NOVOKHATKA, D.A., Cand Chem Sci -- (diss) "Chemical composition and structure of tannery materials of the smoke tree." Kishinev, 1958, 11pp with graphs (Min of Higher Education USSR, Kishinev State Univ), 150 copies. (KL, 41-58, 120)

smoke tree -> tanning substances

LAZUR'YEVSKIY, G.V.; NOVOKHATKA, D.A.

Tanning substances of the smoke tree [with summary in English]. Biokhimiia 24 no.1:9-14 Ja-F '59. (MIRA 12:4)

1. The Moldavian Branch of the Academy of Sciences of the U.S.S.R., Kishinev.

(SMOKE TREE) (TANNINS)

LAZUR'YEVSKIY, G.V.; NOVOKHATKA, D.A.

Syntheses based on sclareol. Part 4: Introduction of the amino group into the oxidation products of sclareol. Zhur. ob. khim. 30 no.9:3123-3125 S '60. (MIRA 13:9)

1. Moldavskiy filial Akademii nauk SSSR, Institut khimii.
(Sclareol) (Amino group)

NOVOKHATKA, D. A.; GLUSHKOVA, A. A.; CHETVERIKOVA, N. M.

Reaction of phenol with methylacetylene in the presence of boron fluoride compounds. Zhur. VKHO 7 no.5:586 '62. (MIRA 15:10)

1. Lisichanskiy filial Gosudarstvennogo proyektnogo i nauchno-issledovatel'skogo instituta azotnoy promyshlennosti.

(Phenol) (Propyne)

NOVOKHATKA, D.A.; MATYUSHINSKIY, B.V.; MOKHOVA, V.S.

Synthesis of diphenylolpropane by alkylation of phenol with methylacetylene. Zhur. VKHO 8 no.5:593-594 '63. (MIRA 17:1)

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

NOVOKHATKA, D.A.; MATYUSHENSKIY, B.V.; TYURINA, M.K.

Reaction of phenol with 2-chloroprene in the presence of Friedel-Crafts catalysts. Zhur. VKHO 10 no.2:240 '65. (MIRA 18:6)

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

L 21186-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6009708 (A) SOURCE CODE: UR/0064/66/000/003/0015/0016

AUTHOR: Novokhatka, D. A.; Matyushenskiy, B. V.; Glushkova, A. A.; Seraya, V. I.

19
B

ORG: none

TITLE: Preparation of diphenylolpropane from phenol and methylacetylene

SOURCE: Khimicheskaya promyshlennost', no. 3, 1966, 15-16

TOPIC TAGS: bisphenol A, bisparahydroxyphenylpropane, diphenylolpropane, polycarbonate, phenol, methylacetylene, boron trifluoride, manganese sulfate

ABSTRACT: A new preparative method has been developed for high purity 2,2-bis(4-hydroxyphenyl)propane (bisphenol-A), suitable for making polycarbonates. The method is based on the alkylation of phenol with methylacetylene in the presence of boron trifluoride as catalyst. Preliminary study indicated that the yield of bisphenol-A depends on the phenol:methylacetylene molar ratio and on temperature, and that the reaction is promoted by salts of manganese, iron or bismuth taken in small amounts, i.e., 0.04%. Water inhibits the reaction. The optimum conditions are: temperature, 45—50C; phenol:methylacetylene molar ratio, 12:1; BF_3, 2.5%; $MnSO_4$, 0.04% (both on the phenol). The catalyst can be recovered from the residual phenol in the form of a phenol complex. A flow diagram and description of the process are given in the original. The experiments conducted on a pilot plant indicated that the bisphenol-A yield is 89%, if 90% methylacetylene is used; the yield can be increased to 93—95%

UDC: 547.631.4'211.07:542.973:546.273'161

Card 1/2

L 21186-66

ACC NR: AP6009708

(on phenol reacted), if 99% methylacetylene is used. The cost per ton of bisphenol-A is calculated to be 8.2% lower than that produced by the hydrochloric acid method. [BM]
Orig. art. has: 1 figure and 1 table.

SUB CODE: 07, 11/ SUBM DATE: none/ ORIG REF: 003/ ATD PRESS: 4222

Card 2/2 BK

KOVALENKO, S., mladshiy nauchnyy sotrudnik; NOVOKHATKA, V., mladshiy nauchnyy sotrudnik

Cockchafers in Sakhalin Province. Zashch. rast. ot vred. i bol. 10 no.9:29 '65. (MIRA 18:11)

1. Sakhalinskaya lesnaya opytnaya stantsiya.

NOVOKHAT'KO, A.

33. Cyclonic Conditions Over Barents Sea

"Descending Cyclones Over the Barents Sea," by A. Novokhat'ko, Tr. Tsentr. in-ta prognozov, Issue 42 (69), 1956, pp 54-56 (from Referativnyy Zhurnal -- Geofizika, No 1, Jan 57, Abstract No 306)

"According to synoptic maps during the period 1946-1949, and maps of the barometric topography during 1948 and 1949, the synoptic conditions of descending cyclones are analyzed. Descending cyclones, as a rule, are found only in the September-April period. From 35 cases considered, 4 basic trajectories of descending cyclones were distinguished. According to a small number of cases it was established that, if the high frontal zone on an AT-500 map was oriented from northwest to southeast, and if the gradient geopotential comprises 32-36 decabars per 1,000 km, then the cyclone located under a fixed frontal zone descends. The more active the frontal zone, the more rapidly the cyclone moves. The average speed of travel of descending cyclones is 80-100 km/hr." (U)

Sum 1429

NOVOKHATKO, D. A.

The role of oak wood in the aging of cognacs. E. M. Shpritsman and D. A. Novokhatko. *Sakharnaya Prom., Vinogradarstvo i Vinodelie Moldavii* 11, No. 4, 47-50 (1957). During the aging of cognacs in oak containers chem. and phys. interdiffusion takes place between the wood and the product; this is mainly responsible for the organoleptic qualities of the finished product. A one-way paper chromatographic method is described (with the solvent butanol-acetic acid-distd. water = 40:12:30) for the analysis of the tannin complex of oak wood (hot-water exts. of oak wood shavings were filtered, the filtrates treated with $Pb(AcO)_2$, the Pb-tannin complex was decompd. by 5% H_2SO_4, excess H_2SO_4 ppted. with $BaCO_3$ soln. to pH 3.6, the tannin soln. obtained vacuum-evapd. under a CO_2 stream, the dry residue hydrolyzed with 5% HCl, the hydrolyzate extd. with Et_2O and AcOEt, and both exts. were paper chromatographed). The results indicate that the oak-wood tannins consist of at least 3 components, readily sol. in alc. and AcOEt, which on acid hydrolysis yield gallic and ellagic acids and an unidentified phenol, sugars are represented by one spot with the R_f value (0.16) known for glucose. During the aging of cognac in oak containers the amt. of tannins increases in the first 3-4 years and then remains nearly const. (0.3-0.4 g./l.), while the amt. of extractable substances increases continuously (0.285 and 1.693 g./l. of the

the oak container and its oxidized fraction in the cognac.
11 references. L. Wisbicki

NOVOKHATKO, E.I.; BAGDASAR'YAN, I.M.

System of program control for the 6L12P and 6L82G milling machines.
Stan.i instr. 34 no.4:11-14 Ap '63. (MIRA 16:3)
(Milling machines--Numerical control)

ANTONOV, Aleksandr Sergeyevich, prof., doktor tekhn. nauk;
MAGIDOVICH, Yevgeniy Iosifovich, kand. tekhn. nauk, dots.;
NOVOKHAT'KO, Ivan Spiridonovich, kand. tekhn. nauk, dots.;
KOTIN, Zh.Ya., doktor tekhn. nauk, retsenzent; MIKHEIEVA,
R.N., red. izd-va; SPERANSKAYA, O.V., tekhn. red.

[Hydromechanical and electromechanical transmission systems of transportation and traction machinery; theory, design principles, construction and calculations] Gidromekhanicheskie i elektromekhanicheskie peredachi transportnykh i tiagovykh mashin; teoriia, osnovy proektirovaniia, konstruktsiia i raschet. Pod red. A.S.Antonova. Moskva, Mashgiz, 1963.
350 p. (MIRA 16:7)
(Hydraulic drive) (Electric driving)
(Automobiles--Transmission devices)

FROLOV, Ivan Mikhaylovich; MOKSHIN, Stepan Ivanovich; NOVOKHATKO,V., red.

[Three on the stellar route; story of the world's first team flight on the Soviet multiseat space vehicle "Voskhod."] Troe na zvezdnoi trasse; rasskaz o pervom v mire ekipazhe sovetskogo mnogomestnogo kosmicheskogo korablia "Voskhod." Moskva, Politizdat, 1964. 30 p.
(MIRA 17:12)

KOKH, Boris Fedorovich; LUK'YANOV, B.; ROMANOV, A.; NOVOKHATKO, V., red.

[Man steps into outer space] Chelovek shagaet v kosmos. Moskva, Politizdat, 1965. 63 p. (MIRA 18:3)

NOVOKHATNIY, A.A.

VOTLOKHIN, B.Z.; NOVOKHATNIY, A.A.

Introduction of level indicators of loose materials at Groznyy oil refineries. Neftianik 2 no.5:21-23 My '57.
(MLRA 10:5)

1. Nachal'nik laboratorii razrabotki Kontrol'no-izmeritel'nykh priborov Groznenskogo nauchno-issledovatel'skogo neftyanogo instituta im. I.V. Kossiora. (for Votlokhin) 2. Nachal'nik tsekha kontrol'no-izmeritel'nykh priborov Novogroznenskogo neftepererabatyvayushchego zavoda.
(Cracking process--Measurements)
(Bins)

NOVOKHATOVSKIY, V.

NOVOKHATOVSKIY, V., mashinist; SHLEPINA, M., redaktor; MOLOTKOV, M.A., inzhener, konsul'tant.

[Stalingrad open-hearth steel workers] Stalingradskie martenovtsy. [Moskva] Profizdat, 1953. 31 (MLRA 7:8)
(Stalingrad--Steelworkers) (Steelworkers--Stalingrad)

NOVOKHATSKAYA, Z.V. (Khar'kov)

Influence of an excess of copper on thyroid gland function.
Vrach.delo no.2:155-157 F '60. (MIRA 13:6)

1. Otdel vozrastnoy endokrinologii (zav. - kand.med.nauk S.V. Maksimov) i gistofiziologii (zav. - zasl. deyatel' nauki, prof. B.V. Aleshin) Ukrainskogo instituta eksperimental'noy endokrinologii.
(THYROID GLAND) (COPPER SULFATE--PHYSIOLOGICAL EFFECT)

MAKSIMOV, S.V.; NOVOKHATSKAYA, Z.V.; SHARKEVICH, I.N.

Some data on the functional state of the thyroid gland in rats of varying ages during an excess administration of vitamin B_1. Trudy Ukr.nauch.-issl.inst.eksper.endok. 18:71-76 '61.
(MIRA 16:1)

1. Iz otdela vozrastnoy endokrinologii Ukrainskogo instituta eksperimental'noy endokrinologii.
(THYROID GLAND) (THIAMINE)

USSR/Human and Animal Morphology (Normal and Pathological) Nervous S
System.

Abs Jour : Ref Zhur- Biol., No 7, 1958, No 31170

Author : Novokhatskiy A.
Inst : Not Given
Title : Anatomical Connections of the Visual Tracts with the Hypothalamus.

Orig Pub : Oftal'mol. zh., 1957, No 2, 100-105

Abstract : In serial sections, two groups of fibers are found which connect the reticular membrane and the nuclei of the anterior hypothalamus. One group of fibers goes from the visual cords and the chiasma, ending with round and club-shaped thickenings at the cells of the supraoptic nucleus. Other groups of fibers ("hypothalamic optical cluster of Frey) are located mostly superficially in the chiasma and terminate near the cells of the spendyma of the anterior wall of the visual pocket and of the subependyma space of this area. In the brain of a dog, the delimiting cluster of the visual fibers

Card : 1/2

KATENEV, Ye.N.; NOVOKHATSKIY, D.F.; OSTAPENKO, A.A.

Results of the investigation and use of belite-siliceous cement in Stavropol Territory. Burenie no.1:29-32 '64.

(MIRA 18:5)

1. Stavropol'skiy filial Groznenskogo neftyanogo nauchno-issledovatel'skogo instituta.

KATENEV, Ye.P.; NOVOKHATSKIY, D.E.

Slag muds with reduced filtration properties. Burenie no.9: 11-13 '65. (MIRA 18:10)

NOVOKHATSKIY, I.A.; YESIN, O.A.; CHUCHMAREV, S.K.

Methods of determining the diffusion coefficient of hydrogen in molten slags. Izv.vys.ucheb.zav.; chern.met. no.4:5-14 '61. (MIRA 14:4)

1. Ural'skiy politekhnicheskiy institut.
(Slag) (Activity coefficients) (Hydrogen)

NOVOKHATSKIY, I.A.; YESIN, O.A.; CHUCHMAREV, S.K.

Mechanism of hydrogen diffusion in slags. Izv. vys. ucheb. zav.; chern. met. 4 no.10:10-18 '61. (MIRA 14:11)

1. Ural'skiy politekhnicheskiy institut.
(Diffusion) (Slag)

NOVOKHATSKIY, I.A.; YESIN, O.A.; CHUCHMAREV, S.K.

Hydrogen solubility in molten slags. Izv. vys. ucheb. zav.; chern. met. 4 no.11:22-29 '61. (MIRA 14:12)

1. Ural'skiy politekhnicheskiy institut.
(Slag) (Hydrogen)

LENEV, L.M. (Chelyabinsk); NOVOKHATSKIY, I.A. (Chelyabinsk)

Thermodynamic characteristics of iron metatitanate. Izv. AN SSSR. Met. i gor. delo no.4:87-90 Jl-Ag '64. (MIRA 17:9)

S/020/61/136/004/022/026
B028/B060

AUTHORS: Novokhatskiy, I. A., Yesin, O. A., and Chuchmarev, S. K.

TITLE: Diffusion of Hydrogen in Molten Slag

PERIODICAL: Doklady Akademii nauk SSSR, 1961, Vol. 136, No. 4, pp. 868-870

TEXT: Data available in the literature concerning the mass transfer of hydrogen in molten slag indicate very high values (10^{-3} - 10^{-2} cm^2 sec^{-1}). These data were obtained under the conditions prevailing in open-hearth furnaces, and rather stand for convection than for molecular diffusion D_H. To eliminate convection entirely and to approach the value for D_H, a nonsteady diffusion was used in the present work. An Al_2O_3 test tube contained a thin layer of viscous, liquid slag (δ = 1.5 mm, η = 3 - 100 poises, 1410 - 1608°C) of the composition 16.5 - 53.0% CaO, 8.2 - 41.0% Al_2O_3, 6.0 - 58.3% SiO_2. Dried nitroger was blown through to convey the water liberated from the slag to a hygrometer. The dew point was used to calculate the rate of water yielded by the slag.

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$Q_\tau/Q_0 \approx 1 - 8/\pi^2 e^{-\theta}$ (1). If θ is known, it is possible to calculate the diffusion coefficient. $D_H = \frac{4\delta^2\theta}{\pi^2\tau}$ (2). The values found for D_H assuming three thicknesses of the slag layer (1.3; 1.8; and 2.6 mm) proved to be very high $(1.0; 1.1; 0.9)\cdot 10^{-5}$ cm^2/sec. V_{H_2O} was not dependent upon the layer thickness. The fact that convection played no role in the experiment was checked with Lin' Tszya-tszyao (Ref. 3) and confirmed. The D_H found thus characterized the molecular diffusion of H_2 which was assumed to diffuse through the slag in the form of protons, and to pass over from one oxygen atom to another. This transition takes place only if the distance to the adjacent O atom does not exceed 2.65 A, as occurs with SiO_2 (d = 2.64 A). D_H was practically constant in slag with 56.4% SiO_2. D_H rises with an increase of CaO and so does the activation energy. Due to

$D = 2.72 \frac{kT}{h} \lambda^2 \exp(\Delta S^*/R)\exp(\frac{-E}{RT})$. ($\Delta S^*$ = activation entropy, λ distance

between the equilibrium states of the moving particle), D_H and E may then increase at the same time, if λ rises. λ rises in CaO (lattice distance of the O atoms = 3.41 A). In the case of slag rich in CaO, D_H amounted to $2.05 \cdot 10^{-5}$ cm^2/sec, E = 20800 cal/mole. There are 3 figures and 16 references: 10 Soviet, 4 US, 1 Canadian, and 1 British.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova, Sverdlovsk (Ural Polytechnic Institute imeni S. M. Kirov, Sverdlovsk)

PRESENTED: July 20, 1960, by A. N. Frumkin, Academician

SUBMITTED: July 9, 1960

CHUCHMAREV, S.K.; YESIN, O.A.; NOVOKHATSKIY, I.A.

Hydrogen permeability through molten slags. Izv. vys. ucheb. zav.; chern. met. 5 no.10:5-13 '62. (MIRA 15:11)

1. Ural'skiy politekhnicheskiy institut.
(Slag) (Hydrogen)

MOROZOV, A. N. (Chelyabinsk); NOVOKHATSKIY, I. A. (Chelyabinsk)

Thermodynamics of the reduction of ferrous chromite by hydrogen.
Izv. AN SSSR. Otd. tekh. nauk. Met. i topl. no.6:3-6 N-D '62.
(MIRA 16:1)

(Chromite)
(Oxidation-reduction reaction)

NOVOKHATSKIY, I.A. (Chelyabinsk)

Calculation of the thermodynamic characteristics and conditions for the reduction of magnesium and calcium chromites. Izv. AN SSSR. Otd. tekh. nauk Met. i gor. delo no.2:3-8 Mr-Ap '63. (MIRA 16:10)

MOROZOV, A.N. (Chelyabinsk); NOVOKHATSKIY, I.A. (Chelyabinsk)

Reduction of manganous oxide by hydrogen. Izv. AN SSSR. Met. i gor. delo no.5:18-22 S-O '63. (MIRA 16:11)

RUSAKOV, L.N.; NOVOKHATSKIY, I.A.; LENEV, L.M.; SAVINSKAYA, A.A.

Synthesis and characteristics of mineral phases in the systems FeO - MoC_2 and MgO - MoC_2. Dokl. AN SSSR 161 no.2:410-412 Mr '65. (MIRA 18:4)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii. Submitted August 7, 1964.

NOVOKHATSKIY, I.A.; LENEV, L.M.

Determining the thermodynamic characteristics of cobalt aluminate and cobalt and nickel metatitanates. Izv. vys. ucheb. zav.; tsvet. met. 8 no.4:68-74 '65. (MIRA 18:9)

1. Chelyabinskiy nauchno-issledovatel'skiy institut.

LEMEV, L.M.; NOVOKHATSKIY, I.A.

Thermodynamic characteristics of $NiAl_2O_4$. Zhur.neorg.khim. 10 no.11:2400-2403 N '65. (MIRA 18:12)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii. Submitted April 13, 1964.

L 13029-66 EWP(e)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD/WH

ACC NR: AP5028585 SOURCE CODE: UR/0076/65/039/011/2806/2808

AUTHOR: Novokhatskiy, I. A.; Belov, B. F.; Gorokh, A. V.; Savinskaya, A. A.

ORG: Chelyabinsk Metallurgical Scientific Research Institute (Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii)

TITLE: Phase diagram of ferrous oxide-corundum system

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 11, 1965, 2806-2808

TOPIC TAGS: iron compound, alumina, phase diagram, stoichiometric mixture, x ray diffraction analysis, sintering

ABSTRACT: The FeO-Al_2O_3 system was studied by means of x-ray diffraction and petrographic analysis. The specimens were prepared by sintering $FeAl_2O_4$ with Al_2O_3 in Al_2O_3 and ZrO_2 tubes at 1700°C in a purified argon atmosphere. After sintering the mixtures were quenched in water and subjected to x-ray powder analysis. It was shown in this system that $FeAl_2O_4$ and α-Al_2O_3 are not mutually soluble in solid phases. The study of the sintered stoichiometric $3FeO + Al_2O_3$ mixtures showed that $3FeO \cdot Al_2O_3$ compound is not formed. A new variation of the phase dia-

UDC: 541.123

Card 1/2

L 13029-66
ACC NR: AP5028585

gram of the $FeO-Al_2O_3$ system was constructed on the basis of the obtained experimental data and literature data (see fig. 1). Orig. art. has: 1 figure.

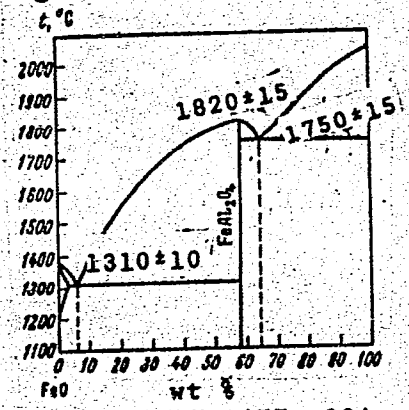


Fig. 1. Phase diagram of the $FeO-Al_2O_3$ system.

SUB CODE: 11,20/ SUBM DATE: 06Aug64/ ORIG REF: 007/ OTH REF: 002

Card 2/2

ACC NR: AP6019052 (A) SOURCE CODE: UR/0078/66/011/002/0427/0428

AUTHOR: Novokhatskiy, I. A.; Lanev, L. M.; Savinskaya, A. A.; Gorokh, A. V.

ORG: none

TITLE: Diagram of phase equilibria in the system MnO-Al_2O_3 (corundum)

SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 2, 1966, 427-428

TOPIC TAGS: phase diagram, phase equilibrium, phase analysis, manganese compound, aluminum compound, corundum, melting point

ABSTRACT: Specially synthesized high-purity MnO, α-Al_2O_3, and $MnAl_2O_4$ were used as initial components during a study of the phase equilibria in the system. The melting points of manganese aluminate and the eutectics between $MnAl_2O_4$ and α-Al_2O_3 (corundum) were measured with a [illegible] thermocouple and the temperature of the eutectic line between MnO and $MnAl_2O_4$ was measured by a PtRh(6)-PtRh(30) thermocouple. The $MnAl_2O_4$ melted congruently at 1850±15C without peritectic decomposition at 1560C. The temperature of the eutectic line between $MnAl_2O_4$ and α-Al_2O_3 was 1770±15C and between MnO and $MnAl_2O_4$ 1520±10C. The composition of the eutectics between $MnAl_2O_4$ and α-Al_2O_3, determined by the exposure-quenching method, was 27 wt% MnO and 73 wt% Al_2O_3, whereas the eutectics between MnO and $MnAl_2O_4$ had the following composition: 76 wt% MnO and 24 wt% Al_2O_3. The phase analysis of the sintering products of the mixture of $MnAl_2O_4$

Card 1/2 UDC: 541.123+546.712-31+546.623-31

ACC NR: AP6019052

and α-Al_2O_3 (1:1) carried out in a CO atmosphere for 3 hr. at 1700C revealed the absence of mutual solubility in the solid phases. The x-ray diffraction and optical characteristics of MnO and $MnAl_2O_4$ after sintering in a CO atmosphere at 1500C for 3 hr. remained the same as in the initial materials. This indicated the absence of noticeable mutual solubility also between these compounds. These data were used for plotting the phase equilibria diagram in the MnO-Al_2O_3 (corundum) system (see Fig. 1). The melting points of MnO and α-Al_2O_3 were 1785 and 2050C, respectively, during plotting of the diagram. The diagram was the simplest type of eutectic diagram and did not differ from that for the FeO-Al_2O_3 (corundum) system. Orig. art. has: 1 fig.

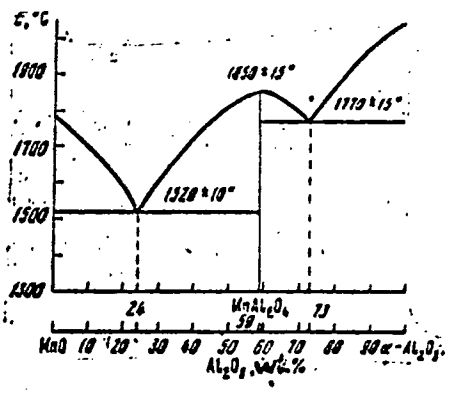


Fig. 1. Phase equilibria diagram of the system MnO-Al_2O_3 (corundum)

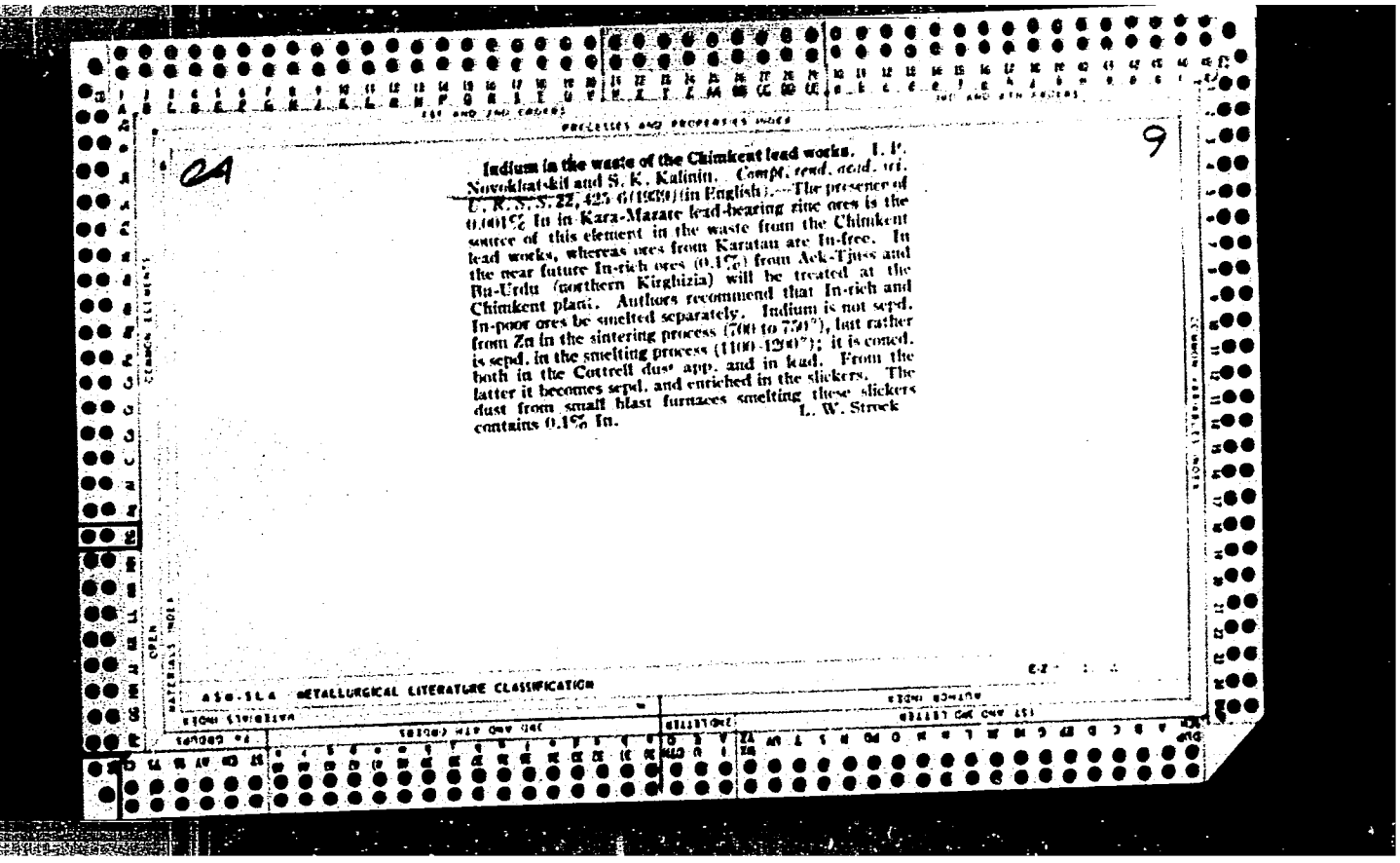
SUB CODE: 07/ SUBM DATE: 21Nov64/ ORIG REF: 006/ OTH REF: 004

Card 2/2

ZUBOV, A.V., inzh.; KAZACHKIN, V.I., inzh.; MOROZOV, G.K., inzh.; NOVOKHATSKIY, I.N., inzh.

Our suggestions for improvement of the VL23 electric locomotive circuit. Elek.i tepl.tiaga 4 no.2:45 F '60. (MIRA 13:6)

1. Depo Orel.
(Electric locomotives--Electric equipment)



24

9

Indium in the waste of the Chimkent lead works. I. P. Novoklinskii and S. K. Kalinin. *Compt. rend. acad. sci. U. R. S. S.* 22, 425–6 (1939) (in English).—The presence of 0.001% In in Kara-Mazare lead-bearing zinc ores is the source of this element in the waste from the Chimkent lead works, whereas ores from Karatau are In-free. In the near future In-rich ores (0.1%) from Ack-Tjuss and Bu-Urdu (southern Kirghizia) will be treated at the Chimkent plant. Authors recommend that In-rich and In-poor ores be smelted separately. Indium is not sepd. from Zn in the sintering process (700 to 750°), but rather is sepd. in the smelting process (1100–1200°); it is concd. both in the Cottrell dust app. and in lead. From the latter it becomes sepd. and enriched in the slickers. The dust from small blast furnaces smelting these slickers contains 0.1% In.

L. W. Streck

A50-5L4 METALLURGICAL LITERATURE CLASSIFICATION

NOVOKHATSKIY, I. P.

Monich, V. K. and Novokhatskiy, I. P. "On the scientific works of I. I. Bok "Geologist, on his 50th birthday)," Vestnik Akad. nauk Kazakh. SSR, 1948, No. 10, p. 21-22, with picture

SO: U-3450, 16 June 53, (Letopis 'Zhurnal Statey, No. 5, 1949).

NOVOKHATSKIY, I. P.

20576 NOVOKHATSKIY, I.P. Nekotoryye osobennosti oolitovykh zheleznykh rud. Izvestiya akad. nauk. kazakh. SSR, No. 70, Seriya geol. vyp. 11, 1949, s. 118-24.-Rezyume na kazakh. yaz.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949

NOVOKHATSKIY, I.P.

15

Fluorine content of some natural waters of Kazakhstan from spectrum-analytical data. I. P. Novokhatskii and G. K. Kalinin (Acad. Sci. Kazakh. S.S.R., Alma-Ata). *Doklady Akad. Nauk S.S.S.R.* 93, 289–91(1953).—The presence of F in waters was studied by the sharp green band, 5291.0 Å, which becomes visible with 0.05–0.1% F. Results obtained by spectroscopy were compared with chem. analysis data. High F content (> 1% in solid evapd. residue) was found in the hot springs in Tien-Shan and in wells from granites and lakes in granite massives. No F was found in limestone-mine waters. W. M. Sternberg

CH

Novokhatskiy, I. P.

Category: USSR D

Abs Jour: RZh--Kh, No 3, 1957, 7842

Author : Novokhatskiy, I. P. and Kalinin, S.K.
Inst :
Title : The Application of Spectroscopic Analysis to Geologic Investigations

Orig Pub: Vestn. AN KazSSR, 1956, No 5, 13-21

Abstract: The fields of application of spectroscopic analysis in geological and geochemical investigations under Kazakhstan conditions are discussed. The following applications are recommended: (1) large-scale semiquantitative analysis of ores, minerals, and rocks; (2) determination of the composition of individual minerals; (3) prospecting for ores in the aureoles and solution paths; (4) identification and study of petrochemical and metallogenic districts; (5) study of the composition of natural waters.

Card : 1/1 -25-

SATPAYEV, K.I.; BORUKAYEV, R.A.; AKHMEDSAFIN, U.M.; BOK, I.I.; KUSHEV, G.L.; SERGIYEV, N.G.; SHLYGIN, Ye.D.; SHCHERBA, G.N.; MONICH, V.K.; LOMONOVICH, I.I.; LAVROV, V.V.; MEDOYEV, G.TS.; NOVOKHATSKIY, I.P.; BARBOT-DE-MARNI, A.V.; GALITSKIY, V.V.; KOLOTILIN, N.F.; ZHILINSKIY, G.B.; KAYUPOV, A.K.; KAZANLI, D.N.; SATPAYEVA, T.A.; ABDULKABIROVA, M.A.; GAZIZOVA, K.K.; VEYTS, B.I.; KHAYRUTDINOV, D.Kh.; MUKHAMEDZHANOV, S.M.; CHOLPANKULOV, T.Ch.; PARSHIN, A.V.; TAZHIBAYEVA, P.T.; YANULOVA, M.K.; BYKOVA, M.S.; VOLKOV, A.N.; BOLGOV, G.N.; MITRYAYEVA, N.M.; CHOKABAYEV, S.Ye.; KUNAYEV, D.S.; YARMENSKAYA, M.A.; RIBROVA, T.I.

Tireless explorer of the depths of the earth's crust; on the 65th birthday and 40th anniversary of the scientific engineering activities of Academician M.P. Rusakov. Vest. AN Kazakh. SSR 13 no.12:96-97 D '57. (MIRA 11:1)

(Rusakov, Mikhail Petrovich, 1892-)

NOVOKHATSKIY, I.P.

3(5) PHASE I BOOK EXPLOITATION SOV/1886

Ob"yedinennaya nauchnaya sessiya po metallogenicheskim i prognoznym kartam, Alma-Ata, 1958.

Materialy nauchnoy sessii po metallogenicheskim i prognoznym kartam; doklady. (Materials Presented at the Scientific Session on Metallogenetic and Postulated Ore Occurrence Maps; Reports) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1958. 318 p. Errata slip inserted. 3,050 copies printed.

Ed.: A.S. Pogozhev; Tech. Ed.: P.F. Alferova.

Sponsoring Agencies: (1) Akademiya nauk SSSR, (2) Akademiya nauk Kazakhskoy SSR, Alma-Ata, (3) USSR. Ministerstvo geologii i okhrany nedr, (4) Kazakh SSR. Ministerstvo geologii i okhrany nedr.

PURPOSE: This book is intended for exploration geologists, mining engineers, and cartographers.

Materials Presented (Cont.) SOV/1886

COVERAGE: This collection of reports was presented at the United Scientific Session on Metallogeny and Postulated Ore Occurrence Maps convoked by the Academy of Sciences in Alma-Ata, December, 1956. The reports deal with various aspects of compiling metallogenetic and ore occurrence maps as well as the methodology and techniques of correlating geophysical exploration data. These reports deal only with non-ferrous metals. Three other reports delivered at the conference but not included in this work were read by Ye.Ye. Zakharov, N.S. Shatskiy, and Yu.K. Goretskiy. References accompany each article.

TABLE OF CONTENTS:
Materials Presented (Cont.) SOV/1886

AVAILABLE: Library of Congress

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6-10-59

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BANDALETOV, S.M.; BESPALOV, V.F.; BOGATYREV, A.S.; BOK, I.I.; GALITSKIY, V.V.; ZHILINSKIY, G.B., IVSHIN, N.K.; KAZANLI, D.N.; KAYUPOV, A.K.; KONEV, A.K.; KUSHEV, G.L.; LYAPICHEV, G.F.; MEDOYEV, G.TS.; MONICH, V.K.; MYACHKOV, V.M.; NIKITIN, I.F.; NOVOKHATSKIY, I.P.; SATPAYEV, K.I.; SHLYGIN, Ye.D.; SHCHERBA, G.N.

Eminent geologist of Kazakhstan. Vest. AN Kazakh.SSR 15 no.1: 94-95 Ja '59. (MIRA 12:1)
(Borukaev, Ramazan Aslanbekovich, 1899-)

BOLDYREV, G.P.; VOGMAN, D.A.; NOVOKHATSKIY, I.P.; VERK, D.L.; DYUGAYEV, I.V.; KAVUN, V.M.; KURSHKO, A.A.; UZHKOV, M.R.; ARSEN'YEV, S.Ya.; YEGORKIN, A.N.; KORSAKOV, P.F.; KUZ'MIN, V.N.; STRELETS, B.A.; PATKOVSKIY, A.B.; BOLESLAVSKAYA, B.M.; INDENBOM, D.B.; FINKEL'SHTEYN, A.S.; SHAPIRO, I.S.; LAPIN, L.Yu.. Prinimali uchastiye: NEVSKAYA, G.I.; FEDOSEYEV, V.A.; KASPILOVSKIY, Ya.B., ZERNOVA, K.V.. BARDIN, I.P., akademik, otv.red.; SATPAYEV, K.I., akademik, nauchnyy red.; STRUMILIN, akademik, nauchnyy red.; ANTIPOV, M.I., nauchnyy red.; BELYANCHIKOV, K.P., nauchnyy red.; YEROFEYEV, B.N., nauchnyy red.; KALGANOV, M.I., nauchnyy red.; SAMARIN, A.M., nauchnyy red.; SLEDZYUK, P.Ye., nauchnyy red.; KHLEBNIKOV, V.B., nauchnyy red.; STREYS, N.A., nauchnyy red.; BANKVITSER, A.L., red.izd-va; POLYAKOVA, T.V., tekhn.red.

[Iron ore deposits in central Kazakhstan and ways for their utilization] Zhelezorudnye mestorozhdeniia TSentral'nogo Kazakhstana i puti ikh ispol'zovaniia. Otvetstvennyi red. I.P.Bardin. Moskva, 1960. 556 p. (MIRA 13:4)

1. Akademiya nauk SSSR. Mezhduvedomstvennaya postoyannaya komissiya po zhelezu. 2. Gosudarstvennyy institut po proyektirovaniyu gornykh predpriyatiy zhelezorudnoy i margantsevoy promyshlennosti i promyshlennosti nemetallicheskikh iskopayemykh (Giproruda) (for Boldyrev, Vogman, Arsen'yev, Yegorkin, Korsakov, Kuz'min, Strelets,

(Continued on next card)

BOLDYREV, G.P.--(continued). Card 2.

3. Institut geologicheskikh nauk AN Kazakhskoy SSR (for Novokhatskiy). 4. TSentral'no-Kazakhstanskoye geologicheskoye upravleniye Ministerstva geologii i okhrany nedr SSSR (for Verk, Dyugayev, Kavun, Kurenko, Uzbekov). 5. Nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki poleznykh iskopayemykh (Mikhanobr) (for Patkovskiy). 6. Gosudarstvennyy institut proyektirovaniya metallurg.zavodov (Gipromez) (for Boleslavskaya, Indenbom, Finkel'shteyn, Nevskaya, Fedoseyev, Karpilovskiy). 7. Mezhduvedomstvennaya postoyannaya komissiya po zhelezu AN SSSR (for Shapiro, Zernova, Kalganov). 8. Gosplan SSSR (for Lapin).
(Kazakhstan--Iron ores)

AFANAS'YEV, Aleksandr Afanas'yevich; RABINOVICH, Yakov Mikhaylovich; VINOGRADOV, V.K., retsenzent; LIOKUMOVICH, Kh.Kh., kand. tekhn. nauk, retsenzent; NOVOKHATSKIY, K.I., nauchnyy red.[deceased]; MINAYEVA, T.M., red.; TRISHINA, L.A., tekhn. red.

[Safety engineering in shoe manufacture]Tekhnika bezopasnosti v obuvnom proizvodstve. Moskva, Rostekhizdat, 1962. 225 p. (MIRA 16:2)

(Shoe industry—Safety measures)

NOVOKHATSKIY, Ye.M., inzh.

Experimental investigation of the structure of a flow of a two-phase fluid in vertical pipes. Izv.vys.ucheb.zav.; energ. no.12:91-97 D '58. (MIRA 12:3)

1. Khar'kovskiy politekhnicheskiy institut imeni V.I.Lenina.
(Fluid dynamics)

NOVOKHATSKIY, Ye.M.

Methods for investigating the structure of the flow of an air-water mixture in vertical pipes. Izm. tekh. no. 6:22-25 Je '60. (MIRA 14:2)

(Pipe--Hydrodynamics)

NOVOKHATSKIY, Ye.M

S/021/60/000/011/008/009
D204/D302

AUTHOR: Novokhats'kyy, Ye.M.

TITLE: The effect of the tube diameter on the motion of a two-phase liquid

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 11, 1960, 1522-1526

TEXT: An experiment is described in which the motion of a mixture of air and water through a vertical tube was investigated experimentally, the flow being recorded electrically. The tubes used were of diameters 69 mm, 52 mm and 24 mm respectively. Formulae, suitable for engineering computations are then established. The author observes that the motion of a 2-phase liquid through a pipe depends on a great number of variables. The general relationship between the chief parameters are given by G.Ye. Kholodovskiy (Ref. 5: Teploenergetika, 7, 68, 1957) using 6 variables: ρ', μ', σ, W_{CM}, W" and b, where μ is the coefficient of dynamic viscosity of

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The effect of the tube ...

the liquid, W_{CM} is the velocity of the motion of two-phase liquid, considering the corresponding phase velocity, W'' is the velocity of the light phase, ρ' is the density of the liquid, σ is the surface tension coefficient, b is the acceleration due to upward forces. These quantities are grouped in 3 dimensionless complexes

$$\frac{W''\mu'}{\sigma}; \quad \frac{W_{CM}\mu'}{\sigma}; \quad K = \frac{b\mu^4}{\sigma^3}$$

and the concrete form of the equation is

$$\frac{W''\mu'}{\sigma} K = f\left(\frac{W_{CM}\mu}{\sigma} K\right).$$

The author observes that the work of V.I. Tolubinskiy (Ref. 6: Soobshcheniya, KPI, 115, 1945) and A.P. Krylov establishes a relationship between the velocity of the air and the diameter of the tube, but does not give a criterial relationship. The results of the experiment give velocities of water from 0.5 to 2.5 m/sec. and

Card 2/3

The effect of the tube ...

velocities of air from 0.5 - 15 m/sec. The following approximate formulae are established:

$$\frac{W''\mu'}{\sigma} K = \frac{1}{93.5} \left(\frac{W_{CM}\mu'}{\sigma} KWe^{0.1}\right)^{0.8}. \quad (1)$$

This formula may be transformed into equations, from which may be found the velocity of the light phase W" and the value of the phase content at the two-phase flux ξ. There are 2 figures, and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: Martinelly. Bolter. Transaction of the ASME, 2, 1944.

ASSOCIATION: Kharkivs'kyy poitekhnichnyy instytut im. V.I. Lenina (Polytechnic Institute of Khar'kov, im. V.I. Lenin)

PRESENTED: by F.P. Byelyakin, Academician of the AS UkrSSR

SUBMITTED: April 27, 1960

Card 3/3

NOVOKHATSKIY, Ye. M.

Cand Tech Sci - (diss) "Effect of pipe diameter on the process of travel of bi-phase liquid in vertical pipes." Kiev, 1961. 14 pp; with diagrams; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, Kiev Order of Lenin Polytechnic Inst, Chair of Boiler Installations); 120 copies; free; (KL, 7-61 sup, 242)

30878
S/143/61/000/004/005/005
D274/D305

11.7430

AUTHOR: Novokhatskiy, Ye.M., Engineer

TITLE: Influence of the tube diameter on the structure of the flow of a biphase liquid flowing in vertical tubes

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 4, 1961, 93 - 97

TEXT: The article deals with results, obtained with the aid of an electrical method used for investigating the influence of the tube diameter on the structure of the flow of biphase liquid flowing in vertical tubes. It is stated to be the first time anyone has investigated the method to find quantitative relations and examine the influence of different factors on the structure of flow. Previous methods are mentioned such as: Visual observation photography and cinephotography, by which only the qualitative side of the complex structure of the flow of biphase liquids was investigated. The electrical method consists of comparing the capacity of a condenser

Card 1/4

Influence of the tube diameter ...

filled with water to the capacity of the same condenser filled with biphase liquid. Using the density equation, the gas component of the biphase liquid was found. These condensers were embodied in the experimental part of the vertical tube. The consumption of biphase liquid was precisely measured. During the bullet-regime the relative distance between the bullets and also the diameter of the bubble-bullet was found by using a special method. Three experimental tubes with different diameters were used (69,52 and 24 mm). It is stressed that an equal amount of water was used during the different series of experiments, while the consumption of air was different and its distribution along the tube was taken down. Analyzing the experimental data the author concludes that: 1) The air-component of the biphase flow is greater in the center of the tube than in the layers next to the walls; this phenomenon is observed both in emulsive and bullet regime of the flow and confirms the theoretical results published by A.V. Kubratov (Ref. 5: Tr. MEI. no. 9, 1953). 2) The emulsive regime transfers into bullet-regime when $W''_0/W_0 = 1 \div 2$, where W''_0 is the relative velocity of air and that of water. This transition takes place gradually. In the beginning the

Card 2/4

S/143/61/000/004/005/005
Influence of the tube diameter ... D274/D305

6 Soviet-bloc references.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut im. V.I. Lenina (Khar'kov Politechnic Institute im. V.I. Lenin)

SUBMITTED: June 1, 1960

Card 4/4

Dehydrogenation of pentane. B. A. Timofeeva, S. S. Novokov, and N. I. Shuikin. *Doklady Akad. Nauk S.S.S.R.* 92, 345-8(1953).—Contact of *n*-pentane with alumo-chromo-magnesium catalyst (45 mole-% Cr_2O_3, 30 Al_2O_3, 25 MgO) at 500° at space velocity 1.2, gave a catalyzate with 21–2% pentene content, most of which (95%) consisted of 2-pentene. In addition the catalyzate contained smaller amounts of 1-pentene, pentadienes, isopentane, C_6H_6, and *m*-xylene. When MgO is omitted from the catalyst formulation the extent of dehydrogenation declines; when KOH or K_2CO_3 are added to the original catalyst the results are also negative.—G. M. Kosolapoff.

NOVOKOVSKIY, M.Ya.; TIMOSHUK, S.A.; KARPOVICH, G.G.; CHIZHOV, N.S.

Enlarging the beam of the "Pioner" crane. Rats. i izobr.predl.v stroi. no.119:5-6 '55. (Cranes, derricks, etc.) (MLRA 9:7)

AUTHORS: Petrov, Z., Novokovskiy, N. SOV/84-58-8-16/59

TITLE: Pilots' Contribution to the Kazakhstan Billion (Vklad letchikov v kazakhstanskiy milliard)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 8, p 12 (USSR)

ABSTRACT: The article reports on the work of agricultural aircraft in the new grain fields of Kazakhstan in fighting a variety of gamma moth (zernovaya sovka). Most of the article deals with the operations of a group of planes sent to Kazakhstan from the Northern Territorial Administration.

Card 1/1

1. Novokrepovskiy, S.A., (Eng.), Kogan Ye.A.

2. USSR (600)

4. Housing

7. Methods of planning residential buildings. Biul. stroi. tekh. 9 no.24, 1952.

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

NOVOKRESHCHENOV, Aleksey Aleksandrovich; RENNENGARDT, Fridrikh Fridrikhovich; GORYANSKIY, Yu.V., kand. tekhn. nauk, red.; VOLCHOK, K.M. tekhn. red.

[Maintenance of hulls of ships engaged in inland navigation] Ukhod za korpusami sudov vnutrennego plavaniia. Pod red. IU.V. Gorianskogo. Leningrad, Izd-vo "Rechnoi transport," Leningr. otd-nie, 1961. (MIRA 14:6)
(Ships—Maintenance and repair)

NOVOKRESHCHENOV, A. I.

137-1957-12-23057

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 27 (USSR)

AUTHORS: Yushchenko, G. D., Novokreshchenov, A. I.

TITLE: Regarding the Information in "A Sampler for Crushed Ore" (Po povodu informatsii "Probootbiratel' dlya droblenoy rudy")

PERIODICAL: Kolyma, 1953, Nr 5, p 48

ABSTRACT: Bibliographic entry

1. Samplers-Applications 2. Bibliography

Card 1/1

NOVOKRESHCHENOV, A. I.

137-1958-1-112

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 17 (USSR)

AUTHOR: Novokreshchenov, A. I.

TITLE: Washing Sands by Means of Pulsator Jigs and Shaking Tables (Promyvka peskov s primeneniyem otsadochnykh mashin i kontsentratsionnykh stolov)

PERIODICAL: Kolyma, 1957, Nr 3, pp 19-21

ABSTRACT: The results of the distribution of products extracted by dressing obtained by sampling on a washer working at 600-650 m^3/day are adduced. Two-stage washing with further concentration of the sand-clay sluice refuse by a slow jig and a shaking table permit Sn extraction to be raised to 96 percent. In the course of the operation of washers with pulsator jigs it was noted that the washing away of cassiterite from the sluice due to deviations from normal functioning of the revolving screen does not increase losses thanks to the fact that a pulsator jig is installed aft of the sluice to catch virtually all large and fine cassiterite. In light of this it was decided at the "Deputatskiy" placer to build a washer working on the following sequence: disintegration - screening - jigging - waste disposal. A production flow diagram and a

Card 1/2

137-1958-1-112

Washing Sands by Means of Pulsator Jigs and Shaking Tables

drawing of an experimental washer with pulsator jigs and shaking table are presented. The output of such a washer is 600 m^3/day, extracting 96 - 96.5 percent of the metal in the 30 mm fraction.

A. Sh.

1. Ores--Processing--Equipment 2. Ore washers--Design 3. Tin ores--Processing

Card 2/2

NOVOKHRYASHCHENOV, A.I.

BS-3 boring machine. Kolyma 21 no.3:19-21 Mr '59.
(MIRA 12:6)

1.Magadanskiy sovnarkhoz.
(Boring machinery)

ALIYEV, I.M., BARKHATNAYA, L.N.; IL'IN, V.D.; MIRZOYEV, G.G.; NOVOKSHCHENOV, A.M.; FOKINA, N.I.

Boundary between the Neocomian and Aptian in the western regions of Central Asia. Izv.AN Azerb.SSR. Ser.geol.-geog. nauk i nefti no.4:19-26 '63. (MIRA 17:4)

NOVOKRESHCHENOV, B.V., kandidat meditsinskikh nauk

Role of the coli bacillus in toxinfections in newborns. Vop. okh. mat. i det. 2 no.2:44-46 Mr-Ap '57 (MLRA 10:4)

1. Iz Uzhgorodskogo instituta epidemiologii, mikrobiologii i gigiyeny (dir. V.M. Meshchenko)
(ESCHERICHIA COLI) (INFANTS,(NEWBORN)--DISEASES)

ESSEL', A.Ye., starshiy nauchnyy sotrudnik, kand.biol.nauk; NOVOKRESHCHENOV, B.V., starshiy nauchnyy sotrudnik, kand.med.nauk, otv.red.; BLIZEYEV, V.I., kand.med.nauk, red.; KOZLOV, V.A., dotsent, red.; RASKIN, M.M., starshiy nauchnyy sotrudnik, kand.med.nauk, red.

[Problems in the biology of the causative agent of diphtheria] Voprosy biologii vozbuditelia difterii. Chita, 1959. 189 p. (Chita. Institut epidemiologii, mikrobiologii i gigieny. Nauchnye zapiski, no.5). (MIRA 15:1)

(CORYNEBACTERIUM DIPHTHERIAE)

NOVOKRESHCHENOV, L.B.

Splenoportography for the detection of pathological formations in the liver. Vest. rent. i rad. 40 no.4:14-18 Jl-Ag '65. (MIRA 18:9)

1. Gospital'naya khirurgicheskaya klinika (zav.- prof. G.D. Obraztsov) Chelyabinskogo meditsinskogo instituta i rentgeno-diagnosticheskiy otdel (rukovoditel' - prof. L.S. Rozenshtraukh) Nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta (direktor-prof. I.G. Lagunova) Ministerstva zdravookhraneniya RSFSR, Moskva.

LEVI, S.S., kandidat tekhnicheskikh nauk; NOVOKRESHCHENOV, M.M., inzhener.

Spot welding of large-caliber reinforcement rod sections made of ST.5 steel. Mekh.stroi. 13 no.10:16-20 O '56. (MLRA 9:11)
(Steel, Structural--Welding)

AUTHOR: Novokreshchenov, M.M. (Engineer) 100-4-6/16

TITLE: New machine for welding steel reinforcement. (Novaya mashina dlya svarki armaturnykh karkasov).

PERIODICAL: "Mekhanizatsiya Stroitel'stva" (Mechanisation of Construction), 1957, Vol.14, No.4, pp.20-21 (USSR).

ABSTRACT: Steel reinforcement up to a weight of 30 kg is welded either by arc-welding or point-welding by a suspended apparatus МТПГ-75. When using this apparatus the reinforcement has to be dismantled which is very wasteful. The output of a welder during a shift is 4500 - 5000 welds. A new welding machine was designed (МТМК-3Х100) by the Leningrad factory "Elektrik" which is more efficient. 12 000 welds can be carried out per shift. Only one skilled engineer and one worker are needed for the operation which can be either continuous or intermittent. The transportation of the reinforcement, welding and cutting are automised. The welding machine comprises a framework with 6 welding points, a compartment for cross-reinforcement, a platform for operation and pneumatic reductors. Automation is provided by a cam-mechanism КМУ-3 through an electromotor which uses direct current. Technical data are tabulated.

1/2

New machine for welding steel reinforcement. (Cont.)

2/2 There are 1 diagram and 1 photograph. 100-4-6/16

AVAILABLE:

NOVOKRESHCHENOV, M.M.; PODVOL'SKIY, L.I.

Condenser discharge welding of seat frames of automobiles. Avt. prom. no.7:27-29 Jl '60. (MIRA 13:7)

1. Nauchno-issledovatel'skiy institut tekhnologii avtomobil'noy promyshlennosti.
(Electric welding)

83684

S/135/60/000/010/006/015
A006/A001

1.2300 only 2208 also 2308

AUTHORS: Novokreshchenov, M. M., Podvol'skiy, L. I., Senin, A. M., Engineers

TITLE: Condenser Butt Welding of BT-1-2 (VT-1-2) Titanium and 1Kh18N9T (1Kh18N9T) Steel Pipes

PERIODICAL: Svarochnoye proizvodstvo, 1960, No. 10, pp. 20-22

TEXT: An investigation was made at NIIAVTOPROM of the condenser resistance welding of VT-1-2 titanium and 1Kh18N9T steel pipes of 10-23 mm in diameter and 1.0-1.5 mm wall thickness. The experiments were made on a laboratory machine equipped with a TKI-200-3-1 (TKI-200-3-1) transformer from the "Elektrik" plant. Pipe sections of 70 and 200 mm length were welded. One part of the pipes was surface-etched prior to welding. In all cases welding was performed without a gas shield. Optimum values were set up for the capacitance of the capacitor battery, the charging voltage, the up-setting force, the effective throat depth of the pipe from the insert electrodes and the transformation coefficient of the welding transformer. The conditions established (given in a table), were used to carry out control welds of pipes which were then tested as to the tightness, elongation and vibration strength of the welds. On account of the fact

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83684
S/135/60/000/010/006/015
A006/A001

Condenser Butt Welding of BT-1-2 (VT-1-2) Titanium and 1Kh18N9T (1Kh18N9T) Steel Pipes

that in condenser welding cast metal is not present in the weld and the zone of the thermal effect does not exceed 0.1 mm, an attempt was made of eliminating heat treatment of VT-1-2 alloy pipes after welding. The pipes were not heat treated and were tested 6 months after welding. The steel and titanium pipes were consecutively subjected to hydraulic (300 atm), pneumatic (200 atm) tests, and to tests under vibration load with repeated hydraulic and pneumatic tests at the indicated pressure. Vibration tests were performed for 6 hours on a special stand (Fig. 4) in vertical direction at 45 to 50 cycles frequency and 1 ± 0.1 mm amplitude. 20 to 25 pipes of each diameter and grade were tested and no cases of breakdown or loss in tightness were stated. It is concluded that the described welding method produces strong and stable joints when welding VT-1-2 titanium and 1Kh18N9T steel pipes. There are no oxides, cracks or other defects in the butts. Heat treatment of VT-1-2 pipes can be eliminated. Preliminary etching which is necessary in argon arc welding is not required for condenser welding of Ti alloys, which may be carried out without shielding the butt zone. There are 5 figures and 1 table.

Card 2/2

36462
S/137/62/000/003/164/191
A160/A101

1.2300

AUTHOR: Novokreshchenov, M.M.

TITLE: Electrostatic spot-welding of some aluminum alloys

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 36, abstract 3E204. (Avtomob. prom-st', 1961, no. 10, 35 - 37)

TEXT: A number of experiments were carried out on the spot-welding of following Al-alloys: the АВ (AVA) alloy with a thickness of 1 and 2 mm; the Д16АМ (D16AM) alloy with a thickness of 1.5 and 2.5 mm; the АМГ-6Т (AMG-6T) alloy with a thickness of 2, 2.5 and 3 mm; and the АМГ-5ВМ (AMG-5VM) alloy with a thickness of 4 mm. The experiments were conducted on a laboratory spot-type condenser machine of the NIITAvtoprom. During the experiments, the approximate welding conditions were determined; and also the conditions permitting to obtain a stable spot joint. The following conclusions are drawn: (1) Al-alloys with a thickness of 1 - 4 mm can be qualitatively welded on spot-type condenser machines. When selecting the proper welding conditions, the clad layer may be retained. (2) The electrostatic welding should be conducted under the softest conditions. This ensures the stability of the quality of welded joints. (3) A deficiency of the

Card 1/2

NOVOKRESHCHENOV, M.M.; PODVOL'SKIY, L.I.

Electrostatic percussion welding of the frame for two-passenger seats of the PAZ-651 motorbus. Avto.prom. 27 no.6:35-36 Je '61. (MIRA 14:6)

1. Nauchno-issledovatel'skiy tekhnologicheskiy institut avtomobil'noy promyshlennosti.
(Electric welding)
(Motor vehicles—Bodies)

L 10227-66 EWT(m)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) IJP(c) JD/HW

ACC NR: AP5027606 SOURCE CODE: UR/0135/65/000/011/0035/0036

AUTHOR: Timofeyeva, V. P. (Engineer); Novokreshchenov, M. M. (Engineer)

ORG: none

TITLE: Weldability of EI559A alloy

SOURCE: Svarochnoye proizvodstvo, no. 11, 1965, 35-36

TOPIC TAGS: alloy, nickel alloy, heat resistant alloy, chromium containing alloy, aluminum containing alloy, welding, TIG welding, alloy weldability/EI559A alloy

ABSTRACT: The weldability of the nickel-base EI559A alloy (0.10 max% C, 0.8 max% Si, 0.3% max Mn, 15—18% Cr, 55—60% Ni, 2.8—3.6 Al, remainder Fe) in manual TIG welding with or without filler wire has been investigated. The alloy susceptibility to hot cracking was tested by the T-joint, Kautts, and MVTU methods in 3 mm-thick sheets which were air cooled from 1200C or air cooled and aged at 750C or 8 hr. All welds made without filler wire or with EI559A filler wire had cracks, but none were observed in the welds made with VZh98 filler wire, notably in the unfilled craters or in the heat-affected zone. The alloy welded in the unaged condition had somewhat lower susceptibility to hot cracking. Regardless of the filler wire used, the bend angle of nonheat-treated welds was 180 deg. The welds in the initial condition and after aging at 800C for 2000 hr had practically the same notch toughness of 11—15 kgm/cm^2 at 800C. Metallographic examination showed that butt-welded joints were dense and

Card 1/2 UDC: 621.791.011:669.15-194

L 10227-66

ACC NR: AP5027606

sound. The experimental results showed that EI559A alloy parts up to 2.5 mm thick can be satisfactorily welded by manual TIG welding with Kh15N60V15(VZh98) alloy filler wire. The use of EI559A filler wire is permissible only for welding of low-rigidity structures. To reduce the danger of hot cracking, the alloy should be welded at the annealed condition with the minimum possible heat input, the melting pool should be thoroughly shielded, and all craters should be filled. On the basis of the experiments, welding conditions were specified for joining EI559 alloy tubes and for welding ribs to the tubes. Orig. art. has: 2 figures and 1 table. [MS]

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 002/ ATD PRESS: 4163

Card 2/2

L 43989-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD/HW/JG

ACC NR: AP6030269 (N) SOURCE CODE: UR/0125/66/000/008/0030/0032

AUTHOR: Rybakov, Yu. V. (Moscow); Novokreshchenov, M. M. (Moscow)

ORG: none

TITLE: Effect of nitrogen on the mechanical properties of Kh17N4G14AB steel welds

SOURCE: Avtomaticheskaya svarka, no. 8, 1966, 30-32

TOPIC TAGS: stainless steel, chromium manganese stainless steel, nickel containing steel, nitrogen containing steel, stainless steel welding, stainless steel weld property, inert gas welding, inert gas nitrogen welding

ABSTRACT: Kh17N4614AB, low-nickel stainless steel (0.05% carbon, 14.6% manganese, 17.3% chromium, 4.65% nickel, 1.05% niobium, 0.20% nitrogen) can be welded with any welding method. It was observed, however, that welds made with argon-shielded arc are susceptible to embrittlement when exposed to temperatures of 500—600C for a long time, owing to a precipitation of a brittle phase at the grain boundaries. The notch toughness of the welds made with pure argon and aged for 1000 hr at 600C dropped from the original 8.3—8.7 mkg/cm^2 to about 2.0 mkg/cm^2, while the notch toughness of the base metal aged under the same conditions underwent little or no change. Addition of 5—6% nitrogen to argon greatly reduced the weld susceptibility to embrittlement, especially when Kh17N4614AB electrode wire was used. The notch

Card 1/2 UDC: 621.791.856

L 43989-66

ACC NR: AP6030269

toughness of the welds aged as above remained on a fairly high level, 6.5—7.5 kg/cm^2. Nitrogen also improved somewhat the weld resistance to hot cracking. Orig. art. has: 4 figures. [DV]

SUB CODE: 11, 13/ SUBM DATE: 03Feb66/ ATD PRESS: 5070

Card 2/2 ULR

NOVOKRESHCHENOV, M.V.

Nervous regulation of the lysozyme activity of the blood serum. Pat. fiziol. i eksp. terap. 8 no.5:80-81 S-O '64.
(MIRA 18:12)

1. Kafedra patologicheskoy fiziologii (zav. - dotsent V.A.Kozlov) Chitinskogo meditsinskogo instituta i Chitinskogo instituta epidemiologii, mikrobiologii i gigiyeny. Submitted March 25, 1963.

PROCESSES AND PROPERTIES INDEX

CA

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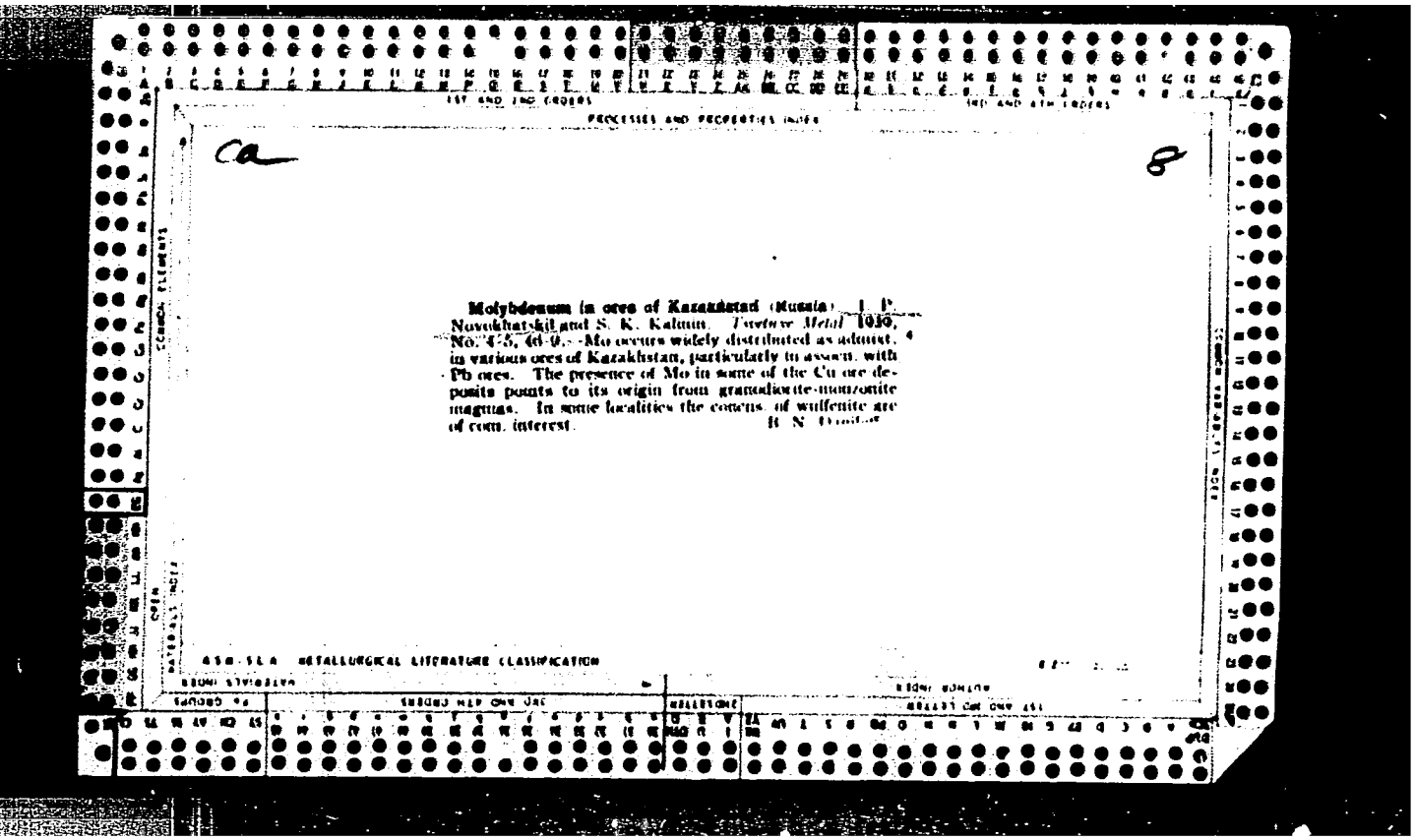
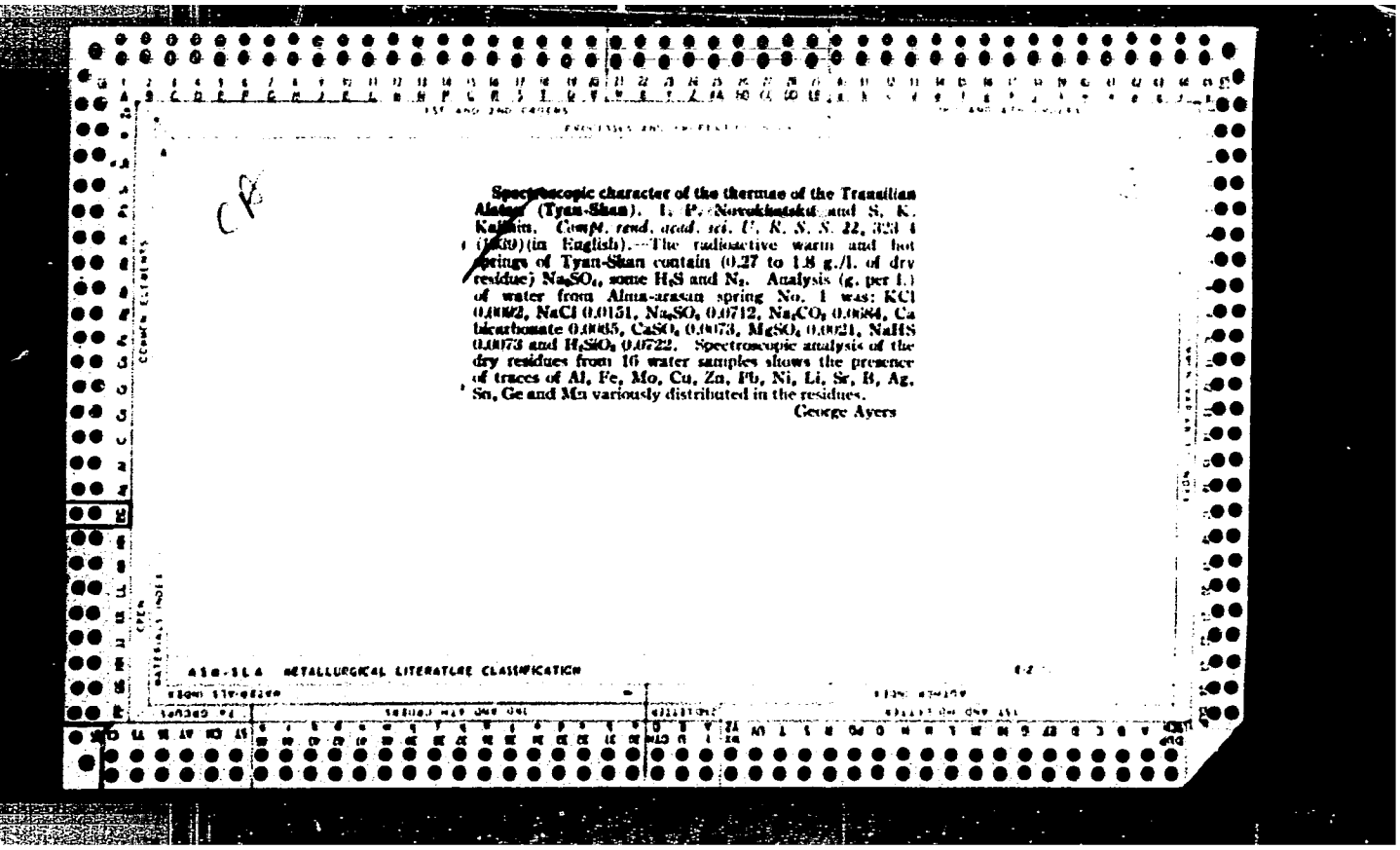
The chemical composition of some antimony minerals.

I. P. [illegible] and S. K. Kalinin. *Mineral. Syr'e* [illegible], No. [illegible], [illegible]; *Khim. Referat. Zhur.* 1, No. 2, [illegible].—A spectrochem. method of analysis for Sb is given. The [illegible] and [illegible] deposits in the Kazakhstan are described. Besides Sb and the usual elements found with it (Si, Al, Fe, Ca and in some deposits Mg) were found Pb, Cu, As and Mo, as well as Ag and Hg in the oxides of Sb. Of most geochem. interest is the presence in all samples of Mo in const. quantity. No Sn or Ge is mentioned. The authors do not attempt to explain the geochem. role of Mo in the crystal lattices of Sb minerals, but it may be explained by the role of polar isomorphism of A. E. Fersman (cf. *C. A.* [illegible], [illegible]). W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



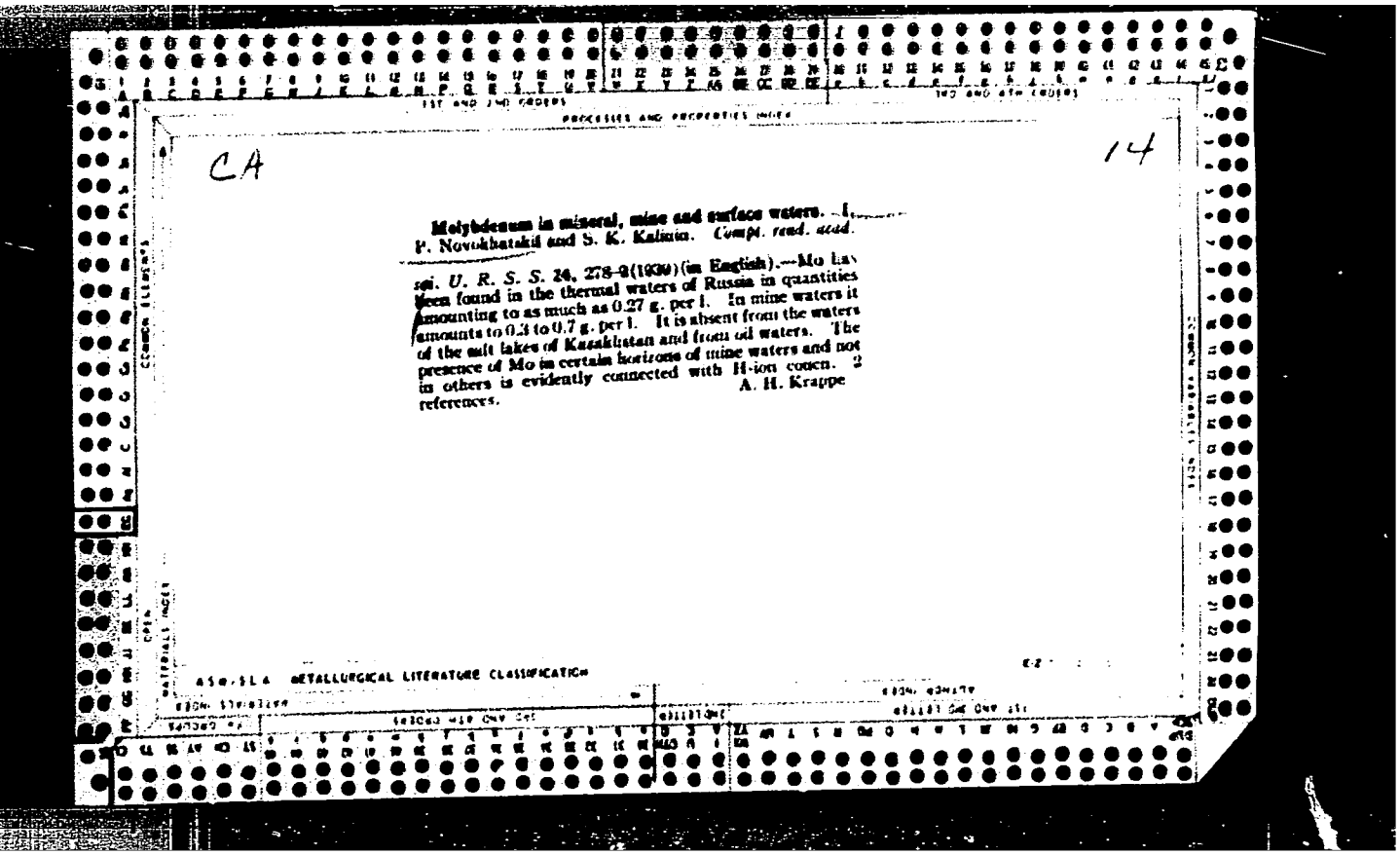
Molybdenum in ores of Kazakhstan (Russia). I. P. Novokhat-skii and S. K. Kalmin. *Tsvetnye Metal.* 1950, No. 4-5, 46-9.—Mo occurs widely distributed as admixt. in various ores of Kazakhstan, particularly in assocn. with Pb ores. The presence of Mo in some of the Cu ore deposits points to its origin from granodiorite-monzonite magmas. In some localities the concns. of wulfenite are of com. interest.



Spectroscopic character of the thermae of the Transilian Alatau (Tyan-Shan). I. P. Novokhatskii and S. K. Kaplin. *Compt. rend. acad. sci. U. R. S. S.* 22, 323 4 (1939)(in English).—The radioactive warm and hot springs of Tyan-Shan contain (0.27 to 1.8 g./l. of dry residue) Na_2SO_4, some H_2S and N_2. Analysis (g. per l.) of water from Alma-arasan spring No. 1 was: KCl 0.0002, NaCl 0.0151, Na_2SO_4 0.0712, Na_2CO_3 0.0084, Ca bicarbonate 0.0085, $CaSO_4$ 0.0073, $MgSO_4$ 0.0021, $NaHS$ 0.0073 and H_2SiO_3 0.0722. Spectroscopic analysis of the dry residues from 16 water samples shows the presence of traces of Al, Fe, Mo, Cu, Zn, Pb, Ni, Li, Sr, B, Ag, Sn, Ge and Mn variously distributed in the residues.

George Ayers

A16-SL4 METALLURGICAL LITERATURE CLASSIFICATION

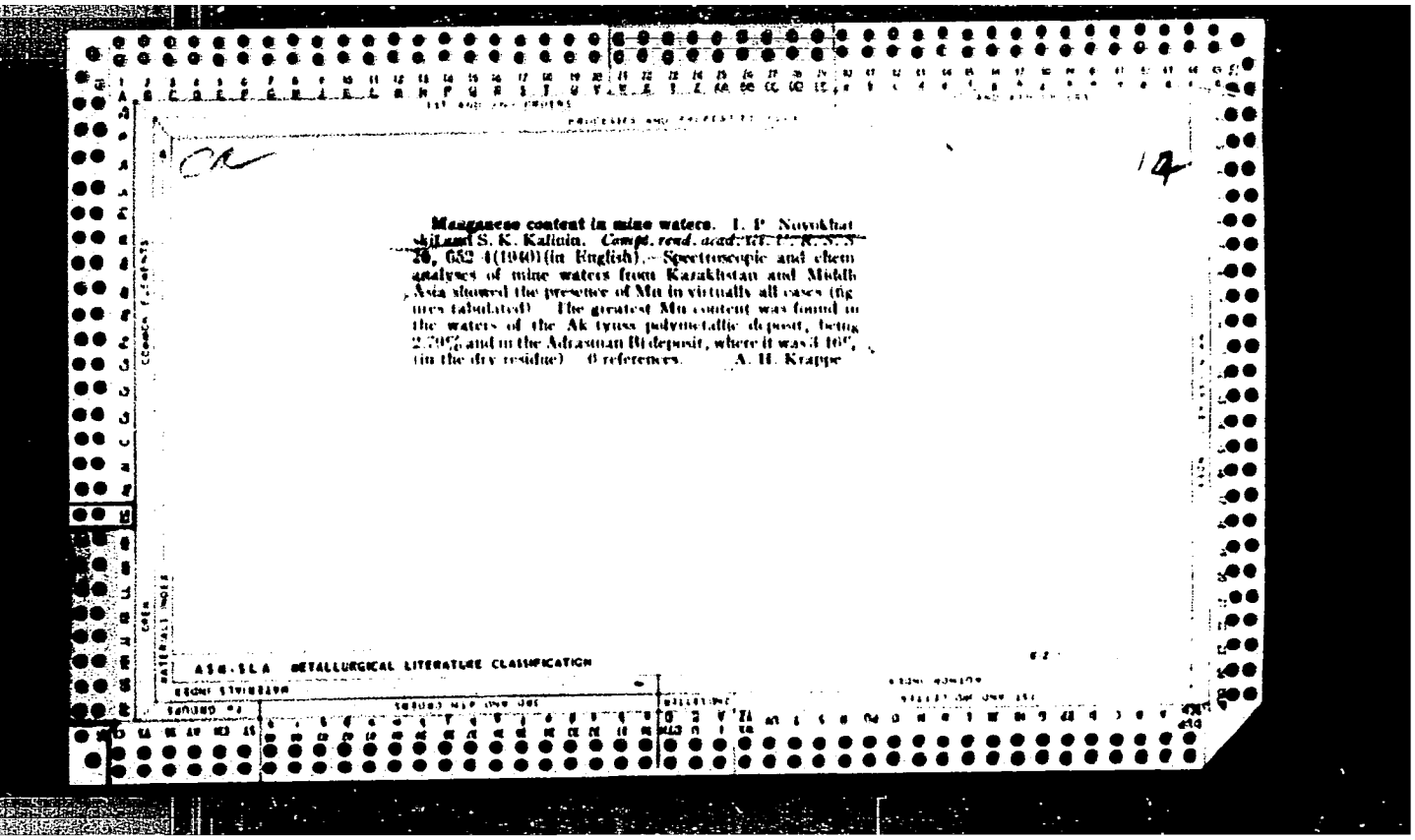


CA

14

Molybdenum in mineral, mine and surface waters. I.
P. Novokhatskii and S. K. Kalinin. *Compt. rend. acad. sci. U. R. S. S.* **24**, 278–9(1939)(in English).—Mo has been found in the thermal waters of Russia in quantities amounting to as much as 0.27 g. per l. In mine waters it amounts to 0.3 to 0.7 g. per l. It is absent from the waters of the salt lakes of Kazakhstan and from oil waters. The presence of Mo in certain horizons of mine waters and not in others is evidently connected with H-ion concn. 2 references.
A. H. Krappe

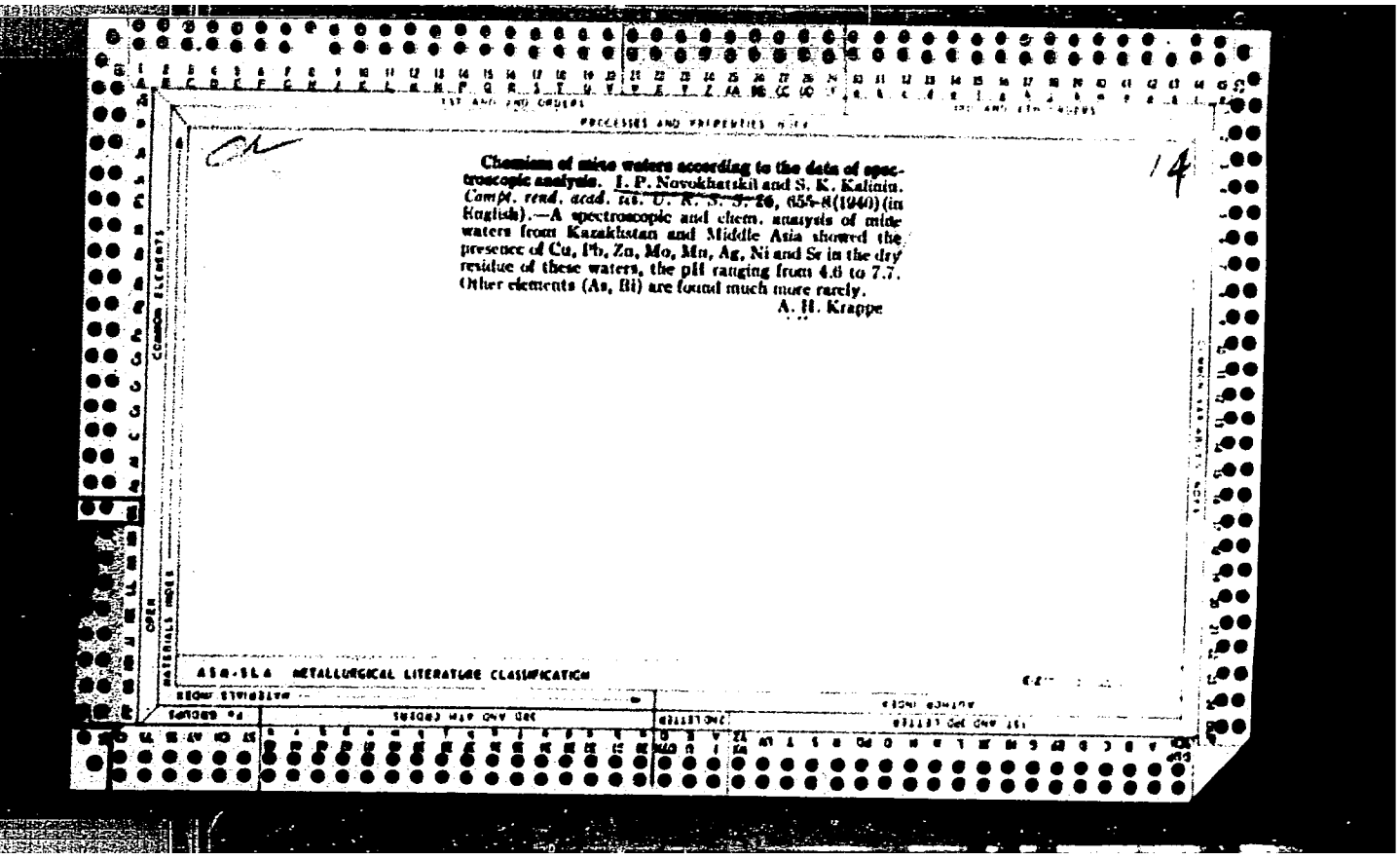
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



14

Manganese content in mine waters. I. P. Novokhatskii and S. K. Kalinin. *Compt. rend. acad. sci. U.R.S.S.* 26, 652-4 (1940) (in English).—Spectroscopic and chem. analyses of mine waters from Kazakhstan and Middle Asia showed the presence of Mn in virtually all cases (figures tabulated). The greatest Mn content was found in the waters of the Ak tyuss polymetallic deposit, being 2.70% and in the Adrasman Bi deposit, where it was 3.10% (in the dry residue). 6 references. A. H. Krappe

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Chemism of mine waters according to the data of spectroscopic analysis. I. P. Novokhatskii and S. K. Kalinin. *Compt. rend. acad. sci. U. R. S. S.* 26, 655-8(1940)(in English).—A spectroscopic and chem. analysis of mine waters from Kazakhstan and Middle Asia showed the presence of Cu, Pb, Zn, Mo, Mn, Ag, Ni and Sr in the dry residue of these waters, the pH ranging from 4.6 to 7.7. Other elements (As, Bi) are found much more rarely.
A. H. Krappe

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A58-5L4 METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

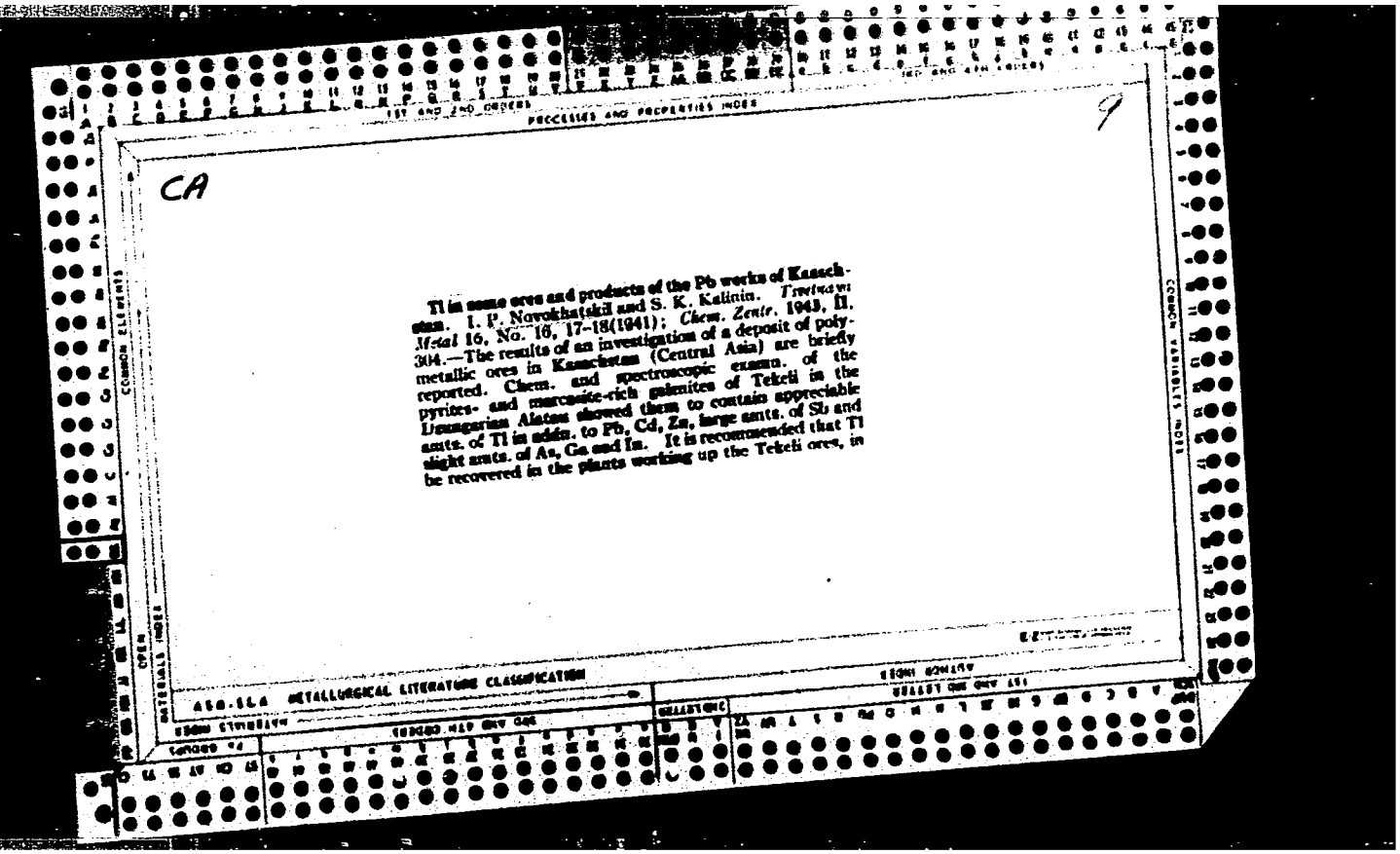
PROCESSES AND PROPERTIES INDEX

CA

Lithium in the thermal waters of Kazakhstan. L. P. Novokhatskii and S. K. Kalinin. *Compt. rend. acad. sci. U. R. S. S.* **29**, 31-4(1940)(in English). The dry residue of the waters was examd. at 3232.67 A. The highest Li content, 0.9 mg. L., was found in the thermal waters at Parkent, Uzbekistan. J. J. Willaman

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

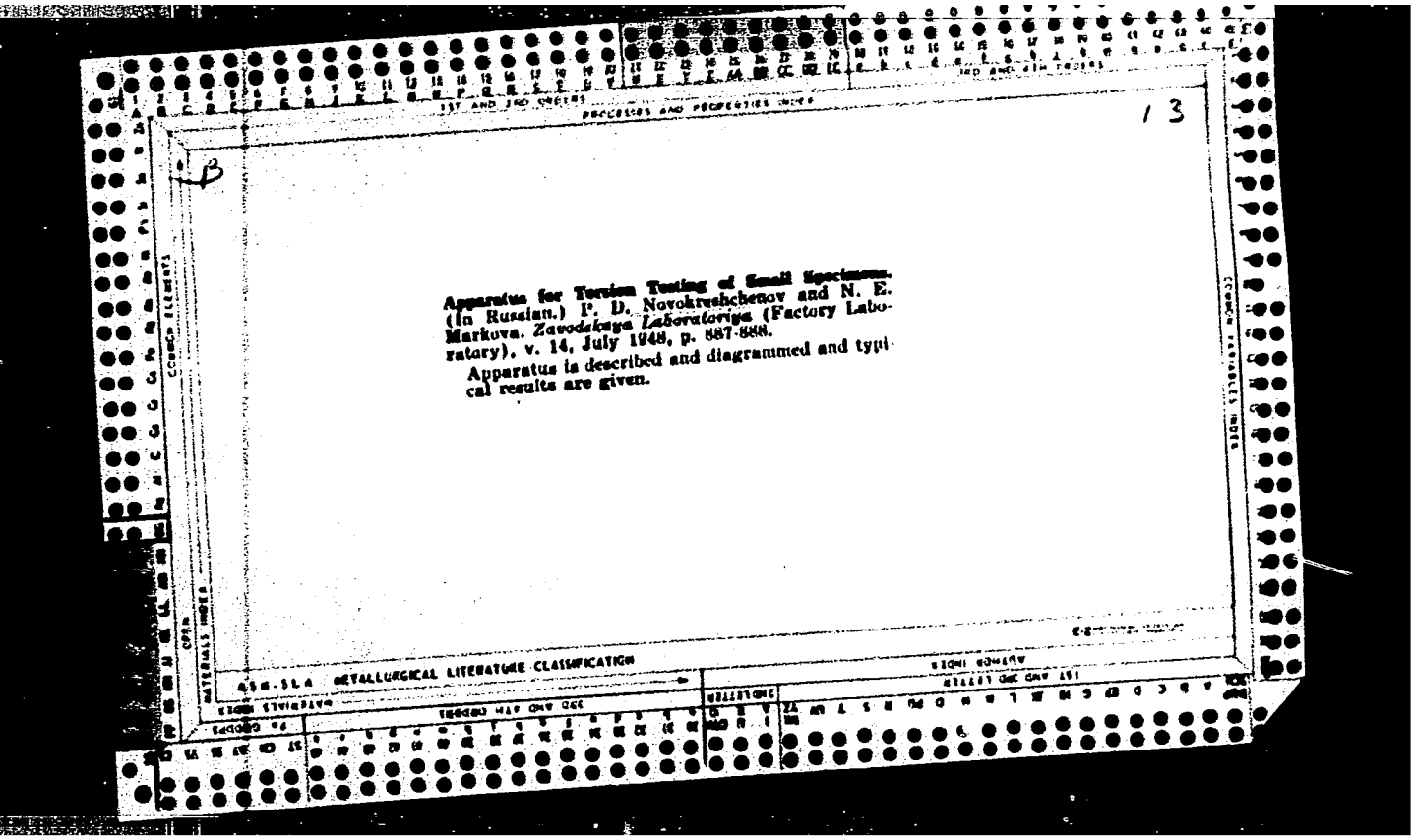


CA

9

The occurrence of thallium in the silicates of the earth's crust. I. P. Novokhatskii and S. K. Kalinin. *Doklady Akad. Nauk S.S.S.R.* 56, 831–2(1947); *Chem. Zentr.* 1947, II, 302.—Spectrographic examn. of silicates for Tl showed it to occur predominantly in the Na-K feldspars, mica, and a few other minerals. Its occurrence with K is worthy of note, since the 2 at. radii are near the same (K 1.33 and Tl 1.49 A.). In most cases the Tl content was 0.001–0.003%. Only rarely did it amount to a few hundredths of 1%, as in damourite (0.02%) and pollucite (0.01%). The Tl:K ratio was 1:14,000 and less for the feldspars, 1:435 for damourite, and 1:80,700 for the earth's crust.

M. G. Moore



/ 3

Apparatus for Torsion Testing of Small Specimens. (In Russian.) P. D. Novokreshchenov and N. E. Markova. *Zavodskaya Laboratoriya* (Factory Laboratory), v. 14, July 1948, p. 887-888.

Apparatus is described and diagrammed and typical results are given.

USSR/Physics - Fatigue of Metals
Adsorption Effect

"The Adsorption Effect for Sign-Variable Torsion in Connection With the Problem of Metal Fatigue," F. D. Kovchashchenov, N. Ye. Markova, Acad F. A. Rebinder, Voronezh State U, Dept of Physical Systems, Inst of Phys Chem, Acad Sci USSR, 4 pp

"Dok Ak Nauk SSSR" Vol LXVIII, No 3, 549-552

Results of detailed study of deformation of tin single crystals in the form of poly- and monocrystallic wires. In one-sided torsion of wire tin the under influence of adsorption of oleic acid from nonpolar hydrocarbon liquid. Effect was observed for low torsion speeds (of order of 0.045 rpm). Note shows that adsorption effect increases in deformation and reaches very high values near the breaking point. In studying sign-variable torsion under simultaneous stretching by static load for constant amplitude of ϕ, and the angle ϕ varies sinusoidally with time, adsorption effect becomes very marked at comparatively small periods of the cycle T ($T = 4$ to 8.5 min). Submitted 14 Jul 49.

PA 149T82

NOVOKRESHCHENOV, P. D.

Novokreshchenov

A new phenomenon of self-faceting of wires from polycrystalline metals on stretching. P. D. Novokreshchenov (State Pedagog. Inst., Tula). *Doklady Akad. Nauk S.S.S.R.* 91, 123–4(1953).—Formation of facets on surface of wires on uniaxial stretching was noted. These phenomena were observed on wires of the following diam.: Sn 0.5–1.0; Zn 0.5; Cd 0.8; Cu 0.6, Al 0.5, and brass 0.8 mm. On stretching a cylindrical wire its bright polished surface became mat and then rough as a result of exposure of separate crystals. Cross-section of wires of Cu, Sn, and brass became square while Zn and Cd wires became hexagonal. Investigation of chem. pure Sn wire by stretching at const. load revealed that noticeable faceting appeared after the rate of deformation became min. Formation of facets continued while the rate remained const. As soon as the rate became greater than min. samples began to disintegrate. Good faceting was obtained with wires 0.5–1.0 mm. in diam. while on wires 2–3 mm. in diam. faceting was unsymmetrical, usually only along two well-developed planes. Character of faceting was better the smaller the original grain size. On coarse-grained samples faceting was not obtained. Small P gave better faceting than large P. Twisting the wire before stretching yielded a twisted parallelopiped. Formation of facets was observed when the wire was subjected to regular periodic twisting while being stretched but the faceting was poorer. Preliminary metallographic and x-ray investigation showed the formation of a coarsely cryst. structure with definite azimuthal

V. N. Bednarski

ACCESSION NR: AT4013964 S/2659/63/010/000/0270/0274

AUTHOR: Novokreshchenov, P. D.; Savchenko, N. V.

TITLE: Effect of fusible metallic coatings on mechanical properties of Ni after cyclic heat treatment

SOURCE: AN SSSR. Institut metallurgii. Issledovaniya po zharoprochnym splavam, v. 10, 1963, 270-274

TOPIC TAGS: nickel NP-2, fusible nickel coating, bismuth coated nickel, nickel strength, nickel ductility, coated nickel strength, coated nickel ductility, coated nickel heat treatment, cyclic heat treatment

ABSTRACT: This study concerned the effects of fusible coatings (Sn, Cd, Zn, Pb, Bi and alloy POS-40) on mechanical properties of nickel NP-2 after cyclic heat treatment (80 to 800C, 25 sec. cycle, 8 sec heating, 17 sec cooling). Heat-treated wire specimens were tested on the rupture tester MR-0.05 (10 mm/min). Results are tabulated or shown graphically (see Figs. 1 and 2 in the Enclosure). Bi proved most active of all named coatings in reducing the strength (σ_b = 67%) and ductility (σ_b = 60%) of Ni. The other coatings had little effect on strength, but produced noticeable brittleness of the material, especially within the 500-1000

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