"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, K.I.

On the article by A.N. Shakin and G.S. Benin. Sakh.prom. 30 no.4: 12-13 Ap '54. (MLRA 9:8)

1. Bol'she-Gribanovskiy sakharnyy zavod.
(Sugar industry--Equipment and supplies)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

10.3500

26.5100

28007

S/508/60/030/000/009/013
D234/D306

AUTHOR: Vasilevskiy, K.K. (Moscow)

TITLE: Solving one-dimensional problem of heat conductivity for a two layer plate and constant heat flow on the boundary

PERIODICAL: Akademiya nauk SSSR. Institut mekhaniki. Inzhenernyy sbornik, v. 30, 1960, 119 - 125

TEXT: The differential equations are $dt_1/d\tau = a_1 \cdot d^2t_1/dx_1^2$, $0 \leqslant x_1 \leqslant h_1$; $dt_2/d\tau = a_2 \cdot d^2t_2/dx_2^2$, $0 \leqslant x_2 \leqslant h_2$ [Abstractor's note: Author uses symbol d although partial derivatives are meant] $t_{1,2}$ the temperature of the respective layer; $x_{1,2}$ the coordinate referred to thickness; τ the time; $h_{1,2}$ the thickness of a layer; $a_{1,2}$ the coefficients of heat conductivity [Abstractor's note: Li-

Card 1/5

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

terally "temperature conductivity"]. The boundary conditions are $-\lambda_1 dt_1(o, \tau)/dx_1 = q_o$, $\tau > 0$, $dt_2(h_2, \tau)/dx_2 = 0$, $\tau \geqslant 0$ [Abstractor's note: λ_1 is called "coefficient of heat conductivity"], q_o being the constant specific heat flow at the boundary. Other conditions are

$$\lambda_1 \cdot \frac{dt_1(h_1, \tau)}{dx_1} = \lambda_2 \cdot \frac{dt_2(0, \tau)}{dx_2}, \quad (5)$$

$$t_1(h_1, \tau) = t_2(0, \tau), \quad (6)$$

$$t_1(x_1, 0) = t_2(x_2, 0) = t_o = \text{const}, \quad (7)$$

where $c_{1,2}$ are the specific heats and $\gamma_{1,2}$ the densities of layers. The author obtains for the solution

Card 2/5

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

$$t_1 = t_0 + \frac{q_0}{2a_1(c_1\gamma_1 h_1 + c_2\gamma_2 h_2)} \cdot x_1^2 - \frac{q_0}{\lambda_1} \cdot x_1 + \frac{q_0}{c_1\gamma_1 h_1 + c_2\gamma_2 h_2} \cdot \tau + \\ + q_0 \cdot \frac{c_1^2\gamma_1^2 h_1^3\lambda_2 + 3c_2\gamma_2 h_1 h_2^2 (c_1\gamma_1 h_1 + c_2\gamma_2 h_2) + c_2^2\gamma_2^2 h_2^3\lambda_1}{3\lambda_1\lambda_2 (c_1\gamma_1 h_1 + c_2\gamma_2 h_2)^4} + \\ + \sum_{n=1}^{\infty} A_n e^{-\gamma_n \tau} \cdot \cos\sqrt{\frac{\gamma_n h_1^2}{a_1}} \frac{x_1}{h_1}, \qquad (20)$$

$$t_2 = t_0 + \frac{q_0}{2a_2(c_1\gamma_1 h_1 + c_2\gamma_2 h_2)} \cdot (h_2 - x_2)^2 + \frac{q_0}{c_1\gamma_1 h_1 + c_2\gamma_2 h_2} \cdot \tau - \\ - q_0 \cdot \frac{c_1^2\gamma_1^2 h_1^3\lambda_2 + 3c_1\gamma_1 c_2\gamma_2 h_1 h_2 (h_1\lambda_2 + h_2\lambda_1) + c_2^2\gamma_2^2 h_2^3\lambda_1}{6\lambda_1\lambda_2 (c_1\gamma_1 h_1 + c_2\gamma_2 h_2)^4} + \\ + \sum_{n=1}^{\infty} B_n e^{-\gamma_n \tau} \cdot \cos\sqrt{\frac{\gamma_n h_2^2}{a_2}} \left(1 - \frac{x_2}{h_2}\right). \qquad (21)$$

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

It is assumed that $h_1^2/a_1 \neq h_2^2/a_2$. The constants A_n, B_n and γ_n are determined by

$$\frac{\operatorname{ctg}\mu_n'}{\frac{\lambda_1}{h_1}\mu_n'} + \frac{\operatorname{ctg}\mu_n''}{\frac{\lambda_2}{h_2}\mu_n''} = 0, \tag{24}$$

where

$$\mu_n' = \sqrt{\frac{\gamma_n h_1^2}{a_1}}, \quad \mu_n'' = \sqrt{\frac{\gamma_n h_2^2}{a_2}}.$$

The Eqs.

$$A_n \frac{\lambda_1}{h_1}\mu_n' \sin\mu_n' = -B_n \frac{\lambda_2}{h_2}\mu_n'' \sin\mu_n'' = A_n^*, \tag{25}$$

$$A_n^* = -\frac{q_0 h_1^3 \gamma_n}{\lambda_1 a_1 \mu_n'^3 \sin\mu_n'} \cdot \frac{1}{\psi_n}. \tag{30}$$

and

$$\psi_n = \frac{1 + \sin 2\mu_n'/2\mu_n'}{\frac{\lambda_1}{h_1}(1 - \cos 2\mu_n')} + \frac{1 + \sin 2\mu_n''/2\mu_n''}{\frac{\lambda_2}{h_2}(1 - \cos 2\mu_n'')} \tag{29}$$

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

28007
S/508/60/030/000/009/013
D234/D306

Solving one-dimensional problem ...

then follow. By putting $h_2 \rightarrow 0$ the author obtains a well-known solution for a single layer plate. There are 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: P. Seide, On one-dimensional temperature distribution in two layered slabs with contact resistance at the place of contact, JASS, N. 6, 1958, p. 523-524.

SUBMITTED: April 4, 1958

Card 5/5

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, K.K. (Moskva)

Applying Green's function to the solution of the problem of the heat conductivity of a rod. Inzh.zhur.2 no.1:195-200 '62. (MIRA 15:3)

(Heat--Conduction)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

S/258/63/003/001/019/022
E201/E141

AUTHOR: Vasilevskiy, K.K. (Moscow)

TITLE: On obtaining an integral solution of the nonlinear heat conduction problem for a semi-infinite body

PERIODICAL: Inzhenernyy zhurnal, v.3, no.1, 1963, 165-168

TEXT: Two cases are considered. 1) The body does not melt. 2) The body melts but molten particles do not remain in contact with the unmelted surface. A linear variation of material properties is assumed. An integral solution gives approximate but simple results in the form of analytical formulas. The analysis during the first stage ($\tau \leqslant \tau_m$) is based on the equation

$$M_o \left[1 + m(t - t_o)\right] \frac{\partial t}{\partial \tau} = \frac{\partial}{\partial x} \left\{ \lambda_o \left[1 + \ell(t - t_o)\right] \frac{\partial t}{\partial \tau} \right\} \qquad (1)$$

where: $t(x, \tau)$ - temperature; x - coordinate; τ - time; τ_m - time at commencement of melting; M_o, λ_o, m, ℓ - constant values; t_o - constant initial temperature. The equation for the temperature drop at infinity for the exact solution is:

Card 1/3 $\partial t(\infty, \tau)/\partial x = 0$

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

and for the integral solution

$$t(\delta, \tau) = t_o \quad \text{and} \quad \frac{\partial t(\delta, \tau)}{\partial x} = 0 \qquad (3)$$

where $\delta = \delta(\tau)$ - thickness of the heated layer.
It is assumed that heat propagates in stages from the layer.
The solution can be obtained from:

$$\theta = \theta_w \left(1 - \frac{\bar{x}}{\bar{\delta}}\right)^n \qquad (5)$$

where

$$\theta = \frac{t - t_o}{\Delta t}, \quad \theta_w = \frac{t_w(\tau) - t_o}{\Delta t}, \quad \bar{x} = x/R, \quad \bar{\delta} = \delta/R.$$

Here, R - length; Δt - characteristic temperature difference.
A more accurate equation is:

$$\theta = \theta_w \left(1 - \frac{\bar{x}}{\bar{\delta}}\right)^2 \left(1 - \frac{\bar{x}^2}{\bar{\delta}^2}\right) \qquad (7)$$

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

For the second stage, $\tau \geqslant \tau_m$

$$-\lambda_o \left\{ 1 + \ell \left[t(\xi, \tau) - t_o \right] \right\} \frac{\partial t(\xi, \tau)}{\partial x} = q_w(\tau) - \gamma r \frac{d\xi}{d\tau} \qquad (12)$$

This can be solved using

$$\theta = \left(1 - \frac{\bar{x} - \bar{\xi}}{\bar{\delta} - \bar{\xi}} \right)^n \qquad (13)$$

where: $t(\xi, \tau) = t_m$ - constant; $q_w(\tau)$ - given flow at melting surface; $\xi(\tau)$ - unknown law governing propagation of melting surface; $n > 1$, $\bar{\xi} = \xi/R$, $\Delta t = t_m - t_o$.

The author states that his results agree well with Landau's results (H.G. Landau, Heat conduction in a melting solid. Quart. Appl. Math., v.3, 1950. There is 1 figure.

SUBMITTED: March 20, 1962

Card 3/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

S/0294/64/002/002/0260/0266

ACCESSION NR: AP4038441

AUTHOR: Vasilevskiy, K. K.

TITLE: Approximate solution of the nonlinear nonstationary problem of heat and mass exchange for a semi-bounded porous body

SOURCE: Teplofizika vy*sokikh temperatur, v. 2, no. 2, 1964, 260-266

TOPIC TAGS: heat exchange, mass exchange, porous material, thermal property, thermal stress, capillary tube, boundary layer

ABSTRACT: In view of recent interest in the investigation of the heat and mass exchange inside a capillary-porous body with allowance for phase transitions and chemical transformations, and in view of the fact that the theory hitherto developed is suitable principally for linear systems, the author considers a method of obtaining an approximate analytic solution for the nonlinear nonstationary problem of heat and mass exchange in a semibounded body with variable thermophysical parameters in the absence of an over-all pressure gradient. Approximate formulas are obtained to facilitate the analy-

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

ACCESSION NR: AP4038441

sis of the influence of different thermophysical parameters and for use in experimental determinations of these parameters, and also for the investigation of the stressed state of the material. The method used is similar to that used by Meksyn (Proc. Roy. Soc. v. A192, 167, 1948) to solve the equations of the boundary layer and heat conduction. The results of the calculation indicate good agreement between the successive approximations used in the method and the exact solution. The first-approximation solution, which is quite easy to obtain, is satisfactory for rough estimates. Orig. art. has: 3 figures and 18 formulas.

ASSOCIATION: None

SUBMITTED: 28Sep63 DATE ACQ: 09Jun64 ENCL: 00

SUB CODE: TD, ME NR REF SOV: 003 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, K.K.

Unsteady heat and mass transfer in a semibounded capillary-porous body under boundary conditions of the first kind. Inzh.-fiz. zhur. 7 no.4:71-73 Ap '64. (MIRA 17:4)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

ACC NR: AP7002913 (N) SOURCE CODE: UR/0170/66/011/006/0725/0729

AUTHOR: Vasilevskiy, K. K.

ORG: none

TITLE: Unsteady heating of a conical rod

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 11, no. 6, 1966, 725-729

TOPIC TAGS: heating, heat conductivity, heat property, approximate solution

ABSTRACT: The article deals with an approximate solution of the transient problem of heat conductivity for a thin conical rod by the Galerkin-Kantorovich method. Constant heat properties of the rod material are assumed. The comparison of numerical values are in good agreement with approximate and exact solutions. Orig. art. has: 3 figures and 15 formulas. [Author's abstract]

SUB CODE: 13, 20/SUBM DATE: 14Dec65/ORIG REF: 003/OTH REF: 002/ [NT]

Card 1/1 UDC: 536.21.212

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, K. P.

USSR/Physical Chemistry - Molecules. Chemical Bonds. B-4

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14410

Author : K. P. Vasilevskiy
Inst : -
Title : Vibration-Rotation absorption and emission spectra of heated carbon monoxide

Orig Pub: Optika i spektroskopiya, 1956, 1, No 4, 587-589; Isprav-leniye No 8, 1040

Abstract: A study was made, at a high resolution, of the absorption and CO emission spectra, at temperatures of 300-1350°K, in the region of second overtone (2.35μ). From the distribution of line intensities in the emission spectrum the value of the rotation "temperature" 1650°K was obtained for the case of T = 1350°K. This divergence may be explained apparently, by self absorption in less heated gas layers in front of the bulb which is confirmed by the observed distribution of intensities in CO absorption spectra at the same temperature which leads to the

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

USSR/Physical Chemistry - Molecules. Chemical Bonds.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14410 B-4

Abstract: rotation "temperature" of 1360°K. The vibration "temperature" determined from the spectra is, in these conditions, on the average 1380°K.

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

10.1100

3,5100

28405

S/169,51/000/007/058/104
A006/A101

AUTHORS: Vasilevskiy, K.P., Kiseleva, M.S., Neporent, B.S.

TITLE: Study of the law of infrared radiation absorption by water vapors and determination of the moisture in the upper atmospheric layers by the spectral method

PERIODICAL: Referativnyy zhurnal. Geofizika, no. 7, 1961, 34, abstract 7B219 ("Dokl. Mezhvuz. nauchn. konferentsii po spektroskopii i spektr. analizu", Tomsk, Tomskiy un-t, 1960, 82 - 84)

TEXT: The authors investigated the method of determining water vapor concentration from absorption lines in the infrared spectrum range. The described method is applicable to various gas systems and also to the atmosphere. The half width of individual lines of rotary-oscillation H_2O bands under conditions corresponding to the lower atmospheric layers, is of the order of 0.03 - 0.1 cm^{-1}; therefore in the majority of cases measurements in the absorption bands of water vapors are performed under conditions of unresolved structure of bands and at a slit width of the spectral devices exceeding considerably the width of individual lines. Under such conditions the Bouguer-Beer law is not applicable and the

Card 1/4

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

28405
S/169/61/000/007/058/104
A006/A101

absorption intensity depends not only on the concentration of water vapors and the length of the path but also on the presence of by-gases, the temperature, and a number of other factors. The authors studied the dependence of infrared radiation absorption by water vapors on the partial pressure of vapors, the path length and the pressure of by-gases. It was established that under the experimental conditions the integral absorption A in the line obeys regularities which were found by Ladenburg and Reiche (Ladenburg, R., Reiche F., Ann. Phys. 1913, v. 42, 181)

$$A = \int \left(1 - \frac{I}{I_o}\right) dv = 2\left[S^o \gamma^o p_a \; L\,(p_a + \sigma p_x)\right]^{\frac{1}{2}} \qquad (1)$$

where p_a is the partial pressure of water vapors, p_x is the pressure of by-gas, S^o is the intensity and γ^o is the half-width of the line at $p_a = I$ and $p_x = 0$; L is the path length and σ is the relative effectiveness of optical collisions of water molecules with by-gas molecules. For the case of a group of lines

$$A_n = \sum_{i=1}^{n} A_i = 2\,(p_a l)^{1/2} \sum_{i=1}^{n} \left[S_i^o \gamma_i^o (p_a + \sigma_i p_x)\right]^{1/2} \qquad (2)$$

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

The direct application of equation (2) for determining the p_a values from measured p_x values, requires that the values $S_i^o \gamma_i^o$ and σ_i be known for each line entering the group. Experiments have shown that at a pressure of H_2O vapors and by-gases, corresponding to the lower atmospheric layers, the following equation is approximately applicable

$$A = m \sqrt{p_a l} \cdot (p_a + p_x)^k \qquad (3)$$

where m and k are constant values. In 1957 experiments were carried out to determine water vapor concentration in the atmosphere (up to 15 km altitudes) by the spectral method with the use of formula (3). Spectrometers with diffraction gratings made it possible to determine the moisture of the air at various altitudes from attenuated solar radiation in bands of water absorption 1.4; 1.9 and 2.7 μ. Spectral sections near 1.2; 1.5 and 2.2 μ (beyond the absorption bands) were employed as check wavelengths. A PbS photoresistance was used as a radiation receiver. The readings of the device during its free flight on a stratosphere balloon were consecutively transmitted through a telemetric line to the earth. During the flight of the device from 1957 - 1960, data were obtained from the attenuation of solar radiation at various altitudes, which were

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

24.05

S/169/61/000/007/053/104
A006/A101

Study of the law ...

used to calculate values of water vapor concentration in the atmosphere with the aid of graduation graphs. Measurements of the air moisture with the aid of the 1.4 μ band can be performed up to 11-km altitude. For higher altitudes the stronger 2.7 μ band is employed.

L. Yerasova

[Abstracter's note: Complete translation]

Card 4/4

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, K.P.

NEPORENT, B.S.; VASILEVSKIY, K.P.; LAPINA, N.A.; FURSENKOV, V.A.

Vacuum grating spectrometer for the 0.7-3 spectral range. Opt. i spektr. 3 no.3:289-293 S '57. (MIRA 10:9)
(Spectrometer)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

Sov/51-4-4-7/24

AUTHORS: Vasilevskiy, K.P. and Neporent, B.S.

TITLE: Dependence of the Infra-red Absorption by Water Vapour on its Concentration and on Path Length for the Case of a Separate Line and for a Group of Lines in the 2.7 μ Band (Zavisimost' pogloshcheniya infrakrasnoy radiatsii parami vody ot kontsentratsii i dliny puti v sluchayakh otdel'noy linii i gruppy liniy polosy 2.7 μ)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol IV, Nr 4, pp 474-480 (USSR).

ABSTRACT: A preliminary communication on the subject of the present paper was given at the Tenth Conference on Spectroscopy on July 12, 1956. The paper gives the results of measurements of the infra-red absorption by a single line at 4 025.38 cm^{-1} and by a group of 9 lines in the region 3 970-3 978 cm^{-1} which belong to the ν_3 and ν_1 bands of water vapour. Concentration of water vapour C was varied from 1.23×10^{-7} to 45.5×10^{-7} mol/cm^3 and absorption path lengths were from 8.8 to 160.8 m. The part of the spectrum containing the 4025.38 cm^{-1} line is shown in Fig. 1. The group of 9 lines in the region 3 970 - 3 978 cm^{-1} is given by arrows in Figure 2, which represents the spectrum

Card1/5

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

Dependence of the Infra-red Absorption by Water Vapour on its Concentration and on Path Length for the Case of a Separate Line and for a Group of Lines in the 2.7 μ Band

obtained at a water vapour concentration of 7.37×10^{-7} mol/cm^3 and absorption path lengths of 8.8 and 120.8 m. The equivalent width A was determined by integration of the spectral curves by means of a planimeter. Dispersion of the spectrograph was 2.5 cm^{-1}/mm in the region of interest and the best resolution was about 0.1 cm^{-1}. A lead sulphide photo-resistance was used as the receiver. A multiple-passage cell had a construction similar to that described in Refs 17, 18. The cell temperature was 60 °C in all experiments. The results of measurements for the 4 025 cm^{-1} lines are given in Figure 3 in the form of dependence of the equivalent width A on $\sqrt{Cl}$. Figure 3 shows that, for A from 0.1 to 0.9 cm^{-1}, A is in fact proportional to $\sqrt{Cl}$. A linear dependence of A/C on $\sqrt{l}$ for the 4 025 cm^{-1} line is shown in Figure 4 for the range of values of A from 0.1 to 0.9 cm^{-1}. Departures from straight lines in Figures 3 and 4 are observed at low concentrations (Curves 1

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

and 2 in Figure 3) and at high concentrations (Curves 7 and 6 in Figure 3). In Figure 4, Curves 1, 2 and 7 show departures from the general trend. The departures at higher concentrations (at values of A greater than 0.9 cm^{-1}) are due to overlapping of the studied line (4 025 cm^{1-}) with its neighbours as shown in Figure 1. Departures at low concentrations are due to a decrease in the line width when the Doppler width can no longer be neglected as compared with the collision width. The results of measurements of the equivalent width A for the 3 970-3 978 cm^{-1} group are shown in Figure 5 in the form of a dependence of A on $\sqrt{C}$. The square-root law is observed up to values of about 2-2.5 cm^{-1}. In the region of applicability of the square-root law, the angle of slope of the rectilinear portions of curves of Figure 5 is proportional to the square root of the concentration of water vapour C. This is confirmed by Figure 6 which shows dependence of A/C on $\sqrt{C}$. The black

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

Sov/51-4-4-7/24

Dependence of the Infra-red Absorption by Water Vapour on its Concentration and on Path Length for the Case of a Separate Line and for a Group of Lines in the 2.7 μ Band

circles and the continuous curve in Figure 6 correspond to the rectilinear portions of the Curves 2-5 of Figure 5. Figure 7 repeats the results of Figure 5 in the form of a dependence of A on log(Cl) . In this case, the points for values of A greater than 2.5 cm^{-1} are found to lie on a family of parallel lines. Such a logarithmic dependence for absoprtion due to a vibrational-rotational band was first suggested by Elder and Strong (Ref 10). A more precise expression, in which dependence of the line-width on concentration was taken into account, was obtained for "strong" absorption bands of water vapour by Howard, Burch and Williams (Ref 9). The rectilinear portions of the curves in Figure 7 follow the equation obtained by Howard et al. for dependence of A on C and l .

Card 4/5

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

Sov/51-4-4-7/24

Dependence of the Infra-red Absorption by Water Vapour on its Concentration and on Path Length for the Case of a Separate Line and for a Group of Lines in the 2.7 μ Band

There are 7 figures and 20 references, 16 of which are in English, 3 Soviet and 1 German.

ASSOCIATION: Gosudarstvennyy opticheskiy institut im. S.I.Vavilova (State Optical Institute imeni S.I. Vavilov)

SUBMITTED: June 19, 1957

Card 5/5 1. Water vapor--Spectra

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

SOV/51-7-4-27/32

AUTHORS: Vasilevskiy, K.P. and Neporent, B.S.

TITLE: The Effect of Foreign Gases on Absorption of Infrared Radiation by Water Vapour in the Region of a Single Line in the 2.7 μ Band

PERIODICAL: Optika i spektroskopiya, Vol 7, Nr 4, pp 572-574 (USSR)

ABSTRACT: The authors studied the effect of foreign gases on the integral absorption by a single water-vapour line at 4025.4 cm^{-1} (transition $v_3'' = 0$, $J_\tau'' = 5_{-5} \rightarrow v_3' = 1$, $J_\tau' = 6_{-2}$). Absorption of the $H_2O + A$, $H_2O + N_2$ and $H_2O + CO_2$ mixtures was measured at water-vapour pressure $p_1 = 0.00895$ atm (6.8 mm Hg), total pressures up to 0.83 atm and light-beam path-lengths ℓ from 8.8 to 160.8 m. These measurements were made using a spectrometer with high resolving power and a multiple-passage cell, described earlier (Ref 2). The experimental technique was the same as that given in an earlier paper (Ref 1). Fig 1 shows the integral absorption A (in cm^{-1}) of the 4025.4 cm^{-1} line plotted against ($p_1\ell$) at $p_1 = 0.00895$ atm and CO_2 pressures $p_2 = 0$, 0.057, 0.188, 0.386, 0.596 and 0.832 atm (curves 1-6 respectively). These data show that the integral absorption between 0.07 and 0.9 cm^{-1} can be given in the form:

$$A = 2\sqrt{S^0\gamma}\sqrt{p_1\ell}, \qquad (3)$$

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

SOV/51-7-4-27/32

The Effect of Foreign Gases on Absorption of Infrared Radiation by Water Vapour in the Region of a Single Line in the 2.7 μ Band

where S^0 is the integral intensity of the line at p_1 = 1 atm and γ is the line half-width. Because of the linear dependence of γ on $(p_1 + \sigma_{12}p_2)$, the slope of the curves 1-6 in Fig 1 is proportional to $(p_1 + \sigma_{12}p_2)^{\frac{1}{2}}$, where σ_{12} is the relative efficiency of optical collisions between molecules of water and of foreign gas. Similar dependences were observed when nitrogen and argon were used as the foreign gases. The authors determined the values of σ_{12} as well as the optical diameters (d) of collisions between water and foreign molecules. All these values are given in a table on p 574. There are 2 figures, 1 table and 6 references, 2 of which are Soviet, 3 English and 1 translation.

SUBMITTED: April 23, 1959

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, K.P.

Vibration and rotational absorption and emission spectra of heated carbon monoxide. Opt.i spektr. 1 no.4:587-589 Ag '56. (MLRA 9:11)
(Carbon monoxide--Spectra)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, K.P.

PRIKHOTKO, A.F.

24(7) p3 PHASE I BOOK EXPLOITATION SOV/1365

L'vov. Universytet

Materialy X Vsesoyuznogo soveshchaniya po spektroskopii. t. 1: Molekulyarnaya spektroskopiya (Papers of the 10th All-Union Conference on Spectroscopy. Vol. 1: Molecular Spectroscopy) [L'vov] Izd-vo L'vovskogo univ-ta, 1957. 499 p. 4,000 copies printed. (Series: Its: Fizychnyy zbirnyk, vyp. 3/8/)

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po spektroskopii. Ed.: Gazer, S.L.; Tech. Ed.: Sararyuk, T.V.; Editorial Board: Landsberg, G.S., Academician (Resp. Ed., Deceased), Neporent, B.S., Doctor of Physical and Mathematical Sciences, Fabelinskiy, I.L., Doctor of Physical and Mathematical Sciences, Fabrikant, V.A., Doctor of Physical and Mathematical Sciences, Kornitskiy, V.G., Candidate of Technical Sciences, Rayskiy, S.M., Candidate of Physical and Mathematical Sciences, Klimovskiy, L.K., Candidate of Physical and Mathematical Sciences, Miliyanchuk, V.S., Candidate of Physical and Mathematical Sciences, and Olauberman, A. Ye., Candidate of Physical and Mathematical Sciences.

Card 1/30

Savinov, B.O. Use of Infrared Absorption Spectra in Determining the Characteristics of the Products of Vitamin E Synthesis 265

Belyy, M.U. Optical Method for the Determination of the Composition of Complexes in Solutions 267

Bogomolov, S.G., M.P. Grebenshchikova, and I. Ya. Liplavk. Analysis of Phenol-naphthalene Mixtures by Means of Ultraviolet Absorption Spectra 270

Zimina, K.I., and A.G. Siryuk. Group Determination of the Naphthalene Hydrocarbons by Means of Ultraviolet Absorption Spectra 272

Shabadash, A.N., V.P. Fahenitsyna, and V.M. Khisheva. Spectrophotometric Methods of Phase Control in Processing Acetic Anhydride 275

Neporent, B.S., K.P. Vasilevskiy, and N.A. Lapina. Qualitative Absorption by Means of Water Vapor in Near Infrared Region

Card 18/30

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, K.P.; BAYKOV, V.I.

Infrared spectrum of lithium fluoride vapors. Opt.i spektr. 11 no.1:41-45 Jl '61. (MIRA 14:10)
(Lithium fluoride--Spectra) (Infrared rays)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, K.P.

Effect of foreign gases on the absorption of infrared radiation by water vapor. Opt. i spektr. 11 no.2:207-215 Ag '61. (MIRA 14:8)

(Infrared rays)
(Water vapor)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, A. P.
Sherstkov, Yu. A.

105

PHASE I BOOK EXPLOITATION SOV/6181

Ural'skoye soveshchaniye po spektroskopii. 3d, Sverdlovsk, 1960. Materialy (Materials of the Third Ural Conference on Spectroscopy) Sverdlovsk, Metallurgizdat, 1962. 197 p. Errata slip inserted. 3000 copies printed.

Sponsoring Agencies: Institut fiziki metallov Akademii nauk SSSR. Komissiya po spektroskopii; and Ural'skiy dom tekhniki VSNTO.

Eds. (Title page): G. P. Skornyakov, A. B. Shayevich, and S. G. Bogomolov; Ed.: Gennadiy Pavlovich Skornyakov; Ed. of Publishing House: M. L. Kryzhova; Tech. Ed.: N. T. Mal'kova.

PURPOSE: The book, a collection of articles, is intended for staff members of spectral analysis laboratories in industry and scientific research organizations, as well as for students of related disciplines and for technologists utilizing analytical results.

COVERAGE: The collection presents theoretical and practical problems of the application of atomic and molecular spectral analysis in controlling the chemical composition of various materials in ferrous and nonferrous metallurgy, geology, chemical industry, and medicine. The authors express their thanks to G. V. Chentsova for help in preparing the materials for the press. References follow the individual articles.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

PART II

Vasilevskiy, K. P., and B. S. Neporent. Absorption of infrared radiation by water vapor in mixtures with foreign gases 145

Kislovskiy, L. D. New method of absorption analysis based on reflection 151

Bogomolov, S. G., A. P. Kolesov, M. P. Grebenshchikova, and E. I. Gorbunova. Utilization of ultraviolet spectroscopy in analysis of by-product coke xylene 157

Korshunov, A. V., and A. A. Kolovskiy. Spectra of low-frequency Raman light scattering by some heptahydrate crystals 164

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, Kazimir Valentinovich; FILIPPOV, Viktor Pavlovich; PASHCHINSKAYA, G.N., redaktor; VOLYNTSEVA, V.A., tekhnicheskiy redaktor

[Rule casting machine] Material'no-lineechnaia mashina. Moskva, Gos. izd-vo "Iskusstvo," 1955. 55 p. (MLRA 8:7)
(Leningrad--Type and type founding)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

L 14965-63
EWP(q)/EWT(m)/BDS AFFTC/ASD JD
ACCESSION NR: AP3004266 S/0128/63/000/007/0005/0006

AUTHORS: Vasilevskiy, Kh. G.; Karpenko, I. I.

TITLE: Refining aluminum alloys with argon

57
56

SOURCE: Liteynoye proizvodstvo, no. 7, 1963, 5-6

TOPIC TAGS: aluminum alloy refining, argon, mechanical property, porosity, heat treatment

ABSTRACT: Studies on diminishing the gas and nonmetallic inclusions by passing argon through molten AL9 alloy were conducted. This was done because present methods of refining aluminum with chlorine salts do not always produce satisfactory results and also pollute the air in poorly ventilated shops. Samples of metal were tested for their mechanical properties and were examined microscopically by the x-ray method and spectroscopically. It was found that chemical composition of the metal was not affected significantly, and that its gas pores were substantially reduced. When argon was blown at 740-750C for 5 to 10 minutes, mechanical properties were improved, but they remained constant after blowing for longer periods. Similar results were obtained at 700-710C. Simultaneously conducted heat-treatment tests showed that AL9 refined with argon attained desirable properties in less than the 3 hours presently allotted to the process. It is recommended that AL9 be blown

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

L 14965-63
ACCESSION NR: AP3004266

with argon for 8-10 minutes at 700-710C and that its heat-treatment time be reduced to 2 hours. Orig. art. has: 4 tables.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 08Aug63 ENCL: 00

SUB CODE: ML NO REF SOV: 000 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, I.; SEMENOV, S.; YEFREMOVA, Ye.V., redaktor; CHEREMUKHIN, G.A., redaktor; ANDRIANOV, B.I., tekhnicheskiy redaktor

[Foreign sport planes] Zarubezhnye sportivnye samolety. Moskva, Izd-vo DOSAAF, 1956. 66 p. (MLRA 10:10)
(Airplanes)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L.; SEMENOV, S.; YEFREMOVA, Ye.V., redaktor; KARYAKINA, M.S., tekhnicheskiy redaktor

[Foreign apparatus for automatic control of models in flight] Zarubezhnye pribory avtomaticheskogo upravleniia modeliami v polete. Moskva, Izd-vo DOSAAF, 1956. 1956. 47 p. (MLRA 9:12)
(Airplanes--Models--Radio control)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L.; SEMENOV, S.

Artificial earth satellite. IUn.tekh.ne.1:31-32 Ja '57. (MIRA 10:3)

(Space stations)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L.

Control-line model of a two-motor airplane. IUn.tekh.no.1:65-67 Ja '57. (MIRA 10:3)

(Airplanes--Models)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L.

Inglorious end of a spy airplane. Tekh. mol. 31 no.6:19 '63. (MIRA 16:7)

(No subject headings)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L.

After 2000 years. Tekh.mol. 29 no.8:24-25 '61. (MIRA 14:11)
(Excavations (Archeology))
(Vases, Roman)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L.

Is there such a thing as a sea serpent? IUn.tekh. 5 no.4:72-73 Ap '61. (MIRA 14:3)

(Sea serpents)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L.

Invention or mistification? Tekh.mol. 30 no.10:24-25 '62. (MIRA 15:12)

(United States—Fuel research)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L., polkovnik zapasa.

Above Playa-Giron. Av.i kosm. 45 no.10:90-91 '62. (MIRA 15:10)
(Cuba--Invasion, 1961)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L.

Manufacture of the metal elements of a steel-pouring crane with a capacity of 630 t. Prom. stroi. i inzh. socr. 4 no.3:23-25 My-Je '62. (MIRA 15:7)

1. Glavnyy tekhnolog zavoda imeni Babushkina.
(Mine buildings)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, K.P.

51-3-13/14

AUTHORS: Neporent, B. S., Vasilevskiy, K. P., Lapina, N. A. and Fursenkov, V. A.

TITLE: A Vacuum Spectrometer with a Diffraction Grating for the 0.7-3 μ Spectral Region. (Vakuumnyy spektrometr s difraktsionnoy reshetkoy dlya oblasti spektra 0.7-3 μ)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.3, pp.289-293. (USSR)

ABSTRACT: This paper described apparatus of high resolving power for obtaining spectra in the region 0.7-3 μ. It consists of a recording vacuum spectrometer with a diffraction grating and a cell which light is made to traverse many times so that its path length in the vessel can be 180 m. This apparatus is suitable for recording of spectra of rarefied or weakly absorbing gases at temperatures from room temperature to 100°C. The optical part of the apparatus is shown in Fig.1. Fig.2 shows the general view of the apparatus with the control panel. The cell used in this apparatus follows in its construction Ref. 14 and 15. The diffraction grating used is of echelette type, 150 x 150 mm, with 300 lines per millimetre. This

Card 1/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

51-3-13/14

A Vacuum Spectrometer with a Diffraction Grating for the 0.7-3 μ Spectral Region.

grating reflects 75% of the incident light at 2 μ, 55% at 1.5 μ and 60% at 2.3 μ. The monochromater used follows Ref.16. The spectrometer is placed in a vacuum chamber (0.1 mm Hg). The signal falls on a PbS photoresistance and is amplified. For this purpose the incident light is modulated by a perforated disc at 550 c/s frequency. This apparatus makes it possible to resolve spectra down to 0.1 cm^{-1}. Fig.4 shows radiational lines of water vapours near 3900 cm^{-1} obtained using the apparatus described. The slit width was 0.06 cm^{-1} and lines approximately 0.1 cm^{-1} distant from each other are resolved. This means that the resolving power of the instrument reaches 40 000, and this corresponds to 45 000 resolving power of the diffraction grating. Fig.5 shows absorption spectra of water vapours near 2.7 μ obtained using path lengths of 8.8 (broken curve) and 120.8 (continuous curve) metres respectively. When the container used was of quartz, absorption and emission of carbon dioxide could be measured with this apparatus.

Card 2/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

51-3-13/14

A Vacuum Spectrometer with a Diffraction Grating for the 0.7-3 μ Spectral Region.

The authors thank F. M. Gerasimov for supplying the diffraction grating used. There are 5 figures, and 17 references, 1 of which is Slavic.

SUBMITTED: 15 January, 1957.

AVAILABLE: Library of Congress

Card 3/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

ANDREYEVA, Vera Mikhaylovna; GOKHMAN, Veniamin Maksovich; KOVALEVSKIY, Vladimir Pavlovich; POLOVITSKAYA, Mariya Yefimovna; POPOV, K.M., doktor ekon.nauk, otv.red.; SOLOV'YEVA, M.G., kand.geograf.nauk, otv.red.; CHIZHOV, N.N., red.; VASILEVSKIY, L.I., red.; KISELEVA, Z.A., red.kart; NOGINA, N.I., tekhn.red.

[Economic regions of the U.S.A.; the North] Ekonomicheskie raiony SShA: Sever. Otv. red. K.M.Popov, M.G.Solov'eva. Moskva, Gos. izd-vo geogr. lit-ry, 1958. 829 p.. (MIRA 12:1)
(United States--Economic geography)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

MIKHEYEV, A.P., prof., doktor tekhn.nauk; SHUKSTAL', Ya.V., kand.ekon. nauk; DMITRIYEV, V.A., kand.ekon.nauk. Prinimali uchastiye: GUTKIN, L.V., kand.tekhn.nauk; SHVARTS, R.Ya., mladshiy nauchnyy sotrudnik; VASILEVSKIY, L.I., nauchnyy sotrudnik. GORINOV, A.V., retsenzent; MIKHAL'TSEV, Ye.V., prof., retsenzent; GIBSHMAN, A.Ye., prof., retsenzent; RYLEYEV, G.S., inzh., retsenzent; KHACHATUROV, T.S., red.; MAKSIMOV, I.S., red.; GERASIMOVA, Ye.S., tekhn.red.

[Effectiveness of electric and diesel traction in railroad transportation] Effektivnosti elektricheskoi i teplovoznoi tiagi na zheleznodorozhnom transporte. Moskva, Gosplanizdat, 1960. 302 p. (MIRA 13:4)

1. Chleny-korrespondenty AN SSSR (for Gorinov, Khachaturov).
(Diesel locomotives) (Electric locomotives)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L.I.

Main problems in studying the geography of transportation of capitalist and economically underdeveloped countries. Vop. geog. no.61:153-176 '63. (MIRA 16:6)

(Transportation)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

SEMENOV, A.I., otv.red.; FILIPPOV, Yu.V., prof., doktor tekhn.nauk, red.; BASHLAVIN, V.A., kand.tekhn.nauk, red.; VOYNOVA, V.V., red.; GURARI, Ye.L., kand.ekonom.nauk, red.; GUREVICH, I.V., red.; ZHIV, I.S., red.; ZARUTSKAYA, I.P., red.; ZASLAVSKIY, I.I., red.; KOZLOV, F.M., red.; NIKISHOV, M.I., kand.geograf.nauk, red.; SADCHIKOV, S.F., red.; TIKHOMIROV, D.I., red.; TUTOCHKINA, V.A., red.; BALANTSEVA, I.A., red. kart; BOGDANOVA, L.A., red.kart; BOCHAROVA, I.L., red.kart; VENEVTSEVA, G.P., red.kart; VOLKOVA, A.P., red.kart; GOSTEVA, N.A., red.kart; YEFIMOVA, G.N., red.kart; ZHIV, D.I., red.kart; KRAVCHENKO, A.V., red. kart; KUBRIKOVA, N.S., red.kart; KUZNETSOVA, N.A., red.kart; KURSAKOVA, I.V., red.kart; LOBZOVA, N.A., red.kart; MERTSALOVA, L.M., red.kart; MOSTMAN, S.L., red.kart; PONFILOVA, M.V., red.kart; SEMENOVA, V.D., red.kart; SMIRNOVA, T.N., red.kart; TERESHKOVA, V.S., red.kart; FEDOROVSKAYA, G.P., red.kart; FETISOVA, N.P., red.kart; FIL'GUS, Z.Kh., red.kart; SHAPIRO, Ye.M., red.kart; SHISHKIN, Ye.A., red.kart; YASHUNICHKINA, Ye.G., red.kart. V razrabotke kart prinimali uchastiye: ALISOV, B.A., prof.; BERZINA, M.Ya.; VASILEVSKIY, L.I.; GAVRILOVA, S.A., kand.geograf.nauk; GINZBURG, G.A., kand.tekhn.nauk; DOBOSHINSKAYA, I.B.; YEVSTIGNEYEVA, A.I.; LAVRENKO, Ye.M., prof.; LOZINOVA, V.M., kand. tekhn.nauk; MILANOVSKIY, Ye.Ye., kand.geologo-mineral.nauk; MIKHAYLOV, A.A., prof.; MYSHKIN, Ye.P.; PUZANOVA, V.F., kand.geograf.nauk;

(Continued on next card)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

SEMENOV, A.I.----(continued) Card 2.
ROZOV, N.N., prof.; SMIRNOV, D.I.; TARASOV, A.P.; TROFIMOVSKAYA, Ye.A., kand.geograf.nauk; TUGOLESOV, D.A., kand.geologo-mineral. nauk. ZININ, I.F., tekhn.red.

[Geographical atlas for secondary school teachers] Geograficheskii atlas; dlia uchitelei srednei shkoly. Izd.2. Moskva, Glav.upr. geodezii i kartografii MVD SSSR, 1959. 191 p. (MIRA 12:11)

1. Predstavitel' Nauchno-issledovatel'skogo instituta metodov obucheniya Akademii pedagogicheskikh nauk RSFSR (for Zaslavskiy). 2. Predstavitel' Upravleniya shkol Ministerstva prosvyashcheniya RSFSR (for Tutochkina). 3. Chleny-korrespondenty AN SSSR (for Lavrenko, Mikhaylov).

(Maps)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L. S.

Reduction of ferric sulfate by sulfur dioxide. M. G. Pozin, L. P. Mukhlenov, and L. S. Vasilevskii. *J. Appl. Chem. U.S.S.R.* 28, 543-7(1955)(Engl. translation).—See *C.A.* 50, 36i. B. M. R.

CH

4

2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, L.V., inzh.; SIDORUK, V.S., inzh.; SHATAYLO, D.V., inzh.

Electric slag welding of flanges. Svar. proizv. no.5:31-32 My '61. (MIRA 14:4)

1. Dnepropetrovskiy zavod metallokonstruktsiy imeni Babushkina.
(Flanges—Welding)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, Lev

Pages of a heroic biography. Av.i kosm. 46 no.9:77-84 S '63. (MIRA 16:10)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.

32722. VASILEVSKIY, M. i VORONTSOV, L. Koltushi segodnya, [In-t znolyutsionnoy fiziologii i patologii vysah. Nervnoy deyatel'nosti im. I. P. Pavlova, Leningrad]. Znaniye—sila, 1949, No. 9, s. 2-7, s. Portr.

SO: Letopis' Zhurnal'nykh Statey, Vol. 44, Moskva, 1949

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.A.

MALKIMAN, I.V.; VASILEVSKIY, M.A.

The role of the functional state of the alimentary center in the motor and evacuatory activity of the stomach in dogs. Biul.eksp. biol.i med. 43 no.1 supplement:74-78 '57. (MLRA 10:3)

1. Iz laboratorii fiziologii i patologii pishchevareniya (zav. - deystvitel'nyy chlen AMN SSSR I.P.Razenkov [deceased]) Instituta fiziologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. V.N.Chernigovskiy) Predstavlena deystvitel'nym chlenom AMN SSSR V.N.Chernigovskim.

(STOMACH, physiol.
evacuatory & motor funct., exam. of alimentary center in CNS)
(CENTRAL NERVOUS SYSTEM, physiol.
alimentary centers, study by determ. of evacuatory & motor funct. of stomach)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.E., prof.; RZHEVSKIY, A.V. (Yaroslavl')

Reiter's syndrome (asteromycosis). Klin. med. 37 no.5:142-143 My '59. (MIRA 12:8)

1. Iz kafedry gospital'noy terapii (zav. - prof. M.E. Vasilevskiy) Yaroslavskogo meditsinskogo instituta.
(REITER'S DISEASE, case reports (Rus))

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.E., prof.; KONONOV, P.F., dotsent

Disturbance of water metabolism in the active phase of rheumatic fever. Vrach.delo no.6:581-584 Je '59. (MIRA 12:12)

1. Kafedra gospital'noy terapii (zav. - prof. M.E. Vasilevskiy) Yaroslavskogo meditsinskogo instituta.
(RHEUMATIC FEVER) (WATER IN THE BODY)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.E., prof.; KOZLOV, G.S.

Ballistocardiographic investigation in rheumatic fever. Vrach. delo no.9:16-19 S '60. (MIRA 13:9)

1. Klinika gospital'noy terapii (zav. - prof. M.E. Vasilevskiy) Yaroslavskogo meditsinskogo instituta.
(RHEUMATIC FEVER) (BALLISTOCARDIOGRAPHY)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.E., prof.; SHIFRIN, M.A.

Hyperinsulinism. Vrach. delo no.10:72-76 O '63. (MIRA 17:2)

1. Kafedra gospital'noy terapii (zav. - prof. M.E. Vasilevskiy) Yaroslavskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASIL'EVSKII, Mikhail Maksimovich, 1800- jt. au.

Instructions for determining the flow of springs and gushing wells. F. P. Severenskii. Instructions for the inspection of springs. Moskva, Geologicheskoe izd-vo Glavnogo geolo razvedochnogo upravleniia, 1931. 30 p. (48-34660)

TC175.B77

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.M.

RUDENKO, N.I.; VASILEVSKIY, M.M.

Simplified method for determining specific weights of minerals. (MLRA 10:4)
Zap. Vses. min. ob-va 86 no.1:131-134 '57.
(Mineralogy, Determinative)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VLASOV, G.M.; VASILEVSKIY, M.M.; ZHEGALOV, Yu.V.

Geological conditions of finds and features of the genesis of mercury ores in the central Kamchatka Range. Biul.VSEGEI no.1: 104-111 '58 (MIRA 14:5)

(Kamchatka—Mercury ores)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.M.

Zoning and ore mineralization of altered solfatoric rocks in Bystrinskiy District, Kamchatka. Zap. Vses. min. ob-va 87 no.3:277-289 '58. (MIRA 11:10)

1. Vsesoyuznyy geologicheskiy nauchno-issledovatel'skiy institut, Leningrad.
(Bystrinskiy District--Mineralogy)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

SOV/20-122-4-[illegible]/57

AUTHORS: Vlasov, G. M., Vasilevskiy, M. M.

TITLE: Zoning in the Transformed Rocks of the Kamchatka Central Range (Zonal'nost' izmenennykh porod [illegible] Kamchatskogo khrebta)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 4, pp 678-682 (USSR)

ABSTRACT: The zoning in the Kamchatka Central Range has been studied by the All-Union Scientific Geological Research Institute since 1957. The Kamchatka mountain chain represents an anticlinorium composed of magmatic and metamorphic rocks varying in age from Cambrian to Quaternary. A deep-seated fault zone runs approximately along the axis of the anticlinorium. This zone influenced the implacement of most of the young magmatic rocks in the structure of the anticline as well as controlling the gas-hydrothermal processes and the ore formation. The zones of altered rocks and the ore occur in feather-faults associated with the main shear zone. In the same associated faults occur small diorite intrusions, stocks of acidic andesite and dike suites of diorite porphyry and other rocks. The anticlinorium has been mildly folded perpendicular to its axes. Therefore, the

Card 1/4

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

SOV/20-122-4-39/57

Zoning in the Transformed Rocks of the Kamchatka Central Range

plunge of one single segment of the axis allows observation of different structural levels. This peculiarity is intensified by the fact that the principal ore deposition took place in the late Neogene, i.e., the time of maximum leveling of relief in this area. In the early Quaternary the present relief was formed by differential block uplift. Through the erosion that followed, the different levels of Late Neogene vulcanism and ore deposition were exposed. At over 50 profiles of altered rock the authors have shown that along the linear shear zone the association of new minerals, i.e., facies, in the altered rocks is characteristic in a regular manner. Furthermore, near the fault zone which produced channels for the hydrothermal solutions there is a clear horizontal and vertical zoning of these facies (Fig 1). In the middle structural blocks, composed of folded Paleogene and Neogene volcanic masses of andesite and basalt, the following characteristic zones are found: 1) mono-quartz, lower zone, 2) kaolinite (dickite), lower zone, 3) quartz-sericite or muscovite, lower zone, 4) propylite, consisting of chlorite, calcite, albite and zeolites. These zones correspond to zoning in the altered rock of secondary quartzites, and it is

Card 2/4

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

SOV/20-122-4-39/57

Zoning in the Transformed Rocks of the Middle Kamchatka Mountain Ridge

here hypothesised that they represent a diffusion-metasomatism resulting from the gradual neutralization of acid solutions as they react with the surrounding rock (Refs 2,3). The observations prove the next step in the evolution of the ore solutions: the alkalic post-magmatic solutions ascended in the fracture zone carrying large amounts of silica and ore elements. The raising of the oxidation potential, the gradual lowering of temperature and pressure decreased the solubility of the silica. Through this process the following took place: a metasomatic silicification of the country rock with the formation of massive quartz-propylite, the rapid fall of temperature and pressure in a higher zone of more highly fractured rock with the consequent deposition of quartz in fractures and the building of quartz-stock works with metal ores of copper, lead, and zinc. In the highest beds near the earth's surface the rapid cooling of the remaining solution formed acids which bleached the country rock, creating the secondary quartzite. There are 1 figure and 3 references, 3 of which are Soviet.

Card 3/4

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

SOV/20-122-4-39/57

Zoning in the Transformed Rocks of the Middle Kamchatka Mountain Ridge

ASSOCIATION: Vsesoyuznyy nauchno-issiedovatel'skiy geologicheskiy institut (All-Union Scientific Geological Research Institute)

PRESENTED: May 19, 1958, by D. S. Korzhinskiy, Member, Academician

SUBMITTED: May 19, 1958

Card 4/4

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M. M. and VLASOV, G. M.

"Metallogenic Characteristics of the Kurile-Kamchatka Arc"

report presented at the First All-Union Conference on the Geology and Metallurgy of the Pacific Ocean Ore Belt, Vladivostok, 2 October 1960

So: Geologiya Rudnykh Mestorozhdeniy, No. 1, 1161, pages 119-127

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M. M., CAND GEOL-MINER SCI, "[redacted] HYDROTHERMALLY modified [redacted]D ROCKS OF CENTRAL KAMCHATKA, THEIR ore- [redacted] BEARING QUALITIES, AND [redacted] REGULARITY OF [redacted] SPATIAL DISTRIBUTION." LENINGRAD, 1960. (MIN OF GEOLOGY AND Mineral Cons [redacted]SERVATION [redacted] USSR. ALL-UNION SCI RES GEOL INST "VSEGEY"). (KL, 2-61, 201).

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.M.

Characteristics of hydrothermal differentiation at various depths of the hydrothermal infiltration process. Dokl.AN SSSR 133 no.3:661-664 Jl '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut. Predstavleno akad. D.S.Korzhinskim.
(Kamchatka--Metasomatism)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.M.

Determination of the specific gravity of solids from minute amounts. (MIRA 13:10)
Zav.lab 26 no.10:1170-1171 '60.
(Solids) (Specific gravity)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VLASOV, G.M.; VASILEVSKIY, M.M.

Alumina-rich secondary quartzite facies of the Sredinnyy Range in Kamchatka. Geokhimiia no.7:630-633 '61. (MIRA 14:6)
(Sredinnyy Range—Quartzite) (Alumina)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.M.

Zoning and genesis of alternated rocks and mineralization in the ore zone of central Kamchatka. Trudy Lab.vulk. no.19: 145-164 '61. (MIRA 14:9)
(Kamchatka--Metamorphism (Geology))

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.M.

Depth criteria of postvolcanic hydrothermal metamorphism in the ore zone of central Kamchatka. Izv. AN SSSR. Ser.geol. 27 no.1:66-84 Ja '62. (MIRA 15:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut (VSEGEI), Leningrad.
(Kamchatka--Metamorphism (Geology))

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.N., inzhener.

Automation of hoisting operation with induction engine drives. Ugol' 30 no.11:20-23 N '55. (MLRA 9:2)

1.Stalingiproshakht.
(Mine hoisting) (Automation)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, Mark Nikolayevich; MIRSKAYA, V.V., red.izd-va; SHKLYAR, S.Ya., tekhn.red.; BERESLAVSKAYA, L.Sh., tekhn.red.

[Asynchronous drives for mine hoisting machinery] Asinkhronnyi privod shakhtnykh pod"emnykh mashin. Izd.2., dop. i ispr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 387 p. (MIRA 13:5)
(Mine hoisting) (Hoisting machinery--Electric driving)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.N.

26

PHASE I BOOK EXPLOITATION SOV/5473

Gornoye delo; entsiklopedicheskiy spravochnik. t. 8: Statsionarnoye elektromekhanicheskoye oborudovaniye. Elektrosnabzheniye shakht (Mining Industry; an Encyclopedic Handbook. v. 8: Stationary Electromechanical Equipment. Electric Power Supply to Mines) Moscow, Gosgortekhizdat, 1960. 784 p. Errata slip inserted. 18,500 copies printed.

Chief Ed.: A. M. Terpigorev (Deceased); Members of the Editorial Board: A. I. Baranov, F. A. Barabanov (Deceased), A. A. Boyko, V. K. Buchnev, A. N. Zaytsev; Deputy Chief Eds: I. K. Kit and N. V. Mel'nikov; I. N. Plaksin, N. M. Pokrovskiy, A. A. Skochinskiy (Deceased), A. O. Spivakovskiy, I. K. Stanchenko, A. P. Sudoplatov, A. V. Topchiyev, S. V. Troyanskiy, A. K. Kharchenko, L. D. Shevyakov and M. A. Shchedrin; Editorial Board for this volume: Resp. Ed.: F. A. Barabanov; Deputy Resp. Ed.: Z. M. Melamed; N. A. Arzamasov, G. M. Yelanchik, V. K. Yefremov, B. I. Zasadych, I. M. Zhumakhov, N. A. Letov, P. P. Nesterov, I. A. Rabinovich, K. I. Skorkin, and V. A. Sumchenko; Authors: G. A.

Card 1/16

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

Babak, Candidate of Technical Sciences, V. D. Belyy, Professor, Doctor of Technical Sciences, K. S. Borisenko, Candidate of Technical Sciences, A. G. Borumenskiy, Candidate of Technical Sciences, I. V. Brusilovskiy, Candidate of Technical Sciences, A. R. Bushel', Candidate of Technical Sciences, V. P. Bukhgol'ts, Engineer, M. N. Vasilevskiy, Candidate of Technical Sciences, A. N. Vas'kovskiy, Engineer, B. N. Vlasenko, Engineer, I. Ya. Gershikov, Engineer, V. G. Geyer, Professor, Doctor of Technical Sciences, A. D. Dimashko, Engineer, V. S. Dulin, Candidate of Technical Sciences, I. L. Lokshin, Engineer, B. M. Melamed, Engineer, Yu. A. Mikheyev, Engineer, V. P. Morozov, Engineer, M. I. Mushkatin, Engineer, V. S. Pak, Academician, I. M. Perskaya, Engineer, N. M. Rusanov, Candidate of Technical Sciences, G. P. Savel'yev, Candidate of Technical Sciences, Ya. M. Smorodinskiy, Candidate of Technical Sciences, K. A. Ushakov, Honored Scientist and Technologist, Professor, Doctor of Technical Sciences, B. M. Furmanov, Engineer, and N. N. Chernavkin, Engineer. Eds.: Ya. M. Drozdov, Engineer, B. I. Zasadych,

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

26

Mining Industry (Cont.) SOV/5473

Candidate of Technical Sciences, N. S. Karpyshev, Candidate of Technical Sciences, N. A. Letov, Candidate of Technical Sciences, Z. M. Melamed, Candidate of Technical Sciences, Yu. A. Mikheyev, Engineer, V. P. Morozov, Engineer, V. I. Polikovskiy, Professor, Doctor of Technical Sciences, I. A. Rabinovich, Engineer, M. S. Rabinovich, Candidate of Technical Sciences, I. A. Raskin, Engineer, V. S. Tulin, Engineer, S. Ye. Unigovskiy, Engineer, K. A. Ushakov, Honored Scientist and Technologist, Professor, Doctor of Technical Sciences, M. M. Shemakhanov, Candidate of Technical Sciences, P. F. Shishkov, Candidate of Technical Sciences, and V. B. Yablonovskiy, Engineer; Eds. of Publishing House: N. A. Arzamasov and T. I. Rybal'nik; Tech. Ed.: V. L. Prozorovskaya and M. A. Kondrat'yeva.

PURPOSE: This handbook is intended for mining and mechanical engineers as well as for other skilled personnel of the mining industry concerned with the handling and operation of various installations and equipment used in mines.

Card 3/16

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

26

Mining Industry (Cont.) SOV/5473

COVERAGE: Volume VIII of the mining handbook contains detailed information on mine hoisting installations, machines and equipment, mine ventilation units, duct systems, dewatering facilities, various types of pumps, pump meters, pumping stations, and the automatic remote control of these units. The handbook also describes and explains the operation of the air compression units and compressors. Heat-generating and heat-supply equipment of mines is described, as are the electric power supply systems and other electrical equipment such as transformers, power distribution systems, and grounding devices. Telephone communication and signaling systems used in mines are also treated. No personalities are mentioned. Each part of the handbook is accompanied by references, mostly Soviet.

TABLE OF CONTENTS [Abridged]:

PART I. MINE HOISTING UNITS

Card 4/16

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

SOV/5473

Mining Industry (Cont.)

Ch. I. General Information (Rusanov, N. M., Candidate of Technical Sciences) 11

Ch. II. Hoisting Conveyances (Vlasenko, B. N., Engineer) 14

Ch. III. Hoisting Ropes (Belyy, V. D., Professor, Doctor of Technical Sciences) 46

Ch. IV. Winders and Speed Reducers of Hoisting Machines (Gershikov, I. Ya., and A. D. Dimashko, Engineers) 69

Ch. V. Position of Hoisting Machines Relative to the Mine Shaft (Vasilevskiy, M. N., Candidate of Technical Sciences) 95

Ch. VI. Fundamentals of the Mine Hoisting Installation Theory (Rusanov, N. M.) 99

Card 5/16

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

Ch. VII. Braking and Protective Systems of Hoisting Machines and Winders 117

Ch. VIII. Automation Principles for Hoisting Machines (Vasilevskiy, M. N.) 129

Ch. IX. Electric Circuits for the Hoisting Machine Control (Vasilevskiy, M. N., Candidate of Technical Sciences) 142

Ch. X. Electrical Equipment of Hoisting Units (Vasilevskiy, M. N.) 155

Ch. XI. Signaling Systems for the Hoisting Units (Savel'yev, G. P., Candidate of Technical Sciences) 167

Bibliography 176

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

FEDOROV, M.M., gornyy inzh.; VASILEVSKIY, M.N., kand.tekhn.nauk; TRAUBE, Ye.S., inzh.

Automatic control of hoisting machines with asynchronous drive. Gor. zhur. no.12:38-43 D '60. (MIRA 13:12)

1. Gipronisselektroshakht, Stalino (for Vasilevskiy, Traube).
(Hoisting machinery--Electric drives)
(Automatic control)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, Mark Nikolayevich; TRAUBE, Yevgeniy Semenovich; MIRSKAYA, V.V., red. izd-va; MINSKER, L.I., tekhn. red.; BOLDYREVA, Z.A., tekhn. red.

[Remote and automatic control of the brakes of mine hoists] Distantsionnoe i avtomaticheskoe upravlenie tormozom shakhtnykh pod"emnykh mashin. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1961. 57 p. (MIRA 14:11)

(Hoisting machinery—Brakes) (Remote control)
(Automatic control)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.N., kand.tekhn.nauk

Selecting the type of the explosion proof drive and design of mine winches. Ugol' Ukr. 5 no.3:24-26 Mr '61. (MIRA 14:3)

1. Gipronisselektroshakht (for Vasilevskiy, Traube). 2. Zavod im. 15-letiye Leninskogo kommunisticheskogo soyuza molodezhi Ukrainy (for Krevnevich).

(Winches)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.N., kand.tekhn.nauk; TRAUBE, Ye.S., inzh.; KRAVTSOV, V.A., inzh.

Effect of the conveying type, engine and network parameters on the rated operating efficiency of the cutter-loader. Ugol' Ukr. 5 no.12:27-28 D '61. (MIRA 14:12)

1. Giproniselektroshakht.
(Coal mining machinery)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.N., kand.tekhn.nauk; SHANIN, S.I.

Use of guide ropes. Ugol' Ukr. 6 no.9:25-27 S '62. (MIRA 15:9)

1. Zamestitel' glavnogo mekhanika kombinata Donetskugol' (for Shanin).

(Mine hoisting)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.N., kand.tekhn.nauk; TRAUBE, Ye.S., inzh.; LEVCHENKO, Yu.T. inzh.; KRAVTSOV, S.I., inzh.

Automation of skip hoists by means of mechanical brakes with hydraulic drive. Ugol'.prom. no.4:51-55 Jl-Ag '62. (MIRA 15:8)

1. Giproniselektroshakht.
(Mine hoisting) (Automatic control)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.N., kand. tekhn. nauk; CHERTKOV, M.A., inzh.

Method of calculating a double-cage rotor of an induction motor for driving multirope hoisting machines. Izv. vys. ucheb. zav.; gor. zhur. 6 no.10:50-57 '63. (MIRA 17:2)

1. Gipronisélektroshakht.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.N., kand. tekhn. nauk; KOGAN, E.L., inzh.; STOLBUN, M.I., inzh.

New electric apparatus for the control of an asynchronous drive of hoisting equipment in mine construction. Shakht. stroi. 7 no.11:13-16 N'63 (MIRA 17:7)

1. Institut Giproniselektroshakht.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, Mark Nikolayevich

[Asynchronous drive for mine hoisting machines] Asinkhronnyi privod shakhtnykh pod"emnykh mashin. 3. izd. Moskva, Nedra, 1964. 446 p. (MIRA 18:4)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.N., kand.tekhn.nauk; CHERTKOV, M.A., inzh.

Operating temperature of an asynchronous motor with a double cage rotor in the drive of a multirope hoist. Izv.vys.uchev. zav.:gor zhur. 7 no. 4:142-146 '64. (MIRA 17:7)

1. Gipronisolektroshakht.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.N., kand. tekhn. nauk; STOLBUN, M.I.; GELYADOV, R.S.

Automatic charging devices for the mine skip hoist. Avtom. i prib. no. 1:5-7 Ja-Mr '64. (MIRA 17:5)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9

VASILEVSKIY, M.N., kand. tekhn. nauk

Electric driving system for mine hoisting machinery. Gor. zhur. no.6: 51-54 Je '64. (MIRA 17:11)

1. Gipronisel'ektroshakht, Donetsk.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858810010-9"