$$\frac{\partial^2 F}{\partial x^2} + \frac{\partial^2 F}{\partial y^2} + \varkappa \frac{\partial^2 F}{\partial z^2} = 0 \qquad (13)$$

the author obtains the expression

$$F = f(z)\varphi_{2n+1} + f'(z)\Psi_{2n} + \sum_{k=0}^{n-1} \left[f^{(2n-2k)}(z) \, (\varphi_{2k+1} + \phi_{2k+1}) + \right.$$

$$\left. + f^{(2n-2k+1)}(z)(\varphi_{2k} + \phi_{2k}) \right] \qquad (14)$$

where $f(z)$ is a polynomial of $(2n + 1)^{st}$ degree, $\varphi_s = \varphi_s(\xi)$ -- analytic function,

$$\phi_s = \sum_{m=1}^{n-k} \left(\frac{-\varkappa}{4} \right)^m \frac{\bar{\xi}^m}{m!} \int^m \varphi_{s+2m} \, a\xi \qquad (15)$$

Here $\int^m$ denotes an m-fold integration with respect to ξ, and the prime

denotes the conjugate complex magnitude. For the funotions F_0, F_1, F_2 satisfying (11) it follows

$$\left.\begin{aligned} F_0 &= \operatorname{Re} i\left\{ f(z)\psi_{2n+1} + f'(z)\psi_{2n} + \sum_{k=0}^{n-1}\left[f^{(2n-2k)}(z)(\psi_{2k+1} + \Psi_{2k+1}) + \right.\right. \\ &\qquad \left.\left. + f^{(2n-2k+1)}(z)(\psi_{2k} + \Psi_{2k})\right]\right\}, \\ F_1 &= \operatorname{Re}\left\{ f(z)\lambda_{2n+1} + f'(z)\lambda_{2n} + \sum_{k=0}^{n-1}\left[f^{(2n-2k)}(z)(\lambda_{2k+1} + \Delta_{2k+1}) + \right.\right. \\ &\qquad \left.\left. + f^{(2n-2k+1)}(z)(\lambda_{2k} + \Delta_{2k})\right]\right\}, \\ F_2 &= \operatorname{Re}\left\{ f(z)\varphi_{2n+1} + f'(z)\varphi_{2n} + \sum_{k=0}^{n-1}\left[f^{(2n-2k)}(z)(\varphi_{2k+1} + \Phi_{2k+1}) + \right.\right. \end{aligned}\right\} \quad (16)$$

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$$+ f^{(2n-2k+1)}(z)(\varphi_{2k} + \Phi_{2k})\Big]\Big\},$$

with

$$\Psi_s = \sum_{m=1}^{n-k} a_m \bar{\xi}^m \int_m \psi_{s+2m}\, d\xi, \quad \Delta_s = \sum_{m=1}^{n-k} b_m \bar{\xi}^m \int_m \lambda_{s+2m}\, d\xi,$$

$$\Phi_s = \sum_{m=1}^{n-k} b'_m \bar{\xi}^m \int_m \varphi_{s+2m}\, d\xi, \quad a_m = \left(-\frac{\varkappa_0}{4}\right)^m \frac{1}{m!}, \qquad (17)$$

$$b_m = \left(-\frac{\varkappa_1}{4}\right)^m \frac{1}{m!}, \quad b'_m = \left(-\frac{\varkappa_2}{4}\right)^m \frac{1}{m!},$$

where Ψ_s, λ_s are analytic functions of ξ and s = 0, 1, .. 2n+1. The

Some problems of the theory . . .

shifts (10) after the substitution of (16) read

$$\left.\begin{aligned} w &= \operatorname{Re}\left\{ f'(z)(c_1\lambda_{2n+1} + c_2\varphi_{2n+1}) + f''(z)(c_1\lambda_{2n} + c_2\varphi_{2n}) + \right. \\ &\left. + \sum_{k=0}^{n-1} \left[f^{(2n-2k+1)}(z)(c_1\lambda_{2k+1} + T_{2k+1}) + f^{(2n-2k+2)}(z)(c_1\lambda_{2k} + T_{2k}) \right] \right\}, \\ u - iv &= f(z)(\lambda'_{2n+1} + \varphi'_{2n+1} - \psi_{2n+1}) + f'(z)(\lambda'_{2n} + \varphi'_{2n} - \psi'_{2n}) + \\ &+ \sum_{k=0}^{n-1} \left[f^{(2n-2k)}(z)(\lambda'_{2k+1} + \varphi'_{2k+1} - \psi'_{2k+1} + Q_{2k+1}) + \right. \\ &\left. + f^{(2n-2k+1)}(z)(\lambda'_{2k} + \varphi'_{2k} - \psi'_{2k} + Q_{2k}) \right], \end{aligned}\right\} \quad (18)$$

with

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Some problems of the theory . . .

$$T_s = c_2\varphi_s + c_1\Delta_s + c_2\Phi_s,\quad Q_s = 2\,\frac{\partial}{\partial\xi}\left[\mathrm{Re}(\Delta_s + \Phi_s) + i\,\mathrm{Re}\,i\Psi_s\right], \qquad (19)$$

where $\lambda_s' = \frac{\partial\lambda_s}{\partial\xi}$ etc.

The boundary conditions on the generated surface of the cylinder can be satisfied if the shifts on the generated surface are given in the form

$$\left.\begin{aligned} w &= \sum_{k=0}^{n}\left[f^{(2n-2k+1)}(z)\,t_{2k+1} + f^{(2n-2k+2)}(z)\,t_{2k}\right] \\ u - iv &= \sum_{k=0}^{n}\left[f^{(2n-2k)}(z)\,q_{2k+1} + f^{(2n-2k+1)}(z)\,q_{2k}\right] \end{aligned}\right\} \qquad (20)$$

where t_s, q_s $(s = 0,1,\ldots, 2n+1)$ are functions of the arc of L. Detailed formulas for the case $n = 2$ (i.e. $f^{VI}(z) = 0$) are given. The case where u and v are missing and w does not depend on z is considered

Card 9/10

in detail, where a three-fold connected region bounded by 5 circles and an elliptic region, respectively, is chosen as D. In all cases the boundary conditions are satisfied approximately only on the generated surface.

There are 2 figures, 1 table and 6 Soviet-bloc references.

ASSOCIATION: Khar'kovskiy avtomobil-no-dorozhnyy institut (Khar'kov Automobile and Highway Institute)

SUBMITTED: March 3, 1959

MAKHOVIKOV, V.I. [Makhovykov, V.I.] (Khar'kov)

Solution of the wave equation. Prykl.mekh. 7 no.5:566-568 '61. (MIRA 14:10)

1. Khar'kovskiy avtomobil'no-dorozhnyy institut.
(Wave mechanics)

S/140/62/000/003/005/007
C111/C333

16.3000
24.4200

AUTHOR: Kakhovikov, V. I.

TITLE: The plane problem in the theory of anisotropic elastic mediums for the exterior of an unbounded number of equal elliptical holes

PERIODICAL: Vysshiye uchebnyye zavedeniya. Izvestiya. Matematika, no. 3, 1962, 84-90

JA

TEXT: Considered is an anisotropic plane with infinitely many equal elliptical holes which are arranged equi-distant from each other. In order to solve the elasticity problem where all holes are under equal stress, the circles K_ν with the radii 1 and the equations

$$\zeta_\nu = \varepsilon + \nu h, \quad h > 2, \quad \varepsilon = e^{i\theta}, \quad (1)$$

$$-\pi \leq \theta \leq \pi$$

are mapped on the exterior of the ellipses. The mapping is approximate and done with the help of the function

$$\omega(\zeta) = \gamma_0 \zeta + m_0 Y(\zeta^{-1}) \quad (18)$$

Card 1/3

The plane problem . . .

where γ_0 is a constant, $|m_0| < 1$ and Y is defined by

$$\Phi(\zeta) = Y[\varphi(\zeta)] = \sum_{k=-\infty}^{-\infty} \varphi(\zeta - kh) \quad . \qquad (2)$$

It is shown that, if

$$\varphi(\zeta) = \sum_{j=1}^{\infty} \alpha_j \zeta^{1-2j} \quad , \qquad (14)$$

then the following holds on the circles:

$$\Phi(\zeta_\nu) = Y[\varphi(\zeta_\nu)] = f(\varepsilon) - \sum_{k=1}^{n} A_k \varepsilon^{2k-1} + \delta_0 \qquad (15)$$

$$A_k = \sum_{j=1}^{n} a_{j,k} \alpha_j, \quad a_{j,k} = 2\left|\varepsilon_{2j-1,2k-1}\right| p_{2j+2k-2}\, e_1^{k+j-1}, \quad e_1 = \frac{1}{h^2} \qquad (16)$$

Card 2/3

The plane problem . . .

where $p_\alpha = \sum_{k=1}^{\infty} \frac{1}{k^\alpha}$ and $\sigma_{j,k}$

$$(1+x)^{-j} = \sum_{k=0}^{\infty} \sigma_{j,k} x^k, \quad |x| < 1 . \qquad (11)$$

With a sufficiently large distance H between adjacent ellipses one can use in (18) for Y the expression (15) without σ_0. The error resulting by neglecting σ_0 is then estimated. Examples of the stresses determined by the suggested method are given in three tables.

ASSOCIATION. Khar'kovskiy avtomobil'no dorozhnyy institut (Khar'kov Automobile and Highway Institute)

SUBMITTED: June 24, 1959

Card 3/3

S/170/62/005/003/008/012
B108/B104

10 3100

AUTHOR: Makhovikov, V. I.

TITLE: A problem of thermal elasticity of a plate

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 3, 1962, 95 - 102

TEXT: The thermal stresses arising in an elastic plate of height $2h_0$ in a steady temperature field with a uniform gradient in the z direction only, $t(z)$, are calculated. The author assumes the origin of coordinates to be in the center of the plate, its base and top ($z = \pm h_0$) to be free from stresses. The stresses at the sides of the plate can be found from the equation

$$\psi(\xi_0) + \varkappa_1 \varphi''(\xi_0) + \bar{\xi}_0 \varphi'(\xi_0) + \overline{\varphi(\xi_0)} =$$
$$= -p\bar{\xi}_0 - \frac{1}{4h_0 G}\int (P_* - iT_*)\, d\bar{\xi}_0 + c,$$

$\ldots - e^{i\alpha} ds$, ξ_0 is the value of the variable $\xi = x + iy$ at the contour,

Card 1/2

$\nu_1 = -2\mu h_o^2/3(1 + \mu)$, μ - Poisson's ratio, $p = \frac{\alpha'(1 + \mu)}{2h_o(1 - \mu)} \int_{h_o}^{h_o} t(z)dz$, P_ν and T_ν are stresses normal and tangential, respectively, to the contour (side surface) of the plate, $G = E/2(1 + \mu)$, E - Young's modulus. c is an arbitrary constant. The bar indicates the complex conjugate. $\psi(\zeta)$ and $\chi(\zeta)$ are two analytic functions in the plane z = 0. α' is the linear expansion coefficient. The above boundary value problem is solved for an unbounded plate with an infinite number of openings in it according to an earlier method of the author (IFZh, no. 1, 1961). There are 2 figures and 7 Soviet references.

SUBMITTED: June 1, 1961

Card 2/2

S/200/62/000/011/001/008
D234/D308

10.6100

AUTHOR: Makhovikov, V. I.

TITLE: Some cases of stress concentration in a plate with an infinite number of holes

PERIODICAL: Akademiya nauk SSSR. Sibirskoye otdeleniye. Izvestiya, no. 11, 1962, 33-45

TEXT: Using the method described in a previous paper, the author investigates the problems of an infinite plate having an infinite number of circular or square holes along a straight line, and cases of two or three rows of circular holes. Boundary properties of functions which are analytical outside the holes, are described for the case of one row of holes. Stress concentration on the hole boundaries was investigated for 16 different cases of load. Series expansions are given for some of these cases without specifying the form of series coefficients (some numerical values of these are tabulated). There are 4 figures and 9 tables.

VB

Card 1/1

MAKHOVIKOV, V.I. [Makhovykov, V.I.]

Heat problem in the theory of elasticity for a plate. Dop. AN URSR no.9:1175-1179 '62. (MIRA 18:4)

S/170/63/006/001/012/015
B112/B186

AUTHOR: Makhovikov, V. I.

TITLE: Some approximate solutions of the thermal conductivity and wave equations for solids revolution and slabs

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 6, no. 1, 1963, 87-96

TEXT: Approximate solutions of the thermal conductivity and wave equations containing an arbitrary analytical function φ are obtained following the model of the solution

$$\Phi = \mathrm{Re}\left[\sum_{k=0}^{m} (a_k/\varrho^k) \int_k \varphi(\xi)d\xi\right],$$

$$a_{k+1} = -i(4k(k+1)+1)a_k/8(k+1), \quad (k = 0,1,\ldots,m-1)$$

of the equation

$$4\partial^2\Phi/\partial\xi\,\partial\bar{\xi} + \Phi/4\varrho^2 = 0$$

With the help of these solutions, some boundary value problems for solids

Card 1/2

S/170/63/006/001/012/015
B112/B186

Some approximate solutions of ...

of revolution and slabs of relatively complicated form are solved.

SUBMITTED: March 7, 1962

JB

Card 2/2

MAKHOVIKOV, V.I., kand.tekhn.nauk

Solution of heat conductivity problems of a cylinder and plate from nonuniform material. Izv. vys. ucheb. zav.; energ. 6 no.7:115-120 Jl '63. (MIRA 16:8)

(Heat--Transmission)

MAKHOVIKOV, V.I. (Khar'kov)

Solution of a heat transmission problem for a plate with variable thickness. Izv. AN SSSR. Otd. tekh. nauk. Energ. i transp. no.3:348-352 My-Je '63. (MIRA 16:8)

ACCESSION NR: AP4042544 S/0140/64/000/004/0111/0117

AUTHOR: Makhovikov, V. I. (Khar'kov)

TITLE: Dynamic elasticity theory problem for a plate of transversally isotropic material

SOURCE: IVUZ. Matematika, no. 4, 1964, 111-117

TOPIC TAGS: elasticity theory, dynamic problem, transverse isotropy, steady state oscillation, boundary condition, initial condition, Hook law, elasticity modulus

ABSTRACT: The author studies steady-state oscillations of a constant thickness plate. He assumes the body to be isotropic in all planes parallel to the middle plane. Under steady-state conditions, studying the oscillations in the course of time t sufficiently far from the initial moment t = 0, he assumes the displacements and stresses proportional to a certain periodic function of t. Since the effect of the initial conditions in relation to the interior friction occurring in any real system decreases with time, he restricts consideration to the satisfaction of only the boundary conditions. He considers the cases of flexure of the middle

Card 1/2

ACCESSION NR: AP4042544

plane of the plate, investigating four forms of the boundary conditions on the bases of the plate and of stress-strain on the middle plane of the plate. Orig. art. has: 30 formulas.

ASSOCIATION: none

SUBMITTED: 17Oct62 ENCL: 00

SUB CODE: AS NO REF SOV: 007 OTHER: 000

Card 2/2

ACCESSION NR: AP4037100 S/0258/64/004/002/0268/0274

AUTHOR: Makhovikov, V. I. (Khar'kov)

TITLE: Solution of a three dimensional problem in elasticity theory for a cylinder

SOURCE: Inzhenernyy zhurnal, v. 4, no. 2, 1964, 268-274

TOPIC TAGS: elasticity theory, cylinder, three dimensional problem, precise solution, infinite system of equations, stationary dynamic problem, isotropy, Helmholtz operator, Poisson coefficient, Laplace operator, Lame equilibrium

ABSTRACT: Using a solution method based on representation of the desired functions in terms of a differential Helmholtz operator and the use of series, the author obtains a precise solution for the three dimensional stationary dynamic problem in elasticity theory for an isotropic cylinder on whose ends are imposed mixed boundary conditions. On the lateral surface of the cylinder the given solution makes it possible to satisfy all the boundary conditions in displacements or stresses. Orig. art. has: 27 formulas.

ASSOCIATION: none

Card 1/2

MAKHOVIKOV, V.I. (Khar'kov)

Solution of temperature problems for a transversally isotropic cylinder. Izv. AN SSSR. Mekh. no.6:100-105 N-D '65.
(MIRA 18:12)

L 40014-66 EWT(1)

ACC NR: AP6006145 SOURCE CODE: UR/0376/65/001/010/1383/1389

AUTHOR: Makhovikov, V. I.

ORG: none

TITLE: Three-dimensional problems of heat conduction for certain bodies of inhomogeneous material

SOURCE: Differentsial'nyye uravneniye, v. 1, no. 10, 1965, 1383-1389

TOPIC TAGS: heat conduction, three dimensional flow, boundary value problem, Fourier analysis, DIMENSION ANALYSIS

ABSTRACT: Utilizing a method presented in an earlier work IFV, AN SSSR, OTN, energetika i transport, No. 3, 1963), the author obtains the exact solutions to the three-dimensional problems of steady-state heat conduction for the two cases of the cylinder and hollow sphere made of inhomogeneous material. The equation of heat conduction used in the case of an inhomogeneous medium with no heat source is taken in the following form

$$N(T) \equiv \frac{\partial}{\partial x}\left(\lambda \frac{\partial T}{\partial x}\right) + \frac{\partial}{\partial y}\left(\lambda \frac{\partial T}{\partial y}\right) + \frac{\partial}{\partial z}\left(\lambda \frac{\partial T}{\partial z}\right) = 0, \qquad (1)$$

where λ is the variable coefficient of heat conduction. It is derived in works by

Card 1/2

L 40014-66

ACC NR: AP6006145 C

A. V. Lykov (1952) and by B. M. Budak, A. A. Samarskiy, and A. N. Tikhonov (1956). The method of Fourier series in mathematical physics is employed in its solution, in conjunction with pertinent boundary conditions and transformation of coordinates. Orig. art. has: 53 equations.

SUB CODE: 20,12/ SUBM DATE: 11Jan65/ ORIG REF: 005/ OTH REF: 000

MAKHOVIKOV, V.I.

Solution of heat conductivity problems for an inhomogeneous solid of revolution. Inzh.-fiz. zhur. 10 no.1:115-119 Ja '66. (MIRA 19:2)

1. Submitted April 3, 1965.

ACC NR: AP6021539 SOURCE CODE: UR/0281/66/000/003/0109/0116

AUTHOR: Makhovikov, V. I. (Khar'kov)

ORG: none

TITLE: The solution of spatial problems of thermal conductivity

SOURCE: AN SSSR. Izvestiya. Energetika i transport, no. 3, 1966, 109-116

TOPIC TAGS: thermodynamics, thermal effect, heat conduction, Laplace transform

ABSTRACT: A method, proposed elsewhere by the author (Novyy metod resheniya zadach teploprovodnosti dlya tel vrashcheniya. Izv. AN SSSR, Energetika i transport, 1965, No. 5) for the solutuion of the stationary heat conductance problem in the case of bodies of rotation, is extended in this paper to bodies of arbitrary configuration for unstationary thermal conditions, when the temperature changes exponentially in time, and natural conditions can be disregarded. The method is based on the assumption that the body is made of a heterogeneous anisotropic material whose density, specific thermal capacity, and thermal conductivity factors in the direction of axes α_1, α_2, and α_3 are, respectively, p_*, c_*, and λ_1, λ_2, and λ_3 (differentiable functions of variables α_1, α_2, and α_3). As the result of the imposition of definite conditions on these functions, the thermal conductivity equation is significantly simplified, making it

Card 1/2 UDC: 536.21.001.1

ACC NR: AP6021539

possible to represent the unknown temperature by a function of variables α_1 and α_2, which satisfies either a Laplace transform or an equation that has been sufficiently well studied and is convenient to use in the solution of plane problems. In this way, with the boundary conditions on the surface Π_0 satisfied, well-known and effective methods for the solution of plane problems can be used, regardless of the complexity of region D, and expressions can be written for p_*, c_*, λ_1, λ_2, and λ_3 which will differ only little from the given constants in the range of variables α_1, α_2, and α_3 in which the body V is defined. Thus, the thermal conductivity problem can be solved for a body of nearly homogeneous material. Orig. art. has: 68 formulas, 2 tables, and 1 figure.

SUB CODE: 20/ SUBM DATE: 15Oct65/ ORIG REF: 009

Card 2/2

MAKHOVKA, P.P.

3
1-4E2c
1-4E4j
1-4E3d

The analysis of a mixture of vanadium oxides. P. P. Makhovka (Agr. Inst., Ukr. S.S.R., Belaya Tserkov). *Zavodskaya Lab.* 23, 633-5(1957).—V catalysts when used in the phthalic anhydride production are partially reduced, with a retention of V_2O_5 in the center of the catalyst granules, and formation of concentric rings which consist of VO_2 and V_2O_3. V_2O_5 can be sepd. from VO_2 and V_2O_3 by soln. in alkali. VO_2 can be oxidized to V_2O_5 by 0.1*N* $KMnO_4$ and the total V_2O_5 (the original + the oxidation product of VO_2) can be titrated with 0.1*N* $FeSO_4.(NH_4)_2SO_4$ soln.

W. M. Sternberg

NS

KACHAN, A.A.; MAKHOVKA, P.P.

Photochemical reduction of ceric sulfate in aqueous solutions of sulfuric acid. Zhur. fiz. khim. 36 no.3:526-532 Mr '62. (MIRA 17:8)

1. Belotserkovskiy sel'skokhozyaystvennyy institut.

MAKHOVKO, V. V. Dr. Biolog. Sci.

"Movement of Spermatozoids to an Ovum, and Sperme-Activating and Agglutinating Principles," Sub. 8 May 47, Moscow Zooveterinary Inst.

Dissertations presented for degrees in science and engineering in Moscow in 1947.

SO: Sum.No.457, 13 Apr 55

MAKHOVKO, V. V., Dr.

Doctor of Biological Sciences, Kursk Medical Institute.
"The progress of spermatozoons toward the ovum and the role of vaginal secretions in fecundation."
SO: THE FIGHT AGAINST STERILITY IN AGRICULTURAL ANIMALS, Proceedings of the United Plenum of the Veterinary and Animal Husbandry Sections, P. 84, Trans. 191, by L. Lulich, Uncl. Moscow 1949.

MAKHOVKO, V.V., professor; ZORIN, A.N.; KOROBOVA, T.B.; KRASHENINNIKOVA, A.I.; LAPINA, V.F.; SMIRNOVA, Ye.I.; SUKHACHEV, N.G.; ZHEGALOV, S.B.

[Practical work in general biology for medical schools] Praktikum po obshchei biologii dlia medvuzov. Moskva, Medgiz, 1953. 294 p. (MLRA 7:1)
(Biology)

MAKHOVKO, V.V., professor

Preface; on methods for solving the problem of physiological regeneration. Uch.zap. 2-go MGMI 16:3-6 '58. (MIRA 13:6)
(REGENERATION (BIOLOGY))

USSR / Human and Animal Morphology (Normal and Pathological). Urogenital System. S

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 17018

Author : Makhovko, V. V.
Inst : Second Moscow Medical Institute
Title : Histomorphology of the Ovary of Immature Rabbits Under Normal Conditions and in Starvation

Orig Pub : Uch. zap. 2-y Mosk. med. in-t, 1958, 16, 130-142

Abstract : It was shown in experiments on 1-2⅓-month-old rabbits that destructive processes in the ovary (O) are not limited to the medullary substance and connective tissue. Deep degenerative changes embrace all elements of O; among them also, sexual cells at the stage

Card 1/2

USSR / Human and Animal Morphology (Normal and Pathological). Urogenital System. S

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 17019

Author : Makhovko, V. V.; Rodnikov, A. V.
Inst : Second Moscow Medical Institute
Title : Histomorphology of Ovaries of Immature Rabbits in Parenteral Feeding

Orig Pub : Uch. zap. 2-y Mosk. med. in-t, 1958, 16, 143-153

Abstract : The ovaries of starving 1-2½-month-old rabbits were studied, to which a concentrated therapeutic serum of Belen'kiy (12-15% of protein) (I) was intravenously introduced. Thirty-six hours after parenteral introduction of I in one-month-old rabbits, satisfying

Card 1/3

USSR / Human and Animal Morphology (Normal and Pathological). Urogenital System. S

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 17019

only 50-70% of the protein need, restoration of cell structure, sharp increase of the number of ovicells which began the stage of active growth, increase of their size and number of primordial follicles, decrease of the percentage of atretic follicles, etc., were observed. Increase of the duration of introduction of I intensifies these processes. Not only a normalizing but also a stimulating effect of I on the process of differentiation of primordial follicles was noted. Increase in the frequency of occurrence of cases of amitotic division of gametes at the stage of primary follicles

Card 2/3

USSR / Human and Animal Morphology (Normal and Pathological). Urogenital System. S

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 17019

also testifies to the intensification of the regenerating process in parenteral feeding under conditions of alimentary insufficiency.

Card 3/3

USSR / Human and Animal Morphology (Normal ard Pathological). Urogenital System. S

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 17024

Author : Makhovko, V. V.; Rodnikov, A. V.
Inst : Second Moscow Medical Institute
Title : Restorative Processes in the Tests of Immature Rabbits After They Suffered Starvation

Orig Pub : Uch. zap. 2-y Mosk. med. in-t, 1958, 16, 154-163

Abstract : It was shown in experiments on 1-2½-month-old male rabbits that starvation (without deprivation of water) induces deep degenerative changes in the cells of the spermatogenic epithelium (SE), sharper than the changes in the ovary of rabbits of the same age. Complete

Card 1/2

USSR / Human and Animal Morphology (Normal and Pathological). Urogenital System. S

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 17024

decomposition of a considerable amount of SE is observed; the diameter of convoluted tubuli decreases. The introduction of a protein preparation leads to rapid regeneration of SE; the diameter of convoluted tubuli almost reaches normal after only 24 hours, and after 72 hours exceeds it considerably (stimulating effect). Parenteral protein feeding of starving animals leads to faster restoration of the structure of the testes than feeding per os.

Card 2/2

MAKHOVKO, Vera Vladimirovna, red.

[Course in general biology for medical schools] Praktikum po obshchei biologii dlia medvuzov. Izd.2. Moskva, Medgiz, 1960. 326 p. (MIRA 13:9)

(BIOLOGY--LABORATORY MANUALS)

MAKHOVKO, V.V., prof., red.; TEREZA, S.I., prof., red.; LIOZNER, L.D., prof., red.; STROGANOVA, Ye.V., kand. biol. nauk, red.; ROMANOV, Yu.A., red.

[Materials from the Symposium on Cell Division and the Regeneration of the Endocrine Glands] Materialy Simpoziuma po kletochnomu deleniiu i regeneratsii zhelez vnutrennei sekretsii, 1962. Moskva, Mosk. ob-vo anatomov, gistologov i embroiologov, 1962. 61 p. (MIRA 15:5)

1. Simpozium po kletochnomu deleniyu i regeneratsii zhelez vnutrenney sekretsii, 1962. 2. Zaveduyushchiy kafedroy obshchey biologii 2-go Moskovskogo gosudarstvennogo meditsinskogo instituta im. N.I.Pirogova (for Makhovko). 3. Kafedra parazitologii i zoologii Moskovskogo tekhnologicheskogo instituta myasnoy i molochnoy promyshlennosti (for Tereza). 4. Zaveduyushchiy Laboratorii rosta i razvitiya instituta eksperimental'noy biologii Akademii meditsinskikh nauk SSSR (for Liozner). 5. Otdel morfologii Vsesoyuznogo Instituta eksperimental'noy endokrinologii (for Stroganova). 6. Kafedra obshchey biologii 2-go Moskovskogo gosudarstvennogo meditsinskogo instituta im. N.I.Pirogova (for Romanov).
(CELL DIVISION (BIOLOGY)) (ENDOCRINE GLANDS)
(REGENERATION (BIOLOGY))

MAKHOVKO, V.V.; ROMANOV, Yu.A.

Symposium on cell division and regeneration of endocrine glands. Arkh. anat., gist. i embr. 43 no.11:119-121 N '62. (MIRA 17:8)

1. Adres avtorov: Moskva-117, ul. Pogodina, 6, ... korpus 2-go Moskovskogo gosudarstvennogo meditsinskogo instituta imeni Pirogova, kafedra obshchey biologii.

LEVCHENKO, B.L., inzh.; MAKHOVKO, Yu.Ye., inzh.

Tubular heaters for tightening large threaded joints. Energomashi-nostroenie 9 no.11:33-34 N '63. (MIRA 17:2)

GOHN, V.N.; MAKHOVNIKOV, D.I.

[Semiautomatic accelerator of brake release] Poluavtomaticheskii uskoritel' otpuska tormozov. Moskva, Transzheldorizdat, 1954. 24 p. (MIRA 8:1 D)

MAKHOVNIKOV, V.I. (Khar'kov)

Solution of a two-dimensional heat conductivity problem for an infinite connected region. Izv. AN SSSR.Energ.i transp. no.4: 118-129 Jl-Ag '65. (MIRA 18:10)

L 9837-66 EWT(d)/EWT(1)/EPF(n)-2/EWA(1) IJP(c) WW
ACC NR: AP5026576 SOURCE CODE: UR/0281/65/000/005/0151/0154

AUTHOR: Makhovikov, V. I. (Khar'kov)

ORG: none

TITLE: New method for solving problems of heat conduction in the solids of revolution

SOURCE: AN SSSR. Izvestiya. Energetika i transport, no. 5, 1965, 151-154

TOPIC TAGS: heat conduction, heat transfer

ABSTRACT: The solid of revolution is assumed to consist of a heterogeneous material whose thermal conductivity λ is a differentiable function of variables ρ, z, ϑ (cylindrical coordinates of the solid obtained by revolving a planar area D about the z-axis). By imposing a certain condition ($\lambda = w^2/\rho$) on the above function, the heat conductance equation is considerably simplified, and the

Card 1/2 UDC: 536.212.001.24

L 9837-66
ACC NR: AP5026576

temperature is represented in terms of harmonic functions of ρ, z. This permits using well-known efficient methods of solving planar problems for a wide class of D. Despite the constraint imposed on λ, this function can still be varied within rather wide limits which permits, within a certain range of ρ, z, ϑ, bringing λ near a constant value and obtaining an efficient solution of the heat-conduction problem for a near-homogeneous body. Orig. art. has: 37 formulas.

SUB CODE: 20 / SUBM DATE: 29Apr65 / ORIG REF: 009

Card 2/2

MAKHOVIKOV, V.I.

Three-dimensional heat conduction problems for certain bodies from inhomogeneous material. Dif. urav. 1 no.10:1383-1389 O '65. (MIRA 18:10)

24,200

S/021/62/000/009/005/008
D234/D308

AUTHOR: Makhovykov, V.Y.

TITLE: Temperature problem of the theory of elasticity for a plate

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 9, 1962, 1175 - 1179

TEXT: The author considers an elastic isotropic plate of constant thickness 2h, the coordinate axes x, y being situated in the middle plane and the z axis being perpendicular to it. There is no external load and the temperature is an odd function of z only. It is found to be impossible to satisfy the boundary conditions at all points of the lateral surface and integral conditions are chosen. These are represented as a single equation in complex variables. The author considers the case when the displacement w along the z axis is given for the lateral surface in the form $w = w_1$, $\partial w/\partial \nu = w_2$, the derivative being taken with respect to the external normal of the boundary in the middle plane. w_1 and w_2 are given functions of the arc s of

Card 1/2

Temperature problem of the ...

the boundary. (The displacements along the axes x, y are equal to zero). These two equations are reduced to a single one in complex variables and substituted into the equation representing the boundary conditions. The result is

$$\Psi'(\xi) + \bar{\xi}\varphi'(\xi) + \overline{\varphi(\xi)} + \frac{2\mu z_0^2}{1-\mu}\varphi''(\xi) = ie^{-i\alpha}\left(\frac{\partial w_1}{\partial s} + iw_2\right) \quad (19)$$

where φ and Ψ are analytic functions inside the plate, $\bar{\xi} = x - iy$, α is the angle between the external normal mentioned above and the x axis, and μ is Poisson's coefficient. [Abstractor's note: z_0 not defined]. This equation cannot be satisfied at all points of the lateral surface and the author chooses $z_0 = 0$. Results of the solution (the functions φ and Ψ' and the value of tangential moment in the aperture) are given for a ringshaped plate whose boundaries are concentric circles. There are 2 figures.

PRESENTED: by Academician H.M. Savin, AS UkrSSR

SUBMITTED: November 14, 1961

Card 2/2

KISELEV, I.M.; MAKHRACHEV, A.Ya.

Conference on the full use of nepheline rocks from the Azov Sea region. Met. i gornorud. prom. no.6:78-79 N-D '65. (MIRA 18:12)

PAN'KO, Ivan Kallistratovich; MAKHRACHOV, Aleksandr Yakovlevich; NIPORKO, Yu.I., red.

[Economic regions of the Ukraine] Ekonomichni raiony Ukrainy. Kyiv, Politvydav Ukrainy, 1965. 94 p. (MIRA 18:8)

DYADYK, Ivan Ivanovich; MAKHRACHEV, Aleksandr Yakovlevich [Makhrachov, O.IA.]; KHARCHENKO, P.F., kand.ekon.nauk, glavnyy red.; RESHETNYAK, O.O., glavnyy red.; STAROSTENKO, T.M., red.

[The Stalino Economic Administrative Region] Stalins'kyi ekonomichnyi administratyvnii raion. Kyiv, 1960. 39 p. (Tovarystvo dlia poshyrennia politychnykh i naukovykh znan' Ukrains'koi RSR. Ser.2, no.8)

(MIRA 14:2)

(Stalino Province--Economic policy)

MAKHRACHEV, Aleksandr Yakovlevich[Makhrachov, O.], nauchnyy sotr.;
MAKARENKO, Guriy Karpovich[Makareni, H.], nauchnyy sotr.;
KHORUZHEVSKIY, Nikolay Dem'yanovich[Khoruzhevs'kyi, M.];
SOLODKIY, D.I.[Solodkyi, D.I.], red.; MOROZKO, L.G.
[Morozko, L.H.], tekhn. red.

[Cities of Kiev Province and their future]Mista Kyivshchyny, ikh maibutnie. Kyiv, Kyivs'ke oblasne knyzhkovo-gazetne vyd-vo, 1962. 121 p. (MIRA 16:4)

1. Institut ekonomiki Akademii nauk Ukr.SSR (for Makharchev, Makarenko). 2. Korespondent "Kiyevskoy pravdy" (for Khoruzhevskiy).
(Kiev Province--Cities and towns)

MAKHRACHOV, O.Ya.

The population and cities of the Ukrainian S.S.R. Geog. zbir. no.5:163-172 '62. (MIRA 15:12)

MAKHROV, A.V.

Test for excretion of sergozin by the kidneys in urography as a method of determining kedney function. Lab.delo 5 no.6:24-27 N-D '59. (MIRA 13:3)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta khirurgicheskogo tuberkuleza (direktor - deystvitel'nyy chlen AMN SSSR prof. P.G. Kornev).
(SKIODAN) (KIDNEYS--RADIOGRAPHY)

MAKHROV, A.V. (Leningrad, M-199, Blagodatnyy per., d.15, kv.14)

Association of osteoarticular tuberculosis with tuberculosis of the kidneys [with summary in English]. Vest.khir. 82 no.3:111-113 Mr '59. (MIRA 12:4)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta khirurgicheskogo tuberkuleza (dir. - prof. P.G. Kornev, nauchnyy rukovoditel' raboty - kand. med. nauk N.I. Chuchelov).
(TUBERCULOSIS, OSTEOARTICULAR, compl.
renal tuberc. (Rus))
(TUBERCULOSIS, RENAL, compl.
osteoarticular tuberc. (Rus))

MAKHROV, A.V.

Determination of kidney function following the administration of sergosine for urographic purposes. Urologiia 25 no.2:30-34 Mr-Ap '60. (MIRA 13:12)
(CONTRAST MEDIA) (KIDNEYS) (URINARY ORGANS—RADIOGRAPHY)

MAKHROV, A. V.

Clinical observations on simultaneous tuberculous infection of the kidneys and osteoarticular system. Probl. tub. no.7:65-68 '61. (MIRA 14:12)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta khirurgicheskogo tuberkuleza (dir. - doktor meditsinskikh nauk D. K. Khokhlov, zam. direktora po nauchnoy chasti - deystvitel'nyy chlen AMN SSSR prof. P. G. Kornev)

(KIDNEYS—TUBERCULOSIS) (BONES—TUBERCULOSIS)

GRADOBOYEV, Nikolay Dmitriyevich; PRUDNIKOVA, Vera Mikheyevna; SMETANIN, Ivan Semenovich; MAKHROV, M.K., red.; SHATOKHIN, V.I., tekhn. red.

[Soils of Omsk Province] Pochvy Omskoi oblasti. Omsk, Omskoe knizhnoe izd-vo, 1960. 372 p. (MIRA 14:9)
(Omsk Province--Soils)

ROTERMEL', Bruno Pavlovich; IVANOV, Dmitriy Ivanovich; MAKHROV, M.K., red.; PLAKHTIYENKO, T.I., red.; DEYEV, P.G., tekhn. red.

[Electrical equipment of tractors and combine harvesters; their installation, operation, maintenance and repair] Elektrooborudovanie traktorov i kombainov; ustroistvo, ekspluatatsiia, tekhnicheskii ukhod, neispravnosti i ikh ustranenie. Omsk, Omskoe knizhnoe izd-vo, 1962. 148 p. (MIRA 16:4)

1. Omskiy sel'skokhozyaystvennyy institut im.S.M.Kirova (for Rotermel', Ivanov).

(Harvesting machinery--Electric equipment)
(Tractors--Electric equipment)

RCTER[illegible]EL', Bruno Pavlovich; [illegible], Aleksandr Pavlovich; [illegible]V, [illegible].K., red.

[Maintenance of tractors and combines] Tekhnicheskii [illegible] za traktorami i kombainami. Omsk, Omskoe knizhnoe izd-vo, 1963. 120 p. (MIRA [illegible])

ALEKSANDROV, N.I.; GEFEN, N.Ye.; RUDNEVA, O.A.; LEBEDINSKIY, V.A.; OGARKOV, V.I.; MAKHROV, N.F.; FILIPPENKO, A.I.

Research on effective chemical vaccines against some zoonoses. Report No.2: Development of a chemical brucellosis vaccine and study of its effectiveness in experiments on animals. Zhur. mikrobiol., epid. i immun. 32 no.11:66-72 N '61. (MIRA 14:11)
(BRUCELLOSIS) (VACCINES) (ZOONOSES--PREVENTION)

OGARKOV, V.I.; MAKHROV, N.F.; TSELLARIUS, I.K.; MALYAVIN, A.G., kand. veterin. nauk; SOLOV'YEVA, V.S., nauchnyy sotrudnik

Laboratory practice. Veterinariia 38 no.8:70-77 Ag '61 (MIRA 18:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii (for TSellarius). 2. Gosudarstvennyy nauchno-kontrol'nyy institut veterinarnykh preparatov Ministerstva sel'skogo khozyaystva SSSR (for Malyavin, Solov'yeva).

MAKHROV, P.

[Historical account of the Vilnius Military School] Istoricheskaia pamiatka o Vilenskom voennom uchilishche. Paris, 1959. 55 p. (MIRA 14:11)

(Vilnius—Military education)

MARKOVA, I.

In a city born of oil. Tekhnik 6 no.9:31-34 S '61.
(MIRA 14:10)
(Leninogorsk(Tatar A.S.S.R.)—Petroleum industry)

MAKHROVA, L.

From the school desk to the lathe. Neftianik 7 no.1:25 Ja. '62. (MIRA 15:2)
(Petroleum workers—Education and training)

MAKHROVSKAYA, A. V.

MAKHROVSKAYA, A. V.--"Building and Planning Neva Quays." *(Dissertations for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions.) Min of Higher Education USSR, Leningrad Order of Labor Red Banner Engineering-Construction Inst, Leningrad, 1955

SO: Knizhnaya Letopis', No. 25, 18 Jun 1955

* For Degree of Candidate in Architectural Sciences

NAUMOV, A.I.; MAKHROVSKAYA, A.V.; IVANOVA, O.A.; SHUR, N.Ya., red.; ROTENBERG, A.S., red.izd-va; PUL'KINA, Ye.A., tekhn.red.

[Residential district and microdistrict] Zhiloi raion i mikroraion. Leningrad, Gosstroiizdat, 1963. 94 p. (MIRA 16:11)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Naumov).

(City planning)

MAKHROVSKAYA, Z. A.

MAKHROVSKAYA, Z. A. -- "A Comparative Study of the Productivity of Mixtures of Annual Grasses under the Conditions Prevailing in Kostroma Oblast." All-Union Sci Res Inst of Fodder imeni V. R. Vil'yams. Moscow, 1955. (Dissertation for the Degree of Candidate in Agricultural Sciences).

So.: Knizhnaya Letopis', No. 6, 1956.

USSR

CATEGORY : Cultivated Plants. Fodder Grasses and Roots.

ABS. JOUR. : Referativnyy Zhurnal Biologiya, No. 5 1959, No. 20350

AUTHOR : Makhrovskaya, Z.A.

INST. : Kostroma Agric. Inst.

TITLE : Comparative Study of the Productivity of Mixed Annual Grass Sowings in Kostromskaya Oblast.

ORIG. PUB. : Tr. Kostromsk. s.-kh. in-ta, 1957, vyp. 1, 36-44

ABSTRACT : Results are given of experiments on summer vetch, field pea, grass peavine, serradella and narrowleaf (Lupinus angustifolius) and European yellow lupines, conducted in 1952-1954. Oats and annual ryegrass were taken as components of the mixture. Growth dynamics, the accumulation of dry and green mass on the basis of vegetation stages, and protein and cellulose content were studied. The comparative productivity of mixed sowing of annual

CARD: 1/2

LESNIKOVA, G.; MAKHROVSKIY, V.

Exchange of experiences in the maintenance and repair of equipment. Tekst. prom. 25 no.9:92 S '65.
(MIRA 18:10)

MAKHROVSKIY, V.G.

Metrology and the theory of the precision of structures. Trudy VNIIM no.12:5-39 '51. (MIRA 11:6)
(Structures, Theory of) (Measuring instruments)

MAKHROVSKIY, V.G.

Plotting curves of the distribution of the sum of random measurement errors with unknown density of probability. Trudy VNIIM no.12:40-51 '51. (MIRA 11:6)
(Mensuration) (Errors, Theory of)

MAKHROVSKIY, V.G.

Review of All-Union State Standard 2789-45 "Surface smoothness. Microgeometry of surfaces. Classifications and specifications." Trudy VNIIM no.12:102-121 '51. (MIRA 11:6)
(Surfaces (Technology--Standards)

MAKHROVSKIY, V.G.; GRECHKO, M.F.

Investigating particular methods in evaluating the smoothness of surfaces. Trudy VNIIM no.12:122-132 '51. (MIRA 11:6)
(Surfaces(Technology)--Standards)

TIKHODEYEV, P.M., prof.; YUDIN, M.F., kand.tekhn.nauk, otv.red.; MALIKOV, M.F., prof., retsenzent; MAKHROVSKIY, V.G., prof., retsenzent; FRUMKIN, P.S., tekhn.red.

[Essays on standard (metrological) measurements] Ocherki ob iskhodnykh (metrologicheskikh) izmereniiakh. Moskva, Gos. nauchn.-tekhn.izd-vo mashinostroit.i sudostroit.lit-ry 1954. 215 p. (Leningrad. Vsesoiuznyi nauchno-issledovatel'skii institut metrologii, no.21) (MIRA 13:3)

1. Direktor Vsesoyuznogo nauchno-issledovatel'skogo instituta metrologii imeni D.I.Mendeleyeva (for Yudin).
(Mensuration)

MAKHROVSKIY, V.G., red.

[Instructions 146-53 for checking standard specimens for determining the class of surface smoothness] Instruktsiia 146-53 dlia poverki rabochikh obraztsov chistoty poverkhnosti. Izd. ofitsial'noe. Moskva, 1957. 15 p.
(MIRA 14:5)

1. Russia(1923- U.S.S.R.) Komitet standartov, mer i izmeritel'nykh priborov.
(Surfaces(Technology)-- Testing)

MAKHROVSKIY, V.G.

PUZANOVA, Varvara Petrovna, kand.tekhn.nauk; MAKHROVSKIY, V.G., doktor tekhn.nauk, prof., retsenzent; IZHEVSKIY, M.N., inzh., red.; CHFAS, M.A., red.izd-va; SOKOLOVA, L.V., tekhn.red.

[Dimensional analysis and application of dimensions to working drawings] Razmernyi analiz i prostanovka razmerov v rabochikh chertezhakh. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1958. 195 p. (MIRA 11:5)
(Mechanical drawing)

ACC NR: AR6035223 (AN) SOURCE CODE: UR/0081/66/000/016/S082/S082

AUTHOR: Makhmudov, D. S.; Pulatov, A.

TITLE: Investigation of antifriction properties of compositions on a caprone base

SOURCE: Ref. zh. Khimiya, Part II, Abs. 16S588

REF SOURCE: Tr. Tadzh. s.-kh. in-ta, v. 7, 1965, 56-70

TOPIC TAGS: caprone, plastic coating, heat expansion, heat conductivity, aluminum powder, friction coefficient, antifriction property, wear resistance

ABSTRACT: A study was made on widening the temperature range for the use of plastic coatings, to increase their resistance to wear, to raise the heat conductance, to decrease water absorption, and to lower the coefficient of thermal expansion of a polyamide by introducing additions such as aluminum powder, talc, graphite, and MoS_2. A polyamide coating, applied to the surface of metal bearings, creates a strong antifriction layer capable of withstanding high stresses and operating even with insufficient lubrication. The surface of a shaft (roller) contacting a bearing will hardly show any wear. This is explained by the fact that abrasive particles falling

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ACC NR: AR6035223

on friction surface instantly impress into the caprone. The addition of MoS_2 to caprone as a filler will yield a formulation with a minimum friction coefficient and a maximum resistance to wear. V. Kolesnik. [Translation of abstract] [NT]

SUB CODE: 11/

Card 2/2

L 11531-66 EWT(d)/EWT(m)/EWP(n)-2/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l) 3
ACC NR: AP6005278 LJP(c) JD/WW/HW/JG/SOURCE CODE: UR/0413/66/000/001/0017/0017
DJ

INVENTOR: Moskalenko, N. D.; Novikov, O. K.; Pavlov, V. V.; Garibov, G. S.; Makhnovskiy, V. D.; Zhizhina, T. S.; Rakhinskiy, G. N.; Shur, I. A. 61 B

ORG: none

TITLE: Continuous mill for rolling aluminum strips from liquid metal. Class 7, No. 177395

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 7

TOPIC TAGS: aluminum, aluminum strip, aluminum strip rolling, continuous rolling, rolling mill, liquid metal rolling

ABSTRACT: This Author Certificate introduces a continuous mill for rolling aluminum strips from liquid metal. The mill comprises a continuous casting machine with a mold formed by a metal belt and a wheel, a raw strip guiding stand, a planetary mill, and a finishing stand. In order to synchronize the casting and rolling rates, the

Card 1/2 UDC: [669.716:621.746.27] 621.771.237.064

L 14531-66

ACC NR: AP6005278

continuous casting machine is driven by the lower roll of the guiding stand by means

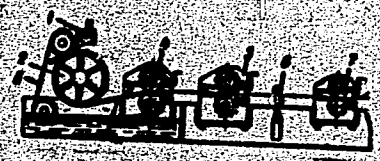

Fig. 1. Continuous mill

1 - Ladle for molten aluminum; 2 - mold wheel; 3 - metal belt; 4 - guiding stand; 5 - planetary stand; 6 - loop former; 7 - finishing stand.

of a metal belt (see Fig. 1). Orig. art. has: 1 figure. [WW]

SUB CODE: 11, 13/ SUBM DATE: 06May63/ ATD PRESS: 4198

Card 2/2

1. MAKHSHIN, S. L., Eng.

2. USSR (600)

4. Couplings

7. Self-locking, friction disc coupling. Vest.mash., 32, no. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, ~~April~~ 1953, Uncl.

MAKHSON, N.Ye.; SHEPELEVA, I.S.

Glomic tumors of the fingers with lesions of the phalanges.
Khirurgiia 40 no.11:124-129 N '65. (MIRA 18:7)

1. Otdeleniye kostnoy patologii (zav. - prof. V.Ya. Shlapoberskiy) TSentral'nogo instituta travmatologii i ortopedii Ministerstva zdravookhraneniya SSSR (dir. - prof. M.V.Volkov), Moskva.

MAKHSON, N.Ye.; BERMAN, A.M.

Xanthomatosis of the Achilles tendons. Ortop., travm. i protez. 26 no.5:58-61 My '65. (MIRA 18:10)

1. Iz TSentral'nogo instituta travmatologii i ortopedii (dir. - chlen-korrespondent AMN SSSR prof. M.V. Volkov).

GUSSAK, V.B.; KIMBERG, N.V.; UMAROV, M.U.; MAKHSUDOV, Kh.M.

Some data on the extent of erosion in Uzbekistan, its aftereffects and control measures. Uzb.biol.zhur. no.1:73-81 '59.
(MIRA 12:7)

1. Institut pochvovedeniya AN UzSSR.
(Uzbekistan--Erosion)

MAKHSUDOV, Kh. M.

Effect of irrigation erosion on some properties of typical Sierozems. Uzb. biol. zhur. no.3:74-79 '59. (MIRA 12:11)

1. Institut pochvovedeniya AN UzSSR.
(Uzbekistan--Irrigation) (Erosion) (Sierozem soils)

MAKHSUDOV, S.

Study of calves under the conditions of high temperature. Nauch. trudy Tash GU no.204:25-32 '62. (MIRA 17:9)

MAKHSUDOV, S.M.

Vascular reactions to high temperature in cattle. Uzb. biol. zhur. no.3:54-59 '60. (MIRA 13:7)

1. Ferganskiy gosudarstvennyy pedagogicheskiy institut.
(CATTLE—PHYSIOLOGY)
(BODY TEMPERATURE—REGULATION)
(HEAT—PHYSIOLOGICAL EFFECT)

SLADKOV, A.M.; KORSHAK, V.V.; MAKHSUMOV, A.G.

Synthesis of polyesters with acetylenic bonds in their chain. Izv. AN SSSR. Ser.khim. no.7:1343-1345 Jl '63. (MIRA 16:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Esters) (Polymers) (Acetylene compounds)

KORSHAK, V.V.; SLADKOV, A.M.; KUDRYAVTSEV, Yu.P.; MAKHSUMOV, A.G.

Synthesis of polyesters containing acetylenic bonds in the chain.
Izv. AN SSSR Ser.khim. no.10:1852-1853 O '63. (MIRA 17:3)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

MAKHSUMOV, A. G.; SLADKOV, A. M.; KORSHAK, V. V.

Oxidizing polyhydrocondensation of dipropargyl esters containing silicon, phosphorus, and fluorine. Izv AN SSSR Ser Khim no. 4:733-736 Ap '64. (MIRA 17:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ACCESSION NR: AP4033390 S/0062/64/000/004/0733/0736

AUTHOR: Makhsumov, A. G.; Sladkov, A. M.; Korshak, V. V.

TITLE: Acid polycondensation of dipropargyl ethers containing silicon, phosphorus and fluorine.

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 4, 1964, 733-736

TOPIC TAGS: acid polycondensation, dipropargyl ether, acetylenic polymer, triple bond containing polymer, phosphorus containing acetylenic polymer, fluorine containing acetylenic polymer, silicon containing acetylenic polymer, methylphosphonic acid dipropargyl ether, diphenoxysilane dipropargyl ether, polydehydrocondensation, thermal stability, hexafluorodiane dipropargyl ether, oligomer, IR spectrum

ABSTRACT: The authors continued their earlier work in preparing polymers containing triple bonds in the chain by acid polycondensation of dipropargyl ethers (A.M. Sladkov, V. V. Korshak i A. G. Makhsumov. Izv. AN SSSR. Ser. khim. 1343, 1963), attempting to prepare acetylenic polymers containing phosphorus, fluorine or silicon. These acetylenic ethers, not described previously in the literature,

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ACCESSION NR: AP4033390

were synthesized: the dipropargyl ethers of methylphosphonic acid, of diphenoxy silane, and of hexafluoro-2,2-bis-(4-hydroxyphenyl)- propane. When subject to acid polydehydrocondensation the first compound hydrolysed to the original materials, methylphosphonic acid and propargyl alcohol; the second hydrolysed to form polyphenoxysiloxane. A thermally stable oligomer of the dipropargyl ether of hexafluorodiane, molecular weight 2730 (dark brown, boiling 95-98C) and molecular weight 1327 (yellow, boiling 160-162C), was formed from the third. A polymer containing phosphorus and acetylenic bonds was obtained by the polycondensation of methylphosphonic acid chloranhydride with butyndiol. IR spectra identifying the products are shown. Orig. art. has: 4 figures.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Organometallic Compounds, Academy of Sciences, SSSR)

SUBMITTED: 09Dec63 DATE ACQ: 15May64 ENCL: 00

SUB CODE: OC NO REF SOV: 003 OTHER: 001

Card 2/2

LARINA, L.P.; SLADKOV, A.M.; MAKHSUMOV, A.G.

Ultraviolet adsorption spectra of dipropargyl ether and ester solutions. Izv. AN SSSR Ser. khim. no.7:1349-1352 Jl '64. (MIRA 17:8)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

L 12459-65 EWT(m)/EPF(c)/ENP(j)/T Pc-4/Pr-4 RM
ACCESSION NR: AP4047407 S/0062/64/000/010/1905/1907

AUTHOR: Sladkov, A. M; Korshak, V. V.; Makhsumov, A. G.

TITLE: Oxidative polydehydrocondensation of dipropargyl ethers

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1964, 1905-1907

TOPIC TAGS: polyether, dipropargyl ether, oxidative polydehydrocondensation

ABSTRACT: New dipropargyl ethers of 4,4'-dihydroxybiphenyl, 1,4-dihydroxynaphthalene, alizarin, and quinizarin have been synthesized and polymers prepared therefrom by oxidative polydehydrocondensation in the presence of copper salts. Because polyethers prepared earlier by this method contained copper in complex form, it was of interest to compare the properties of polymers with and without specific complex-forming groups. The synthesis of the monomers was conducted by reacting the dihydroxy compound with propargyl bromide in the presence of KOH at 70--80C. The monomers were identified by

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L 12459-65
ACCESSION NR: AP4047407

IR spectroscopy and elemental analysis; their melting points ranged from 126 to 172C. As expected, polyethers from alizarin and quinizarin, which contain complex-forming groups, had a much higher copper content than the other two polyethers. Orig. art. has: 2 tables and 1 figure.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Organoelemental Compounds, Academy of Sciences SSSR).

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Card 2/2

SLADKOV, A.M.; KORSHAK, V.V.; MAKHSUMOV, A.G.

Synthesis and study of polyesters containing triple bonds in the chain. Polycondensation of acetylenic glycols with dicarboxylic acids. Vysokom. soed. 6 no.8:1398-1402 Ag '64. (MIRA 17:10)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

L 11330-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 RM
ACCESSION NR: AP4045423 S/0190/64/006/009/1570/1572

AUTHOR: Korshak, V. V.; Sladkov, A. M.; Makhsumov, A. G.

TITLE: Preparation of polyethers by oxidative polydehydrocondensation of dipropargyl acetals

B

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 6, no. 9, 1964, 1570-1572

TOPIC TAGS: polyether, dipropargyl acetal, oxidative polydehydrocondensation

ABSTRACT: Communication IV of the series "Synthesis and study of the properties of polymers with acetylenic bonds in the backbone" reports that certain new dipropargyl acetals have been prepared and converted to a new type of polyether. Diacetal preparation involved the reaction of propargyl alcohol with formaldehyde, acetaldehyde, benzaldehyde, or furfuraldehyde. Reaction of propargyl alcohol with paraldehyde yielded the dipropargyl acetal of the linear dimer,

$$HC\equiv C-CH_2-O-\underset{CH_3}{\underset{|}{CH}}-O-\underset{CH_3}{\underset{|}{CH}}-O-CH_2-C\equiv CH,$$

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