Influence of Alloy Element Additions on the Interatomic Bond Forces of the Aluminium Lattice 1. Influence of Copper

interatomic bond forces in the lattice of duralumin are practically identical with those of pure aluminium (Ref 7), it can be assumed on the basis of the results obtained in this investigation, that the influence of other additions appears to be of opposite sign. It is understood that these assumptions require further confirmation. Thus, the most important alloy element addition in duralumin, copper, increases the bond forces in the lattice in the solid solution, and only the joint influence of all additions leaves the bond strength in the lattice practically unaltered; the strengthening of the alloy observed is due to other strengthening factors (Ref 7) which bring about a more effective employment of the bond forces existing in the lattice.
There are 1 figure, 1 table and 10 references, all of which are Soviet.
(Note: This is a slightly abridged translation except for the figure and table captions)

ASSOCIATION: Chernovitskiy gosudarstvennyy universitet
(Chernovtsy State University)

SUBMITTED: October 13, 1957

83997

18 1210

S/149/60/000/003/012/012/XX
A006/A001

AUTHORS: Kushta, G.P., Mikhaylyuk, I.P.

TITLE: The Effect of Alloying Elements on Interatomic Forces and Lattice Distortion in Solid Aluminum-Base Solutions

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya, 1960, No. 3, pp. 139-142

TEXT: The effect of alloying elements on the magnitude of interatomic forces in an aluminum lattice was studied to gather data on the cohesion forces and the distortion of the lattice in solid aluminum-base solutions. These data will serve to establish general physical and chemical concepts of alloying when developing alloys with high strength and heat resistance characteristics. The authors present some results of an X-ray analysis into the effect of Cu, Mn and Zn admixtures on the magnitude of interatomic forces and on the distortion of the lattice. This effect was studied on alloys with 2, 3 and 4 weight % Cu (0.86; 1.29 and 1.8 at %). Radiographs were taken with a РКД (RKD) type camera at room and liquid air temperatures to determine the characteristic temperature of freshly hardened supersaturated solid Al-Cu solutions with various Cu content. $K_{\alpha_{1,2}}$

Card 1/4

The Effect of Alloying Elements on Interatomic Forces and Lattice Distortion in Solid Aluminum-Base Solutions

radiation of copper was used. The analysis was made on four lines of the Al base solid solution: (111), (222), (422) and (333) + (511). The results of the analysis are represented in a graph and show that the characteristic temperature increases when alloying aluminum with copper and attains a value which exceeds almost by 100°C that of pure aluminum. Correlating this result with the fact of the unchanged magnitude of interatomic forces when strengthening commercial duralumin-um, it is assumed that the effect of other elements or at least of one of them has an opposite effect. This was checked by a comparative investigation of alloys with Cu, Mg and Zn admixture where only two lines (111) and (311) were subjected to photometrical analysis ($K\alpha_{1,2}$ radiation of iron). The alloys were prepared of commercial "A00" aluminum, electrolytic copper and chemically pure Zn and Mg. The characteristic temperatures of the following alloys were determined: 1) with 0.85; 1.54; and 2.03 weight % Cu (0.4; 0.7; 0.86 at %); 2) with 1.3; 5, 10 and 15 weight % Zn (0.42; 1.26; 2.1; 4.2; 6.3 at %) and 3) with 1.2, 4.3, and 7.4 weight % Mn. The results obtained were not different from the aforementioned data. A regular drop of the characteristic temperature of Al-Zn was stated at a higher Zn content, attaining 100°C at 15 weight %. An analogous result was obtained for Al-

83997

S/149/60/000/003/012/012 XX
A006/A001

The Effect of Alloying Elements on Interatomic Forces and Lattice Distortion in Solid Aluminum-Base Solutions

Mg alloys with the difference that a drop of the characteristic temperature by about 100°C was observed at 7.4 weight % Mg. These results are in disagreement with literature data where a change of the characteristic temperature was not observed, probably due to an Mg concentration not higher than 1.4%. This discrepancy was checked by ionization recording of the intensity of X ray interferences. Measurements were made in monochromatized irradiation using MST-17 (MST-17) type meters. The results obtained agree with the photometrical data. Thus in the Al-Mg-Cu system an increase in the characteristic temperature of solid solutions may be expected, apparently resulting from the presence of copper. This is in agreement with data of Reference 10 on the strengthening of the mentioned alloys merely by the increased effect of hardening but not of the aging effect. The selection of an optimum composition of the alloy must be made by taking into account all the strengthening factors. The authors distinguished the values of dynamic and static distortion of the lattice of the solid solution: $\sqrt{u^{-2}_{dyn}}$ and $\sqrt{u^{-2}_{st}}$. The values for $\sqrt{u^{-2}_{st}}$ obtained were about 0.2 Å at a high concentration

Card 3/4

83997

S/149/60/000/003/012/012/XX
A006/A001

The Effect of Alloying Elements on Interatomic Forces and Lattice Distortion in Solid Aluminum-Base Solutions

of the admixtures; at a low concentration of Zn a satisfactory agreement was found between $\sqrt{u^{-2}}$ and u_{st}, calculated by V.I. Iveronova's formula (Reference 11). (0.106 and 0.098 Å respectively for an Al + 1% Zn alloy, and 0.153 and 0.162 Å for an Al + 3% Zn alloy). There is 1 graph and 11 Soviet references.

ASSOCIATION: Chernovitskiy gosudarstvennyy universitet (Chernovtsy State University), Kafedra rentgenometallofiziki (Department of Roentgen Physics of Metals)

SUBMITTED: January 21, 1959

Card 4/4

S/185/62/007/011/015/019
D234/D308

MIKHAYLYUK,

AUTHORS: [redacted], I.P., Mykhal'chenko, V.P. and Kusta, H.P.

TITLE: Temperature dependence of the intensity of X-ray interference in aluminum and in chromium ferrite

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 11, 1962, 1246-1250

TEXT: If the thermal dilation of the lattice is taken into account, the Debye-Waller factor depends linearly on the auxiliary temperature T_B defined by

$$\frac{\psi(x_T)}{\psi(x_o)}\left(\frac{a_o}{a_T}\right)^{6\gamma-2} = \eta, \quad \gamma^T = T_B \qquad (8)$$

so that

$$\ln\frac{J_T}{J_o} = -\frac{12h^2\Sigma h_i^2\,\psi(x_o)}{mka_o^2\Theta_o^2}\,(T_B - T_o). \qquad (9)$$

Card 1/2

Temperature dependence ...

In the experiments the lines (333) and (422) of $CuK\alpha_1$ were used for Al and (552), (532) of $MoK\alpha_1$ radiation for (Fe + 12% Cr). The temperature range was 239-920°K. Above 750°K a deviation of $\ln(J_T/J_o) = f(T_B)$ from linearity is observed in Al, which indicates that there are other factors beside volume expansion affecting M. Fe-Cr satisfies the relation (9), and its characteristic X-ray temperature obtained from the latter is 508 ± 29°K at room temperature. There are 2 figures.

ASSOCIATION: Chernivetskiy derzhuniversytet (Chernovtsy State University)

SUBMITTED: April 14, 1962

Card 2/2

MIKHAYLYUK, I.P. [Mykhailiuk, I.P.]; MIKHAL'CHENKO, V.Y. [Mykhal'chenko, V.P.]

Use of the X-ray diffraction method in studying the anharmonicity of thermal vibrations of atoms in crystal lattices. Ukr. fiz. zhur. 8 no.1:125-133 Ja '63. (MIRA 16:5)

1. Chernovitskiy gosudarstvennyy universitet.
(X-ray diffraction examination) (Crystal lattices)

MIKHAL'CHENKO, V.P.; MIKHAYLYUK, I.P.; KUSHTA, G.P.

Calculating the anharmonicity of the thermal vibrations of a crystal lattice during the experimental determination of the integral intensity of X-ray interferences of polycrystals. Fiz. met. i metalloved. 16 no.3:343-348 S '63. (MIRA 16:11)

1. Chernovitskiy gosudarstvenny universitet.

MIKHAYLYUK, I.P.

Effect of temperature on the vibration spectra of crystals. Fiz. met. i metalloved 20 no.3:339-344 S '65. (MIRA 18:11)

1. Chernovitskiy gosudarstvennyy universitet.

MIKHAYLYUK, I. V.

Cand Agr Sci - (diss) "Formation and pruning of grape vines under conditions of Moldavia." Odessa, 1961. 20 pp; (Ministry of Agriculture Ukrainian SSR, Odessa Agr Inst); 250 copies; price not given; list of author's works at end of text (12 entries); (KL, 10-61 sup,222)

GAYEV, P.T., inzh.; ZELINSKIY, V.M.; MIKHAYLYUK, N.T.; RUKMAN, .L.; SOLOKHA, A.P.

Remote control of immersible pumps during mine drainage. Shakht. stroi. 8 no.3 6-8 Mr '64. MIRA

1. Vsesoyuznyy trest po osushenyu obvodnennykh ugol'nykh mestorozhdeniy Glavtsentroshakhtostroya Ministerstva stroitel'stva predpriyatiy ugol'noy promyshlennosti SSSR (for Gayev). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii shakhtnogo stroitel'stva (for Zelinskiy). 3. Institut Avtomatgormrudprom konosopskogo elektromekhanicheskogo zavoda "Krasnyy metallist (for Mikhaylyuk, Rukmar, Solokha).

MIKHAYLYUK, T.P.; YEREMIN, S.F., red.; LAPIDUS, M.A., red.; OKOLELOVA, Z.I., tekhn. red.

[Work practice of production administrations] Opyt raboty proizvodstvennykh upravlenii. Moskva, Sel'khozizdat, 1963. 334 p. (MIRA 16:12)
(Agricultural administration)

1. MIKHAYLYUK, N. V.

2. USSR (600)

4. Agriculture

7. Agrotechnics of hybrids - direct producers. Kishinev, Moldavgiz, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

GEL'FAND, F.M., inzh.; MARKMAN, L.D., inzh.; MUKHAMEDIN, S., tekhnik; MIKHAYLYUK, V.N., tekhnik

The RPM-2 bit for the rotary boring of holes in rocks. Shakht. stroi. 5 no. 3:12-14 Mr '61. (MIRA 14:2)

1. Karagandinskiy nauchno-issledovatel'skiy ugol'nyy institut.
(Boring machinery)

NIKHALYUK, V.O. [Nykhaliuk, V.O.]

The consolidation of district pharmacies has been a commendable deed. Farmatsev. zhur. 18 no.1:77-78 '63. (MIRA 17:10)

1. Upravlyayushchiy aptekoy No.69, Yarmolintsy, Khmel'nitskoy oblasti.

PONOMARENKO, E.V., MIKHAYLYUK, Yu.I.

Mechanical cleaning of welded seams from slag and splash.
Avtom. svar. 17 no.9:79 S '64. MIRA 17:10

1. Donetskiy mashinostroitel'nyy zavod imeni 15-letiya LKSMU

MIKHAYLYUKOV, M.D.

A case of pneumonia in a cat caused by migration of nematode larvae.
Med.parazi. i parazi.bol. 26 no.2:176-177 Mr-Ap '57. (MLRA 10:7)

1. Iz kafedry patologicheskoy anatomii Voronezhskogo zooveterinarnogo instituta (zav. kafedroy - prof. A.A.Avrorov)
(PNEUMONIA, etiol. and pathogen.
nemotode larvae migration in cat, pathol.)
(NEMATODE INFECTIONS, compl.
pneumonia in cat, pathol.)

MIKHAYLYUKOV, N.D., prozektor

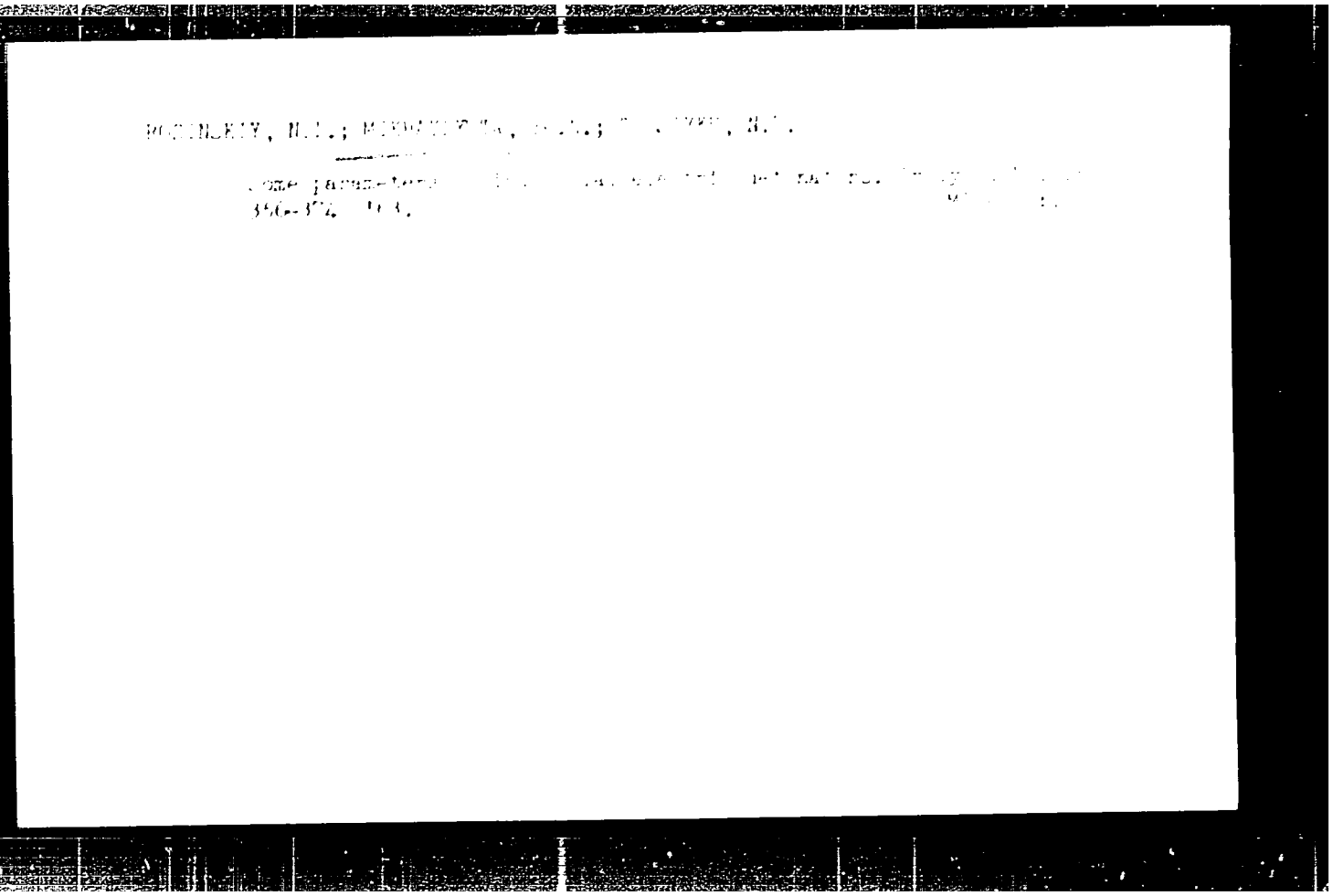
Pathologicoanatomical diagnosis of Aujeszky's disease in suckling piglets. Veterinariia 38 no.7:53-54 Jl '61. (MIRA 16:8)

1. Voronezhskiy zooveterinarnyy institut.
(Voronezh Province—Pseudorabies)
(Voronezh Province—Swine—Diseases and pests)

GEL'FGAT, D.B.; OSHNOKOV, V.A.; MIKHAYLYUTA, D.A. [deceased]; ORLOV, B.N.

Investigating the strength of the cab of the ZIL-130 motortruck.
Avt.prom. 29 no.1:12-14 Ja '63. (MIRA 16:1)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut i Moskovskiy avtozavod imeni Likhacheva.
(Motortrucks--Bodies)



DANIYELLO, L., prof.; TIMOK, I., dotsent; MIKHAYU, V.

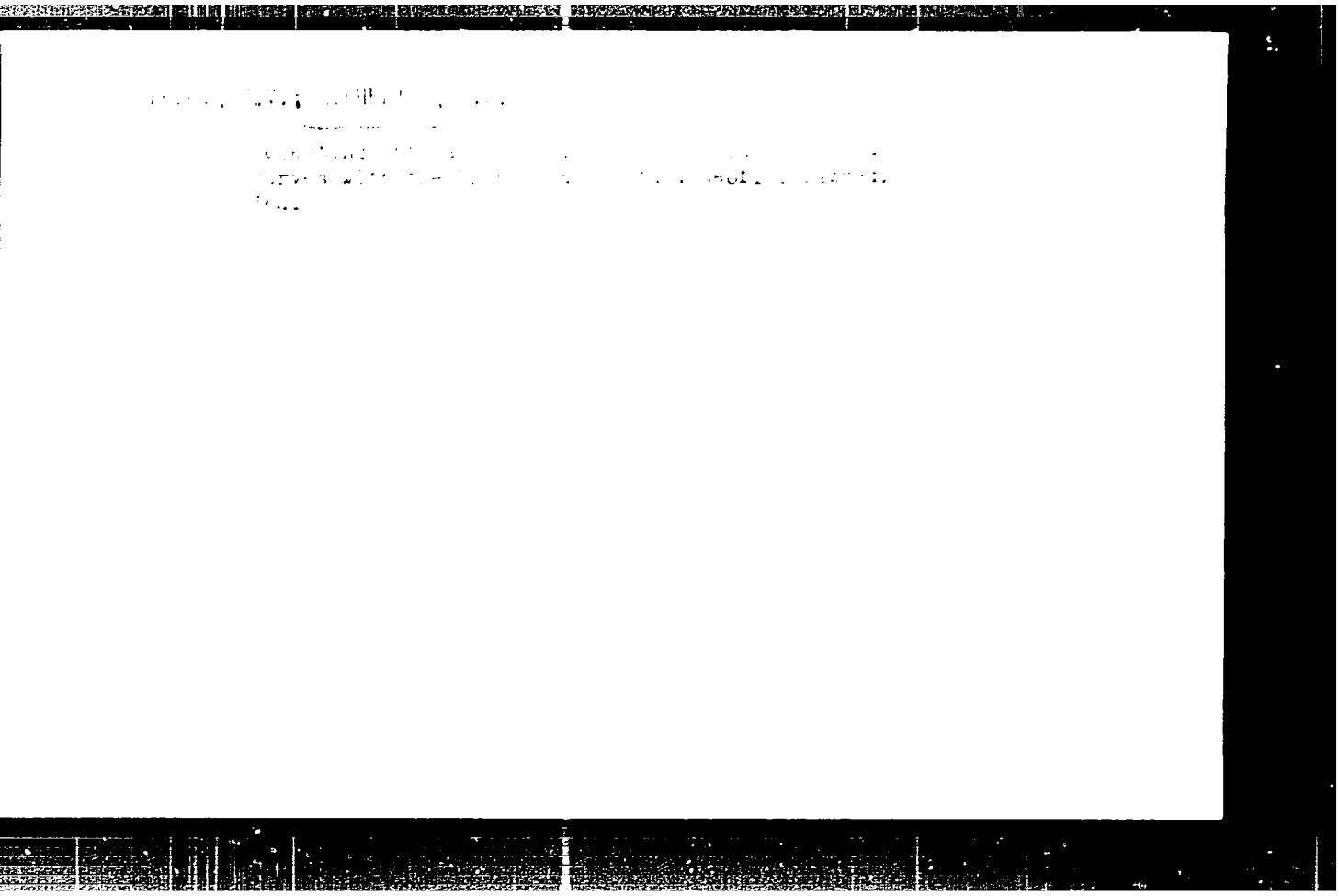
Pseudotumoral forms of bronchial tuberculosis. Probl. tub. 38 no.3: 23-25 '60. (MIRA 14:5)

1. Iz bronkhologicheskogo otdeleniya Ftiziatricheskoy kliniki v Kluzhe (dir. - prof. L.Daniyello).
(TUBERCULOSIS)

MIKHEDKO, N.M.

29319 K kliniko-anatomicheskoy kharakteristike pervichnykh opukholey bryushiny. Voprosy onkologii i rentgenologii, No 1-2, 1948, S. 68-74.

SO: Letopsi' Zhurnal'nykh Statey, Vol. 39, Moskov, 1949

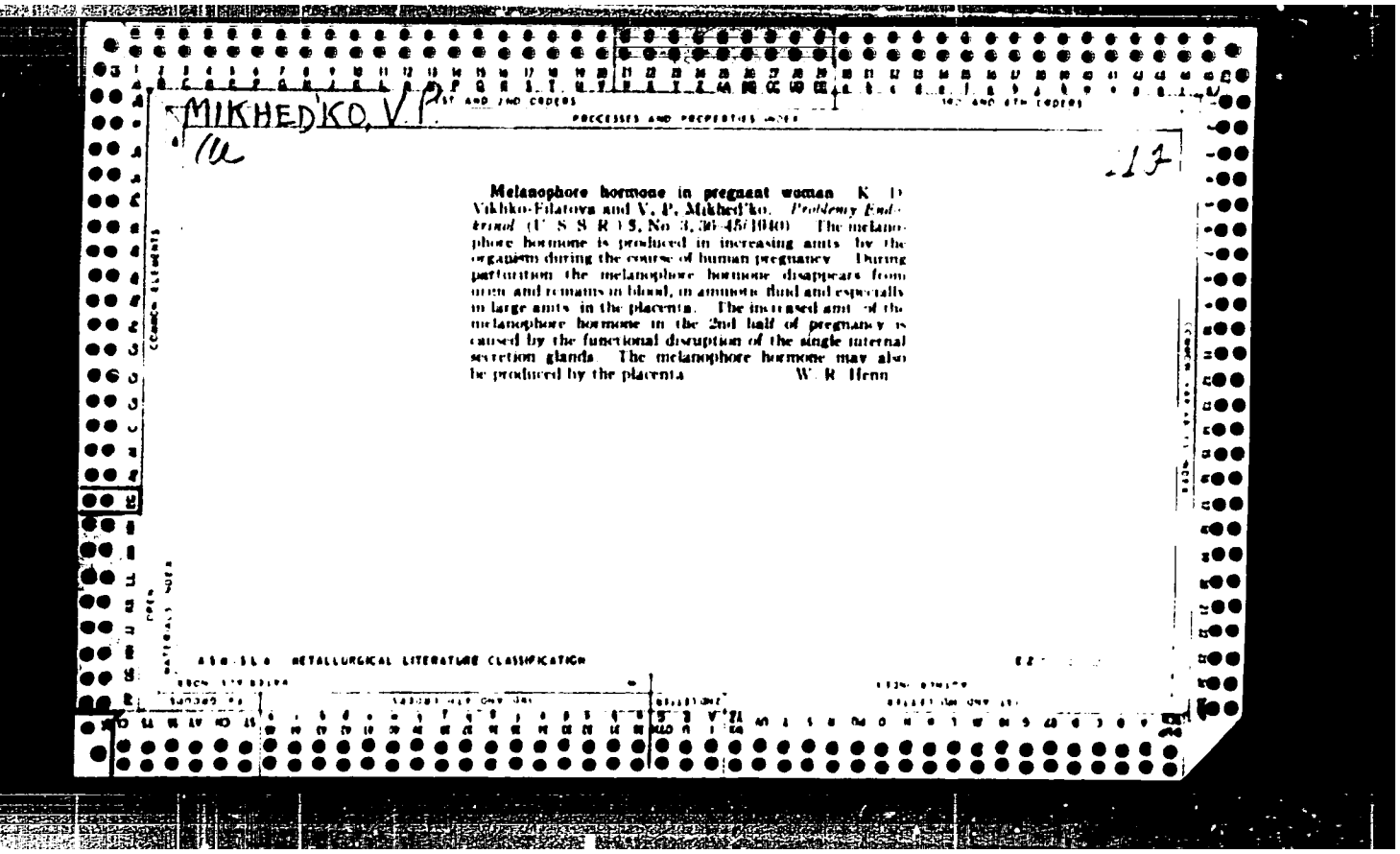


BOGOPOL'SKIY, R.I.; MIKHED'KO, A.F.

Possibility of the documentation of coal exploratory boreholes according to the data of geophysical research methods in coreless drilling. Razved. geofiz. no.4:138-147 '65. (MIRA 18:9)

[illegible], I. P.

"Experimental Data on the Effect of Chloralhydrate upon the Contractile Function of the Pregnant Uterus," Farmak. i Toksikol., 2, No. [illegible], 1939. Lab. Pharmacology Inst. Endocrinology, and the Clinic of Obstetrics and Gynecology, 1st Med. Inst., Kharkov. -1/39-



MIKHED'KO, V. P.

11

17

Melanophore hormone in pregnant woman. K. D. Vikhko-Filatova and V. P. Mikhed'ko. *Problemy Endokrinol.* (U. S. S. R.) 5, No. 3, 35-45(1940). The melanophore hormone is produced in increasing amts. by the organism during the course of human pregnancy. During parturition the melanophore hormone disappears from urine and remains in blood, in amniotic fluid and especially in large amts. in the placenta. The increased amt. of the melanophore hormone in the 2nd half of pregnancy is caused by the functional disruption of the single internal secretion glands. The melanophore hormone may also be produced by the placenta. W. R. Henn

METALLURGICAL LITERATURE CLASSIFICATION

60-372-

MIKHEDKO, Valentina Pavlovna, for Doctor of Medical Sciences on the basis of the dissertation defended 22 September 1959 in the Council of the Khar'kov Medical Institute, entitled: "Effect of Certain Hormonal Factors upon the Muscular and Vascular Reaction of the Uterus".

(BMVISSO USSR, 2-61, 20)

93
20

MIKHEDKO, V.P., dotsent

Intravenous administration of sigetin to paturients to prevent intrauterine asphyxia. Akush. i gin. 35 no.3:70-75 My-Je '59. (MIRA 12:8)

1. Iz laboratorii normal'noy i patologicheskoy fiziologii (zav. - prof.M.L.Garmasheva) Instituta akusherstva i ginekologii (dir. - chlen-korrespondent AMN SSSR prf.P.A.Beloshapko) AMN SSSR i kafedry akusherstva i ginekologii (zav. - prof.V.F.Matveyeva) pediatricheskogo i sanitarno-gigiyenicheskogo fakul'teta Khar'kovskogo meditsinskogo instituta.

(FETUS
asphyxia, in utero, prev. by sigetin, intravenous admin. (Rus))
(ESTROGENS, ther. use
sigetin, intravenous admin., in prev. of fetal asphyxia in utero (Rus))

MIKHEDKO, V.P.

Effect of pregnancy and labor on corticosteroid content in adrenal gland tissue and in the blood of rabbits. Trudy Ukr. nauch.-issl.inst.eksper.endok. 18:237-243 '61. (MIRA 16:1)

1. Iz otdela gistofiziologii Ukrainskogo instituta edsperimental'noy endokrinologii i akushersko-ginekologicheskoy kliniki Khar'kovskogo meditsinskogo instituta.
(ADRENAL GLANDS) (CORTICOSTEROIDS) (PREGNANCY)(LABOR(OBSTETRICS))

MIKHEDKO, V.P. [Mykhedko, V.P.], doktor med.nauk

Some observations on the problem of defining the segments of the fetal head in relation to the small pelvis of parturients. Ped., akush. i gin. 23 no.4:55-56 '61. (MIRA 17:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut okhrany materinstva i detstva im. Geroya Sovetskogo Soyuza P.M.Buyka (direktor - kand.med.nauk O.G.Pap [Pap, O.H.]).

14(1) SOV/67-59-5-1/30

AUTHORS: Basyrov, Z. B., Engineer, Mikhedov, V. G., Engineer

TITLE: The Capability of Detonating a Mixture of Acetylene and Lubricating Oil With Liquid Oxygen

PERIODICAL: Kislorod, 1959, Nr 5, pp 1 - 6 (USSR)

ABSTRACT: Since atmospheric pollutions in air-separation plants cause explosions by acetylene and lubricants again and again the above mixtures were investigated. F. Pollitzer (Ref 1), S. N. Nikitin (Ref 2), and G. A. Gitsevich (Ref 3) had assumed that the lubricant and its "distillates" accumulate in the apparatus which cause an explosion in liquid oxygen medium. The liquid and light gaseous hydrocarbons form with the liquid oxygen the explosive oxyliquites. This theory, however, could not be verified. On the contrary, it was found that both the solid acetylene and lubricating oil in particular the former proved to be highly explosive substances. For this purpose, the critical parameter of a steady detonation mixture of the components mentioned was determined (at different concentration). Further, it was found that mixtures of lubricants and stale oils with oxygen can hardly be di-

Card 1/2

The Capability of Detonating a Mixture of Acetylene and Lubricating Oil With Liquid Oxygen

SOV/67-59-5-17/30

stinguished in their detonation effect. The accumulation of pollutions consisting of lubricating oils, especially in the form of fat droplets, in the separation plants proved to be dangerous on the basis of the investigations carried out. Data are given in tables and figures, the testing apparatus is shown in figure 1. T. K. Zhmakov, Engineer, and N. A. Kotikova, Laboratory Worker, participated in the tests. There are 2 figures, 2 tables, and 12 references, 7 of which are Soviet.

Card 2/2

Mikheev, O.V.

USSR retain

Distr: 4E2c(j)/4E2b

14

Technology of production of pieces from plastic materials. I. V. Mikheev. *Plasticheskie Massy v Mashinostroenii* (Moscow: Izdatel. Akad. Nauk B.S.S.R.) *Sbornik* 1955, 187-99; *Referat. Zhur., Khim.* 1956, Abstr. No. 37583.—The manuf. of finished products from plastic materials by direct thermal pressing, compression, casting, and continuous pressing is described. Methods are given for detg. creeping, plasticity on the normalized dye, and hardening speed of thermoreactive plastic materials. V. S. M.

3

2 May

2

MIKHEYEV, I. V.

MIKHEICHEV, A.S.

Prospects for increasing the reserves of apatite [illegible] the Khibiny Mountains. Razved. i okh. nedr 3[illegible] no.[illegible] [illegible]

[illegible] 17:12

1. Khibinogorskaya geologorazvedochnaya partiya.

MIKHEICHEV, V.S., assistent

Field tests of the SVV-1 optical distance meter. Trudy MIIGAIK no.34:129-130 '59. (MIRA 13:5)

1. Moskovskiy institut inzhenerov geodezii, aerofotos"yemki i kartografii.
(Range finders--Testing)

MIKHEICHEV, V. YA

MIKHEICHEV, V. YA--"Comparative-Anatomical Investigations of the Intestine of Cultivated Fur-Bearing Animals." Min Higher Education USSR. Moscow Veterinary Academy. Moscow, 1955. (Dissertation for the Degree of Candidate in Biological Science).

SO Knizhnay letopis'
No 2, 1956

Category: Diseases of farm animals. Diseases caused by viruses and rickettsiae

Abs Jour : Ref Zhur-Biol., No , 1958, No 9324

Author : Kheits ... , ... , ... , Kheyn ... , ... , ... , Krinecki ...

Inst : Academy of the Agricultural ... Republic of ...

Title : Anti-cholera-swine vaccine prepared from blood containing the virus and crystal-violet inactivated. Experimental investigation and preliminary practical results

Orig Pub : ... , 1 ... , No ... -2, ...-150

Abstract : The examination of vaccine which has been prepared by the ... method ... shown that it establishes stable immunity in pigs in the course of 11 months and that it does not have any harmful effect on the animals. The vaccine may be stored for 9 to 10 months without changing its

Card 1/2

[illegible]maria/ [illegible] of Farm [illegible]. [illegible]iseases Caused by [illegible]iruses -1 and [illegible]ickettsi[illegible]e

[illegible] of [illegible]ur-[illegible]iol., No. [illegible], 19[illegible], [illegible]

[illegible]bstract : [illegible]munog[illegible]nic propert[illegible]. [illegible] which were vaccinated experimentally [illegible] also those which [illegible] [illegible]inated on government and private farms with fifteen and [illegible] milligr[illegible], proved to have a certain [illegible] stable immuni[illegible] [illegible]00,000 [illegible] of the virus in [illegible] to 100 of the [illegible]. In a control infection, a vaccination with a 10 milligram dose repeated after two to three weeks, protected 1[illegible] of the animals. [illegible]n experimental conditions, the vaccine prepared by the authors by a modified [illegible]u-lesko method applying glycerine or hydroxide of aluminum, proved effective. The authors believe that the [illegible]lesko vaccine is as effective as the formol-hydroxide aluminum vaccine used in [illegible] which is prepared from organs of cholera-[illegible] [illegible]s, and they recommend its application in practice.

[illegible]rd 2/2

MALYI, [illegible] red.; KOVAL'SKAYA, I.F., tekhn. red.; VIKTOROVA, Z.N., tekhn. red.

[Automation and mechanization of control operations in the machinery industry] Avtomatizatsiia i mekhanizatsiia kontrol'nykh operatsii v mashinostroenii; obzor tematicheskoi vystavki na VDNKh, IV kvartal 1960 g. (MIRA 16:5)
(Machinery industry) (Automation)

PHASE I BOOK EXPLOITATION SOV/4657

Chekmarev, A. I., M. L. Mikhel', I. A. Krongauz, and Ye. M. Vitenberg

Tara dlya khimicheskikh produktov (Containers for Chemical Products) Moscow, Nauchno-issl. in-t tekhniko-ekon. issled., 1960. 230 p. 2,000 copies printed.

Sponsoring Agency: Gosudarstvennyy komitet Soveta Ministrov SSSR po khimii.

Eds: I. A. Krongauz, S. I. Babushkina, and L. I. Khoras.

PURPOSE: This book is intended as a guide for all engineering, technical, and planning workers concerned with the packing and shipping of chemical products.

COVERAGE: The book discusses the design, manufacture, and utilization of all types of containers for chemical products. It includes technical data of a nature to permit the proper choice of a container in a given situation. New types of containers developed in the Soviet Union, as well as foreign experience, are described. The letter designations for

Card 1/5

Containers for Chemical Products

all such containers are listed. No personalities are mentioned.
There are 50 references: 20 Soviet, 19 English, and 11 German.

TABLE OF CONTENTS:

Card ~~2/5~~

L 24874-65 EWT(m)/EWP(b)/EWP(t) IJP(c) JD/JG
ACCESSION NR: AP5006172 a/0025/64/007/010/0712/0713

AUTHOR: Mikheev, N. V.; El-Garby, M.; Azzam, R.

TITLE: Preparation of colloidal radioactive yttrium silicate

SOURCE: Kernenergie, v. 7, no. 10, 1964, 712-713

TOPIC TAGS: yttrium compound, silicate, titrimetry, radicactive source

ABSTRACT: This article describes the method of producing stable negatively charged colloidal yttrium silicate. In particular, it deals with the determination of its composition by the radioactive titration method, the preparation of the colloidal yttrium silicate solutions, both plain and radioactive. Orig. art. has: 2 tables, 2 figures.

ASSOCIATION: Nuclear Chemistry Department of the U.A.R. Atomic Energy Establishment, Cairo

SUBMITTED: 15Apr64 ENCL: 00 SUB CODE: GC, IC

NO REF SOV: 000 OTHER: 000 JPRS

Card 1/1

L 38274-65 EWP(e)/EWT(m)/EPF(n)-2/EWG(m)/EWA(d)/EPR/EWP(t)/EWP(b) Pa-4/
Pu-4 IJP(c) JD/JG/AT/WH
ACCESSION NR: AP5007438 S/0286/65/000/004/0064/0064

AUTHOR: Mikheichev, L. A.

TITLE: Method of introducing refractory metals into aluminum and magnesium alloys. Class 40, no. 168453

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 4, 1965, 64

TOPIC TAGS: aluminum alloy, magnesium alloy, refractory metal containing alloy, refractory metal addition

ABSTRACT: This Author Certificate introduces a method of introducing refractory metals into aluminum- and magnesium-base alloys. In order to avoid overheating the metal being alloyed, a consumable electrode made of the alloying refractory component is arc melted into the base alloy. [AZ]

ASSOCIATION: none

SUBMITTED: 14Aug62 ENCL: 00 SUB CODE: MM

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3227

Card 1/1

UNGER, Ye. [illegible]; MIKHAILESKU, I. [Mihailescu, I.]

Dynamic studies on verbo-verbal connections and on vegetative components in the association experiment. Znur. vys. nerv. deiat. 12 no.4:578-586 Jl-Ag '62.

1. Institut nevrologii i [illegible] AN Rumynskoy Narodnoy Respubliki, Bukharest.

MIKHEL, V. M.

"Methods for Sounding the Atmosphere," No 1, pp 82-84.
(Meteorologiya i Gidrologiya, No 6 Nov/Dec 1947)

SO: U-3213, 3 Apr 1953

MIKHEL', V. M. PA 167T95

USSR/Meteorology - Clouds Jan/Feb 48
Aerology

"Probability of Different Numbers of Cloud Layers for an Overcast Sky," V. M. Mikhel'

"Meteorol i Gidrol" No 1, pp 85-88

Data from visual cloud observations in airplane flights in Germany, 1936 - 1938. Tables give probability of encountering 1, 2, 3, 4 and more than 1 layer above an overcast sky for various lower and middle cloud types in winter and summer. Data differs slightly from Peppler's (for a solid overcast). Author selected cases in which low and middle cloudiness was at least 8. Submitted 7 May 47

167T95

MIKHEL', V. M.

Nomogram for locating the value of the increment $\Delta\delta$ (or $\Delta\gamma$) of the vertical angle δ (or γ) when projecting it on a vertical plane. Meteor. i gidrol. no.4:84-86 '48. (MLRA 8:2)
(Nomography (Mathematics))

MIKHEL', V. M.

Dec 48

USSR/Physics
Atmosphere
Meteorology

"The Structure of the Atmosphere," V. M. Mikhel', 11 pp

"Priroda" No 12

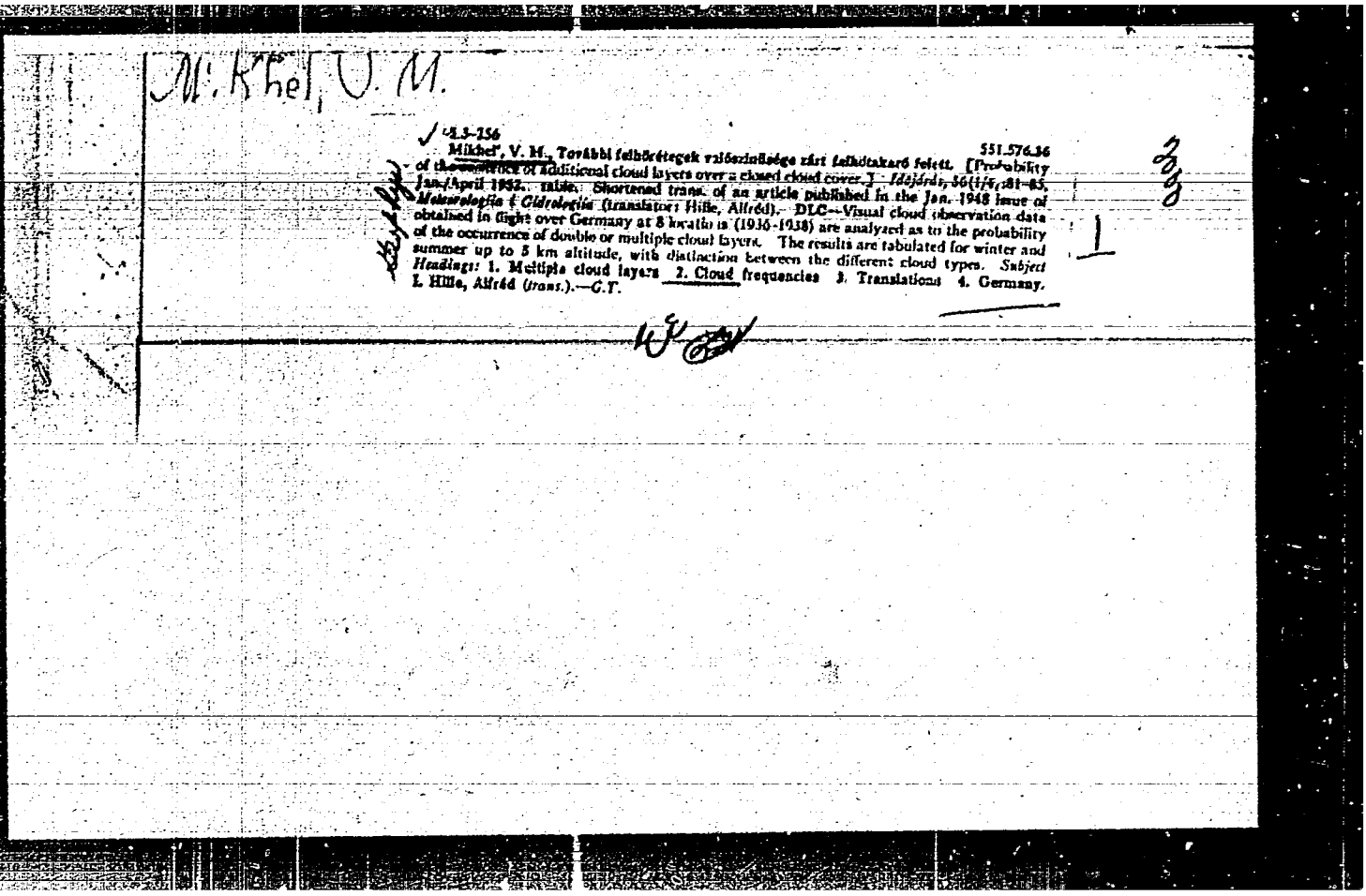
Claims there is a close relationship between various meteorological phenomena. Understanding of this relationship is based on thorough study of stratified structure of the atmosphere. Briefly describes the troposphere, stratosphere, ionosphere, "vacuum sphere," and "sphere of dissipation."

25/49T102

ZAVARINA, M.V.; MIKHEL, V.M.

Extrapolation of winds by altitude. Trudy GGO no.32:34-46 '52
(MIRA 11:1)

(Winds)



Mikhel', V. M.

✓ 43-256

Mikhel', V. M., További felhőrétegek valószínűsége zárt felhőtakaró felett. [Probability of the occurrence of additional cloud layers over a closed cloud cover.] *Időjárás*, 56(1/4):81-85, Jan.-April 1952. table. Shortened trans. of an article published in the Jan. 1948 issue of *Meteorologia i Gidrologiia* (translator: Hille, Alfréd). DLC--Visual cloud observation data obtained in flight over Germany at 8 km alti is (1936-1938) are analyzed as to the probability of the occurrence of double or multiple cloud layers. The results are tabulated for winter and summer up to 5 km altitude, with distinction between the different cloud types. *Subject Headings:* 1. Multiple cloud layers 2. Cloud frequencies 3. Translations 4. Germany. I. Hille, Alfréd (*trans.*).—*G.T.*

551.576.36

PHASE X TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 720 - X

[For Vols. I & II see AID 1 -II]

BOOK Call No.: AF662858

Author: ALISOV, B. P., BERLIN, I. A. and LIKHEL', V. M.

Full Title: COURSE OF CLIMATOLOGY. Part III: CLIMATES OF THE EARTH

Transliterated Title: Kurs klimatologii. Chast' III: Klimaty zemnogo shara

PUBLISHING DATA

Originating Agency: None

Publishing House: Hydrometeorological Publishing House (GIMIZ)

Date: 1954 No. pp.: 320 No. of copies: 6,000

Editorial Staff

Editor: Rubinshteyn, Ye. S.

PURPOSE AND EVALUATION: This book was approved by the Ministry of Higher Education as a textbook for state universities and hydrometeorological institutes as Part III of the general study of earth climates. The book is considered in Soviet literature on meteorology and climatology as a basic textbook and is frequently referred to as a reference source by other authors. The selection of the material is excellent and it is well-presented. The book can be favorably compared with the following American textbooks: Climatology, General and Regional, by Thomas A. Blair (U.S. Weather Bureau and Asst. Prof. of University of Nebraska), 1942; The Climates of the Continents, by W. G. Kendrew.---

NOTE: See card for ALISOV, B. P. for pages 2-5.

[illegible], [illegible], [illegible], I. F., [illegible], [illegible]

"[illegible] [illegible]," [illegible]

A [illegible] by the convergence of air currents [illegible] of the [illegible] ing of anticyclones [illegible]. Divergence of air currents [illegible] in [illegible] ing of cyclones and troughs [illegible] cyclones, [illegible] percentage of [illegible] ility. [illegible] sufficiency of the study of the mechanism governing [illegible] weakening [illegible]. In general the rule is justified in [illegible]. ([illegible]) [illegible] 71, [illegible] Nov [illegible]

MIKHEL', V.M.

Simultaneous aeroclimatological processing of pilot balloon and radiosonde observations. Trudy Tashk.geofiz.obser. no.11/12:62-70 '56. (MLRA 10:8)

1.Glavnaya geofizicheskaya observatoriya.
(Balloons, Pilot)
(Radiosondes)

MIKHEL', V.M.

Motion and intensity variations of baric regions. Trudy GGO [illegible].56: 59-68 '56. (MIRA 15:6)

(Cyclones)

MIKHEL', V.M.

36-64-6/7

AUTHOR: Mikhel',V. M.

TITLE: Increasing the Accuracy of Measurements and the Aeroclimatic Characteristics of the Height of Clouds (K voprosu ob utochnenii izmereniya i aeroklimaticheskoy kharakteristiki vysot oblakov)

PERODICAL: Trudy Glavnoy geofizicheskoy observatorii, 1956, Nr 64, pp 63-73 (USSR)

ABSTRACT: A recommendation is made for the better utilization of balloon sounding techniques for single point observations and for more accurate measurements of wind velocities and cloud elevations. The assumed rate of balloon ascension is greatly affected by the dynamic turbulence of near-surface air masses (several hundred meters thick), in which case corrections of vertical velocity determined by test balloons against the postulated theoretical (table) values will be large. In the majority of cases the corrections are on the plus side. At greater elevations, 1-2 km, the balloon is subject to increased macroturbulence which involves irregular up-and-down tossings of the balloon. In order to improve measurements it is necessary to have corrections for the irregular rate of vertical velocity which leads to corrections in

Card 1/2

36-64-7/7

AUTHOR: Mikhel', V. M.

TITLE: Measurement of Wind Above Clouds and Cloud Height by Means of Test Balloons in Patches of Clear Sky (Izmereniye vetra nad oblakami i ikh vysoty metodom sharov-pilotov pri nalichii prosvetov v oblachnom pokrove)

PERIODICAL: Trudy Glavnoy geofizicheskoy observatorii, 1956, Nr 64, pp 74-83 (USSR)

ABSTRACT: This is a description of the procedure and computations used in measuring wind above clouds. Planned (time distribution) release of balloons and a corresponding plotting are suggested. The altitude of clouds is determined by transit observations and by using the transit as a nephoscope. Test balloons, transits, and plane tables are mentioned. There are 3 figures, 3 tables, and 5 references, 4 of which are Soviet.

AVAILABLE: Library of Congress

Card 1/1

SOV/124-57-3-3252

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 3, p 89 (USSR)

AUTHOR: Mikhel', V. M.

TITLE: On the Problem of the Displacement and Variations in Magnitude of Pressure Areas (K voprosu o dvizhenii i izmenenii moshchnosti baricheskikh oblastey)

PERIODICAL: Tr. Gl. geofiz. observ., 1956, Nr 56, pp 59-68

ABSTRACT: The problem of the displacement of moving cyclones and anticyclones is examined with a view toward the utilization of the steering-current rule for forecasting. The altitude of the lower boundary of the steering current is determined; the altitude at which, in the author's opinion, the steering current provides the most accurate characterization of the displacement of pressure areas is given. Other well-known empirical laws, which are equivalent to the law of the steering current, are also presented. The author also examines the results of computations verifying the validity of the rule on the convergence and divergence of high-altitude winds for the purpose of forecasting the evolution of pressure centers. Bibliography: 16 references.

K. G. Abramovich

Card 1/1

[redacted], V.P.

Pilot balloon measurement of winds and their speed above clouds in the presence of clear gaps in the cloud cover. Trudy GGO no. 74-83 '56. (MLRA 10:7)
(Winds--Measurement) (Balloons, Pilot) (Clouds)

VORONTSOV, P.A.; MIKHEL', V.M.; ERLER, A.A.

Utilizing model airplanes guided by radio for aerological studies of the lower layers of the atmosphere. Trudy GGO no.73:107-115 '58. (MIRA 11:9)

(Atmosphere) (Airplanes--Models--Radio control)

3(7) PHASE I BOOK EXPLOITATION SOV/3497

Mikhel', Vasiliy Mikhaylovich

Voprosy metodiki sharopilotnykh nablyudeniy, ikh obrabotka i prakticheskoye primeneniye (Problems in Methods of Pilot-Balloon Observation, Analysis and Application of Data) Leningrad, Gidrometeoizdat, 1959. 226 p. Errata slip inserted. 3,000 copies printed.

Resp. Ed.: N.F. Nakorenko; Ed.: T.V. Ushakova; Tech. Ed.: A.N. Sergeyev.

PURPOSE: This book is intended for scientific workers in the fields of meteorology and aerology. It may also be useful to advanced students in these fields and to scientists interested in the physics of the atmosphere.

COVERAGE: The author studies methods of pilot-balloon observation from one position based on the assumption of the constant vertical speed of the balloon. Methods of graphical and analytical processing of the observations are presented. It is pointed out that be-

Card 1/7

cause of its relative low cost and simplicity, pilot-balloon observation is being extensively used in the study of such important phenomena as the spatial and time changes of wind and the altitude of clouds. The growing importance of pilot-balloon observations in the Soviet Union is evidenced by the increase in number of pilot-balloon observation stations from 58 in 1930 to 456 in 1950. For the organization of aerologic observations in polar regions, where it is difficult to ensure a regular supply of hydrogen for the balloons, the choice of the most efficient method for generating hydrogen is of particular importance. In this respect, the method described by I.M. Dolgin (1958) is especially valuable for polar regions. It consists in the use of powdered aluminum which, reacting with water in the presence of a very small amount of caustic soda yields hydrogen. Separate chapters of the book deal with methods of processing the observational data and with problems in the practical application of the results of pilot-balloon observations. There are 199 references: 144 Soviet, 37 German, 14 English, 3 French and 1 Spanish.

TABLE OF CONTENTS:

Problems in Methods (Cont.) SOV/3497

Card 3/7

Problems in Methods (Cont.) SOV/3497

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Card 7/7

MIKHEL' V.M.

Variations of the lower limit of low-level clouds. Trudy GGO no.88:59-68 '60. (MIRA 13:8)
(Clouds)

MIKHLL', V.M.

Some characteristics of horizontal and vertical motions in the atmosphere. Trudy GGO no.123:110-118 '61. (MIRA 14:8)
(Winds)

MIKHEL', V.M.

Short-range precipitation forecasts and changes in the intensity of pressure fields. Trudy GGO no.148:122-132 '63. (MIRA 16:6)
(Weather forecasting)

GUSHCHIN, Gennadiy Petrovich; MIKHEL', V.M., otv. red.; KUSAKOVA, G.Ya., red.

[Ozone and aerosynoptic conditions in the atmosphere] Ozon i aerosinopticheskie usloviia v atmosfere. Leningrad, Gidrometeoizdat, 1964. 340 p. (MIRA 17:5)

BARANOV, Aleksandr Mikhaylovich; MIKHEL', V.M., doktor geogr. nauk, retsenzent; VAYTSMAN, A.I., red.

[Front clouds and flight conditions through them] Frontal'nye oblaka i usloviia poletov v nikh. Leningrad, Gimiz, 1964. 237 p. (MIRA 17:6)

MIKHEL', V.M.

A thunderstorm and shower exceptional according to duration and intensity in the region of Leningrad. Trudy GGO no.176:66-74 '65. (MIRA 18:8)

Climatologic characteristics of atmospheric fronts and their evolution in relation to cloudiness and precipitation in some regions of the European territory of the U.S.S.R. Ibid.:114-129

ACC NR: AP7000418 SOURCE CODE: UR/0012/66/098/005/0461/0463

AUTHOR: Mikhel', V. M.; Borushko, I. S.

ORG: none

TITLE: Session of the Scientific Council of the Main Geophysical Observatory, dedicated to the memory of A. I. Voyeykov

SOURCE: Vsesoyuznoye geograficheskoye obshchestvo. Izvestiya, v. 98, no. 5, 1966, 461-463

TOPIC TAGS: meteorologic conference, microclimatology, bioclimatology, atmospheric contamination, heat balance, heat biologic effect, free atmosphere, atmospheric temperature, atmospheric circulation, climatology

ABSTRACT: A meeting of the Scientific Council of the Main Geophysical Observatory (GGO) was held in Leningrad on 2—6 March 1966. Some 250 climatologists and meteorologists from the GGO and 27 other organizations were in attendance. Twenty-six papers were presented in three main sessions: heat balance, atmospheric circulation, and applied climatology. Of these, the following are of interest to users of the CBE Factors reports.

Card 1/3 UDC: 006.3:550.3

ACC NR: AP7000418

1) M. I. Budyko (GGO), delivered a paper on the development of research dealing with the role of heat balance in climatology. Emphasis was on the considerable significance of heat-balance data in bioclimatological studies, in engineering, and in photosynthesis research.

2) O. B. Mertsalova (Scientific Research Institute of Aeroclimatology--NIIAK) presented a paper on mechanized computations of the statistical parameters of the free atmosphere used in designing airborne apparatus.

3) M. Ye. Berlyand (GGO) discussed the climatic aspects of research on atmospheric pollution caused by industrial effluents. Several climatic indices characterizing the extent of the distribution of atmospheric boundary layer pollution in the USSR were obtained from extensive theoretical and experimental studies carried out by the Division of Atmospheric Diffusion Research.

4) I. A. Gol'tsberg (GGO), in a paper entitled "Microclimatic research and its applied significance," presented the results of work carried out to determine the spatial characteristics and distribution of the quantitative characteristics of a microclimate due to the underlying surface, degree of relief dissection, and climatic conditions.

Card 2/3

ACC NR: AP7000418

5) G. V. Tsitsenko (GGO) presented a paper on the influence of meteorological factors on man's body heat. He gave a quantitative evaluation of the heat balance of a man's body in terms of the daytime changes in the bioclimatological characteristics of various regions of the USSR during the summer.

6) Ye. S. Selezneva (GGO) presented the results of studies on the chemical composition of precipitation, which gave additional information in estimating the degree of atmospheric pollution in various regions.

[W.A. 50]

SUB CODE: 04/ SUBM DATE: none

Card 3/3

ACC NR: AP7008890 SOURCE CODE: UR/0362/66/002/012/1320/1322

AUTHOR: Mikhel', V. M.; Zubenok, L. I.

ORG: none

TITLE: Scientific session "A. I. Voyeykov and the present-day problems of climatology"

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 12, 1966, 1320-1322

TOPIC TAGS: atmospheric circulation, climatology, atmospheric thermodynamics, meteorologic conference

SUB CODE: 04

ABSTRACT: A session of the Scientific Council of the Main Geophysical Observatory was held during the period 2-6 March 1966 at Leningrad. The program revolved around three subjects: the heat balance, atmospheric circulation and applied climatology. Some of the representative reports were: B. A. Dzerdzeyevskiy discussed dynamic climatology, especially his own studies which have revealed epochal disruptions of the temperature and precipitation fields over extensive areas of the earth. Kh. P. Pogosyan pointed out that the influence of the underlying surface is not limited to the troposphere but extends to the lower stratosphere. K. I. Yudin told of the stability of fluctuations of the pressure field over the northern hemisphere revealed by the statistical method. O. A. Drozdov

Card 1/2 UDC: 551.52

0929 1693

ACC NR: AP7003890

pointed out the role of circulatory and hydrothermal factors in drought formation and its change from month to month. He analyzed the relationship between fluctuations of the levels of the Caspian and Aral Seas. Ye. S. Rubinshteyn and L. G. Polozova gave data on long-term changes of temperature and the characteristics of atmospheric circulation on a global scale. S. P. Khromov analyzed the present status of the problem of atmospheric circulation in the tropics. G. M. Tauber described the characteristics of atmospheric circulation in the southern hemisphere in dependence on the distribution of land and sea. O. B. Mertsalova told of work on automation of computations of the statistical characteristics of the free atmosphere made at the Institute of Aeroclimatology. M. Ye. Berlyand told of work at the Main Geophysical Observatory on the geographical distribution of atmospheric contamination in industrial regions in dependence on turbulent exchange, inversions at the surface and aloft, microclimatic characteristics of the relief, etc. F. F. Davitaya discussed the agroclimatic resources of the USSR. M. I. Budyko and others described a quantitative theory of photosynthesis and analyzed the influence of meteorological factors on the productivity of the vegetation cover. Ye. S. Selezneva and V. M. Drozdova gave the results of studies on atmospheric contamination and the chemical composition of precipitation in the USSR. [JPRS: 39,718]

Card 2/2

ACCESSION NR: AP4022870 S/0051/64/016/004/0663/0673

AUTHOR: Kilin, S.F.; Mikhelashvili, M.S.; Rozman, I.M.

TITLE: Concerning radioluminescence of organic substances. 2. Specific luminescence quenching under excitation by fast electrons

SOURCE: Optika i spektroskopiya, v.16, no.4, 1964, 663-673

TOPIC TAGS: cathodoluminescence, radioluminescence, luminescence quenching, scintillator, triphenyl derivative, tetraphenyl derivative, triphenylpyrazoline

ABSTRACT: Parts 1 and 2 (S.F.Kilin, K.A.Kovy*rzina and I.M.Rozman, Opt.i spektro. Sbornik 1.Lyuminestsentsiya,p.147,Pub.AN SSSR,1963; S.F.Kilin and I.M.Rozman, Ibid. 15,494,1963) of the present series of papers were devoted to description of the results of investigation of the luminescence of alcohol and water solutions of a number of organic compounds. Appreciable reduction of the persistence of luminescence under x-ray excitation as compared with luminescence under photoexcitation was taken as evidence of specific quenching of radioluminescence in these solutions. The present paper gives further experimental results and an interpretation thereof. There were studied two-component liquid and plastic (solid) scintillators in which

Card 1/2

ACCESSION NR: AP4032370

the solute molecules are acceptors of the electronic excitation energy acquired by the solvent molecules. Data, in the form of curves of the luminescence yield and persistence as a function of the solute concentration, for 2,4,5-triphenyl-1,3-oxazole in toluene, 1,3,5-triphenyl-Δ^2-pyrazoline in toluene, 1,1,4,4-tetraphenyl-1,3-butadiene in polystyrene, and triphenylpyrazoline in polyvinyltoluene under excitation by ultraviolet (2652 Å) and fast electrons from C^{14} are presented in figures. It is shown that in the case of stimulation by electrons there is evinced an added dynamic quenching of the acceptor luminescence. A phenomenological theory of the effect is proposed; this leads to the correct relationships between values of the persistence and yield of radioluminescence (cathodoluminescence) and of photoluminescence. It is noted that such added dynamic quenching is exhibited not only by good sintillators, but also by organic substances in water and alcohol solutions (see second reference above). Orig.art.has: 38 formulas, 8 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 01Jun63 DATE ACQ: 07May64 ENCL: 00

SUB CODE: OP NR REF SOV: 010 OTHER: 005

Card 2/2

L 20215-65 EWT(1)/EWT(m)/EPF(c)/EWP(j)/EEC(b)-2 Pc-4/Pr-4 IJP(c)/RPL/
AEDC(a)/AFWL/SSD/AS(mp)-2/ESD(gs)/ESD(t) RM

ACCESSION NR: AP4039711 S/0051/64/016/006/1063/1065

AUTHOR: Kilin, S.F.; Mikheleshvili, M.S.; Rozman, I.M.

TITLE: Concerning electronic excitation energy transfer in liquid solutions

SOURCE: Optika i spektroskopiya, v.16, no.6, 1964, 1063-1065

TOPIC TAGS: energy transfer, energy migration, diffusion, scintillator, luminescence quenching, luminescence yield

ABSTRACT: The theory of resonance transfer of excitation energy in luminescent solutions, developed by Th.Forster (Zs.Naturforsch.,4a,321,1949) and M.D.Galinin (Zhur.eksp.i teor.fiz.,28,485,1955) yields results that are in good agreement with experiments for viscous solutions; in the case of solutions with low viscosity, however, experiment usually indicates a higher migration efficiency than predicted by the Forster-Galinin theory. It has been hypothesized that the reasons for the divergence are molecular diffusion and transfer incident to molecular encounters. Yu.A. Kursatiy and A.S.Selivanenko (Opt.i spektro.,8,643,1960) and A.M.Samson (Ibid.13,511, 1962) attempted to solve the problem of energy transfer, taking into account both these factors, but their treatments were not carried far enough to permit direct

Card 1/2

L 20215-65
ACCESSION NR: AP4039711

5

comparison with experiment. Accordingly, in the present work the authors calculated the excitation decay law and quantum fluorescence yield for donor molecules in a low viscosity solution in which there occur both diffusion and resonance transfer, on the basis of the method proposed by V.V.Antonov-Romanovsky(Phys.Rev.125,1,1962). The calculation results for the relative quantum efficiency as a function of the acceptor concentration for different values of ε parameter S (which is defined in terms of the number of donor molecules, the excitation lifetime, and the resonance transfer distance) are presented in the form of curves. The results of some numerical calculations for triphenyl and triphenyl-Δ^2-pyrazoline in toluene, anthracene in benzene and diphenyloxazole in xylene are compared with the experimental (authors' values and from the literature) data mainly to evaluate the significance of the diffusion mechanism. "The authors thank M.M.Agrest and his co-workers for carrying out the numerical computations on a Ural computer." Orig. art. has: 8 formulas, 2 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 11Sep63 ENCL: 00

SUB CODE: NP, OP NR REF SOV: 007 OTHER: 009

Card 2/2

[redacted], [redacted].

[redacted] nitrogen in nitrogen oxide.
[redacted]. (MIRA 18:4)

SHUMAYEV, Fedor Grigor'yevich; MAKLYUKOV, Il'ya Ivanovich; MIKHELEV, A.A., dotsent, retsenzent; NOVITSKIY, B.F., dotsent, retsenzent; GINZBURG, A.S., professor, spetsredaktor; KEMEL'MITSKAYA, A.Z., redaktor; KISINA, Ye.I., tekhnicheskiy redaktor

[Industrial ovens for baking bread and confectionery] Promyshlennye pechi khlebopekarnogo i konditerskogo proizvodstva. Moskva, Pishchepromizdat, 1957. 353 p. (MIRA 10:11)
(Ovens)

MIKHELEV, A.A.

Reducing ventilation losses in KHVK and UTSK tray-type traveling ovens. Khleb. i kond. prom. 1 no.3:4-9 Mr '57. (MLRA 10:4)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti imeni A.I. Mikoyana.
(Ovens)

MIKHELEV, A.A.

Twenty First Scientific Conference of the A.I. Mikoian Technological Institute of the Food Industry in Kiev. Khleb. i kond. prom. 1 no.5: 46-47 My '57. (MLRA 10:6)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
(Bakers and bakeries)

MIKHELEV, A.A.

Ways for the utilization of secondary power resources in bakery industry. Trudy KTIPP no.17:69-73 '57. (MIRA 13:1)
(Waste heat) (Bakers and bakeries)

MIKHELEV

ROYTER, Isaak Menashevich; MIKHELEV, Abram Arenovich; KIROVA, Kira Aleksandrovna; KASPERSKAYA, Ye., red.; BESPYATOV, R., tekhn.red.

[Bakery technician's manual] Kratkii spravochnik tekhnologa khlebopekarnogo proizvodstva. Kiev, Gos. izd-vo tekhn. lit-ry USSR, 1958. 504 p. (MIRA 11:2)
(Bakers and bakeries)

MIKHLLEV, A.A.

Temperature distribution in bread during baking. Inzh.-fiz. zhur. no.11:53-61 N '58. (MIRA 12:1)

1. Tekhnologicheskiy institut pishchevoy promyshlennosti, Kiyev.

(Baking) (Temperature)

MIKHEL'N, A.A., Doc Tech Sci -- (diss) "Study of processes in the working chamber of bread-baking ovens for the purpose of perfecting them." Kiev, 1959, 41 pp (Min of Higher Education UkSSR. Kiev Tech Inst of the Food Industry) 200 copies. Bibliography at end of text (7L, 36-59, 11h)

MIKHELEV, A.A.

Analytical investigations of the temperature field in the initial stage of bread baking process [with summary in English]. Inzh.-fiz.zhur. no.1:61-67 Ja '59. (MIRA 12:1)

1. Tekhnologicheskiy institut pishchevoy promyshlennosti, Kiyev.

(Baking)

LISOVENKO, A.T.; MIKHELEV, A.A.

Kinetics of the baking process during the heating of the baking chamber by infrared gas burners. Trudy KTIPP no.22:91-96 '60. (MIRA 14:3)

(Baking)

ZASYAD'KO, V.V.; MIKHELEV, A.A.

Effect of the water spraying of panned dough on the kinetics of the baking process. Trudy KTIPP no.22:97-100 '60. (MIRA 14:3)
(Baking) (Dough)

RUDENKO-GRITSYUK, O.A.; MIKHELEV, A.A.

Heat and mass transfer in a baking chamber during agitation by an air-steam mixture. Trudy KTIPP no.22:101-107 '60. (MIRA 14:3)

(Baking) (Heat—Transmission) (Mass transfer)

ZAYTSEV, Nikolay Vladimirovich, kand. tekhn. nauk; MIKHELEV, A.A., prof., retsenzent; ITSKOVICH, Ya.S., inzh., retsenzent; KOS'MIN, T.F., inzh., retsenzent; VOYKOVA, A.A., red.; SATAROVA, A.M., tekhn. red.

[Technical equipment for bakeries]Tekhnologicheskoe oborudovanie khlebozavodov. Izd.2., perer. i dop. Moskva, Pishcheprom izdat, 1961. 554 p. (MIRA 15:12)
(Bakers and bakeries--Equipment and supplies)

LISOVENKO, A.T.; MIKHELEV, A.A.

Study of the dough-bread temeperature field in baking with the aid of infrared gas burners. Izv.vys.ucheb.zav.;pishch.tekh. 1:96-100 '61. (MIRA 14:3)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti, Kafedra khlebopekarnogo proizvodstva.
(Baking)

LISOVENKO, A.T.; MIKHELEV, A.A.

Automatic setup for the simultaneous recording of weight and temperature [with summary in English]. Inzh.-fiz. zhur. 4 no.9: 98-101 S '61. (MIRA 14:8)

1. Tekhnologicheskiy institut pishchevoy promyshlennosti, g. Kiyev.

(Recording instruments)

MIKHELEV, A.A.; KAZANSKIY, M.F.; DUSHCHENKO, V.P.

Comments on A.S. Ginzburg's monograph "Drying foodstuffs."
Inzh.-fiz. zhur. 4 no.9:132-133 S '61. (MIRA 14:8)
(Food--Drying)
(Ginzburg, A.S.)

LISOVENKO, A.T.; MIKHELEV, A.A.

System for measuring temperatures along the conveyor in commercial baking ovens. Trudy KTIPP no.24:159-161 '61. (MIRA 15:6)
(Bakers and bakeries—Equipment and supplies) (Ovens)

MIKHELEV, Abram Aronovich; DENISENKO, L.P., red.; KASPERSKAYA, Ye.I., red.; GORKAVENKO, L.I., tekhn. red.

[Handbook of the bakery mechanic]Spravochnik mekhanika khlebopekarnogo proizvodstva. Kiev, Gostekhizdat USSR, 1962. 472 p. (MIRA 15:12)

(Bakers and bakeries—Equipment and supplies)

RUDENKO-GRITSYUK, O.A. [Rudenko-Hrytsiuk, O.A.]; MIKHELEV, A.A. [Mikheliev, A.A.]

Bakery ovens with intensified convection heat exhcange in the baking chambers. Khar.prom. no.4:66-68 O-D '62. (MIRA 16:1)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
(Ovens)