

Dependence of

S/126/62/014/002/012/013
E193/E385

creep varying between 10^{-4} and 10^{-9} sec⁻¹. The results are reproduced in the form of graphs, showing: concentration-dependence of the rate of creep under various applied stresses; relationship between the rate of creep and the yield point; stress-dependence of the activation energy for creep of the alloys studied; stress- and temperature-dependence of the rate of creep. The conclusions reached can be summarized as follows. 1) Slip is the predominant mechanism of plastic deformation in creep at relatively low temperatures and high stresses. The relationship between the rate of creep under these conditions, on the one hand, and temperature and stress, on the other, can be described by an expression due to Zhurkov and Sanfirova (DAN SSSR, 1955, 101, no. 2, 257):

$$\dot{\epsilon} = \dot{\epsilon}_0 e^{-\frac{Q-\gamma\sigma}{RT}} \quad (1)$$

where Q is the activation energy for creep at $\sigma = 0$ and $\dot{\epsilon}_0$ and γ are constants. Under these conditions, the rate of

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creep can be correlated with the yield point of the alloy.

2) In creep at high temperatures and under low stresses the diffusion mechanism of plastic deformation predominates and there is a definite temperature and stress range within which the rate of creep increases linearly with increasing stress.

3) In the intermediate range of stress and temperature deformation by slip takes place side-by-side with the relaxation processes. The approximate rate of creep can be obtained, under these conditions, from an equation due to J.J. Weertman (J. Appl. Phys., 1955, 26, 1213):

$$\dot{\epsilon} = c(\sigma^{\alpha}/RT) \exp(-Q/RT) \quad (2)$$

where Q is the activation energy for diffusion,

σ is the stress and

α a coefficient equalling 3-4.

4) The range of temperature and stress in which the diffusion mechanism of deformation predominates is wider in alloys than in pure metals. The same applies to the range in which plastic

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deformation in creep is described by Weertman's equation. Thus, the stress dependence of the activation energy for creep ceases to be linear at 6 - 7 kg/mm² for pure nickel and at 10-12 kg/mm² for the 60% Co-Ni alloy.

5) The onset of the diffusion mechanism of plastic deformation in the alloys studied is facilitated by polygonization. There are 12 figures.

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals, AS USSR)

SUBMITTED: July 28, 1961 (initially)
March 2, 1962 (after revision)

Card 4/4

PAVLOV, V.A.; GAYDUKOV, M.G.; NOSKOVA, N.I.; MEL'NIKOVA, V.V.

Plastic deformation by shear and diffusion during the creep of
nickel-copper alloys. Issl. po zharopr. splav. 9:23-30 '62.

(MIRA 16:6)

(Creep of metals)

ACC NR: AP6007359

EWT(m)/ENP(w)/T/ENP(t)/ETI

IJP(c) JH/JD

AUTHORS: Pavlov, V. A.; Mel'nikova, V. V.; Pecherkina, N. L.

SOURCE CODE: UR/0126/66/021/002/0309/0310

ORG: Institute of the Physics of Metals, AN SSSR (Institut fiziki metallov AN SSSR)

TITLE: The appearance of pores during creep

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 2, 1966, 309-310

TOPIC TAGS: creep, creep mechanism, silver, copper, aluminum, METAL PHYSICAL

PROPERTY
ABSTRACT: The increase in pore density during creep as a function of the energy of packing defect was determined for silver, copper, and aluminum. The investigation supplements the results of Ya. D. Vishnyakov and Ya. S. Umanskiy (Fiz, 1963, 16, 632). The pore density was determined by means of microscopy and bulk density measurements, and the experimental results are presented graphically (see Fig. 1). The creation of

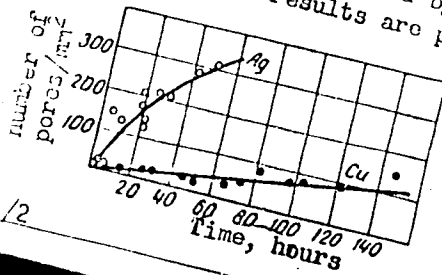


Fig. 1. Dependence of pore density on the duration of creep for silver tested at 500C and copper tested at 575C.

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ACC NR: AP6007359

pores in the metal during creep is strongly dependent on the magnitude of the defect packing energy. No increase in pore density or decrease in bulk density, as a result of creep, was detected in aluminum. It is suggested that further studies are required before a conclusion as to the causes of pore formation can be drawn. Orig. art. has: 2 graphs.

SUB CODE: 11/

SUBM DATE: 18Mar65/

ORIG REF: 003/

OTH REF: 001

Card 2/2 *llb*

SHMELEVA, V.A.; ZOBOV, Ye.V.; SHCHELKUNOVA, M.S.; Prinimala uchastiye:
MEL'NIKOVA, S.N.

Using the electrophoresis method for determining the washing
away of epoxy resin hardeners from the protective coatings
of wine vessels. Lakokras.mat.i ikh prim. no.5:50-52 '62.
(MIRA 16:1)

(Wine--Analysis) (Electrophoresis) (Protective coatings)

MEL'NIKOVA, Ye.A.

New construction NV-1 leveling instrument. Sbor.st.po geod.
no.9:43-45 '55. (MIRA 9:6)
(Leveling)

MEL'NIKOVA, YE. A.

Dissertation: "An Investigation of the Effects of Highly Dispersed Aerosols of Vanadium and Cadmium on the Central Nervous System." Cand Med Sci, First Moscow Order of Lenin Medical Inst, 28 Aug 54. (Vechernyaya Moskva, Moscow, 5 Aug 54)

SO: SUM 393, 28 Feb 1955

MELNIKOVA, O. Ya.

AUTHOR: Mogilevskaya, O.Ya., and Melnikova E.A., Candidates of Medical Sciences, and Mezemtseva, Assistant. 136-4-11/23

TITLE: Investigation of the toxicity of titanium and its compounds. (Issledovanie tiksichnosti titana i ego soedineniy)

PERIODICAL: "Tsvetnye Metally" (Non-ferrous Metals), 1957, No.4, pp. 51 - 55 (U.S.S.R.)

ABSTRACT: Relatively high concentrations of titaniferous dusts and titanium-tetrachloride vapour are becoming more frequently encountered as titanium production increases. The present investigation aimed to fill the gap in both Russian and foreign literature on the toxicity of such substances and the precautionary measures. The authors' observations have not confirmed the view that the solubility of titanium in the biological media is appreciably higher than in water. The compounds studied in the present investigation were titanium dioxide, titanium carbide and titanium tetrachloride, and these were caused to act on animals under conditions fairly similar to those encountered by industrial workers. Among the conclusions reached are the following: although the action on the organism of titanium, titanium-dioxide and titanium-carbide of dusts is relatively mild they cannot be considered inert. Special care should be taken to avoid mixed dusts, particularly those of titanium

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Investigation of the toxicity of titanium and its compounds.
(Cont.)

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compound with silica, since these mutually stimulate their harmful effects. Workers exposed to such dusts should be medically inspected at least once a year. The high toxicity of titanium tetrachloride vapours necessitate the most careful hermetisation of apparatus, and maintenance of ventilation equipment. Suitable protective clothing must be made available. Symptoms of titanium-tetrachloride exposure include chronic bronchitis, pneumosclerosis, tuberculosis of the lungs, bronchial asthma and all breathing-organ illnesses. Further research on this subject is recommended. There are 12 references, 8 of which are Slavic.

Card 2/2

ASSOCIATION: The Moscow Medical Institute (Moskovskiy Meditsinskiy Institut).

AVAILABLE:

MEL'NIKOVA, YE. A.

"Data on the Determination of the Allowable Concentrations of Cadmium and Vanadium in the Air of Industrial Premises," by Ye. A. Mel'nikova, Candidate of Medical Sciences, Chair of Labor Hygiene, First Moscow Order of Lenin Medical Institute, Gigiyena i Sanitariya, Vol 22, No 3, Mar 57, pp 25-31

This article reports the results of experiments conducted on white rats to determine the effect of highly dispersible aerosols formed by the vapors of vanadium and cadmium in plants where these metals are processed. As a result of the experiments it was established that the allowable concentration of vanadium -- 0.0001 milligram per liter -- established previously by I. V. Roshchin and Ye. P. Vishnevskaya was correct; such a concentration of cadmium may be permitted only temporarily; higher concentrations of aerosols of the metals may cause functional disturbances of the organism affecting the nervous system first. Acute and chronic intoxications by vanadium aerosols are more pronounced than those produced by cadmium. (U)

Sum. 1360

EXCERPTA MEDICA Sec 17 Vol 5/3 Public Health Mar 59

1023. TOXICITY OF TITANIUM TETRACHLORIDE (Russian text) - Meirikova
E. A. - GIGI SAN, 1958, 5 (27-31) Tables 1

A comparative study was made of the toxicity of hydrogen chloride which acts at the moment of formation, and of the aerosol product of hydrolysis of $TiCl_4$. Experimental poisoning was performed on mice for a period of 2 hr. in a chamber with a volume of 100 l. The author studied the concentrations which killed the animals in 2-6 days (0.4 ml. $TiCl_4$) and also smaller doses. There were considerable disturbances of respiration. The irritant action of pure hydrogen chloride was more pronounced but caused less mortality, and disturbances of respiration were slight. During poisoning with $TiCl_4$ the signs of oedema of the lungs were more pronounced. The higher toxicity of $TiCl_4$ chloride depends on the physico-chemical state of the aerosol product of hydrolysis (the highly dispersed phase favours its penetration into the deepest parts of the lungs).

MEL'NIKOVA, Ye.A.

Factors impeding and accelerating the process of rusting in salt fish. [with summary in English]. Vop.pit. 17 no.5:59-63 S-0 '58 (MIRA 11:10)

1. Iz kafedry gigiyeny (zav. - prof. F.S. Okolov) Kubanskogo meditsinskogo instituta, Krasnodar).

(FISH,

salted fish, factors impeding & accelerating process of rusting (Rus))

(FOOD,

same (Rus))

EXCERPTA MEDICA Sec 2 Vol 12/7 Physiology July 59

3159. TOXICITY OF A HIGHLY DISPERSE AEROSOL OF CADMIUM OXIDE
(Russian text) - Melnikova E. A., Dept. of Industr. Hyg., i. M.
Sechenov First Moscow Med. Inst., Moscow - FARMAKOL. I TOKSIKOL.
1958, 21/2 (72-78) Graphs 2 Tables 1

Where cadmium is used in industry there is a possibility that the atmosphere may be contaminated by a fine dust of cadmium oxide. This is highly toxic; a threshold concentration of 0.002 mg. per litre of air for the appearance of morphological lesions in the organs of rats has been reported by previous investigators. In this investigation a threshold value of 0.0018 mg./l. for rats was established.

MEL'NIKOVA, Ye.A., kand.med.nauk

Toxicity of titanium tetrachloride [with summary in English]
Gig i san. 23 no.5:27-31 My '58 (MIRA 11:6)

1. Iz kafedry gigiyeny truda i Moskovskogo ordena Lenina meditsin-
skogo instituta imeni I.M. Sechenova.

(TITANIUM,

eff. of titanium tetrachloride in mice (Bus))

MELNIKOVA, YE. A., YAPUN, S. S., ORISENKOVA, R. V., VOPO 'YEVA, A. S.

"The experience of study of the effect of aerosols of metals
on the functional state of the central nervous system under
industrial conditions and experimentation."

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

MEL'NIKOVA, Ye.A.

Toxicity of titanium tetrachloride. Trudy 1-go MMI 5:13-19
'59. (MIRA 13:8)

1. Iz kafedry gigiyeny truda (zav. - prof. Z.I. Izrael'son)
1-go Moskovskogo ordena Lenina meditsinskogo instituta im.
I.M. Sechenova.

(TITANIUM CHLORIDES--TOXICOLOGY)

OGIYENKO, T.G.; MEL'NIKOVA, Ye.A., dotsent

Study of noise on diesel and steam engines at the Krasnodar Railroad
Junction. Gig. i san. 27 no.3:92-94 Mr '62. (MIRA 15:4)

1. Iz kafedry fiziki i kafedry gigiyeny Kubanskogo meditsinskogo
instituta.

(NOISE--MEASUREMENT)

(KRASNODAR--LOCOMOTIVE SOUNDS)

ROTENBERG, M.I.; MEL'NIKOVA, Ye.A.; POLYAKOV, Ya.G., inzhener, redaktor;
GOLOVIN, S.Ya., inzhener, redaktor; TIKHONOV, A.Ya., tekhnicheskiy
redaktor.

[Mastering the casting of crankshafts from spheroidal graphite iron]
Osvoenie otlivki kolenchatykh valov iz chuguna so sferoidal'ny
grafitom. Moskva, Gos.nauchno.-tekhn. izd-vo mashinostroit. i
sudostroit. lit-ry, 1954. 16 p. (Moscow. Vsesoyuznyi proektno-tekh-
nologicheskii institut. Obmen tekhnicheskim opytom, no.13)

(MLRA 9:8)

(Crankshafts and crankshafts) (Founding)

ROTENBERG, M. I. ; SOLDATENKO, V. I. ; MEL'NIKOVA, Ye. A.

Technology of founding magnesium cast iron crankshafts. Lit. proizv.
no. 9:22-24 S'55. (MLRA 8:12)
(Iron-magnesium alloys) (Crankshafts)

MEL'NIKOVA, Ye.A., starshiy prepodavatel', inzh.

Laboratory work in metallography for the course on the technology
of metals and other materials. Uch.zap.Kol.ped.inst. Politekh.ser.
4 no.1:61-81 '59. (MIRA 14:4)
(Metallography—Study and teaching)

MEL'NIKOVA, Ye.A., dotsent; PANASENKO, Z.G., vrach; ARTAMONOVA, T.A.,
vrach

Changes in the serum proteins in persons working with gasoline
and ethylated gasoline. Nauch. trudy Kub. gos. med. inst. 19:
77-83 '62. (MIRA 17:8)

1. Iz kafedry obshchey gigiyeny (zaveduyushchiy - zasluzhennyy
deyatel' nauki Kirgizskoy SSR prof. F.S. Okolov) Kubanskogo
gosudarstvennogo meditsinskogo instituta.

MEL'NIKOVA, Ye.A.: BELIFH... ..

Cholerae... ..
with prodromal... ..
N-D '67.

... ..
... ..
(MIA 19:1)

1.

...

TSOPPI, Yelizaveta Ernestovna; SPERANSKII, G.N., professor, zasluzhenny
deyatel' nauki; MEL'NIKOVA, Ye.B., redaktor; GABERLAND, M.I.,
tekhnicheskii redaktor

[The work of nurses in children's institutions] Rabota meditsinskoi
sestry v detskikh uchreshdeniakh. Pod red. G.N.Speranskogo. Izd.
2-e, ispr. 1 dop. Moskva, Gos. izd-vo med. lit-ry, 1956. 259 p.

(MLRA 9:7)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for
Speranskii)

(CHILDREN--CARE AND HYGIENE)

(NURSES AND NURSING)

MEL'NIKOVA, Ye.E.; TSIRKIN, Yu.M.

Use of complement-fixing culture diagnosticum for the study of the serum
of patients with tick-borne encephalitis. Vop. virus. 9 no.2:158-162
Mr-Apr '64. (MIRA 17:12)

1. Institut virusologii imeni Ivanovskogo AMN SSSR i Institut medi-
tsinskoy parazitologii i gel'mintologii imeni Martsinovskogo, Moskva.

ACC NR: AP6034387 (N) SOURCE CODE: UR/0402/66/000/005/0599/0601

AUTHOR: L'vova, A. I.; Mel'nikova, Ye. E.; Galegov, G. A.; Gaydamovich, S. Ya.

ORG: Institute of Virology im. D. I. Ivanovskiy, AMN SSSR, Moscow
(Institut virusologii AMN SSSR)

TITLE: The stimulating action of L-glutamine on multiplication of Venezuelan encephalomyelitis virus

SOURCE: Voprosy virusologii, no. 5, 1966, 599-601

TOPIC TAGS: virology, virus disease, encephalomyelitis, *GLUTAMIC ACID*

ABSTRACT: The ability of glutamine to stimulate Venezuelan encephalomyelitis virus in Henks solution was demonstrated. Glutamic acid does not have this stimulating effect. Chromatography showed that glutamine is assimilated more rapidly by cells infected with Venezuelan encephalomyelitis than by healthy cells. Since exogenous glutamine is necessary for optimum conditions of multiplication of this virus, structural analogues of glutamine or its antimetabolites may be of interest for chemotherapy of Venezuelan encephalomyelitis. Orig. art. has: 1 figure. [W.A. 50]

SUB CODE: 06/ SUBM DATE: 10Feb66/ ORIG REF: 001/ OTH REF: 001
Card 1/1 UDC: 576.858.25.095.18:615.739.64

BARINSKIY, R.L., redaktor; MARGULIS, U.Ya., redaktor; MEL'NIKOVA, Ye.I.,
redaktor.

[High-energy nuclear reactions] IAdernye reaktsii pri bol'shikh energiiakh. Vol.1. [Photonuclear reactions; collection of translations]
Fotoiadernye reaktsii. Sbornik perevodov. Moskva, Izd-vo inostrannoi
lit-ry. 1953. 227 p. (MLRA 7:2)

(Nuclear physics) (Photons)

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

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 60782
Author : Mel'nikova, Ye. I.
Inst : Not given
Title : Injury of the Cerebral Circulation of a Functional-Dynamic Character
Orig Pub : V. sb.: Vopr. klinich. nevropatol., Irkutsk, 1957, 63-83

Abstract : The result of the clinical study of 360 patients is presented, in which there were sudden transitory disturbances in the cerebral functions. 59.4% of the patients were in the age group of 41 - 60. In 91% of the patients the disturbances in cerebral circulation (CC) were conditioned by hypertension, 24.7% of them in the stage I, 51.6% in II and 23.7% in III. In 85.3% of the

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

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 60782

patients, symptoms of arteriosclerosis were uncovered. In 60% of the cases the disturbance was preceded by factors predisposing towards the rise in blood pressure (physical labor, intellectual overexertion, anxiety). In the beginning of the disease, there were rarely headaches or loss of consciousness. The main symptoms of the disease are: vertigo (66%), disturbance of the function of the hypoglossal nerve (73%), paresis of the extremities (56%), pathological reflexes (51%), pathology of abdominal reflexes (72%), bilateral conduction symptoms (53%), asymmetry in the face innervation (97%), speech impairment (35%). In 63% of the patients the dynamic disturbances of CC developed in the system of the inner carotid artery, in 16.5% in the system of the vertebral artery, and in the remaining cases the question of localization remained

Card 2/3

USOVA, M.K.; IL'INA, N.A.; MEL'NIKOVA, Ya.M.

Clinical and physiological analysis of the effectiveness of acupuncture in radiculitis; preliminary communication. Zhur.nev. i psikh. 59 no.6:723-728 '59. (MIRA 13:1)

1. Laboratoriya igloterapii (nauchnyy rukovoditel' - prof. N.I. Grashchenkov) Instituta psikiatrii (dir. - prof. D.D. Fedotov) Ministerstva zdravookhraneniya SSSR, Moskva.
(ACUPUNCTES, in var. dis.
radiculitis (Rus))
(NERVES, SPINAL, dis.
radiculitis, acupuncture (Rus))

GRASHCHENKOV, N.I.; KASSIL', G.N.; USOVA, M.K.; VEYN, A.M.; IL'INA, N.A.;
KAMENETSKAYA, B.I.; MEL'NIKOVA, Ye.M.

Application of acupuncture in certain diseases; clinical physiological
investigations. Zhur.nevr.i psikh. 59 no.10:1159-1166 '59.

(MIRA 13:3)
1. Laboratoriya reflektornoy terapii Instituta psikhatrii (direktor -
prof. D.D. Fedotov) Ministerstva zdravookhraneniya SSSR, Moskva.
(ACUPUNCTURE)

KASSIL', G.N.; BOYEVA, Ye.M.; VEYN, A.M.; KAMENETSKAYA, B.I.; MAL'TSINA, V.S.;
MEL'NIKOVA, Ye.M.; FISHMAN, M.N.

Mechanisms of therapeutic effects in acupuncture. Vest.AMN SSSR
16 no.3:37-47 '61. (MIRA 14:7)

1. Iz laboratorii reflektornoy terapii (rukovoditel' - deystvitel'nyy
chlen AMN SSSR N.I.Grashchenkov) Instituta psikhiatrii (dir. - prof.
D.D.Fedotov) AMN SSSR.

(ACUPUNCTURE)

MEL'NIKOVA, Ye.M.

Effect of acupuncture on the neuromuscular apparatus (electromyographic investigations). Sbor. trud. GMI no.9:56-62 '62. (MIRA 17:2)

1. Iz laboratorii reflektornoy terapii AMN SSSR (zav. - chlen-korrespondent AN SSSR N.I. Grashchenkov, nauchnyy rukovoditel' prof. G.N. Kassil').

KASSIL', G.N.; BOY'VA, Ye.M.; VEYN, A.M.; KAMENETSKAYA, B.I.; MAL'TSINA, V.S.;
MEL'NIKOVA, Ye.M.; RAYT, M.L.

Acupuncture is a reflex method of treatment and its specific characteristics. Vop. kur., fizioter. i lech. fiz. kul't.
28 no.5:415-419 S-O '63. (MIRA 17:9)

1. Iz laboratorii reflektornoy terapii AMN SSSR.

BOYEVA, Ye.M., kand. med. nauk; GRASHCHENKOV, N.I., prof.; KAMENETSKAYA, B.I., kand. med. nauk; KASSIL', G.N., prof.; MEL'NIKOVA, Ye.M. FISHMAN, M.N., kand. biolog. nauk (Moskva)

Dysfunction of the hypothalamic region of the brain in the acute stage of closed craniocerebral injuries. Klin. med. 41 no.9:113-119 S'63 (MIRA 17:3)

1. Iz laboratorii klinicheskoy neyrofiziologii (zav. - deystvitel'nyy chlen AMN SSSR prof. N.I. Grashchenko) AMN SSSR i laboratorii ney-gumoral'noy regulatsii (zav. - deystvitel'nyy chlen AMN SSSR prof. N.I. Grashchenko) AN SSSR.

BOYEVA, Ye.M.; GRASHCHENKOV, N.I.; KAMENETSKAYA, B.I.; MEL'NIKOVA, Ye.M.

Use of steroid hormones in the acute period of a closed
cerebrocranial trauma. Zhur. nevr. i psikh. 64 no.3:380-385
'64. (MIRA 17:5)

1. Laboratoriya klinicheskoy neyrofiziologii (zaveduyushchiy -
prof. N.I. Grashchenkov) AMN SSSR, Moskva.

MEL'NIKOVA, Ye.P.

Standardization of electrodes for electric arc welding and
building-up. Standartizatsia 24 no.8:30 Ag '60.

(MIRA 13:9)

(Electric welding)

(Electrodes--Standards)

MEL'NIKOVA, E. P., NAUMOVA, Z. K. and VANSHEKDT, A. A.

"Synthesis of methylenediurea and its polymer homologs", J. Gen. Chem. (USSR), 10, 1968-72, 1940.

Methylenediurea may be obtained by condensation of HCHO with urea in the presence of traces of HCl in the solid or at 100° along with an admixt. of less-sol. products of polycondensation. Dimethylenetriurea is prepd. by condensing methylolmethylenediurea with urea in an acid medium. Trimethylenetetraurea is prepd. by condensing the dimethylol deriv. of methylenediurea with urea in an acid medium. In order to prep. good yields of mesomethylenepolyurea it is necessary to use excess urea in the above method.

B. A. Kamich.

MELNIKOVA, E. P.

7
 (Synthesis of dichloro- and dichloromethyl derivatives of aromatic compounds. A. A. Vanshchik, E. P. Melnikova, and E. V. Kuznetsov. *Khim. Tver'sk. Univ.* 1967, 1: 105-107).
 Chloromethylation of C_6H_4 , Ph, and Ph_2CH with chloromethyl ether and $ZnCl_2$ at 35-40° gave within a few min. and up to 2 hrs. 50-70% of the corresponding p-dichloromethyl deriva. (I). The deriva. of naphthalene and anthracene and 4,4'-bis(chloromethyl)diphenyl oxide, m. 61°, were thus prepd. The addn. of HI (d. 1.7) to Me_2CO solns. of these deriva. yield the I deriva. quantitatively. Thus were prepd: p-xylene dioxide, m. 174°, and the 4-bis(chloromethyl) deriva. of Ph, m. 160°, and of Ph_2CH , m. 172°. L.H.

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Distr: ~~4E3d/4E1j/4E2o(j)~~

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VANSHEYDT, A.A.; MEL'NIKOVA, Ye.P.; KUKHAREVA, L.V.; KRAKOVYAK, M.G.

Method for the synthesis of dichloromethyl derivatives of
naphthalene and diphenyl oxide. Khim. nauka i prom. 3 no.2:
287 '58. (MIRA 11:6)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.
(Naphthalene) (Phenyl ether)

VANSHEYDT, A.A.; MEL'NIKOVA, Ye.P.; KURHAREVA, L.V.; KRAEDVYAK, M.G.

Soluble poly-n-xylylene. Zhur.prikl.khim. 31 no.12:1898-1900
D '58. (MIRA 12:2)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.
(Quinodimethan) (Polymers)

MEL'NIKOVA, Ye. P., Cand Chem Sci -- (diss) "Synthesis of dichloromethyl derivatives of aromatic hydrocarbons and the production of polymers of regulated structure on their basis." Leningrad, 1960. 15 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Leningrad Order of Labor Red Banner Technological Inst im Lensovet); 200 copies; price not given; (KL, 28-60, 158)

MEL'NIKOVA, YE. P.

307/4982

International symposium on macromolecular chemistry, Moscow, 1960.
Nuzva 1960 G. i. doklady i referenty. Sbornik I. (International Symposium on Macromolecular Chemistry Held in Moscow, June 11-19, 1960. Papers and Abstracts. Section I.) (Moscow, Izd-vo AN SSSR, 1960) 340 p. 5,500 copies printed.

Sponsoring Agency: The International Union of Pure and Applied Chemistry, Commission on Macromolecular Chemistry
Tech. Ed.: T. V. Polyakova.

PURPOSE: This collection of articles is intended for chemists and researchers interested in macromolecular chemistry.

COVERAGE: This is Section I of a multivolume work containing scientific papers on macromolecular chemistry in Moscow. The material includes data on the synthesis and properties of polymers, and on the processes of polymerization, copolymerization, polycondensation, and polyrecombination. Each part is presented in full or summarized in French, English, and Russian. There are 47 papers, 28 of which were presented by Soviet, Russian, Hungarian, and Czechoslovakian scientists. No personal files are mentioned. References accompany individual articles.

Tyagova, Ye. I., B. A. Dolzhenko, T. G. Zhuravina, R. K. Korzhikina, and M. N. Kuznetsova (USSR). The Synthesis of Gls- and Fuc-Disaccharides on Gels Catalysts and a Study of Their Structure and Properties
Mol. Cr. Liq., G. V. Korolov, Yu. M. Filipovskaya (USSR). Synthesis and Polymerization of Esterified Polyacrylates 47

Sokolov, M. I., M. A. Sernobayeva, and I. Zvonk (Czechoslovakia). The Structure of Hardened Grafting Polymers 58

Allylberan, Ye. M., A. Ye. Kulikova, and N. M. Fedotkina (USSR). New Method of Preparation of Polyesters and Their Oligomers 64

Bodanov, N., and A. Stepanova (Czechoslovakia). Analysis of Cross-Linked Polymers 72

Vasheva, A. A., Ye. P. Mal'nikova, M. G. Tschukaruk, L. T. Kucheryava, and G. A. Gladkovskaya (USSR). On the Synthesis and Properties of Crystalline Polymers of the Type of Poly-P-Isyriane and Polyphenylacetate 90

Makogon, S. G. (USSR). Cyclic Polymerization and Copolymerization of Divinylacetate. Synthesis of Cyclic Polymers and Polyphenylacetate (USSR). Synthesis of Crystalline Polyvinylacetate 101

Antonova, T. A., and Ye. N. Baitzskak (USSR). Polymerization of Polyfunctional Compounds 112

Sokolov, O. P., M. Drenov, E. Abornin, and M. Tschukaruk (Bulgaria). Polymerization of Vinylacetate in the Presence of Butyllithium and Titanium Chloride Type Catalysts 121

Kochak, V. V., S. L. Sash, and V. P. Alekseyeva (USSR). On the Preparation of the New Types of Linear Polymers by the Reaction of Polymer-Combination 131

Kozlov, N. G., A. V. Popov, and S. G. Durnavina (USSR). The Synthesis of Organosilicon Polymers on a Complex Catalyst (C₂H₅)₂Al₂Cl₂ 154

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Kolon, M. M., I. K. Kozlov, and P. S. Portianskiy (USSR). The Effect of Chemical Structure on the Polymerization Activity of the Unsubstituted Organosilicon Compounds 167

Vol'mantsen, M. V. (USSR). Cooperative Processes in the Polycondensation of Biopolymers 202

Card 6/9

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83480

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B004/B060

53831 also 2109, 2209

AUTHORS:

Mel'nikova, Ye. P., Vansheydt, A. A., Krakovyak, M. G.,
Kukhareva, L. V.

TITLE:

Application of the Würtz Reaction to the Synthesis of Polymers of the Polyxylylene Type. I. Interaction of Metallic Sodium With Bis-chloro-methyl Derivatives of Aromatic Hydrocarbons

PERIODICAL:

Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 9, pp. 1383-1390

TEXT: The authors discuss the production of polymers of the type $(-CH_2ArCH_2-)_n$ (Ar = aryl residue) by means of the pyrolysis of dimethyl-substituted aromatic hydrocarbons. This reaction does not succeed if, as happens with m-xylene, no quinone monomer can form, or the methyl groups in derivatives of diphenyl methane are bound to different aromatic rings. The Würtz reaction is recommended for the production of polymers in such a case. After a survey of publications concerning the application of the Würtz reaction to the synthesis of polymers (Refs. 4-11), the authors

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S/190/60/002/009/011/019
B004/B060

Application of the Würtz Reaction to the Synthesis of Polymers of the Polyxylylene Type. I. Interaction of Metallic Sodium With Bis-chloro-methyl Derivatives of Aromatic Hydrocarbons

describe the syntheses made by them. The initial products used were the substances listed in Table 1 with their melting points: p-bis-(chloro-methyl)-benzene; 2,5-bis-(chloro-methyl)-1,4-dimethyl benzene; 4,6-bis-(chloro-methyl)-1,3-dimethyl benzene; 4,4'-bis-(chloro-methyl)-diphenyl methane; and a difficultly separable mixture of bis-(chloro-methyl)-naphthalene (1,4 + 1,5). The reaction of the compounds with sodium metal took place in a nitrogen current in n-octane-, xylene-, and chiefly dioxane solution at temperatures kept near 20-25°C by cooling. Table 1 shows the analysis of the products obtained. They were: poly-p-dimethylene benzene; poly-2,5-dimethylene-1,4-dimethyl benzene; poly-4,6-dimethylene benzene; poly-2,5-dimethylene-1,4-dimethyl benzene; poly-4,4'-dimethylene diphenyl, and polydimethylene naphthalene (1,4 + 1,5). Although the reaction according to equation $nClCH_2ArCH_2Cl + 2(n-1)Na \rightarrow Cl(-CH_2-Ar-CH_2)_nCl + 2(n-1)NaCl$ made expect the formation of linear polymers with chlorine atoms at the ends, some of the polymers did not contain any chlorine. The

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Application of the Würtz Reaction to the
Synthesis of Polymers of the Polyxylylene
Type. I. Interaction of Metallic Sodium With
Bis-chloro-methyl Derivatives of Aromatic
Hydrocarbons

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B004/BC60

authors doubt the possibility of a cyclization, and discuss the reactions that might cause a reduction of polymeric dichlorides. Reference is made to papers by Shorygin in this connection. The determination of the molecular weight on the basis of the chlorine content is not possible by the methods described. A variant of the synthesis from bis-(chloro-methyl)-m-xylene under elimination of the sodium excess led to the chlorine-containing product $\text{Cl}(\text{C}_{10}\text{H}_{12})_n\text{Cl}$, whose molecular weight was found to be

4000, $n = 30$, while the same chlorine-free polymer obtained with sodium excess had a molecular weight of 1800, $n = 14$. The polydimethylene-m-xylene was readily soluble in chloroform, and its molecular weight was 1800 - 4000 depending on reaction conditions. The polymers of dimethylene benzene, p-xylene, and diphenyl methane with CH_2 -groups in p-position were soluble in high-boiling solvents only. The determination of their molecular weight was not possible since the apparatus required was not available. The polymers from bis-chloro-methyl derivatives of diphenyl and naphthalene are spatially cross-linked products, insoluble in organic solvents.

Card 3/4

X

Application of the Wurtz Reaction to the
Synthesis of Polymers of the Polyxylylene
Type. I. Interaction of Metallic Sodium With
Bis-chloro-methyl Derivatives of Aromatic
Hydrocarbons

83480
S/190/60/002/009/011/019
B004/B060

There are 2 tables and 25 references: 3 Soviet, 9 US, 6 British, 6 German,
1 French, and 1 Swiss.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR
(Institute of High-molecular Compounds of the AS USSR)

SUBMITTED: April 11, 1960

Card 4/4

86323

S/190/60/002/012/010/019
B017/B05515.8114
AUTHORS:

2209

Mel'nikova, Ye. P., Vansheydt, A. A., Krakovyak, M. G.,
Kukhareva, L. V.

TITLE:

Application of the Wurtz Reaction in the Synthesis of Poly-
xylylene Type Polymers. II. Properties of the Polycon-
densation Products of Dichloromethylated Aromatic Hydro-
carbons With Metallic Sodium

PERIODICAL:

Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 12,
pp. 1817-1823

TEXT: The physical properties of polymers prepared by polycondensation of dichloro-methyl derivatives of aromatic hydrocarbons with metallic sodium were investigated. It was found that the polymers prepared from dichloro-methyl m-xylene, linked by CH₂ groups in meta position, are easily fusible and soluble. Polydimethylene p-xylene, in which the CH₂ groups are in para position, is crystalline and has a higher melting point. It dissolves in α-bromo naphthalene only at temperatures above 230°C. Poly-4,4'-dimethylene

Card 1/2

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Application of the Wurtz Reaction in the
Synthesis of Polyxylylene Type Polymers.
II. Properties of the Polycondensation Products of Dichloromethylated
Aromatic Hydrocarbons With Metallic SodiumS/190/60/002/012/010/019
B017/B055

diphenyl methane is less crystalline and dissolves at temperatures lower by 100°C than p-xylene derivatives. X-ray analysis of these polymers confirms their crystal structure. The radiograms were taken on a YPC-50 (URS-50) X-ray apparatus. They show that all the polymers prepared are more or less crystalline and that the turbidities appearing at fusion or during the cooling of solutions are caused by crystallization products. Insoluble threedimensional polymerizates formed from dichloro-methyl derivatives of diphenyl and naphthalene are high-melting crystalline compounds. They dissolve after boiling for 4 h in α-bromo naphthalene without suffering a change in melting point. The differences in polymerizate properties are evidently closely linked with the different stabilities of their crystallites towards higher temperatures and hot solvents. There are 6 figures, 2 tables, and 6 references: 2 Soviet, 2 US, 1 British, and 1 German.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR (Institute of High-molecular Compounds of the Academy of Sciences USSR)

SUBMITTED: May 20, 1960

Card 2/2

VANSHEYDT, A.A.; MEL'NIKOVA, Ye.P.; KUKHAREVA, L.V.

Synthesis of dichloromethyl derivatives of *p*- and *m*-xylenes. Zhur.
prikl. khim. 33 no.9:2151-2152 S '60. (MIRA 13:10)
(Xylene)

VANSHEYDT, A. A.; MEL'NIKOVA, Ye.P.; TALLIYER, Yu.A.

Chloromethylation of benzene derivatives and xylenes (m and p)
by paraform and hydrogen chloride in the presence of stannic chloride.
Zhur.prikl.khim. 34 no.3:705-707 Mr '61. (MIRA 14:5)

1. Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR.
(Chloromethylation) (Xylene) (Benzene)

VANSHEYDT, A.A.; MEL'NIKOVA, Ye.P.; GLADKOVSKIY, G.A.

Preparation and properties of polyphenylene-type
polymers. Part 2: Preparation of polyarylenemethyls
by polycondensation of aromatic hydrocarbons with their
bis-acetoxy and bis-chloromethyl derivatives. *Vysokom.soed.*
4 no.9:1303-1309 S '62. (MIRA 15:11)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.
(Hydrocarbons) (Polymers)

MEL'NIKOVA, Ye.P.; VANSHEYDT, A.A.; SIMANOVSKAYA, S.A.

Synthesis of tri (chloromethyl)-*m*-xylene and of some products of its transformation. Zhur. prikl. khim. 38 no.7:1629-1631 J1 '65.

(MIRA 18:7)

DEVYATNIN, V.A.; MEL'NIKOVA, Ye.Ya.; CHEPENKO, A.I.

Vitamin A, B₁ and B₂ content of cheese. Trudy VNIIV 6:240-242
'59. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
Khimiko-analiticheskaya laboratoriya.
(CHEESE) (VITAMINS)

DEVYATNIN, V.A.; IVANOV, A.G.; MEL'NIKOVA, Ye.Ya.

Vitaminization of confectionery products with ascorbic acid.
Trudy VNIVI 6:242-244 '59. (MIRA 13:7)

1. Khimiko-analiticheskaya laboratoriya Vsesoyuznogo nauchno-
issledovatel'skogo vitaminogo instituta i 6-ya Leningradskaya
konditerskaya fabrika.

(ASCORBIC ACID) (CONFECTIONERY)

DEVYATNIN, V.A.; IOYRISH, N.P.; MEL'NIKOVA, Ye.Ya.

Preservation of vitamin C in honey following its vitaminization.
Trudy VNIIV 6:244-245 '59. (MIRA 13:7)

1. Khimiko-analiticheskaya laboratoriya Vsesoyuznogo nauchno-
issledovatel'skogo vitamininogo instituta.
(ASCORBIC ACID) (HONEY)

DEVYATNIN, V.A.; SOLUNINA, I.A.; FEDOROVA, G.A.; MEL'NIKOVA, Ye.Ya.;
SAMSONOVA, G.S.; ZHELTOVA, I.S.

Vitamin loss in cooking. Trudy VNIVI 8:93-96 '61. (MIRA 14:9)

1. Khimiko-analiticheskaya laboratoriya Vsesoyuznogo nauchno-
issledovatel'skogo vitaminnogo instituta.
(Vitamins)

GAYDAMOVICH, S.ya.; OBUKHOVA, V.R.; MEL'NIKOVA, Ye.E.

Obtaining of antigen for the complement fixation reaction
of tick-borne and Japanese encephalitis viruses from tissue
cultures. Nauch. inform. Otd. nauch. med. inform. AMN SSSR
no.1:31-33 '61 (MIRA 16:11)

1. Institut virusologii im. D.I.Ivanovskogo (direktor - prof.
P.N.Kosyakov) AMN SSSR, Moskva.

*

KOPYAKHOV, F.I.; MHL'NIKOVA, Yu.S.; TRUBIN, G.F.; KAZAKOVA, A.V.

Determining water saturation and oil recovery factors of sands on
the basis of drill core analysis. *Neft.khoz.* 34 no.6:28-34 Je '56.
(Oil well logging) (Petroleum engineering) (MLRA 9:9)

MEL'NIKOVA, Yu.S.

Effect of bituminous process on physical and mechanical
properties of soils. Uch.zap.Mosk.un. no.177:171-192 '56.
(MLRA 10:5)

(Bituminous Materials)
(Soil mechanics)

MEL'NIKOVA, Yu.S.; BABAY, V.S.

Lithological characteristics and physical parameters of the Khadun producing area in the Palagiada region of Stavropol Territory.
Geol. nefiti Supplement to no.8:111-122 '58. (MIRA 11:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti i Vsesoyuznyy nauchno-issledovatel'skiy institut gazovoy promyshlennosti.
(Stavropol Territory--Geology, Stratigraphic) (Water, Underground)

KOTYAKHOV, F.I.; MEL'NIKOVA, Yu.S.; SEREBRENNIKOV, S.A.

Method for calculating recovery factors in water flood
operations. Trudy VIII no.24:37-63 '59. (MIRA 13:5)
(Oil field flooding)

KOTYAKHOV, F.I.; MEL'NIKOVA, Yu.S.

Area of disturbance of linear flow in fissured rocks. Nauch.-
tekh. sbor. po dob. nef'ti no.15:10-16 '61. (MIRA 15:9)

1. Vsesoyuznyy nef'tegazovyy nauchno-issledovatel'skiy institut.
(Oil reservoir engineering)

KOTYAKHOV, F.I.; MEL'NIKOVA, Yu.S.

Determining the physical parameters of thinly interbedded
arenaceous-argillaceous rocks. Trudy VNI no.34:86-94 '62.
(MIRA 157)

(Oil sands)

KOTYAKHOV, F.I.; MEL'NIKOVA, Yu.S.; YURCHAK, V.P.

Permeability of lithologically uniform sandstones in bed D₁
of the Tuymazy oil field. Nefteprom, delo no.6:7-9 '65.

(MIRA 18:10)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

ALISHOYEV, V.R.; BEREZKIN, V.G.; MEL'NIKOVA, Yu.V.

Effect of phase transitions in the stationary phase on the chromatographic characteristics of the eluates. Zhur. fiz. khim. 39 no. 1:200-202 Ja '65 (MIRA 19:1)

1. Institut neftekhimicheskogo sinteza AN SSSR. Submitted January 13, 1964.

MEL'NIKOVA, Z., assistant

Concerning structure of "other" diseases. Okhr.truda i sots.strakh.
no.7:56-57 J1 '59. (MIRA 12:11)

1. Kafedra organizatsii zdravookhraneniya Sverdlovskogo meditsin-
skogo instituta.

(MEDICINE, INDUSTRIAL)

MEL'NIKOVA, Z.M.; DUDAR', N.M.

Effect of those who are repeated ill on the level of disease incidence with temporary loss of work capacity. Zdrav. Ros. Feder. 5 no.8:13-16 Ag '61. (MIRA 14:10)

1. Iz kafedry organizatsii zdravookhraneniya Sverdlovskogo meditsinskogo instituta (dir. - prof. A.F.Zverev) i Sverdlovskogo oblprofsoвета.

(INDUSTRIAL HYGIENE)

MEL'NIKOVA, Z.M. (Sverdlovsk)

Correlation of general morbidity (according to patients' records and morbidity with temporary loss of working capacity. Sov. zdrav. 21 no.2:41-43 '62. (MIRA 15:3)

1. Iz kafedry organizatsii zdravookhraneniya i istorii meditsiny (zav. -- dotsent N.M. Mamzina) Sverdlovskogo meditsinskogo instituta (dir. -- ~~prof.~~ A.F. Zverov).
(INDUSTRIAL HYGIENE)

BARATS, S.S.; MEL'NIKOVA, Z.M.

Hypertension and coronary atherosclerosis among workers of the Ural Machinery Plant. Sov.med. 26 no.8:13-18 Ag '62.

(MIRA 15:10)

1. Iz kardiologicheskoy gruppy usileniya (~~nauchnyy~~ rukovoditel' - prof. B.P.Kuzhelevskiy) pri Sverdlovskom institute fizioterapii i kafedry organizatsii zdravookhraneniya Sverdlovskogo meditsinskogo instituta (dir. - prof. A.F.Zverev).

(CORONARY HEART DISEASE)

(SVERDLOVSK--MACHINERY INDUSTRY WORKERS--DISEASES AND HYGIENE)

BERG, Aksel' Ivanovich, akademik; MEL'NIKOVA, Zh.I., red.;
RAKITIN, I.T., tekhn. red.

[Cybernetics and reliability] Kibernetika i nadezhnost'.
Moskva, Izd-vo "Znanie," 1963. 30 p. (Novoe v zhizni, nauke,
tekhnike. IV Seriya: Tekhnika, no.21) (MIRA 16:12)

1. Chlen-korrespondent AN SSSR (for Berg).
(Automatic control)
(Electronic industries—Quality control)

UMANSKIY, Aleksey Aleksandrovich; MEL'NIKOVA, Zh.M., red.;
NAZAROVA, A.S., tekhn. red.

[Food is prepared by automatic machines] Pishchu gotoviat
avtomaty. Moskva, Izd-vo "Znanie," 1963. 31 p.
(MIRA 16:12)

(Cookery) (Machinery, Automatic)

SHAROL', Leonid Isaakovich; MEL'NIKOVA, Zh.M., red.; NAZAROVA,
A.S., tekhn. red.

[Cybernetic machines of the highest order] Kiberneticheskie
mashiny vysshego ranga. Moskva, Izd-vo "Znanie," 1963. 36 p.
(Novoe v zhizni, nauke, tekhnike. IV Serii: Tekhnika, no.24)
(MIRA 17:1)

GORAZDOVSKIY, Tadeush Yanushevich, kandi. tekhn. nauk; MEL'NIKOVA,
Zh.M., red.

[Nondestructive testing of metals; physical means of
providing reliability] Nerazrushaiushchii kontrol' metal-
lov; fizicheskie sredstva obespechenia nadezhnosti. Mo-
skva, Izd-vo "Znanie," 1964. 30 p. (Novoe v zhizni, na-
uke, tekhnike. IV Seriya: Tekhnika, no.10) (MIRA 17:7)

PLONSKIY, Aleksandr Filippovich, kand. tekhn.nauk, dots.;
MEL'NIKOVA, Zh.M., red.; RAKITIN, I.T., tekhn.red.

[The crystal and radio electronics] Kristall i radio-
elektronika. Moskva, Izd-vo "Znanie," 1964. 39 p. (Novoe
v zhizni, nauke, tekhnike. IV Seria: Tekhnika, no.1)
(MIRA 17:2)

VENDA, Valeriy Fedorovich; MEL'NIKOVA, Zh.M., red.; RAKITIN, I.T.,
tekhn. red

[Operator and the machine] Operator i mashina. Moskva, Izd-
vo "Znanie," 1964. 47 p. (Novoe v zhizni, nauke, tekhnike.
IV Seria: Tekhnika, no.5) (MIRA 17:4)

REYNBERG, Mikhail Germanovich, kand. tekhn. nauk; MEL'NIKOVA,
Zh.M., red.

[The future of computers] Budushchee vychislitel'nykh
mashin. Moskva, Izd-vo "Znanie," 1964. 47 p. (Novoe v
zhizni, nauke, tekhnike. IV Seriya: Tekhnika, no.6)
(MIRA 17:5)

KLAVDIN, Boris Vasil'yevich; MEL'NIKOVA, Zh.M., red.

[Irrigation technique] Tekhnika orosheniia. Moskva, Izd-vo
"Znanie," 1964. 31 p. (Novoe v zhizni, nauke, tekhnike.
IV Seriiia: Tekhnika, no.7) (MIRA 17:5)

DICHAROV, Zakhar L'vovich; MEL'NIKOVA, Zh.M., red.

[Man tames rivers] Chelovek pokoriaet reki. Moskva,
Izd-vo "Znanie," 1964. 47 p. (Novoe v zhizni, nauke,
tekhnike. IV Seria: Tekhnika, no.9) (MIRA 17:6)

MUSHEYANOV, Andrey Nikolayevich, sektor techn. nauk; MELNIKOVA,
Zh.M., red.

[Isotopes in the service of man] Izobryazheniye i
dian. Moskva, Izd-vo "Znanie," 1965. 30 p. (Novoe v
zhitii, nauka, tekhnika. IV Seriya: Tekhnika, no.9)
(U.S.A. 15:4)

VASIL'YEV, Boris Vasil'yevich, kand. khim. nauk; PSHENICHNIKOV,
Aleksandr Georgiyevich, kand. khim. nauk; FRUMKIN, A.N.,
akademik, red.; MEL'NIKOVA, Zh.M.' red.

[Horizons of electrochemistry] Gorizonty elektrokhimii.
Moskva, Znanie, 1965. 42 p. (Novoe v zhizni, nauke, tekhnike. XI Seriya: Khimii, no.4) (MIRA 18:4)

SAFRONOV, Yuriy Pavlovich, kand. tekhn. nauk; MEL'NIKOVA, Zh.M.,
red.

[Infrared rays] Infrakrasnye лучи. Moskva, Izd-vo
"Znanie," 1965. 32 p. (Novoe v zhizni, nauke, tekhnike.
IV Seria: Tekhnika, no.4) (MIRA 18:3)

FAPIK'YAN, Robert Tatevosovich; MEL'NIKOVA, Zh.M., red.

[Chemistry in the fields] Khimia - polian. Moskva,
Znanie, 1965. 38 p. (Novoe v zhizni, nauke, tekhnike.
IX Seria: Khimia) (MIRA 19:1)

PAVLOV, Vladimir Pavlovich; MEL'NIKOVA, Zh.M., red.

[Polymers and metals] Polimery i metall. Moskva, Znaniye, 1965. 45 p. (Novoe v zhizni, nauke, tekhnike. XI Seriya: Khimiya, no.10) (MIRA 18:10)

SYRKIN, Vitaliy Grigor'yevich, kand. tekhn. nauk; MEL'NIKOVA, Zh.M.,
red.

[New carbonyl materials] Novye karbonil'nye materialy. Mo-
skva, Izd-vo "Znanie," 1965. 46 p. (Novoe v zhizni, nauke,
tekhnike. XI Seriya: Khimiya, no.8) (MIRA 18:8)

REUTOV, Oleg Aleksandrovich, akademik; MEL'NIKOVA, Zh.M., red.

[Architects of molecules; stereochemistry] Arkhitektory
molekul; stereokhimiia. Moskva, Znanie, 1965. 47 p.
(Novoe v zhizni, nauke, tekhnike. XI Seria: Khimiia,
no.7) (MIRA 18:7)

FRIDL'YANDER, Iosif Naumovich; doktor tekhn. nauk; MEL'NIKOVA,
Zh.M., red.

[Aluminum and its alloys] Aiuminiy i ego splavy. Moskva,
Izd-vo "Znanie," 1965. 60 p. (Novoe v zhizni, nauke,
tekhnike. XI Seriya: Khimiya, no.11) (MIRA 18:11)

BOEROV, Lev Viktorovich; MEL'NIKOVA, Zh.M., red.

[Mathematics of molecules] Matematika molekul. Moskva,
Znanie, 1965. 67 p. (Novoe v zhizni, nauke, tekhnike.
IX Seriya: Khimiia, no.9) (MIRA 18:8)

NOVIKOV, S.S.; RUBINSETEYN, A.M.; SHUIKIN, N.I.; MELNIKOVA, Z.Ya.

Causes of low stability of palladium catalysts under conditions of
dehydrogenation catalysis. C.R. Acad. Sci., U.R.S.S., '49, 68, 1049-
1051. (MLRA 2:10)

(BA - A I Ja '53:84)

Instit Org Chem, AS USSR

1. The V.

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KHANDKAROV, Yuriy Sergeevich; MEL'NIKOVA, Zh.M., red.

[Computer control of transportation] Avtomaty uprav-
liaiut transportom. Moskva, Znanie, 1964. 22 p. (Novoe
v zhizni, nauke, tekhnike. IV Seriia: Tekhnika, no.18)
(MIRA 17:9)

MOROZOV, Sergey Aleksandrovich; MEL'NIKOVA, Zh.M., red.

[The photographic eye of the scientist; on the occasion
of the 125th anniversary of the invention of photography]
Fotoglaz uchenogo; k 125-letiiu izobreneniia fotografii.
Moskva, Znanie, 1964. 47 p. (Novoe v zhizni, nauke, tekhnike. IV Seriya: Tekhnika, no.17) (MIRA 17:9)

SVIRSKIY, Yuliy Il'ich; LITVINOV, Yuliy Aleksandrovich; VIL'KIN, V.,
Zh.S., red.

[Machines under the earth. Mashiny pod zemlei. Moskva,
Izd-vo "Znanie," 1964. 31 p. Na be v znanii, nauke,
tekhnike. IV Serija: Tekhnika, no. 16. (1964: 17:16)

KIRLIAN Valentina Khrisanfovna; KIRLIAN, Semen Davidovich;
MEL'NIKOVA, Zh.M., red.

[In the world of wonderful discharges] V mire chudesnykh
razriadov. Moskva, Znanie, 1964. 39 p. (Novoe v zhizni,
nauke, tekhnike. IV Seria: Tekhnika. no.20)

(MIRA 17:11)

GOLOVIN, Sergey Yakovlevich, kand. tekhn. nauk; MEL'NIKOVA. Zh.M.,
red.

[Progressive foundry practices] Progressivnye vidy lit'ia.
Moskva, Znanie, 1964. 31 p. (Novoe v zhizni, nauke,
tekhnike. IV Seriya: Tekhnika, no.23) (MIRA 17:11)

TSAYEV, Emmanuil Aronovich; MEL'NIKOVA Zh.M., red.

[Image on a magnetic tape] Izobrazhenie na magnitnoi
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USSR/Chemistry - Oxidants

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"Reaction Between Carbon Monoxide and Manganese Dioxide," N. A. Shurmovskaya,
B. P. Bruns, Z. Ya. Mel 'nikova, Inst of Nitrogen Ind, Moscow

"Zhur Fiz Khim" Vol XXV, No 11, pp 1306-1312

Investigation of kinetics of interaction of active MnO_2 and CO at temps -50° to $0^{\circ}C$ showed that rate of interaction is detd by rate of diffusion of O from solid phase of MnO_2 to its surface. Data obtained here refute conclusions reached by earlier investigators that MnO_2 surface is highly nonuniform

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Characteristics of chondromatosis of the hip joint in roentgenologic representation. Vest.rent.i rad. no.6:59-64 N-D '53. (MLRA 7:1)

1. Iz kafedry rentgenologii (zavednyushchiy - zaslužennyy deyatel' nauki professor S.A.Baynberg) i kliniki travmatologii i ortopedii (zavednyushchiy - zaslužennyy deyatel' nauki professor M.I.Fridland) Tsentral'nogo instituta usovershenstvovaniya vrachey (direktor V.P.Lebedeva) Ministerstva zdravookhraneniya SSSR. Baza - klinicheskaya bol'nitsa im. S.P.Botkina.

(Hip joint--Tumors) (Diagnosis, Radioscopic)