

ACCESSION NR: AT4037691

S/2865/64/003/000/0210/0216

AUTHOR: Gorban', G. M.; Kondrat'yeva, I.I.; Poddubnaya, L. T.

TITLE: Gaseous products of vital activity liberated by man in sealed chambers

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy* kosmicheskoy biologii, v. 3, 1964, 210-216

TOPIC TAGS: respiration, air purification, metabolic waste

ABSTRACT: Experimental studies have shown that a human being in the process of his vital activities liberates a number of toxic gaseous products into the surrounding medium. Thus, for example, a chamber in which a man has been sealed for 24 hours will contain 297 mg of ammonium, 278 mg of carbon monoxide (417 mg for smokers), 504 mg of hydrocarbons, 0.6 mg of aldehydes, 235 mg of ketones, 5 mg of mercaptans and hydrogen sulfides, and 89 mg of fatty acids. Permanent contaminants in the air of the sealed chamber were carbon dioxide, hydrocarbons, aldehydes, and ammonium. The carbon dioxide and hydrocarbons were found only in a gaseous form; the others both in the air and in the condensate. Data accumulated

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in these experiments indicate the necessity of developing effective means of purifying air and of working out standards for permissible limits for the concentration of toxic substances in sealed chambers.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: PH, LS

NO REF SOV: 014

OTHER: 005

Card 2/2

KRASIL'NIKOV, N.A.; NIKITINA, N.I.; KONDRAT'YEVA, I.K.

Actinomyces pneumonicus n. sp., a new species of the globisporus
group. Trudy Inst. microbiol. no. 2:160-169 '60. (MIRA 14:1)
(ACTINOMYCETALES)

KONDRAT'YEVA, I.N.

Relation of changes in physical thermoregulation induced by a single total body irradiation to the condition of the hypothalamic region [with summary in English]. Med.rad. 3 no.1:16-22 Ja-F, '58.

(HYPOTHALAMUS, physiology, (MIRA 11:4)

eff. of stimulation on thermoregulation responses to single total-body x-irradiation (Rus) -

(BODY TEMPERATURE, physiology,

thermoregulation response to total body x-irradiation, eff. of hypothalamic stimulation (Rus)

(ROENTGEN RAYS, effects,

total body, on thermoregulation, eff. of hypothalamic stimulation (Rus)

KONDRAT'YEVA, I.N.

Changes in physical thermoregulation following single-dose total-body roentgen irradiation of rabbits using 1000 r. [with summary in English]. Med.rad. 3 no.4:8-15 J1-Ag '58. (MIRA 12:3)

(BODY TEMPERATURE,

thermoregulation, eff. of total body single dose x-irradiation in rabbits (Rus))

(ROENTGEN RAYS, effects,

total body, on thermoregulation in rabbits (Rus))

KONDRAT'YEVA, I. N.: Master Biol Sci (diss) -- "Changes in physical thermoregulation following irradiation of rabbits with X-rays, and the dependence of these changes on the state of the hypothalamus". Moscow, 1959. 14 pp (Acad Med Sci USSR), 220 copies (KL, No 9, 1959, 114)

LIVANOV, M.N.; KONDRA'T'YEVA, I.N.

Sensitivity of the nervous system to weak radiation effects.
Med.rad. 4 no.9:3-13 S '59. (MIRA 12:11)
(NERVOUS SYSTEM radiation eff)

ALPAT'YEV, B.A.; KONDRAT'YEVA, I.N. (Moskva)

Registration of respiratory movements in man during physical work
with the aid of a thermal battery. Biul. eksp. biol. i med. 48 no.9:
129-130 S '59. (MIRA 13:1)

1. Predstavlena deystvitel'nym chlenom AMN SSSR A.I. Nesterovym.
(RESPIRATION funct. tests)

ALPAT'YEV, B.A.; KONDRAT'YEVA, I.N.; MINAYEVA, G.B.

Method for recording respiration in man during physical work
performed in an isolation suit. Gig. i san. 25 no.3:70-72 M
'60. (MIRA 14:5)

(RESPIRATION)

(PHYSIOLOGICAL APPARATUS)

S/205/62/002/004/008/014
I015/I215

AUTHOR: Kondrat'yeva, I. N.

TITLE: The mechanism of the effect of the irradiated thyroid gland on the cerebral cortex

PERIODICAL: Radiobiologiya, v.2, no.4, 1962, 569-572

TEXT: This study is the continuation of previous ones. Experiments were carried out on 19 sexually mature female rabbits weighing 1.8-2.5 kg. The bioelectrical activity of the optical and parietal cortical regions was studied. The recording was performed on a 4ЭЭГ-1 (4EEG-1) EEG apparatus. The recording was activity was determined by the method of V.V.Usov, 30 min before and 3 hours after irradiation of the thyroid (10264r/min from a PУМ-7 (RUM-7) apparatus). Intact and denervated thyroids were examined in 2 experimental series. It was found that the level of the bioelectrical activity as well as the pulse rate increased 2-3 hours after irradiation of intact thyroid, whereas in denervated glands these phenomena were much less marked, or

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KONDRAT'YEVA, I.N.

Changes in the functional state of the cerebral cortex in rabbits following local irradiation of the thyroid gland with X rays. Probl.endok.i gorm. no.4:34-39 '62.

(MIRA 15:11)

(CEREBRAL CORTEX) (THYROID GLAND)
(X RAYS—PHYSIOLOGICAL EFFECT)

KONDRAT'YEVA, I.N.

Inhibition in the neuron systems of the visual sector of the cerebral cortex. Zhur.vys.nerv.deiat, 14 no.6:1069-1078 N-D '64. (MIRA 18:6)

1. Institute of Higher Nervous Activity and Neurophysiology, U.S.S.R. Academy of Sciences, Moscow.

DANIL'CHENKO, P.T. [deceased]; KONDRAT'YEVA, I.P.

Refractometry of chromates and dichromates. Zhur. neorg. khim.
10 no.3:676-680 Mr '65. (MIRA 18:7)

KUDRYAVTSEV, V.A.; KONDRAT'YEVA, K.A.; VITKINA, N.Kh.

Mapping the seasonal freezing and thawing of ground. Mersl.issl.
no.2:18-32 '61. (MIRA 16:5)

(Frozen ground--Maps)

KONDRAT'YEVA, K.A.; LAZUKOVA, G.G.

Role of the vegetative cover as one of the indications of the isolation of microregions for purposes of large-scale permafrost mapping as revealed by a study of the region of the Vilyuy Hydroelectric Power Station. Merzl. issl. no.3: 63-72 '63. (MIRA 17:6)

KONDRAT'YEVA, K. A.

Some data on the necessity of taking into account the effect
of vegetative cover when calculating the seasonal freezing
and thawing of soils. Merz1. iss1. no.1:39-44 '61.
(MIRA 16:1)

(Frozen ground)

KONDRAT'YEVA, K.A.; TRUSH, N.I.

Determining depths of seasonal freezing and thawing of soils.
Merial, issl. no.2:59-70 '61. (MIRA 16:5)
(Frozen grounds)

KONDRAT'YEVA, K.A.; TRUSH, N.I.

Some data on the working of experimental plots near the Salekhard
Hydroelectric Power Station. Merz.issl. no.2:71-79 '61.
(MIRA 16:5)

(Salekhard Hydroelectric Power Station—Frozen ground)

KONDRAT'YEVA, K.A.

Effect of the relief on the formation of the temperature
conditions of rocks in the presence of temperature inversion
in the region of the Vilyuy Hydroelectric Power Station.
Merz1. iss1. no.3:73-82 '63. (MIRA 17:6)

SHILOVA, Ye. I.; KONDRAT'YEVA, K. B.

Some characteristics of the rhizospheres of clover and timothy.
Vest. Len. un. 10 no. 4: 17-24 Ap '55. (MLRA 8:8)
(Rhizosphere microbiology)

KONDRAT'YEVA, K. Ya. and PODOL'SKAYA, E. L.

"Theory of the Yanishevskiy Pyrgeometer".
Vestnik Leningr. un-ta, No 5, pp 103-117, 1954.

A more complete theory of the instrument for the measurement of radiational balance is given. The theory is applicable under the condition of sationary heat exchange between receptor plates of the pyrgeometer and the air, i.e., when the microfluctuations of wind velocity and air temperature existing in the atmosphere are not taken into consideration. Formulas for the determination of coefficients of heat transmission are employed in two limitation cases, namely forced and free motion. A detailed analysis is given of the dependence of the conversion factor upon wind velocity, temperature, and radiation.
(RZhGeol, No 9, 1955)

SO: Sum No 884, 9 Apr 1956

KONDRAT'YEVA, L.

AUTHOR: Kondrat'yeva, L., Candidate of Pedagogical Sciences 27-7-21/37

TITLE: Some Questions of Labor Planning (Nekotoryye voprosy planirovaniya trudovoy deyatel'nosti)

PERIODICAL: Professional'no - Tekhnicheskoye Obrazovaniye, 1957, # 7(146), p 25-27 (USSR)

ABSTRACT: In investigating questions of labor planning, the author studied the method of productive teaching adopted by two different instructors on the same subject, i.e. drilling a hole in a hammer for the handle, and manufacturing a wrench. The method adopted by one of the teachers showed negative results while the system of the other proved that planning each operation leads to successful accomplishment.

AVAILABLE: Library of Congress

Card 1/1

SHUSHERINA, N.P.; LEVINA, R.Ya.; KONDRAT'YEVA, L.B.

γ-lactones. Part 11: 9,10-dibromohexahydrocoumarin and its reactions. Zhur. ob. khim. 27 no.8:2255-2260 Ag '57. (MLBA 10:9)

1. Moskovskiy gosudarstvennyy universitet.
(Coumarin) (Lactones)

GOL'DSHTEYN, B.I.; VOL'KENZON, D.V.; KONDRAT'YEVA, L.G.; UL'YANOVA, N.D.

On the action mechanism of vitamin C. *Biokhimiia*, Moskva 15 no.2:
173-177 Mar-Apr 1950. (CML 20:7)

1. Department of Biochemistry, All-Union Institute of Experimental
Endocrinology, Moscow.

GOL'DSHTYIN, B.I.; KONDRAT'YEVA, L.G.; GERASIMOVA, V.V.

Effect of vitamin C on conversion of nucleic acids in cell in the
animal organism. Biokhimiia, Moskva 17 no.3:354-361 May-June 1952.
(CJML 25:1)

1. Biochemical Laboratory of the Scientific-Research Institute of
Nutrition of the Ministry of Public Health Ukrainian SSR, Kiev.

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CA

Effect of vitamin C on transformations of nucleic acids in cells of the animal organism. B. I. Gol'dshteln, L. G. Kozulakova, and V. V. Gerasimova (Ministry Health, Kiev). *Doklady Akad. Nauk S.S.S.R.* 23: 451 (1952); cf. C. I. 45, 10(11).—Ribonucleic acid (I) of the cytoplasm changes to deoxyribonucleic acid (II) of the nucleus, as shown in specimens of malignant tumors, intestinal mucosa, and spleen of avitaminotic guinea pig. The possible participation of ascorbic acid in formation of II is indicated and may be the main function of this vitamin as a stimulant of cell growth and development. *In vivo* expts. showed clearly, especially with tumor tissues, that in C-avitaminosis a decline of II and a rise of I occur. The reverse phenomenon, formation of I from II in the presence of vitamin C, could not be shown in normal tissues but did occur readily in tumor specimens (rat sarcoma). G. M. Kosolapoff

KONDRAT'YEVA, L.G., GERASIMOV, V.V., GOL'DSHTEYN, B.I.

"Vitamin C Influencing the Velocity of Regeneration of Nucleic Acids in Cells of Animal Organism"²⁴⁰, in the book Experience in the Use of Radioactive Isotopes in Medicine R. Ye. KAVETSKIY AND I.T. SHEVCHENKO, published by the Gosmedizdat Publishing House of the UKRAINIAN SSR, KIEV 1955, represents medical transactions of a conference held in KIEV from 18-20 January 1954.

S6: 116235

Kondrat'eva L.G.

KONDRATYEVA, L.G.

USSR/Human and Animal Physiology. Metabolism.

T

Abs Jour: Ref Zhur-Biol., No 8, 1958, 36155

Author : Goldstein, B I , Gerasimova, V V., Kondratyeva, L.G.

Inst :

Title : The Application of Radioactive P^{32} and C^{14} to the Study of the Effect of Vitamin C on Nucleic Acid Changes in the Cells of the Animal Body.

Orig Pub: Tr. Veses. Konferentsii po med. radiol eksperim. med. radiol n Medgiz, 1957, 260-266.

Abstract: The authors studied the rate of penetration of P^{32} and C^{14} into the tissues of malignant tumors, the mucous membrane of the small bowel and spleen. They arrived to the conclusion that the RNC (Ribonucleic acid) of the cell is the source material for the formation of dnc (Desoxyribonucleic acid of the nucleus of the

Card : 1/2

USSR/Human and Animal Physiology (Normal and Pathological). T-2
Metabolism. Nitrogen Metabolism.

Abs Jour : Ref Zhur - Biol., No 16, 1958, 74582

Author : Gol'dshteyn, B.I.; Gerasimova, V.V., Kondrat'yeva, L.G.

Inst : AS USSR

Title : The Participation of Vitamin C in the Biosynthesis of
Nucleic Acids.

Orig Pub : V. sb.: Vitaminy, 3, Kiyev, AN USSR, 1958, 129-141.

Abstract : No abstract.

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GOL'DSHTEYN, B.I.; GERASIMOVA, V.V.; KONDRAT'YEVA, L.G.

Action of vitamin C in the tissues of the animal organism.
Vitaminy no.4:44-52 '59. (MIRA 12:9)

1. Biokhimicheskaya laboratoriya Instituta pitaniya Ministerstva
zdravookhraneniya USSR.
(ASCORBIC ACID) (NUCLEIC ACID)

KONDRAT'YEVA, L.G.; VARSHAVSKAYA, N.B.; SHUBS, Z.V.; KOBZAR', V.I.

Use of levomycetin for the preservation of placental serum.
Antibiotiki 10 no.7:657-660 J1 '65. (MIRA 18:9)

1. Otdel proizvodstva γ -globulina Kiyevskogo nauchno-
issledovatel'skogo instituta epidemiologii i mikrobiologii.

PEYZULAYEV, SH.I.; KARABASH, A.G.; KRAUZ, L.S.; KOSTAREVA, F.A.;
SMIRNOVA-AVERINA, N.I.; BABINA, F.L.; KONDRAT'YEVA, L.I.; VORONOVA,
Ye.F.; MESEKOVA, V.M.

Spectral method for the determination of trace impurities. Zav. lab.
24 no. 6:723-731 '58. (MIRA 11:7)
(Spectrum analysis)

SHLYAKHOV, E.N.; BONDURYANSKIY, I.P.; GROYSMAN, G.M.; OSTAPENKO, M.G.;
LITVIK, Ye.N.; KONDRAT'YEVA, L.I.; LEBENZON, N.P.; SHPANIR, Ye.I.

Use of gamma globulin for the prevention of infectious hepatitis
in pediatric institutions. Trudy Kish.gos.med.inst. 11:101-104
'60. (MIRA 16:2)

1. Otdel epidemiologii Moldavskogo nauchno-issledovatel'skogo
instituta epidemiologii, mikrobiologii i gigiyeny, Kishinevskaya,
Bel'takaya, Orgeyevskaya i Respublikanskaya sanitarnaya epidemio-
logicheskaya stantsiya.

(HEPATITIS, INFECTIOUS—PREVENTIVE INOCULATION)
(GAMMA GLOBULIN)

KONOVALOV, E.Ye.; PEYZULAYEV, Sh.I.; PINCHUK, G.P.; LARIONOVA, I.Ye.;
KONDRAT'YEVA, L.I.

Use of zonal fusion for concentrating impurities in spectral
analysis of pure bismuth. Zhur. anal. khim. 18 no.5:624-
633 My'63. (MIRA 17:2)

L 46329-66 ENT(m)/ENP(t)/ETI IJP(c) JD

ACC NR: AP6019766

SOURCE CODE: UR/0370/66/000/003/0084/0089

AUTHOR: Konovalov, E. Ye. (Obninsk); Peyzulayev, Sh. I. (Obninsk); Larionova, I. Ye. (Obninsk); Kondrat'yeva, L. I. (Obninsk); Pinchuk, G. P. (Obninsk)

ORG: none

19
B

TITLE: Determination of equilibrium distribution coefficients of impurities in bismuth

SOURCE: AN SSSR. Izvestiya. Metally, no. 3, 1966, 84-89

TOPIC TAGS: bismuth, metal zone melting, distribution coefficient, metal crystallization

ABSTRACT: In order to calculate the process of zone melting with optimum parameters, it is necessary to have the values of equilibrium coefficients of distribution of the impurities (k_0). These coefficients can be calculated by the method of Burton, Prim, and Slichter (J. Chem. Phys. 21, 1987, 1953) if the effective distribution coefficients k are known from experiments conducted at different crystallization rates (f) but under the same conditions of stirring of the melt. Using this method, the authors determined the values of k_0 for the impurities Ag, Pb, Cu, Tl, Cd, and Ni in bismuth. The values of k were determined by two independent methods, one involving zone melting processes and the other a normal directed crystallization. The two methods produced very similar results. This permitted the recommendation of their mean values as the most reliable values of the equilibrium coefficients of

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UDC: 669.764

L 46329-66

ACC NR: AP6019766

distribution for the above-mentioned impurities in bismuth. Orig. art. has: 4 figures, 4 tables, and 4 formulas.

SUB CODE: 11/ SUBM DATE: 23Feb65/ ORIG REF: 004/ OTH REF: 002

Card 2/2 fv

...SOLUBLE IN THE AQUEOUS phase. Standards were prepared with I_2O_5 .
Altogether, 20 elemental impurities were determined spectrographically. These are

Card 1/2

ASSOCIATION: none

REGISTERED: 00

ENCL: 00

SUB CODE: 00, 0P

KONDRAT'YEVA, L.N.

96-1-6/31

AUTHORS: Kiselev, P.I., Candidate of Technical Sciences and
Kondrat'yeva, L. N., Engineer

TITLE: Determination of the Millability of Coal on the OP-BM
Instrument (Opredeleniye razmolosposobnosti ugley na
pribore OR-VTI)

PERIODICAL: Teploenergetika, 1958, Vol.5, No.1, pp. 25 - 28 (USSR)

ABSTRACT: The All-Union Thermo-technical Institute (VTI) has developed a new instrument to determine the relative friability (OP) of coals and to investigate the process of milling. It is illustrated in Fig. 1 and comprises a steel milling rod which, sliding in a guide tube, falls into a steel milling chamber. To carry out the test, a dry sample of fuel is prepared to pass through a sieve of 3.32 mm and does not pass through one of 2.36 mm. Then, for example, 2.5 g of anthracite dust of this fineness is loaded into the milling chamber. The milling rod is dropped from a height of 150 mm and its position read off a scale to give the actual distance of fall, so that the work done may be determined. After the first impact the fuel was offered to a sieve with apertures of 210 μ and the rejected portion was weighed, reloaded into the milling chamber and again milled by impact.

Card1/3 After each test, the work done in kg/m was graphed to relate

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Determination of the Millability of Coal on the OP-BM Instrument.

the quantity of dust produced to the work expended. Tests carried out at different initial loads, as shown in Fig.2, indicated that increase in the initial energy improves the economy of the process. A formula is given for the specific energy required for milling. The equipment was used to study a number of related factors. The graphs in Fig. 4 refer to the milling of Moscow Basin Coal, with and without removal of fines after each impact, and also when operating with feed. A formula is given for the "coefficient of friability", which is a useful characteristic of the fuel. From theoretical considerations, which are stated, the procedure for determining the coefficient of friability was based on the milling of samples until 40 - 70% remained on an 88 mesh sieve. The differential coefficients of the curves given in Figs. 2 and 4 also represent degrees of pulverisation. The article then discusses whether feed should be used when milling and the best way of defining the friability of coal. Graphs relating the amounts of fuel passing through a sieve to the work expended are given in Fig. 6 for different kinds of fuel. Hitherto, the Institute has assessed the friability of fuels by milling 500 g of fuel for 15 min in a porcelain mill and applying a given formula to give a certain friability factor.

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KONDRAT'YEVA, L.N.

Age-conditioned characteristics of the course of skin reactions.
Uch. zap. MGPI no.168:137-148 '62.

Oculocardiac reflex in children of various ages. Ibid.:149-158
(MIRA 19:2)

KONDRAT'YEVA, L.N.; SKVORTSOVA, G.K.; TARKOVA, K.R.

Effect of physical training in an Alpine camp on the organism
of adolescents. Uch. zap. MGPI no.168:255-258 '62.
(MIRA 19:2)

VERZILOVA, O.V.; KONDRAT'YEVA, L.N.

Pressor and depressor structures of the posterolateral region of
the hypothalamus. Biul. eksp. biol. i med. 57 no.6:11-14 Je '64.
(MIRA 18:4)

1. Laboratoriya fiziologii i patologii krovoobrashcheniya i
dykhaniya (zav. - chlen-korrespondent AMN SSSR prof. M.Ye.Marshak)
Instituta normal'noy i patologicheskoy fiziologii (dir. - deystvitel'-
nyy chlen AMN SSSR prof. V.V.Parin) AMN SSSR, Moskva.

VERZILOVA, O.V.; KONDRAT'YEVA, L.N.

Electrical activity of pressoreceptor neurons of the medullary reticular formation following the stimulation of hypothalamic pressoreceptors. Trudy Inst.norm. i pat.fiziol. AMN SSSR 7:31-32 '64. (MIRA 18:6)

1. Laboratoriya fiziologii i patologii krovoobrashcheniya i dykhaniya (zav. - chlen-korrespondent AMN SSSR prof. M.Ye. Marshak) Instituta normal'noy i patologicheskoy fiziologii AMN SSSR.

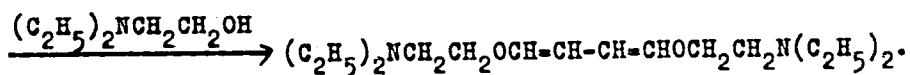
AUTHORS: Shostakovskiy, M. F., Chekulayeva, I. A. SOV/62-58-6-33/37
 Kondrat'yeva, L. V.

TITLE: Letter to the Editor (Pis'ma redaktoru)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk,
 1958, Nr 6, pp. 794 - 794 (USSR)

ABSTRACT: Recently increased interest has been displayed by research workers in the chemistry of diacetylene. In the course of the present report the authors describe some of the peculiar features of the interaction between diacetylene and some aminealcohols. It was shown that β -(diethylamino)ethanol enters into reaction with diacetylene (contrary to non-substituted alkyl esters) without a catalyzer. On this occasion 1-(β -diethylamino)ethoxybutene-in-3 (Formula I) with 80-90% yield is formed. Ethinylvinyl ester combines with the 2.molecule of β -(diethylamino)ethanol under more rigorous conditions. This causes the formation of: Di-(β -diethylamineethoxy)buthadien-1,3 with 55-60% yield:

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Letter to the Editor

SOV/62-58-6-33/37

In the case of butyl alcohol the following acetal was obtained:
 $\text{CH}_3 - \text{C} \equiv \text{C} - \text{CH}(\text{OC}_4\text{H}_9) \text{OCH}_2\text{CH}_2\text{N}(\text{C}_2\text{H}_5)_2$. The structure of the
compounds obtained was ascertained by means of hydrolysis and
spectral analysis.

ASSOCIATION: Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk
SSSR (Institute of Organic Chemistry imeni N.D.Zelinskiy, AS USSR)

SUBMITTED: April 16, 1958

1. Acetylenes--Chemical reactions 2. Amino alcohols--Chemical
reactions 3. Spectrographic analysis--Applications 4. Cyclic
compounds--Hydrolysis

Card 2/2

5.3610

77353

SOV/79-30-1-14/78

AUTHORS: Shostakovskiy, M. F., Chekulayeva, I. A., Kondrat'yeva, L. V.

TITLE: Reaction of Butadiyne With Amino Alcohols and Amines. I. Synthesis and Conversions of 1-(β -Diethylamino)-ethoxybut-1-en-3-yne

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 75-81 (USSR)

ABSTRACT: Reaction of butadiyne with β -(diethylamino)-ethanol at room temperature without catalyst yields (80-90%) 1-(β -diethylamino)-ethoxybut-1-en-3-yne (I), bp 99° (11 mm), n_D^{20} 1.4832. When compound I is hydrolyzed with 10% H_2SO_4 it yields 1,3,5-triacetylbenzene (yield 80%), mp 162-163°. Reaction of compound I with aliphatic alcohols under rigorous conditions (boiling under vacuum (10 mm) for 6 hr in the presence of catalyst, potassium

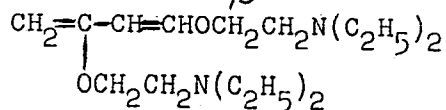
Card 1/7

Reaction of Butadiyne With Amino Alcohols and Amines. I. Synthesis and Conversions of 1-(β -Diethylamino)-ethoxybut-1-en-3-yne

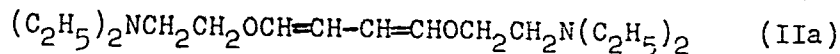
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SOV/79-30-1-14/78

ethoxide) yields, along with the acetals of but-1-yn-4-ol, also addition products of one molecule of alcohol to a molecule of ethylvinyl ether. These addition products have both a diene and an allene structure. Thus, reaction of I with β -(diethylamino)-ethanol yields (55-60%) di-(β -diethylaminoethoxy)-buta-1,3-diene (II), bp 151° (4 mm), n_D^{20} 1.4819. Compound II can also contain some 1,4-di-(β -diethylaminoethoxy)-buta-1,3-diene (IIa).



(II)



Reaction of I with butanol yielded (50-60%) the acetal of but-1-yn-4-ol (III), bp 138-140° (10 mm), n_D^{20} 1.4542,

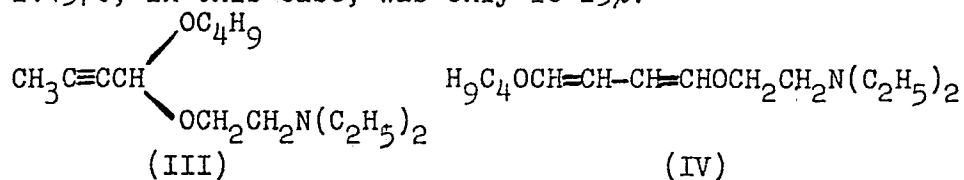
Card 2/7

Reaction of Butadiyne With Amino Alcohols
and Amines. I. Synthesis and Conversions
of 1-(β -Diethylamino)-ethoxybut-1-en-3-yne

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containing an admixture, a product with an allene structure. The yield of butoxy-(β -diethylamino)-ethoxybuta-1,3-diene (IV), bp 153-155° (7 mm), n_D^{20} 1.4570, in this case, was only 10-25%.

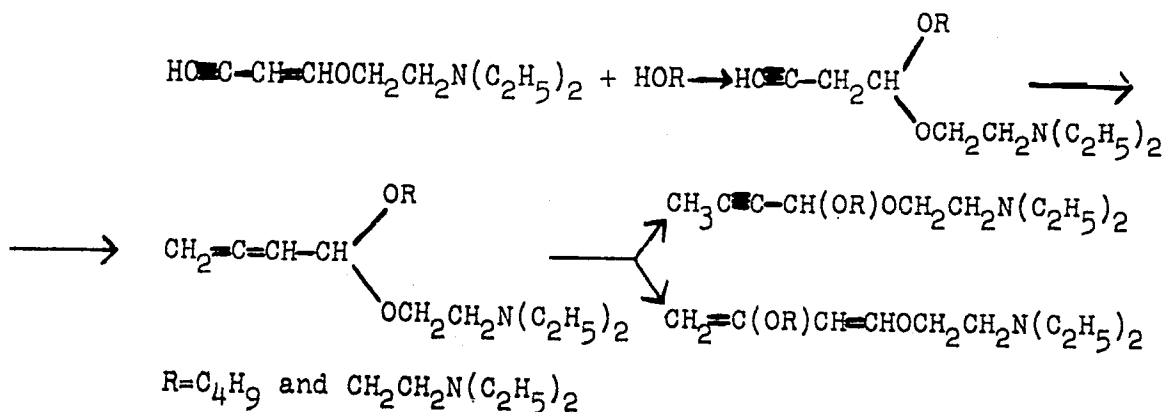


During the reaction of ethyl vinyl ether with alcohols there occurs, evidently, not only the isomerization that causes migration of the triple bond, but acetylene-allene-dienic isomerization of reaction products as well, which leads to the formation of di-alkoxybuta-1,3-dienes.

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Reaction of Butadiyne With Amino Alcohols and Amines. I. Synthesis and Conversions of 1-(β -Diethylamino)-ethoxybut-1-en-3-yne

77353
SOV/79-30-1-14/78



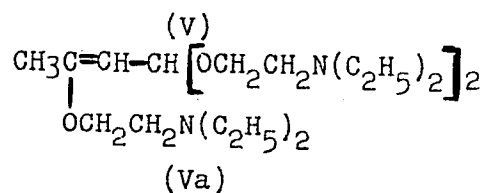
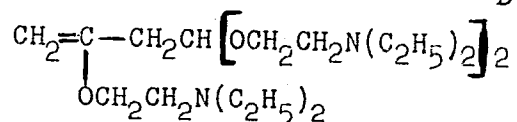
When the reaction of I with β -(diethylamino)-ethanol is extended from 6 to 22 hr, the addition product of two molecules of amino alcohol with one molecule of ethyl

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Reaction of Butadiyne With Amino Alcohols
and Amines. I. Synthesis and Conversions
of 1-(β -Diethylamino)-ethoxybut-1-en-3-yne

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vinyl ether is obtained. The structure of this compound is V or Va (based on spectral analysis) and its physical constants are: bp 178-179°, n_D^{20} 1.4608.



Reaction of I with ethylmercaptan at 70-80° for 6 hr yielded (60-70%) ethylmercapto-(β -diethylaminoethoxy)-

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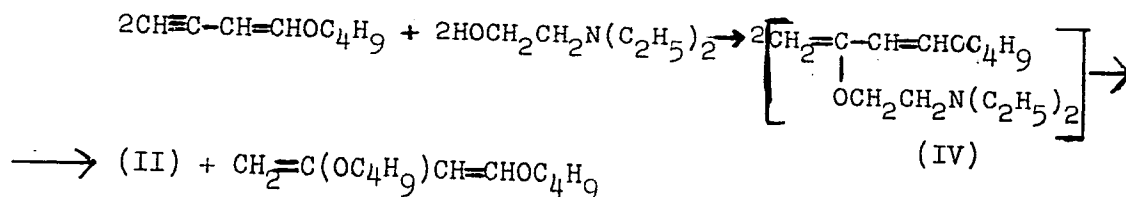
Reaction of Butadiyne With Amino Alcohols
and Amines. I. Synthesis and Conversions
of 1-(β -Diethylamino)-ethoxybut-1-en-3-yne

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SOV/79-30-1-14/78

-buta-1,3-diene (VI) or (VIa), bp 152° (7 mm), n_D^{20}

1.5290. The attempt to prepare compound VI by parallel synthesis from 1-ethylmercaptobut-1-en-3-yne and 1-butoxybut-1-en-3-yne failed. Only di-(β -diethylaminoethoxy)-buta-1,3-diene (II) was obtained. The formation of II in this case can be explained by disproportionation of butoxy-(β -diethylaminoethoxy)-buta-1,3-diene (IV) into symmetric dialkoxybuta-1,3-dienes.



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Reaction of Butadiyne With Amino Alcohols
and Amines. I. Synthesis and Conversions
of 1-(β -Diethylamino)-ethoxybut-1-en-3-yne

77353
SOV/79-30-1-14/78

The authors wish to thank B. V. Lopatin for spectral analysis of the prepared compounds. There are 11 references, 5 Soviet, 5 German, 1 U.S. The U.S. reference is: Copenhaver, J. W., Bigelon, M. H., Acetylene and Carbon Monoxide Chemistry, 305 (1949).

ASSOCIATION: Institute of Organic Chemistry of the Academy of Sciences, USSR (Institut organicheskoy khimii Akademii nauk SSSR)

SUBMITTED: October 15, 1958

Card 7/7

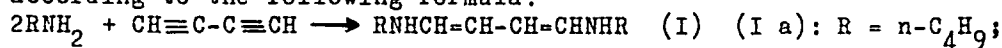
84866

S/079/60/030/010/002/030
B001/B075

11. 1340

AUTHORS: Shostakovskiy, M. F., Chekulayeva, I. A., and Kondrat'-
yeva, L. V.TITLE: Reaction of Diacetylene With Amino Alcohols and Amines.
II. Synthesis of N-Alkyldiamino-1,4-butadienes-1,3 and
N,N-Dialkylamino-1-buten-1-ines-3 7PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 10,
pp. 3179-3183

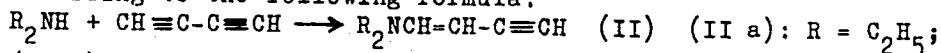
TEXT: The authors had shown in Ref. 4 that the reactions of diacetylene with aliphatic amines and β -(dialkylamino) ethanols start at room temperature and proceed exothermically without a catalyst. This paper gives a detailed description of these reactions in which the nature of the initial amine plays an essential part. Thus, primary amines react with diacetylene to form N-alkyldiamino-1,4-butadienes-1,3 (I) (80% yield) according to the following formula:



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Reaction of Diacetylene With Amino Alcohols and Amines. II. Synthesis of N-Alkyldiamino-1,4-butadienes-1,3 and N,N-Dialkylamino-1-buten-1-ines-3 S/079/60/030/010/002/030
B001/B075

(I b): $n-C_5H_{11}$; (I v): $iso-C_5H_{11}$. Secondary amines react under analogous conditions, forming N,N-dialkylamino-1-buten-1-ines-3 (II) (60% yield) according to the following formula:



(II b): $n-C_4H_9$; (II v): $n-C_5H_{11}$. The addition of the amines to compound (II) requires harder conditions. The diene structure of the reaction products was proved by spectral analysis and by diene synthesis with ethyl vinyl sulfone. The structure of the products obtained by reacting diacetylene with secondary amines was proved by hydrolysis. The synthesized products are unstable liquids which are only stable when kept in sealed ampoules between -50° and -70° . Dienes (I) and (III) absorb carbon dioxide from the air and form solid, stable carbonates. The spectral analysis carried out by B. V. Lopatin confirmed the presence of the group $-C \begin{smallmatrix} \text{=O} \\ \text{<-} \end{smallmatrix}$ in the dienes obtained. There are 1 table and 6 references:

3 Soviet, 2 German, and 1 US.

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84667

53610

2209 only

S/020/60/135/001/020/030
B016/B067

11.2.240

AUTHORS:

Shostakovskiy, M. F., Corresponding Member AS USSR,
Chekulayeva, I. A., Kondrat'yeva, L. V., and Lopatin, B.V.

TITLE:

Structure and Some Properties of the Products of Interaction Between Diacetylene and Alkyl Amines

PERIODICAL:

Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 1, pp.101-104

TEXT: In studying the reaction of diacetylene with primary and secondary alkyl amines (Ref. 1) the authors observed that the N-alkyl-diamino-1,4-butadienes-1,3 and the N,N-dialkyl-amino-1-butenines-3, respectively, are the main products. The authors succeeded in isolating the geometric isomers of N,N-diethyl-amino-1-buten-1-ine-3 (I and II) from the reaction of diacetylene with diethyl amine. The chemical transformations and the data of spectral analysis prove that I and II have cis- and trans-structures, respectively. On heating, isomer I passes over into II. The UV spectrum of II is more intensive than that of I. In the IR spectrum of I, no absorption bands were observed in the range of from 800 to 1000 cm^{-1} , in the IR spectrum of II, however, an intensive absorption band is observed at 945 cm^{-1} which is characteristic of a trans-configuration (Table 1).

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Structure and Some Properties of the Products S/020/60/135/001/020/030
of Interaction Between Diacetylene and B016/B067
Alkyl Amines

Furthermore, an intensive absorption band is observed in the spectrum of substance I at 692 cm^{-1} which is interpreted as the CH-vibrational deformation of the isomer. In spectrum II, no corresponding band exists in this region. The IR spectra of the isomers I and II were taken on a spectrophotometer of the type UR-10. The pictures showed that the bands of the double bond are split into two components. The intensities of the components are not equal. Substance I and II may only be geometrical or place isomers: $(\text{C}_2\text{H}_5)_2\text{NCH}=\text{CH}-\text{C}=\text{CH}$ and $\text{CH}_2=\text{CN}(\text{C}_2\text{H}_5)_2-\text{C}\equiv\text{CH}$. In the range $885-895\text{ cm}^{-1}$ and $3075-3095\text{ cm}^{-1}$ of the IR spectrum of both substances, no absorption bands are observed which are characteristic of a terminal double bond. This confirms the cis-trans isomerism. On the basis of the investigation of products of the addition of amines (III), alcohols (IV), and mercaptans (V) to I and II, the place isomerism seems to be excluded (see Scheme). In the reaction of n-amyl amine with the isomers I and II, 1,4-amino-substituted butadienes (III) were formed under analogous conditions which

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Structure and Some Properties of the Products S/020/60/135/001/020/030
of Interaction Between Diacetylene and Alkyl Amines B016/B067

had the same physico-chemical constants, formed the same picrates, and also had similar IR spectra. The IR spectra of products of the addition of butyl alcohol (IV) and ethyl mercaptan (V) to I had no absorption bands corresponding to the terminal double bond. This excludes the presence of this bond in the initial isomers. Hence, the addition with the formation of I is the most essential point in the reaction of diacetylene with diethyl amine. This agrees with the results obtained by the ion reaction of the thiols with diacetylene which is stereospecific and proceeds according to the method of the "trans-addition" rule. N-butyl-diamino-1,4-butadiene-1,3 (VI) with cis-cis configuration of the substituents with respect to the double bonds is the main product resulting from the reaction of diacetylene with n-butyl amine. The structure of VI was confirmed by a diene synthesis and by data of spectral analysis. IR spectra of butadiene VI in a polar and a non-polar solvent showed that the position of the absorption bands of $>C=N$ and $>C=C<$ bonds was only slightly influenced (Table 2). The Raman spectrum showed only one line in the region of 1600 cm^{-1} . The bond $>C=N$ (1684 cm^{-1} in the IR spectrum) was also present

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Structure and Some Properties of the Products S/020/60/135/001/020/030
of Interaction Between Diacetylene and Alkyl Amines B016/B067

in a second substance which was formed in a small amount in the reaction of diacetylene with n-butyl amine. This substance will be further investigated. There are 1 figure, 3 tables, and 3 references: 2 Soviet and 1 US.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR
(Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: July 18, 1960

Card 4/4

SHOSTAKOVSKIY, M.F.; CHEKULAYEVA, I.A.; KONDRAT'YEVA, L.V.

Reactions of diacetylene with amino alcohols and amines. Part 2:
Synthesis of N-alkyl-1,4-diamino-1,3-butadienes and N,N-dialkyl-
amino-1-buten-3-ynes. Zhur.ob.khim. 30 no.10:3179-3183 0 '61.
(MIRA 14:4)

1. Institut organicheskoy khimii AN SSSR.
(Butadiene) (Butenyne)

5.3832

40569

S/O20/62/146/002/011/013
B101/B144

AUTHORS: Shostakovskiy, M. F., Corresponding Member AS USSR,
Chekulayeva, I. A., Kondrat'yeva, L. V.

TITLE: Reactivity of ethinyl vinyl compounds containing nitrogen

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 146, no. 2, 1962, 376-379

TEXT: The effect of nitrogen atoms on the hydrolyzability of triple bonds in compounds with the general structure $R_2NCH=CH-C\equiv CH$ was studied. In N,N-dimethyl-amino-1-butene-1-yne-3 and the corresponding diethyl compound, the H_2O addition takes place without a catalyst even at room temperature.

The corresponding N,N-dialkyl vinyl ketones $R_2NCH=CH-CO-CH_3$ are formed.

The presence of carbonyl groups conjugated with the double bond was proved by IR spectra, and the structure was confirmed by a color reaction for methyl ketone. The corresponding dibutyl and dipentyl compounds hydrolyze more slowly. Dialkyl-aminobutenines react with water, aliphatic alcohols, and amines under less severe conditions than β -dialkyl aminoethoxy butenines. 1-(β -diethylamino)-ethoxy butene-1-yne-3 did not hydrolyze at
Card 1/2

Reactivity of ethinyl...

S/G20/62/146/002/011/013
B101/B144

room temperature. Biosynthesis is attributed to the action of biocatalysts and to the formation of similar compounds reacting under mild conditions. There is 1 figure. *f*

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: May 25, 1962

Card 2/2

SHOSTAKOVSKIY, M.F.; CHEKULAYEVA, I.A.; KONDRAT'YEVA, L.V.

Reactivity of nitrogen-containing ethynylvinyl compounds. Dokl.
AN SSSR 146 no.2:376-379 S '62. (MIRA 15:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
2. Chlen-korrespondent AN SSSR (for Shostakovskiy).
(Unsaturated compounds) (Nitrogen compounds)

DIDENKO, N.V.; KONDRAT'YEVA, L.V.

Reaction conditions for the preparation of α -isoamylacrylic acid.
Ukr.khim.zhur. 29 no.1:80-81 '63. (MIRA 16:5)

1. Odesskiy gosudarstvennyy universitet.
(Acrylic acid)

SHOSTAKOVSKIY, M. F.; CHEKULAYEVA, I. A.; KONDRAT'YEVA, L. V.; L
LOPATIN, B. V.

Interaction of diacetylene with amino alcohols and amines.
Report No. 3: Stereochemistry of the addition of alkyl amines
and dialkyl amino alcohols to the triple bond of diacetylene
and 1-buten-3-yne. Izv. AN SSSR Otd. khim. nauk no.12:2217-
2220 D '62. (MIRA 16:1)

1. Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR.

(Amines) (Alcohols) (Butadiyne)
(Butenyne)

SHOSTAKOVSKIY, M.F.; CHEKULAYEVA, I.A.; KONDRAT'YEVA, L.V.

Interaction of diacetylene with bifunctional compounds.
Dokl. AN SSSR 153 no.6:1353-1355 D '63. (MIRA 17:1)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
2. Chlen-korrespondent AN SSSR (for Shostakovskiy).

KONDRAT'YEVA, L.V.; CHEKULAYEVA, I.A.; SHOSTAKOVSKIY, M.F.; LOPATIN, B.V.

Addition of unsaturated amines to diacetylene. Izv. AN SSSR.
Ser. khim. no. 1:160-162 Ja '64. (MIRA 17:4)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

L 2169-66 EWT(m)/EPF(c)/EWP(j)/T/EWA(c) RM

ACCESSION NR: AP5024499

UR/0191/65/000/010/0011/0013

AUTHOR: Kafengauz, A. P.; Inokhodova, A. A.; Kondrat'yeva, L. V.

TITLE: Elastic polyurethane foams

SOURCE: Plasticheskiye massy, no. 10, 1965, 11-13

TOPIC TAGS: foam plastic, polyurethane, oligomer, elasticity

ABSTRACT: The proposed synthesis of elastic polyurethane foams is based on the formation of a partially cross-linked prepolymer having a higher molecular weight than that of the prepolymers usually used. The prepolymer is synthesized in two stages: the polyetherisocyanate is prepared by reacting toluylene diisocyanate (TDI) and propylene oxide oligomer (NCO:OH molar ratio of 1.05:1) for 2 hours at 90C. The polyetherisocyanate is then mixed with additional TDI while maintaining pH of 5-5.6. The desired amount of crosslinkage in this prepolymer is controlled by viscosity measurements. The polyurethane foam is made by vigorously agitating the prepolymer for 10-20 seconds with an aqueous catalyst

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L 2169-66

ACCESSION NR: AP5024499

solution containing a surfactant, pouring into a form and curing for 2 hours at 60C. The 2,4-isomer of TDI and 65/35 and 80/20 mixtures of 2,4 and 2,6 isomers of TDI were tried; the product of TDI 80/20 gives the best physical-mechanical properties. A mixture of tertiary amines or a mixture of tertiary amine and organotin catalyst is suitable. Polyoxypropylenetriol having a molecular weight of about 3000, or mixtures of such triol with diols having a molecular weight of about 2000 as the oligomer, give a product with the highest physico-mechanical indices. Orig. art. has: 3 tables

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, OC

NR REF SOV: 001

OTHER: 007

Card 2/2 *dg*

CHEKULAYEVA, I.A.; KONRAT'YEVA, L.V.

Interaction of acetylene and acetylene compounds with amines and ammonia. Usp. khim. 34 no.9:1583-1606 S '65.

(MIRA 18:10)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.

BAL'YAN, L.G., red.; KONDRAT'YEVA, M.A., tekhn.red.

[Fur articles of clothing] Mekhovaia odezhda. Izd.ofitsial'noe.
Moskva, 1959. 227 p. (MIRA 12:9)

1. Russia (1923- U.S.S.R.) Vsesoyuznyy komitet standartov.
(Fur)

KONDRATYEVA, M. A.

STUDIES OF LARGE IONIZATION BURSTS BY THE METHOD
OF "CONTROLLED PHOTOGRAPHIC EMULSIONS"

S. I. Brikker, N. L. Grigorov, M. A. Kondratyeva,
A. V. Podgurskaya, A. I. Savelieva, V. Ya. Shestoperov

1. Electron-sensitive photographic plates were irradiated at 3200 m. above sea level in a special apparatus, which a) recorded large ionization bursts with the number of particles ≈ 1000 , and b) indicated through which of the photographic plates (covering the entire sensitive area of the apparatus) the shower has passed that produced the given "burst".

2. The analysis showed that:

- a) the majority of "bursts" are created by showers of electrons generated in the apparatus by nuclear-active particles of high-energy;
- b) the showers most often consist of one principal "core" apparently created by a single gamma-quantum of sufficiently high energy;
- c) in cases when the shower contains several laterally separated "cores", one of the "cores" is, as a rule, responsible for the bulk of the particles in the shower, that is, in the recorded ionization "burst";
- d) if in showers that contain two or more "cores", the total energy of the whole shower is taken as unity, the energy distribution of the individual showers comprising the given shower may be approximated by a power function.

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

21 (7)
AUTHORS:

Grigorov, N. L., Kondrat'yeva, M. A.

SOV/56-37-3-16/62

TITLE:

Investigation of a Shower of 200000 Particles, Recorded in Nuclear Photographic Plates

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37, Nr 3 (9), pp 684-689 (USSR)

ABSTRACT:

On a NIKFI-R (200 μ)-type nuclear emulsion plate, which was exposed in 1956 on Mount Aragats, a very strong electron-photon shower was found; the shower axis formed an angle of 15° with the normal to the plate surface. Figure 1 shows a microphotograph of the central part of this shower. The particles of the shower and of the background were drawn on paper by means of the apparatus RA-1 and a MBI-2-type-microscope (1350-fold enlargement); for this purpose four ranges perpendicular to one another (Fig 2) were selected. The background was determined as amounting to $(1.02 \pm 0.03) \cdot 10^{-3}$ -particles/ μ^2 . The density distribution $\varrho(r)$ is (in logarithmic coordinates) represented by figure 3. Both the data obtained from photometrization and those obtained by direct counting of the particles are entered for comparison with the theoretical curve (Ref 2) which has been calculated for

Card 1/3

Investigation of a Shower of 200000 Particles,
Recorded in Nuclear Photographic Plates

SOV/56-37-3-16/62

$E_0 = 4 \cdot 10^{13}$ ev and for a shower at the maximum of its development. Agreement is very good. The number of particles is obtained by the summation of the particles in three ranges: 1. $0 \leq r \leq 250 \mu$: $N_1 = 10000$ particles; 2. $250 \mu \leq r \leq 10000 \mu$: $N_2 = 150000$ particles; 3. $r > 10^4 \mu$, if $\varrho(r) \sim r^{-3}$: $N_3 = 88000$ particles. By taking an error of 20% into account, $N_0 = (248 \pm 50) \cdot 10^3$ is obtained for the total particle number. Assuming the shower to have attained the maximum of its development, one may put: $N_{\max} = 0.17(E/\beta) / \sqrt{\ln(E/\beta)} = N_0$ and for the energy E of the soft component $E \approx E_0 = (3.6 \pm 0.7) \cdot 10^{13}$ ev is obtained. Figure 4 shows the angular distribution of the particles at a distance of 100 μ (a) and 600 μ (b) from the shower center. Particle distribution with respect to the shower axis is represented by the mean angle $\bar{\lambda}$, which characterizes the predominating direction; figure 5 shows the function $\bar{\lambda}(r)$. Particle distribution with respect to the mean value of direction is represented in figure 6. ($\Delta \bar{\lambda}(r)$). $\Delta \bar{\lambda}$ denotes the

Card 2/3

S/058/61/000/010/016/100
A001/A101

3.24/10

AUTHORS: Grigorov, N.L., Kondrat'yeva, M.A., Savel'yeva, A.I., Sobinyakov, V.A., Podgurskaya, A.V., Shestoporov, V.Ya.

TITLE: Methods of studying the elementary process of interaction with atomic nuclei of nuclear-active particles with energies of 10^{11} - 10^{14} ev developed at the Moscow University

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 96, abstract 10B499 ("Tr. Mezhdunar. konferentsii po kosmich. lucham, 1959, v. 1", Moscow, AN SSSR, 1960, 122 - 133)

TEXT: The authors describe the devices of the Cosmic Radiation Laboratory at the MGU for studying the elementary process of interaction with atomic nuclei of nuclear-active particles with energies of 10^{11} - 10^{14} ev (with the use of a large number of counters, ionization calorimeters, systems of controlled photo-plates).

[Abstracter's note: Complete translation]

Card 1/1

33316

S/560/61/000/010/014/016

D299/D302

11.1540
AUTHORS:

Grigorev, N. L., Zhuravlev, D. A., ~~Kondrat'yeva~~
M. A., Rapoport, I. D., and Savenko, I. A.

TITLE:

Search for antimatter in cosmic radiation and space

SOURCE:

Akademiya nauk SSSR. Iskusstvennyye sputniki Zemli. no. 10. Moscow, 1961, 96-97

TEXT: An emulsion flask--containing 489 emulsion layers of type 5P (BR), size 10 x 10 cm², thickness 400 μ--was placed on the 2nd Soviet Sputnik. The flask was exposed for about 24 hours at an altitude of 300 km. Brought back to earth, the flask was chemically treated and then analyzed. The analysis was carried out by means of the microscope МБВ-2 (MBI-2) with total magnification 105. Thereby, the multi-charge nuclei and "stars" created by these nuclei, which were stopped in the

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S/560/61/000/010/014/016
D299/D302

Search for antimatter...

emulsion, were observed. In a volume of 656 cm³ of emulsion, 442 ordinary nuclei were found, as well as 320 "stars." None of the "stars" possessed the characteristics pertaining to annihilation of multi-charge particles which come to rest. Assuming that antinuclei have the same energy spectrum as ordinary nuclei, and taking into consideration that out of 442 multi-charge nuclei not a single anti-nucleus was found, it follows that the fraction of antinuclei with $Z > 2$ in cosmic radiation does not exceed 0.23% of ordinary nuclei of the same charge. A similar result was obtained by D. M. Haskin et al (Ref. 1: Trudy Mezhdunarodnoy konferentsii po kosmicheskim lucham (International Conference on Cosmic Radiation), v. III. Izd-vo AN SSSR, 1960, p. 138). Assuming antimatter to be scattered in the solar system as individual atoms, it is possible to make an upper estimate of antimatter density as follows: The flow of gamma-quanta with energy of the order of 10^8 ev is

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Search for antimatter...

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D299/D302

$$J_{\gamma} \approx 2 \cdot 10^{30} \bar{n}_{\pi^0} \bar{\rho}_a \text{ cm}^{-2} \cdot \text{sec}^{-1}, \text{ where } \bar{n}_{\pi^0} \text{ is the mean}$$

number of π^0 -mesons formed by the annihilation of the anti-nucleus. As an upper (greatly over-rated) estimate for J_{γ} , it is possible to take a flow of gamma-quanta which would give rise (at geomagnetic latitude 40°) to a charged-particle flow with energy $E \geq 10^8 \text{ ev}$, provided all the particles are considered

as electrons. Hence, $J_{\gamma} < 10^{-1} \text{ cm}^{-2} \text{ sec}^{-1}$, and

$\bar{\rho}_a < \frac{1}{3} 10^{-31} \text{ gm} \cdot \text{cm}^{-3}$. Assuming that the density of matter in the solar system is $\bar{\rho} \sim 10^{-24} \text{ gm} \cdot \text{cm}^{-3}$, one obtains

$$\frac{\bar{\rho}_a}{\bar{\rho}} < \frac{1}{3} 10^{-7}. \text{ There are 2 references: 1 Soviet-bloc and 1}$$

Card 3/4

GRIGOROV, Naum Leonidovich; KONDRAT'YEVA, Marina Aleksandrovna;
RAPOPORT, Il'ya Davidovich; FRANK, I.M., red.; GRIGOROVA,
V.A., red.; FLAKSHE, L.Yu., tekhn. red.

[Cosmic rays]. Kosmicheskie luchy. Moskva, Fizmatgiz. 1962.
83 p. (Praktikum po iadernoi fiziki, no.2). (MIRA 16:4)

1. Chlen-korrespondent AN SSSR (for Frank).
(Cosmic rays)

GRIGOROV, N.L.; ZHURAVIEV, D.A.; KONDRAT'YEVA, M.A.; RAPOPORT, I.D.;
SAVENKO, I.A.

Study of cosmic radiation outside the atmosphere. Kosm. issl.
1 no.3:436-442 N-D '63. (MIRA 17:4)

L 14277-63

EWT(1)/FCC(v)/FS(v)/EDS/EEG-2/ES(v) AFFTC/ASD/AFMDC/APGC/

ESD-3 Pa-4/Pi-4/Pq-4 TT/GW/JFW

ACCESSION NR: AP3005304

S/0056/63/045/002/0394/0394

AUTHOR: Grigorov, N. L.; Zhuravlev, D. A.; Kondrat'yeva, M. A.; Rapoport, I. D.; Savenko, I. A.

TITLE: Search for antimatter² in cosmic rays^{1/9}

84
83

SOURCE: Zhur. eksper. i teoret. fiz., v. 45, no. 2, 1963, 394

TOPIC TAGS: cosmic-ray antimatter, cosmic ray, antimatter, spaceflight

ABSTRACT: On 19 Aug 1960 the Second Ship-Satellite [the "Strelka"-^{1/9}"Belka" flight] was sent into space carrying an emulsion stock of 489 layers of type-BR emulsion 400 μ in total thickness. The open emulsion stock was kept for approximately 24 hr at an altitude of 300 km and later examined with a 105X microscope for the purpose of detecting multiply-charged nuclei stopped by the emulsion and "stars" produced by the nuclei. The emulsion stock was found to have 1079 stopped nuclei of atomic number $Z > 2$ and 748 "stars", which could not be attributed to the annihilation of stopped antinuclei. It is concluded that the number of antinuclei with $Z > 2$ in the primary cosmic rays does not exceed 0.1%, at least for the case of low-energy antinuclei.

ASSOCIATION: Institute of Nuclear Physics of Moscow State University.
Card 1/4

GRIGOROV, K.I.; ZHURAVLEV, E.A.; PODOLSKAYA, N.A.; RAPOPORT, I.D.;
SAVITSKI, I.A.

Use of nuclear photoemulsions in studying the nature of cosmic
ray particles beyond the atmosphere. Izv. AN SSSR Ser. fiz. 28
no.12:2025-2038 D 141 (MIRA 18:2)

~~KONDRAT'YEVA, M. G.~~

Lithologic characteristics of Devonian sediments in Teplovka District.
Biol. MOIP. Otd. geol. 24 no.6:13-28 '49. (MIRA 11:6)
(Teplovka District—Rock, Sedimentary)

AVDUSIN, P.P.; TSVETKOVA, M.A.; KONDRAT'YEVA, M.G.; FEDOROV, S.F.,
POLYAKOVA, T.V., tekhnicheskiy redaktor.

[Lithology and facies of Paleozoic deposits in the Saratov and
Kuybyshev areas of the Volga Valley] Litologiya i fatsii
paleozoiskikh otlozhenii Saratovskogo i Kuibyshevskogo Povolzh'ia.
Moskva, Izd-vo Akademii nauk SSSR, 1955. 137 p. 22 plates.
[Microfilm] (MLRA 8:9)

1. Akademiya nauk SSSR, Institut nefti. 2. Chlen-korrespondent Akademii
nauk SSSR (for Fedorov).
(Volga Valley--Petrology)

KONDRAT'YEVA, M.G., OBRUCHEV, D.V.

Age of the Baylin series on the right bank of the Volga river
near Saratov. Dokl. AN SSSR 105 no.5:1074-1075 D '55. (MLRA 9:3)

1. Predstavleno akademikom H.M. Strakhovym.
(Saratov Province--Geology, Stratigraphic)

KONDRAT'YEVA, M. G.

NALIVKIN, V.D.; ROZANOV, L.N.; FOTIADI, E.E.; YEGOROV, S.P.; YENGURAZOV, I.I.; KOVALEVSKIY, Yu.S.; KOZACHENKO, A.A.; KONDRAT'YEVA, M.G.; KUZNETSOV, G.A.; KULIKOV, F.S.; LOBOV, V.A.; SOPRONITSKIY, P.A.; TATARINOV, A.G.; PRITULA, Yuriy Aleksandrovich, redaktor; DAYEV, G.A., vedushchiy redaktor; GENNAD'YEVA, I.M., tekhnicheskii redaktor.

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(Volga Valley--Petroleum geology)
(Ural Mountain Region--Petroleum geology)

KONDRAT'YEVA, M.G., kand.geol.-mineral.nauk

Lithology, facies, and oil and gas potentials of Devonian sediments
in the Volga Valley portion of Saratov Province. Trudy VNIIGNI no.22:
123-130 '59. (MIRA 13:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologo-razvedochnyy neftyanoy
institut.

(Saratov Province--Petroleum geology)
(Saratov Province--Gas, Natural--Geology)

KONDRAT'YEVA, M.G.

Regularities in the distribution of facies and thicknesses of the Devonian in the Volga Valley portion of Saratov Province. Trudy VNIGNI no.28:90-95 '60. (MIRA 14:4)

1. Nizhne-Volzskiy filial Vsesoyuznogo nauchno-issledovatel'skogo geologo-razvedochnogo naftyanogo instituta.
(Saratov Province—Geology, Stratigraphic)

BALAYEV, V.A.; KONDRAT'YEVA, M.G.

Oil and gas potentials of Devonian sediments in the southwestern regions of Saratov Province. Izv. vys. ucheb. zav.; neft' i gaz 3 no.10:3-8 '60. (MIRA 14:4)

1. Saratovskiy gosudarstvennyy universitet imeni N.G.Chernyshevskogo.
(Saratov Province--Petroleum geology)
(Saratov Province--Gas, Natural--Geology)

KONDRAT'YEVA, M.G.

Brookite, anatase, and garnet from Devonian deposits of the Saratov area of the Volga Valley. Dokl. AN SSSR 135 no.6:1488-1490 D '60.
(MIRA 13:12)

1. Nizhne-Volzhskiy filial Vsesoyuznogo nauchno-issledovatel'skogo geologorazvedochnogo neftyanogo instituta. Predstavleno akademikom N.M. Strakhovym.

(Saratov Province--Mineralogy)

BALAYEV, V.A.; VEL'KOV, A.M.; KONDRAT'YEVA, M.G.

Jointing of Devonian carbonate rocks in the Volga Valley
portion of Saratov Province. Izv.vys.ucheb.zav.; neft' i gaz 4
no.7:17-22 '61. (MIRA L4:10)

1. Saratovskiy gosudarstvennyy universitet im. M.G.Chernyshevskogo.
(Saratov Province--Petroleum geology)
(Joints (Geology))

SKLOVSKIY, A.M.; VOLOKH, A.G.; KARPOV, P.A.; KONDRAT'YEVA, M.G.; LYASHENKO, A.I.; FEDOROVA, T.I.; SHEVCHENKO, V.I.

Devonian sediments of the western part of the northern Caspian oil- and gas-bearing basin. [Trudy] NILneftegaza no.10:127-181 '63. (MIRA 18:3)

1. Nauchno-issledovatel'skaya laboratoriya geologicheskikh kriteriyev otsenki perspektiv neftegazonosnosti; Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut; Nizhnevolzhskiy nauchno-issledovatel'skiy institut geologii i geofiziki i Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti.

FILIPPOV, I.V.; KAGAN, S.Z.; KONDRAT'YEVA, M.I.

Using the extraction method for the purification of phenol-bearing wastes from coke and coal chemical plants. Koks i khim. no.12:46-49 '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti (for Filippov). 2. Moskovskiy khimiko-tekhnologicheskiy institut im. D.I. Mendeleeva (for Kagan, Kondrat'yeva).

KONDRAT'YEVA, Margarita Maksimovna; NARUSOVA, I.Ya., red.; DOTSENKO,
~~A.A.,~~ tekhn. red.

[Maternity and physical culture] Materinstvo i fizkul'tu-
ra. Izd.2. Moskva, Fizkul'tura i sport, 1963. 48 p.
(MIRA 17:2)

*

VYAL'TSEV, A.N.; KEDROV, B.M.; KONDRAT'YEVA, N.A., aspirant;
RODNYI, N.I.; SMIRNOV, P.V., aspirant; CHERNAVSKIY,
S.Ya., aspirant; TENIKOV, A.G., red.

[Contradictions in the development of natural science]
Protivorechiia v razvitii estestvoznaniia. Moskva, Nauka,
1965. 351 p. (MIRA 18:9)

1. Akademiya nauk SSSR. Institut istorii yestestvoznaniya
i tekhniki. 2. Chlen-korrespondent AN SSSR (for Kedrov).

137-1958-2-2684

Kondrat'yeva, N. B.
Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 69 (USSR)

AUTHORS: Fridlyander, I. N., Kondrat'yeva, N. B.

TITLE: The Structure and Properties of a Light-gage Sheet Bar of Alloy D 1 (an Aircraft Duralumin) (Issledovaniye struktury i svoystv tonkoy listovoy zagotovki iz splava D1)

PERIODICAL: V sb.: Metallurg. osnovy lit'ya legkikh splavov. Moscow, Oborongiz, 1957, pp 400-413

ABSTRACT: A study was made of the structure and properties of a cast billet and rolled sheets of the Al alloy D 1 (an aircraft Duralumin). It was found that when the Fridlyander-Golovkin method was used to cast a light-gage sheet bar, the strip was found to contain lower zones of equilibrium crystals and upper zones of fibrous crystals which attained a length of several meters. The appearance of the latter was caused by superheating the melt till the moment that crystallization began, followed by a rapid and rigidly controlled elimination of the heat. The elongation undergone by the fibrous crystals along the length of the fibers was extremely great, exceeding by 2-4 times the elongation undergone by the transverse specimens and by the specimens cut from the region of equiaxial

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137-58-6-12784

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 227 (USSR)

AUTHORS: Kondrat'yeva, N.B., Fridlyander, I.N.

TITLE: Investigation of the Possibility of Producing Finer Grain in Wire Made from Billets of the Cast Alloys D18, DZP, and V65 (Issledovaniye vozmozhnosti izmel'cheniya zeren v provoloke, poluchennoy iz litoy zagotovki splavov D18, DZP i V65)

PERIODICAL: V sb.: Metallurg. osnovy lit'ya legkikh splavov. Moscow, Oborongiz, 1957, pp 414-428

ABSTRACT: It is established, that the cause of many rejects by reason of cracks and lumpy surface of the locking heads of rivets is the coarse-grain structure in the finished wire. The possibility of producing rivet wire with fine-grain structure from cast alloy ingots D18, DZP, and V65 has been studied; the effect of the temperature of the melt in the furnace upon the structure of the cast ingot and the effect of the temperature of intermediate annealings upon the structure and properties of the finished wire were examined. It has been established that for the formation of uniform fine-grain structure in the finished wire it is necessary to combine the lowest possible temperatures of

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137-58-6-12784

Investigation of the Possibility (cont.)

casting the ingots with sufficiently high temperatures of intermediate annealings. A casting temperature of 705°C and annealing temperatures of 410-430° are termed optimal for the abovementioned alloys. The work performed establishes the possibility of producing high-quality riveting wire up to 5 mm diam from ingots of the cast alloys D18, DZP, and V65.

N.P.

1. Wire--Production
2. Wire--Mechanical properties
3. Metals--Casting
4. Grains (Metallurgy)--Metallurgical effects
5. Rivets--Effectiveness

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37979

S/137/62/000/005/104/150
A006/A101

18.1210 (240P)

AUTHORS: Nikitayeva, O. G., Kutaytseva, Ye. I., Romanova, O. A., Karpovich, Yu. M., Kondrat'yeva, N. B.

TITLE: The effect of aluminum purity on the mechanical properties and heat-resistance of aluminum alloys

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 71, abstract 51432 (V sb. "Deformiruyemye alyumin. splavy", Moscow, Oborongiz, 1961, 30 - 43).

TEXT: The authors studied the effect of Fe and Si admixtures upon the properties of deformed Al-alloys at room and higher temperatures. For the preparation of grade 16, 19, AKЧ -1 (AKCh-1), Д 20 (D20), Д 21 (D21), B 95 (V95) and AMr 6 (AMg6) alloys, three Al grades were used, namely: Al A00, and AB000 (AV000); Mg- and Zn-metal, and addition-alloys Al-Cu, Al-Mn, Al-Ti, Al-Ni, Al-Fe. The strength of pressed rods made of D16 and D19 alloys increases somewhat at room temperature with a higher purity of the initial Al. The mechanical properties of forgings in short-lasting tension of D20 and D21 alloys, do practically

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S/137/62/000/005/104/150
A006/A101

The effect of aluminum purity on...

not depend on the initial aluminum grade. The strength of AKCh-1 alloy forgings decreases with higher Al purity. The endurance strength of semi-products of all alloys decreases with a higher purity of the initial Al. A decrease in contamination of V95 and V96 alloys reduces somewhat the number of cycles until the breakdown in repeated static-loading tests. It is not expedient to use high-purity Al (AV000) to raise the heat-resistance of sheets and forgings made of Al alloys at 200°C.

T. Rumyantseva

[Abstracter's note: Complete translation]

Card 2/2

DAVIDOV, Yu.P.; POKROVSKIY, G.V.; KONDRAT'YEVA, N.B.; Primali
uchastiye: KUZ'MICHEV, M.D.; LOMONOSOVA, A.A.; KUZ'MINA, S.P.

Mechanical properties and the forgeability of alloys of the
system aluminum - magnesium. Alum. splavy no.3:285-299 '64.

Forgeability of peened magnalium-type alloys. Ibid.:300-312
(MIRA 17:6)

ACCESSION NR: AT4037669

S/2981/64/000/003/0285/0299

AUTHOR: Davy*dov, Yu. P.; Pokrovskiy, G. V.; Kondrat'yeva, N. B.

TITLE: Mechanical properties and stampability of magnalium alloys

SOURCE: Alyuminiyevy*ye splavy*, no. 3, 1964. Deformiruyemy*ye splavy* (Malleable alloys), 285-299

TOPIC TAGS: aluminum alloy, magnalium, magnalium mechanical property, magnalium stampability, magnalium corrosion resistance, annealing, cold hardening, magnalium cupping, magnalium flanging, magnalium flat extrusion, magnalium round extrusion

ABSTRACT: The authors report on a study of mechanical properties and stampability of magnalium sheets from series AMg1 through AMg9 (see Table 1 of the Enclosure). The material is classified as soft (annealed), quarter-hardened (5-15% reduction), semi-hardened (20-30%) or hardened (35-50%). Mechanical properties of annealed material varied as follows for subsequent cold reductions of 10-15%, 25-30% and 40-45% respectively: tensile strength plus 20-30, 30-40 and 40-50%; yield plus 70-90, 120-130 and 200-250%; elongation minus 40-60, 60-70 and 70-75%. Temperatures up to 100C did not affect mechanical properties. Tensile strength and yield dropped sharply at 100-250C and more gradually at 250-370C, to levels of 3-6 and 2-5 kg/mm², respectively at 350-370C. Elongation increased sharply at

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ACCESSION NR: AT4037669

100-370C, up to 100% at the latter temperature. Stampability was good, the material did not require laborious finishing procedures, ratio of yield to tensile strength averaged 0.5, lateral contraction and relative elongation approximated those of sheet aluminum and were higher than for other standard aluminum alloys, and uniform deformability levels were high. Stampability of cold material (cupping, flanging, flat and round extrusion) decreased as Mg increased from 0.5 to 3.6%, then rose again to roughly the original levels as Mg increased further to 9%. It was quite adequate even at its lowest levels (AMg3). Recommendations are given for optimal results of each of the named stamping operations. Best corrosion resistance is retained by annealing at 310-335C for 30 to 180 min. "M. D. Kuz'michev, A. A. Lomonosova and S. P. Kuz'mina also took part in the work." Orig. art. has: 12 graphs, 1 table and 4 formulas.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 04Jun64

ENCL: 02

SUB CODE: MM

NO REV SOV: 000

OTHER: 000

Card 2/4

ACCESSION NR: AT4037669

ENCLOSURE: 01

alloy designation	Chemical composition in %									Mechanical properties		
	Mg	Mn	Ba	Cr	Ti	Fe	Si	Zn	Cu	tensile strength	yield	elongation
AMg1	0,5-1,8	—	—	—	—	<0,05	<0,05	—	<0,01	9,0-15,5	3,4-6,0	20,0-37,7
AMg2	1,8-2,8	0,2-0,6	—	—	—	<0,4	<0,4	—	<0,1	16,9-23,2	7,2-11,2	24,1-27,3
AMg3	3,2-3,8	0,3-0,6	—	—	—	<0,6	0,5-0,8	<0,2	<0,05	22,6-25,2	11,6-13,3	24,8-26,0
AMg4	3,8-4,8	0,3-0,6	—	—	—	<0,4	<0,4	—	<0,05	23,9-28,7	12,4-16,0	25,2-28,2

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ACCESSION NR: AT4037669

ENCLOSURE: 02

AMg5	4,8-5,5	0,3-0,6	—	—	—	<0,5	<0,5	<0,05	29,7-30,7	15,9-17,1	27,0-27,5	
AMg6	5,8-6,8	0,5-0,8	0,0001- 0,005	—	0,02-0,1	<0,4	<0,4	<0,2	<0,1	31,3-34,9	16,0-17,5	27,2-28,8
AMg7	6,8-7,8	0,3-0,5	0,0001- 0,005	До 0,1	—	<0,4	<0,4	—	<0,05	32,2-36,5	15,4-17,2	26,4-29,3
AMg9	8,5-9,5	0,2-0,5	0,0001- 0,005	До 0,1+ + 10 0,1%Zr	—	<0,4	<0,4	—	<0,05	35,4-39,5	16,2-18,1	27,2-30,3

Table 1. Composition and properties of magnalium alloys

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ACCESSION NR: AT4037670

S/2981/64/000/003/0300/0312

AUTHOR: Davy*dov, Yu. P.; Pokrovskiy, G. V.; Kondrat'yeva, N. B.

TITLE: Stampability of cold worked magnalium alloys

SOURCE: Alyuminiyevy*ye splavy*, no. 3, 1964. Deformiruyemy*ye splavy* (Malleable alloys), 300-312

TOPIC TAGS: aluminum alloy, magnalium, malleable alloy, deformable alloy, cold worked alloy, alloy stampability, alloy AMg1, alloy AMg2, alloy AMg3, alloy AMg4, alloy AMg5, alloy AMg6, alloy AMg7, alloy AMg9, alloy D16, alloy hardness, alloy mechanical property, alloy annealing temperature, alloy corrosion resistance

ABSTRACT: A series of magnalium alloys of the system Al-Mg and alloy D16 were tested for stampability characteristics (elongation limit, critical beading factor, extrusion ratio, 90° bend radius) in relation to stamping temperature, duration and temperature of annealing, as well as the level of cold working (10 or 20%). Other tests concerned the effect of annealing temperature on hardness and interrelations between hardness and tensile strength of magnalium alloys. The latter dependence was plotted (see Figure 1 in the Enclosure) and

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