BREKHMAN, I.I.; OSKOTSKIY, L.I.; KHAKHAM, A.I.

Effect of certain preparations from plants of the Aralia family on experimental radiation sickness. Med.rad. 5 no.2:33-36 F '60. (MIRA 13:12)

(GINSENG) (RADIATION SICKNESS)

OSKOTSKIY, L.I., mayor meditsinskoy sluzhby

Possibilities of using a B-gamma-radiometer in medical institutions. Voen.-med. zhur. no. 6:37-39 Je '60. (MIRA 13:7)
(X RAYS—SAFETY MEASURES)

OSKOTSKIY, L.I.

Determination of the functional state of the thyroid gland in an endemic goiter region with the aid of radioactive iodine. Probl. endok. i gorm. 6 no.6:90-95 '60. (MIRA 14:2)
(THYROID GLAND) (GOITER)

USSR / Pharmacology, Toxicology. Analeptics. V

Abs Jour: Ref Zhur-Biol., No 18, 1958, 85119.

Author : Brekhman, I. I., Khakham, A. I., Oskotskiy, [illegible] I.
Inst : Not given.
Title : The Course and Outcome of Radiation Sickness in White Mice Following Prophylactic and Therapeutic Use of a Liquid Extract of Ginseng.

Orig Pub: In the collection: Materialy k izych. zhen'shenya i limonika. No 3, Leningrad, 1958, 71-77.

Abstract: In experiments on mice, studies were made of the influence of a liquid extract of the root of the ginseng (G) on the course of radiation sickness. The mice were irradiated with doses of X-ray and with gamma-rays from Co^{60}. G, in a dose of 0.1 ml of a 10% solution, was given subcutaneously to mice every other day. The animals were divided in-

Card 1/2

Oskotskiy, V. S.

81965
S/181/60/002/04/26/034
B002/B063

24.7200

AUTHOR: Oskotskiy, V. S.

TITLE: The Possibility of Investigating the Density Distribution of Phonons in a Noncubic Crystal With the Aid of Incoherent Neutron Scattering

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 4, pp. 701-703

TEXT: It had been shown in Ref. 1 that the differential cross section of incoherent inelastic neutron scattering from cubic crystals is proportional to the density distribution of phonons. For noncubic crystals, the differential cross section depends on the phonon polarization which is not known. It is shown in the paper under review that it is possible to eliminate the phonon polarization from the differential cross section by examining composite samples. In this case, the sample is made up of twelve lamellas in the following manner: If the first lamella is oriented according to the Cartesian coordinates XYZ, the second lamella is rotated by 120° around the central line of the coordinate trihedron, and the third lamella by 240°. The axes of the fourth, seventh, and tenth lamellas are rotated by

Card 1/2

S/181/61/003/002/041/050
B102/B201

24.7100 1035 1043 1158 also 1103

AUTHORS: Oskotskiy, V. S. and Efros, A. L.

TITLE: Theory of the crystal lattice with peripheral interatomic interactions

PERIODICAL: Fizika tverdogo tela, v. 3, no. 2, 1961, 611-624

TEXT: This is an extensive theoretical work dealing with problems of the correspondence of the microscopic lattice theory and the elasticity theory. A most general expression is derived in harmonic approximation for the lattice energy density at a given field of displacement of the atoms from their position of equilibrium, describing peripheral interaction. The method of the homogeneous static deformation is then applied to express the elastic constants as functions of the parameters of the microscopic theory, and a condition is derived for the elimination of all components of the initial stress. It is shown that in the absence of initial stresses the elastic constants calculated by the method of homogeneous static deformation coincide with those calculated by the "method

S/181/61/003/002/041/050
B102/B201

of the "long wave" (Huang Kun) (in the presence of initial stresses the elastic constants cannot be calculated by the method of the long wave). A relation is found between the parameters determining the energy density and the dynamic matrices. It is shown by the example of simple cubic lattices, that the condition of the absence of all components of initial stresses leads, if only the closest neighbors undergo interaction, to a restriction of the form of dynamic matrices, that cannot be obtained from Born's theory. The paper consists of seven chapters. The problem is first outlined briefly, the method of the long waves and the applicability of the harmonic approximation being discussed next. In the said approximation the lattice energy is given by

$$U=\frac{1}{2}\sum_{ll'kk'}\sum_{\alpha\beta}\Phi_{\alpha\beta}\binom{l-l''}{kk'}u_\alpha\binom{l}{k}u_\beta\binom{l''}{k'}, \qquad (1)$$

where $\Phi_{\alpha\beta}(..)$ denotes the component of the dynamic matrix, $u_\alpha\binom{l}{k}$ the component of the displacement vector, l the number of the cell, k is the number of the atom in the cell. On a dislocation of the atoms from the

Theory of the crystal lattice ...

position of equilibrium

$$v(\Omega)=\frac{1}{V_\Omega}\left\{\sum_{lk}{}_\Omega\sum_{l'k'}\sum_{\alpha}Q_\alpha\binom{l-l'}{kk'}u_\alpha\binom{ll'}{kk'}-\right.$$

$$\left.-\frac{1}{4}\sum_{lk}{}_\Omega\sum_{\substack{l'k'\\ l''k''\\ l'''k'''}}\sum_{\alpha\beta}Q'_{\alpha\beta}\binom{l-l'\ \ l-l''\ \ l-l'''}{kk'\ \ kk''\ \ kk'''}u_\alpha\binom{ll'}{kk'}u_\beta\binom{l''l'''}{k''k'''}\right\}, \qquad (2)$$

the general representation of the energy density in the region Ω is then transformed and

$$v(\Omega)=\frac{1}{V_\Omega}\left\{\sum_{lk}{}_\Omega\sum_{l'k'}\sum_{\alpha}Q_\alpha\binom{l-l'}{kk'}u_\alpha\binom{ll'}{kk'}+\right.$$

$$\left.+\frac{1}{2}\sum_{lk}{}_\Omega\sum_{\substack{l'k'\\ l''k''}}\sum_{\alpha\beta}Q_{\alpha\beta}\binom{l-l'\ \ l-l''}{kk'\ \ kk''}u_\alpha\binom{ll'}{kk'}u_\beta\binom{ll''}{kk''}\right\}, \qquad (5)$$

$$Q_{\alpha\beta}\binom{l-l'\ \ l-l''}{kk'\ \ kk''}=\sum_{l'''k'''}Q'_{\alpha\beta}\binom{l-l'\ \ l-l''\ \ l-l'''}{kk'\ \ kk''\ \ kk'''}.$$

Card 3/10

is obtained; furthermore

$$F_\alpha\binom{l}{k} = -\frac{\partial U}{\partial u_\alpha\binom{l}{k}} = -2\sum_{l'k'}{}' Q_\alpha\binom{l-l'}{kk'} + \sum_{l'k'}\sum_{\beta}\Phi_{\alpha\beta}\binom{l-l'}{kk'}u_\beta\binom{l'}{k'}, \quad (7)$$

где

$$\Phi_{\alpha\beta}\binom{l-l'}{kk'} = \sum_{l''k''}{}'\left[Q_{\alpha\beta}\binom{l''-l\ \ l''-l'}{k''k\ \ k''k'} - Q_{\alpha\beta}\binom{l-l''\ \ l-l'}{kk''\ \ kk'} - Q_{\alpha\beta}\binom{l'-l\ \ l'-l''}{k'k\ \ k'k''}\right], \quad (8)$$

при $l \neq l'$, $k \neq k'$.

are obtained for the force acting upon the atom lk, and it is shown that if $\sum_{l'k'} Q_{\alpha\beta}\binom{l-l'}{kk'} = 0$, the matrices $\Phi_{\alpha\beta}\binom{l-l'}{kk'}$ coincide with Born's dynamic matrices from formula (1). By

Theory of the crystal lattice ...

$$\Delta v(\Omega)=\frac{1}{V_0}\left\{\sum_{lk}{}^{0}\sum_{l'k'}\sum_{\alpha\beta}\left[Q_{\alpha\beta}\left(\begin{matrix}l-l'\\kk'\end{matrix}\right)\omega_{\alpha\beta}R_\beta\left(\begin{matrix}l-l'\\kk'\end{matrix}\right)+\right.\right.$$

$$+Q_{\alpha\beta}\left(\begin{matrix}l-l'\\kk'\end{matrix}\right)\omega_{\alpha\beta}\overline{u_\beta\left(\begin{matrix}ll'\\kk'\end{matrix}\right)}\Big]+$$

$$\left.+\sum_{lk}{}^{0}\sum_{\substack{l'k'\\l''k''}}\sum_{\alpha\beta\gamma}Q_{\alpha\beta\gamma}\left(\begin{matrix}l-l' & l'-l''\\kk' & kk''\end{matrix}\right)\overline{u_\alpha\left(\begin{matrix}ll'\\kk'\end{matrix}\right)}\omega_{\beta\gamma}R_\gamma\left(\begin{matrix}l-l''\\kk''\end{matrix}\right)\right\}, \qquad (13)$$

where $R_\alpha\left(\begin{matrix}l-l'\\kk'\end{matrix}\right)=R_\alpha\left(\begin{matrix}l\\k\end{matrix}\right)-R_\alpha\left(\begin{matrix}l'\\k'\end{matrix}\right)$.

the conditions to be imposed to the Q matrix are obtained

$$\sum_{l'k'}\sum_{l''k''}\left[Q_{\alpha\eta}\left(\begin{matrix}l-l' & l-l''\\kk' & kk''\end{matrix}\right)R_\eta\left(\begin{matrix}l-l''\\kk''\end{matrix}\right)-\right.$$

$$\left.-Q_{\alpha\eta}\left(\begin{matrix}l-l' & l-l''\\kk' & kk''\end{matrix}\right)R_\eta\left(\begin{matrix}l-l''\\kk''\end{matrix}\right)\right]=0, \qquad (16a)$$

Card 5/10

Theory of the crystal lattice ...

$$\sum_{lk}\sum_{l''k''}\left[Q_{\alpha\alpha}\left(\begin{matrix}l-l' & l-l''\\ kk' & kk''\end{matrix}\right)R_\gamma\left(\begin{matrix}l-l''\\ kk''\end{matrix}\right)-\right.$$
$$\left.-Q_{\alpha\gamma}\left(\begin{matrix}l-l' & l-l''\\ kk' & kk''\end{matrix}\right)R_\alpha\left(\begin{matrix}l-l''\\ kk''\end{matrix}\right)\right]=0. \qquad (166)$$

$$\sum_{l'k'}\Phi_{\alpha\beta}\left(\begin{matrix}l-l'\\ kk'\end{matrix}\right)R_\gamma\left(\begin{matrix}l-l'\\ kk'\end{matrix}\right)=\sum_{l'k'}\Phi_{\alpha\gamma}\left(\begin{matrix}l-l'\\ kk'\end{matrix}\right)R_\beta\left(\begin{matrix}l-l'\\ kk'\end{matrix}\right). \qquad (17)$$

Кроме того, из (15) следуют соотношения

$$\sum_{l''k''}\left[Q_{\alpha\alpha}\left(\begin{matrix}l-l' & l-l''\\ kk' & kk''\end{matrix}\right)R_\gamma\left(\begin{matrix}l-l''\\ kk''\end{matrix}\right)-Q_{\alpha\gamma}\left(\begin{matrix}l-l' & l-l''\\ kk' & kk''\end{matrix}\right)R_\alpha\left(\begin{matrix}l-l''\\ kk''\end{matrix}\right)\right]=0, \qquad (18)$$

при $s\neq\alpha$, $s\neq q$;

$$\sum_{l''k''}\left[Q_{\alpha s}\left(\begin{matrix}l-l' & l-l''\\ kk' & kk''\end{matrix}\right)R_s\left(\begin{matrix}l-l''\\ kk''\end{matrix}\right)-Q_{\alpha s}\left(\begin{matrix}l-l' & l-l''\\ kk' & kk''\end{matrix}\right)R_s\left(\begin{matrix}l-l''\\ kk''\end{matrix}\right)\right]=$$
$$=\sum_{l''k''}\left[Q_{\gamma s}\left(\begin{matrix}l-l' & l-l''\\ kk' & kk''\end{matrix}\right)R_s\left(\begin{matrix}l-l''\\ kk''\end{matrix}\right)-Q_{\gamma s}\left(\begin{matrix}l-l' & l-l''\\ kk' & kk''\end{matrix}\right)R_s\left(\begin{matrix}l-l''\\ kk''\end{matrix}\right)\right] \qquad (19)$$

Theory of the crystal lattice ...

The determination of the elastic moduli of the crystal is then discussed by the method of the homogeneous static deformation, where the dislocation is expressed in the form

$$u_\alpha\left(\begin{matrix}l\\k\end{matrix}\right) = \sum_\beta \frac{\partial u_\alpha}{\partial x_\beta} R_\beta\left(\begin{matrix}l\\k\end{matrix}\right) + u_\alpha(k);$$

here, the last term is the displacement component of the sublattice as a whole, consisting of k atoms, $\partial u_\alpha/\partial x_\beta$ the unsymmetrical deformation tensor.

$$v = \frac{1}{v_0}\left\{\sum_{l'k'}\sum_{\alpha\gamma} Q_{\alpha\gamma}\left(\begin{matrix}l-l'\\kk'\end{matrix}\right)\left[R_\gamma\left(\begin{matrix}l-l'\\kk'\end{matrix}\right)\frac{\partial u_\alpha}{\partial x_\gamma} + u_\alpha(k) - u_\alpha(k')\right] + \right.$$

$$+\frac{1}{2}\sum_{l'k'}\sum_{l''k''}\sum_{\alpha\beta\gamma\delta} Q_{\alpha\beta\gamma\delta}\left(\begin{matrix}l-l' & l-l''\\kk' & kk''\end{matrix}\right)\left[R_\gamma\left(\begin{matrix}l-l'\\kk'\end{matrix}\right)\frac{\partial u_\alpha}{\partial x_\gamma} + u_\alpha(k) - u_\alpha(k')\right]\times$$

$$\left.\times\left[R_\delta\left(\begin{matrix}l-l''\\kk''\end{matrix}\right)\frac{\partial u_\beta}{\partial x_\delta} + u_\beta(k) - u_\beta(k'')\right]\right\}. \qquad (23)$$

Card 7/10

Theory of the crystal lattice ...

holds, from which, eventually, using

$$\frac{\partial v}{\partial u_\alpha(k)} = -\sum_{l'k'}\sum_{\alpha\beta}\left\{\sum_{\gamma}\Phi_{\alpha\beta}\begin{pmatrix} l' \\ kk' \end{pmatrix} R_\gamma\begin{pmatrix} l' \\ kk' \end{pmatrix}\frac{\partial u_\beta}{\partial x_\gamma} + \Phi_{\alpha\beta}\begin{pmatrix} l' \\ kk' \end{pmatrix} u_\beta(k')\right\} = 0. \qquad (26)$$

and

$$u_\alpha(k) = \sum_{lk''}\sum_{\beta\gamma}\Gamma_{\alpha\beta}(kk')\,\Phi_{\gamma\beta}\begin{pmatrix} l \\ k'k'' \end{pmatrix} R_\gamma\begin{pmatrix} l \\ k'k'' \end{pmatrix}\frac{\partial u_\beta}{\partial x_\gamma}, \qquad (27)$$

Card 8/10

Theory of the crystal lattice ...

$$v = \frac{1}{v_0} \sum_{lk'} \sum_{\alpha\gamma} Q_\alpha \begin{pmatrix} l \\ kk' \end{pmatrix} R_\gamma \begin{pmatrix} l \\ kk' \end{pmatrix} \frac{\partial u_\alpha}{\partial x_\gamma} + \frac{1}{2} \sum_{\alpha\gamma\beta\delta} (\alpha\gamma, \beta\delta) \frac{\partial u_\alpha}{\partial x_\gamma} \frac{\partial u_\beta}{\partial x_\delta} + \\ + \sum_{\alpha\gamma\beta\delta} (\alpha\gamma, \beta\delta) \frac{\partial u_\alpha}{\partial x_\gamma} \frac{\partial u_\beta}{\partial x_\delta}, \qquad (28)$$

is obtained. After a comparison of results obtained by the method of the static deformation and by the method of long waves, the case of the central interaction is examined. Here one obtains by

$$v(\Omega) = \frac{1}{V_0} \sum_{lk} \sum_{l'k'} \sum_{\alpha} \left\{ Q_\alpha \begin{pmatrix} l-l' \\ kk' \end{pmatrix} u_\alpha \begin{pmatrix} ll' \\ kk' \end{pmatrix} + \right. \\ \left. + \frac{1}{2} \sum_{\beta} Q_{\alpha\beta} \begin{pmatrix} l-l' & l-l' \\ kk' & kk' \end{pmatrix} u_\alpha \begin{pmatrix} ll' \\ kk' \end{pmatrix} u_\beta \begin{pmatrix} ll' \\ kk' \end{pmatrix} \right\}. \qquad (45)$$

$$\Phi_{\alpha\beta} \begin{pmatrix} l-l' \\ kk' \end{pmatrix} = \frac{\partial^2 U}{\partial u_\alpha \begin{pmatrix} l \\ k \end{pmatrix} \partial u_\beta \begin{pmatrix} l' \\ k' \end{pmatrix}} = -2Q_{\alpha\beta} \begin{pmatrix} l-l' & l-l' \\ kk' & kk' \end{pmatrix}. \qquad (46)$$

Card 9/10

Theory of the crystal lattice ...

$$Q_{\alpha\beta}\begin{pmatrix} l-l' & l-l' \\ kk' & kk' \end{pmatrix} = -\frac{1}{2}\Phi_{\alpha\beta}\begin{pmatrix} l-l' \\ kk' \end{pmatrix}\delta_{ll'}\delta_{kk'} \quad \text{при } l \neq l',\ k \neq k'. \quad (47)$$

$\{\alpha\gamma,\beta\delta\} = \{\beta\gamma,\alpha\delta\} = \{\alpha\delta,\beta\gamma\}$, while by the method of homogeneous static deformation the condition for the absence of initial stresses reads: $\{\alpha\gamma,\beta\delta\} = \{\gamma\alpha,\beta\delta\}$. Some simple examples are given, and interaction by the introduction of Q matrices is discussed for special cases. B. Ya. Moyzhes is thanked for his interest and advice. There are 6 references: 1 Soviet-bloc and 4 non-Soviet-bloc.

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad (Institute of Semiconductors of the AS USSR, Leningrad)

SUBMITTED: July 4, 1960

Card 10/10

29682
S/181/61/003/010/004/036
B102/B108

24 7500 (1144, 1454)

AUTHOR: Oskotskiy, V S

TITLE: Method of homogeneous static deformation for calculating the elastic, piezoelectric, and dielectric tensors of an ion crystal

PERIODICAL: Fizika tverdogo tela, v 3, no 10, 1961, 2918-2928

TEXT: The method of long waves by Born and Huang cannot be applied to all elastic properties of ion crystals. The author uses the method of homogeneous static deformation to study the elastic properties of piezoelectric materials. This method consists in determining the change in lattice site potential when the crystal is deformed and in finding the energy density of ions on this potential and the density of Coulomb energy of deformation. The ions are assumed to be rigid and Coulomb-interacting as point sources. The macroscopic field potential is separated by Ewald's method, so that it is not necessary to take boundary conditions into account. The non-Coulomb part of the deformation energy density is introduced in the same way as in a previous paper (FTT, III, 611, 1961).

Card 1/2

29682
S/181/61/003/010/004/036
B102/B108

Method of homogeneous static...

The calculations are independent of the shape of the crystal which is assumed to possess no pyroelectric properties. The calculations partly are analogous to those in the book by Born and Huang. The respective results are compared with each other. The results were found to agree with those obtained by the long-wave method if no initial stresses are present. The author thanks A. L. Efros for discussions. There are 4 references: 2 Soviet and 2 non-Soviet. The two references to English-language publications read as follows: K. Huang. Phil. Mag. 40, 733 (1949); M. Born, K. Huang. Dinamicheskaya teoriya kristallicheskikh reshetok (Dynamical theory of crystal lattices), 1958

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad (Institute of Semiconductors AS USSR, Leningrad)

SUBMITTED: March 17, 1961

Card 2/2

S/056/62/043/006/049/067
B102/B186

AUTHORS: Zhurkov, I. S., Oskotskiy, V. S.

TITLE: Microscopic calculation of lattice distortions by impurities

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 6(12), 1962, 2261-2262

TEXT: The distortions of a NaCl lattice caused by Ag^+, Br^-, Li^+, K^+, I^-, and Rb^+ ions are calculated on the basis of the rigid ion model. The calculations are carried out in analogy to those of J. R. Hardy (Phys. Chem. Solids, 15, 39, 1960), assuming electrostatic plus central interactions with a potential of the form $Ae^{(-r/\varrho)}$ with $A = 2.26 \cdot 10^{-9}$ erg and $\varrho = 0.217 \cdot 10^{-8}$ cm. The displacement ξ of the ions nearest to the impurity ion is calculated by Hardy's formula and with the values thus obtained the relative displacement $\epsilon_0 = \xi/r_0$ is determined; r_0 is the distance between the nearest neighbors in the NaCl lattice. The theoretical results are compared with experimental data obtained in nuclear paramagnetic resonance measurements (M. I. Kornfel'd, V. V. Lemanov, ZhETF, 43, 6, 2021, 1962) and calculations based on the elasticity theory. The values of n/ϵ_0,

Card 1/2

S/181/63/005/004/016/047
B102/B186

AUTHOR: Oskotskiy, V. S.

TITLE: Quasielastic scattering of cold neutrons in a fluid

PERIODICAL: Fizika tverdogo tela, v. 5, no. 4, 1963, 1082 - 1085

TEXT: Cold neutron scattering is analyzed on the basis of the quasicrystal model of a fluid when not only jumps of molecules from one oscillation center to another have to be taken into account but also continuous diffusion of the oscillation centers. The parameters of the theory are determined from experimental determination of the angular dependence of the width of the quasielastic neutron scattering peak for water at room temperature. The following results are obtained: $D = 2.66 \cdot 10^{-5}$ cm^2 sec^{-1}; $\tau_0 = 1.7 \cdot 10^{-12}$ sec; $D_0\tau_0 = 0.012 \cdot 10^{-16}$ cm^2 $l_0 = \sqrt{6\, D_0\tau_0} = 0.31$ Å, $l_1 = \sqrt{6(D\tau_0 - D_0\tau_0)} = 1.6$ Å. D is the total diffusion coefficient, D_0 (D_1) is the coefficient of continuous (jump-like) diffusion, $D(\tau_0+\tau_1) = D_0\tau_0 + D_1\tau_1$, τ_0 (τ_1) is the mean time a particle is in the oscillatory (jump-over)

Card 1/2

state; l_0 is the mean distance a particle travels in the period between two jumps, and l_1 is the mean distance of a jump. There is 1 figure.

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad (Institute of Semiconductors AS USSR, Leningrad)

SUBMITTED: October 29, 1962

AUTHOR: [illegible]

TITLE: [illegible]

PERIODICAL: [illegible]

TEXT: [illegible]

Card 1/2

The exclusion of coherent ...

Semic electors of the Academy of Sciences USSR

August , 1962

Card 2/2

S/0181/64/006/005/1294/1302

ACCESSION NR: AP4034904

AUTHOR: Oskotskiy, V. S.

TITLE: On the negative coefficient of thermal expansion in germanium

SOURCE: Fizika tverdogo tela, v. 6, no. 5, 1964, 1294-1302

TOPIC TAGS: negative thermal expansion, vibration spectrum, Debye region, Einstein region, Gruneisen constant, elastic oscillation, neutron diffraction, isothermal compressibility, Brillouin zone, Planck constant, Boltzman constant

ABSTRACT: The dependence of the coefficient of thermal expansion of germanium on temperature was theoretically derived in this work. From data obtained on neutron diffraction a model was developed for the vibration spectrum, consisting of two parts: the Debye region (at the beginning of the spectrum), and the Einstein region (at the end). The longitudinal oscillation was also considered to be in two parts. The Gruneisen constants for the elastic part of the longitudinal and transverse modes were determined from experimental data on the relation between the elastic constants and pressure. The Gruneisen constants for the Einstein region of transverse oscillations and for the other part of the longitu-

Card 1/3

ACCESSION NR: AP4034904

dinal mode were obtained by a comparison of the theoretical and experimental dependences of the coefficient of thermal expansion (β) on temperatures at which β did not yet become negative. According to the theory, β reaches a minimum, at lower temperatures, and subsequently at about 15K again becomes zero. It again reaches a maximum and then decreases, tending to zero as T^3. For low temperatures, an expression was derived for β containing two undetermined parameters. These were evaluated by comparing the theoretical values and the experimental values obtained for β at 100K and for T_0, the temperature at which β became zero. For this purpose the results of S. I. Novikova (FTT, 2, 43, 1960) and of R. D. McCammon and G. K. White (Phys. Rev. Lett. 10, 234, 1963) were used. The final form of the expression for β for low temperatures was

$$\beta = +\varkappa \frac{2\pi^2 k^4}{15\hbar^3}\left(\frac{\gamma_l}{v_l^3} + 2\frac{\gamma_\tau}{v_\tau^3}\right)T^3 ,$$

where $\varkappa$ is the isothermal compressibility, γ Gruneisen constant, and v the velocity of sound. The subscripts τ and l stand for transverse and longitudinal oscillations respectively. The value of the parameter

$$\frac{\frac{\gamma_l}{v_l^3} + 2\frac{\gamma_\tau}{v_\tau^3}}{\frac{1}{v_l^3} + \frac{2}{v_\tau^3}}$$

Card 2/3

ACCESSION NR: AP4034904

as T tended to zero was found to be 0.43, and was in agreement with the value obtained by W. B. Daniels (Phys. Rev. Lett., 8, 3, 1962). An expression was also derived for β at large temperatures, and the value of β for germanium was computed to be 14.5×10^{-6} per degree. The difference between this value and the formerly obtained ones was caused by the fact that the theory did not take into account the optical mode which becomes significant at high temperatures. The expression obtained for the contribution from this mode was $\beta_{OPT} = \frac{12 \times T \gamma_{OPT}}{\pi a^3}$, where a^3 is the density of crystals. Assuming that the difference between the theoretical and experimental values came from the optical mode, β_{OPT} had to be about 3.6×10^{-6} per degree. The corresponding value for γ_{OPT} was calculated to be equal to 0.3. Orig. art. has: 26 formulas, 2 figures, and 2 tables.

ASSOCIATION: Institut poluprovodnikov, AN SSSR, Leningrad (Institute of Semiconductors, AN SSSR)

SUBMITTED: 07Oct63 DATE ACQ: 20May64 ENCL: 00

SUB CODE: NP NO REF SOV: 009 OTHER: 007

Card 3/3

L 9610-66 EWT(l)/EWT(m)/EPF(n)-2/EWP(t)/EWP(b)/EWA(l) IJP(c) JD/WW
ACC NR: AP5025378 SOURCE CODE: UR/0181/65/007/010/3003/3007

AUTHOR: Mirlin, D. N.; Oskotskiy, V. S.; Reshina, I. I.; Smirnov, I. A.; Tikhonov, V. V.; Zhurkov, I. S.

ORG: Institute of Semiconductors AN SSSR, Leningrad (Institut poluprovodnikov AN SSSR)

TITLE: Possibilities for quasi-localizable vibrations in infrared absorption and thermal conductivity in KCl-H crystals

SOURCE: Fizika tverdogo tela, v. 7, no. 10, 1965, 3003-3007

TOPIC TAGS: potassium chloride, absorption spectrum, IR absorption, thermal conduction, phonon interaction

ABSTRACT: The authors study the sidebands in the absorption spectrum on a localizable vibration as a function of temperature in potassium chloride crystals with a hydrogen ion impurity. A hypothesis is proposed that these bands are due to combined absorption on localizable and quasi-localizable vibrations. These quasi-localizable vibrations are assumed to be caused by attenuation of force constants when the hydrogen ion replaces the chlorine ion. The curve for thermal conductivity as a function of temperature in the 90-300°K range also shows the effect of quasi-localizable vibrations. The additional thermal resistance caused by hydrogen impurity ions is

Card 1/2

Card 2/2

MIRLIN, D.N.; OSKOTSKIY, V.S.; REShINA, I.I.; SMIRNOV, I.A.; TIKHONOV, V.V.; ZHURKOV, I.S.

Possible appearance of quasi-local vibrations in the infrared absorption and heat conductivity in KCl-H crystals. Fiz. tver. tela 7 no.10:3003-3007 O '65. (MIRA 18:11)

1. Institut poluprovodnikov AN SSSR, Leningrad.

USSR / Forestry. Forest Biology and Typology K-2

Abs Jour: Ref Zhur-Biol., No 16, 1958, 1[illegible]

Author : Oskretkov, [illegible]

Inst : Bryansk Forest Management Institute

Title : The Effect of Different Degrees of Light on the Reproduction of Pine and Spruce

Orig Pub: Tr. Bryanskogo lesokhoz. in-ta, 1 5[illegible], [illegible] [illegible]7-1[illegible]

Abstract: The purpose of this study was to verify Prof. V. G. Nesterov's conviction that spruce, pine, oak, and probably other varieties not only tolerate but like shade during the beginning of their existence. The study was conducted at the Briansk Institute of Forestry and covered an investigation of the

Card 1/3

USSR / Forestry. Forest Biology and Typology K-2

Abs Jour: Ref Zhur- Biol., [illegible]

light requirements of pine and spruce shoots raised in growing vessels both under the cover of the forest and in the clearings (the method of the experiment is described). It was determined that the best growth of the pine and spruce shoots takes place in full light. The absence of direct sun radiation (slight shading) noticeably depressed the development of the root system in the spruce and greatly weakened the growth of the roots in the pine. Intense shading during the vegetative period leads to the loss of the pine shoots and it also leads to a distinct weakening of the spruce. Under the conditions of strong shading (under the canopy) the shoots are etiolated and become susceptible to diseases (fusarium infection, etc.). There are very few shoots under the tree canopy and in clear-

Card 2/2

USSR / Forestry. Forest Biology and Typology K-

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43919

ings with a thick litter of leaves even when there is a large quantity of seeds sown. -- . . V. Nesmelov

Card 2/2

POLAND/Chemical Technology. Chemical Products and Their Application. Ceramics. Glass. Binders. Concrete. F-13

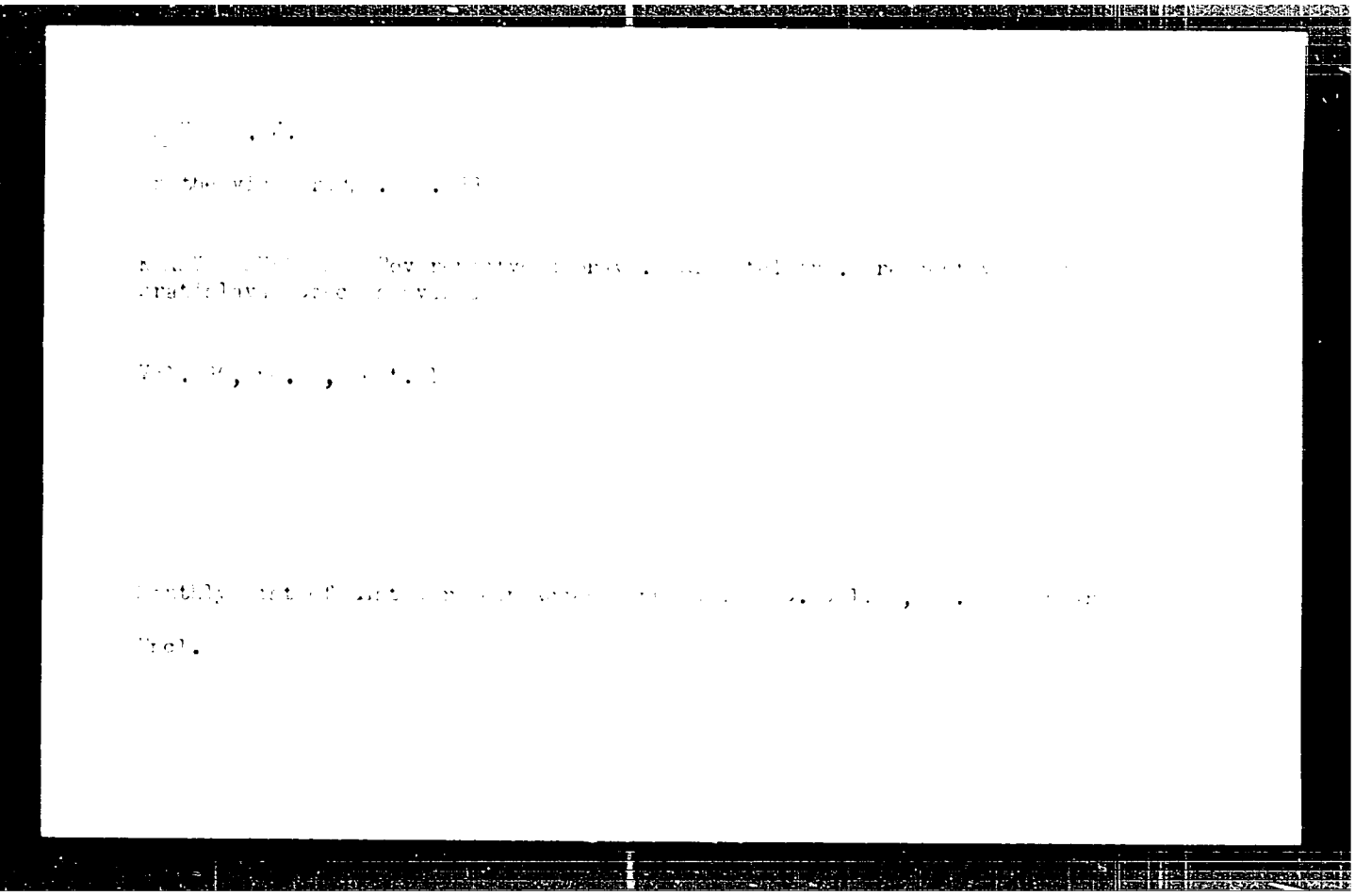
Abs Jour: Ref Zhur-Khim., No 13, 1958, 44148.

Author : Lecznar Franciszek, Oskroba Stefan.
Inst :
Title : Compact Concrete as a Material for the Construction of Storage Containers for Petroleum and Gasoline.

Orig Pub: Nafta (Polska), 1957, 13, No 7-8, 197-204.

Abstract: Concrete and mortars impermeable to petroleum and gasoline can be prepared from Polish portland cement of grade "350" with a water/cement ratio not exceeding 0.20-0.25. Mortars are made with basalt flour (1:1), and concrete -- with basalt, limestone, and in part with porphyry aggregate, 2-12 mm particle size. The primary prerequisite of impermeability of

Card : 1/2



OSLEJSEK, Jiri, inz.

Pipe laying without trench excavation. Vodni hosp 14 no.7: 269-271 '64

1. Chair of Sanitary Engineering, Higher School of Technology, Brno.

OSLEJSEK, Oldrich, inz.

Notes on cooling the smaller asynchronous squirrel-cage motors.
El tech obzor 52 no.2:73-79 F '63.

L 33685-66 SCTB DD

ACC NR: AP6024252 SOURCE CODE: CZ/0032/65/015/008/0582/0588

AUTHOR: Vasulin, M. (Doctor of medicine; Brno) Oslejsek, O. (Engineer; Candidate of sciences; Brno)

ORG: none

TITLE: Heat exchanger for deep hypothermy

SOURCE: Strojirenstvi, v. 15, no. 8, 1965, 582-588

TOPIC TAGS: heat exchanger, blood, surgery, hypothermia

ABSTRACT: The article describes a new type of heat exchanger developed for cooling blood during operations carried out in a state of deep hypothermy. The exchanger is outstanding for its small size and high efficiency and is easy to clean and sterilize. Hydraulic and thermal properties of the exchanger are discussed in detail. This paper was presented by Engineer J. Schneller. Orig. art. has: 11 figures, 10 formulas and 2 tables. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 13, 06 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 017

Card 1/1

UDC: 536.24:536.48

STRJSKAL,J.; BOZDECHOVA,M.; OSLEJSKOVA,M.

Presence of atypical lymphocytes in clinically healthy children and in some infections during childhood. Cesk. pediat. 19 no.2: 157-160 F'64.

1. Infeksni oddeleni fakultni detske nemocnice v Brne; vedouci: doc.dr. Vl.Kluska.

L 20861-66 EWP(t) IJP(c) JD

ACC NR: AP6011083 SOURCE CODE: CZ/0017/65/054/011/0527/0537

AUTHOR: Oslejsek, Oldrich (Engineer; Candidate of sciences)

ORG: none

TITLE: Analysis of the cooling of enclosed induction motors

SOURCE: Elektrotechnicky obzor, v. 54, no. 11, 1965, 527-537

TOPIC TAGS: electric motor, heat resistance, hydraulic resistance

ABSTRACT: Prototypes of enclosed induction motors with an outer diameter of the stator winding of 500 mm and an output of 200 kw (2p = 4) and 100 kw (2p = 8) were subjected to ventilating and thermal tests. Suitable hydraulic and thermal resistances were obtained for the machines after mutual adjustment of the calculated and measured values. The influences of changes in thermal resistances and losses upon the rise in temperature of the winding was examined, and the expediency of modifications in the further development of the machines judged according to those changes. Orig. art. has: 10 figures, 5 formulas, and 5 tables. [JPRS]

SUB CODE: 09, 20 / SUBM DATE: 15Jun65 / ORIG REF: 017 / OTH REF: 005
SOV REF: 001

Card 1/1 UDC: 621.313.333.017.72

STEJSKAL, J.; OSLEJSKOVA, M.; GREGOROVA, Y.

Liver disorders in influenza in childhood. Scr. med. fac. med. Brunensis 36 no.3:139-145 '63.

1. Infekcni oddeleni Fakultni detske nemocnice v Brne, Cerna pole Vedouci doc. MUDr. V. Kluska Biochemicke oddeleni Fakultni detske nemocnice v Brne, Cerna pole Vedouci MUDr. O. Teyschl.

(INFLUENZA) (AMINOTRANSFERASES)
(ALANINE AMINOTRANSFERASE)
(ASPARTATE AMINOTRANSFERASE)

OSLIKOVSKAYA, Ye.S.

Innovators of farm mechanization . Nauka i pered. op. v sel'khoz.
7 no.10:5-9 O '57. (MLRA 10:11)
(Agricultural machinery)

OSLIKOVSKAYA, Yelena Sergeyevna; KRAVCHENKO, Z.I., red.; SMIRNOVA, Ye.A., tekhn.red.

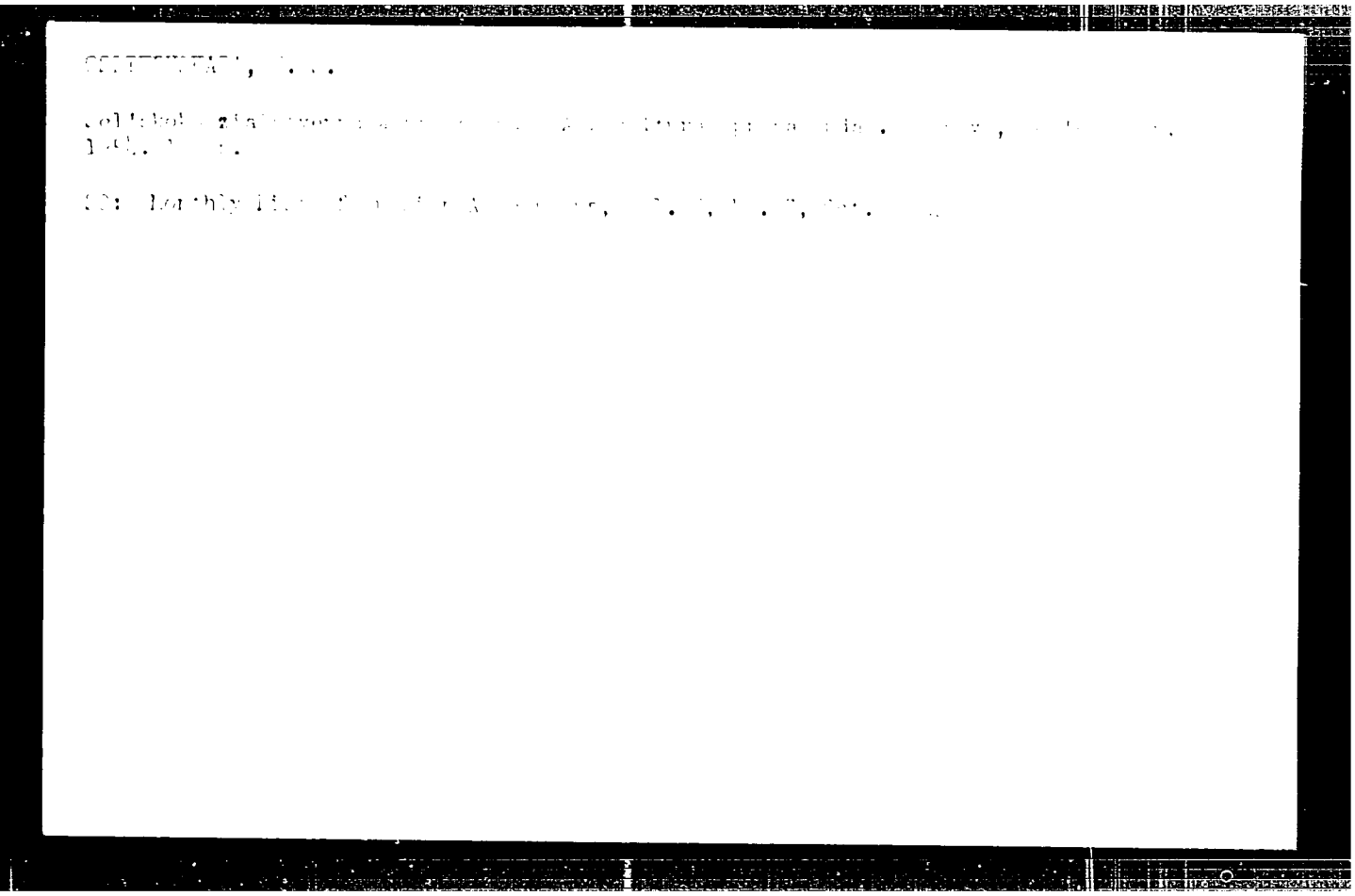
[Methods of promoting scientific achievements and advanced practices] Metodika propagandy nauchnykh dostizhenii i peredovogo opyta. Izd.2., perer. Moskva, Gos.izd-vo sel'khoz. lit-ry, 1958. 230 p. (MIRA 12:7)
(Agricultural extension work)

OSLIKOVSKAYA, Ye.S., kandidat ekonomicheskikh nauk.

Mass drive of leading workers for high grain yields. Nauka i pered.op.v sel'khoz. 7 no.7:35-38 Jl '57. (MLRA 10:8)
(Grain)

OSLIKOVSKAYA, E.S., kandidat ekonomicheskikh nauk.

The training of specialists should meet present requirements. Nauka i pered.op.v sel'khoz.7 no.1:4-6 Ja '57. (MLRA 10:2)
(Agriculture--Study and teaching)



OSTRENKO, V.Y., kand.tekhn.nauk; BOBRAKOV, L.D., inzh.; Prinimali uchastiye: ROZENFEL'D, N.B.; OSLAMENKO, I.S.; TSERETELI, P.A.; MINDLIN, I.D.; KUPERSHTEYN, Ye.A.; TOPAL, V.A.

Organizing the rolling of large-diameter thin-walled pipes on the heavy-duty automatic unit at the Zakavkazskiy Metallurgical Plant. Biul.nauch.-tekh.inform.VNITI no.4/5:17-23 '58. (MIRA 15:1)
(Tiflis--Pipe mills)

1. OSLIKOVSKAYA, [illegible]. S.
2. USSR (600)
4. Agriculture - Study and Teaching
7. Raising qualifications for agricultural specialists. Sov. agron., 1[illegible], No. 11, 1952

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

1. OSLIKOVSKAYA, F.

2. USSR (600)

4. Agriculture - Ukraine

7. Pamphlets on progressive practice in agriculture, Sots.sel'khoz. 24 no. 1, 1953.

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

1. OSLIKOVSKAYA, YE.

2. USSR (600)

4. Ukraine--Agriculture

7. Pamphlets on progressive practice in agriculture, Sots. sel'khoz, 24, No. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, [illegible]

OSLIKOVSKAYA, Ye., kand.ekon.nauk

Great shortcomings in the "Agriculture" Pavilion of the Exhibition of Achievements of the Soviet National Economy. Nauka i perod.op.v sel'khoz. 9 no.9:53-56 S '59. (MIRA 13:2)
(Moscow--Agricultural exhibitions)

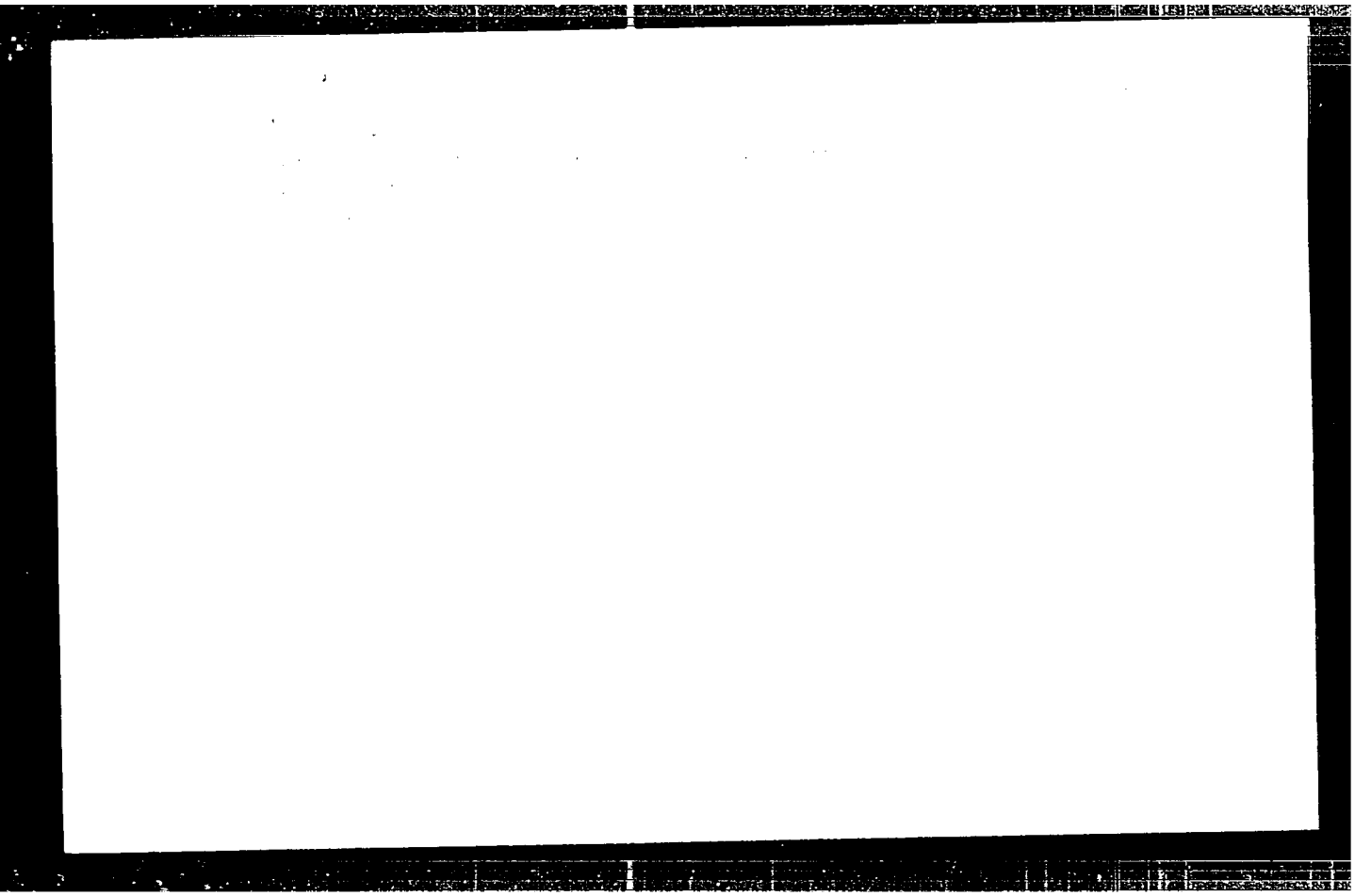
KOLDOBSKIY, A.G.; MEDVEDEV, S.I.; PISKOPPEL', F.G.; YAKOBSON, M.G. Prinimali uchastiye: BERKHIN, I.B.; OSLIKOVSKAYA, Ye.S.; PEREKISLOVA, A.M.; LITVIN, V.M.; PARKHOMENKO, Ye.V.; STOTIK, A.M.; SHAPIRO, T.I.; STRUMILIN, S.G., akad., glav. red.; ALEKSENKO, G.V., red.; ANISIMOV, N.I., red.; VOLODARSKIY, L.M., red.; GERSHBERG, S.R., redaktor; red.; PETROV, A.I., red.; POSVYANSKIY, S.S., red.; BAZAROVA, G.V., kand. ekonom. nauk, starshiy nauchnyy red.; KISEL'MAN, S.M., starshiy nauchnyy red.; LIVANSKAYA, F.V., kand. ekonom. nauk, starshiy nauchnyy red.; GLAGOLEV, V.S., nauchnyy red.; NEDBAYEV, V.I., nauchnyy red.; TUMANOVA, N.L., nauchnyy red.; TOVMASYAN, M.E., red.; BLAGODARSKAYA, Ye.V., mladshiy red.; SHUSTROVA, V.M., mladshiy red.; ZENTSEL'SKAYA, Ch.A., tekhn. red.

[The economic life of the U.S.S.R.; chronicle of events and facts, 1917-1959] Ekonomicheskaia zhizn' SSSR; khronika sobytii i faktov 1917-1959. Glav. red. S.G.Strumilin. Chleny red. kollegii: Aleksenko i dr. Moskva, Gos. nauchn.izd-vo "Sovetskaia entsiklopediia," 1961. 779 p. (MIRA 14:10)

1. TSentral'naya nauchnaya sel'skokhozyaystvennaya biblioteka Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. Lenina (for Litvin, Parkhomenko, STOTIK, Shapiro).
(Russia--Economic conditions)

VADIKOVSKAYA, Lyudmila Mikhaylovna; DONSKAYA, Galina Kupriyanovna; OSLIKOVSKAYA, Ye.S., kand.ekon.nauk, nauchnyy red.; SEMENOVA, V.A., red.; SUSHKO, A.O., red.; KHOVANSKIY, I.P., tekhn.red.

[Agriculture] Sel'skoe khoziaistvo. Moskva. (Biblioteka samoobrazovaniia) Vol.1. [The economics and organization of socialist agriculture in the U.S.S.R.; a bibliography] Ekonomika i organizatsiia sotsialisticheskogo sel'skogo khoziaistva v SSSR; rekomendatel'nyi ukazatel' literatury. Nauchnaia red. E.S. Oslikovskoi. 1957. 102 p. (MIRA 12:4)
(Bibliography---Agriculture)



APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

OSLIKOVSKAYA, Ye.S.

Those who prepared the way for the upswing in dairy husbandry. Nauka i pered.op.v sel'khoz. 7 no.9 2-4 S '57. (MIRA 10:10)
(Dairying)

OSLIKOVSKA, Ye. S.

Farm Management

Survey of articles received at "Soviet Agronomy's" editorial office [illegible] list Ye. S. Oslikovska's article "Training and placing agricultural specialists." Sov. agron. 16 no. 7, 19[illegible].

9. Monthly List of Russian Accessions. Library of Congress, September [illegible]. Unclassified.

OSLIKOVSKAYA, YE. S.

Stock and Stockbreeding

Zootechnical knowledge for all farm workers. Sots. zhiv. 14 no. 3, 1952

9. Monthly List of Russian Accessions, Library of Congress, June 1952 Uncl.

P/000/60/008/002/003/0
A222/A026

AUTHOR: Osliński, Zbigniew

TITLE: On Motion Alternation at a Certain Non-Linear Damping

PERIODICAL: Rozprawy Inżynierskie, 1960, Vol. 8, No. 2, pp. 167-175

TEXT: The author is concerned with the investigation of the motion described by the equation

$$\ddot{x} + R(\dot{x}) + \omega^2 x = 0 \qquad (1.1)$$

where ω^2 = const and $R(\dot{x})$ is a non-linear function of speed. For damping characteristics satisfying the condition $R(\dot{x})\dot{x} > 0$ in a certain finite or infinite interval (-V, V). He establishes some of the oscillatory characteristics of the motion. Making use of (Ref. 1,2) and supplementing them with his own considerations, he finds that the oscillatory nature of the motion depends only on the coefficient of the first power of the power expansion of the function $R(\dot{x})$. The notion of the critical line is introduced. The oscillatory character of the motion is determined by the mutual position of the critical line and the damping characteristic $R(\dot{x})$. It is also shown that in the non-alternating case a motion is possible for which the deflection has at most one

Card 1/2

OSLOBEANU, M., ing.; ALEXANDRESCU, I., ing.

Cultivation of grapevines on terraces. St si Teh Buc 14 no.12:16-17 D'62.

1. Experiment Station, Dobruja.

OSLOBEANU, M., ing.; ALEXANDRESCU, I., ing.

Cultivation of grapevines on terraces, an important means of making hillside soils valuable. St si Teh Buc 14 no.12: 16-17 D'62.

1. Statiunea experimentala Dobruja.

OSLOBEANU, M.; MUJDABA, F.

Grapevine varieties for red wines in the Murfatlar Vineyard.
Comunicarile AR 13 no.8:733-742 Ag'63.

1. Comunicare prezentata de academician Gh. Constantinescu.

OSLON, A.B., inzhener. (g.Zlatoust)

On measuring ground resistances. Elektichestvo no.2:56-58 F '57. (MLRA 10:3)

(Electric currents--Grounding)

OSLON, A.B., inzh.

Calculating several types of complex ground electrodes. Elektrichestvo no.4:58-61 Ap '58. (MIRA 11:5)
(Electric current--Grounding)

OSLON, A.B.

Method of mean potentials. Nauch.dokl.vys.shkoly; energ. no.2:79-82 '59. (MIRA 13:1)

1. Rekomendovana kafedroy TVN Moskovskogo energeticheskogo instituta.
(Electric conductors)

8(2)

AUTHOR: Oslon, A. B., Engineer

SOV/105-59-7-21/30

TITLE: Calculation of Rectangular Grounding Circuits (Raschet pryamougol'nykh zazemlyayushchikh konturov)

PERIODICAL: Elektrichestvo, 1959, Nr 7, pp 79 - 81 (USSR)

ABSTRACT: A rather exact and simple method of calculating earthing-resistances of rectangular grounding circuits with internal grid wiring and without vertical elements is given. Such grounding circuits have been calculated by E. T. B. Gross and R. S. Hollitch (Ref 2) on an electronic computer. The method employed by these authors does not make it possible to carry out calculations of an arbitrary ground circuit without having to solve a large number of linear equations. Formula (12) is deduced for the resistance of the ground circuit (Fig 3). Table 2 shows the results obtained by means of the described method as well as those obtained by Gross and Hollitch. In most cases the results obtained here for the same grounding circuits are about 5% higher than those obtained by the two Americans. As, when calculating grounding, an accuracy of 10% is considered to be sufficient, the results may be considered to

Card 1/2

Calculation of Rectangular Grounding Circuits SOV/105-33-7-21/30

be satisfactory. The method described permits the calculation of earthing ground circuits of any configuration and to obtain the results as formulas for any values of l(length of the element) and d(diameter of its cross section), without having to use electronic computers. There are 4 figures, 2 tables, and 3 references, 2 of which are Soviet.

SUBMITTED: August 4, 1958

Card 2/2

105-58-4-13/37

AUTHOR: Gelon, A. B., Engineer

TITLE: Calculating Several Types of Complex Ground Electrodes (Raschet nekotorykh vidov slozhnykh zazemliteley)

PERIODICAL: Elektrichestvo, 1958, Nr 4, pp. 58 - 61 (USSR)

ABSTRACT: In the calculation of complex ground electrode installations usually the factors of utilization are used. In many cases, however, a calculation can be carried out according to more simple formulae without using these factors, Such a calculation is shown here for a ground electrode installation consisting of n elements. The problem consists in the determination of the proper and mutual (reciprocal) potential factors and the current distribution between the ground electrode elements. The proper factors are usually essentially greater than the reciprocal ones. Therefore the latter need not be determined exactly. In linear ground electrode installations the latitudinal dimensions of which are small compared to longitudinal measurements the proper and reciprocal factors can most easily be calculated by the method of the mean potentials (Ref 1). By the method of calculation given here

Card 1/2

Calculating Several Types of Complex Ground Electrodes 105-58-4-13/37

the ground electrode resistances can be calculated for the following ground electrode installations: fourmembered star right angle (formed by two horizontal beams) threemembered star, sixmembered star, square, rectangle. There are 5 figures, 1 table, and 4 Soviet references.

SUBMITTED: April 18, 1957

AVAILABLE: Library of Congress

1. Electrodes-Theoretical analysis

Card 2/2

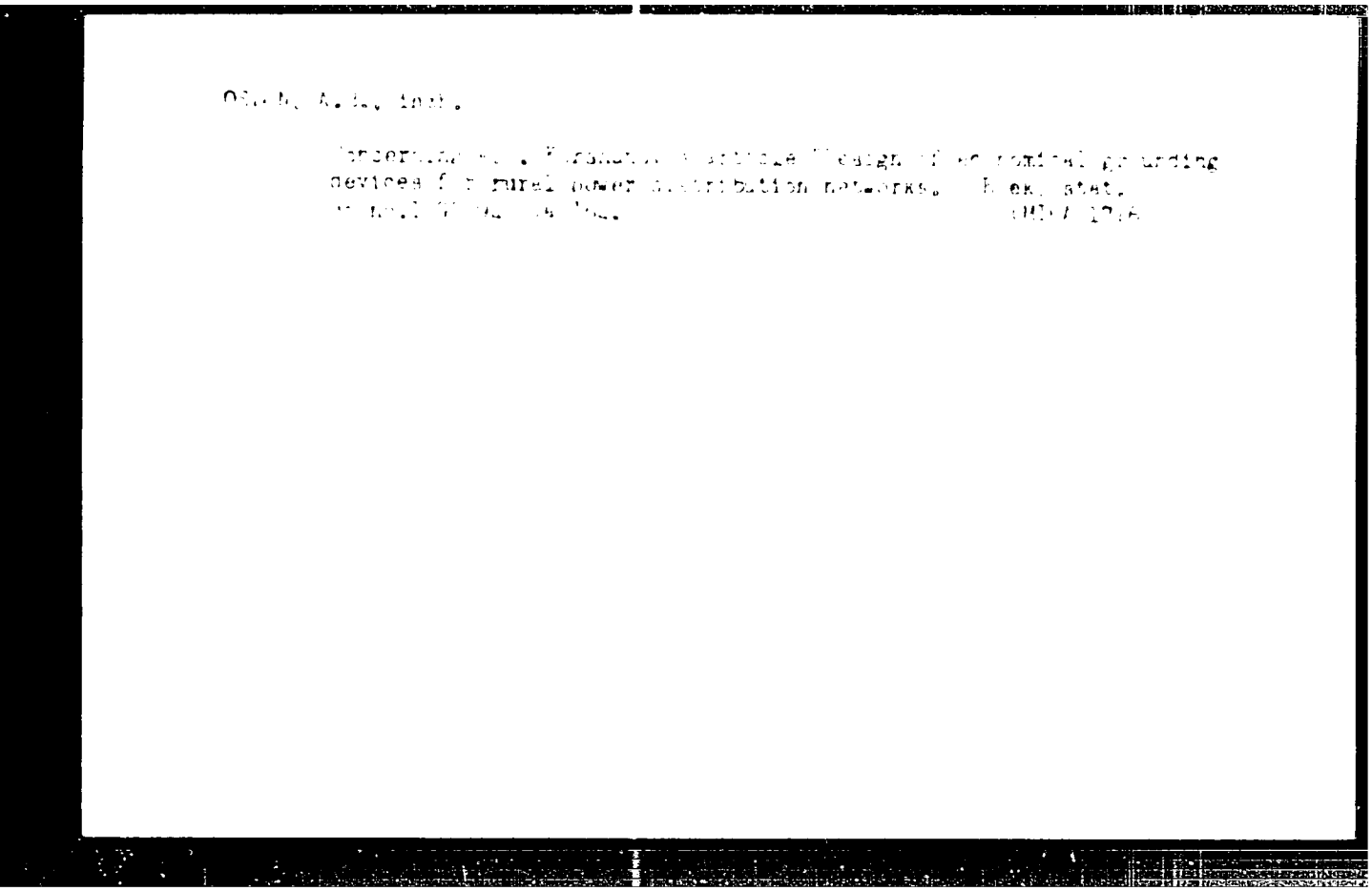
OSLOM, A.B., inzh. (Perm')

Design of deep grounding rods for electric power transmission line towers. Elektrichestvo no.12:59-63 D '61. (MIRA 14:12)
(Electric lines--Overhead) (Electric currents--Grounding)

OSLON, A.B., inzh. (Chita)

Dependence of the grounding resistance on the dimensions of the grounding device. Elektrichestvo no.6:67-[illegible] Je '64.

(MIRA [illegible])



OSLON, I.

The artels of Dnepropetrovsk utilize progressive experience.
Prom.koop. no.11:47-49 N '55. (MLRA 9:5)

1. Predsedatel' pravleniya Dnepropetrovskogo oblmetallopromsoyuza.
(Dnepropetrovsk--Metalwork)

PROCESSES AND PROPERTIES INDEX

Structure of tempered martensite and tempering of hardened steel. G. Kurdyumov and N. Oslon. *J. Tech. Phys.* (U. S. S. R.) 9, 1891-900(1939).—The width and spacing of x-ray lines of steels contg. 0.11-1.18% of C were detd. The width of lines of hardened steel increases linearly with the C content up to 0.5%. Annealing causes decompn. of the solid soln. having an irregular tetragonal structure. The decompn. is incomplete below 300° and complete at 350°. "Cubical martensite" or "β-martensite" is a heterogeneous mixt. of a solid soln. of C in α-iron and a disperse phase contg. much C. The concn. of C in the solid soln. decreases when the temp. of annealing rises.

J. J. Bikerman

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

OSTRENKO, V.Ya.; YUFEROV, V.M.; GEYKO, I.K.; TYR, V.R.; OSIOK, N.A.; CHEREPINSKAYA, E.I.; VIL'YAMS, O.S.; LAGUTINA, E.V.

Pipe production from new heat-resistant ferritic-martensitic steels. Stal' 23 no. 3:258-263 Mr '64. (MIRA 17:6)

1. Ukrainskiy nauchno-issledovatel'skiy trubnyy institut, Pervoural'skiy novotrubnyy zavod i Nikopol'skiy yuzhnotrubnyy zavod.

ACCESSION NR: AP4019481 S/0133/64/000/003/0258/0263

AUTHOR: Ostrenko, V. Ya.; Yuferov, V. M.; Geyko, I. K.; Ty*r, V. P.; Oslon, N. A.; Chererinskaya, R. I.; Vil'yams, O. S.; Lagutina, R. V.

TITLE: Manufacture of tubes from new ferritic martensitic heat resistant steels

SOURCE: Stal', no. 3, 1964, 258-263

TOPIC TAGS: heat resistant steel, steel tube, ferritic martensitic steel, tube rolling

ABSTRACT: The authors report on techniques developed in recent years by the Ukrainskiy n.-i. trubny*y institut (Ukrainian Tube Research Institute) in cooperation with tube factories in Pervoural'sk and Nikopol for hot rolling and heat treating of tubes made from 9 new types of steel, all of which contain 10—14% Cr and additions of V, Mo, Nb, and W. The AC temperature was in the range of 810—830C; ferrite grain growth was noted above 1100C; piercing temperatures varied from 1090 to 1200C. Ductility at high temperatures was found to depend on the content of free ferrite, and piercing of tube billets presented no

Card 1/2

ACCESSION NR: AP4019481

difficulties at a content of 50%. At 15—20% ferrite hot tears, cracks, and laps were formed. Annealing of hot-rolled and reduced tubes at 770—780C imparts a structure of granular pearlite and the mechanical properties needed for further cold reduction. Metal consumption for almost all steels, including machining, proved no higher than those for similar pipes of stainless steels in current production practice. "Engineers N. S. Kirvalidze, R. A. Prudkova, N. N. Pil'nikova, L. S. Rakhnovetskiy, I. S. Pechennikova, and others took part in the work." Orig. art. has: 8 figures and 2 tables.

ASSOCIATION: Ukrainskiy n.-i. trubny*y institut (Ukrainian Tube Research Institute); Pervoural'skiy novotrubny*y zavod (Pervoural'sk New Tube Plant); Nikopol'skiy yuzhnotrubny*y zavod (Nikopol' Southern Tube Plant)

SUBMITTED: 00 ATD PRESS: 3045 ENCL: 00

SUB CODE: MM,IE NO REF SOV: 010 OTHER: 000

Card 2/2

PLYATSKOVSKIY, O.A., kand.tekhn.nauk; Prinimali uchastiye: OSLON, N.D.; NODEV, E.O.; DEVYATISIL'NYY, V.I.; SULTINSKIKH, A.N.; SHANIN, F.I.; KUKARSKIKH, V.I.; RAKHNOVETSKIY, L.Y.; DUYEV, V.N.

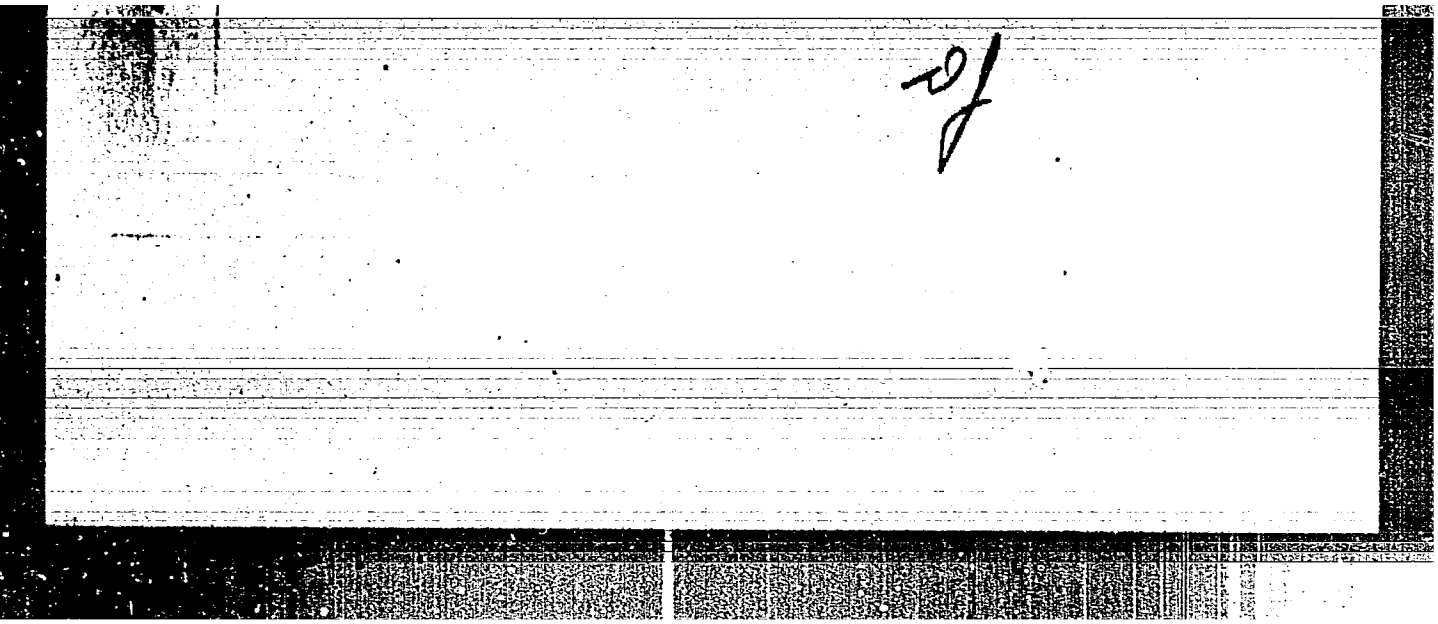
New technological processes used in rolling 102-170 mm. diameter pipes of stainless steel 1Kh18N9T. Biul.nauch.-tekh.inform.VNITI no.4/5:24-30 '58. (MIRA 15:1)

(Pipe mills)

OSLON, N.L., inzhener; GLEYBERG, A.Z., inzhener; CHERKERINSKAYA, R.I., inzhener

Effect of the length of skelp heating time on the quality of pipe. Stal' 15 no.6:537-540 Je '55. (MLRA 8:8)

1. Pervoural'skiy Novotrubnyy zavod. (Rolling (Metalwork)) (Pipe, Steel)



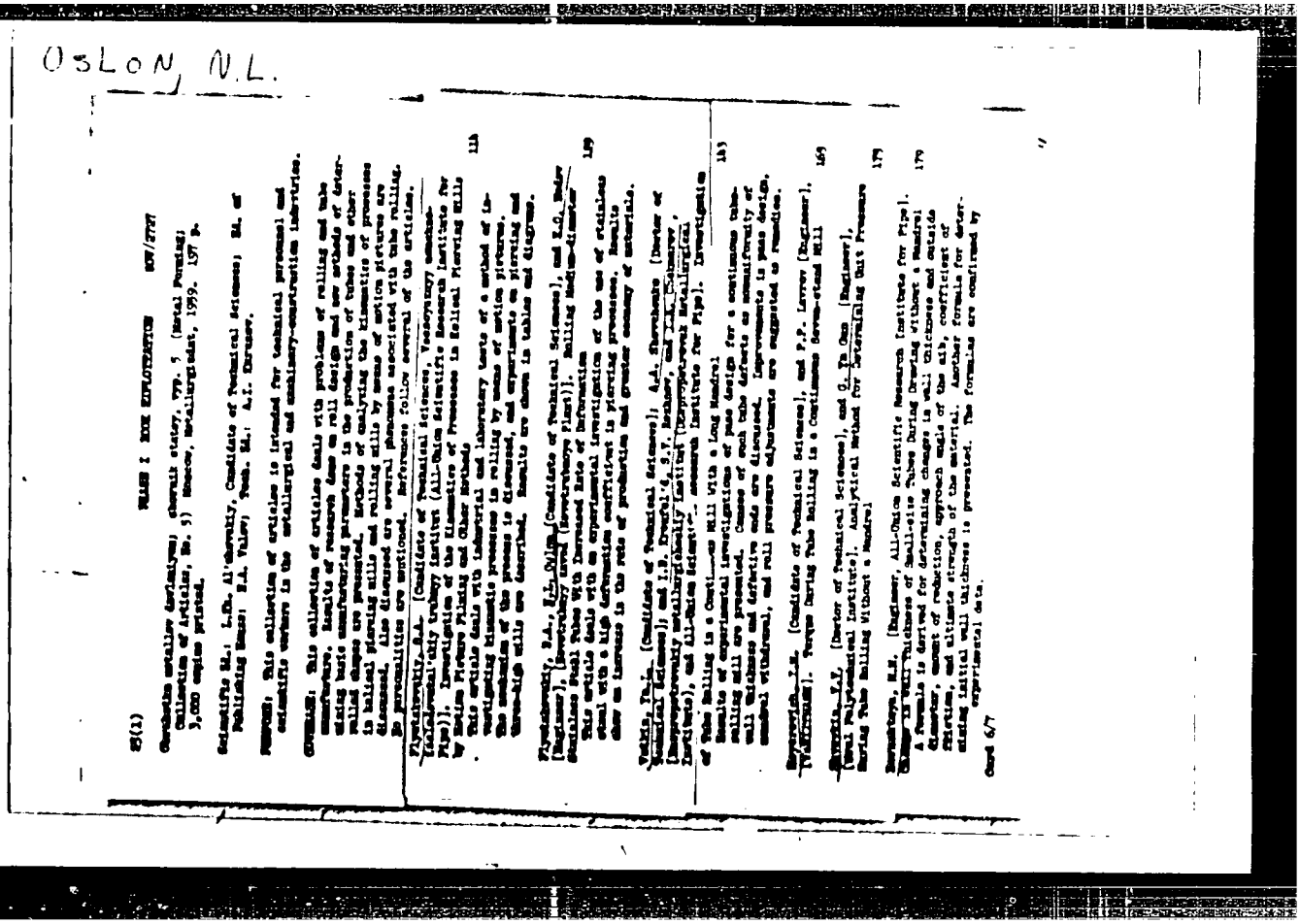
APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

PLATSKOVSKIY, O.A., kand. tekhn. nauk; OSLON, N.L., kand. tekhn. nauk; NODEV, E.O., inzh.

Rolling medium-diameter pipes of stainless steel with high deformation ratios. Obr. met. davl. no.5:129-142 '59. (MIRA 13:3)

1.Vsesoyuznyy nauchno-issledovatel'skiy trubnyy institut (for Plyatskovskiy). 2.Novotrubnyy zavod (for Oslon, Nodev)
(Rolling (Metalwork)) (Steel, Stainless)

OSLON, N.L.



STASEVICH, P.K.; FREYBERG, M.A.; OSLON, N.L.; CHEMERINSKAYA, R.I.; KOKHMAN, L.V.; MOSKALENKO, V.I.

Drawing unannealed carbon steel tubes without mandrels.
Stal' 21 no.8:725-727 Ag '61. (MIRA 14:9)

1. Pervoural'skiy novotrubnyy zavod.
(Deep drawing (Metalwork)) (Pipe, Steel)

OSLON, N.L., KOKHMAN, [illegible] V.A

Investigating the effect [illegible] internal pipe surfaces [illegible] steel. [illegible] Je '64.

1. Permskiy politekhnicheskiy institut i Pervouralskiy [illegible] zavod.

LIPCHIN, N.N.; KRYUKOVA, T.S.; OSLON, N.I.

Effect of the rate of heating on the phase recrystallization of hardened 6ОС2 steel. Metalloved. i term. obr. met. no.8 5-8 Ag '64. (MIRA 17:10)

1. Permskiy politekhnicheskiy institut.

LIPCHIN, N.N. (Perm'); OSLON, N.L. (Perm'); SHUBIN, V.N. (Perm');
KHUDEN'KIKH, V.P. (Perm')

Effect of vanadium on the phase recrystallization of steel. Izv. AN SSSR. Met. no.3:140-145 My-Je '65. (MIRA 18:7)

OSLOPOV, K.A.

Pullout platforms for mine elevators. Rats. i izobr. predl.v strel. no.119:23-24 '55. (MLRA 9:7)
(Elevators)

IVANOV, A.G., inzh.; OSLOPOV, O.I., inzh.; RUTENBERG, B.G.; GRACHEV, Yu.B., inzh.

Grinding and burning lignite from the Aleysk deposit. Elek. sta. 36 no.2:16-18 F '65. (MIRA 18:4)

L 17860-63 EWT(m)/EDS AFFTC/ASD

ACCESSION NR: AP3003687 S/0048/63/027/007/0865/0865

AUTHOR: Akkerman,A.F.; Kochetkov,V.L.; Chekanov,V.N.; Oslopovskikh,G.V. Suvorov,V.A.; Shtol'ts,A.K.

TITLE: Lifetime of the first excited state of Ti^{48} /Report of the Thirteenth Annual Conference on Nuclear Spectroscopy held in Kiev from 25 January to 2 February 1963/

SOURCE: AN SSSR Izv. Seriya fizicheskaya, v.27, no.7, 1963, 865

TOPIC TAGS: lifetime level, resonance scattering, Mossbauer effect Ti^{48}

ABSTRACT: The lifetime of the 990 keV 2^+ state of Ti^{48} has been determined by the method of Coulomb excitation as 9.7×10^{-12} sec and 4.2×10^{-12} sec, respectively, by G.M.Temmer and N.P.Heydenburg (Phys.Rev.,104, 967, 1956) and D.Andreyev and others (Nuc.Phys.,19, 400, 1960) and by the method of resonance scattering by V.Knapp (Proc.Phys.Soc.,A70, 194, 1957) who obtained $T = 4.2 \times 10^{-12}$ sec. But Knapp did not take into account the possible influence of molecular bonds, although the density of his source was such that this influence could be significant. Hence the authors carried out resonanance absorption experiments aimed at determining the lifetime of the 990 keV state of Ti^{48}. The source was V^{48} produced by deuteron

Card 1/2

L 17860-63
ACCESSION NR: AP3003687

bombardment in the internal beam of the Sverdlovsk Polytechnic Institute cyclotron of natural Ti and then converted to VCl_3. The 400°C reaction temperature employed prevented chlorination of the Sc^{46}, which was also present in the target. Measurements on the double scintillation spectrometer set-up with Ti and Fe scatterers yielded a value of 0.072 ± 0.022 for the attenuation factor R. Calculations based on this value yield (9.47 ± 2.89) x 10^{-5} eV for the level width and, finally, $T = (4.92 \pm 1.52) \times 10^{-12}$ sec for the lifetime of the 2^+ state. Orig. art. has: 1 formula.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 02Aug63 ENCL: 00

SUB CODE: NS NO REF SOV: 002 OTHER: 003

Card 2/2

RUDKEVICH, M.Ya.; OSLOPOVSKIY, A.P.

Nature of Paleogene displacements in the Poluy River basin in the lower Ob' Valley. Trudy SNIIGGIMS no.14:15-20 '61.
(MIRA 15:8)

(Poluy Valley (Tyumen' Province)--Geology, Structural)

OSLOPOVSKIY, A.P.

Hot mineral waters in the Crimea. Sov.geol. 2 no.1:147-149 Ja '59. (MIRA 12:4)

1. Krymneftegazrazvedka.
(Crimea--Mineral waters)

OSLOPOVSKIY, A.P.

New level of artesian fresh waters in the Crimea. Priroda 46 no.3:113 Mr '57. (MLRA 10:3)

1. Krymneftegazrazvedka (Feodosiya)
(Crimea--Artesian wells)

L 40991-66 EWP(j)/EWT(m)/T/EWP(t)/ETI IJP(c) RM/JD/WB

ACC NR: AP6022870 (N) SOURCE CODE: UR/0303/66/000/002/0044/0046

AUTHOR: Oslopovskiy, B. A.; Pugachev, Yu. B.; Medvedeva, T. I.

ORG: none

TITLE: Testing of paint-and-varnish coatings for protection of equipment from corrosion

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 2, 1966, 44-46

TOPIC TAGS: paint, varnish, protective coating, sea water corrosion

ABSTRACT: The feasibility of using paint-and-varnish protective coatings in units where water is boiled at reduced pressure at 45-50°C was studied by testing a series of paint-and-varnish coating systems in a vacuum boiler containing sea water. At the pressure in the evaporator (40 mm Hg), sea water boiled at 45°C. A large number of paint-and-varnish materials were tested by being deposited on St. 3 steel specimens which were placed in sea water in the evaporator, and kept there for 2700 hr (some of them for 300 hr in boiling water). The highest resistance was exhibited by coatings based on "liquid" Nairit, hot- and cold-cured epoxy coatings deposited on a zinc epoxy protective primer, and also coatings consisting of a mixture of epoxy resins and Kuzbass varnish or coal pitch. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 011

Card 1/1 UDC: 667.657.27

PA38/49T18

OSLOVSKIY, A. B., PROF

USSR/Electricity
Electricity - Training

Mar 49

"The Training of Electrical Engineers in the Kiev Polytechnical Institute," Prof A. D. Nesterenko, Dr Tech Sci, Prof A. B. Oslovskiy, 1½ pp

"Elektrichestvo" No 3

Kiev Polytech Inst, oldest technical VUZ of Ukrainian SSR, was founded 50 years ago. During 30 years of Soviet regime, 10,500 specialists were trained. At present more than 3,300 students attend classes. There are ten faculties, and 32 specialties are taught.

38/49T18

OSIOVSKII, N.

O novoi sisteme sortirovki pochtovoi korrespondentsii. [On the new system of mail sorting]. (Vestnik sviazi. Pochta, 1946, no. 11-12, p. 13).

DLC: HE7.V44

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress Reference Department, Washington, 1952, Unclassified.

ACCESSION NR: AR4036028 S/0299/64/000/006/G005/G005

SOURCE: Referativnyy zhurnal. Biologiya, Abs. 6G26

AUTHORS: Osipova, O. P.; Ashur, N. I.

TITLE: Photostability and function of the photosynthetic apparatus of plants

CITED SOURCE: Sb. Probl. ekol. i fiziol. lesn. rast. L., 1963, 33-45

TOPIC TAGS: photosynthesis, plant physiology, photostability, chlorophyll, chloroplast, carotenoid

ABSTRACT: In this work, an attempt is made to determine the connection between the photostability of chlorophyll and the photosynthetic ability of leaves, as well as the role of carotenoids in the photostability of chlorophyll; 15-16 day-old leaves of corn, beans and cucumbers were used. Luminescence curves of photosynthetic intensity were determined with the use of C^{14} by the method of Zelenskiy, while the photostability of chlorophyll was determined from the gradual fading after illumination of a suspension of isolated chloroplasts with red light (600-700 mμ). Colloidal suspensions of chlorophyll had considerably more photostability than molecular ones. Therefore, aggregation of molecules serves to protect chlorophyll against

Card 1/2

OSLYAKOV, A. (Ashkhabad).

Fire train in action. Pozh. delo 3 no.2:15 [illegible] (MIRA [illegible]
(Fire extinction)

OSMACHEK, A., general-mayor aviatsii, voyennyy letchik pervogo klassa;
BERKOVCHENKO, A., inzhener-podpolkovnik, kand. tekhn. nauk;
DARMOGRAY, V., podpolkovnik; GAKH, A., inzhener-podpolkovnik

On ground target. Av. i kosm. 45 no.6:45-49 '62.
(MIRA 15:10)

(Bombing, Aerial)

OSMACHKIN, B.P. (g. Voroshilovgrad).

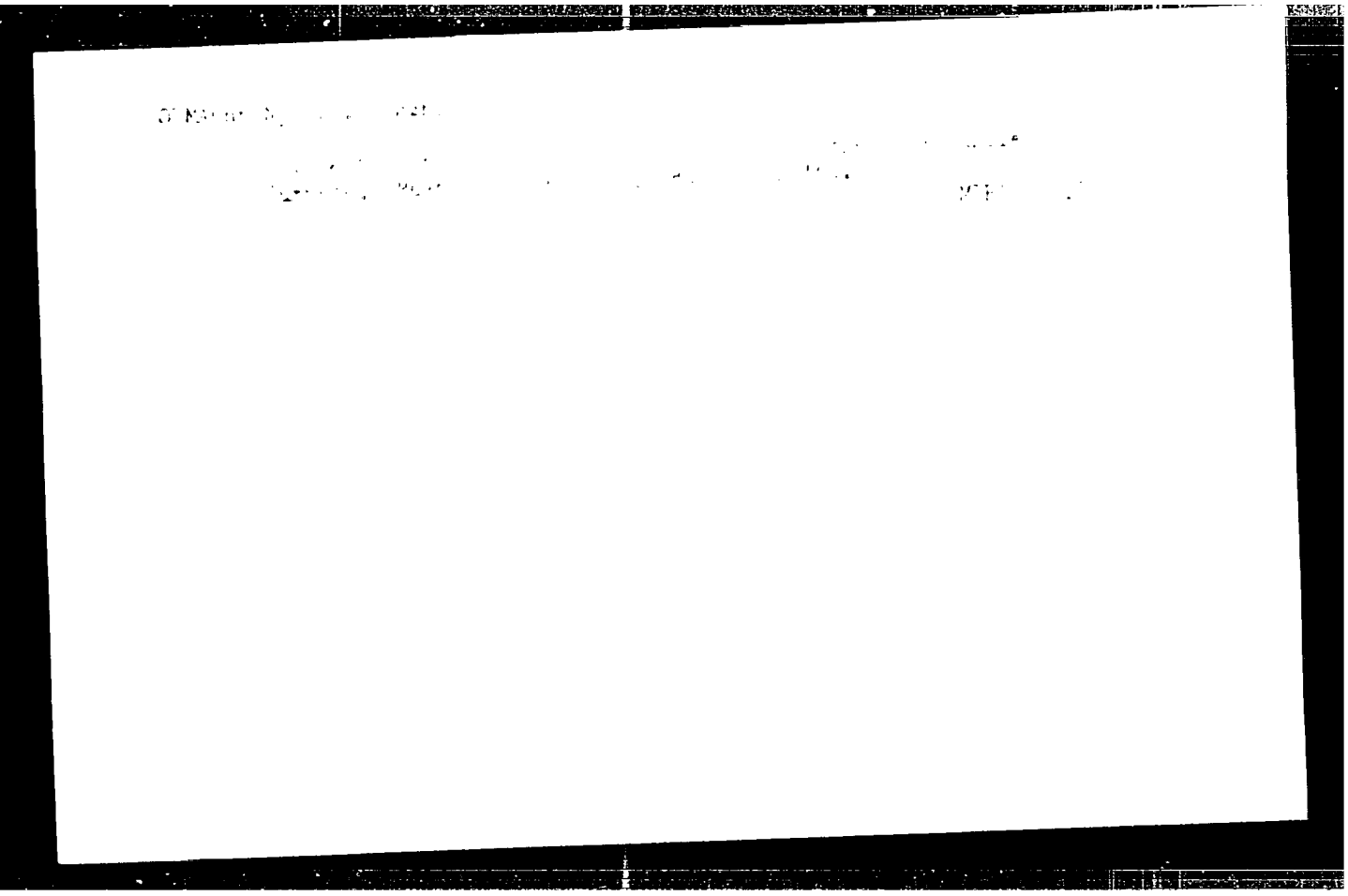
Apparatus for the subject "Electromagnetic oscillations." Fiz. v shkole 13 no.3:65-67 My-Je '53. (MLRA 6:6)
(Oscillators, Electric)

OSMACHKIN, B.P., inzh.

Using gamma defectoscopy for checking the condition of conveyer belts. Ugol' Ukr. 7 no.11:46 N '63. (MIRA 17:4)

OSMACHKIN, B.P.; RUDANOVSKIY, A.A., red.

[illegible] (Work experience of the Lugansk [illegible] in the introduction of radioisotope devices in the industrial enterprises of Lugansk Province] Opyt raboty Luganskoi [illegible] oblasti po vnedreniiu radioizotopnykh priborov na promyshlennykh predpriiatiiakh oblasti. Moskva, Atomizdat, [illegible]. (MIRA 18:1)



APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

OSMACHKIN, B.I., [illegible]

[illegible] free-flowing [illegible]

(MIRA [illegible])