

L 23955-66 EWT(1)/EWT(m)/ETC(f)/EWG(m)/T WE

ACC NR: AP6009920

(A)

SOURCE CODE: UR/0413/66/000/004/0116/0116

AUTHOR: Beletskiy, M. I.; Pogosbekov, M. I.

ORG: none

TITLE: A device for cutting off fuel feed in a carburetor engine. Class 46, No. 179122

SOURCE: Izobreteniya, promyshlennyye obraztsy; tovarnyye znaki, no. 4, 1966, 116

TOPIC TAGS: fuel carburetor, engine fuel system

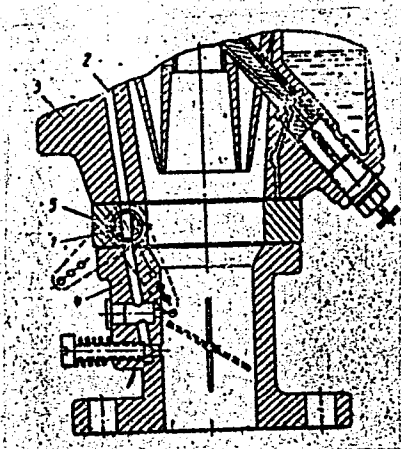
ABSTRACT: This Author's Certificate introduces a device for cutting off fuel feed in a carburetor engine with forced idling. The installation contains a movable shutoff unit, e. g. a valve, covering the idling channel which goes through the carburetor housing to the mixing chamber. For unified design of carburetors used in various operational conditions, e. g. in the mountains, an annular sleeve is mounted in the space between the housing and the mixing chamber. This sleeve supports the cutoff element located in the idling channel.

UDC: 621.43.033.9-588

Cord 1/2

L 23955-66

ACC NR: AP6009920



1--cutoff unit; 2--idling channel; 3--housing; 4--mixing chamber; 5--annular sleeve

SUB CODE: 21/

SUBM DATE: 13Mar64/

ORIG REF: 000/

OTH REF: 000

Card 2/2 ✓

KOSTYUKOV, V.A.; GONCHARENKO, K.S.; BELETSKIY, M.L., redaktor; SOROKA,  
M.S., redaktor; RUDENSKIY, Ya.V., ~~tekhnicheskii~~ redaktor

[Reconditioning tractor parts by means of gas and electric arc  
welding] Vosstanovlenie avtoraktornykh detalei gazovoi i elektro-  
dugovoi svarkoi. Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit.  
lit-ry, Ukrainskoe otd-nie, 1955. 50 p. (MLRA 8:6)  
(Tractors--Welding)

ASNIS, A. Ye.: BELETSKIY, M. L., retsentsent, inzhener; SCROKA, M. S., redaktor;  
RUDENSKIY, Ya. V., tekhnicheskiiy redaktor

[Welding in repairing tractors and agricultural machinery] Sva-  
rochnye raboty pri remonte traktorov i sel'skokhoziaistvennykh  
mashin. Kiev, Gos. nauchno-tekhn. izd-vo mashinostroitel'noi lit-  
ry, 1955. 156 p. (MLRA 9:3)

(Welding) (Agricultural machinery--Repairing) (Tractors--  
Repairing)

BELETSKIY, M.L. [Bilets'kiy, M.L.]

Organized repair of machinery. Mekh. sil'. hosp. 11 no.9:1-2 8 '60.  
(MIRA 13:9)

1. Nachal'nik upravleniya remonta i tekhnicheskogo obsluzhivaniye  
kolkhozov i sovkhov Ministerstva sel'skogo khozyaystva USSR.  
(Agricultural machinery--Maintenance and repair)

BELETSKIY, M.S., prof., doktor fiz.-matem. nauk; RAYKHENSHTEYN, I.TS.;  
~~SHATALOVA~~ SHATALOVA, O.K., assistant

Using molybdenum disulfide for reducing the wear of cutting tools. Mashinostroitel' no.7:40-42 J1 '65.

(MIRA 18:7)

1. Zaveduyushchiy kafedroy fiziki Leningradskogo inzhenerno-ekonomicheskogo instituta imeni Pal'miro Tol'yatti (for Beletskiy).
2. Zamestitel' nachal'nika instrumental'nogo otdela Nauchno-issledovatel'skogo instituta tekhnologii mashinostroyeniya Leningradakogo sojeta narodnogo khozyaystva (for Raykhenshteyn).
3. Kafedra fiziki Leningradskogo inzhenerno-ekonomicheskogo instituta imeni Pal'miro Tol'yatti (for Shatalova).

1ST AND 2ND SERIES		3RD AND 4TH SERIES	
PROCESSES AND PROPERTIES INDEX			
BC		B-I-8	
<p>Calcination of aluminum hydroxide. M. S. Beletskii (<i>Izv. Akad. Nauk SSSR, Ser. Khim. Nauk</i>, 1958, No. 2, 16-21).—The hydroxide ppd. at the Dnieper Alumina Plant has the X-ray structure of hydrargillite. It changes to boehmite at 325° and to <math>\gamma</math>-<math>\text{Al}_2\text{O}_3</math> at 500°. The change to <math>\alpha</math>-<math>\text{Al}_2\text{O}_3</math> begins at 950° and is completed at 1200°. Ch. Ans. (c)</p>			
METALLURGICAL LITERATURE CLASSIFICATION			
FROM SYMBOLS		FROM SYMBOLS	
<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p>		<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p>	





1ST AND 2ND ORDER										100 AND 5TH ORDER									
PROCESSING AND PROPERTY INDEX																			
<p>Structure of alumina-bearing compound in cakes and alumes. M. S. Heletskii. <i>Tsvetnyy Metal.</i> 1938, No. 12, 96-9. The structure, compn., and properties of ppts. formed in the process of desilication of con. aluminate solns. were detd. by means of x-ray analysis and by study of the optical and other phys. and chem. properties. The ppts. were proved to contain analcime (<math>\text{NaAlSi}_3\text{O}_8 \cdot \text{H}_2\text{O}</math>), which is presumably formed according to the reaction <math>2\text{Na}_2\text{SiO}_3 + \text{NaAlO}_2 + 3\text{H}_2\text{O} \rightarrow \text{NaAlSi}_3\text{O}_8 \cdot \text{H}_2\text{O} + 4\text{NaOH}</math>. The desilication of aluminate solns. is accompanied by hydrolysis, as a result of which a ppt. of <math>\text{Al}(\text{OH})_3</math> is formed. No ppts. of other compds. contg. <math>\text{Al}(\text{OH})_3</math> was observed in the process. Synthetic ppts., prepd. by combining solns. of aluminates and silicates of Na, also were found to consist of analcime and <math>\text{Al}(\text{OH})_3</math>. 5 references.</p> <p style="text-align: right;">H. N. Daniloff</p>																			
<p>ASM-AIA METALLURGICAL LITERATURE CLASSIFICATION</p>																			
<p>FROM 17700100</p>																			
<p>177000 01</p>										<p>177000 01</p>									
<p>177000 01</p>										<p>177000 01</p>									

*M*

The Application of Spectrographic Analysis in the Practice of the S.M.  
Kirev Aluminium Works. M. B. Bekhtsky (*Izvest. Akad. Nauk S.S.S.R.*,  
1941, [Fig.] 6, (2/3), 277-279).—[In Russian.] Siluminae are being analyzed  
visually with a steelometer for Si (5-14%) and other Al alloys for Si (0.5-3.8%),  
and Fe (0.52-1.25%). Large concentrations (~25%) of Al and Mg are also  
being successfully determined. The lines used and tables comparing the  
results of spectrographic and chemical analyses are included.—N. E. V.

ALSO SEE METALLURGICAL LITERATURE CLASSIFICATION

SOURCE OF INFORMATION

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PROCESSING AND PROPERTIES INDEX

40-38. X-Ray Investigation of the Structure of Nickel "Skeleton" Catalysts (In Russian.) Yu. B. Terminasov and M. S. Belitskii. Doklady Akad. Nauk SSSR (Reports of the Academy of Sciences of the USSR), new ser., v. 63, Dec. 1, 1948, p. 411-413.

The residue remaining after leaching out the aluminum by means of a KOH solution from the compound  $NiAl_3$ , that is, the nickel "skeleton" catalyst, represents dispersed crystals of nickel of hexagonal modification, in the crystal lattice of which is dissolved hydrogen.

METALLURGICAL LITERATURE CLASSIFICATION

HIGH DENSITY

RESEARCH ONE DIV A21

CA

19

Nature of the crystals of silicon carbide.  
V. A. Alferov, M. S. Belovskii, and N. B. Gasilova (All-Union Sci. Research Inst. Abrasives and Polishes, Leningrad). *Doklady Akad. Nauk S.S.S.R.* 71, 117-18 (1960).—Reaction between 1 SiO<sub>2</sub> and 2 C at 1820-50° produces a soft woolly green substance of d. 3.17, which, by x-ray exam., proves to have a cubic lattice with a lattice const. of 4.38 Å., hence, the calcd. mol. wt. is 40.06, in agreement with the formula SiC. There are no lines that would indicate the presence of any other compd., and there is no indication of an "amorphous carbide", or of the hypothetical silicocarbides claimed by various authors. In samples of the cubic carbide, SiC, 99.95-99.99% pure, prepd. by heating SiO<sub>2</sub> (pure sand) with petroleum coke at 1600°, heating to 1800, 2000, and 2200° produced a very slight variation of the lattice const., from the original 4.38 to 4.45, 4.40, and 4.39 Å., resp. Lines of graphite appear only above 2200°. In sinter rods, heated up to 2150-2300°, only the cubic SiC was detected. At higher temps., there appeared lines of graphite, and, at certain spots, also of hexagonal carbide. N. Thon

CA

Silicon monoxide. M. S. Beletskii and M. B. Rapoport.  
*Doklady Akad. Nauk S.S.S.R.* 72, 699-701 (1950).—  
 The existence of SiO in the solid state was established by  
 the x-ray pattern of the product of reduction in vacuum of  
 SiO<sub>2</sub> by C or Si at 1800° or above, or of the product of  
 reduction of a mixt. of SiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> under the same con-  
 ditions. The substance appears as a condensate of yellow-  
 ish brown color. Its refractive index is 1.92-1.91, the d.  
 2.13. The crystal lattice is cubic,  $a = 5.10 \text{ \AA}$ . No other  
 interferences appear in the pattern. If there are 4 mols.  
 per unit cell, the exptl. d. of 2.13 gives a mol. wt. of 44.3.  
 The preps. investigated by Baumann (*C.A.* 35, 5035)  
 and by Inuzuka (*C.A.* 36, 4001) were not SiO but a mixt.  
 of Si and SiC. N. Thon

BELETSKIY, M. S.

USSR/Chemistry - Protective films on Metals 1 Dec 50

Structure of Oxide Films on the Surface of Aluminum, M. S. Beletskiy, State All-Union Sci Res Aluminum-Magnesium Inst

"Dok Ak Nauk SSSR," Vol LXXIV, No 4, pp 551-553  
It has been held hitherto that oxidation film on aluminum metal consists of gamma-oxide and beryte. Herein exp't prove that beryte is secondary product of hydration. X-ray and electron-ray investigation of "Al medicinal powder" (1) did not disclose

173124

USSR/Chemistry - Protective films on Metals (Contd) 1 Dec 50

Al oxide crystals: Substance is highly amorphous or represents disordered array of Al and O atoms. I (black powder resembling carbon black) becomes dark gray and finally yellow-gray stage is beryte. After 24 days, beryte is obtained.

173124

BCS

*Chemistry & physics*

147. Investigation of the lower oxide of silicon  $\text{SiO}$ . — M. S. BILYUKOV and M. B. RAPOPORT (*Dokl. Akad. Nauk U.S.S.R.*, 72, 299, 1951). Although there is no longer any doubt about the existence of  $\text{SiO}$  as a gas, its solid phase has not yet been convincingly proved. References are made to the literature on the subject (Gold and Kholodov, H. Baumann, H. Imazuka, etc.). For the present investigations preparations were obtained by reducing  $\text{SiO}_2$  by C or Si at  $>1,800^\circ\text{C}$ . in a vacuum, or by reducing a mixture of  $\text{SiO}_2$  and  $\text{Al}_2\text{O}_3$  under the same conditions. The preparation was an isotropic substance of yellowish brown colour;  $n_D = 1.92-1.94$  and  $d_4^{20} = 2.13$ . An X-ray photograph obtained showed a considerable background upon which only the most intense interference lines could be measured. By means of appropriate calculations it was established that the compound obtained has a cubic lattice ( $a = 3.16 \text{ \AA}$ ). The fact that no other lines were observed on the photograph was taken as an indication that the preparation obtained was pure. Taking into consideration that the density was 2.13 it is found that with 4 molecules in an elementary cell the mol. wt. of the cpd. is 44.3, which is quite close to that of  $\text{SiO}$ . It is stated that the lattice constant serves as a direct characteristic of  $\text{SiO}$  in the solid state. (1 table.)



IR/Metals - Aluminum, High Temperature 22 Oct 51

Study of Aluminum Compound Forming at High Temperatures, M. S. Beletskiy, M. B. Repoport, All-Union Aluminum-Magnesium Inst

Dok Ak Nauk SSSR" Vol LXXX, No 5, pp 751-754  
During experimentation for reducing  $Al_2O_3$  with C at temps above 1,800 in vacuo, unknown compd in shape of thin elongated crystals of blue color was observed. It contained considerable amt of Al, did not react with water or acids, only reacting slowly on heating with alkali. Density was found equal to 2.74. Mol wt 69.94 suggests compd of  $Al_2O$  type. Complete chem

221147

analysis was not possible due to small amt of substance obtained. Submitted by Acad D. C. Belyankin 20 Aug 51.

221147

BELETSKIY, M. S.

BELETSKIY, M. S.

Chemical Abst.  
Vol. 48 No. 9  
May 10, 1954  
General and Physical Chemistry

Determination of the new SiC VII structure. R. B. Gasilova, M. S. Beletskii, and M. A. Sokhor. *Doklady Akad. Nauk S.S.S.R.* 82, 57-60 (1952); cf. Zhdanov and Minervina, *Zhur. Eksp. Teor. Fiz.* 15 (1945). All the known SiC modifications have in common  $a_0 = 3.08$  Å, but  $c/a$  depends on the no. of the layers in the structure piled up in direction  $c$ . Using Belov's theory of densest-sphere packings, Zhdanov had established a classification of the known modifications of SiC, which explains, e.g., Ott's structure of SiC V with 17 layers, as well as that of SiC VI (C.A. 42, 10094); SiC I (2.3)3; SiC II 3.3; SiC III 2.2; SiC IV (4.3)3; SiC V (2.3.3.3.3.3)3; SiC VI (2.3.3.3)3;  $\beta$ -SiC = 3.0; and Ramsdell's (C.A. 41, 4980e) SiC-87R (3.3.3.1.-3.3.3.3.2)3. In com. SiC, another modification was observed, called SiC VII, which has a particular powder diagram that is somewhat similar to that of trigonal SiC I and IV, but different from hexagonal SiC II and III. The layers obey the law  $n_s = 3 \times 9$ , with  $d_{hkl} = n_s a \sqrt{(6/(8n_s^2 S + 9P^2))}$ ;  $S = h^2 + k^2 + l^2$ , in very good agreement with the exptl. facts. The translation group is trigonal-rhombohedral, primitive. The discussion of the intensities gives also a complete agreement with the structural principles expressed in the correlations  $h - k \neq 3m$ ;  $l = 3l$ , and  $h - k = 3m$ ;  $l = n_s l = 27l$ ;  $ml = 0.1.2$ , etc. Space group  $D_{3d}^5 = R\bar{3}m$ , and subgroup  $C_{3v} = R3m$ , with the symbol of spheric packings (2.2.2.3)3. A series of structural types is established expressed by SiC I with  $n_s = 15$ ; SiC VII,  $n_s = 27$ ; 2(2.2.-2.2.2.3)3,  $n_s = 39$ ; (2.2.2.2.2.2.3)3,  $n_s = 51$ . The differences of the  $n_s$  values between these single types is  $\Delta n_s = 12$ .  
W. Bitel

9-2-53  
280

BELETSKIY, M.S.

Jan 10, 1977

General And  
Physical Chemistry

1 (2)  
dur

Structure of the oxide formed on the surface of aluminum.  
M. S. Beletskiy (All-Union Aluminum-Magnesium Inst., Leningrad). *Doklady Akad. Nauk S.S.S.R.* 91, 89-91 (1963); *ibid.* C.A. 45, 3275h. The oxide layer on Al surfaces appears to consist of a nearly monatomic layer of O held by relatively weak attraction existing between Al and O atoms, in which 3p electrons of 2 atoms of Al are transferred to the 2p shell of adsorbed O atoms after dissociation of O<sub>2</sub> mol. Thus there is formed a unimol. film of 2-dimensional Al<sub>2</sub>O which does not give diffraction patterns by x-ray or electron-microscopic methods. If the oxidation occurs at elevated temp., the two 3s electrons of Al also participate and form crystalline Al<sub>2</sub>O<sub>3</sub>; such a situation occurs in oxidation of a spray of molten Al droplets which consist of Al<sub>2</sub>O and Al<sub>2</sub>O<sub>3</sub> (α-form) as shown by x-ray examn.; heating in air to 1250° converts these particles completely to Al<sub>2</sub>O<sub>3</sub> (α-form). Crystals of Al<sub>2</sub>O<sub>3</sub>·H<sub>2</sub>O (boehmite) on heating to 480° yield the γ-oxide with crystal particles of about 20 Å. Absorption of H<sub>2</sub>O vapor by this oxide (I) and by the so-called medicinal powder (II) (oxidation product of finely powd. Al under isothermal conditions at room temp.) was examd. II in taking up some 5% H<sub>2</sub>O becomes rapidly satd., whereas I prepd. at 480° takes up 21% H<sub>2</sub>O and I prepd. at 600° takes up 18% H<sub>2</sub>O. I prepd. at 800° takes up but 10% H<sub>2</sub>O. This can be explained by reduced amt. of free surface in the specimens made at higher temp. The low level of H<sub>2</sub>O absorption by II is explained by the structure of the oxide layer on its surface. I immersed in H<sub>2</sub>O undergoes no change, but I changes to boehmite and finally to bayerite by the reaction sequence such as: Al<sub>2</sub>O + 3H<sub>2</sub>O → 2Al(OH)<sub>3</sub> + 2H<sub>2</sub> → Al<sub>2</sub>O<sub>3</sub>·H<sub>2</sub>O + 2H<sub>2</sub>; and 2Al(OH)<sub>3</sub> + 2H<sub>2</sub>O → 2Al(OH)<sub>3</sub> + 2H<sub>2</sub>O → 2Al(OH)<sub>3</sub> + 2H<sub>2</sub>O.  
G. M. Kosolapoff

BELENISKIY, M. S.

"Roentgenographic and Electronographic Investigations of the Structure of Films of Surface Active Agents Adsorbed on the Surface of Deformed Aluminum."  
Dr Phys-Math Sci, Leningrad State Pedagogical Inst, Leningrad, 1954. (RZhKhim, No 6, Mar 55)

So: Sum. No 670, 29 Sept 55 - Survey of Scientific and Technical Dissertations  
Defended at USSR Higher Educational Institutions (15)

BELETSKIY, M.S.  
BELETSKIY, M.S.; MASHOVETS, V.P.

~~Determining~~ Determining the amount of aluminum in an electrolytic cell  
by means of radioactive tracers. TSvet.met. 28 no.5:51-54  
S-O '55. (MIRA 10:10)  
(Aluminum--Analysis) (Radioactive tracers)

Name: BELETSKIY, Mikhail Semenovich

Dissertation: Radiographic and electrographic analyses of the  
structure of films of surface-active materials;  
adsorbed by the surface of deformed aluminum

Degree: Doc Phys-Math Sci

Affiliation: All-Union Aluminum-Magnesium Inst

Defense Date, Place: 26 May 55, Council of the Leningrad State Ped  
Inst imeni Gertsen

Certification Date: 12 May 56

Source: BMVO 4/57

AUTHORS: Beletskiy, M.S. and Saksonov, Yu. G. 577

TITLE: Phases in the System  $\text{Na}_3\text{AlF}_6$  -  $\text{Li}_3\text{AlF}_6$ . (Fazy v Sisteme  $\text{Na}_3\text{AlF}_6$  -  $\text{Li}_3\text{AlF}_6$ ).

PERIODICAL: "Zhurnal Neorganicheskoy Khimii" (Journal of Inorganic Chemistry, Vol. II, No. 2, pp. 414-416. (U.S.S.R.). 1957

ABSTRACT: Although there are favourable prospects for the use of lithium compounds for intensifying the electrolytic production of aluminium, many of the corresponding physical-chemical effects which occur on fusing lithium and sodium cryolites have been insufficiently studied. There are serious discrepancies between the results of Drosspach<sup>3</sup> and those of Petrov<sup>4</sup>.

In the present investigation of the sodium cryolite-lithium cryolite system the melts were prepared by melting suitable mixtures in a shaft electric furnace. Since single crystals could not be obtained, powder X-ray methods were used for finding phase composition.

The investigation failed to confirm the existence in this system of a simple eutectic or a continuous series of solid solutions. On fusing sodium and lithium cryolites together three chemical compounds,  $\text{Li}_3\text{Na}_6\text{Al}_3\text{F}_{18}$ ,  $\text{Li}_6\text{Na}_3\text{Al}_3\text{F}_{18}$  and  $\text{Li}_{15}\text{Na}_3\text{Al}_6\text{F}_{36}$  were formed; the following eutectics were also

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Phases in the System  $\text{Na}_3\text{AlF}_6$  -  $\text{Li}_3\text{AlF}_6$ . (Cont.)

formed:  $\text{Na}_3\text{AlF}_6$  -  $\text{Li}_3\text{Na}_6\text{Al}_3\text{F}_{18}$ ;  $\text{Li}_3\text{Na}_6\text{Al}_3\text{F}_{18}$  -  $\text{Li}_6\text{Na}_3\text{Al}_3\text{F}_{18}$ ;

$\text{Li}_6\text{Na}_3\text{Al}_3\text{F}_{18}$  -  $\text{Li}_{15}\text{Na}_3\text{Al}_6\text{F}_{36}$ ;  $\text{Li}_{15}\text{Na}_3\text{Al}_6\text{F}_{36}$  -  $\text{Li}_3\text{AlF}_6$ .

There are six references, four of them Russian.

The references cited in the text of abstract are the following:

3. P. Drossbach, Z. Elektrochem, B.42, No.1, 65, 1936.
4. V.I. Petrov. Investigations of the main physical-chemical properties of a new electrolyte for the aluminium bath based on the partial replacement of sodium cryolite by lithium cryolite. Dissertation, VAMI, 1954.

1 Figure, 2 Tables.

The work was carried out at the All-Union Aluminium-Magnesium Research Institute.

Received 2 October, 1956.

Card 2/2



BELETSKIY, M. S.

BELETSKIY, M.S.; GOPIYENKO, V.G.; SAKSONOV, Yu..G.

A new modification of  $Ti_3O_5$ . Zhur.neorg.khim. 2 no.9:2276-2278

S '57.

(MIRA 10:12)

(Titanium oxides)

BELETSKIY, M.S.

20-6-29/59

AUTHOR:

TITLE:

MASHOVETS, V.P., BELETSKIY, M.S., SAKSONOV, Yu. G., and SVOBODA, R.V.  
On a New Compound in the  $\text{NaF} - \text{AlF}_3$ .

(O novom soedinenii v sisteme  $\text{NaF} - \text{AlF}_3$ . Russian).

PERIODICAL:

Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 6, pp 1290 - 1292  
(U.S.S.R.)

ABSTRACT:

The diagram of the state of the fluorine-sodium-fluorinealuminum-system has often been studied since the cryelite formed on this occasion is the main component of the electrolyte which is used for the electrolytic winning of aluminum from its oxide. By earlier investigations it was found that in this system also chielite develops besides cryelite (according to data:  $\text{Na}_5\text{Al}_3\text{F}_{14}$  or  $\text{Na}_3\text{Al}_2\text{F}_9$ ).

The conclusion concerning the sole existence of cryelite and chielite was repeatedly confirmed in contrast to theoretical computations according to which an equimolecular compound:  $\text{NaAlF}_4$  is supposed to have the most stable aluminum configuration. The existence of such a compound with potassium as well as with univalent thallium and rubidium was already proved. Nothing is known about sodium compounds (with the exception of  $\text{NaAlF}_4 \cdot \text{H}_2\text{O}$ ) Apart from Howard, the authors obtained  $\text{NaAlF}_4$  in the condensate of the distillation vapors from cryelite-alumina-melting in an argon atmosphere at  $1200^\circ$ . The greatest quantities were found in vapors of meltings which had a molecular

Card 1/3

20-6-29/59

On a New Compound in the NaF - AlF<sub>3</sub>.

ratio of NaF : AlF<sub>3</sub> = 1,67 to 1.00. This is the domain which corresponds to the so-called "sour-electrolytes". It can be assumed that in normal conditions this compound is very unstable and is only partly conserved in the presence of argon and other gases. The interference-maxima of chielite and fluorine aluminum were determined in radiograms. The not identified maxima left after their elimination which were characteristic of the crystal lattice of the new phase used for calculations. The obtained data were approximated to the constants of the known lattice of the compounds of the type MeAlF<sub>4</sub>. Theoretical values of the intensities of the interference maxima were calculated in order to find out whether sodium tetraaluminate has the same crystal lattice as the rubidium-, thallium-, and potassium compounds which are isomorphous with it. The obtained results show satisfactory agreement. Therefore it can be assumed that sodium tetraflueraluminate has a similar crystal lattice as the aforementioned isomorphous compounds. Attention must be paid to some deviations of the theoretical intensity values from those obtained experimentally. A further still unknown compound may be concerned. Also a deformation of the tetrahedron of 6 fluorine atoms is possible. It is not impossible that just this is the reason for the instability of sodium-tetraflueraluminate. An analogous lithium-compound is like-

Card 2/3

On a New Compound in the  $\text{NaF} - \text{AlF}_3$ .

20-6-29/59

ly to be still more instable. (1 illustration, 5 Slavic references).

ASSOCIATION:

Allunion-Scientific Research Institute for Aluminum and Magnesium,  
Leningrad.

(Vsesoyuznyy nauchno-issledovatel'skiy aluminiye-ve-magniyevyy  
institut, Leningrad).

PRESENTED BY:

FRUMKIN, A.N., Member of the Academy.

SUBMITTED:

7 January 1956

AVAILABLE:

Library of Congress

Card 3/3

5(4)

AUTHORS: Beletskiy, M. S., Saksonov, Yu. G.

SOV/78-4-5-4/46

TITLE: Radiographic Investigation of the Polymorphous Conversion of Sodium Aluminate (Rentgenograficheskoye issledovaniye polimorfnoy prevrashcheniya alyuminata natriya)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 5, pp 972-974 (USSR)

ABSTRACT: The radiographic investigation of sodium aluminate was carried out at temperatures of up to 1200°C. The X-ray pictures taken are shown by figure 1 (a-d). It was found that by the heating of sodium aluminate a new phase develops temporarily, which again goes over into sodium aluminate after cooling down. The phase of high-temperature stability has cubic lattices. The phase of low-temperature stability, however, has a tetragonal modification. The polymorphous conversion occurs at 450°. The lattice constants of the tetragonal and cubic modifications of the sodium aluminate were determined (Tables 1, 2). There are 1 figure, 2 tables, and 3 references, 2 of which are Soviet.

Card 1/2

81707  
S/020/60/132/05/41/069  
B004/B011

5.2100(B)

AUTHORS: Beletskiy, M. S., Yeruslimskiy, M. I.

TITLE: On the Mechanism of the Protection of Magnesium Against Oxidation<sup>27</sup>

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 5, pp. 1122-1124

TEXT: The authors discuss the easy oxidizability of magnesium due to the structure of its electron sheath. The valence electrons of the magnesium surface, which are in the 3s ground state, readily react with the p-electrons of oxygen. These statements were confirmed by experiments. By introducing neodymium into the magnesium surface, the 3s electrons of Mg are raised to the higher p-level and, in compliance with the selection rule, they are protected against bonding with the valence electrons of oxygen. The experiments are described. In a vacuum chamber ( $5 - 7 \cdot 10^{-6}$  torr), magnesium, magnesium-neodymium alloy (45% Nd), or pure neodymium are sprinkled onto a collodium film by a molybdenum spiral with a current

Card 1/2

On the Mechanism of the Protection of  
Magnesium Against Oxidation

81707  
S/020/60/132/05/41/069  
B004/B011

impulse (7-8 a for Mg and Mg-Nd alloy, 18-20 a for Nd). Of the metal films thus obtained, electron diffraction pictures were taken both immediately and after long standing in the air. Fig. 1 shows that in the case of pure Mg, the interference rings of MgO grow more and more intensive after standing in the air, while a small addition of Nd suppresses the formation of MgO still after one month of standing in the air (Fig. 2). There are 2 figures and 2 Soviet references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy alyuminiyevo-  
magniyevyy institut (All-Union Scientific Research Institute  
of Aluminum and Magnesium)

PRESENTED: February 13, 1960, by G. V. Kurdyumov, Academician

SUBMITTED: February 6, 1960

4

Card 2/2

*BELETSKIY, M.S.*

81859

S/020/60/133/02/28/068  
B016/B060

5.2300

AUTHORS: Beletskiy, M. S., Yerusalimskiy, M. I.TITLE: Electron Diffraction Study<sup>21</sup> of Neodymium Oxides<sup>21</sup>PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 2,  
pp. 355-358

TEXT: The authors discuss the rather scarce data contained in publications (Iost and others, Ref. 1, and also Refs. 3-5) concerning the oxides of the rare earth elements. It follows herefrom that neodymium sesquioxide is present in hexagonal and cubic modification. A higher degree of oxidation to  $\text{NdO}_2$ , has hitherto not been known. Oxidation conditions and intermediary oxides are not described either. For the purpose of studying the oxidation processes of neodymium, the authors made use of the diffraction method of fast electrons on thin oxidized films of this element. A special apparatus with a vacuum of  $6-7 \cdot 10^{-6}$  torr served for the purpose. As a protection against the "burning through" of the collodium base, the authors used a copper net (60-130 mesh, electrolyti-

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81859

Electron Diffraction Study of  
Neodymium OxidesS/020/60/133/02/28/068  
B016/B060

cally prepared). Electron diffraction pictures of the nonoxidized neodymium were obtained by immediately placing the neodymium film in an electron diffraction apparatus. A thermocouple was then fastened onto the copper net mentioned, and the latter was heated in the furnace along with the film. At the same time, film fragments were kept at room temperature, and oxidation on the air was studied on them. Fig. 1 a shows the electron diffraction picture of the initial film. Table 1 supplies experimental data, from which it appears that the thin neodymium film oxidizes with relative rapidity at room temperature, giving rise to the cubic modification of the sesquioxide. Oxygen diffuses in the film interior already at room temperature with a certain intensity (Fig. 1b and 1v, respectively). The blurred interference rings of the compound formed points to a considerable distortion of its lattice. Despite considerable spread of the lattice constant value, the average value  $a = 11.36 \text{ \AA}$  points to the continued enlargement of the elementary cell of neodymium on longer storing in the air and at room temperature. The authors therefore believe that the oxygen diffusion progresses in the lattice of the sesquioxide, whereby the lattice is irregularly distorted. By a temperature rise up to  $500^{\circ}\text{C}$  there also forms a cubic lattice with a constant

Card 2/3

Electron Diffraction Study of  
Neodymium Oxides

81859  
S/020/60/133/02/28/068  
B016/B060

$a = 11.05 \text{ \AA}$ . The degree of ordering of the atoms in the lattice rises at  $700^\circ\text{C}$  (Table 2). The authors reach the conclusion that an oxide  $\text{Nd}_2\text{O}_3$  and probably  $\text{Nd}_6\text{O}_{11}$  results at temperatures up to  $700^\circ\text{C}$ . The compound corresponding to  $\text{NdO}_2$  forms with the oxidation of neodymium vapors only.

All of these compounds exhibit a cubic lattice. There are 1 figure, 2 tables, and 9 references: 3 Soviet, 1 French, and 1 American.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy alyuminiyevy-magniyevyy institut (All-Union Scientific Research Institute of Aluminum and Magnesium)

PRESENTED: February 13, 1960, by G. V. Kurdyumov, Academician

SUBMITTED: February 6, 1960

Card 3/3

BELETSKIY, M.S.; SAKSONOV, Yu.G.

Letter to the editor. Zhur.nerog.khim. 5 no.5:1183  
My '60. (MIRA 13:7)  
(Sodium aluminate)

RAPOPORT, M.B.; BELETSKIY, M.S.

Investigating the interaction of coal and graphite with aluminum and iron chlorides. Izv.vys.ucheb.zav.; tsvet.met. 5 no.3:71-79 '62. (MIRA 15:11)

1. Vsesoyuznyy alyuminiyevo-magniyevyy institut. Rekomendovana kafedroy legkikh metallov Krasnoyarskogo instituta tsvetnykh metallov.

(Aluminum chloride) (Iron chloride) (Electrodes, Carbon)

22962

18.1245

24,7300(1153,1482,1136)

S/126/61/011/005/007/015  
E193/E183

AUTHORS: Beletskiy, M.S., and Gal'perin, Ye.L.

TITLE: The crystal structure of some phases in alloys of magnesium with cerium and neodymium

PERIODICAL: Fizika metallov i metallovedeniye, Vol.11, No.5, 1961, pp. 698-703 + 1 plate

TEXT: The object of the present investigation was to ascertain whether phases, present in alloys of magnesium with other rare earth metals of the cerium sub-group, are also present in the magnesium-neodymium system, and to determine the crystal structure of the phases. The experiments were conducted on magnesium-base alloys containing 2-45 wt.% Ce or Nd. All X-ray diffraction work was done on polycrystalline (massive and powder) specimens. The following conclusions were reached.

1. The Mg-Nd alloys with up to 45% Nd consist of phases similar to those present in alloys of Mg with other rare earth metals of the cerium group, namely  $Mg_9Nd$  and  $Mg_3Nd$ .
  2. Depending on the Ce or Nd content in the alloy, the  $Mg_9Ce$  and  $Mg_9Nd$  phases can exist as one of two modifications:  $\beta$  and  $\beta'$
- Card 1/2

22962  
S/126/61/011/005/007/015  
E193/E183

The crystal structure of some phases in alloys of magnesium with cerium and neodymium

in the former, and  $\beta$  and  $x$  in the latter case. The  $x$ -phase is also present in the Mg-Ce alloys containing more than 35% Ce and quenched from 600 °C.

3. The  $\beta$ -Mg<sub>9</sub>Ce and  $\beta$ -Mg<sub>9</sub>Nd phases appear to have an ordered cubic structure with the lattice parameters of 14.604 and 14.578 Å respectively.

There are 4 figures, 1 table and 7 references: 2 Soviet and 5 non-Soviet. The English language references read as follows; X  
Ref.1: M. Hansen, Constitution of binary alloys. McCraw Hill Book Comp. 1958.

Ref.2: G.V. Raynor. The physical metallurgy of magnesium and its alloys, London, 1959.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy alyuminiyevo-magniyevyy institut g. Leningrad.  
Card 2/2 (All-Union Aluminium-Magnesium Scientific Research Institute in Leningrad.

SUBMITTED: July 14, 1960

BELETSKIY, M.S.; YERUSALIMSKIY, M.I.

Diffractometric determination of the amount of alumina  
in an electrolyte. Zav.lab. 27 no.6:702-703 '61. (MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy alyuminiyevo-magniyevyy  
institut.  
(Alumina--analysis) (X rays--Diffraction)

BELETSKIY, M.S.

Improve the control of the electrolyte composition for aluminum electrolytic cells. TSvet.met. 35 no.2:56-59 F '62.

(MIRA 15:2)

(Aluminum--Electrometallurgy) (Electrolytes--Analysis)



BELETSKIY, M.S.; DRUZHININA, N.K.; YANKOVSKAYA, V.G.

Spectrochemical determination of aluminum in titanium tetra-  
chloride. Titan i ego splavy no.8:247-250 '62. (MIRA 16:1)  
(Titanium chloride—Analysis) (Aluminum—Spectra)

BELETSKIY, M.S.; VERESHCHAGIN, F.P.; LEONENKOVA, T.A.; MELAMED, R.I.

X-ray diffraction examination of alunite during heating. Zhur.prikl  
khim. 36 no.3:475,483, My '63. (IRA 16:5)  
(Alunite—Thermal properties) (X-ray diffraction examination)

LEYTETZEN, M.G.; BELETSKIY, M.S.

Deep desiliconizing of aluminate solutions in the presence of lime.  
TSvet. met. 36 no.9:49-53 S '63. (MIRA 16:10)

SHVARTSMAN, B.Kh.; BELETSKIY, M.S.; VOLKOVA, N.S.; LEONENKOVA, T.A.

Composition of sodium and potassium aluminosilicates  
separating out in the process of removal of silicon compounds  
from aluminate-alkali solutions. Zhur. prikl. khim. 36 no.10:  
2103-2108 0 '63. (MIRA 17:1)

BELETSKIY, N.F., inzhener.

Design of trolley blocking schemes. *Energetik* 2 no.5:21-23 My '54.  
(MLRA 7:6)

(Electric lines)

BELETSKIY, P. [Bilets'kyi, P.]

Mesh-reinforced concrete covers for autoclaves. Bud. mat. i  
konstr. 4 no.2:58-59 Mr-Ap '62. (MIRA 15:9)  
(Reinforced concrete) (Autoclaves)

BELETSKIY, P.M.

5677. BELETSKIY, P. M. Ovoshchnyye Kul'tury. 2-Ye Pererabot. 1 Dop. izd. Kiyev, Gossel'khozizdat USSR, 1954, 348s. s Ill.; 20Sm (Trekhletniye Agrozootekhn. Kursy. Vtoroy God Obucheniya). 20,000 Ekz 50R 90k v Per--Na Pereplete Avt. Ne Ukazan. --Na Ukr. Yaz-- (55-961)

SO: Knizhnaya, Letopis, Vol. 1, 1955

-USSR/Cultivated Plants - Potatoes. Vegetables. Melons.

M-3

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29767

Author : Beletskiy, P.M.

Inst : Voroshilovgrad Agricultural Institutes.

Title : On Accelerated Potato Reproduction in the Donbas

Orig Pub : Nauch. zap. Voroshilovgradsk. s. kh. in-ta, 1956, 4, No 1,  
74-81

Abstract : At the Department of Vegetable Cultivation of the Voroshilovgrad Agricultural Institute a study was made for 2 years of the effect of the times of planting and transplanting of the green sprouts and single budding tuber parts on the productivity and seed qualities of the tubers. The tubers were vernalized in four periods, during each time one transplanted separately the green shoots of the 1st, 2nd and 3rd turns, the tubers after having cut the shoots of the

Card 1/2



USSR/Cultivated Plants - Potatoes. Vegetables. Melons.

M-3

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29767

3rd turn and the single sprouting part of the tuber. On the average 30-55% of the eyes germinated when vernalized, the largest number of eyes sprouting during the late period of vernalization (16 June). With vernalization in the earlier periods the number of shoots of the first batch increased sharply, although the number of shoots was reduced per single eye. Tubers of the first two vernalization periods did not yield any shoots after the sprouts had been trimmed three times, and tubers of the 3rd and 4th vernalization periods had no shoots after having been cut twice. The highest yields were obtained from tubers which were raised from green shoots and the single sprouting parts of the tuber planted in the late periods. The best time for beginning the vernalization to obtain green shoots is the end of April. The highest yield when cultivating from the single-sprout parts of the tuber was gotten by vernalizing in the beginning of June.

Card 2/2

- 2 -

Country : USSR

M

Category: Cultivated Plants. Potatoes. Vegetables. Melons.

Iss Jour: Zhurnal. No 11, 1958, No 48968

Author : Deletskiy, P.M.

Inst : Voroshilovgrad Agricultural Institute

Title : Problems of Ecology and Agrotechny of the Meadow  
Mushroom (*Psalliota campestris*)

Orig Pub: Nauchn. zap. Voroshilovgradsk, s.-kh. in-ta, 1957,  
4, No 2, 125-134

Abstract: Experiments organized by the Department of Vegetable  
Growing of the Voroshilovgrad Institute of Agriculture  
in the closed stone quarries at the depth of 48-50 m,  
discovered the optimum conditions for the culture of  
*Psalliota campestris* (soil temperature - 16-17°, manure

Card : 1/2

Country : USSR

Category: Cultivated Plants. Potatoes. Vegetables. Melons.

11

Abs Jour: RZhBiol., No 11, 1958, No 48968

moisture - 60%, thickness of beds - 50 cm.). It is recommended that one add 1 part of cow manure to 3 parts of horse manure (or 1 part of sawdust to 5 parts of horse manure). For building up the beds, a mixture of 70% of structural chernozem and 30% of humus should be added. It is recommended to lay first a 2-3 cm layer of the mixture, gradually bringing the thickness of the layer to 7-8 cm.

L.N. Kats

Card : 2/2

M-74

BELETSKIY, S. M. Cand Agr Scie-- "Agricultural engineering of ~~the~~ high  
~~fields~~ <sup>zone</sup> of African millet in the steppe ~~part~~ <sup>Khar'kov, 1959, (Mun Agr Ukr SSR).</sup> of the Ukr SSR." (Khar'kov Order of  
Labor Red Banner Agr Inst im V. V. Dokuchayev). (KL, 1-61, 200)

-284-

BELETSKIY, V., kandidat tekhnicheskikh nauk.

Dynamics of bolter mechanism with rectilinear vibrations. Muk.-  
elev.prom. 20 no.7:20-25 J1 '54. (MLRA 7:8)

1. Odesskiy tekhnologicheskiy institut imeni I.V.Stalina.  
(Grain milling machinery)

BELETSKIY, V., doktor tekhnicheskikh nauk; DRAGUN, I., kandidat tekhnicheskikh nauk.

Optimal values and load capacity of vibrating screens in cleaning ground millet. Muk.-elev.prom. 21 no.11:16-17 N '55. (MLRA 9:4)

1.Odesskiy tekhnologicheskii institut imeni I.V.Stalina.  
(Millet)

*BEKETSKIY, V.*

BEKETSKIY, V., kandidat tekhnicheskikh nauk; LEBEDINSKIY, V., inzhener.

Determining optimal parameters for sorting millet. Muk.-elev.  
prom. 21 no.2:19-20 F '55. (MIRA 8:3)

1. Odesskiy tekhnologicheskii institut im. I.V.Stalina.  
(Millet)

BELETSKIY, V., inzh.

Mechanical lubrication unit. Avt. transp. 41 no.5:50 My '63.  
(MIRA 16:10)

(Motor vehicles—Lubrication)



DREY~~IN~~, R.S.; BELETSKIY, V.D.; YANKEVICH, O.D.

"New"respiratory viruses. Vop. virus. 8 no.3:259-263 My-Je'63.  
(MIRA 16:10)

1. Institut virusologii imeni D.I.Ivanovskoso AMN SSSR, Moskva.  
(RESPIRATORY ORGANS — MICROBIOLOGY)

BELETSKIY, V.

"Pathoanatomy of diseases of the brain" by E.B. Krasovskii.  
Reviewed by V. Beletskii. Zhur.nevr. i psikh. 58 no.8:1019-1021. '58  
(MIRA 11;9)

(BRAIN--DISEASES)  
(KRASOVSKII, E.B.)

BELETSKIY, V. G.

BELETSKIY, V. G. "On communicable outbreaks of tularemia", Trudy Smol. gos. med. in-ta, Vol. II, 1948, p. 54-58.

SO: U-439, 19 August 53, (Istoria 'Zhurnal 'nykh Statey', No. 22, 1949).

BELETSKIY, V.G.; BELGORODSKAYA, N.N.; LYAKHOVA, L.Ya.

State of artificial lighting in Smolensk schools. Gig. i san. 21  
no.9:94 S '56. (MLRA 9:10)

1. Iz kafedry gigiyeny Smolenskogo meditsinskogo instituta.  
(SMOLENSK--SCHOOL HOUSES--LIGHTING)

BELETSKIY, V. G., BEICORODSKAYA, N. N.

"Dynamics of the physical development and state of health of  
Smolensk school children during the postwar period."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists  
and Infectionists, 1959.

BELETSKIY, V.G., aspirant

Technique for resection of the knee joint with the use of compression. Zdrav.Bel. 8 no.12:42-45 D '62. (MIRA 16:1)

1. Kafedra travmatologii i ortopedii Belorusskogo gosudarstvennogo instituta dlya usovershenstvovaniya vrachey (zav. - kafedroy - prof. V.O.Marks).

(EXCISION OF KNEE)

BELETSKIY, V.G.; PRUDNIKOVA, E.K.; MAKARENKOVA, Ye.D.; LYAKHOVA, L.A.

Hygiene of children's eyes. Vop. o sh.mat. i det. 8 no.3:70-73 Mr  
'63. (MIRA 16:5)

1. Iz kafedr gigiyeny i glaznykh bolezney Smolenskogo meditsinskogo  
instituta i Smolenskoj gorodskoj sanitarno-epidemiologicheskoy  
stantsii.

(EYE—CARE AND HYGIENE) (CHILDREN—CARE AND HYGIENE)

RYABOV, N.A., vrach; VARIN, I.Ye., vrach; ARKHANGEL'SKIY, V.N., prof.;  
LUBOTSKAYA-ROSSEL'S, Ye.M., vrach; BELETSKIY, V.G., dotsent  
(Smolensk); UKRAN, M.L., dotsent; USTINOV, S.D., starshiy  
prepodavatel' gimnastiki

Health hints. Zdarov'ye 9 no.2:30-31 F '63.  
(HYGIENE)

(MIRA 16'3)



BELETSKIY, V.G., assistant

Compression fixation of the resected knee joint under clinical  
and experimental conditions. Zdrav. Bel. 9 no.6:16-18 Je '63.  
(MIRA 17:5)

1. Iz kafedry travmatologii i ortopedii (zaveduyushchiy - prof.  
V.O. Marks) Belorusskogo gosudarstvennogo instituta usovershenstvo-  
vaniya vrachey (rektor - dotsent N.Ye. Saichenko).

BELETSKIY, V.I., inzh. (Frunze); BIBIKOV, R.P., inzh. (Frunze)

Concrete paver for lining irrigation canals. Gidr. i mel. 17  
no.5:40-43 My '65.  
(MIRA 18:7)

BELETSKIY, V.I., ordinator.

Electric drive for the telescopic column of the Russian fluorescent screen.. Vest.rent.i rad. no.5:77-79 S-0 '53. (MLRA 7:1)

1. Iz kafedry rentgenologii (zaveduyushchiy - professor A.I.Dombrovskiy) Rostovskogo n/D meditsinskogo instituta (direktor - professor G.S.Ivakhnenko).

(Radiography) (X rays--Apparatus and supplies)

BRUK, A.S.; OBUKHOVSKIY, Ya.M.; BELETSKIY, V.G.; LEYBOVICH, R.Ye.;  
KULESHOV, P.Ya.; GOLUBCHIK, A.L.; SITALO, M.V.; EYDEL'MAN, A.Ye.

Improving the stability of coke quality at the Zaporozh'ye  
By-Product Coke Plant. Koks i khim. no.16:10-12 '61.

(MIRA 15:2)

1. Dnepropetrovskiy metallurgicheskiy institut (for Bruk,  
Obukhovskiy, Beletskiy, Leybovich). 2. Zaporozhskiy koksokhimi-  
cheskiy zavod (for Kuleshov, Golubchik, Sitalo, Eydel'man)  
(Zaporozh'ye—Coke)

BRUK, A. S.; OBUKHOVSKIY, Ya. M.; VOLKOVA, Z. A.; BELETSKIY, V. G.; ANTONOV, A. T.;  
SHEVCHENKO, A. I.

Effect of bulk weight of coal charges on the mechanical properties  
of coke. Koks i khim. no. 11:20-25 '60. (MIRA 13:11)

1. Dnepropetrovskiy metallurgicheskiy institut (for Bruk, Obukhov-  
skiy, Volkova, Beletskiy). 2. Yasinovskiy koksokhimicheskiy zavod  
(for Antonov, Shevchenko).

(Coke)

BELETSKIY, V.I. (Donetsk)

Fluororoentgenographic comparisons of pneumoconiosis in coal miners; large-frame fluorography. Gig. truda, i prof. zab. 6 no. 5:33-35 My'62. (MIRA 16:8)

1. Donetskii meditsinskiy institut.  
(MINERS' PHTHISIS) (CHEST—RADIOGRAPHY)

GEL'BERG, S.I.; FINKEL', Ye.A.; BELETSKIY, V.I.; DANOVICH, S.M.; TSATSKINA, E.S.

Combined entero-cutaneous method of immunization with BCG vaccine.  
Probl.tub. 34 no.4:48-53 J1-Ag '56. (MIRA 9:11)

1. Iz kafedry mikrobiologii (zav. S.I.Gel'berg) Kirgizskogo meditsinskogo instituta.

(BCG VACCINATION, exper.

entero-cutaneous method of admin. in mice & guinea pigs)

MIKHAYLICHENKO, V.A.; BELETSKIY, V.I.

Lymphogranulomatosis of the duodenum; a case report. Vop. onk. 10  
no.9:106-109 '64. (MIRA 18:4)

1. Iz kafedry obshchey khirurgii lechebnogo fakul'teta (zav. -  
prof. A.M.Ganichkin) i kafedry rentgenologii (zav. - dotsent  
I.A.Kunin) Donetskogo meditsinskogo instituta.



Country	: USSR	F
Category	: Microbiology. Microbes Pathogenic For Man and Animals. Mycobacteria.	
Abs. Jour	: Ref Zhur-Biol., No 23, 1958, No 103910	
Author	: Seletskiy V. I.	
Institut.	: Kirgiz Scientific Research Institute of Epidemiology,*	
Title	: Comparative Study of the Combined Oral-Percutaneous and Intracutaneous Methods of Administering BCG Experimentally. First Report. Vegetative Dynamics of BCG Mycobacteria**	
Orig Pub.	: Sb. tr. Kirg. n.-1. in-ta epidemiol., mikrobiol. i gigi-yeny, 1956, 2, 68-73	
Abstract	: The advantages of one method or another of vaccination cannot be demonstrated until three months after the vaccination. Later (200-249 days), the advantages of the oral-percutaneous method come out distinctly. In guinea pigs a greater diffusion of the mycobacteria throughout the internal organs was observed with it than in those inoculated intracutaneously. The growth of mycobacteria in organs and lymph glands was more active and prolonged after the oral-percutaneous method. This method makes it possible to inject a considerable quantity of BCG into the body without notable changes at the site of injection.--M. Ya. Boyarskaya.	
Card:	*Microbiology and Hygiene **in the Bodies of Guinea Pigs and White Mice Depending on the Method of Administration	
	1/1	

Country :USSR  
 Category :Microbiology. Microbes Pathogenic For Man and Animals.  
 Mycobacteria.  
 Abs. Jour :Ref Zhur-Biol., No 23, 1958, No 103911  
 Author :Beletskiy, V.I.  
 Institut. :Kirgiz Scientific Research Institute of Epidemiology\*  
 Title :Comparative Study of the Combined Oral-Percutaneous  
 and Intracutaneous Methods of Administering BCG  
 Experimentally. Second Report. Observation of the\*\*  
 Orig Pub. :Sb. tr. Kirg. n.-i. in-ta epidemiol., mikrobiol. i  
 gigiyeny, 1956, No 2, 74-76  
 Abstract :\*Microbiology and Hygiene.  
 \*\*Dynamics of Tuberculin Sensitivity in Guinea Pigs  
 Guinea pigs were immunized with BCG vaccine (15 intra-  
 cutaneously and 15 orally-percutaneously). The  
 demonstration of the difference in intensity of the  
 state of sensitization in immunized guinea pigs was  
 made each week for the first 15 days, and then monthly  
 for a long time (315 days) after the vaccination. It  
 was shown that the state of sensitization of the guinea  
 pigs inoculated by the combined oral-percutaneous method  
 is more intense than that of those immunized intra-  
 cutaneously. In the latter, the reduction in intensity

Card:

1/2

F-67

Country	:	
Category	:	
Abs. Jour	:	Ref Zhur-Biol., No 23, 1958, No 103911
Author	:	
Institut.	:	
Title	:	
Orig Pub.	:	
Abstract (Cont.)	:	of the tuberculin reactions occurs somewhat sooner. In the author's opinion, more favorable conditions for the mobilization of physiological defense mechanisms are created after vaccination by the combined method. ---M.Ya. Boyarskaya.
Card:		2/2

BELETSKIY, V. K.

35514. Gistopatologiya Plevry I Legkogo I puti Rasprostraneniya Vospalitel'nogo  
Protsessa Pri Pictorakse Posle Raneniy Grudnoy Kletki, Pronikayushchikh  
V Plevral'nuyu Polust'. V SB: Voprosy Grudnoy Khirurgii. T. 111. M.,  
1949, c. 80-96.

Letopis' Zhurnal'nykh Statey, Vol. 48, Moskva, 1949

BELETSKIY, V.K.

Critique of idealistic theories on the concept of the neuroglia.  
Zh. nevropat. psikhiat., Moskva 53 no.11:885-892 Nov 1953. (CJML 25:4)

1. Institute of Psychiatry, Ministry of Public Health USSR.

62-15817, 0011  
GILYAROVSKIY, V.A., redaktor; BELETSKIY, V.K., redaktor; SEGAL', Yu.E., redaktor; SKUIN', E.Ya., redaktor; SIMSON, T.P., redaktor; FEDOTOV, D.D., redaktor; KHACHATURYAN, A.A., redaktor; GUREVICH, L.A., redaktor.

[Problems in psychiatry; abstracts of scientific works by the Psychiatry Institute of the Ministry of Health of the U.S.S.R. (1945-1953)] Voprosy psikhiatrii; avtoreferaty nauchnykh rabot Instituta psikhiatrii Ministerstva zdravookhraneniia SSSR (1945-1953 gg). Pod red. V.A.Giliarovskogo i dr. Moskva, 1956. 453 p. (MIRA 10:11)

1. Russia (1923- U.S.S.R.) Ministerstvo zdravookhraneniya. Institut psikhiatrii. 2. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Gilyarovskiy).  
(Psychiatry)

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

S-4

Abs Jour: Ref Zhur-Biol., No 16, 1958, 74356

Author : Beletskiy, V. K.

Inst : Ryazan' Medical Institute.

Title : On Reticular Tissue of the Serous Membranes  
and Their Serous Draining Sinuses.

Orig Pub: Materialy 19-y nauchn. konferentsii Ryazansk.  
med. in-ta po probleme: "Anatomiya i patolo-  
giya organov grudnoy polosti", Ryazan', 1956,  
79-83

Abstract: Reticular tissue (RT) of normal serous mem-  
branes was studied as well as its change in  
various acute serositis of man (on section-  
ed material) and of experimental animals

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

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Abs Jour: Ref Zhur-Biol., No 16, 1958, 74356

(rabbits and dogs) by introduction of a 1% suspension of India ink and a thin suspension of Berlin azure I to their peritoneal and pleural cavities. It was shown that in serous membranes RT forms a body, piercing the entire thickness, and settles in the fissures of tissue between the collagenous and elastic fibers, vessels and nerves. The basal membrane is formed by a thick net of reticular fibers; in the spaces between them there is an amorphous interstitial substance, either homogenous or granular, depending on its colloidal state. Into the composition of serous membranes, aside from epithelium, its basal membrane

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Abs Jour: Ref Zhur-Biol., No 16, 1953, 74356

and submesothelial layer of RT, there also enters formed, fibrous tissue, between the structures of which RT is situated. With the underlaying (subserous) tissue the serous membrane is connected by porous, fibrous connective tissue, which also has RT in its composition. Submesothelial layer with basal membrane is a cellulose-fibrous barrier, blocking portions of suspensions which were introduced into the serous cavity. This layer fulfills: 1) a reactive and defensive role by decomposition and desquamation of mesothelium and by formation of superficial serositis; 2) a plastic function by formation

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Pathological). Lymphatic System.

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Abs Jour: Ref Zhur-Biol., No 16, 1958, 74356

of postinflammatory adhesions or commissures between serous leaflets, since the cells of this layer transform before others into fibroblasts of these adhesions. RT, by virtue of adsorption and the phagocytic capacity of its cells, plays a role in the adsorption of liquid from serous cavities by inflammation. RT in the mass of serous membranes has serous sinuses which widen by edema, narrow and waste away by scleroses. Finely-dispersed suspensions, introduced into the body cavity, are manifested in the lumen of submesothelial serous sinuses, which are connected with lymph vessels. Particles of suspensions with

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

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Abs Jour: Ref Zhur-Biol., No 16, 1953, 74356

a diameter of  $1-7/\mu$  penetrate into serous sinuses through intermesothelial spaces and directly through the protoplasm of the mesothelium. By dilatation of serous sinuses and intensification of their draining function, by stasis of tissue fluid, endothelisation of reticular cells, the transformation of serous sinuses into lymph capillaries and their direct inclusion into the general lymphatic system occurs. -- I. B. Barabash

Card : 5/5

USSR / Human and Animal Morphology. Anatomical and S-1  
Respiratory System.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 64729.

Author : Belotskiy, V. K.

Inst : Ryazan Medical Institute.

Title : The Histo-pathophysiology of the Visceral and  
Parietal Pleura in Empyema of the Pleural Cavity.

Orig Pub: Materialy 19-I nauchn. konferentsii Ryazan'sk.  
med. in-ta po problems: "Anatomiya i patologiya  
organcv grudnoy polosti": Ryazan', 1956, 84-86.

Abstract: In the initial stage of the homo and pyothorax,  
through tissue spaces, openings, and a lymphatic  
network, the parietal pleura resorbs blood and  
exudate, but thereafter the resorbing system of  
the pleura is thrombosed and the resorption is  
replaced by exudation. In the dense mass of the

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USSR / Human and Animal Morphology. Anatomical and      S-1  
Respiratory System.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 64729.

Abstract: pleura, granulating tissue develops protecting the surrounding tissues and the circulatory and lymphatic systems from infection. Initially, the visceral pleura protects the lung from infection by dint of its transudating function, and later it does so as a result of the inflammatory process and the development of granulating tissue. The submesothelial layer of the reticular tissue with its basal membrane is the first connective-tissue barrier in the pleura. Granulating tissue develops in the dense mass of both blades of the pleura after the death and disintegration of the mesothelium, and is subject to the laws of the fibro-and cyto-architectonics of the pleura. Mention is made of the intussusception growth of

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USSR / Human and Animal Morphology. Anatomical and S-1  
Respiratory System.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 64729.

Abstract: collagenous fibers in the thick mass of the pleura and of the appositional growth - on its surface. In induration both elastic layers of the pleura move apart, detach themselves from the surface of the lung, and divide into layers; both collagenous layers of the pleura thicken; the fibrin, having fallen out onto the surface of the pleura gets organized. As a result of all this the pleura attains a bulk of 2-3cm (it thickens particularly in the area of the cupolas and pleural sinuses). The cohesions thicken in consequence of the development of granulating tissue in their dense mass (the formation of separate pus cells into sacs is possible). In the disorganization of the pleura as a result of its lysis

Card 3/4

USSR / Human and Animal Morphology. Anatomical and S-i  
Respiratory System.

Abs Jour: Ref Zhur-Biol., No 14, 1958, 64729.

Abstract: with a histologically acting flora, its fibro-  
architectonics are disturbed; the layers in the  
induration become indistinguishable. The dis-  
turbance of the granulating pleura by the in-  
fection process leads to various serious com-  
plications. -- I. B. Barabash.

Card 4/4

BELETSKIY, V. K.  
BELETSKIY, V.K.

\*Analysis of a prolonged psychic disease caused by injury [with  
summary in French]. Zhur.nevr. i psikh. 57 no.10:1195-1204 '57.

(MIRA 10:12)

1. Institut psikiatrii Ministerstva zdavookhraneniya SSSR (dir. -  
prof. D.D.Fedotov), patologoanatomicheskaya laboratoriya (zav. -  
prof. V.K.Beletskiy), Moskovskaya oblastnaya nervno-psikhiatriches-  
skaya klinika (dir. - prof. G.M.Khanlaryan)

(TEMPORAL LOBE, wounds and injuries

causing ment. disord., 30 year follow-up (Rus))

(MENTAL DISORDERS, etiology and pathogenesis,

temporal inj., 30-year follow-up (Rus))



BELETSKIY, V.K., prof.

Work of the Ryazan Province Pathoanatomical Society for 1959.  
Arkhn.pat. 21 no.7:86-87 '59. (MIRA 13:5)

1. Predsedatel' Ryazanskogo oblastnogo obshchestva patologo-  
anatomov.

(RYAZAN PROVINCE--PATHOANATOMICAL SOCIETIES)

BELETSKIY, V.K.

Classification of connective tissue tumors of the central nervous  
system. Vop. neirokhir. 24 no. 2:3-8 Mr-Apr '60. (MIRA 14:1)  
(NERVOUS SYSTEM—TUMORS)

BELETSKIY, V. K., prof. (Ryazan')

Some critical comments on the histological nomenclature of human tumors compiled by the Committee on Nomenclature of Tumors of the International Anticancer Society. Arkh. pat. no.6:74-80 '61.  
(MIRA 14:12)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. V. K. Beletskiy)  
Ryazanskogo meditsinskogo instituta imeni akad. I. P. Pavlova  
(dir. - prof. L. S. Sutulov)

(TUMORS) (MEDICINE--TERMINOLOGY)

BELETSKIY, V.K., prof. (Ryazan')

Innervation of tumors. Arkh.pat. no.10:3-16 '61.

(MIRA 14:10)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. V.K. Beletskiy) Ryazanskogo meditsinskogo instituta imeni akad. I.P. Pavlova.

(TUMORS--INNERVATION)

BELETSKIY, V.K. (Ryazan')

Primary rheumatic tonsillocardiac complex (tonsillitis, mediastinitis, carditis) and the general pathological process in rheumatic fever. Vop.revm. 1 no.2:19-25 Ap-Je '61.

(MIRA 16:4)

(TONSILS--DISEASES) (MEDIASTINUM--DISEASES)  
(RHEUMATIC HEART DISEASE)

BELETSKIY, V.K.

Toxoplasmosis of the brain (chronic toxoplasmic encephalitis and its sequelae). Zhur. nevr. i psikh. 61 no.5:733-738 '61.  
(MIRA 14:7)

1. Kafedra patologicheskoy anatomii (zav. - prof. V.K.Beletskiy)  
Ryazanskogo meditsinskogo instituta imeni I.P.Pavlova.  
(TOXOPLASMOSIS) (ENCEPHALITIS)  
(MENTAL DEFICIENCY)

BELETSKIY, V.K. (Ryazan')

Toxoplasma infectious process in anencephali and the circulatory disorder genesis of anencephalia. Zhur. nevr. i psikh. 61 no.7: 1052-1055 '61. (MIRA 15:6)

1. Kafedra patologicheskoy anatomii (zav. - prof. V.K. Beletskiy) Ryazanskogo meditsinskogo instituta imeni Pavlova.  
(MONSTERS) (TOXOPLASMOSIS)  
(BLOOD---CIRCULATION, DISORDERS OF)

BELETSKIY, V.K.; USHKALOV, A.F., retsenzents; SUTULOV, Yu.L., red.

[Laboratory manual on pathological anatomy] Praktikum po patologicheskoi anatomii; metodicheskoe uchebnoe posobie dlia studentov (v 2 chastiak). Riazan', Riazanskii med. in-t im. I.P.Pavlova. Pt.2.[Pathological anatomy of diseases (nosological forms)] Patologicheskaiia anatomia boleznei (nozologicheskikh form). 1962. 173 p.  
(MIRA 17:1)



BELETSKIY, V.K. (Ryazan')

Problems of the pathogenesis and clinical aspect of rheumatic fever. Nauch. trudy Riaz. med. inst. 14 '63.

Vladimir Timofeevich Talslaev, originator of anatomicoclinical research in the pathogenesis of rheumatic fever. Nauch. trudy Riaz. med. inst. 14:14-20 '63.

Pathological anatomy of spinal rheumatic fever. Ibid.:24-41.

Rheumatic fever of the spinal cord. Ibid.:233-242.

(MIRA 17:5)

BELETSKIY, V.N.; MAYANSKAYA, V.G.

Problem of multiple eosinophilic granulomas of the bone. *Pediatrics*  
no.1:68-70 Ja-F '55. (MIRA 8:5)

1. Iz kafedry i kliniki gosptal'noy pediatrii (zav. prof. P.D. Davydov) i kafedry rentgenologii (zav. prof. A.I.Dombrovskiy) Rostovskogo-na-Donu meditsinskogo instituta.  
(EOSINOPHILIC GRANULOMA, in infant and children, multiple)

BELEZKIY, V.V.

SUBJECT USSR/MATHEMATICS/Differential equations CARD 1/2 PG - 545  
 AUTHOR BELEZKIY V.V.  
 TITLE On the vertical elevation of a point with variable mass in a medium of constant density.  
 PERIODICAL Priklad. Mat.Mech. 20, 559-560 (1956)  
 reviewed 1/1957

The vertical elevation of a point with variable mass in a medium of constant density (homogeneous atmosphere) and homogeneous gravitational field is described by the equation  $m \frac{dy}{dt} = -F - mg - V \frac{dm}{dt}$ . Here  $m$  is the variable mass,  $v$  its velocity,  $F$  the resistance of the medium,  $V$  the relative velocity of the flowing out of the fuel. The author assumes that  $V = \text{const}$ ,  $F = Kv^2$  ( $K = \text{const}$ ),  $m = m_0 f(t)$ ,  $m_0$  the point mass in the initial moment,  $f(t)$  monotonely decreasing from 1 to 0. Then by introducing a new variable  $v = \frac{m_0}{K} f \frac{1}{u} \frac{du}{dt}$  the original equation is brought to the linear form

$$\frac{d^2 u}{dt^2} + \frac{\dot{f}}{f} \frac{du}{dt} + \frac{K}{m_0} \frac{1}{f} (g_0 + \frac{\dot{f}}{f} V) u = 0.$$

By the transformation

$$u = \psi^{1/2} \alpha z, \quad \psi = f^{-1/2} \int f^{-1/2} dt$$

Priklad.Mat.Mech. 20, 559-560 (1956)

CARD 2/2

PG - 545

$$z = z(x), \quad x = c \int f^{-\frac{1}{2}} dt$$

we have

$$x^2 \frac{d^2 z}{dx^2} + x \frac{dz}{dx} + \Lambda z = 0.$$

Now the author investigates the case  $\Lambda = c^2 f \psi^2 - \gamma^2$ , where  $\gamma$  and  $c$  are preliminarily indefinite constants. Since  $c^2 f \psi^2 = x^2$  the Bessel equation

$$x^2 \frac{d^2 z}{dx^2} + x \frac{dz}{dx} + (x^2 - \gamma^2)z = 0$$

is obtained. The condition  $\Lambda = c^2 f \psi^2 - \gamma^2$  is satisfied e.g. for the following

$f(t)$ : 1)  $f = e^{-\beta t}$  for  $c^2 = \frac{K}{m_0} (g - V)$ ,  $\gamma^2 = 1$ ; 2)  $f = 1 - \alpha t$  for

$c^2 = \frac{K}{m_0} g$ ,  $\gamma^2 = 4 \frac{KV}{m_0 \alpha}$  (in this case solved by Blatz, Kinematics of a vertical booster, Jet Propulsion, Vol. 24, No. 1, (1954)).