

REF. JOUR. : ZhBiol., No.4, 1959,

No. 15711

TITLE .

ABSTRACT : rape at the beginning of flowering are ( in % )  
water 85.5, protein 3.1, albumin 1.5,  
fats 0.5, cellular tissue 2.7, extract-  
ive substances without nitrogen 5.5, ash 2.7.  
A model system is given of a green conveyor  
for the pig breeding farms in the Gissarskaya  
valley, in which rape has a prominent place.  
-- N.B. Borisova

WORD

: 2/2

DEMIN, Yu.M.

Effect of insulin and  $\gamma$ -aminobutyric acid on the action of  
hyaluronidase. Vop.biokhim. 2:115-127 '61. (MIRA 15:12)

1. Institute of Biochemistry, Academy of Sciences of Armenian  
S.S.R., Erevan.  
(Hyaluronidase) (Insulin) (Butyric acid)

KECHEK, G.A. [deceased]; DEMIN, Yu.M.; OSIPOVA, E.N.

Uptake of glucose by cerebral cortex sections under the effect  
of gamma-aminobutyric acid and insulin. Vop. biokhim. 3:69-  
78 '63. (MIRA 17:12)

1. Institute of Biochemistry, Academy of Sciences of the Armenian  
S.S.R., Erevan.

DEMIR, Yu.M.; MEYELYAN, S.S.; KARAPETYAN, V.S.; OSIPOVA, E.N.; AKOPYAN,  
Dzh.A.

Participation of  $\gamma$ -aminobutyric acid in the metabolism of  
glutamic and aspartic acids, alanine and glutamine and in  
neutralization of ammonia in the brain tissue. Vop. biokhim.  
noz. 1:45-59 '64. (MIRA 18:9)

1. Institut Mekhimi AN ArmSSR.

MAZURENKO, A.P.; DEMIN, Yu.M.

Introducing a butt-alignment machine for short timber assortment.  
Biol. tekhn.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekhn.  
inform. 18 no.10:99-10 0'68. (MIRA 18:12)

L 25804-65 EWG(a)/EWG(c)/EWG(j)/EWG(r)/EWG(v)/EWT(L)/FS(v)-3 Pe-5 33  
 ACCESSION NR: AT5003094 DD/MLX S/0000/64/000/000/0161/0181 20  
 B+1

AUTHOR: Demin, Yu. S.

TITLE: Effects of whole-body vertical vibration and x-rays on the nuclei of bone-marrow cells of mammals

SOURCE: AN SSSR. Institut biologicheskoy fiziki. Vliyaniye ioniziruyushchikh izlucheniy i dinamicheskikh faktorov na funktsii tsentral'noy nervnoy sistemy; voprosy kosmicheskoy fiziologii (Effect of ionizing radiation and dynamic factors on the function of the central nervous system; problems in space physiology). Moscow, Izd-vo Nauka, 1964, 161-181

TOPIC TAGS: vibration effect, radiation effect, x ray, bone marrow cell, mouse, combined effect, whole body vibration, whole body irradiation

ABSTRACT: In order to test the effects of vibration and the combined effects of vibration and x-ray irradiation on the cytological structure of bone-marrow cells, mice were subjected to 20 min of vertical vibration at frequencies of 60 or 70 cps and amplitudes of 0.25 to 0.4 mm, and irradiated with x-ray doses of 50 to 100 r. Four groups of mice were used. The first group was subjected to vibration alone and the second group was exposed to radiation alone. The third group was exposed

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ACCESSION NR: AT5003094

to vibration followed 3 to 5 min later by irradiation, and the fourth group was exposed to irradiation followed 3 to 5 min later by vibration. It was found that vibration increases the number of mitoses in bone-marrow cells. Most of the affected cells showed chromosome adhesions. The number of disturbed mitoses caused by the combined effects of vibration and irradiation did not exceed the number produced by the effects of radiation alone. However, some differences were noted in the types of changes encountered: exposure to combined factors increased the proportion of chromosome adhesions to chromosome aberrations. The mitotic activity picture in bone marrow exposed to a 50-r x-ray dose alone was similar to that produced by the combined effect of vibration and irradiation. Increasing the vibration frequency from 60 cps to 70 cps produced no statistically significant difference in the number of changes in mitotic activity. Orig. art. has: 8 figures and 7 tables. [BM]

ASSOCIATION: none

SUBMITTED: 08Sep64

ENCL: 00

SUB CODE: PH, LS

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3183

Card 2/2

L 17637-65 ENG(j)/ENG(r)/ENT(1)/FS(v)-3/ENG(v)/ENG(a)/ENG(c) Pe-5 ISD/SSD/  
AFWL/ASD(a)-5/AMD/Pb-4 DE/RD

ACCESSION NR: AP5000178

S/0293/64/002/006/0939/0945

AUTHOR: Semin, Ju. S.

TITLE: The combined effects of low-frequency vibration and x-rays B  
on the bone-marrow cells of mammals

SOURCE: Kosmicheskiye issledovaniya, v. 2, no. 6, 1964, 939-945

TOPIC TAGS: vibration, ionizing radiation, bone marrow, mitosis,  
mitotic disruption, spaceflight factor, mouse

ABSTRACT: White mice were subjected to the individual and combined action of vibration and ionizing radiation to determine how these factors effect the cytogenetics of bone marrow. In all, 161 male mice were used, 18 of which served as controls. The animals received 50-r doses of x-rays 3-5 minutes after being subjected to vertical vibration (70 cps; 0.4-mm amplitude; 20-min duration). Experimental animals were divided into 3 groups which 1) received vibration only; 2) received x-ray irradiation only; 3) received both vibration and irradiation. Each of these groups had biological controls. Decapitation was accomplished 1/2, 1, 2 1/2, 5, 7, 10, 15, 18, 24, 28, 32, 36, 42, and 48 hr after exposure to the experimental parameters. Federal Card 1/2



L 17637-65

ACCESSION NR: AP5000178

and tibial marrow was prepared at OC and stained with acetocarmine. Mitotic disruption was studied at anaphase and early and mid telophase. A detailed statistical analysis of the results revealed that vibration alone increased the frequency of mitotic disruption characterized by increased chromosomal adhesion. Vibration prior to irradiation did not increase the number of mitotic disruptions, but it decreased the number of chromosomal rearrangements and increased the number of chromosomal adhesions. In general, it was concluded that combined vibration and irradiation did not increase the frequency of mitotic disruption any more than did irradiation alone; thus, the author feels that the vibration frequency may have been too low to produce a significant effect. It is felt that the mechanism by which vibration produces mitotic changes in the cell is imperfectly known and requires further study. Orig. art. has: 3 tables.

ASSOCIATION: none

SUBMITTED: 06Mar64

ENCL: 00

SUB CODE: LS, PH

NO REF SOV: 017

OTHER: 007

ATD PRESS: 3151

Card 2/2

DEMIN, Yu.S.

Effect of vibration and X rays on the nucleus of bone marrow cells  
in mammals. Radiobiologiya 4 no.4:563-568 '64. (MIRA 17:11)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

L 12051-65 ENG(j)/ENG(r)/ENT(1)/FS(v)-3/ENG(v)/ENG(a)/ENG(c) Pe-5 AMD  
ACCESSION NR: AP4043556 DD S/0020/64/157/004/0972/0974

AUTHOR: Demin, Yu. S.

TITLE: Combined effect of low frequency vibration and x rays at a 50 r dose  
on bone marrow cells of mammals

SOURCE: AN SSSR. Doklady\*, v. 157, no. 4, 1964, 972-974

TOPIC TAGS: low frequency vibration, low x ray dose, bone marrow cell,  
mammal bone marrow, mitosis, mitosis disturbance, anaphase, chromosome  
rebuilding, cell cycle, mitotic disturbance rate

ABSTRACT: These two factors are of interest, since they are encountered in  
space flight. Their combined influence on the dynamics of disturbed mitoses  
during the cellular cycle and comparison of this effect with that of irradiation  
only were studied in 2 groups of mice (altogether 161) subjected first to vertical  
vibration of 70 hertz at 0.4 mm amplitude for 20 minutes, then (after 3-5 min.)  
to irradiation with a 50 r dose. Analysis of disturbed mitosis at the anaphase

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L 12051-65

ACCESSION NR: AP4043556

was conducted on the total preparation. Results are tabulated. Comparative detailed analysis showed no increase in the rate of disturbed mitosis upon adding vibration to irradiation. There were differences in the frequency of certain types of mitotic disturbance, such as a decrease in the rate of chromosome rebuilding and increase of cells with chromosome adhesions; the decrease in the frequency of chromosome bridges indicates an influence on the presynthetic stage. According to earlier findings the duration of the cycle in the mouse bone marrow was 14 hours for the erythroid and about 21 for the myeloid series. In these experiments irradiation seemed to extend the cycle. The only explanation offered for the vibratory effect is its mechanical influence on the division and combination process. A delayed vibratory effect on the nervous system may exist, through biochemical changes in the marrow tissue. Orig. art. has:

1 table

ASSOCIATION: Institut biologicheskoy fiziki Akademii nauk SSSR (Institute of Biophysics, Academy of Sciences, SSSR)

SUBMITTED: 04Mar64

ENCL: 00

SUB CODE: LS

NO REF SOV: 004

OTHER: 002

Card 2/2

L 4506-56 EWI(1)/FS(v)-3 WVR/DD

SOURCE CODE: UR/0293/65/003/005/0796/0801

ACC NR: AP5026060

AUTHOR: Arsen'eva, M. A.; Belyayeva, L. A.; Denis, Yu. S.; Pokrovskaya, G. I.; Golovkina, A. V.; Gavrilina, L. I.

3/  
B

ORG: none

TITLE: The effect of some space-flight factors on the hereditary structures of mammals

SOURCE: Kosmicheskiye issledovaniya, v. 3, no. 5, 1965, 796-807

TOPIC TAGS: animal genetics, biologic mutation, radiation biologic effect, radiation injury, vibration effect, acceleration effect

ABSTRACT: The effect on certain mammalian structures (bone marrow, spleen, and testes) of vibration and acceleration is studied, as independent factors and in combination with radiation. In the first series of experiments, mice were subjected to vibration with a frequency of 35 and 75 cps (amplitude 0.4 mm) for 15 min, 1 hr, and 4 hr. Experimental results showed an increase in the frequency of chromosome adhesions and an increased frequency of chromosome rearrangements in bone-marrow cells and spleen, together with adhesion of chromosomes in the metaphase of meiosis of testes cells. In the second series of experiments, mice were subjected to acceleration of 8 g for 5 and 15 min. This factor caused an increase in the frequency of chromosome adhesions, and some increase in the number of chromosome rearrangements and chromosome fragments.

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UDC: 629.198.61.591.15

09010007

I 4506-66

ACC NR: AP5026060

tions in the bone-marrow cells of mice. In general, it was found that vibration and acceleration cause disruptions in the nuclei of bone-marrow and spleen cells. Another group of experiments on the combined effect of vibration or acceleration and radiation on the cell nucleus showed a general decrease in the radiation effect. Either of these factors, when applied prior to irradiation with x-rays (33 rad/min) or fast neutrons (11 rad/min), decreased the radiation effect in the following manner: They decreased the frequency of chromosome aberrations in bone-marrow cells by the second day after irradiation and decreased the frequency of chromosome aberrations in germ cells after 24 hr. However, the protective effect of vibration and acceleration depends not only on when the effect was exerted (prior to or after irradiation), but also on the time interval between the influence of these factors and subsequent irradiation. Analysis of the mechanism of the combined effect of these factors is a very complex problem and requires much more investigation. Orig. art. has: 10 tables and 1 figure. [JS]

SUB CODE: LS/ SUBM DATE: 03Apr64/ ORIG REF: 007/ OTH REF: 001/ ATD PRESS: 4/30

OC

2/2

L 51506-65 EWT(1)/EWA(h) Feb

ACCESSION NR: AP5015331

UR/0286/65/000/009/0089/0089  
681.142.644.3

AUTHOR: Zaytsev, G. F.; Aldokhin, V. F.; Demin, Ya. V.

16  
B

TITLE: A wide band dc differentiator. Class 42, No. 170746

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 89

TOPIC TAGS: differentiating circuit, phase discriminator, voltage doubler

ABSTRACT: This Author's Certificate introduces: 1. A wide band dc differentiator made in the form of a phase discriminator with storage. The device contains a diode and an RC circuit connected in series with the load to reduce the output impedance. 2. A modification of this device which contains two memory elements connected in series to double the output voltage.

ASSOCIATION: none

SUBMITTED: 10Aug62

ENCL: 01

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

Card 1/2

L 51506-65

ACCESSION NR: AP5015331

ENCLOSURE: 01

0

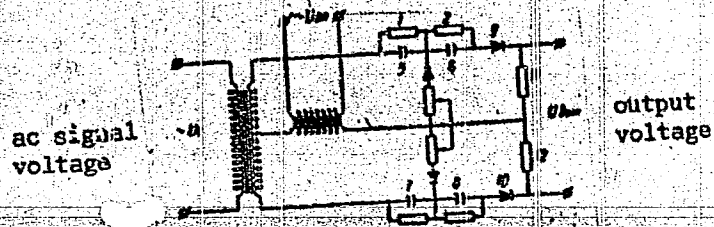


Fig. 1. 1-4--resistors for the RC circuits; 5-8--capacitors for the RC circuits; 9 and 10--diodes; 11 and 12--load resistors

Card

2/2



S/187/60/000/003/002/002  
A189/A026

6,6000

AUTHORS: Demin, Z.A.; Chinenkov, L.A.; Shcherbakov, B.P.

TITLE: A TV Synchronizing Generator Assembled on Ferrites and Semiconductors

PERIODICAL: Tekhnika kino i televideniya, 1960, No. 3, pp. 53 - 57

TEXT: The authors describe the design of a TV synchronizing generator assembled on semiconductors and ferrites with a rectangular hysteresis loop. The generator was developed by the Nauchno-issledovatel'skaya laboratoriya No. 2 Novosibirskogo elektrotekhnicheskogo instituta svyazi (No. 2, Scientific Research Laboratory of the Novosibirsk Electrotechnical Institute of Communications). The synchronizing generator consists of a quartz-stabilized master oscillator, 2 pulse generators, 3 delay lines, 2 frequency dividers, 1 shift register, 3 dynamic flip-flops, 2 pulse adders and 1 trigger. The synchronizing pulses correspond to the Soviet TV-standard, ГОСТ 7845-55 (GOST 7845-55). The cells in the circuits consist of toroidal cores made of ПП-24 (PP-24) ferrites, 4 mm in diameter, Д1В (D1V) germanium diodes, П13А (P13A) transistors and БМ (BM) capacitors, 0.02  $\mu$ F. The master oscillator, output amplifiers, and trigger units are

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S/187/60/000/003/002/002  
A189/A026

A TV Synchronizing Generator Assembled on Ferrites and Semiconductors

transistorized. The trigger units are assembled on П403 (P403) diffused transistors to obtain output pulses with a front duration not exceeding 0.2  $\mu$ sec. In all, the synchronizing generator contains two 6Н1П (6N1P) double triodes, 56 ferrite cores, and 40 transistors. Laboratory tests indicated that the frequency dividing and pulse-forming units of this generator have a stable operation within a 10% fluctuation of the supply voltage and at variations of the working temperature from +10 to +60°C. There are 4 figures and 3 Soviet references. ✓

ASSOCIATION: Novosibirskiy elektrotekhnicheskiy institut svyazi (Novosibirsk Electrotechnical Institute of Communications)

Card 2/2

DEMINA, A., kandidat tekhnicheskikh nauk.

On the calculation of air tanks for incomplete purification. Zhil.-kom.  
khoz. 3 no.8:24-25 Ag '53. (MLRA 6:8)  
(Water--Aeration)

NEKRASOV, G., gornyy dispatcher; KILEPU, A.; DEMINA, A.

Miners and their lodging house. Sev.shakht. 10 no.8:34-35  
Ag '61. (MIRA 14:8)

1. Shakhta No.8 kombinata Primorskugol' (for Nekrasov).
2. Komendant obshchezhitiya shakhtoprokhodcheskogo upravleniya No.2, Popasnyunskiy rayon, Luganskaya oblast' (for Demina).
3. Mashinist vodootliva shakhty imeni Stalina v Luganskoy oblasti (for Kilepu).  
(Coal miners)

DEMINA, A.A.; CHELENOKOV, V.P.

Photogrammetric condensation of altitudes by means of an undistorted  
model. Geod. i kart. no.4:9-15 Je '56. (MIRA 9:10)

(Photogrammetry)

USSR / Cultivated Plants. Fodder Grasses and Edible Roots. M

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24931

Author : Solov'yeva, A. I.; Demina, A. A.

Inst : Not given

Title : Treatment of the Perennial Lupine Seedlings with Mineral Fertilizers

Orig Pub : Byul. nauchn.-tekhn. inform. Vses. n.-i. in-t udrobr. i agropochvoved., 1956, No 2, 12-14

Abstract : Treatment of the perennial lupine with Fs and Kkh at the rate of 40 kg/ha by the active agent on sandy and sand-loamy podzol soils secured an addition to the green-mass harvest of 4.8 t/ha in the 1st year and 3.7 t/ha in the 2nd year; addition to the seed

Card 1/2

USSR / Cultivated Plants. Fodder Grasses and Edible Roots. M

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24931

harvest was 2.2 c/ha in the 1st year and 0.6 c/ha in the 2nd year. Subsequently, addition to the winter rye harvest attained 3.6 c/ha. Tests were conducted by the Sudogorod Experimental Field in Vladimirskaya Oblast'. -- S. A. Nikitin

Card 2/2

96

USSR/Microbiology - Microbes Pathogenic for Man and Animals. F  
Bacteria. Bacteria of the Intestinal Group.

Abs Jour : Ref Zhur Biol., No 22, 1958, 99377

Author : Demina, A.A.

Inst :

Title : Infectivity of Household Articles in Homes with  
Dysenteric Microbes and Their Epidemiological Role.

Orig Pub : Z. mikrobiol., epidemiol. i immunobiol. 1957, No 10,  
109-114

Abstract : The infectivity of household articles with Shigella in  
homes with insufficiently high sanitary-cultural levels  
was determined on the outskirts of one city district.  
Children up to the age of 15 formed 31.4% of the total  
number of inhabitants, 58.8% of cases of dysentery were  
registered among the child population, and among chil-  
dren up to the age of 3, there were 70% of cases of all  
child dysentery. 20 foci of illness of the acute form

Card 1/3



USSR/ Microbiology - Microbes Pathogenic for Man and Animals. F  
Bacteria. Bacteria of the Intestinal Group.

Abs Jour : Ref Zhur Biol., No 22, 1958, 99377

and 20 of the chronic form were taken under observation. 20 apartments, where there was not a single case of intestinal illness, served as controls. Of the 40 foci of dysentery, in 11 cases the disease affected adults, and in 29 children. In order to detect the pathogenic microflora in the environment of the patient, washings of household objects were investigated repeatedly. As a result of 236 investigations in foci of acute dysentery, 7 strains of atypical cultures were isolated. The infectivity of various household articles was not uniform. During 356 investigations, in foci of patients with the chronic form, 16 atypical strains and 3 strains of microbes of Flexner were isolated. In foci of chronic dysentery, infectivity of various objects proved to be higher than in the foci of acute dysentery. In the foci, where atypical bacteria which did not change to typical ones

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USSR/Microbiology - Microbes Pathogenic for Man and Animals.  
Bacteria. Bacteria of the Intestinal Group.

F

Abs Jour : Ref Zhur Biol., No 22, 1958, 99377

during the process of reversion were found, no repeated cases of dysentery were observed. New cases of illness were observed only in homes with the chronic form of dysentery where there were patients in the acute stage.  
-- M.Ya. Boyarskaya

Card 3/3

*DEMINA, A. A.*

DEMINA, A.A.

Nature of atypical strains isolated from objects in the environment where dysentery is prevalent; author's abstract. Zhur.mikrobiol. epid. i immun. 28 no.8:41-42 Ag '57. (MIRA 11:2)

1. Iz kafedry mikrobiologii II Moskovskogo meditsinskogo instituta imeni I.V.Stalina.

(DYSENTERY, BACILLARY, microbiology,

atypical bact. strains isolated from various objects in focus of infect. (Rus))

Demina, A.A.

DEMINA, A.A.

Infection of utensils with dysentery bacteria in infective foci and their epidemiological role. Zhur.mikrobiol.epid. i immun. 28 no.10: 109-114 0 '57. (MIRA 10:12)

1. Iz kafedry mikrobiologii II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.

(DYSENTERY, BACILLARY, transmission,  
by infect. household utensils (Rus))

(EATING UTENSILS, microbiology,

Shigella dysenteriae, role in transm. of dysentery (Rus))

DEMINA, A. A., Cand Med Sci -- (diss) "Significance of ~~the~~ Modified  
Forms of Intestinal Bacteria in Dysentery Epidemiology." Mos,  
1958. 15 pp. (2nd Mos State Med Inst im N. I. Pirogov), 200  
copies. (KL, 7-58, 112)

DEMINA, A.A.; BODISKO, V.F.; ARKHANGEL'SKAYA, K.N.; LARINA, L.I.

Bacteriological diagnosis of pertussis under conditions of mass  
specific vaccination. Zhur. mikrobiol., epid. i immun. 40 no.9:  
26-30 S'63. (MIRA 17:5)

1. Iz Moskovskogo instituta vaksin i syvorotok imeni Mечnikova  
i Detakoy gorodskoy bol'nitsy Baumanskogo rayona Moskvy No.32.

СЕМЕНА, А.А.; АНДРИАНОВСКАЯ, К.В., ВОЛКОВ, И.И.

Some characteristics in the course of whooping cough under present conditions. *Pediatrics* 42 no.9:98-73 S'68.

(MIB 17:5)

1. Из лаборатории патрых дetskikh (Центр Невро-исследовател'sкого института сычротek и вакцин им. И.И. Медникова (директор - проф. А.Н. Мешалова) и поликлинического отделения с-у детскоy городской бол'ницы Бауманского района Москвы.

DEMINA, A.A.; STAN\_SLAUSKIY, Ye.S.; LARINA, L.I.

Antigenic, toxic and protective properties of the cellular components of Bordetella pertussis. Zhur. mikrobiol., epid. i immun. 41 no.4:17-22 Ap '64. (MIRA 18:4)

1. Moskovskiy institut vaktsin i syvorotok imeni Meehnikova.



DEMINA, A.I.

Santonin-bearing wormwood from the flora of the Ukrainian S.S.R.  
Trudy Bot.inst.Ser.6 no.7:308-310 '59. (MIRA 13:4)

1. Odesskiy farmatsevticheskiy institut.  
(Odessa Province--Wormwood)

15-8460

32360  
S/191/62/000/001/005/006  
B139/B110

AUTHORS: Tarakanov, O. G., Demina, A. I., Vasil'yev, B. V.

TITLE: Research into the adhesion of foam plastics. Communication II. Adhesion properties of foam polyurethan and foam polystyrene

PERIODICAL: Plasticheskiye massy, no. 1, 1962, 41-43

TEXT: The dependence of the adhesive power of foam plastics to metals on temperature, cleanness of the metal surface, and duration of foaming was investigated. For this purpose, foam polystyrene specimens with an embedded metal cone were heated in a thermostat for 30 min, the cone was then torn out, and the stress per  $\text{cm}^2$  of metal surface was measured. The maximum adhesive power ( $\sim 3 \text{ kg/cm}^2$ ) sharply decreased above  $70^\circ\text{C}$ . The adhesive power of the plastics on metal was largely influenced by the duration of foaming. The optimum foaming time must be specially determined for each case and probably depends on the foaming agent content of the initial material. Both in the presence and absence of an oxidation layer on the cone surface, the adhesion of the plastics is stronger than  
Card 1/3

32360  
S/191/62/000/001/005/006  
B139/B110

Research into the adhesion ...

their cohesion. Polystyrene is assumed to adhere to the oxidized metal surface by means of covalent binding between carbon and the metal ion of the oxidized surface. In the case of foam polyurethan, the adhesive power increased linearly with increasing volume weight. Foam plastics with a volume weight of up to  $0.14 \text{ g/cm}^3$  showed tearing off from all metal surfaces investigated due to cohesion; plastics with a higher-volume weight showed mixed tearing off. The specimens were also heated to  $150^\circ\text{C}$  in a two-hour cycle, or constantly for 3, 6, 9, or 12 hrs. Even a 12-hr heating did not reduce the adhesive power ( $10.0 \text{ kg/cm}^2$  at  $0.12 \text{ g/cm}^3$  volume weight), nor did several days' storage of specimens in distilled water. Finally, the conical metal cores were moistened with water before being cast in with plastics (foam polyurethan), and the filled molds were then left for 1 hr at  $70^\circ\text{C}$ , did not impair the adhesive power. Cleaning of the metal core may be restricted to polishing with emery and rinsing with hot acetone. Foam polyurethan was prepared by formula no. 3 of the Fiziko-khimicheskaya laboratoriya Vladimirovskogo NIIS (Physicochemical Laboratory of the Vladimir NIIS). There are 3 figures, 3 tables, and 5 references: 3 Soviet and 2 non-Soviet. The two references to English-language publications read as follows: B. A. Dombrow, Polyurethanes, ch. 3, Reinhold Publishing Corp., U.S.A., 1957; J. E. Rutzler, Adhesives Age, Card 2/3

X

Research into the adhesion ...

2, 7, 28 (1959).

32360  
S/191/62/000/G01/005/006  
B139/B110

X

Card 3/3

TARAKANOV, O.G.; DEMINA, A.I.

On determining the paste forming properties of polyvinyl  
chloride resins. Plast. massy no. 3:28-32 '65.

(MIRA 3886)

L 27627-65 ENT(m)/EPF(c)/EWA(d)/T/EWF(j)/EPR/EWA(c) Pc-4/Pr-4/Ps-4 RPL

WW/EM

ACCESSION NR: AP5005588

S/0190/65/007/002/0224/0225

AUTHOR: Tarakanov, O. G.; Demina, A. I.TITLE: Effect of surface-active agents in the morphology of polyurethanSOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 2, 1965, 224-225

TOPIC TAGS: polyurethan, morphological form, surface active agent

ABSTRACT: A study has been made of the effect of various types of surface-active agents on the development of morphological forms in polyurethans. The experiments were conducted with polyurethan synthesized from hexamethylene diisocyanate and ethylene glycol and the following surface-active agents: straight-chain alkyl- and alkylaryl-sulfonates, OP-10, the branched organosilicon compound "Si" (molecular weight, 3000), and the fluorine-containing material "SiF" (molecular weight, 1000). Various amounts of surface-active agents were added to 0.2% dimethylformamide-acetone polyurethan solutions. Evaporation of the solvent at 70C yielded more or less developed spherulitic polyurethan structures. Electron microscope study of these structures showed that straight-chain compounds having low surface activity promote ordering of the polymer structure, but substances with high surface activity hinder ordering. The negative effect of surface-active agents on polymer ordering increases with molecular weight and the degree of branching. Orig. art. has: 2 figures. [B0]

Card 1/2

L 27627-65

ACCESSION NR: AP5005588

ASSOCIATION: Vladimírskiy institut sinteticheskikh emol. (Vladimir Institute of Synthetic Resins)

SUBMITTED: 23Mar64

ENCL: 00

SUB CODE: 00, 00

NO REF SOV: 003

OTHER: 001

ATD PRESS: 3190

Card 2/2

TARAKANOV, O.G.; DEMINA, A.I.; DUBYAGA, Ye.G.

Structure formation in nonaqueous foam films as a factor  
of their stabilization. Dokl. AN SSSR 163 no.3:684-685 J1 '65.  
(MIRA 18:7)

1. Vladimirskiy nauchno-issledovatel'skiy institut sinteticheskikh  
smol. Submitted January 11, 1965.



L 32683-66 EWT(m)/T/EWP(j) IJP(c) WW/JWD/RM

ACC NRAP6015058 (A) SOURCE CODE: UR/0190/66/008/005/0938/0942

AUTHOR: Vasil'yev, B. V.; Tarakanov, O. G.; Demina, A. I.;  
Shirobokova, A. I. 62  
B

ORG: Scientific Research Institute of Synthetic Resins (Nauchno-issledovatel'skiy institut sinteticheskikh smol)

TITLE: Investigation of polyurethane crystallization

SOURCE: Vysokomolekulyarnyya soyedineniya, v. 8, no. 5, 1966, 938-942

TOPIC TAGS: polyurethane, crystal lattice, glycol, isocyanate, ~~polymer~~ crystallization, copolymerization, molecular weight

ABSTRACT: The crystallization capacity and morphological structural types as a function of the chemical composition of polyurethane has been studied. The crystalline lattice of polyurethane depends on the initial isocyanate and glycol structures. The crystallization capacity of polyurethane drops with an increase in the polyester molecular weight up to 1000. In the case of polymers with a polyester base and molecular weight above 1000, the polyurethane could crystallize. However, in this case the crystalline lattice structure does not depend on the diisocyanate structure but only on the polyester structure. The degree of

Card 1/2

UDC: 678.01:53+678.664

L 32683-66

ACC NR: AP6015058

crystallization can be changed by copolymerization. Orig. art. has:  
7 figures. [NT]

SUB CODE: 11, 07/ SUBM DATE: 26May65/ ORIG REF: 009/ OTH REF: 005

Card 2/2

BLG

DEMINA, A.N.; KUZ'MINA, G.P.; ROMANOVA, L.S.

Determination of the unevenness of silk dyeability.  
Standartizatsiia 27 no.10:41-45 O '63.      (MIRA 16:11)

SHUL'MAN, M. S.; DEMINA, A. S.; MOROZOVA, V. T.

Amylase sorption from solutions of fermentation preparations.  
Spir. prom. 29 no.3:13-15 '63. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy  
i spirtovoy promyshlennosti.

(Amylase) (Sorption)

KOVALEVSKAYA, I.L.; EPSHTEYN-LITVAK, R.V.; DMITRIYEVA-RAVIKOVICH, Ye.M.;  
KURNOSOVA, N.A.; SHCHEGLOVA, Ye.S.; FERDINAND, Ya.M.;  
KHOMIK, S.R.; MAKHLINOVSKIY, I.P.; PETROVA, S.S.;  
GOLUBOVA, Ye.Ye.; GONCHAROVA, Z.I.; SARMANEYEV, A.P.;  
SIZINTSEVA, V.P.; Primali uchastiye: MEDYUKHA, G.A.;  
OSOKINA, L.A.; RACHKOVSKAYA, Yu.K.; OSOVTSEVA, O.I.;  
DEDUSENKO, A.I.; KOVALEVA, P.S.; KARASHEVICH, V.P.;  
CHEBOTAREVICH, N.D.; CHIGIR', T.R.; SKUL'SKAYA, S.D.;  
KECHETZHIYEV, B.A.; DEMINA, A.S.; ZUS'MAN, R.T.; YESAKOV, P.I.;  
SYSOYEVA, Z.A.; ZINOV'YEVA, I.S.; FAL'CHEVSKAYA, A.A.;  
DENISOVA, B.D.; TIMOFEEVA, R.G.; SYRKASOVA, A.V.;  
LYANTSMAN, S.G.

Reactivity and immunological and epidemiological effectiveness  
of alcoholic typhoid and paratyphoid fever vaccines in school  
children. Zhur. mikrobiol., epid. i immun. 33 no.7:72-77  
Jl '62. (MIRA 17:1)

1. Iz Moskovskogo, Rostovskogo, Omskogo institutov epidemio-  
logii i mikrobiologii, Stavropol'skogo instituta vaksin i  
syvorotok i Ministerstva zdravookhraneniya RSFSR. 2. Rostovskiy  
institut epidemiologii i mikrobiologii (for Kovaleva).
3. Stavropol'skiy institut vaksin i syvorotok (for Sysoyeva).
4. Kuybyshevskiy institut epidemiologii i mikrobiologii (for  
Zinov'yeva).
5. Saratovskaya gorodskaya sanitarno-epidemiolo-  
gicheskaya stantsiya (for Lyantsman).

KRETOVICH, V.L.; DEMINA, A.S.; YAKOVLEVA, V.I.

Glutamic dehydrogenase and alanine dehydrogenase of *Aspergillus niger*. Dokl. AN SSSR 159 no.5:1169-1172 D '64 (MIRA 18:1)

1. Institut biokhimii imeni A.N. Bakha AN SSSR i Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i spirtovoy promyshlennosti, Moskva. 2. Chlen-korrespondent AN SSSR (for Kretovich).

DEMINA, A.I.; YEFIMIEVA, V.I.; ERETOVICH, V.I.

Malate dehydrogenase and glyoxalate reductase of *Aspergillus niger*.  
Biokhimiya 30 no.5:956-963 SMO '65. (MIRA 18:10)

1. Institut biokhimiya imeni A.N.Bakha AN SSSR i Vsesoyuznyy nauchno-  
issledovatel'skiy institut fermentov i spirtovoy promyshlennosti,  
Moskva.

DEMINA, A.T.

On the problem of the most efficient depth for aeration tanks.  
Vod.i san.tekh. no.8:23-24 N '55. (MLRA 9:3)  
(Water--Aeration)



DEMINA, A.T.; TOPCHIYEVA, M.V.

Operations of primary horizontal clarifiers at the Kharkov  
biological station. Vod. i san. tekhn. no.9:3-7 S '58. (MIRA 11:10)  
(Kharkev--Water--Purification)

AKOPYAN, S.O.; BAZEV, N.S.; DEMINA, A.V.; SHAYEVSKIY, Yu.I.; YUFEROV, Yu.K.

Development of the layer D<sub>1</sub> in the Shkapovo oil field.  
Nefteprom. delo no.6:3-8 +63. (MIRA 16:10)

1. Neftepererabatyvayushcheye upravleniye "Aksakovneft'."  
(Shkapovo region—Petroleum production)

9.42/0

S/194/62/000/006/149/232  
D201/D308

AUTHORS: Shevchik, V.N., and Demina, A.Ye.

TITLE: Theory of the plane magnetron

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 6, 1962, 14, abstract 6Zh101 (Nauchn. yezhegodnik:  
Saratovsk. un-t. Fiz. fak. i N.-i. in-t mekhan. i fiz.  
1955. Saratov, 1960, 107-108)

TEXT: The results of evaluation of the electronic efficiency and  
the analysis of conditions of self-excitation of a plane magnetron  
are given in kinematic approximation. A relationship was obtained  
which describes the efficiency as a function of transmit angle in  
various regimes, except the critical and beyond-the-critical.

✓B

[Abstracter's note: Complete translation.]

Card 1/1

DEMINA, D.M.; ZABALUYEVA, A.P.; KANDROB, I.S.

Evaluation from the point of view of hygiene of the effect of a deficiency  
in natural ultraviolet irradiation. Gig.i san. no.1:6-9 Ja '54.  
(MLRA 6:12)

1. Iz Instituta obshchey i kommunal'noy gigiyeny Akademii meditsinskikh  
nauk SSSR.

(Ultraviolet rays--Physiological effect)

DEMINA, D. M.

USSR/Human and Animal Physiology - Effect of Physical Factors. R-14

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 71300

Author : Dantsig, D.M., Demina, D.M., Zabaluyeva, A.P., Kandrod, I.

Inst :

Title : The Comparative Evaluation of the Antirachitic Action of U-V Irradiation of Sun Lamps and Vitamin D.

Orig Pub : Pub: In coll: Tr. Nauchnoy sessii, Posviashch. ostizh. i Zadacham sov. biofiziki, v. s. Kh. M. Isd-vo AN SSSR, 1955, 121-127

Abstract : Rats on a rachitogenic diet were irradiated by sun lamps (0.1-0.2 erythema dose); the rats of a special group received daily vitamin D 1 m. u.; the control rats received neither irradiation nor vitamins. After 20 days, the activity of thyroid phosphatase and inorganic P in blood was determined and also X-rays of the hind limbs were taken. All findings pointed to the fact that irradiation had a much greater prophylaxis than vitamin administration.

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USSR/Human and Animal Physiology - Effect of Physical Factors. R-14

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 71300

In another series of tests, where rats with severe experimental rickets were used, a high therapeutic effect of irradiation was obtained. Observations of 27 children from one of the extreme northern regions showed that irradiation for two months, produces increase in phosphatase activity in the blood. The authors, consider, that the irradiation gives a doubtlessly hygienic effect, which cannot be obtained by administration of vitamins alone.

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- 167 -

ZABALUYEVA, A.P.; TALANOVA, I.K.; DEMINA, D.M.

Results of preventive irradiation of young school children in the schoolroom with erythema-dose lamps and in photaria with PRK-7 lamps. Vop.kur., fizioter. i lech.fiz.kul't. no.4:22-26 O-D '55.

(MIRA 12:12)

1. Iz nauchno-issledovatel'skogo instituta fizioterapii Ministerstva zdravookhraneniya RSFSR (dir. - prof. A.N. Obrosoy) i Instituta obshchey i kommunalnoy gigiyeny AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. A.N. Sysin).

(ULTRAVIOLET RAYS, therapeutic use,  
prev. irradiation of school child.)

USSR/Human and Animal Physiology (Normal and Pathological).  
Metabolism. Vitamins.

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 26251

Author : Demina, D.M.

Inst : -

Title : An Evaluation of the Effectiveness of Long-Wave Ultraviolet Radiation (Erythemat Luminescent Lamps) as Compared to the Action of Vitamin D<sub>2</sub> in the Prophylaxis of D-Vitamin Insufficiency

Orig Pub : Zh. gigiyeny, epidemiol., mikrobiol., i immunol. (Chehosl).  
1957, 1, No 4, 388-398

Abstract : The therapeutic effect of radiation with luminescent erythemat lamps (LEL) was compared with the effect of vitamin D<sub>2</sub> oil solutions in experiments on rats which received rachitogenic rations. Equally valuable, in the sense of a favorable effect on the content of P and activity of phosphatase of the blood and rachitic changes in

Card 1/2

- 8 -



**DEMINA, D.M.**

Evaluation of the effect of long-wave ultraviolet irradiation and its comparison with vitamin D<sub>2</sub> in prevention of vitamin D deficiency. J. Hyg. Epidem., Praha 1 no.4:459-471 1957.

1. Institut für allgemeine und Kommunalhygiene der Akademie für medizinische Wissenschaften der UdSSR, Moskau.

(RICKETS, prevention and control,  
ultraviolet irradiation & vitamin D<sub>2</sub>, comparison (Ger))

(ULTRAVIOLET RAYS, ther. use,  
rickets prev., comparison with vitamin D<sub>2</sub> (Ger))

*Demina, D.M.*

DEMINA, D.M.

~~Evaluation of the effectiveness of long-wave ultraviolet irradiation (erythematous fluorescent lamps) as compared with vitamin D2 in prevention of vitamin D deficiency [with summary in English]. Gig. i san. 22 no.6:3-10 Ja '57. (MIRA 10:10)~~

1. Iz Instituta obshchey i immunal'noy gigiyeny AMN SSSR.  
(RICKETS, prevention and control,  
ultraviolet rays & vitamin D2, comparison (Rus))  
(VITAMIN D, therapeutic use,  
D2, rickets prev., comparison with ultraviolet rays (Rus))  
(ULTRAVIOLET RAYS, therapeutic use,  
rickets prev. comparison with vitamin D2 (Rus))

ACCESSION NR: AP4042482

S/0240/64/000/007/0020/0024

AUTHOR: Solov'yev, Yu. N. (Candidate of medical sciences);  
Demina, D. M. (Candidate of biological sciences)

TITLE: Reaction of loose connective tissue to cold and ultraviolet radiation

SOURCE: Gigiyena i sanitariya, no. 7, 1964, 20-24

TOPIC TAGS: ultraviolet radiation, connective tissue, PRK 4 lamp, EUV 15 lamp, short wave, long wave, rat, cytography, low temperature

ABSTRACT: Data are presented on changes developing in cytograms of subcutaneous loose connective tissue of rats under the effect of cold (2-5C), ultraviolet radiation of various wavelengths, and the combined effects of the two factors. Ultraviolet sources were an EUV-15 lamp (wavelength — 280 to 380 millimicrons) and a PRK-4 lamp with both near and far ultraviolet light (about 26% shorter wavelength than 254 millimicrons). The experimental animals were in seven groups: control; exposed to cold; exposed to cold plus EUV-15 light, total dose 3160 microwatts-min/cm<sup>2</sup>; exposed to EUV-15 light, dose 790

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ACCESSION NR: AP4042482

microwatts-min/cm<sup>2</sup>; exposed to EUV-15 light, dose 3160 microwatts-min/cm<sup>2</sup>; exposed to PRK-4 light, dose 590 microwatts-min/cm<sup>2</sup>; and exposed to PRK-4 light, dose 1960 microwatts-min/cm<sup>2</sup>. Exposures were carried out for 3 weeks. When used in suberythematous doses, the near ultraviolet light (EUV-15) was found to have a stimulating effect on the cellular content of loose connective tissue, particularly on young fibroblasts and histiocytes. Exposure to cold, which produced a stress effect, had a depressing effect on loose connective tissue. Radiation from the PRK-4 lamp, which included shorter ultraviolet wavelengths, tended to have a depressing effect on connective tissue. The combined application of cold and near ultraviolet radiation caused an additive effect, the action of the cold being somewhat suppressed.

ASSOCIATION: Institut obshchey i kommunal'noy gigieny im. A. N. Sysina AMN SSSR, Moscow (Institute of General and Municipal Hygiene, AMN-SSSR).

SUBMITTED: 27Mar63

ENCL: 00

SUB CODE: LS

NO REF SOV: 005

OTHER: 001

Card 2/2

SOLOV'YEV, Yu.N.; DEMINA, D.M. (Moskva)

Effect of cold and ultraviolet radiation on the system of mast  
cells. Arkh. pat. 26 no.8:63-68 '64. (MIRA 18:2)

1. Institut obshchey i kommunal'noy gigiyeny imeni A.N. Sysina  
(dir. - chlen-korrespondent AMN SSSR prof. V.A. Ryazanov) AMN  
SSSR.

33462

S/129/62/000/001/005/011  
E073/E483

1.1700

AUTHORS: Bernshteyn, M.L., Candidate of Technical Sciences,  
Demina, E.L. and Safonova, K.E., Engineers

TITLE: Thermomechanical treatment of ball-bearing steel

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,  
no.1, 1962, 23-28

TEXT: The authors investigated the influence of thermo-  
mechanical treatment on the structure and properties of ball-  
bearing steel  $\text{MnX15}$  (ShKh15) (1% C, 1.3% Cr, 0.3% Mn, 0.2% Si,  
0.01% S, 0.02% P). Cylindrical and flat specimens were deformed  
by rolling at a temperature above  $A_{c3}$ , total reductions (estimated  
by means of a logarithmic formula) of 5, 10, 25, 50 and 80% being  
attained in a single pass. The cylindrical specimens were  
tempered at 140, 240 and 440°C for 4 hours. The flat specimens  
were tempered at 240°C (24 hours), 450, 500 and 550°C (30 min).  
Air cooling was applied in every case. X-ray investigations were  
made on specimens cut from the centre of the rolled and quenched  
specimens that had not been subjected to mechanical tests.

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33462

S/129/62/000/001/005/011

E073/E483

Thermomechanical treatment ...

Bending tests on cylindrical specimens (N.I. Dolshenko participated in these tests) indicated that a considerable increase in strength and a sharp increase in ductility were obtained as a result of thermomechanical treatment. The results obtained with 180 mm long, 4 mm thick specimens, subjected to thermal or thermomechanical treatment followed by tempering for 24 hours at 240°C, indicated that if the thermomechanical treatment is applied under optimum conditions, material can be produced which even under unfavourable test conditions will exhibit bending strength of 400 kg/mm<sup>2</sup>, as compared with 140 kg/mm<sup>2</sup> for specimens that had been subjected to conventional heat treatment. Bending tests on flat micro specimens yielded similar results. These specimens were subjected to the following treatment: heating to 930°C for 20 min, reduction by rolling in a single pass with reductions of 7, 25, 65 and 90%, immediate quenching in oil, followed by tempering at 450°C for 30 min. For comparison, a batch of specimens was subjected to the same heat treatment without plastic deformation. In the latter case the bending strength increased to 100 kg/mm<sup>2</sup>, against

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33462

S/129/62/000/001/005/011

E073/E483

Thermomechanical treatment ...

320 kg/mm<sup>2</sup> attained in specimens deformed to 90% reduction; in addition, the thermomechanical treatment brought about an almost four-fold increase in ductility, which is particularly important since this steel had a strong tendency to brittle failure. It was found that the properties imparted to steel by thermomechanical treatment were retained at tempering temperatures of 500 and 550°C. The strengthening effect of the work-hardening during thermomechanical treatment is very stable and this is attributed to the fact that plastic deformation produces a particularly fine structure of the austenite which, in turn, ensures high dispersion and submicroscopic nonuniformity of the subsequently formed martensite. It is also possible that some texturing occurs. X-ray structural investigations show that the density of crystal lattice defects increases with increasing degree of deformation during thermomechanical treatment. The actual values after ordinary heat treatment and after thermomechanical treatment with 90% reduction were, respectively:  $2.0 \times 10^{11} \text{ cm}^2/\text{cm}^3$ ,  $3.35 \times 10^{11} \text{ cm}^2/\text{cm}^3$  after

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33462  
S/129/62/000/001/005/011  
E073/E483

Thermomechanical treatment ...

tempering for 24 hours at 200°C;  $1.49 \times 10^{11} \text{ cm}^2/\text{cm}^3$ ,  
 $3.24 \times 10^{11} \text{ cm}^2/\text{cm}^3$  after tempering for 2 hours at 300°C;  
 $7.94 \times 10^{10} \text{ cm}^2/\text{cm}^3$  after ordinary heat treatment;  
 $19.3 \times 10^{10} \text{ cm}^2/\text{cm}^3$  after tempering at 400°C for 2 hours.  
The size of the regions of coherent scattering decreases with increasing deformation. Stresses of the second type in thermomechanically treated specimens tempered at 400°C decrease monotonously with increasing deformation. The results obtained indicate that thermomechanical treatment with high degrees of deformation reduces the influence of the tempering temperature on the block dimensions which, in the case of smaller blocks, increase at high tempering temperatures only. It is possible that this explains, to some extent, permanence of the effects of work-hardening and reversibility of the thermomechanical treatment. There are 5 figures, 3 tables and 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc. The reference to an English language publication reads as follows:

Card 4/5

33462

S/129/62/000/001/005/011

E073/E483

Thermomechanical treatment ...

Ref.2: J. K. Williamson, R. Smallman. Phil. Mag., 1956.

ASSOCIATION: Moskovskiy institut stali  
(Moscow Institute of Steel)

X

Card 5/5

40985

18.1151

S/659/62/009/000/019/030  
1003/1203

**AUTHORS** Demina, E. L., Tai Tung-fu and Bernshtein, M. L.  
**TITLE** The influence of cold-working and of alloying on the crystal structure and on the properties of nickel-base heat resisting alloys  
**SOURCE** Akademiya nauk SSSR. Institut metallurgii. Issledovaniya po zharoprochnym splavam v. 9. 1962. Materialy Nauchnoy sessii po zharoprochnym splavam (1961 g.), 139-145

**TEXT:** The alloys investigated were quenched from 1000-1200°C, and drawn to a 5.25 % and 75 % deformation. Hardness, red-hardness, the mosaic structure and internal friction were determined. It was concluded from the data that internal friction increases with increase in the degree of cold-working, and that slip is easier along the block boundaries when the samples with a high degree of cold-work deformation are heated, this is due to dislocation movements caused by the heat and applied stress. The investigation on the effect of alloying with chromium, molybdenum and tungsten shows that there is little strengthening of the solid solution except when the alloying elements present cause lattice imperfections by the formation of a strengthening phase on aging. There are 4 figures and 1 table

Card 1/1

X

EWP(q)/EWT(m)/BDS--AFFTC/ASD--JD/JG

L 11203-63

ACCESSION NR: AP3000490

S/0129/63/000/005/0049/0054

51  
56

AUTHOR: Bernshteyn, M. L.; Demina, E. L.; Lieberman, Ye. E.; Chernukha, L. G.

TITLE: Polygonization in molybdenum and its alloys.

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 5, 1963 49-54

TOPIC TAGS: polygonization in molybdenum, zirconium, titanium

ABSTRACT: Authors made tests on molybdenum which was obtained by powder metallurg method, on cast molybdenum, on cast molybdenum alloys with admixtures of zirconium, titanium as well as cast molybdenum alloys with simultaneous admixtures of zirconium and titanium. For selection of recrystallization conditions, the samples were heated to 1250, 1300, 1400, 1500 and 1600 degrees with holding at 5, 10, 15, 20 and 30 minutes. The microstructures were studied and optimum annealing conditions were established. In addition, treatment conditions were established which produced the most developed polygonized structure in the molybdenum and its alloys. Microstructure testing was done by subjecting the samples to deformation, deformation and annealing at 1000-1600 degrees, and, finally, after deformation and double annealing at polygonization and higher temperatures. The changes in the structure of molybdenum and its alloys were also studied in relation to

Card 1/2

L 11203-63

ACCESSION NR: AP3000490

holding period at optimum treatment conditions. Authors conclude that polygonization raises the temperature of subsequent recrystallization which is important for employing molybdenum and its alloys at elevated temperatures. As a result of development of polygonization in the tested materials, an increase of resistance to small plastic deformations occurs. Orig. art. has: 6 figures.

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute for Steels and Alloys)

SUBMITTED: 00

DATE ACQD: 03Jun63

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 000

*mca/cs*  
Card 2/2

ACCESSION NR: AP4010067

S/0129/64/000/001/0012/0013

AUTHORS: Bernshteyn, M.L.; Birman, S.R.; Demina, E.L.

TITLE: Investigation of polygonization in nichrome

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 1, 1964, 12-13

TOPIC TAGS: nichrome, Kh20N80 alloy, plastic deformation, elastic limit, polygonization, annealing

ABSTRACT: The conditions for treating Kh20N80 alloy causing polygonization were established. As a result of polygonization the resistance to small plastic deformation is increased 1.5-2 times. Annealing for 1 hour at 850C increases resistance to 1% deformation at 450C by 1.5 times; this value is increased somewhat more by annealing for 100 hours, then it decreases. For 4% deformation at 450C, optimum annealing is for 1 hour at 750C (increasing resistance 2 times); further annealing up to 40 hours reduces the elastic limit and with longer annealing the elastic limit remains

Card 1/2

ACCESSION NR: AP4010067

constant. Orig. art. has: 2 figures.

ASSOCIATION: Moskovskiy Institut stali i splavov (Moscow Steel  
and Alloy Institute)

SUBMITTED: 00

DATE ACQ: 07Feb64

ENCL: 00

SUB CODE: ML

NO REF SOV: 000

OTHER: 000

Card

2/2

L 08426-67 EWT(m)/EWP(w)/EWP(k)/EWP(t)/ETI IJP(o) JD/HW/JG/GD  
ACC NR: AT6034438 (N) SOURCE CODE: UR/0000/66/000/000/0084/1086

AUTHOR: Demina, E. L.; Bernshteyn, M. L. 36  
B+1

ORG: none

TITLE: Effect of polygonization on the heat resistance characteristics of molybdenum 1

SOURCE: AN SSSR. Institut metallurgii. Svoystva i primeneniye zharoprochnykh splavov (Properties and application of heat resistant alloys). Moscow, Izd-vo Nauka, 1966, 84-86

TOPIC TAGS: molybdenum, ~~molybdenum-mechano-thermal treatment, molybdenum polygonization, polygonized-molybdenum property~~ metal heat metal property

ABSTRACT: Specimens of sintered-molybdenum wire, 1.00 mm in diameter, were drawn at 300 or 1150C with 5, 9 or 13% reduction, vacuum annealed at 1150C for 1 hr, and subjected to stress-rupture tests at 900C under a stress of 20 kg/mm<sup>2</sup>. The rupture life was found to increase with increasing reductions. For instance, specimens drawn at 1150C with 5% reduction and then annealed at this temperature for 1 hr withstood 95 min, while specimens reduced by 9 or 13% and annealed withstood 240 or 585 min respectively. The annealing of deformed molybdenum stimulates the formation of a polygonized structure which has a high creep resist- 16

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L 08426-67

ACC NR: AT6034438

ance. However, with drawing at low temperature or with lower reduction, the polygonization is not completed after 1 hr at 1150C. Only drawing with 13% reduction at 1150C, followed by annealing at the same temperature produces a complete polygonization and the highest increase of rupture life. This mechanothermal treatment, which creates a polygonized structure, also substantially improves the ductility. For instance, the maximum elongation of molybdenum deformed at 1150C with 9% reduction and annealed at 1150C is 24% compared with 8% for molybdenum deformed at 300C and tested without being annealed. Specimens deformed at 300C with 5 and even 13% reduction also have a lower ductility. Orig. art. has: 2 figures.

SUB CODE: 13, 11/ SUBM DATE: 10Jun66/ ATD PRESS: 5103

Card 2/2 LS

DEKIN, E. M., TELICHOV, V. A., TELICHOV, V. A., BUSTOISKY, V. I.,  
TELICHOV, V. A.

"Hygienic characteristics of polytechnical teaching in a rural  
school."

report submitted at the 11th All-Union Congress of Hygienists, Epidemiologists  
and Infectionists, 1959.

DEMINA, E.M.

Use of different kinds of lighting in kindergartens. Uch.zap.  
Mosk. nauch.-issl. inst. san. i gig. no.2:71-74 '59.

(MIRA 16:11)

1. Moskovskiy nauchno-issledovatel'skiy institut sanitarii  
i gigiyeny imeni F.F. Erismana.

\*

BUKREYEVA, D.P., nauchnyy sotrudnik; DEMINA, E.M., nauchnyy sotrudnik;  
POPOVA, N.M., nauchnyy sotrudnik.

Improvement of artificial illumination of school classrooms.  
Gig i san. 24 no.4:83-85 Ap '59. (MIRA 12:7)

1. Iz Moskovskogo nauchno-issledovatel'skogo inatituta sanitarii  
i gigiyeny imeni F.F. Krismana Ministerstva zdavookhraneniya RSFSR.

(SCHOOLS,  
illumination (Rus))

(ILLUMINATION,  
of schools (Rus))

*DEMINA, E.Z.*

KORENMAN, I.M.; SHEYANOVA, F.R.; ~~DEMINA, E.Z.~~; SHAPOSENIKOVA, M.I.

Radiometric titration of zinc and copper. Zav.lab. 22 no.10:  
1143-1149 '56. (MLRA 10:5)

1.Gor'kovskiy gosudarstvennyy universitet im. N.I. Lobachevskogo.  
(Zinc) (Copper) (Titration)

BOTVINKIN, O.K.; YEVSTROP'YEV, K.S., doktor khimicheskikh nauk, professor, retsentsent; TOROPOV, N.A., doktor tekhn.nauk, professor, retsentsent; MAZURIN, O.V., kandidat khim. nauk, retsentsent; KUKOLEV, G.V., doktor tekhnicheskikh nauk, peofessor, retsentsent; ALKIND, I.Ya., kandidat tekhnicheskikh nauk, redaktor; DEMINA, G.A., redaktor; LYUDKOVSKAYA, N.I., tekhnicheskij redaktor.

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PEREL'MAN, F.M.; ZVORYKIN, A.Ia.; DEMINA, G.A.

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Zhur. neorg. khim. 8 no.7:1753-1755 J1 '63.  
(MIRA 16:7)

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Kurnakova AN SSSR.  
(Neodymium nitrate) (Rubidium nitrate)  
(Solubility)

PEREL'MAN, F.M.; DEMINA, G.A.

The system  $Y(NO_3)_3 - RbNO_3 - HNO_3 - H_2O$  at 25°. Zhur.  
neorg. khim. 9 no.7:1772-1773 J13, 16%. (MIRA 17:9)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.  
Kurnakova AN SSSR.



GLEZAROVA, I.L., otv.za vypusk; DEMINA, G.A., otv.za vypusk; PYATAKOVA,  
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*DEMINA, G.A.*  
AKUNOV, Viktor Ivanovich; REBINDER, P.A., akademik, redaktor; DEMINA, G.A.,  
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