

BASHKIROV, A.N.; LOKTEV, S.M.; KAGAN, Yu.B.; SABIROVA, G.V.

Hydrogenation of compounds containing a carbonyl group (over fused
iron catalysts). Trudy Inst.nefti 13:180-195 '59. (MIRA 13:12)
(Carbonyl compounds) (Hydrogenation)
(Catalysts)

LOKKE V. S. 111

PHASE I BOOK EXPLORATION

SOV/4726

Kiyev, Gosudarstvennyy nauchno-issledovatel'skiy i proyektiruyemyy institut ustoinoy rudnoy, neftyanoy i gazovoy promyshlennosti
Mashinnye zapiski, vyp. 1: Dobycha i pererabotka nefli (Scientific Reports of the State Scientific Research and Project Institute for the Coal, Mining, Oil and Gas Industries, No. 1: Production and Processing of Petroleum) Kiyev, 1960. 91 p. 1,000 copies printed.

Sponsoring Agencies: DUKSIN Gosudarstvennaya planovaya ekonomicheskaya proyektiruyemyy institut ustoinoy, rudnoy, neftyanoy i gazovoy promyshlennosti, Yuzhnyy Ural, Uralpromneft.

Editorial Council: V. P. Krasovoy, S. Ye. Anushkin, S. I. Babinakidze, I. Ya. Volchanskiy, D. I. Dolitskiy, V. S. Grinshchik (Chairman), A. G. Kozlov, B. V. Dubinovskiy, M. M. Zherbin (Chairman), S. G. G. V. Prudskiy, V. T. Sklyarskiy, L. M. Orzhakovskiy, V. T. Belyy, V. T. Tarkitskiy, Resp. Ed. (Copy Chairman); M. Yu. V. T. Belyy, candidate of Chemical Sciences; Ed.: A. Novik.

Card 1/5

Summary: This collection of articles is intended for petroleum researchers, engineers, and refiners.

Contents: The collection of articles deals with the production and refining of petroleum. Individual articles discuss the effect of ground water on the depletion of petroleum reserves under different conditions, the effect of pressure on the viscosity of gas-saturated petroleum, the structure of bituminous and asphaltic petroleum, the asphaltens and tar components of Carpathian coals, the asphaltens and tar components of the Carpathian coals, and the investigation of the asphaltens and tar components of the Carpathian coals. Other articles describe the carbazole derivatives produced by selective hydrochlorination of the carbazole derivatives of synthesis. One article describes the production of flocculants for filtration of wax dissolved petroleum, and the investigation of six-membered aromatic and naphthalene hydrocarbons by means of infrared absorption spectrometry. The remaining articles are on the synthesis of pressure-stable copolymers of styrene and on the phase equilibria in ethylene-styrene, ethylene-cyclohexane, and ethylene-cyclohexane systems. Specific volumes and compression coefficients are

Card 2/5

Scientific Reports (Cont.)

SOV/4726

Rudakova, N. Ya., A. D. Bilonizhka, and S. Z. Krimerman. Carbamide Dewaxing of Filtrates of Wax Distillate From Dolinskaya and Borislavskaya Crude Oils

83

Sabirova, G. V., and S. M. Loktev. Study of the Aliphatic Composition of Alcohols Produced by Selective Hydrogenation of the Synthesis Product From CO and H₂

86

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3-21-61

Card 5/5

BASHKIROV, A.N.; LOKTEV, S.M.; SABIROVA, G.V.; NOVAK, F.I.

Composition of the liquid products obtained in the synthesis
from CO and H₂ on talc catalysts. Trudy Inst.nefti 14:76-84
'60. (MIRA 14:5)

(Carbon monoxide)
(Hydrogen)

S/710/60/000/001/004/004
D055/D113

AUTHORS: Sabirova, G.V.; Loktev, S.M.

TITLE: A study of the composition of aliphatic spirits obtained by means of the selective hydrogenation of the product of CO and H₂ synthesis.

SOURCE: Kiyev. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut ugol'noy, rudnoy, neftyanoy i gazovoy promyshlennosti. Nauchnyye zapiski, no. 1, 1960. Dobycha i pererabotka nefi, 86-91.


TEXT: The authors examine the composition of spirits obtained by means of a two-stage process: synthesis from CO and H₂ on a talc catalyst and subsequent hydrogenation of the synthesis product on fused iron catalysts. The following spirits were separated and identified: ethyl alcohol, iso-propyl alcohol, n-propyl alcohol, secondary butyl alcohol, n-butyl alcohol, secondary amyl alcohol, n-amyl alcohol, secondary hexyl and n-hexyl alcohol. The yield of spirits with a boiling temperature of up to 157.4 °C is 80.3% of the total quantity of spirits in the hydrogenate. Together with the

Card 1/2

A study of the composition ...

S/710/60/000/001/004/004
D055/D113

primary and secondary saturated aliphatic spirits in the hydrogenation product, unsaturated spirits were discovered with a boiling temperature above 157.4°C. They composed about 10% of the total quantity of spirits. There are 4 tables and 14 references, 6 Soviet-bloc and 8 non-Soviet-bloc. The four English-language references are: P.Sherwood, Petroleum Engineer, 24, no. 5, 21; no. 7, 28, 1952; L.Hatch, Higher oxo alcohols. New York. 1958; Encyclopedia of Chemical Technology, V.I., 1947; A.J. Vogel, J.Chem. Soc., 1814, 1948.



Card 2/2

S/195/60/001/003/008/013
B013/B058

AUTHORS: Kagan, Yu. B. Bashkurov, A. N., Kamzolkina, Ye. V.,
Loktev, S. M.

TITLE: On the Activation Process of Molten Iron Catalysts for
for CO and H₂ Synthesis Under the Effect of the Reaction
Mixture

PERIODICAL: Kinetika i kataliz, 1960, Vol. 1, No. 3, pp. 393 - 400

TEXT: The activation of molten iron catalysts for the hydrocarbon
synthesis from CO and H₂ under the effect of the reaction mixture was
studied in this paper. The following catalysts were used:

- 1) $100\text{Fe}_3\text{O}_4 + 6\text{Al}_2\text{O}_3 + 4.2\text{SiO}_2 + 1.2\text{K}_2\text{O} + 0.3\text{Cr}$;
- 2) $100\text{Fe}_3\text{O}_4 + 6\text{Al}_2\text{O}_3 + 4.2\text{SiO}_2 + 1.2\text{K}_2\text{O} + 0.5\text{V}$;
- 3) $100\text{Fe}_3\text{O}_4 + 6\text{Al}_2\text{O}_3 + 4.2\text{SiO}_2 + 1.2\text{K}_2\text{O} + 1.0\text{B}_2\text{O}_3$. They were reduced

Card 1/4

On the Activation Process of Molten Iron Catalysts for CO and H₂ Synthesis Under the Effect of the Reaction Mixture S/195/60/001/003/008/013 B013/B058

within 1.5 hrs in hydrogen current at 1000°C. The study was made in a highpressure apparatus (Ref. 4) in the laboratory. For each of the catalysts studied, the lowest temperatures and pressures were initially chosen; at which, over the freshly and reduced catalysts (in comparable time intervals), a high degree of transformation of the carbon monoxide (84 to 86%) entering at a volume rate of the initial gas (CO and H₂ 1 : 1) of ~1500 h⁻¹ was obtained. The catalysts were gradually activated under these conditions. The duration of the tests varied. The tests of catalysts of equal composition were conducted under the same conditions and in the same reaction vessel. The indices of the synthesis were well reproducible. The results determined could therefore also be compared with each other. The samples were hydrogenated after termination of the synthesis test. Subsequently, the hydrogenated samples were treated with CO at atmospheric pressure, a volume rate of 800 h⁻¹ and temperatures by 10° higher than at the end of the synthesis test, with carbide being formed. The studies

Card 2/4

On the Activation Process of Molten Iron
Catalysts for CO and H₂ Synthesis Under the
Effect of the Reaction Mixture

S/195/60/001/003/008/013
B013/B058

produced the following results: the previously (Refs. 1, 2) made statement that the iron catalysts molten at high temperatures (1000°C) immediately after reduction, are inactive in the synthesis of CO and H₂ and obtain activity only during the course of this synthesis, was confirmed. Activation also continues after reaching activity, which warrants a practically complete transformation of the initial carbon monoxide. This process is not terminated until 3 to 4 days after conduction of the synthesis. Simultaneously with the activation of the catalysts under the effect of the reaction mixture, their reactivity with respect to carbide formation is also increased. Those catalysts which have reached equal activity in consequence of the CO + H₂ synthesis, have also a similar reactivity with regard to carbide formation. The activation of the catalysts during the synthesis is accompanied by an increase of their activity during CO decomposition under formation of elementary carbon. The conditions under which the activation of catalysts occur (pressure, temperature, CO₂ content of the gas) have a noticeable effect on their properties. Of the methods investigated of

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On the Activation Process of Molten Iron
Catalysts for CO and H₂ Synthesis Under the
Effect of the Reaction Mixture

S/195/60/001/003/008/013
B013/B058

the activation of the catalyst for the synthesis, its treatment at the
synthesis temperature is suited best. In this case the catalysts get speci
ally active, but simultaneously show a lower activity with regard to CO
decomposition. There are 3 figures, 4 tables, and 6 Soviet references.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR
(Institute of Petrochemical Synthesis AS USSR)

SUBMITTED: January 19, 1960

Card 4/4

S/510/60/014/000/004/006
D244/D307

AUTHORS: Bashkirov, A.N., Loktev, S.M., Sabirova, G.V., and Novak, F.I.

TITLE: Composition of liquid products of the synthesis from CO and H₂ on talc catalysts

SOURCE: Akademiya nauk SSSR. Institut nefti, Trudy, v. 14, 1960, Khimiya nefti, 76 - 84

TEXT: Results are presented of the chemical composition of CO - H₂ synthesis on talc catalysts and of the influence of the chemical composition of the catalysts and the synthesis conditions on the composition of the reaction products. It was found that the products were a complex mixture of alcohols, hydrocarbons, aldehydes, ketones and small quantities of acids and esters. The water of the reaction contained 1.2 % of organic acids and 12.5 % of neutral O-containing compounds (alcohols and ketones). There were about 30 % of carbonyl compounds in the products. Addition to the catalyst of .25 % of calcium aluminate increased the ketone content to 36.6 % - 39.7 %. With

Card 1/2

Composition of liquid products of ... S/510/60/014/000/004/006
D244/D307

50 % of barium aluminate the content increased to 40 - 55 %. Selective hydrogenation of the liquid products could give liquids containing 75 - 80 % alcohols. The O-containing compounds before and after hydrogenation, contained unsaturated bonds. Increase of the space velocity from 100 h^{-1} to 500 h^{-1} gave 1.5 - to 4-fold increase in the alcohol content of the products and a decrease in the content of unsaturated compounds. Further increases to 1000 h^{-1} gave only small changes in the yields and composition of the products. Regeneration of the catalyst by air at $380 - 450^\circ$ enabled the authors to conduct the reaction at lower temperatures. Increase of the reaction temperature from $350 - 375^\circ\text{C}$ to $400 - 430^\circ\text{C}$ gave some increase in the content of alcohols, ketones, complex esters and carboxylic acids in the products and a decrease of the content of unsaturated compounds. There are 8 tables.

Card 2/2

LOKTEV, S.M., kand.khimicheskikh nauk; SABIROVA, G.V., kand.khimicheskikh nauk; NOVAK, F.I., kand.khimicheskikh nauk

Composition of the products from a carbon monoxide-hydrogen synthesis over talc catalysts. Nauch.zap.Ukrniiproekta no.4:167-172 '61.
(MIRA 15:1)

(Petroleum chemicals)

LOKTEV, S.M., kand.khim.nauk

Conference on Problems of the Manufacture of Higher Alcohols.
Masl.-zhir.prom. 28 no.9:43 S '62. (MIRA 15:9)
(Alcohols)

VULAKH, Ye.L.; LOKTEV, S.M.; KAGAN, Yu.B.

Esterification of aliphatic alcohols with sulfamic acid. *Neftekhimika*
4 no.5:780-788 S-O '64. (MIRA 18:1)

1. Institut neftekhimicheskogo sinteza imeni A.V.Topchiyeva AN SSSR
i Novomoskovskiy khimicheskij kombinat.

LOKTEV, Sergey Minovich; BASHKIROV, A.H., otv. red.

[Higher aliphatic alcohols] Vysshie zhirnye spirty. Moskva, Nauka, 1964. 165 p. (MIRA 17:10)

1. Chlen-korrespondent AN SSSR (for Bashkirov).

LOKTEV, S.M., kand.khim.nauk

Chemistry and physics of surface-active agents. Priroda 53 no.4:85-86
'64. (MIRA 17:4)

1. Institut neftekhimicheskogo sinteza im. A.V.Topchiyeva AN SSSR, Moskva.

KUTEPOVA, A.I.; GRISHKO, N.I.; KAGAN, Yu.B.; LOKTEV, S.M.; MAL'TSEVA, R.P.;
SHTEKKER, O.A.

Preparation of phthalate plasticizers on the base of the wide
fractions of C₅-C₁₂ alcohols. Plast. massy.no.10:22-24 '65.
(MIRA 18:10)

SOURCE: *Reitekhimiya*, v. 5, no. 1, 1965, 82-89

TOPIC TAGS: hydrocarbon synthesis, alcohol synthesis, carbon monoxide, hydrogen exchange, catalytic hydrogenation, fused iron catalyst

ABSTRACT: The reaction kinetics of alcohol synthesis from carbon monoxide and

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R000930420018-4

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R000930420018-4"

LOKTEV, V.

Studying the problem of increasing labor productivity at the
Economics Institute of the Academy of Sciences of the U.S.S.R.
("Problems in increasing labor productivity in Soviet industry."
Reviewed by V.Loktev). Sots.trud.no.9:115-121 S '56.
(Labor productivity) (MLRA 9:12)

LOKTEV, V.; SEMKIN, I., red.; YERMOLENKO, V., tekhn. red.

[The workday in the U.S.S.R.] Rabochii den' v SSSR. Minsk,
Gos.izd-vo BSSR. Red. sotsial'no-ekon.lit-ry, 1961. 46 p.
(MIRA 15:1)

(Hours of labor)

LOKTEV, V.I.
LOKTEV, V.I.

Equipping wooden barges for pushing. Rech.transp. 16 no.10:20-21
0 '57. (MIRA 19:12)

(Barges) (Towing)

ALEKSANDROV, O.V.; LOKTEV, V.Ye. (Maloyaroslavets)

Case of ectopic chorioepithelioma of the liver in a man. Klin.
med. 40 no.10:116-118 O '62. (MIRA 15:12)

1. Iz Maloyaroslavetskoy rayonnoy bol'nitsy (glavnyy vrach --
P.A.Khachikyan).

(LIVER--CANCER)

LOKTEVA, A.T., glavnyy vrach medsanchnosti (g.Zhdanov)

Work of the medical and sanitary squad in the "Azovstal'" plant.
Sov.zdrav. 15 no.5 supplement:6-8 0 '56. (MIRA 10:1)
(INDUSTRIAL HYGIENE
med. care of factory workers in Russia)

LOKTEVA, A.T.; TERENT'YEVA, T.A. (Zhdanov)

Medical care of steel workers. Vrach.delo no.1:83-85 Ja '58.
(MIRA 11:3)

1. Mediko-sanitarnaya chast' i Sovet sotsial'nogo strakhovaniya
zavodskogo komiteta profzoyuza zavod "Azovstal'".
(IRON AND STEEL WORKERS--MEDICAL CARE)

LOKTEVA, P. P.

LOKTEVA, P. P. (Rostov Oblast Veterinary Experimental Station). Complement
Fixation Reaction in brucellosis of calves.

So: Veterinariya; 23; 1; January 1946; Incl.
TABCON

LOKTYEVA, F. P.

PA 190T79

USSR/Medicine (Veterinary) - Infectious Diseases Nov 51

"Eye Test as a Diagnostic Method for Brucellosis,"
F. P. Loktyevz Cand Vet Sci, Rostov Oblast Vet
Expt Sta

"Veterinariya" Vol XXVIII, No 11, pp 23-32

Details technique of carrying out test in combina-
tion with RA [agglutination reaction] and RSK
[reaction of blood sedimentation]. Finds that eye
test is convenient, timesaving, and replaces sero-
logical diagnosis.

190T79

LOKTEVA, F.P. AND KOCHETOVSKIĬ, B.A.:

Brucellosis of agricultural animals and the measures of the fight against it.
Rostov-on-Don, Rostov Publishing House, 1953. 32 pages with illustrations; price
40 kopeks; 3,000 copies.

SO: TABCON Veterinariya; Vol. 29; No. 2; February 194³₅₄ Unclassified

LOKTEVA, F.P., kand. veter. nauk; BELYAYEVA, N.A., starshiy nauchnyy
sotrudnik

Bacteriological study of materials from sheep inoculated with
strain No.19 vaccine. Veterinariia 42 no.11:23-24 N '65.
(MIRA 19:1)

1. Rostovskaya nauchno-issledovatel'skaya veterinarnaya
stantsiya.

L 38307-66 EWT(1)/T JK

ACC NR: AP6005017

(A)

SOURCE CODE: UR/0346/65/000/011/0023/0024

AUTHORS: Lokteva, F. P. (Candidate of veterinary sciences); Belyayeva, N. A. (Senior research associate)

ORG: Rostov Scientific Research Veterinary Station (Rostovskaya nauchno-issledovatel'skaya veterinarnaya stantsiya)

TITLE: Bacteriological investigation of the materials from sheep vaccinated with strain-19

SOURCE: Veterinariya, no. 11, 1965, 23-24

TOPIC TAGS: animal disease, animal disease therapeutics, vaccine, commercial animal / strain-19 vaccine

ABSTRACT: The lifetime of carriers and the generation of brucellosis in sheep vaccinated with strain-19 were studied in a large sheep breeding station. The study was carried out over a 6-year period (1957--1962) under conditions highly susceptible towards brucellosis. The annual number of stillborn lambs and brucellosis-induced lamb abortion were noted. The experimental results are tabulated (see Fig. 1). It was found that the carrier lifetime in sheep immunized with strain-19, exposed to brucellosis-inducing conditions, was of the order of 5 to 6 years. Because of the prolonged active brucellosis stage it is recommended that sheep suspected of brucellosis and immunized with strain-19 be separated from healthy sheep up to

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UDC: 619:616,981.42-078:636.3

L 38307-66

ACC NR: AP6005017

Data on the generation of brucellosis cultures in herds raised in brucellosis-inducing conditions.

After vaccination	Year of generation	Percent
1 year	1957	
2 "	1958	77
3 "	1959	66
4 "	1960	12
5 "	1961	10
6 "	1962	4.3
		0

Fig. 1.

slaughter time. Sheep herds raised in conditions free of brucellosis become immune to the disease if immunized with strain-19. Orig. art. has: 1 table.

SUB CODE: 06/ SUBM DATE: none

Card 2/2 LC

LOKTEVA, L. V.

178T105

USSR/Physics - Nonlinear Elements
Electricity - Thermistors

21 Jan 51

"Certain Peculiarities of the Characteristics of
Thermistors as Elements of Nonlinear Models,"
G. L. Polisar, L. V. Lokteva, Power Eng Inst
Imeni Krzhizhanovskiy, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol LXXVI, No 3, pp 403-406

Investigates coeff K of nonlinearity in the for-
mula $U = KI^a$ (where a is exponent of nonlinear-
ity, U is potential, and I is current) for vari-
ous voltages and frequencies. Submitted 23 Nov
50 by Acad A. V. Vinter.

END

178T105

ZHERBIN, M.M., kand. tekhn. nauk; VDOVENKO, O.S.; VINOGRADOV, S.M.
[Vynohradov, S.M.]; SLIVKO, V.M. [Slyvko, V.M.], inzh.;
SHTEPAN, Ya.G. [Shtepan, IA.H.], otv. za vypusk; LOKTEVA, V.A.
[Loktieva, V.A.], red.

[Device for drying corn on the cob with a gas and air stream]
Ustanovka dlia sushimnia kukurudzy v kachanakh haropovitriany
strumenem. Kyiv, Derzh. vyd-vo tekhn. lit-ry URSR, 1961. 36 p.
(MIRA 15:3)

1. Ukrains'kyi naukovo-doslidnyi i proektnyi instytut derzh-
planu URSR. 1961.
(Corn (Maize))—Drying (Drying apparatus)

CHERNENKO, L.D.; SHTEPAN, Ya.G.; LOKTEVA, V.A., red.;
PONOMAR VA, L.I., tekhn. red.

[Mechanization of hoisting and conveying in industrial
enterprises abroad] Mekhanizatsiia pod'emno-transport-
nykh rabot promyshlennykh predpriatii; zarubezhnyi opyt.
Kiev, In-t tekhn. informatsii, 1963. 304 p.

(MIRA 16:11)

(Hoisting machinery) (Conveying machinery)

ЛОКТЕВА, Ye.Ya.
LOKTEVA, Ye.Ya. (Leningrad)

Quick method for staining nerve cells following formalin fixation of the brain; modified Nessler's method [with summary in English]. Arkh. pat. 19 no.8:83-84 '57. (MIRA 10:12)

1. Iz patologoanatomicheskoy laboratorii VNISKhI i kafedry patologicheskoy anatomii (sav. - prof. P.V.Sipovskiy) Leningradskogo gosudarstvennogo instituta dlya usovershenstvovaniya vrachey imeni S.M. Kirova.

(BRAIN, anatomy and histology,
rapid stain. of nerve cells after formalin fixation (Rus))
(STAINS AND STAINING,
of nerve cells after brain fixation in formalin (Rus))

LOKTEVA, Ye.Ya., kand.med.nauk

Use of a filmless method in histoautoradiography. Vest. All Kazakh.
SSR 17 no.10:104-110 0 '61. (MIRA. 14:10)
(Autoradiography)

LOKTEVA, Ye.Ya., kand.med.nauk

Impregnation of reticular fibres; modification of Foot's method.
Vest. AN Kazakh. SSR 18 no.6:91-93 Je '62. (MIRA 15:9)
(RETICULO-ENDOTHELIAL SYSTEM)
(STAINS AND STAINING (MICROSCOPY))

PHASE I BOOK EXPLOITATION SOV/3883

Gintsburg, A.K., V.A. Ioktin, S.L. Reznikovskiy, B.G. Rozovskiy,
M.A. Sulyutin, and A.A. Trakhov

Remont radiostantsiy (Repair of Radio Stations) Moscow, Voen. Izd-vo
M-va obor. SSSR, 1959. 327 p. No. of copies printed not given.

Ed.: P.S. Kiriyenko; Tech. Ed.: Ye.K. Konovalova.

PURPOSE: This textbook is intended for students of communication schools of the Soviet Defense Ministry, and may also be used by Defense Ministry personnel working in army communication repair shops, and by other radio specialists.

COVERAGE: The book deals with radio repair. Detailed information is given on materials and components, testing and repair of components, assembly and disassembly of radio equipment, measurements during testing and repair of radio stations, various methods of radio repair, and repair of power supply sources, transmitters, and receivers. M.A. Sulyutin wrote Ch. I; A.K. Gintsburg wrote Ch. II;

~~Card 1/11~~

Repair of Radio Stations

SOV/3883

V.A. Loktin wrote Ch. III; B.G. Rozovskiy wrote Ch. IV; S.L. Reznikovskiy wrote Chs. V, VII, VIII, and Section 3 of Ch. VI; and A.A. Trakhov wrote Ch. VI (excepting for Section 3). No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

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1. Materials as basis of construction	5
2. Properties of radio engineering materials	5
Physical properties	5
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Mechanical properties	8
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Card 2/11

LOKTIONOV, A.A.; STAFEYEV, V.I.; TAKIBAYEV, Zh.S.

Studying the spatial distribution of nuclear disintegrations with
thick nuclear emulsions. Vest.AN Kazakh.SSR 14 no.10:49-59 0 '58.
(MIRA 11:12)

(Cosmic rays) (Photography, Particle track)

LOKTIONDV, A. A.

AN ANALYSIS OF THE ANGULAR DISTRIBUTION OF THIN TRACKS OF SHOWERS PRODUCED BY $\geq 10^{11}$ ev PARTICLES

Zh.S. Takibayev, A.A. Loktionov, L.A. Sanko, Ts. I. Shakhova

An analysis is made of the angular distribution of thin tracks of showers produced by cosmic-ray particles with energy exceeding 10^{11} ev. To determine the energy dependence of the angular distribution of the shower-producing particles, all analyzed showers are divided into two energy intervals. The first interval includes all showers produced by particles (protons, neutrons, pi-mesons) with energy of the order of 10^{11} ev (at least $> 10^{10}$ ev); the second interval includes particles with energy exceeding 10^{12} ev. For comparison a study is made of showers taken from published material.

The experimental data obtained are compared with the model of "two Centres" that independently emit mesons (Takagi, Feinberg and Chernavsky, Kokkonen et al.). The comparison reveals the limitations of this model. The observed angular distribution of thin tracks of a number of showers may be explained on the assumption that:

- a) there is a power energy spectrum in the centre-of-mass system ($\sim A^{1/2}/E^{1.1}$) which agrees with the Heisenberg theory;
- b) there is a sharply anisotropic angular distribution in the centre-of-mass system ($\sim \cos^2 \theta$), although such a high degree of anisotropy of generated particles does not follow from the Heisenberg theory.

Report presented at the International Cosmic Ray Conference, Moscow, 6-11 July 1959

21(7)

SOV/56-36-6-11/66

AUTHORS: Loktionov, A. A., Takibayev, Zh. S.

TITLE: Production of π -Mesons by α -Particles of High Energy From Cosmic Radiation (Generatsiya π -mezonov α -chastitsami bol'shoy energii kosmicheskikh luchey)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 6, pp 1697 - 1702 (USSR)

ABSTRACT: In collisions of high-energy ($E 10^{12}$ ev) nucleons with atomic nuclei it may be assumed that the nucleons interact with a "pipe" of massive nuclear matter; the diameter of this "pipe" is equal to that of a nucleon, its length depends on the atomic number of the target nucleus and the collision parameter. On the basis of this theory it is possible to explain some experimental data of high-energy showers; the authors of the present paper use it for the purpose of investigating the collision of α -particles and atomic nuclei, where the "pipe" has a diameter that is proportional to $A_\alpha^{2/3}$ and contains A_α α -particles. For the investigation the authors used data obtained from showers produced by α -particles in Ilford G-5 photoemulsions (exposure 1955 in Italy at an altitude of

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Production of π -Mesons by α -Particles of High Energy
From Cosmic Radiation

SOV/56-36-6-11/66

30 km; total of 67 showers, c.f. references 5-12). The data are dealt with by means of the hydrodynamical theory of multiple meson production according to Landau and Belenkiy (Refs 13,14). First, the connection between the angle $\theta_{1/2}$ and the number of charged shower particles is investigated (Fig 1). In heavy nuclear emulsions the maximum size of the "pipe" is 4.57 and in light elements 2.00; in the following the ratio N_1/N_2 both for showers produced by α -particles and for showers produced by nucleons is investigated and compared. (N_1 denotes the number of interactions of α -particles with "pipes" having a length of between 2.0 and 4.57, N_2 - the number of interactions with a "pipe" < 2.0). In the following the energy distribution of the showers with respect to the number of gray-black tracks N_h is investigated (Fig 2). The distribution has a maximum at $3 < N_h < 5$; the highest experimentally determined N_h -value is 26, and for light nuclei it is about 8. The ratio between the cases with $N_h > 8$ and the cases with $N_h \leq 8$ is 0.64. This

Card 2/3

Production of π -Mesons by α -Particles of High Energy
From Cosmic Radiation

S07/56-36-6-11/66

ratio is investigated for various energies of α -particles (10, > 10 , > 50 , > 100 Bev/nucleon) (Table 2). Finally, the mean value \bar{N}_h is investigated in dependence on the length of the "pipe" and on α -energy (Table 3). An analysis of experimental star data was found not to contradict the concept of an interaction between the incident α -particles and such a "pipe". There are 2 figures, 3 tables, and 18 references, 8 of which are Soviet.

ASSOCIATION: Institut yadernoy fiziki Akademii nauk Kazakhskoy SSR (Institute of Nuclear Physics of the Academy of Sciences of the Kazakhskaya SSR)

SUBMITTED: February 13, 1958 (initially) and January 20, 1959 (after revision)

Card 3/3

LOKTIONOV, A. A., TAKIBEYEV, ZH. S., Zhdanov, G. B.

"Interactions of Heavy Primaries of Energy
 $5 \cdot 10^{10}$ ev/núcl."

report submitted for the Intl. Conf. on Cosmic Rays and Earth Storm (IUPAP)
Kyoto, Japan, 4-15 Sept. 1961.

S/058/61/000/010/009/100
A001/A101

3,2410

AUTHORS: Takibayev, Zh. S., Loktionov, A. A., San'ko, Shakhova, Ts. I.

TITLE: Analysis of angular distribution of thin tracks of showers produced by particles with energies of $> 10^{11}$ ev

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 95, abstract 10B490
("Tr. Mezhdunar. konferentsii po kosmich. lucham, 1959, v. 1",
Moscow, AN SSSR, 1960, 51-60)

TEXT: The authors investigated the angular distribution of thin tracks of showers produced by cosmic ray particles with energies exceeding 10^{11} ev in the stratosphere. Characteristics of showers in the energy ranges 10^{11} ev $< E < 10^{12}$ ev and $E > 10^{12}$ ev are compared with various theoretical concepts. To explain a number of peculiarities in angular distribution (e.g., occurrence in some showers of distribution with two peaks), it is proposed to take into consideration the role of produced particles (antinucleons, \bar{K} -mesons) in generation of additional particles at secondary collisions inside the target-nucleus. The angular distribution of shower particles produced by multi-charged particles is also analyzed.

Card 1/2

Analysis of angular distribution ...

S/058/61/000/010/009/100
A001/A101

A case is described, $15 + 515 Z$, produced by a silicon nucleus with energy of ~ 600 Bev/nucleon.

L. Dorman

[Abstracter's note: Complete translation]

✓
B

Card 2/2

LOKTIONOV, A.A.; SEMENOV, A.Z.

Determination of the charge of relativistic nuclei by the
method of counting delta electrons. Prib. i tekhn. eksp. no.3:
31-33 My-Je '60. (MIRA 14:10)

1. Institut yadernoy fiziki AN KazSSR.
(Nuclei, Atomic) (Electrons)

37543

S/048/62/026/005/007/022
B108/B104

AUTHORS: Loktionov, A. A., and Takibayev, Zh. S.

TITLE: Showers produced by nuclei with $\approx 5 \cdot 10^{10}$ ev per nucleon

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26, no. 5, 1962, 596-603

TEXT: Showers are the best means for studying head-on collisions between nucleons. The authors therefore studied showers induced by heavy nuclei ($Z \geq 2$). Conclusions: High-energy nuclei undergo a tube-type interaction during the collision with emulsion nuclei. If the primary particles are nucleons, this tube model can only be applied to extremely high energies. The dependence of multiplicity on the energy in nucleus-induced showers is not uniform: for alphas ($5 \cdot 10^{10}$ - $5 \cdot 10^{13}$ ev per nucleon), $n_s \sim E^{0.15 \pm 0.03} - E^{0.29 \pm 0.01}$, and $r_{n_s, E} = 0.65 - 0.95$; for n-n showers, $n_s \sim E^{0.05}$, and $r_{n_s, \gamma_c} \sim 0.3$. The degree of anisotropy in the angular

Card 1/2

Showers produced by nuclei...

S/048/62/026/005/007/022
B108/B104

distribution of the shower particles is $\sim(0.066 \pm 0.008)\log(E/2M)$ for nuclear showers, and $\sim(0.146 \pm 0.009)\log(E/2M)$ for nucleon-induced showers. This difference cannot be attributed to a dependence of the angular distribution on the tube length. An angular distribution with two peaks for nuclear showers is only possible at energies $\gtrsim 5 \cdot 10^{12}$ ev per nucleon. The coefficient of inelasticity in head-on collisions between alphas and emulsion nuclei is independent of energy, and equals 0.4-0.6. The average of the quantity N_h , which may serve as a measure for the excitation of the target nucleus, is determined by the tube volume, and is independent of the primary-particle energy: $\bar{N}_h = (0.85 \pm 0.1)A_\alpha^+(1^+ + 1)$ at $E > 5 \cdot 10^{10}$ ev per nucleon. Nucleus-nucleus interaction does not lead to superposition of the individual n-n collisions. Nucleus-nucleus collisions are accomplished chiefly by head-on collisions. There are 4 figures and 1 table.

Card 2/2

S/707/62/005/000/003/014
D290/D308

AUTHOR: Loktionov, A.A.

TITLE: The multiplicities and angular distributions of showers produced by nuclei with energies of 5×10^{10} - 10^{14} ev

SOURCE: Akademiya nauk Kazakhskoy SSR. Institut yadernoy fiziki. Trudy. v. 5. Alma-Ata, 1962. Fizika chastits vysokikh energiy. Struktura yadra, 33-64

TEXT: The author studied the relation between the multiplicities and angular distribution of nucleus-nucleus showers produced by primary cosmic ray particles, and the energy of the primary particles. An emulsion chamber was used; it was exposed at heights of 25-30 km in the Moscow neighborhood in 1955-1958 and in Italy in 1955. The multiplicities (n_s) and the anisotropies of the angular distributions (σ) differ in showers formed by nucleons or nuclei. For α -showers in the energy range 5×10^{10} - 10^{14} ev/nucleon

Card 1/3

S/707/62/005/000/003/014
D290/D308

The multiplicities and angular ...

$$n_s = 7.04 (E/2M)^{0.18} \pm 0.02 \quad (l < 2)$$

$$n_s = 11.53 (E/2M)^{0.29} \pm 0.01 \quad (l \geq 2)$$

$$n_s = 8.75 (E/2M)^{0.19} \pm 0.03 \quad (\text{all except nucleon-nucleon showers})$$

$$n_s = 10 (E/2M)^{0.05} \quad (\text{nucleon-nucleon showers})$$

in which E is the energy per nucleon of the α -particle, M is the mass of a nucleon in the energy range 5×10^{10} - 10^{14} ev/nucleon, and l is the length of the tube in the tube theory of very high energy nuclear interactions. σ for nucleus-nucleus showers ($0.412 + (0.66 \pm 0.008) \log (E/2M)$) increases more slowly with energy than σ for nucleon-nucleon showers ($0.268 + (0.146 \pm 0.009) \log (E/2M)$); this difference cannot be explained by the variation of the angular distribution with l. This indicates that nuclear collisions are mostly central nucleon-nucleon collisions. Since the angular characteristics of nucleon-nuclear and nucleon-nucleon showers are very similar, one can assume that the cross-section for core-core collisions is low in nucleus-nucleus showers. Angular distributions with two maxima are found in nucleus-nucleus showers for energies.


Card 2/3

S/707/62/005/000/003/014
D290/D308

The multiplicities and angular ...

greater than 5×10^{12} ev/nucleon. High energy α -particles ($\approx 5 \times 10^{10}$ ev/nucleon) interact only along the tube during oscillations with nuclei of the emulsion. The mean number of heavily-ionizing particles produced per shower (N_h) gives a measure of the excitation of the target nuclei; N_h depends on the volume of the tube and not on the energy of the primary α -particle:

$$N_h = (0.85 \pm 0.1) A_\alpha (1 + 1)$$

in which A_α is that part of the mass of the α -particle which cuts the tube in the target nucleus. The author expresses his gratitude to Zh.S. Takibayev (Professor, Member of As KazSSR) for advice, Ye. L. Feynberg, Professor and D.S. Chernavskiy for criticism. There are 9 figures and 3 tables. 

Card 3/3

LOKTIONGV, A.A.

Multiplicity and angular distribution in showers consisting of
nuclei having energies between $5 \cdot 10^{10}$ and 10^{14} ev. Trudy Inst.
iad. fiz. AN Kazakh. SSR 5:33-64 '62. (MIRA 15:4)
(Solar radiation) (Nuclei, Atomic)

LOKTIONOV, A.A.; TAKIBAYEV, Zh.S.

Showers produced by nuclei with energies of $\geq 5 \cdot 10^{10}$ ev. nucleon.
Izv. AN SSSR. Ser. fiz. 26 no. 5: 596-603 Ap '62. (MIRA 15:5)
(Cosmic rays) (Nuclear reactions)

LOKTIONOV, A.S.

New design of bearings for the P-5-35M plow. Mekh. sil', hosp. 8
no.9:31 S '57. (MIRA 10:9)

1. Direktor Pivdenno-Ukrains'koy mashinoprobnoi stantsii.
(Bearings (Machinery)) (Plows)

LOKTIONOV, A.S.

Preparing vegetable seeds for sowing. Mekh. sil'. hosp. 9 no.1:
28-30 Ja '58. (MIRA 11:2)

1. Direktor Pivdenno-Ukrains'koi mashinoviprobuval'noi stantsii.
(Vegetable gardening) (Seeds)

LOKTIONOV, A.S.

New machine for the cultivation of vineyards. Mekh.sil'.
hosp. 10 no.7:29-30 J1 '59. (MIRA 12:12)

1. Direktor Yuzhno-Ukrainskoy mashinospytatel'noy stantsii.
(Agricultural machinery) (Viticulture)

DIYEV, B.G., inzh.; LOKTIONOV, G.D., inzh.

Some data on the combined operation of UFB-2 and SB-1
machines. Torf.prom. 37 no.1:6 '60. (MIRA 13:6)

1. Sitnikovskoye torfopredpriyatiye.
(Sitniki--Peat machinery)

GRISHKOV, A.I.; FEDOROV, Yu.K.; LOKTIONOV, G.I.; IVANOV, G.M.

Investigating the coefficient of resistance to the movement of a
strip along the roller table. [Sbor. trud.] TSNIICHM no.29:113-120
'63. (MIRA 17:4)

GRISHKOV, A.I.; LOKTIONOV, G.I.

Current collecting device in the diagram for the measurement of
torque on blooming mills. Sbor. trud.} TSNIICP no.29:171-174
'63. (MIRA 17:4)

LOKTIONOV, G.M.

SHARGORODSKIY, L.Ya., professor; LOKTIONOV, G.M.; SRAPIONOV, A.S.

Luminescent-fluorescent method in the diagnosis of certain diseases
of the central nervous system. Vop. neurokhir. 18 no.3:14-21 My-Je '54.
(MLRA 7:8)

1. Iz kliniki nervnykh bolezney Tashkentskogo meditsinskogo instituta.
(CENTRAL NERVOUS SYSTEM, diseases,
*diag., luminescent-fluorescent method)

LOKTIONOV, G.M.

SHARGORODSKIY, L.Ya., professor; SRAPIONOV, A.S.; LOKTIONOV, G.M.

Luminescent-fluorescein method of diagnosis of cerebral tumors in experimental conditions. Vop. neirokhir. 19 no.1:3-8 Ja-F '55. (MLRA 8:2)

1. Iz kliniki nervnykh bolezney Tashkentskogo meditsinskogo instituta.

(BRAIN, neoplasms,
exper., diag. with luminescent-fluorescein method)
(FLUORESCHEIN,
diag. of exper. brain tumors)

SHARGORODSKIY, L.Ya., professor.; LOKTIONOV, G.M.; SRAPIONOV, A.S.

Luminescent and fluorescent method of diagnosing inflammatory processes of the brains and its membranes in experiments. Vopr. neirokhir. 20 no.1:36-40 Ja-F '56. (MLRA 9:6)

1. Iz kliniki nervnykh bolezney Tashkentskogo meditsinskogo instituta.

(BRAIN, dis.
inflammation, exper., diag., luminescent & fluorescent method)

(LUMINESCENCE
luminescent & fluorescent method for determ. of brain inflammation.)

LOKTIOMOV G.M.

SHARGORODSKIY, L.Ya., professor; LOKTIOMOV, G.M.; SRAPIONOV, A.S.

Radioactive phosphorus in the diagnosis of experimental tumors of the central nervous system. Vop.neirokhir. 21 no.3:10-15 My-Je '57. (MIRA 10:13)

1. Kafedra nervnykh bolezney Tashkentskogo meditsinskogo instituta.
(CENTRAL NERVOUS SYSTEM, neoplasma
exper., diag. with radioactive phosphorus)
(PHOSPHORUS, radioactive
use in diag. of exper. tumors in CNS)

LOKTIONOV, G.M. (Tashkent)

Fluorescence analysis in the diagnosis of brain tumors; experimental investigations. Vop.neirokhir. 25 no.2:10-14 Mr-Apr '61. (MIRA 14:6)

1. Klinika nervnykh bolezney Tashkentskogo meditsinskogo instituta.

(BRAIN--TUMORS)

PROMYSLOV, M.Sh., doktor biolog.nauk (Moskva); LOKTIONOV, G.M., assistant
(Tashkent)

Vital staining of brain tumors in an experiment. Vop.neirokhir.
25 no.1:16-20 '62. (MIRA 15:1)

1. Nauchno-issledovatel'skiy ordena Trudovogo Krasnogo Znameni
institut neyrokhirurgii imeni akad. N.N. Burdenko AMN SSSR i
Tashkentskiy gosudarstvennyy meditsinskiy institut.
(BRAIN-TUMORS) (STAINS AND STAINING (MICROSCOPY))

DIMANT, I.N.; LOKTIONOV, G.M.; SATAYEV, M.M.; LI, M.I.

Effectiveness of combined methods in treating neuroectodermal
tumors. Pat. fiziol. i eksp. terap. 9 no.1:46-49 Ja-F '65.
(MIRA 18:11)

1. Otdel eksperimental'noy onkologii (zav. - I.N. Dimant)
Instituta rentgenologii, radiologii i onkologii (direktor - prof.
D.M. Abdurasulov), Tashkent.

DIMANT, I.N.; LOKHONOV, G.M.; SATAYEV, M.M.

Induction of tumors of the membranes of the spinal cord in rabbits
by radioactive cobalt. Vop. onk. il no.5:46-53 '65. (MIRA 12:8)

1. Iz ottdela eksperimental'noy onkologii (zav. -- starym nauchnyy
sotrudnik I.N.Dimant) Nauchno-Issledovatel'skogo Instituta
rentgenologii, radiologii i onkologii Ministerstva zdravokhraneniya
UzSSR (dir. -- prof. D.M.Abdurasulov).

DIMANT, I.N.; ABDURASULOV, D.M.; STOLYAROVA, A.G.; LOKTIONOV, G.M.; SATAYEV, M.M.

Reactive processes in the brain during chronic local irradiation.
Arkhn.anat.gist. 1 embr. 48 no.3:84-90 Mr '65.

(MIRA 18:6)

1. Otdel eksperimental'noy onkologii (zav. - starshiy nauchnyy
sotrudnik I.N.Dimant) Nauchno-issledovatel'skogo instituta
rentgenologii, radiologii i onkologii Ministerstva zdravookhraneniya
Uzbekskoy SSR, Tashkent.

KRIZHANOVSKIY, V. A.; KOVALEV, M. M.; LOKTIONOV, I. A.

Tuberculosis of the thyroid gland. Probl. tub. 40 no.5:106-109
'62. (MIRA 15:7)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - prof. G. D. Obraztsov) i kafedry patologicheskoy anatomii (zav. - prof. A. I. Vorotilkin) Chelyabinskogo meditsinskogo instituta (rektor - dotsent P. M. Tarasov)

(THYROID GLAND--TUBERCULOSIS)

LOKTIONOV, Ivan Il'ich, kand.voyenno-morskikh nauk, dotsent, kapitan
1 ranga; LUPACH, V.S., red.; ANIKINA, R.F., tekhn.red.

[Danube flotilla in the Great Patriotic War, 1941-1945]
Dunaiskaia flotiliia v Velikoi Otechestvennoi voine, 1941-
1945 gg. Moskva, Voen.izd-vo M-va obor.SSSR, 1962. 317 p.
(MIRA 15:4)

(World War, 1939-1945—Naval operations)

SOKOV, N.T.; LOKTIONOV, M.I.

[Swine breeding at the 1958 Exhibition] Svinovodstvo na Vystavke
1958 goda.. Moskva, Gos.izd-vo selkhoz lit-ry, 1958. 36 p.
(Swine) (MIRA 12:3)

DRESVYANNIKOVA, D.F., kand. sel'skokhoz. nauk, metodist; LOKTIONOV, M.I.;
SALEY, Ye.A.; KMET', S.K.; BURDIASHVILI, I.G.

Thematic exhibitions and shows. Inform. biul. VDNKH no.7:
18-25 JI '63. (MIRA 16:8)

1. Pavil'on "Krupnyy rogatyy skot" na Vystavke dostizheniy narodnogo khozyaystva (for Dresvyannikova).
2. Glavnyy zootekhnik po svinovodstvu Vystavki dostizheniy narodnogo khozyaystva (for Loktionov).
3. Starshiy ekskursovod pavil'ona "Krolikovodstvo i zverovodstvo" na Vystavke dostizheniy narodnogo khozyaystva (for Saley).
4. Glavnyy veterinarnyy vrach Vystavki dostizheniy narodnogo khozyaystva (for Kmet').
5. Nachal'nik Upravleniya promyshlennykh predpriyatiy i mekhanizatsii vodokhozyaystvennykh rabot Gosudarstvennogo komiteta Soveta Ministrov RSFSR po vodnomu khozyaystvu (for Burdiashvili).

KHASIN, G.A.; MENUSHENKOV, P.P.; PETROV, A.K.; OKHRIMOVICH, B.P.; DAVIDYUK,
V.N.; FILATOV, S.K.; VASIL'YEV, P.V.; LOKTIONOV, M.V.; GUREVICH, Yu.G.

New method of mold coating with petrolatum. Metallurg 5 no.5:21-24,
My '60. (MIRA 14:3)

1. Zlatoustovskiy metallurgicheskiy zavod i Chelyabinskiy
politekhniicheskiy institut.
(Ingot molds) (Petrolatum)

IOKTIIONOV, N.L.

Fish Culture

How our brigade bred 2996 pounds of fish per hectar. Ryb. khoz. 23, no. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, _____ AUGUST 1952 1953. Unclassified.

DABAGYAN, N.P.; CHUB, V.M.; TIMOFEYEV, D.I.; KHOROSHILOV, N.M.;
LOKTIONOV, P.Ya.; SHUL'GA, Ye.A.

Experience of manufacturing two-layer sheet steel at the
Kommunarsk Metallurgical Plant. Stal' 24 no.8:718-721 Ag '64.
(MIRA 17:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov
i Kommunarskiy metallurgicheskiy zavod.

ACCESSION NR: AP4043485

S/0133/64/000/008/0718/0721

AUTHOR: Dabagyan, N.P., Chub, V.M., Timofeyev, D.I., Khoroshilov, N.M.,
Loktionov, P. Ya., Shul'ga, Ye. A.

TITLE: Experiences in the production of two-layer sheet steel at the Kommunar metallurgical plant

SOURCE: Stal', no. 8, 1964, 718-721

TOPIC TAGS: steel rolling, rolling mill, sheet steel, two layer sheet steel, pack rolling, steel cladding, cast cladding, bimetal, clad steel

ABSTRACT: In a discussion of the pack-rolling of two-layer sheet steel, introduced in 1963 at the Kommunar plant, the authors specify the difficulties encountered in the previous cast-cladding process and indicate that higher technological efficiency and production on a much larger scale can be achieved with the new process without affecting the high quality of the product. To produce two-layer sheets, symmetrical four-layer packs whose size is prescribed by nomograms, are assembled from the basic steel plates a, cladding plates b, and interlayers c, as shown in the Enclosure. The equations from which specifications of the pack components are found, the necessary nomograms and the details of the process are presented. An interlayer distribution curve for carbon, chromium and nickel in a
Card 1/3

ACCESSION NR: AP4043485

bimetal prepared by the pack-rolling process is shown. The diffusion of the elements was investigated by metallographic, electron microscopic and layer-by-layer spectral and chemical analyses, and by means of C^{14} . From the nomograms, pack specifications for two-layer 8-25 mm thick 20k + Kh17N13M2T steel sheets can be calculated, including the proper upper-to lower plate thickness ratio. This ratio (optimally about 1.08), designated the coefficient of equithickness, is introduced into the calculations to offset nonuniform metal expansion due to a temperature gradient across the pack during heat treatment. To reduce this effect, the temperature in the upper, lower and tempering section of the furnace is held at 1340-1360, 1320-1340, and 1240-1220C, respectively. Orig. art. has: 5 figures, 1 table and 4 formulas.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut metallov (Ukrainian Scientific Research Institute of Metals); KommunarSKIY metallurgicheskiy zavod (Kommunar Metallurgical Plant)

SUBMITTED: 00

NO REF SOV: 000

ENCL: 01

OTHER: 000

SUB CODE: MM, IE

Card 2/3

ACCESSION NR: ^PAT4043485

ENCLOSURE: 01

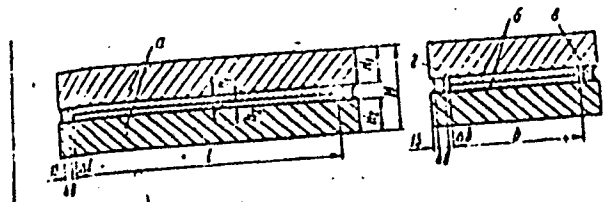


Fig. 1. Diagram of a symmetrical 4-layer pack: d - fire-proof partition; h_1 h_2 ;

Card 3/3

KHOROSHILOV, N.M.; CHERNER, M.I.; LOKTIONOV, P.Ya.

Effect of the rolling scheme on plate steel quality. Stal' 24
no.6:524-527 Je '64. (MIRA 17:9)

1. Kommunarskiy metallurgicheskiy zavod.

GOLIKOV, S.M.; LOKTIONOV, S.I. (Leningrad)

Pharmacological characteristics of substances inhibiting acetyl-
choline synthesis in the body. Vest. AMN SSSR 18 no.2:77-87 '63.
(MIRA 17:7)

I. 02/07-000 (1) 50/RH

ACC NR: AP6031667

SOURCE CODE: UR/0219/66/061/004/0061/0065

AUTHOR: Golikov, S. N.; Loktionov, S. I. 2/3ORG: Institute of Toxicology/directed by Prof. S. N. Golikov, Corresponding member AMN SSSR/, Ministry of Health USSR, Leningrad (Institut toksikologii Ministerstva zdravookhraneniya) bTITLE: Tremorine hyperkinesia as a model for estimating the cholinolytic activity of compounds

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 61, no. 4, 1966, 61-65

TOPIC TAGS: mouse, pharmacology, nervous system drug

ABSTRACT: The median effective doses of the cholinolytics atrophine (I), scopolamine (II), amisyl (III), amisyl chloromethylate (IV), dipheridine (V), dipheridine chloromethylate (VI), lachosine (VII), diphacyl (VIII), amphino (IX), and antitremorine (X) were determine which prevented intoxication with tremorine (1,4-dipyrrolidin-2-butyne) in mice, as indicated by trembling and salivation. The doses of I-X that prevented intoxication with arecoline were also established. There was a parallelism between the antitremorine and antiarecoline activities of the substances tested and a correlation between the M-cholinolytic activity exhibited by them and their effect in counteracting tremorine. Quaternary ammonium compounds were the most active peripheral antagonists of both tremorine and

Card 1/2

UDC: 615.787-092.22:[616.8-009.12-02: 615.785

0919 0265

L 42267-66

ACC NR: AP6031667

arecoline. The results indicated that hyperkinesia and salivation produced by tremorine were due to excitation of the central and peripheral M-cholinergic systems by it. It is doubtful on the basis of the results obtained that tremorine intoxication can be used as a test for determining the N-cholinolytic activity of compounds (IX, which lacks completely M-cholinolytic activity and has a strong selective activity with respect to central N-cholinergic receptors, had no effect in preventing tremorine hyperkinesia even on being administered in large doses). Orig. art. has: 11 formulas. [JPRS: 36,932]

SUB CODE: 06 / SUBM DATE: 05Nov64 / ORIG REF: 004 / OTH REF: 005

Card 2/2 *ldh*

CHERVYAKOV, D.K., prof.; TSAREV, S.G., dotsent; KREPYSHEV, Ye.M., dotsent;
LOKTIONOV, V.H., mladchiy nauchnyy sotrudnik

Effect of chloracetophos, thiophos, and chlorophos on the development
of the larvae of the warble fly in cattle. Uch. zap. KVI 89:117-150
'62.

Use of phosphorus organic preparations for the treatment of tri-
chophytosis in animals. Ibid.:131-139

(MIRA 18:8)

1. Laboratoriya khimioterapii (zav. - prof. D.K.Chervyakov)
Kazanskogo veterinarnogo instituta.

S/724/61/000/000/007/020

AUTHORS: Lotareva, O. B., Stromskaya, N. P., Loktionova, L. I.

TITLE: The influence of natural and artificially accelerated aging on the mechanical properties of parts and specimens made of AA8 (AL8) alloy.

SOURCE: Liteynyye alyuminyevyye splavy; svoystva, tekhnologiya plavki, lit'ya i termicheskoy obrabotki. Sbornik statey. Ed. by I. N. Fridlyander and M. B. Al'tman. Moscow, Oborongiz, 1961, 66-69.

TEXT: This paper reports experimental laboratory tests which were designed to obtain the highest possible strength and elongation characteristics in AL8 alloy following a quench intended to transfer and fix the Mg_5Al_8 phase, little soluble at room temperature (T), into the solid solution (SS) of the alloy. The resulting supersaturated SS, in the Al-Mg system of the alloy, is metastable and, therefore, tends to revert to its stable state. The specific objective of the present investigation is a determination of the effect of the Zn in an AL8 alloy on the mechanical properties of the alloy after natural and artificially accelerated aging. The natural aging was studied on AL8 parts quenched under production conditions and stored at room T. The longest storage time was 40 months. The variation of the mechanical properties of the parts is graphed versus storage time. The tests show that the natural aging of the AL8 alloy following quench increases the tensile strength and the

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elongation, especially during the initial aging period (up to 15 months). The properties of parts aged up to 40 months remain better than those of parts that were not subjected to natural aging. Artificially accelerated aging was performed on AL8 alloy and on an alloy containing 11% Mg, 0.8% Zn, 0.15% Be, 0.20% Ti, the remainder Al. Three-hr aging was performed at 100, 115, 125, 150, 175, 200, 250, and 300°C. Tabulated test data show that artificially accelerated 3-hr aging at 100° and room-T storage for 8 months improves the mechanical properties of the AL8 alloy to a significantly higher value than those obtained immediately after quench. The general level of the mechanical properties of the alloy of the Al-Mg-Zn system with Be and Ti is significantly higher than that of the AL8 alloy. Artificially accelerated aging at 100, 125, and 150° (3 hrs in each instance), followed by 1.5 yrs room-T storage, affords retention of the elongation of the quenched Al-Mg-Zn alloy at a level 50-60% of the initial value of that characteristic following quench, whereas naturally aged alloy, after 1.5 yrs, exhibits a reduction in the elongation to appx. one-third that value. There are 1 figure, 2 tables, and 1 Russian-language Soviet reference. The participation of G. K. Karelov in the work is acknowledged.

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S/724/61/000/000/016/020

AUTHORS: Al'tman, M. B., Slotin, B. I., Stromskaya, N. P., Eskin, G. I.,
Loktionova, L. I.

TITLE: The degassing of Aluminum and its alloys by ultrasonic vibrations.

SOURCE: Liteynnye alyuminiyevyye splavi; svoystva, tekhnologiya plavki, lit'ya
i termicheskoy obrabotki. Sbornik statey. Ed. by I. N. Fridlyander
and M. B. Al'tman. Moscow, Oborongiz, 1961, 134-143.

TEXT: The paper describes an experimental investigation which deals with the
use of ultrasonic (US) vibrations in the degassing of Al and its alloys. A brief
state-of-the-art survey is presented. The equipment involved comprising a magne-
tostriptive transformer, a concentrator, a wave-guide, and a crucible containing
the melt are shown in a cross-sectional diagram. The metals tested by means of
US vibrations comprised pure Al of grade A00, a medium-strength alloy with good
casting properties, namely AA9 (AL9), an Al-Si-Mg alloy, and a high-strength
cast alloy, AA20 (AL20), an Al-Si-Cu-Mg alloy. Following the US treatment, the
alloys were cast in sand molds, and tensile specimens 10-mm diam and various
practical parts were cast. The parts were subjected to X-ray transillumination
and hydraulic tests under a 10-at pressure. An empirical gas-content scale was

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adopted based on the segregation of gas bubbles at the moment of crystallization under vacuum, ranging from 5 points for intensive segregation of gas along the specimen surface to 1 point for crystallization without any visible segregation of gas. In addition, the vacuum specimens were cut in two, and the macrostructure of the sections was inspected after etching with a 10% solution of NaOH. The US treatment of the Al and its alloys was found to be an effective method for degassing. US treatment of an alloy prior to pouring into a mold increases the density and improves the mechanical properties of the castings. The properties are summarized in a full-page table. It was found that during US treatment of an alloy the alloy becomes saturated with the material of certain vibrators (for example, Mo) as a result of their dispersion under the action of the elastic vibration and of the temperature. It is suggested that this phenomenon may be usefully employed to produce intentional inoculation and alloying of the alloys. It is established that Nb is the most stable material for wave-guides, so that it may be recommended for the making of wave-guides from which no inoculation is to occur. There are 4 figures, 2 tables, and 5 references (2 Russian-language Soviet and 3 German-language). Thanks are expressed to the late G.M. Rovenskiy and to G.V. Zhevakina for the performance of the X-ray investigation.

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S/724/61/000/000/019/020

AUTHORS: Lotareva, O. B., Postnikov, N. S., Loktionova, L. I.

TITLE: The properties of Al alloys cast by various casting methods.

SOURCE: Liteynnye alyuminiyevyye splavy; svoystva, tekhnologiya plavki, lit'ya i termicheskoy obrabotki. Sbornik statey. Ed. by I. N. Fridlyander and M. B. Al'tman. Moscow, Oborongiz, 1961, 157-170.

TEXT: The paper describes an experimental investigation of the effects of various types of casting techniques on the standard USSR Al alloys AA (AL) -2, -3, -4, -5, -7, -8, and -9, cast in ethylsilicate molds, by the lost-wax process, and in shell molds, and of the new alloys AL19 and AL21 cast according to new methods. It is found that the standard alloys all satisfy the requirements of the All-Union Standard (GOST) 2685-53, regardless of the casting method. The use of the lost-wax method was limited to small parts and to rods with a cross-shaped cross-section. A broad range of mold temperatures (T) from 20 to 350°C was tested, and the tensile strength and elongation of the resulting specimens were measured in the standard heat-treated state of each alloy. A mold T of up to 300° was found to have but little influence on the mechanical properties of the alloys investigated. At higher mold T a loss in mechanical properties is found. A comparison of the

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fluidity of the alloys in pouring into shell molds and ethylsilicate molds showed a fluidity somewhat greater than when pouring was done into sand molds. Typical comparison of the length of spirals cast for the AL7 alloy: 575 mm in a shell mold, against 508 mm in a sand mold. The mechanical properties of specimens 5-mm in diameter made of AL9 alloy cast into gypsum molds do not differ from the properties of the same alloy when cast into a sand mold. In 8-mm and 12-mm diam specimens some small impairment in mechanical properties is observed. A 10-15% impairment in mechanical properties is noted in alloys AL19 and AL21 cast into gypsum molds. It was also noted that any heating of the gypsum molds impairs the mechanical properties of 8-mm-diam and, even more appreciably, of 12-mm-diam specimens made of the latter 2 alloys, whereas the properties of 5-mm-diam specimens is not affected thereby. The fluidity (and, therefore, pourability) of the AL9, AL19, and AL21 alloys in pouring into either cold or heated gypsum molds exceeds that observed in pouring into sand molds by several times. For example, the length of an AL9 spiral cast in a gypsum at 20°C is 1,500 mm, as against 550 mm in a sand mold. The same ratio of appx. 3:1 prevails in the other 2 alloys, also. A time-and-temperature study was made of the heat-absorption capabilities of the various molds, and it was found that the heat is taken from the casting most rapidly by the ethylsilicate mold, then by the shell mold, and lastly by the gypsum mold. This is interpreted as an explanation of the relatively low mechanical

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properties of castings made in gypsum molds and the practically identical properties obtained in castings made in a sand mold, a shell mold, and an ethylsilicate mold. There are 6 figures, 7 tables, and 4 references (3 Russian-language Soviet and 1 English-language group: Brown, H., Foundry, Jan. 1950, 74; Light Metals, Nov. 1952, 365; Foundry, Sep. 1956, 104). The participation of V. G. Baradan'yants in the present project, and his development of the method for making the various types of molds, is acknowledged.

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AL'TMAN, M.B.; LOTAREVA, O.B.; POSTNIKOV, N.S.; Primali uchastiye:
SPIRIDONOVA, S.B.; LOKTIONOVA, L.I.

High-strength BAL2 alloy. Alum. splavy no.1:5-13 '63.
(MIRA 16:11)

STROMSKAYA, N.P.; SMIRNOVA, T.I.; KLIMOVA, V.A.; LOKTIONOVA, L.I.;
SYROMYATNIKOVA, M.A.; AL'TMAN, M.B., rukovoditel' raboty.

Effect of metal inclusions on the properties of aluminum
foundry alloys. Alum. splavy no.1:55-72 '63. (MIRA 16:11)

ACCESSION NR: AP4040688

S/0129/64/000/006/0015/0018

AUTHOR: Al'tman, M. B.; Postnikov, N. S.; Loktionova, L. I.

TITLE: Airtight casting alloy of the Al-Si-Mg system

SOURCE: Metallovedeniya i termicheskaya obrabotka metallov, no. 6, 1964, 15-18

TOPIC TAGS: aluminum alloy, aluminum silicon magnesium alloy, VAL5 alloy, beryllium containing alloy, titanium containing alloy, alloy property

ABSTRACT: An investigation showed that beryllium and titanium, when added to the Al-Si-Mg alloy, contributed to grain refining and increased alloy strength. The maximum strength of 33.5 kg/mm² of solution-annealed and aged alloy was attained at 0.15—0.4% Be and 0.15% Ti, while the strength of the alloy with 0.5—1% Be without titanium was only 27—29 kg/mm². To obtain a 50—60% eutectic (for higher airtightness), the content of silicon should be limited to 6.5—8.5%. Although magnesium silicide is the main strengthening phase, the magnesium content should not exceed 0.55%. Higher magnesium contents result in

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ACCESSION NR: AP4040688

brittleness of the alloy. The investigation established the composition of a new alloy, designated VAL5: 6.5—8.5% Si, 0.35—0.55% Mg, 0.15—0.4 Ba, and 0.1—0.3% Ti. Its strength was found to be 39.4, 34.2, and 32 kg/mm² at temperatures of -190, -70, and +20C, respectively; the 100-hr rupture strength was 12, 4, and 2 kg/mm² at 200, 250, and 300C, respectively. The alloy is not susceptible to hot cracking, its fluidity is adequate, and it is airtight at pressures as high as 300 atm and over. It is recommended for parts operating under high internal pressure. The alloy with a beryllium content of up to 0.5% can be melted, cast, and heat treated without special precautions. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

ATD PRESS: 3042

ENCL: 00

SUB CODE: MM MA

NO REF SOV: 001

OTHER: 000

Card 2/2

LOKTIONOV, S.P., aspirant

Concerning the mineralogy, chemical composition, and genesis of
Alba concretionary phosphorites of the right bank of the Volga
River in the area of Saratov Province. *Izv. vys. ucheb. zav.;*
geol. i razv. 7 no.11:132-133 N '64. (MIRA 18:5)

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L 14566-66 EWT(d) IJP(e) BC

ACC NR: AP6003294

SOURCE CODE: UR/0209/66/000/001/0070/0075

AUTHOR: Glazkov, I. (Colonel; Military pilot first class; Loktionov, V. (Engineer; Major) 48
3

ORG: none

TITLE: "Autopilot-drive" landing system
9,44,55

SOURCE: Aviatsiya kosmonavtika, no. 1, 1966, 70-75

TOPIC TAGS: autopilot, aircraft landing system, automatic control system, automatic control equipment, motion mechanics

ABSTRACT: An automatic control mechanism, designed to maintain an aircraft on a certain course or to cause it to maneuver, is said to be extremely dependable. However, no matter how reliable an autopilot-drive system may be it is still subject to either partial or total failure. A malfunction of the system may result in a change of the motion parameters of the aircraft, such as the altitude, acceleration, angle of attack, and angle of roll. Experiments were carried out to determine the dynamics of these changes as well as the resources available to the pilot to operate the aircraft. Failures were introduced by feeding into the system an electric signal which was turned on by a crew member at a specially designed "failure control panel." The time needed by the pilot to detect unpredictable errors during flight and to correct for them amounted to 1.5—2.5 sec for errors occurring in the longitudinal and 1.5—6 sec

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ACC NR: AP6003294

for errors originating in the latitudinal control channels of the autopilot. With the autopilot turned off, the pilot operated the aircraft using instrument readings from the drive system, and when the drive system failed he maneuvered by using the gyro horizon, variometer, altimeter, speed indicator, and other instruments. In a perturbed longitudinal motion, the dive failure (pilot's reaction time, 1.5—2.5 sec) caused the aircraft to lose altitude up to 25 m in horizontal flight and 30 m in gliding descent. In 4—6 seconds, the altitude loss amounted to 70 m, while in the zone between the outer and the inner marker beacons it increased to 90 m. The motion of an aircraft during its recovery by a command instrument within 1, 2, 3, 4, and 5 seconds is illustrated in Figs. 1 and 2. The dotted line indicates the path of an

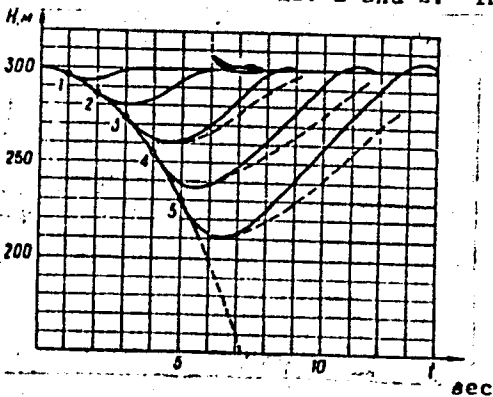


Fig. 1. Altitude loss during recovery in horizontal flight

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