of blanks, indirect extrusion and heading of the flange. The first and third methods include more or less short operational cycles. The second method could be recommended for the production of relatively high parts. These new methods developed in 1958-1959 by the "Department of Pressure Working of Metals" of the Leningradskiy mekhanicheskiy institut (Leningrad Mechanical Engineering Institute), under the supervision of Professor G. A. Smirnov-

Card 1/2

Perfecting the technology of ...

Alyayev, were approved after experimental tests, carried out under laboratory and plant conditions, in which A. V. Mozhzherin and V. A. Kroshilov participated. Copper, brass and АМг (AMg) alloy blanks were tested. A mixture of cylinder oil and natural wax in equal proportions was used as a lubricant. The author concludes that, according to preliminary estimates, the cost price of a manufactured part ought to be reduced by not less than 20%, and the new processes should facilitate the mechanization and automation of production methods. There are 5 figures.

Card 2/2

GUS'KOV, Aleksandr Vasil'yevich, inzh.; KUZNETSOV, D.P., red.; GRIGOR'YEVA, I.S., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Manufacture of shaped parts by the extrusion method in the Czechoslovak Socialist Republic; stenographic record of a lecture....]Izgotovlenie fasonnykh detalei metodom vydavlivaniia v Chekhoslovatskoi Sotsialisticheskoi Respublike; stenogramma lektsii, prochitannoi v LDNTP na kratkosrochnom seminare "Shtampovka kholodnym vydavlivaniem." Leningrad, 1962. 26 p. (MIRA 15:9)

(Extrusion (Metals))
(Czechoslovakia--Machinery industry)

REZNIKOV, Aleksey Georgiyevich; KUZNETSOV, D.P., red.; FREGER, D.P., red.izd-va; BELOGUROVA, I.A., tekhn. red.

[Making steel and aluminum parts by cold extrusion]Shtampovka detalei iz stali i aliuminievykh splavov metodom kholodnogo vydavlivaniia. Leningrad, 1962. 27 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Goriachaia i kholodnaia obrabotka metallov davleniem, no.6)
(MIRA 16:2)

(Extrusion (Metals))

ANTONOV, E.I., inzh.; KUZNETSOV, D.P., inzh.; LAVRUKHINA, T.P., inzh.; TSYRKIN, I.Z., inzh.

Redesigning of the ER-3-600 ejector for operation on steam pressures of 6 atm. Energetik 10 no.5:13-16 My '62. (MIRA 15:5)
(Steam turbines)

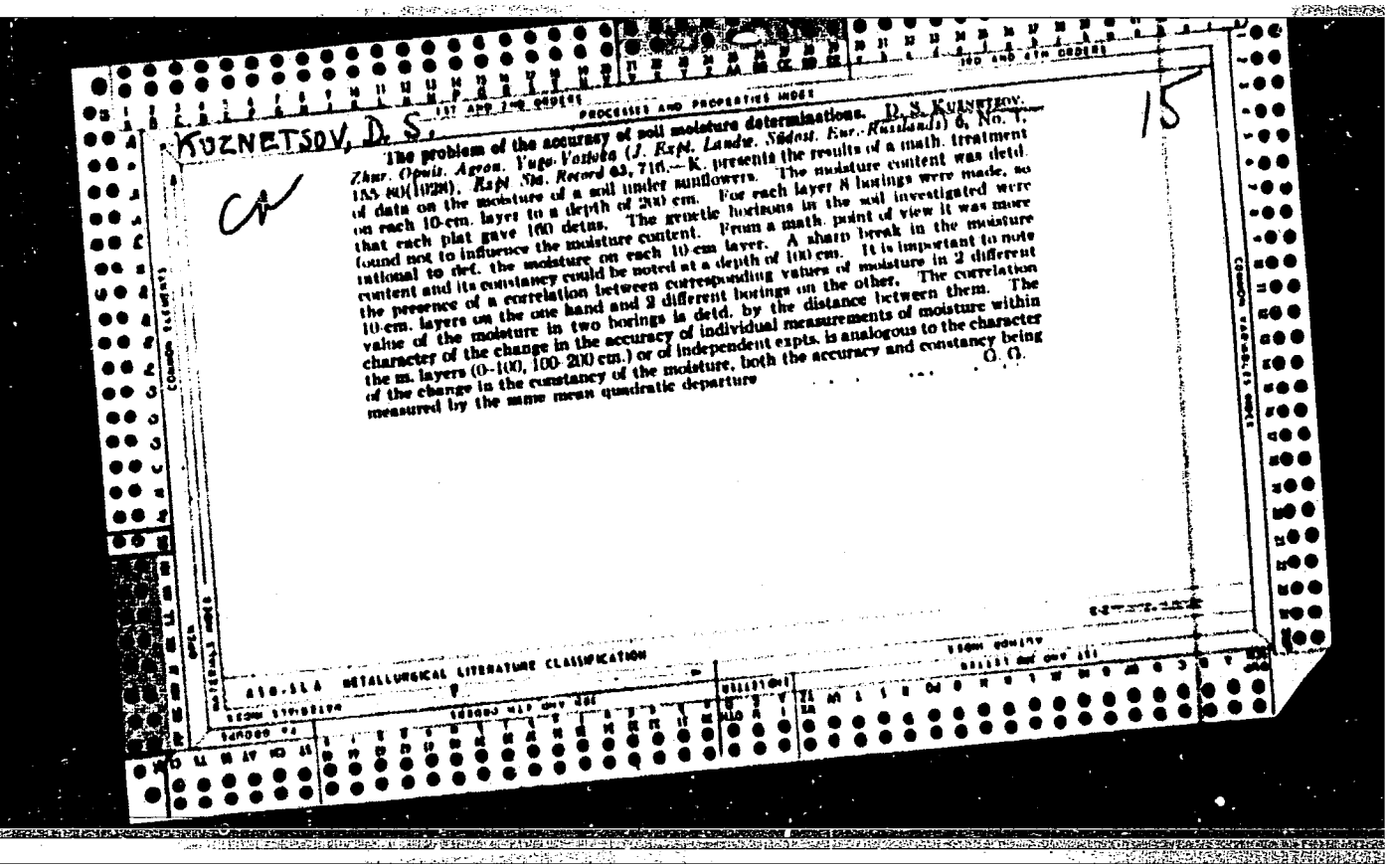
KUZNETSOV, Dmitriy Sergeyevich

[Operational calculus] Operatsionnoe ischislenie; konspekt lektsii. Moskva, Mosk. vysshee tekhn. uchilishche im. N.E.Baumana, 1961. 98 p. (MIRA 16:7)
(Calculus, Operational)

KUZNETSOV, Dmitriy Sergeyevich; TAL'SKIY, D.A., red.; GRIGORCHUK, L.A., tekhn. red.

[Special functions] Spetsial'nye funktsii. Moskva, Vysshaia shkola, 1962. 245 p. (MIRA 15:6)

(Functions)



KUZNETSOV, D. S.

15

The problem of the accuracy of soil moisture determinations. D. S. KUZNETSOV. *Zhur. Opyt. Agron. Yugo-Vostoka* (*J. Exp. Landw. Südost. Eur.-Russlands*) 6, No. 1, 183-90(1928). *Exp. Sta. Record* 63, 716.—K. presents the results of a math. treatment of data on the moisture of a soil under sunflowers. The moisture content was detd. on each 10-cm. layer to a depth of 200 cm. For each layer 8 borings were made, so that each plat gave 160 detns. The genetic horizons in the soil investigated were found not to influence the moisture content. From a math. point of view it was more rational to det. the moisture on each 10-cm layer. A sharp break in the moisture content and its constancy could be noted at a depth of 100 cm. It is important to note the presence of a correlation between corresponding values of moisture in 2 different 10-cm. layers on the one hand and 2 different borings on the other. The correlation value of the moisture in two borings is detd. by the distance between them. The character of the change in the accuracy of individual measurements of moisture within the m. layers (0-100, 100-200 cm.) or of independent expts. is analogous to the character of the change in the constancy of the moisture, both the accuracy and constancy being measured by the same mean quadratic departure O. O.

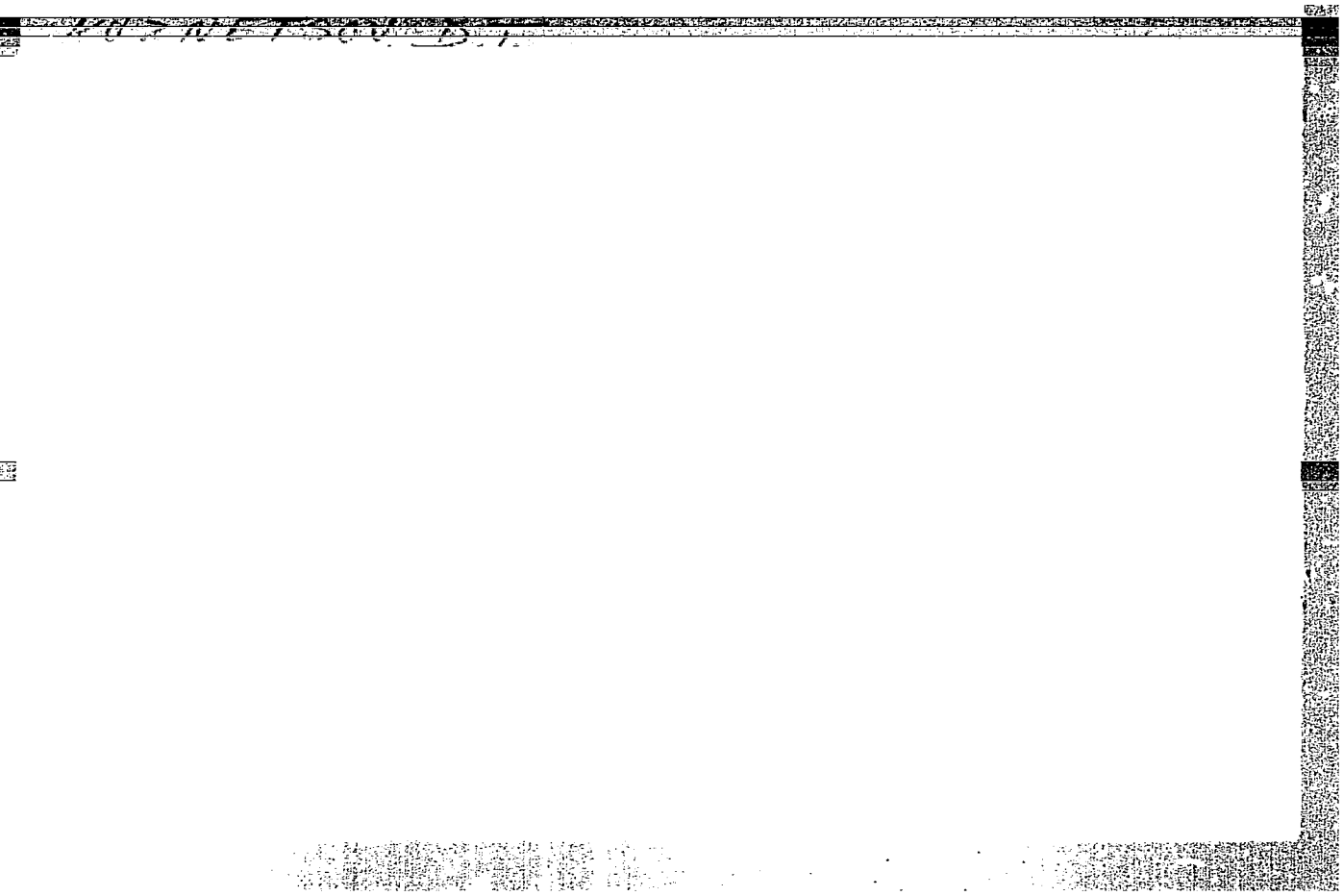
KUZNETSOV, D.S.; GOLUBEV, V.V., prof., red.; RULEVA, M.S., tekhn. red.

[Hydrodynamics] Gidrodinamika. Pod red. V.V.Golubeva. Leningrad, Gidrometeor. izd-vo, 1951. 390 p. (MIRA 14:5)

1. Chlen-korrespondent AN SSSR (for Golubev)
(Hydrodynamics)

KUZNETSOV, Dmitriy Sergeyevich; TAL'SKIY, D.A., red.

[Special functions] Spetsial'nye funktsii. Moskva, Vysshaia shkola, 1965. 422 p. (MIRA 18:7)



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KUZNETSOV, Dmitriy Trofimovich; ZHUKOV, V.A., dotsent, retsenzent; KIVIT, A.A., nauchnyy red.; NIKOLAYEV, G.A., nauchnyy red.; ROGINA, G.M., vedushchiy red.; YASHCHURZHINSKAYA, A.B., tekhn.red.

[Outline of the development of the oil-shale industry in the Estonian S.S.R.] Ocherki razvitiia slantsevoi promyshlennosti Estonskoi SSR. Leningrad, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, Leningradskoe otd-nie, 1960. 199 p. (MIRA 13:6)

1. Zaveduyushchiy kafedroy khimicheskoy tekhnologii Leningradskogo inzhenerno-ekonomicheskogo instituta (for Zhukov).
(Estonia--Oil shales)

KUZNETSOV, D. V.

KUZNETSOV, D. V. I LABUTIN, NA.
36205 Opyt vnedreniya uskoriteley na Obvinskom reyde. (Trest "Kamlesosplav"). Les. prom-st', 1949, No. 11, S. 18-19.

SO: Letopsi'Zhrunal'nykh Statey, No. 49, 1949

KUZNETSOV, D. V.

Agriculture

Using TL-3 winches for binding timber into rafts on the water, Moskva, Goslesbumizdat, 1952

Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

MAKAROVA, Z. P.; KUZNETSOV, D. V.; KOZHANOV, D. I.

Lumbering

Floating hardwood logs in the Tartar Republic., Les prom., 12, no. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. UNCLASSIFIED.

SINGALEVICH, M.S.; KUZNETSOV, D.V.

Manufacturing the RSB-2 bundle-breaking machine. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 18 no.11:43-45 N '65. (MIRA 19:12)

KUZNETSOV, D.V.; OSIPOV, M.Ye.

Introducing the TAZS-1 tractor unit. Biul.tekn.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 18 no.9:35-36 S '65. (MIRA 18:10)

SOKOL'SKIY, G.K.; KUZNETSOV, D.V.

Introducing the KT-1 longitudinal cable conveyor. Biul.tekh.-ekon. inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 18 no.9:39-40 S '65. (MIRA 18:10)

KUZNETSOV, E., red.

[Diethyl pyrocarbonic ester (piref), the new preservative in wine making; collection of articles on the chemistry and use of piref] Dietilpirougol'nyi efir (piref) - novyi konservant v vinodelii; sbornik statei po khimii i primeneniiu pirefa. Kishinev, Kartia moldoveniaske, 19[illegible]. [illegible] p. (MIRA [illegible])

1. Akademiya nauk Moldavskoy SSR. Institut khimii.

S/089/62/012/002/001/013
B102/B138

AUTHORS: Kuznetsov, E. I., Velikhov, Ye.P.

TITLE: The International Conference on Plasma Physics and Controlled Thermonuclear Reactions

PERIODICAL: Atomnaya energiya, v. 12, no. 2, 1962, 101 - 110

TEXT: The International Conference on Plasma Physics and Controlled Thermonuclear Reactions was held at Salzburg (Austria) from September 4 to 9, 1961. It was organized by the MAGATE and attended by 508 delegates from 29 countries and 6 international organizations. Of the 250 papers presented 111 were read. The full text of all lectures and discussions will be published in the journal "Yadernyy sintez". The present article summarizes the results of the Conference. Lectures by the following Soviet scientists are mentioned and discussed in brief: I. F. Kvartskhava et al., new data on self-sustained discharges. Investigations on current distribution in a θ-pinch, plasma concentrations of $10^{17}cm^{-3}$ achieved for some μsec at several hundred ev. T. I. Filippova et al., dense high-

temperature plasma in the region of non-cylindrical cumulation of a z-pinch; densities 10^{18} cm^{-3} at above 500 ev. N. V. Fedorenko et al., investigation of the atomic particle flow emitted from the plasma machine "Альфа" ("Al'fa"). The ion energy was found to be approximately proportional to charge and almost independent of mass. A. I. Karchevskiy et al., high-current gas discharge in weak magnetic fields; confirmation of the results obtained with the "Zeta" machine. Soviet reports on experiments with the "Токамак-II" ("Tokamak-II") machine; Joulian plasma heating in strong magnetic fields; study on impurity influence on ionization and heating of deuterium plasma. In "Tokamak-II" no collective processes, such as macroscopic particle motion, were observed. B. B. Kadomtsev is mentioned in this connection. K. D. Sinel'nikov et al., investigations on ionic cyclotron waves in plasma heating. V. M. Glagolev et al., Study of interaction between plasma and the high-frequency electromagnetic field of a cavity. V. G. Andreyev et al. and R. A. Demirkhanov et al., plasma confinement by travelling waves. Soviet reports on "Огра" ("Ogra") experiments with "hot" plasma, 10^{7} cm^{-3}, H_2-ions with 160 kev. M. S. Ioffe

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B102/B138

et al., Plasma instability investigations in the magnetic mirror machine "Ionic magnetron"; fast ion concentrations 10^9-10^{10} cm^{-3} retained in an ordinary mirror trap for 100 μsec. S. Yu. Luk'yanov et al., I. M. Podgornyy et al., results of plasma trapping in mirror machines. V. D. Fedorchenko and D. P. Panov, Stabilization of oscillations in the "Ogra" machine; B. B. Kadomtsev, theory of plasma instability. L. I. Rudakov, R. Z. Sagdeyev, investigation of instabilities caused by particle drift in inhomogeneous plasma. B. B. Kadomtsev, A. V. Nedospasov, explanation of anomalous diffusion in the positive column by current-convective instabilities. A. A. Vedenov, et al., kinetic quasilinear theory of plasma instabilities. Ye. K. Zavoyskiy et al., I. F. Kharchenko, theoretical descriptions of processes taking place in strongly instable plasma. Academician L. ... Artsimovich read the final paper.

SUBMITTED: November 27, 1961

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KUZNETSOV, E.N., aspirant

Practical method for designing arbitary rotary shells for axisymmetric load. Nauch.dokl.vys.shkoly; stroi. no.3:76-84 '58. (MIRA 12:7)

1. Rekomendovana kafedroy stroitel'noy mekhaniki Moskovskogo inzhenerno-stroitel'nogo instituta imeni V.V. Kuybysheva.
(Elastic plates and shells)

KUZNETSOV, E. N. Cand Tech Sci -- (diss) "A practical method of calculating arbitrary ~~rotary~~ moment shells ~~with respect to~~ axially-symmetrical ~~influence~~."
Mos, 1959. 13 pp (Min of Higher and Secondary Specialized Education RSFSR. Mos Order of Labor Red Banner Construction Engineering Inst im V. V. Kuybyshev), 130 copies (KL, 47-59, 115)

KUZNETSOV, E.N.

Designing arbitrary rotation shells foraxially symmetric actions of temperature. Nauch.dokl.vys.shkoly; stroi. no.1:91-99 '59.
(MIRA 12:10)

1. Rekomendovana kafedroy stroitel'noy mekhaniki Moskovskogo inzhenerno-stroitel'nogo instituta imeni V.V.Kuybysheva.
(Elastic plates and shells)

S/180/62/000/004/006/009
E040/E435

AUTHORS: Arkharov, V.I., Kuznetsov, E.N. (Sverdlovsk)

TITLE: On the fine structure of crystalline lattice during polymorphic transformations in cobalt and titanium

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Metallurgiya i toplivo, no.4, 1962, 143-152

TEXT: Directional bonds are known to exist between crystal lattices of the original and new phases formed during polymorphic transformations in cobalt and titanium; the microstructure of the resultant products of the transformation and their kinetics and temperature dependence differ from that of martensitic transformation in carbon steel, therefore calculations were made of the dimensions and shape of coherent zones present during polymorphic transformations in the crystal lattices of cobalt and titanium. These studies together with available knowledge of the martensitic transformation in steel contribute to the elucidation of the mechanism of the following system of crystal lattices:

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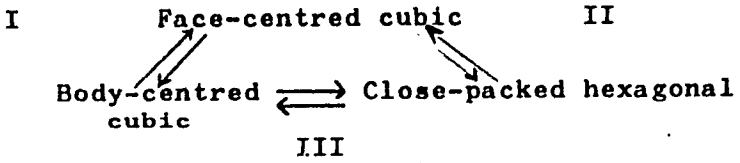
On the fine structure ...



Results are given of calculation of coherent regions for type II and type III transformations in Co and Ti, using essentially the method given previously (Fiz. metallov i metalloved., v.12, no.6, 1961, 853). Basic parameters are tabulated of coherent regions in the β-transition in cobalt (at 450°C) and Ti (at 882.5°C) and the dimensions are given of the β and α-crystal lattices for both metals. Graphical studies were made by superposition of the (111) β and (001) α-phases. It is concluded that the coherency region in Co during transition from the β to α state is in the form of a thin and comparatively narrow but long strip. In Ti, the coherent region is narrower and shorter than in Co, its thickness being approximately of the same order. Comparison of the

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On the fine structure ... S/180/62/000/004/006/009
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transformations in Co and Ti with the martensitic transformation in steel indicates that the three types of transformation produce essentially different shapes and characters of the coherent regions. The absolute size of the regions is also different. The above differences might provide a basis for studying the causes of the differences in the microstructure of the transformation products and their properties, which depend on the microstructure. There are 6 figures and 5 tables.

SUBMITTED: March 2, 1962

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KUZNETSOV, E.N. (Moskva)

Static calculations for cable-suspended systems with two chords.
Stroi.mekh.i rashch.soor. 4 no.5:7-14 '62. (MIRA 15:11)
(Roofs, Suspension)

KUZNETSOV, E.N., kand.tekhn.nauk

Calculations for circular suspension roofs. Trudy NIIZHB no.25:57-113 '62. (MIRA 16:2)

(Roofs, Suspension)

KUZNETSOV, Eduard Natanovich, kand. tekhn. nauk; LYASNIKOVA, L.I., red.; TARKHOVA, K.Ye., tekhn. red.

[Radial suspension systems; theory and design] Radial'nye vantovye sistemy; teoriia i raschet. Moskva, Gosstroiizdat, 1963. 120 p. (MIRA 16:9)
(Roofs, Suspension)