PANASYUK, V.V.; LOZOVOY, B.L.

Determination of the ultimate load for a strip having two uneven cracks and subjected to bending. Vop. mekh. real'. tver. tela no. 2:49-58 '64. (MIRA 17:9)

PANASYUK, V.V.; KOVSHIK, S.Ye.

Temperature dependence of the surface energy of glass. Vop. mekh. real. tver. tela no.3:20-25 '64. (MIRA 17:11)

L 15999-65 EWT(m)/EWP(w)/EWA(d)/EWP(t)/EWP(b) EM
ACCESSION NR: AT4048339 S/2813/64/000/003/0003/0019

AUTHOR: Panasyuk, V.V. (Candidate of physico-mathematical sciences); Berezhnitskiy, L. T.

TITLE: Determination of maximum stresses during stretching of a plate having a curved crack

SOURCE: AN UkrSSR. Institut mashinovedeniya i aviomatiki, Lvov. Voprosy* mekhaniki real'nogo tverdogo tela, no. 3, 1964, 3-19

TOPIC TAGS: plate, plate tensile stress, plate failure, curved crack

ABSTRACT: The paper investigates the state of limiting equilibrium of an elastic infinite plate having a crack in the shape of a circular arc when constant tensile forces are applied at infinitely distant points. The problem consists of the determination of the stressed-strained state in the vicinity of the ends of the crack and the calculation of the maximum values of external loading in the presence of curved cracks; by the maximum value of external loading is meant the value of loading at which the crack just begins to propagate. The solution of the problem was based on the method of N.I. Muskhelishvili, the results of G.I. Barenblatt, and some additional assumptions concerning the direction of the initial propagation of the crack (it is assumed that the initial propagation of a curved crack of normal rupture takes place along the plane where the normal tensile stresses

Card 1/2

attain the maximum possible intensity). The following specific cases of the problem are examined: an infinite plate having a rectilinear crack and being stretched at infinitely distant points by a uniformly distributed stress directed at an angle to the line of the crack; an infinite plate having a circular arc crack in the form of a semicircle stretched with stresses applied at infinity at an angle to the axis of symmetry of the crack; an infinite plate having a circular arc crack (smaller than a semicircle) and stretched omnidirectionally. Orig. art. has: 7 figures and 72 formulas.

ASSOCIATION: none

SUBMITTED: 01Jun63 ENCL: 00 SUB CODE: AS, ME

NO REF SOV: 003 OTHER: 001

BEREZHNITSKY, L. T.; PANASYUK, V. V. (L'vov)

"On the propagation of curvilinear (circular) cracks in stretched plates"

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 1964.

...YUK, V.V. (L'vov); ...KHNITSKIY, L.T. (L'vov)

Limiting equilibrium of a plate having cracks ... cross. Prikl. mekh. 1 no.10:52-6... '65.

1. Fiziko-mekhanicheskiy institut AN Ukr...SR. ...
20, 1965.

L 29131-65 EWI(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(b) JD/EM

ACCESSION NR: AP5004245 S/0021/65/000/001/0036/0040

AUTHOR: Panasyuk, V. V.; Berezhnyts'kyy, L. T. (Berezhnitskiy, L.T.)

TITLE: Determination of ultimate forces in bilateral extension of a plate with an arbitrarily oriented crack

SOURCE: AN UkrRSR. Dopovidi, no. 1, 1965, 36-40

TOPIC TAGS: ultimate strength, yield strength, stretched plate, metal failure, crack development

ABSTRACT: The article deals with the development of an arbitrarily oriented straight-line crack in an infinite plate, in the general case when the plate is subjected to plane tension, applied at infinite points of the plane in two mutually perpendicular directions. It is assumed that in the general case of plane stressed state of the plates with arbitrarily oriented macrocrack the initial broadening of the macroscopic crack develops along planes in which the normal tensile stresses reach maximum intensity. On the basis of these assumptions, and on the basis of results obtained by G. I. Barenblatt (PMTF, v. 4, 3, 1961) and N. I.

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L 29131-65

ACCESSION NR: AP5004245

Muskhelishvili (Nekotoryye osobnyye zadachi matematicheskoy teorii uprugosti [Some Special Problems in Mathematical Theory of Elasticity], Izd. AN SSSR, 1954), the authors derive formulas for the limiting (critical) load and for the angle that determines the initial direction of propagation of the crack. The conclusions of this work agree with the theory of A. A. Griffith (Proceedings First Congress of Mechanics, Delft, 1924, p. 55) and also with experimental data on the failure of brittle materials. This report was presented by G. N. Savin. Orig. art. has: 13 formulas.

ASSOCIATION: Instytut mashynoznavstva ta avtomatyky AN UkrSSR (Institute of Science of Machines and Automation, AN UkrSSR)

SUBMITTED: 08Jan64 ENCL: 00 SUB CODE: AS, MM

NR REF SOV: 003 OTHER: 004

Card 2/2

L 33969-65 EWT(m)/EWP(w)/EPR/EWA(d)/T/EWP(t)/EWP(b) EM/JD
ACCESSION NR: AP5007267 S/0198/65/001/002/0048/0055

AUTHORS: Panasyuk, V. V. (L'vov); Berezhnitskiy, L. T. (L'vov); Kovchik, S. Ye. (L'vov)

TITLE: On the propagation of an arbitrarily oriented straight crack in a plate under tension

SOURCE: Prikladnaya mekhanika, v. 1, no. 2, 1965, 48-55

TOPIC TAGS: tensile stress, crack propagation, critical stress, analytic function, complex variable/ MR 0.5 machine, BMI 1 microscope, IZA 2 comparator

ABSTRACT: The propagation of an arbitrarily oriented straight crack under a single axis tensile stress was studied analytically as well as experimentally. The applied stress is represented by p in Fig. 1 on the Enclosure, and the stress components σ_x, σ_y, σ_{xy} are given in terms of the analytic functions $\Phi(z)$ and $\Omega(z)$. The solution is given in polar coordinates β and r for the stresses σ_r, σ_β, $\sigma_{r\beta}$.

The critical stresses are determined for the angle β_*

$$\beta_* = -2\arcsin\sqrt{\frac{6\operatorname{ctg}^2\alpha + 1 - \sqrt{8\operatorname{ctg}^2\alpha + 1}}{2(9\operatorname{ctg}^2\alpha + 1)}}$$

, at which σ_β reaches a maximum. This

Card 1/3

L 33969-65

ACCESSION NR: AP5007267

corresponds to the load p_* $p_* = \frac{K\sqrt{2}}{\pi\sqrt{l}} \frac{1}{\cos^2\frac{\beta_*}{2}\left(\sin^2\alpha\cos\frac{\beta_*}{2} - 3\sin\alpha\cos\alpha\sin\frac{\beta_*}{2}\right)}$. These equations are shown graphically where the initial direction of the crack propagation is found to be always close to the direction of the perpendicular to the line of action of the external load p. These results are then verified experimentally for plates of different dimensions with a 6-mm hole drilled in the center of each plate. Orig. art. has: 18 equations, 5 figures, and 2 tables.

ASSOCIATION: Fiziko-mekhanicheskiy institut, AN UkrSSR (Physico-Mechanical Institute, AN UkrSSR)

SUBMITTED: 12Jun64 ENCL: 01 SUB CODE: ME

NO REF SOV: 006 OTHER: 003

Card 2/3

L 33969-65
ACCESSION NR: AP5007267

ENCLOSURE: 01

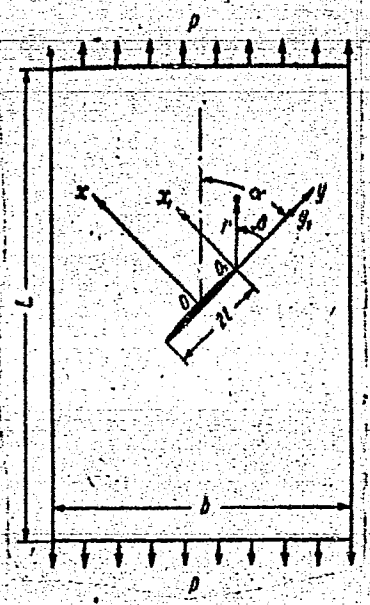

Fig. 1.

Card 3/3

L 14939-66 EWT(d)/EWT(m)/EWP(w)/T/EWP(t)/EWP(b) IJP(c) JD/EM

ACC NR: AP5019413 SOURCE CODE: UR/0021/65/000/007/0868/0872

AUTHOR: Panasyuk, V. V.

ORG: Physicomechanical Institute, AN URSR (Fizyko-mekhanichnyy instytut AN URSR)

TITLE: Destructive loads for a plate weakened by a circular hole with radial cracks

SOURCE: AN UkrRSR. Dopovidi, no. 7, 1965, 868-872

TOPIC TAGS: crack propagation, material failure, tensile test

ABSTRACT: An unbounded plate, weakened by a circular hole with radial cracks of lengths l_1 and l_2 and stretched by a monotonically increasing strain of intensity p, applied at infinitely distant points on the plate and perpendicular to the crack formation lines is studied. The minimum strain p at which the crack widens and the plate is destroyed is determined. The effect of various relative dimensions of the cracks is considered. Orig. art. has: 2 figures, 19 formulas.

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L 14939-66
ACC NR: AP5019413

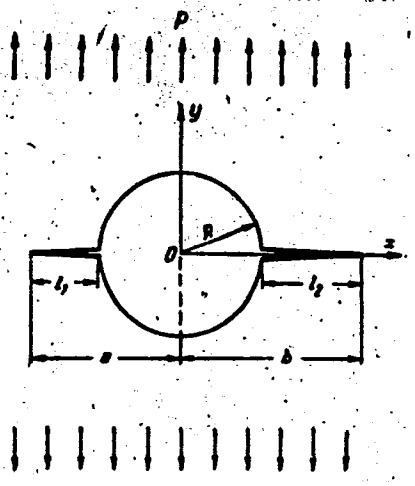

Figure 1.

SUB CODE: 20/ SUBM DATE: 02Jul64/ ORIG REF: 006/ OTH REF: 002

Card 2/2

L 4189-66 EWT(d)/EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b) JD/EM

ACCESSION NR: AP5024935 UR/0198/65/001/009/0026/0034

38
31
13

AUTHOR: Panasyuk, V. V. (L'vov)

TITLE: On the rupture of brittle bodies in a planar stressed state

SOURCE: Prikladnaya mekhanika, v. 1, no. 9, 1965, 26-34

TOPIC TAGS: limit load, stress concentration, rupture strength, brittle point, stress load

ABSTRACT: The problem of limit load on brittle bodies with fractures is considered under planar, biaxial tension-compression loads. Two types of fractures are considered in the analysis: a straight-line fracture and a hypocycloid. The limit loads for both cases are calculated as functions of the defect orientation. For the straight-line case this is given by

$$p_* = Rf(\alpha, \eta_0); \quad q_* = \eta_0 Rf(\alpha, \eta_0).$$

$$R = \frac{\sqrt{2K}}{\pi\sqrt{l}}; \quad l = a;$$

$$f(\alpha, \eta_0) = \left\{\cos^2\frac{\beta_*}{2}\left[\cos\frac{\beta_*}{2}(\sin^2\alpha + \eta_0\cos^2\alpha) - 3(1-\eta_0)\sin\alpha\cos\alpha\sin\frac{\beta_*}{2}\right]^{-1}\right\}$$

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ACCESSION NR: AP5024935

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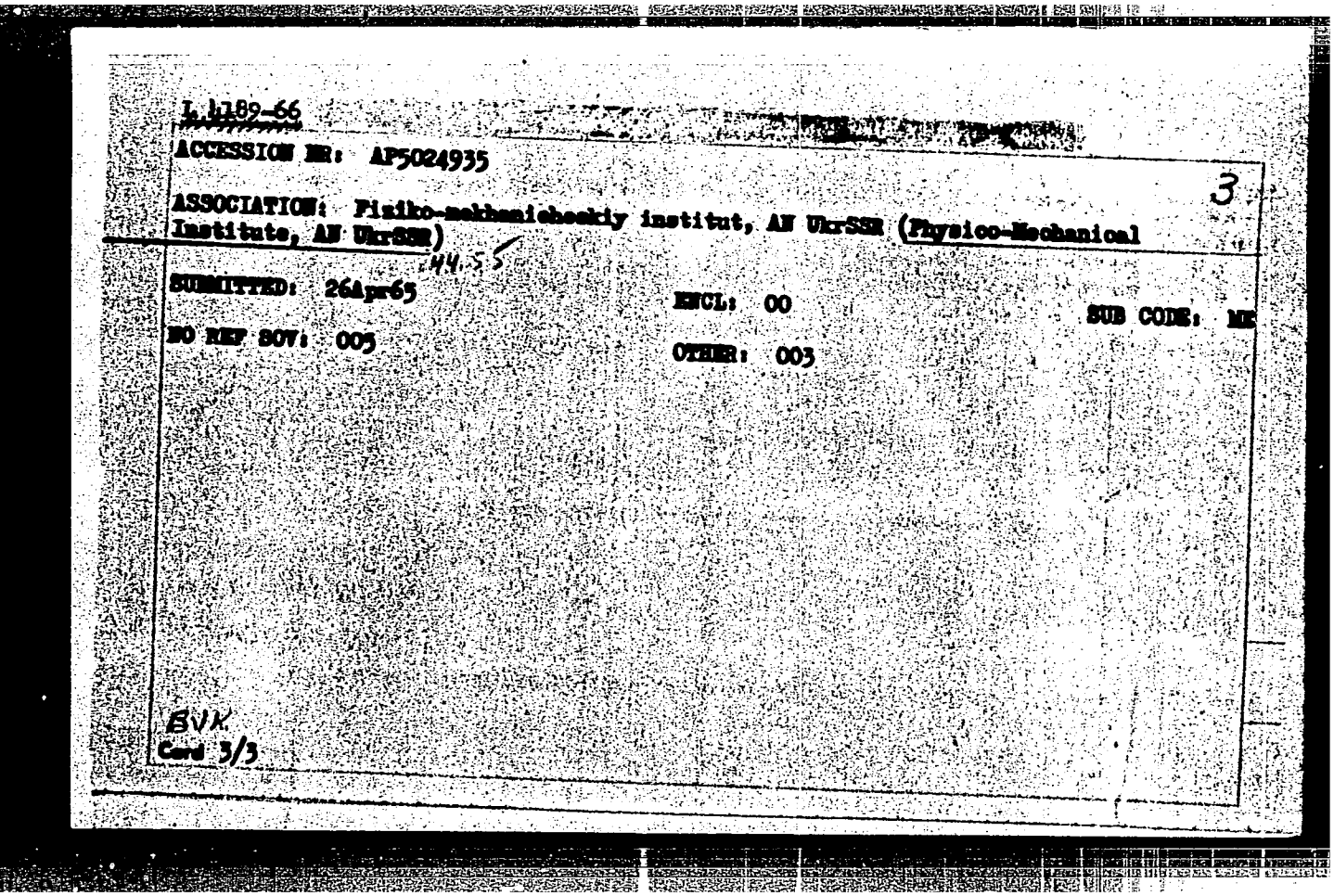
and for the hypocycloid

$$\rho_* = \min\{\rho_j\}: \quad q_* = \eta_0 \rho_*, \quad (j = 1, 2, 3);$$

$$\rho_j = R_1 f_j(\alpha, \eta_0, \beta_*, \theta_j): \quad R_1 = \frac{\sqrt{2K}}{\pi \sqrt{a}}; \quad \eta_0 = \frac{q}{p},$$

$$f_j(\alpha, \eta_0, \beta_*, \theta_j) = 6\sqrt{2}\left\{[1 + \eta_0 - (1 - \eta_0)\cos(2\alpha + \theta_j)]\left(3\cos\frac{\beta_*}{2} + \cos\frac{3}{2}\beta_*\right) - 3(1 - \eta_0)\sin(2\alpha + \theta_j)\left(\sin\frac{\beta_*}{2} + \sin\frac{3}{2}\beta_*\right)\right\}^{-1}.$$

On the basis of these formulae diagrams are constructed for the limit stress in a brittle body weakened by fractures of the type discussed above, under biaxial tension or compression. These diagrams could be used as criteria to determine the strength of solid bodies to brittle or quasi-brittle rupture under biaxial stresses with initial fractures present in the material. The theoretical results are compared with experimental data obtained with tubular cast iron samples as well as with vitreous samples. Agreement between theory and experiment is quite satisfactory. Orig. art. has: 23 equations, 3 figures, and 1 table.



L 1189-66

ACCESSION NR: AP5024935

3

ASSOCIATION: Fiziko-mekhanicheskiy institut, AN UkrSSR (Physico-Mechanical Institute, AN UkrSSR)

44,55

SUBMITTED: 26Apr65 ENCL: 00 SUB CODE: ME

NO REF SOV: 005 OTHER: 003

BVK

Card 3/3

ACC NR: AP6029680 SOURCE CODE: UR/0369/66/002/004/0394/0401

AUTHOR: Panasyuk, V. V.; Buyna, Ye. V.

ORG: Physics-Engineering Institute, AN UKrSSR, L'vov (Fiziko-mekhanicheskiy institut AN UkrSSR)

TITLE: Determination of the yield force for a plate with sharp edged stress concentrator

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 2, no. 4, 1966, 394-401

TOPIC TAGS: stress concentration, yield stress, mathematic model, elastic stress

ABSTRACT: Mathematical models are derived, defining the maximum force balance for an infinite plate with angular stress concentrator under biaxial elongation-compression, the concentrator being a fracture type hole with angular points in its boundary. The characteristic dimensions of concentrators with one or two angular points as shown in Figures 1 and 2 of the Enclosure are defined as

$$x_1 = A_1\left[\lambda\cos\theta + m_1\frac{1-n_1\cos\theta}{1-2n_1\cos\theta+n_1^2}\right];$$

$$y_1 = A_1\left[\lambda\sin\theta - m_1\frac{n_1\sin\theta}{1-2n_1\cos\theta+n_1^2}\right],$$

for $$A_1 = \frac{a_1(1+\varepsilon_1)}{(3-\varepsilon_1)\lambda+2(1-\varepsilon_1)}, \quad m_1 = \frac{4(1-\varepsilon_1)^3}{(3-\varepsilon_1)(1+\varepsilon_1)}, \quad n_1 = \frac{1+\varepsilon_1}{3-\varepsilon_1},$$

$$\varepsilon_1 = \frac{b_1}{a_1}, \quad 0 \leqslant \varepsilon_1 \leqslant 1, \quad \lambda > 1,$$

$$x_2 = A_2\left[\lambda\cos\theta + m_2\frac{(1-n_2)\cos\theta}{1-2n_2\cos 2\theta+n_2^2}\right];$$

$$y_2 = A_2\left[\lambda\sin\theta - m_2\frac{(1+n_2)\sin\theta}{1-2n_2\cos 2\theta+n_2^2}\right],$$

for $$A_2 = \frac{a_2}{1+\lambda-\varepsilon_2}, \quad m_2 = \frac{2(1-\varepsilon_2)^3}{2-\varepsilon_2}, \quad n_2 = \frac{\varepsilon_2}{2-\varepsilon_2},$$

$$\varepsilon_2 = b_2/a_2, \quad 0 \leqslant \varepsilon_2 \leqslant 1, \quad \lambda > 1,$$

a_1b_1 and a_2b_2 corresponding to dimensions of Figures 1 and 2. Equations for the field of elastic stress are developed and solved for the limiting loads $p=p_*$ and $q=q_*$. Formulas for limiting stress are derived, involving a single angular hole and monoaxial elongation directed vertical to the hole's symmetry axis, or a single hole and omnidirectional stress. Finally, regarding the concentrator as circular hole with

angular fracture points on its boundary, the maximum load becomes for the case of omnidirectional elongation

$$p_*(\Delta) = \frac{K}{\pi\sqrt{R_1}} \frac{1}{\sqrt{2\Delta(1+\Delta)(2+\Delta)}} \frac{2(2+3\Delta)[8(1+\Delta)^3-(2+\Delta)^3]}{16(1+\Delta)^6-(2+\Delta)^3}$$

for $s=1$;

$$p_*(\Delta) = \frac{K}{\pi\sqrt{R_2}} \sqrt{\frac{2+\Delta}{2\Delta(1+\Delta)(1+\Delta)}} \frac{2(1+2\Delta)[2(1+\Delta)^3-(1+\Delta)^3-\Delta^3]}{[4(1+\Delta)^3-(1+\Delta)^3-\Delta^3]}$$

for $s=2$.

Orig. art. has: 27 formulas and 4 figures.

SUB CODE: 20 / SUBM DATE: 19Dec65/ ORIG REF: 005/ OTH REF: 001

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001238920017-8"

ACC NR: AP7001847 SOURCE CODE: UR/0021/66/000/012/1547/1552

AUTHOR: Panasyuk, V. V.; Buyna, E. V.—Buyna, Ye. V.

ORG: Physicomechanical Institute of the Academy of Sciences, UkrSSR (Fiziko-mekhanichnyy instytut AN URSR)

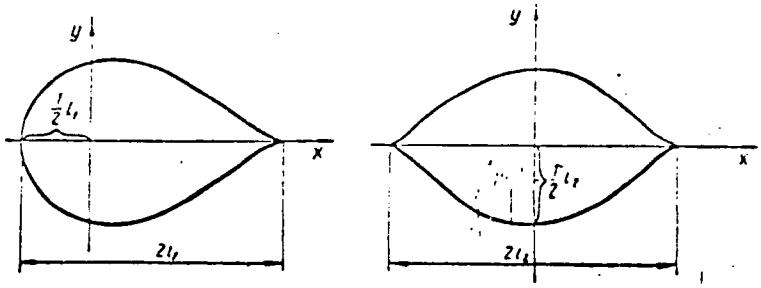
TITLE: On the state of limit equilibrium of a plate with a sharp-pointed hole

SOURCE: AN UkrSSR. Dopovidi, no. 12, 1966, 1547-1552

TOPIC TAGS: thin plate, hole weakened plate, stress concentration

ABSTRACT:

The advancing of sharp corners of a hole (of either shape shown on the figure) in an infinite thin plate under monotonically increasing tensions p and q



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ACC NR: AP7001847

applied at infinity in mutually orthogonal directions is discussed. These directions are rotated relative to the (x, y)-axes through an angle α. The contours of holes which are free of external forces are given by parametric equations in polar coordinates. The minimum (critical) values of p and q are sought at which a sharp point of the hole contour (an evident stress concentrator) starts to advance. A method of conformal mapping is used in determining the stress functions for both hole contours and the components of the stress tensor in the vicinity of the sharp points. The relationships of the theory of equilibrium cracks are used in deriving formulas for the critical values of p and q. The particular case when the plate is subjected to one-directional tension perpendicular to the x-axis ($\alpha = \pi/2$) is analyzed, and formulas for critical p and q are derived. The obtained formulas are compared with approximate formulas for analogical stresses previously obtained by V. V. Panasyuk (Dopovidi AN UkrSSR, 1965, p. 868) for stress concentration around cracks on the edge of a circular hole, and fair agreement is found between them. Orig. art. has: 1 figure and 19 formulas.

SUB CODE: 20/ SUBM DATE: 19Jan66/ ORIG REF: 006/ ATD PRESS: 5111

Card 2/2

L 33049-66 EWT(m)/EWP(w)/T/EWP(t)/ETI

ACC NR: AP6024172 SOURCE CODE: UR/0369/66/002/001/0019/0020

AUTHOR: Panasyuk, V. V.; Buyna, Ye. V.

ORG: Physicomechanics Institute, AN UkrSSR, L'vov (Fiziko-mekhanicheskiy institut AN UkrSSR)

TITLE: Limiting equilibrium of a plate weakened by an n-angled aperture

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 2, no. 1, 1966, 19-20

TOPIC TAGS: brittleness, elastic stress, stress analysis, test method, cyclic load, flat plate model

ABSTRACT: On the basis of the results of an earlier article (The Destruction of Brittle Bodies in the Plane Stressed State, Prikladnaya Mekhanika (applied Mechanics), 1, 9, 1965), an analysis is performed of the problem of the limiting equilibrium of a brittle plate with an aperture in the form of a hypocycloid with n branches, when the plate is subjected to biaxial extension and compression. The case of a plate with an aperture in the form of an astroid is analysed in detail. For this case, a diagram of the beginning of brittle destruction of the plate is constructed. The method for solution presented in the earlier article consists of first determining, with the given external stress, the distribution of elastic stresses in the neighborhood of the corner points of the plate, then, using the limiting state equations, computing the limiting load for the problem and constructing a diagram of limiting equilibrium of the plate in the general case of plane stressed state. Orig. art. has: 2 figures, 18 formulas and 1 table. [JPRS]

SUB CODE: 20 / SUBM DATE: 12Sep65 / ORIG REF: 004

Card 1/1 lo

0915 1762

PANASIUK, YE. I.

USSR/Physics - Luminophores .. V 52

"Characteristics of a Class of Photoluminophores of Sulfate Base," A. A. Konstantinova-Shlezinger, N. A. Gorbacheva and Ye. I. Panasyuk, Phys Inst imeni Lebedev, Acad Sci USSR

"Zhur Eksper i Teoret Fiz" Vol 23, No5, pp 58.-592

Curves of extinction and of thermal glowing time of phosphor $PbSO_4$ with various fusibles and curves of glowing time of phosphor $PbSO_4$ with activators ..., Pt, ..., and of phosphor $PbSO_4$ with double activator ...Ce were plotted. Indebted to Prof V. L. Levshin. Received 18 Jun 52.

PA 236T86

AUTHORS: Levshin, V. L., Ranevych, Ye. I., Pakhomycheva, L. A.

TITLE: The Application of Radioactive Isotopes on the Investigation of the Volatilization of the Accelerators of Crystalline Phosphors During Annealing (Primeneniye metoda mechenykh atomov dlya izucheniya letuchivaniya aktivatorov kristallofosforov pri prokalivanii)

PERIODICAL: Zhurnal Analiticheskoy Khimii, 1957, Vol. 12, Nr 6, pp. [illegible]

ABSTRACT: By the application of radioactive isotopes it was established that on a baking of phosphors, the silver concentration in zinc sulfide and alkaline-earthy phosphors and the zinc concentration in zinc sulfide phosphors volatilizes from 5 to 10%. The volatilization depends on the basic substance. In earth-alkaline phosphors, the volatilization is not higher than 10%, in calcium oxide 1 to 10%, in apatites up to 85%. The volatilization of the accelerator from the basic substance occurs in the first few minutes of baking, antimony volatilizes already at low temperatures. Zn^{65}, Ag^{110}, Sb^{124} were used as radioactive isotopes.
There are 3 tables, and 9 references, 1 of which is Slavi

ASSOCIATION: Physics Institute imeni P. N. Lebedev AN USSR (Fizicheskiy institut imeni P. N. Lebedeva AN SSSR, Moskva).

Card 1/2

The Application of Radioactive Isotopes in the Investigation [illegible] of the Volatilization of the Accelerators of Crystalline Phosphors [illegible]

SUBMITTED: July 26, 1956.

AVAILABLE: Library of Congress.

1. Crystalline phosphor accelerators-Volatilization
2. Radioactive isotopes-Applications

Card 2/2

Panasyuk Ye. I.

SUBJECT: USSR/Luminescence 48-4-44/48

AUTHORS: Levshin V.L., Panasyuk Ye.I. and Pakhomycheva L.A.

TITLE: Luminescent Substances of Permanent Action with Artificially Radioactive Beta-Isotopes (Svetyashchiyesya sostavy postoyannogo deystviya s iskustvenno-radioaktivnymi beta-izotopami)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #4, pp 612-618 (USSR).

ABSTRACT: The Physical Institute im. Lebedev has developed since 1950 luminescent substances of permanent action activated with various radioactive isotopes. After investigations of numerous phosphors it was established that the ZnS-Cu phosphor is most luminous at beta-excitation.

The following conclusions resulted from these investigations:

1. Sr^{90} isotope, and in some cases Cs^{137} isotope, are recommended for luminescent substances of permanent action;

2. Luminescent substances activated with Sr^{90} can have a service time of the order of 10 years and more;

Card 1/2

AUTHORS: Alentsev, M.N. and Panasyuk, Ye.I.

TITLE: The Absorption Spectrum of ZnS Monocrystals (O spektre poglosheniya monokristallov ZnS)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol 5, Nr 2, pp 207-208 (USSR)

ABSTRACT: The existing data on the absorption spectrum of non-activated ZnS crystals are somewhat sparse and conflicting. The present authors, therefore, measured the absorption spectrum on large crystals of ZnS, which were free from impurities and did not have luminescing defects. These crystals were obtained by a reaction between zinc and H_2S in gaseous form. Zinc was evaporated at 820-840° C and it reached a temperature of 1020-1170°C in the reaction zone. The crystals were about 20 mm long, 1 mm wide and from 1 to 10 μ thick. V.S. Vavilov measured their dark resistance and showed that in all cases it is greater than 10^{11} ohm-cm. The absence of luminescence was confirmed by irradiation with the PRK hydrogen lamp and photographing the spectra using exposures about 100 times longer than the exposures at which luminescence spectra of ZnS-Zn and ZnS-Cu were obtained. To measure their absorption the crystals were placed directly at the entrance slit of the Zeiss quartz monochromator. To exclude the

Card 1/3

effects of scattered light the technique described by Preston (Ref 6) was employed. The source of light was a hydrogen or a mercury lamp. The receiver was the FEU-19 photomultiplier. Transmission T was measured for crystals of various thickness and at wavelengths greater than 350 mμ was found to be the same for all crystals. This indicates that absorption is absent in this region and that the losses of light are due to reflections from the crystal surfaces. Working in the region of $\lambda > 350$ mμ the reflection coefficient R was calculated from the transmission T, and from R the refractive index n was found. The value of n decreased monotonically from $n = 2.6$ at $\lambda = 350$ mμ to $n = 2.3$ at $\lambda = 600$ mμ. In the region $\lambda < 350$ mμ transmission T was measured and from it the absorption coefficient was determined. The results obtained are given in the figure on p 208. At wavelengths

The Absorption Spectrum of ZnS Monocrystals

shorter than 313 mμ measurements were not possible since scattered long-wavelength light was stronger than the transmitted light. There are 1 figure and 6 references, 2 of which are English, 1 Soviet, 1 Dutch, 1 French and 1 German.

ASSOCIATION: Fizicheskiy institut im. P.N. Lebedeva, AN SSSR (Physics Institute imeni P.N. Lebedev, Academy of Sciences of the U.S.S.R.)

SUBMITTED: February 7, 1958

Card 3/3 1. Single crystals--Spectrographic analysis 2. Zinc sulfide crystals --Properties

OKANOVSKIY, V.Ye.; PANASYUK, Ye.I.; FEDYUSHIN, B.T.

Studying the electroluminiscence of single crystals of ZnS and CuCl [with summary in English]. Inzh.-fiz.zhur. no.1:39-45 Ja '59. (MIRA 12:1)

1. Fizicheskiy institut im. P.N.Lebedeva, Moskva.
(Crystals--Electric properties)

L 18753-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG S/2941/63/001/000/0239/0244
ACCESSION NR: AT3002227

AUTHORS: Osiko, V. V.; Panasyuk, Ye. I. 61

TITLE: Optical characteristics of monocrystalline ZnS-Mn

SOURCE: Optika i spektroskopiya; sbornik statey. v. 1: Lyuminestsentsiya. Moscow. Izd-vo AN SSSR, 1963, 239-244

TOPIC TAGS: absorption, excitation, luminescence, recrystallization

ABSTRACT: An investigation of optical characteristics of ZnS-Mn has been made by studying the absorption, excitation, and luminescence spectra of monocrystalline ZnS-Mn in its gaseous phase. Two types of specimens were prepared. The first, ZnS-Mn, Cl by means of a reaction between hydrogen sulphide, Zn vapor and magnesium chloride, at 1050C. The magnesium content of the crystal varied from 0.24 to 0.40% by weight. The second specimen, Zn, Mn S was grown by means of high-temperature recrystallization. The results are plotted on Fig. 1 and Fig. 2 of the enclosures. "The author is grateful to M. V. Fok and V. V. Antonov-Romanovskiy for their evaluation of the work." Orig. art. has: 6 figures and 1 table.

Card 1/1

PANASYUKHENKOV, [illegible]

Thermal conductivity of concretes made with granulated blast furnace slags [illegible] Ya. E. Panasyukh[illegible] [illegible]

[illegible] blast furnace slags (composition not given) shows [illegible] lower figures than the cited [illegible]

I. D. Gat

TANAVA, A. F.

"The Propagation and Form of Life of Rats in Georgia,"

Byul. Mosk. Obshch. Ispytat. Prirody, Otdel Biol.,

54, No. 3, 1949.

1. PANAVKO, YA. G.

2. USSR (600)

4. Elasticity

7. Method of straight linearization in non-linear problems of the theory of resilient vibrations. Inzh.sbor., 13, 1952.

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

E

BULGARIA / Virology - Human and Animal Viruses.

Abs Jour: Ref Zhur-Biol., No 9, 1958, 38211.

Author : Panayetov, P.
Inst : Not given.
Title : Isolation of Influenza Virus.

Orig Pub: Izv. Otd. biol. i med. nauki. B'lg. AN. Ser. eksperim. biol. i med., 1957, No 1, 93-96.

Abstract: The virus was concentrated by adsorption on aluminum oxide. Chick embryos infected by the virus continued to develop. RGA (hemagglutinin reaction) with chorio-allantoic fluid yielded negative results. Aluminum oxide adsorbed the virus from virus-containing filtrates. Chick embryos were successfully infected by the precipitate obtained after virus adsorption.

Card 1/1

PANAYEV, A., inzhener.

Ultrasonics and its use in military science. Vest.znan. 33 no.6:24-28 Je '57. (MIRA 10:8)
(Ultrasonic waves) (Sonar)

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

PANAYEV, A.V.

CA

18

Evaporation of a solution of sodium fluoride I. I. Egorov, A. V. Panaev, I. I. Nevstruev and A. N. Lepil kin. *Khim. Mashinostroenie* 1934, No. 2, 19-22, No. 3, 23-6; cf. C. A. 28, 5606. A detailed account of plant operation, material and heat balance and chem. analyses, involved in the process of vacuum evapn. of NaF soln.
S. I. Madorsky

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

VINICHENKO, N.N.; BORISOV, V.A.; KASHIK, S.A.; PANAYEV, V.A.

Facies conditions governing the formation of Jurassic sediments in the Irkutsk Coal Basin. Trudy Inst. zem. kory SO AN SSSR no.15881-91 '63 (MIRA 17:3)

BAKHTIN, V.Ye.; PANAYEV, V.N.

Mechanization and automatic control of the assaying of ores and tailings in asbestos ore dressing plants. Trudy NIIasbest. no.2:127-132 '62. (MIRA 16:12)

PANAYEV, Vladimir Pavlovich

PANAYEV, Vladimir Pavlovich and A. A. GUSEV. Po Zakaspiiskoi Voennoi zheleznoi dorogie. Putevye vpechatleniia. S 42 illiustratsiiami. S.-Peterburg, 1899. 277 p. DLC: DK751.P CtY

SO: LC, Soviet Geography, Part I, 1951; Uncl.

PANAEV, Vladimir Pavlovich

PANAEV, Vladimir Pavlovich and A.A. OLSUF'EV..Po Zakaspiiskoi Voennoi zhelieznoi dorogie. Putevye vpechatlieniia. S 43 illiustratsiiami. S.-Peterburg, 1899. 277 p.
CtY DLC: DK851.P

SO: LC, Soviet Geography, Part II, 1951, Unclassified

PANAEV, VLADIMIR PAVLOVICH.

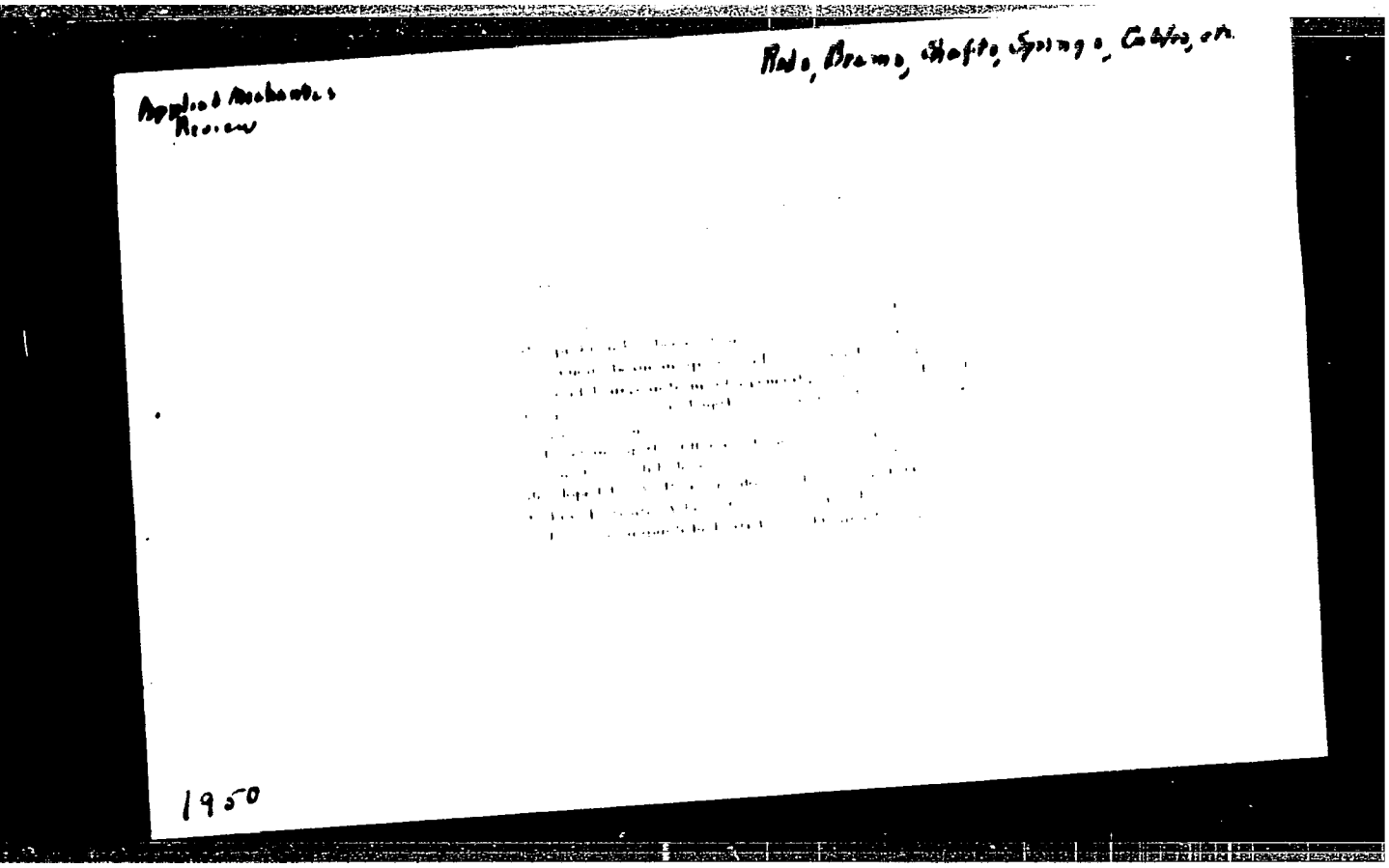
Po Zakaspiiskoi voennoi zheleznoi dorogie. Putevyia vpechatieniia. [By Transcaspian Military railway]. S.-Peterburg, 1899. 227 p. front., illus. (incl. plan) ports., map. DLC: DK851.P

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

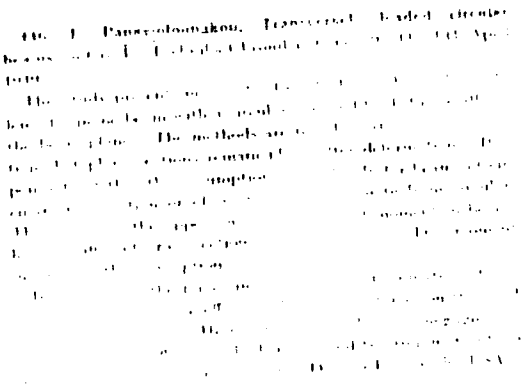
MURZIN, Ivan Konstantinovich, kand.tekhn.nauk; PANAYEVA, Valeriya Ivanovna; SOMOVA, T.M., inzh., red.vypuska; PETUKHOV, P.Z., doktor tekhn.nauk, red.; SUTORIKHIN, V.N., dotsent, red.; KHRISANOV, M.N., kand.tekhn. nauk, red.; DUGINA, N.A., tekhn.red.

[Repairing machine tools] Osobennosti remonta metallorezhushchikh stankov. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 77 p. (Biblioteka slesarya-remontnika, no.7)
(MIRA 14:3)

(Machine tools--Maintenance and repair)



Applied Mechanics Review



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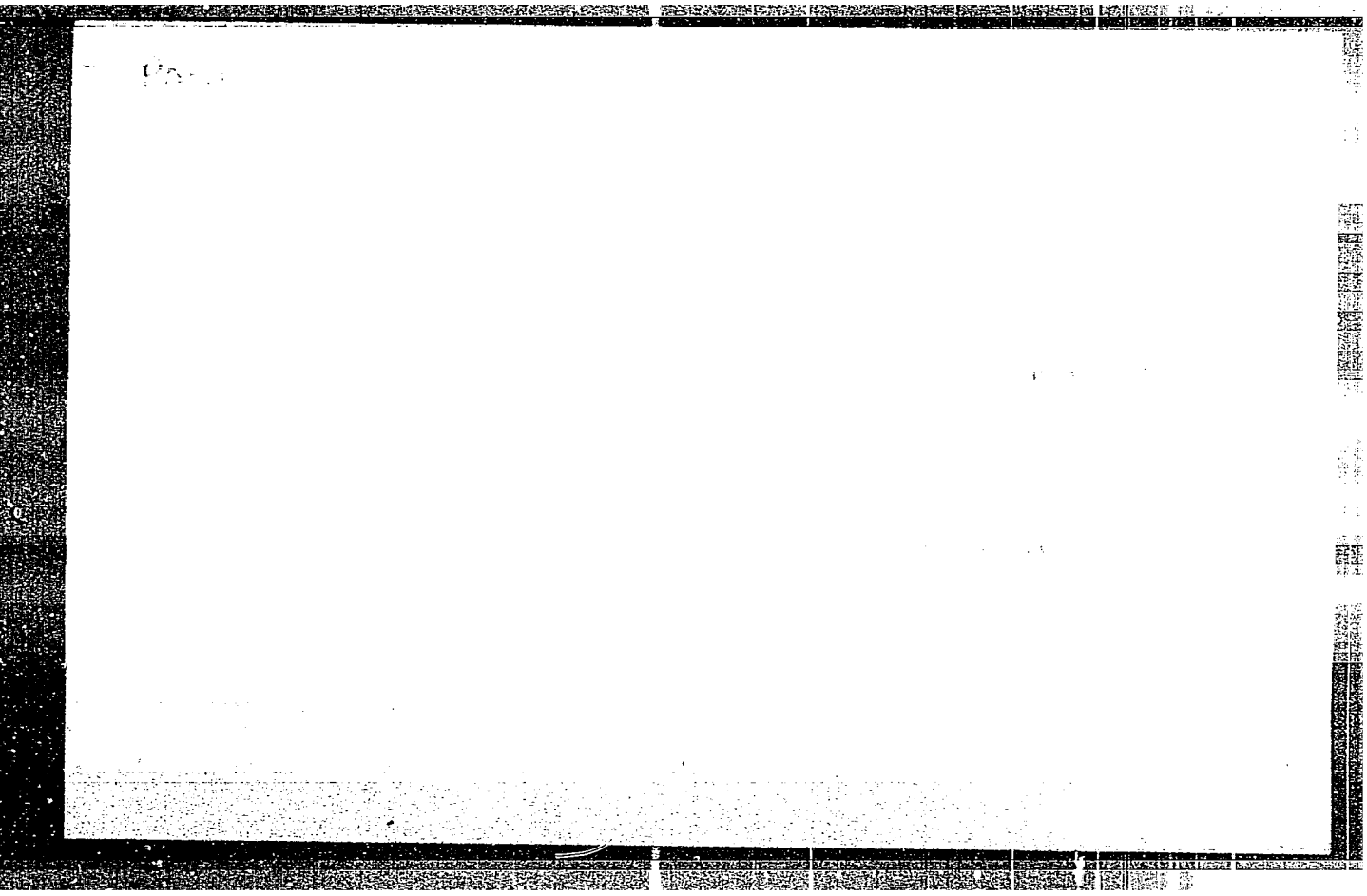

PANAYOTI, B.N.

One Cauchy problem having a small parameter. Dokl. AN Azerb. SSR 10 no.8:527-531 '54. (MLRA 8:10)

1. Azerbaydzhanskiy gosudarstvennyy universitet im. S.M.Kirova. Predstavleno deystvitel'nym chlenom Akademii nauk Azerbaydzhanskoy SSR I.G.Yes'manom
(Differential equations)

PANAYOTI, B. N.

PANAYOTI, B. N. -- "Cauchy's Problem for Equations with Partial Derivatives with Small Parameters in the Derivatives with Respect to Time." Min Higher Education USSR. Azerbaydzhan State U imeni S. M. Kirov. Inst of Physics and Mathematics. Acad Sci Azer SSR. Baku, 1955. (Dissertation for the Degree of Candidate in Physicomathematical Sciences)

SO: Knizhnaya Letopis', No 1, 1956, pp 102-122, 124

Panayoti, B. N.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.) Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.

Card 19/80

PANAYOTI, B.N.

16(0)1 20(2) PHASE I BOOK EXPLOITATION SOV/3365

Akademiya nauk Azerbaydzhanskoy SSR

Tezisy dokladov Soveshchaniya po vychislitel'noy matematike i primeneniyu sredstv vychislitel'noy tekhniki (Outlines of Reports of the Conference On Computational Mathematics and the Use of Computer Techniques) Baku, 1958. 63 p. 400 copies printed.

Additional Sponsoring Agencies: Akademiya nauk SSSR. Vychislitel'nyy tsentr, and Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki.

No contributors mentioned.

PURPOSE: This book is intended for pure and applied mathematicians, scientists, engineers and scientific workers, whose work involves computation and the use of digital and analog electronic computers.

COVERAGE: This book contains summaries of reports made at the Conference on Computational Mathematics and the Application of Computer Techniques. The book is divided into two main parts. The first part is devoted to computational mathematics and contains 19 summaries of reports. The second section is devoted to computing techniques and contains 20 summaries of reports. No personalities are mentioned. No references are given.

Card 1/ 7

PANAYOTI, B.N.

Nonlinear differential equations with small parameters in a Banach space. Trudy Inst. mat. i mekh. AN Azerb. SSR 2:39-48 '63. (MIRA 16:10)

PANAYOTI, B.N.

Uniform approximation of the derivative of the solution to the Cauchy problem for an equation of the second order with a small parameter in Banach space. Izv. AN Azerb.SSR.Ser.fiz.-tekh.i mat. nauk no.3:53-64 '64. (MIRA 17:12)

BELKIN, I.G. (Baku); PANAYOTI, B.N. (Baku)

Bases of a method of combined derivation. Vest. [illegible]
no.3:548-550 Mr '65.

MAKAROV, V.; MANDEL', O.; ITSKOVICH, A.; PANAYOTI, Yu.

Observation of eclipsing variable stars. Astron. tsir. no.187:16-17 D '57. (MIRA 11:6)

1. Kollektiv nablyudateley Otdeleniya Vsesoyuznogo astronomo-geodezicheskogo obshchestva, Odessa.
(Stars, Variable)

[illegible]TOV, [illegible]. A.

Bobbin Block for [illegible] Wave [illegible]. "[illegible]" Ministry of Communication, #9:32: Sept 55

PANAYOTOV, I. [Panaiotov, I.]; SPASSOVSKA, N. [Spasovska, N.]

Synthesis of unsaturated polyesteramides with aromatic nuclei by means of interphase polycondensation. Doklady BAN 16 no.6: 637-640 '63.

1. Submitted by Academician D.Ivanoff [Ivanov, D.].

~~IV M.~~ PANAIOTOV, IV. M.

Synthetic fungicides. I. Antimycotic action of phytohormonal-type substances and of β-naphthalenic derivatives. I. Popov, Ch. Ivanov, N. Angelov, and Iv. M. Panaiotov (State Med. Acad. "V. Tchervenkoff" Sofia). *Compt. rend. acad. bulgare sci.* 6, 37-38(1953)(in French); cf. Popoff and Bakalkoff, *Contemporary Medicin* 8, 52(1952)(in Bulgarian). For expts. *in vitro*, *Aspergillus niger*, *Trichophyton gypseum*, and 2 strains of *Monilia albicans* isolated from lesions of children having grave moniliasis were used. The trials were made in test tubes contg. 5 or 10 ml. of medium on which was poured 0.10 or 0.20 ml. of the alc. soln. of the substance to be examd. The mg. % concn. giving complete inhibition for *T. gypseum*, *M. albicans*, and *A. niger* are, resp.: 2-naphthyloxyacetic acid 8, 12, 12; 2-naphthyloxyacetic acid Me ester —, —, 10; 2-acetonaphthone 8, 12, 12; 2-naphthaldehyde 10, 15, 15; 2-naphthyl phenyl ketone —, +30, +30; 2-naphthaldehyde thiosemicarbazone +5, +10, +10; 2-naphthylmercaptoacetic acid >5, >4, 20; 1-acetonaphthone 20, 20, 20; 1-naphthaleneacetic acid +20, +30, +30; (2,4-dichlorophenoxy)acetic acid —, +30, +30; (o-methoxyphenoxy)acetic acid —, +20, +20; thymyloxyacetic acid —, +20, +20; methyl 3-phenanthryl ketone —, —, +20; 2-chloro-1,4-naphthoquinone +4, +4, +10; dypnone 10, >20, 20; 8-hydroxyquinoline 2, >4, 4. A + sign indicates that the development is not influenced but higher concns. were not examd.; > the development is strongly inhibited but not completely stopped.

H. Halasz

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PANAYOTOV, I. M.

Antituberculs: compounds of the biphenyl series. Alkyl ethers of 4-amino-4'-hydroxybiphenyl. Ch. Ivanov and I. M. Panaiotov (Inst. Chem., Technol., Metallurg., Sofia, Bulgaria). *Doklady Akad. Nauk S.S.S.R.* 93, 1041-3 (1953).—To 0.6 g. KOH in 4 ml. 70% EtOH was added 2.27 g. 4-acetamido-4'-hydroxybiphenyl, followed by 0.65 ml. MeI; after 7 days at room temp. there was obtained 94.0% *4-acetamido-4'-methoxybiphenyl*, m. 208-9° (from aq. EtOH). Similarly were obtained: *EtO analog*, m. 210-10.5°; *PrO analog*, m. 206.5-7.0°; *BuO analog*, m. 199.5-200°; *AmO analog*, m. 190.5-1.0°; $C_6H_{13}O$ *analog*, m. 181.5-2.0°. Hydrolysis by refluxing with alc. KOH 6 hrs. gave the *p*-$H_2NC_6H_4C_6H_4OR$ (*R* shown): *Me*, m. 146.5-7°; *Et*, m. 143.5-4.0°; *Pr*, m. 90-9.3°; *Bu*, m. 93.5-4.0°; *Am*, m. 90-90.5°; C_6H_{13}, m. 88.5-9.0°. Treatment of the MeO deriv. with Na formaldehydesulfoxylate gave the corresponding *4-amino-4'-methoxybiphenyl Na sulfoxylate*, $C_{13}H_{14}NO_5SNa$, which begins to melt at 100° and is molten at 244°; the *Bu analog*, m. 230-60°. Both were poorly sol. in H_2O and suffer decompn. on attempted crystn. from H_2O. The substances are to be tested against tuberculosis.

(T. M. K.

PANAIOTOV, I. M.

Antitubercular compounds of the biphenyl series. Alkyl esters and hydrazide of 4-aminobiphenyl-4'-carboxylic acid. Ch. Ivanov and I. M. Panaiotov (Inst. Chem. Tech. and Met., Sofia, Bulgaria). *Doklady Akad. Nauk S.S.S.R.* 100, 485–8(1955).—(*p*-$H_2NC_6H_4$)$_2$ (25 g.) was monodiazotized and treated with 40 g. $CuSO_4$ and 45 g. KCN in aq. soln.; after 1 hr. on a steam bath the mixt. was treated with excess NH_4OH and filtered yielding a ppt., which after drying was extd. with MePh yielding on evapn. of the ext. and distn. 22–4% *p*-$H_2NC_6H_4C_6H_4CN$-*p*, b$_7$ 237–40°, m. 183–4° (from MePh); a lower boiling fraction, was *p*-$H_2NC_6H_4C_6H_4Cl$-*p*, b$_7$ up to 230°, m. 133–4° (cf. Angeletti and Gatti, *C.A.* 23, 2961); heating the latter with CuCN in quinoline gave the same nitrile as above, b$_{15}$ 245–7°. The nitrile when purified by distn. is pale yellow not red (cf. A. and G.). Sapon. of the nitrile by aq. alc. KOH 8 hrs. gave 100% *p*-$H_2NC_6H_4C_6H_4CO_2H$-*p*, decomp. 241–1.5° (from EtOH); this refluxed in MeOH in the presence of H_2SO_4 gave the *Me ester*, 95.5%, m. 182–3°; similarly were prepd.: 93.6% *Et ester*, m. 87.5–8°; 86% *Pr ester*, m. 98.5–9°; 74.8% *Bu ester*, m. 82–2.5°; 81% *Am ester*, m. 97–8°. The C_6H_{13} *ester* was prepd. from the K salt of the acid and RI in hot xylene; the ester formed in 62.6% yield in 10 hrs., m. 193–4°. The Et ester refluxed 10 hrs. in MePh with $N_2H_4.H_2O$ gave the corresponding *hydrazide*, 68%, m. 229–30° (from EtOH). The free acid treated with Ac_2O gave *p*-$AcNHC_6H_4C_6H_4CO_2H$ (I), 92.2%, does not m. below 410° (from $PhNO_2$); acetylation of the above esters gave the *Ac derivs.* of the: *Et ester*, m. 189.5–90°; *Me ester*, m. 233.5–4°; *Am ester*, m. 144–5°; C_6H_{13} *ester*, m. 184–4.5°. Refluxing I Ag salt with EtI in xylene 4 hrs. gave 86.6% I *Et ester*, m. 189–90°; similarly were prepd. *Pr ester*, m. 183–3.5°, and *Bu ester*, m. 145–6°. The compds. are to be tested for antitubercular activity.

G. M. Kosolapoff

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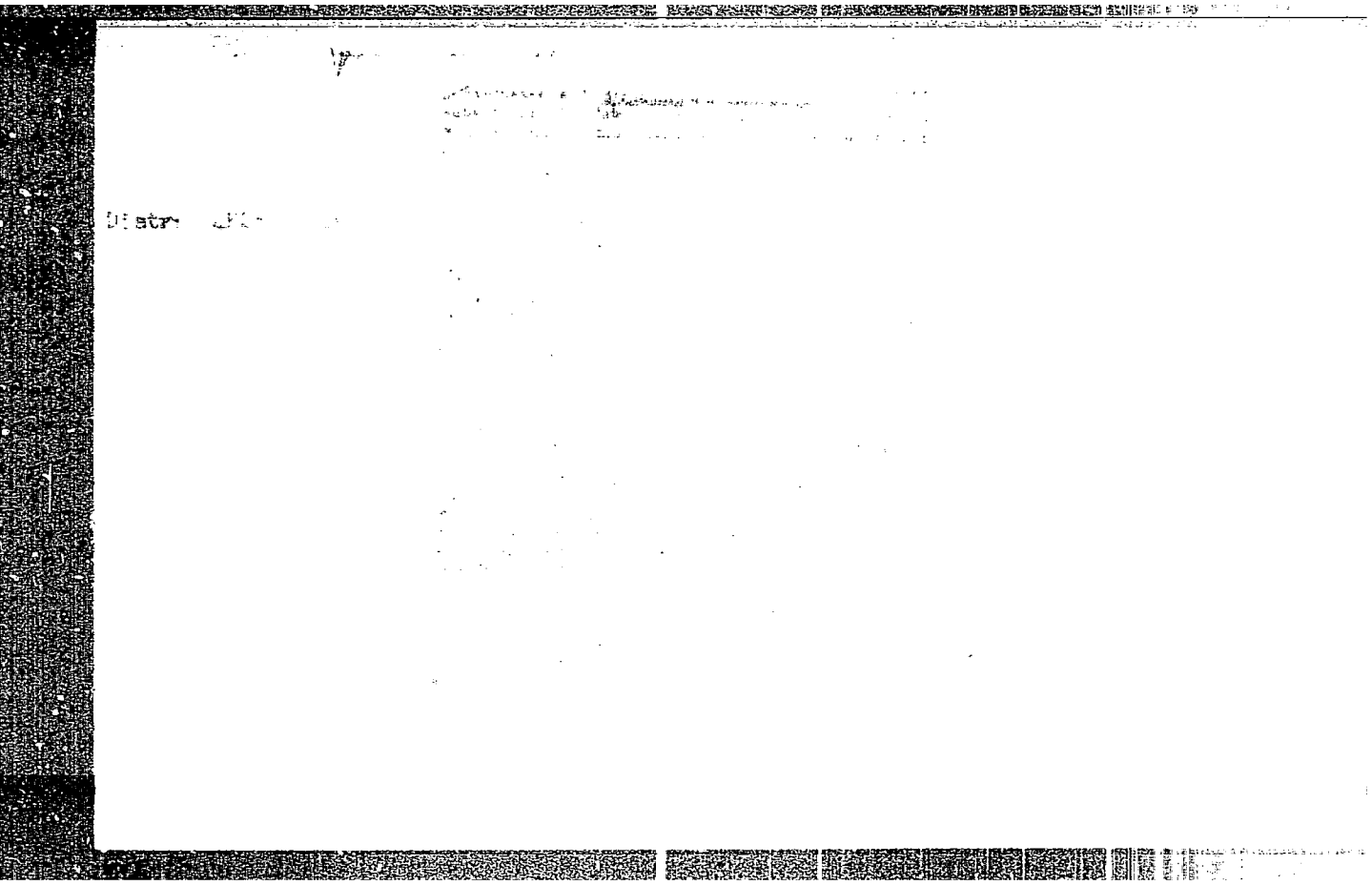
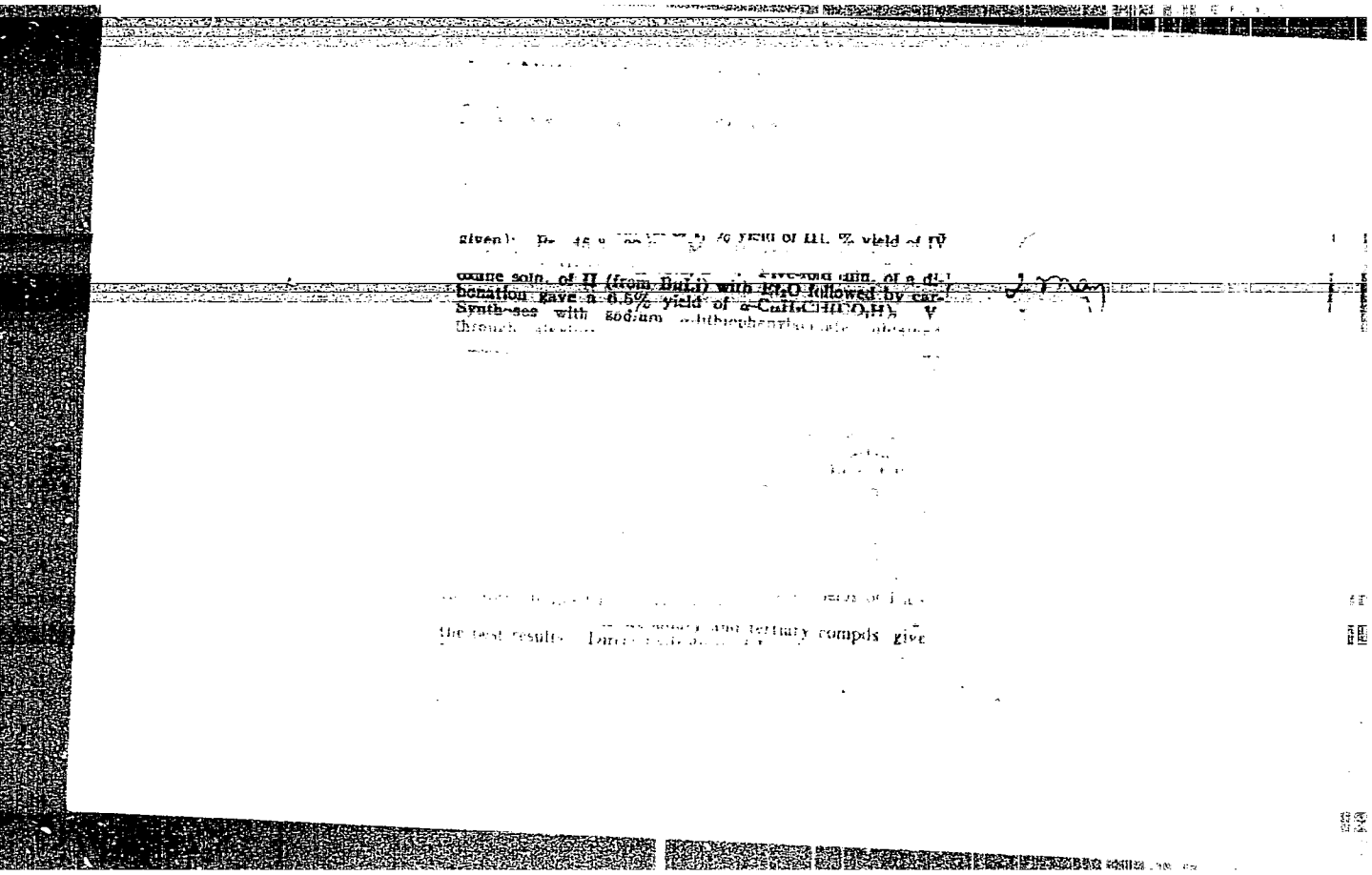




PANAITOV, I. ~~[illegible]~~

Syntheses with organic lithium compounds, obtained by substituting a labile hydrogen atom. IV. Syntheses with a-lithium sodium-x and B-naphthyl a cetate, obtained by means of alkyl lithium compounds. In German. p. 27. Vol. 9, no. 1, Jan./Mar. 1956, DOKLADY.

SOURCE: East European Accessions List (EEAL) Vol 6, No. 4--April 1957

BULGARIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour : Ref. Zhur. - Khimiya, No. 15, 1958, No. 50420

Author : Panajotoff; Ivanoff; Wassileff

Inst : -

Title : Syntheses, based on organolithium compounds, with a substitution of labeled hydrogen atom. VI. Syntheses with α-magnesyl-β-naphthylacetonitrile and α-lithium-β-naphthylacetonitrile. VII. Reactions of some α-LiNa-and MgNa-arylacetates with iodine. VIII. Method of Preparation of α, β-diphenyl-β-alkyl or aryl-β-oxybutric acid.

Orig Pub : Dokl. Bolgar. An, 1956, 9, #3, 21-24, 25-28, 29-32.

Abstract : VI. An α H atom in β-naphthylacetonitrile ma-

Card 1/4

BULGARIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour : Ref. Zhur. - Khimiya, No. 15, 1958, No. 50420

(obtained from $ArCH_2COONa$, RHal and Li or Mg in ether) with 55 moles J_2 at ~20° yielded the following: $(ArCHOONa)_2$: (listed below are Ar, % yield at X = Li and X = MgHal); C_6H_5, 52.6, 17; α-$C_{10}H_7$, 30, 3, 10.3; β-$C_{10}H_7$, 27.55, 11.9. VIII. $C_6H_5CH_2CR(OH)CH(C_6H_5)COOH$ (II), a by-product of reaction of RLi with $C_6H_5CH_2COONa$ (III), became chief product when 1.5-3 fold excess of RLi was used at -10 to 0°C (or in boiling ether when R = aryl). Following II were synthesized: (listed are R, % yield, m.p. °C): C_4H_9, 55, 142-144; C_3H_7, 48, 160-161; iso-C_3H_7, 28, 135-137; sec-C_4H_9, 39, 139-140; n-$CH_3OC_6H_4$, 38, 176-177. Upon alkaline cleavage of II,

Card 3/4

PANAIOTOV, I.

PANAIOTOV, I. Bulgarian juniper oil. In English. p. [illegible]. Vol 9, no. 1, Jan./Mar. 1956. DOKLADY., Sofiia, Bulgaria

SOURCE: East European Accessions List (EEAL) Vol. 6 No. 4 April 1[illegible]

PANAITOV, I.

Synthesis with lithium organic compounds, obtained by substituting unstable hydrogen atoms. VII. Concerning the reaction of some a-lithium-sodium and a-magnezyl sodium aryl acetate with iodine. In German. p.25.
(DOKLADY, Vol. 9, no. 3 July/Sept. 1956, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

BULGARIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur Khimiya, No 20, 1958, 67501.

Author : Panayotov I.
Inst : Not given.
Title : Reactions of N-Bromsuccinimide with Certain Arylacetic Acids.

Orig Pub: Izv. Khim. Inst. Bulg. Acad. of Sciences, 1957, 5, 183-192.

Abstract: It is demonstrated that the effect of N-bromsuccinimide (I) on phenyl-(II), α-naphthyl-III, and β-naphthyl-IV-acetic acids, present in the medium of an organic solvents, form corresponding α-brom-

Card 1/4

BULGARIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 20, 1958, 67501.

Abstract: of excess water from the filtrate. The crystalline residue is then dissolved in warm water, acidified with HCl. The obtained 4-BrC_6H_4COOH (VIII) yields 0.19 gr. of 115-116° melting point. Filtrate of the Ba-salt VIII contains 2-$BrC_6H_4CH_2$ COOH.

Card 4/4

. PANAYOTOV, I. AN

BULGARIA / Organic Chemistry. Organic Synthesis. G

Abs Jour: Ref Zhur-Khimiya, No 12, 1958, 39631.

Author : Panayotov Ivan.
Inst : Bulgarian Academy of Sciences.
Title : On the Reaction between N-Bromosuccunimide and Certain Arylacetic Acids.

Orig Pub: Dokl. Bolg. An., 1957, 10, No 2, 137-140.

Abstract: A reaction between N-bromosuccinimide (I) and $ArCH_2COOH$ (II) (throughout Ar = C_6H_5(a), α-naphthyl(b) and β-naphthyl(v)) in organic solvents and water. In the first case are formed corresponding ArCH(Br)COOH (IIIa-b); in an aqueous media from (IIa) is produced a mixture of O-(IV) and p-$BrC_6H_4CH_2COOH$ (V), whereas (IIb) and (IIv) are converted into resinous materials. The different results of the reaction of (I) with (II)

Card 1/3

BULGARIA / Organic Chemistry. Organic Synthesis. G

Abs Jour: Ref Zhur-Khimiya, No 12, 1958, 39631.

Abstract: and 0.01 mole of (I) in $C_2H_4Cl_2$ was boiled for 5 hours, $C_2H_4Cl_2$ was distilled off from filtrate, the residue was boiled for one hour with 3 g of KOH in 15 ml of water and (VI) was separated. The calculated yield of (IIIa) was 86%. In the same manner in CCl_4 was prepared (IIIb), yield 86.5%, m.p. 140-140.5°C, and (IIIb), yield 86.5%, m.p. 160-161°C. When brominated in $C_2H_4Cl_2$ and acetic acid, (IIb-v) are converted into tarry products. 0.01 moles of (IIa) and 0.01 moles of (I) in 40 ml of water was boiled for 1-1.5 hours, extracted with ether and after the ether was distilled off, the residue was boiled with barium hydroxide; separated were the Ba-salts of (IV) and (V), from which (IV) were obtained, m.p. 103-104°C, and (V), m.p. 191-192°C.

Card 3/3 28

BULGARIA / Chemical Technology. Perfumes and Cosmetics. Essential Oils. H-19

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 78921.

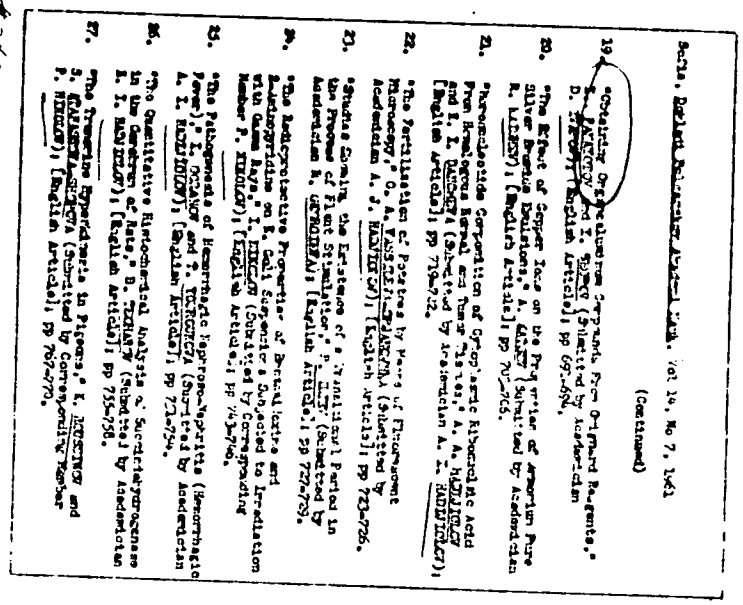
Author : Staykow, B., Panayotov, I., Borisov, G.
Inst : Not given.
Title : The Investigation of Juniper Fruits and the Isolation of an Essential Oil Therefrom.

Orig Pub: Isv. In-ta Rastenievedstvo. Belg. AN, 1958, No 5, 339-347.

Abstract: An essential oil (O) was separated from the fruits of juniper (F) (Juniperus commanis L.) and was studied. The crushed F were submitted to steam distillation, water distillation with steam at 3.5 atmospheres pressure, and distillation with steam at 3.5 atmosphere pressure. The best results were obtained by a water-steam

Card 1/2

PANAYOTOV, I.



Card 1/2

BULGARIA / Cultivated Plants. Medicinal. Essential Oil-Bearing. Toxins. M-7

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6494

used to obtain alcohol. They are also used as animal food.

Card 2/2

: Bulg...
: Chemical Technology. Chemical Products and Their Application. Fermentation Industry
ABS. JOUR. : ..., No. 18 1959, No. 83800

AUTHOR : Liclev, V.; Panayotov, I.
INST. : Chem. Inst. of Bulg. Academy of Science
TITLE : Aliphatic Aldehydes of Cognac Alcohol

ORIG. PUB. : Izv. Khim. in-t. Bulg. Acad. of Science, 1958, 6, ...1-1..

ABSTRACT : Aliphatic aldehydes contained in cognac alcohols derived from "Dimyat" 1953 crop were separated by fractional distillation from aromatic aldehydes. In each of the ... fractions were found, with the aid of selective chromatography on paper and in the form of 2,4-dinitrophenylhydrazones the following: HCOH, CH_3COH, propyon-, butyr-, valeraldehydes and others. Of the aromatic aldehydes were identified syringin aldehyde, vanillin, coniferyl and p-oxybenzaldehyde.

CARD: 1/1

H - 106

PANAYOTOV, I.M.

Distr: 4E2c(j)/4E3b/4E3d

Peroxide initiated polymerization of allyl furylacrylate. As. Trifonov and Iv. M. Panaiotov. *Izvest. Khim. Inst., Bulgar. Akad. Nauk* 6, [illegible]-211([illegible])(Russian summary 212, German summary 213).—In the presence of BaO_2, allyl furylacrylate (I) began to polymerize at 160° to a C_6H_6-sol. liquid (II) and above 200° to a C_6H_6-insol. resin (III). Rates were detd. with 1.5-3.0 ml. samples of I in ampuls, analyzed for II and III. At 220°, the rate was independent of the BaO_2 concn.; therefore initiation was probably by hydroperoxides resulting from the action of BaO_2 on I. Reaction of I under N with 150 mg. BaO_2/ml. I gave in 30-60 hrs. a liquid (IV which showed 3 different peroxidic groups by polarography; upon refluxing IV 18 hrs. in C_6H_6-MeOH, only 1 group remained; it was assumed to be the hydroperoxide. IV initiated the polymerization at 180°; air-oxidized I was not an initiator. Infrared spectra of polymers obtained by thermal or peroxide initiation were similar: the furyl groups were absent, and allylic and acrylic acid groups were weakened.   G. H. Maguerian

3
1 OW (8W)
2 JAJ (WB) (MAY)
1-JT (111)
3

9t
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PANAYOTOV, Ivan
Surname (in caps); Given Names

Country: Bulgaria

Academic Degrees: not indicated

Affiliation: Member of the Staff of Geografiya, Editor: Tyanko YORDANOV

Source: Sofia, Geografiya, No 1, 1961, pp 14-15

Data: "The Vaklite Dupki Caves."

[illegible] 1/1.

BULGARIA/Medicinal Substances, Vitamins. Antibiotics.

Abs Jour : Ref Zhur - Khimiya, No 19, 1958, 65337

Author : Panayotov Khr.
Inst :
Title : The Penicillin Plant in Bulgaria. Its Present and Future.

Orig Pub : Farmatsiya, 1956, 6, No 3, 3-7.

Abstract : No abstract.

Card 1/1

PANAYOTOV, Iv. [Panaiotov, Iv.]; SHOPOV, I.

On obtaining organoaluminium compounds from Grignard reagents.
Doklady BAN 14 no.7:691-694 '61.

1. Submitted by Academician D. Ivanov.

(Aluminium) (Grignard reagents)

[redacted], I.L.; [redacted], A.T.

Heterogeneous polymerization [redacted] initiated by alkali metal hydroxides. Vysokom. soed. [redacted]:360-371 (MIRA 18:3)

[redacted]

1. Institut organicheskoy khimii Akademii nauk Bolgarii, Sofiya.

PANAYOTOV, L.A.

New method for determining the radial velocities of stars with a direct vision objective prism. Astron.tsir. no.139:7-8 Je '53. (MLRA 7:1)

(Stars--Motion in line of sight)

PANAYOTOV, L. A.

"Determination of Radial Velocities of Stars by an Objective Prism with Straight View"
Izv. Gl. Astron. Observ., 19, 5, No.152, 1954, pp 87-99

Errors involved in three basic methods of massive determination of stellar radial velocities by means of an objective prism are analyzed. Discussed are the absorption method, the method of length of the spectrum, and the method of turning the prism. The errors are ascribed to extra-axial effects of the prisms and may be reduced by the use of a prism with straight view. Results are presented in two tables and further improvement of the method is envisaged. (RZhAstr, No.11, 1954)

SO: W-31187, 8 Mar 55

PANAYOTOV, L.A.

Peculiarities of the motion of B-stars in a narrow galactic zone [with summary in English]. Astron. zhur. 35 no.1:64-70 Ja-F '58. (MIRA 11:3)

1. Glavnaya astronomicheskaya observatoriya AN SSSR.
(Stars--Proper motion)

PANAYOTOV, L.A.

Photometric and spectral characteristics of the comet 1956h [with summary in English]. Astron. zhur. 35 no.2:257-260 Mr-Ap '58. (MIRA 11:6)

1. Glavnaya astronomicheskaya observatoriya AN SSSR.
(Comets—1956)

PANAYOTOV, L.A.

Observations of artificial earth satellites in Poland. Biul. sta.opt.nabl.isk.sput.Zem. no.1:12-13 '60.
(MIRA 13:5)

1. Glavnaya astronomicheskaya observatoriya AN SSSR.
(Artificial satellites--Tracking)

PANAYOTOV, L.A.

Design, penetrating power and internal precision of the camera with a mobile film at the Pulkovo Observatory. Biul.sta.opt.nabl. isk.sput.Zem. no.29:12-17 '62. (MIRA 16:2)

1. Pulkovskaya astronomicheskaya observatoriya.
(Astronomical photography—Equipment and supplies)

: BULGARIA

: E

: 1959, No. 9920

: Angelov, St., Panayotov, P., Mar..., ...*

: ...garian Academy of Sciences

TITLE : The Effect of Certain Chemical Agents on the Coxsackie Virus

ORIG. PUB. : Izv. Otd. biol. i med. n. B'lg. AN Ser. eksperim. biol. i med., 1957, No 2, 125-129

ABSTRACT : * Nikolov, P.

No abstract.

Card 1/1

Card 1/1

V

COUNTRY : BULGARIA
CATEGORY : Pharmacology and Toxicology. Medicinal Plants

ABS. JOUR. : RZhBiol., No. 1 1959, No. 4600

AUTHOR : Panayotov, P.; Kalaydzhiyev, A.; G"l"bov, S.
INST. : -
TITLE : Experiments for Studying the Action of Infusions of Teucrium chamaedrys in vitro Upon the Microorganisms Most Frequently Encountered in Diseases of the Digestive Tract
ORIG. PUB. : Farmatsiya (B"lg.), 1957, 7, No.4, 30-32
ABSTRACT : The action of 5% infusion of sprouts of Teucrium chamaedrys upon Bacillus coli, Proteus, pathogens of dysentery, typhoid fever and paratyphoids, and upon Staphylococcus aureus, was investigated experimentally. The bacteriostatic action was evaluated according to halo diameters by using the diffusion method. In the cultures of dysentery bacilli the halo diameters measured 2-12 mm, in paratyphoid cultures 3-5 mm and in typhoid cultures 1 mm. To explain the mechanism of bacte-

CARD: 1/2

C : Bulgaria

P

GENERAL&SPEC.ZOOLOGY.INSECTS - Biology and Ecology.

B : Ref Zhur-Biologiya, No. 2, 1959, No. 9975

A : Penevotov, P.; Zashev, B.; Keremidchiyev, M.

I : Inst. of Forestry, Bulg. Academy of Sciences

T : Yellows Virus Disease of the Gypsy Moth in Bulgaria

S : Izv. In-ta gorata. b"lg. AN. 1958, kn. 3, 417-420

A : No abstract

- Isankov G.; Grigorova, H.

1/1

15.3200

25125
B/004/61/000/001/001/001
D224/D301

AUTHOR: Panayotov, P., Engineer

TITLE: New thermal insulating material in power engineering

PERIODICAL: Tekhika, no. 1, 1961, 38-40

TEXT: The article deals with the problem of replacing mineral wool, sovelite and verniculite, used for thermal insulation in Soviet-made boilers in operation in Bulgaria. In view of a shortage of the above-mentioned materials and a tendency to replace foreign products by domestic ones, Bulgarian designers had to consult A. I. Polkanov, a Soviet specialist in insulating and lining boilers from the Barnaul Boiler Plant. According to a report submitted by A. I. Polkanov, Bulgarian perlite, whose characteristics are given in Table 1,

Table 1

		Перлит	
		сухой	влажный
Обемно тегло VOLUME WEIGHT	kg/m³	2340	2300
Специфично тегло - SPECIFIC WEIGHT	g/cm³	2,39	2,38
Огнеупорност REFRACTORINESS	°C	1350	1390
Температура на размекването TEMPERATURE OF SOFTENING	°C	1186	1190

Card 1/3

New thermal insulating...

can be used for preparing perlite concrete, i.e. the material which can be used as a substitute for the imported material. The technological characteristics of Bulgarian perlite, i.e. the grains formed from it by heating are, compared to Soviet perlite, as follows:

	Volume weight in kg/m^3	Coefficient of heat conductivity in kcal/m h ^0C
Soviet	80-250	0.045 - 0.075
Bulgarian	90-130	0.04 - 0.05

The technological characteristics of perlite concrete, consisting of a 14% solution of abietic rosin, cement, water and perlite sand, are also given. Due to the great similarity of the technological data of perlite concrete, sovelite, and mineral wool and the results of analysis, the perlite concrete can be used for thermal insulation of gas, air and steam ducts and as a second and third layer in boiler linings; it cannot, however, be used for insulations which are limited by the specifications of

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D224/D301

New thermal insulating...

the producer plant to particular materials. Perlite concrete, not being affected by moisture, and resisting temperatures of up to 1,000°C, can be used particularly in insulating Soviet-made BKZ-210-140-Fv and BKZ-75-39-B boilers in operation in Bulgaria. Tabulated data show how the perlite concrete should be used in such a case. There are 5 tables.

Card 3/3

COUNTRY : Bulgaria B-12
CATEGORY :

ABS. JOUR. : RZKhim., No. 22 1959, No. 77938

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : rent for the first wave of α-I i'(lim) is nearly independent of the height of the Hg column; the ratio i'(lim)/i''(lim) increases sharply with increasing temperature (approaching infinity) and is lowered when the fraction [un-ite?] of organic solvent (OR) in the solution is increased. The sum i'(lim) + i''(lim) is the usual diffusion current for the reduction. The α- and β-forms of II give only a single wave; however, on the addition of OR, the

CARD: 2/4

COUNTRY	:	BULGARIA G
CATEGORY	:	Organic Chemistry. Synthetic Organic Chemistry
ABS. JOUR.	:	RZKhim., No. 23 1959, No. 82306
AUTHOR	:	Stanev, A.; Panayotova, E.
INST.	:	Sofia [illegible]
TITLE	:	Interaction of β-Lactams [illegible] Compounds. [illegible]
ORIG. PUB.	:	Godishnik Sofiysk. un-t. Fiz.-matem. fak., 1956-1957 (1958), 51, No 2, 87-101
ABSTRACT	:	In the boiling (3 hours) of β-lactam of α,β-diphenyl-β-(1-phenyl)-aminopropionic acid with 2 moles of C_6H_5MgBr, a mixture of an alcohol-soluble ketone, $C_6H_5CH(NHC_6H_5)CH(C_6H_5)COC_6H_5$ (I), is formed in ether, m.p. 147° (from alcohol), and a substance insoluble in alcohol, m.p. 177-178° (from isoamyl acetate), identical to a compound previously obtained by condensation of benzylideneaniline and benzylphenylketone (II)
CARD:		1/2

COUNTRY :
CATEGORY : G

ABS. JOUR. : RZKhim., No.23 1959, No. 82308

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT cont'd : 165-167° (from alcohol-CH_3COOH). By heating with C_6H_6 in the presence of C_2H_5ONa, I is isomerized into III. The structure of I was confirmed by synthesis from benzalanyl and II (10-12 hours, 60-70°). III decomposes when heated with concentrated aqueous alcoholic HCl into aniline, C_6H_5CHO, II and a chlorine-containing substance, m.p. 240°, of undetermined structure; it does not react with NH_2OH and $C_6H_5NHNH_2$, and when heated

CARD: 3/4

SPASOV, Al.; PANAYOTOVA, B.; [illegible]

Synthesis of aryl-substituted [illegible]. Izv. AN SSSR 158 no.2:429-431 S '64. (MIRA 17:10)

1. Sofiyskiy Vysshiy meditsinskiy institut, Bolgariya. Predstavleno akademikom B.A.Kazanskim.

SPASOV, Al.; PANAYOTOVA, B. [Panaiotova, B.]

Reduction of 1,3,4-triarylated 2-azetidinones. Zhur. org. khim. 1 no.6:1099-1102 Je '65. (MIRA 18:7)

PANAYOTOVA, M.; RAYL'OZOV, D.

Residual microflora in the sterilization of canned meat and fish. Mikrobiologiia 25 no.2:211-216 Mr-Ap '56. (MLRA 9:7)

1. Nauchno-issledovatel'skiy veterinarno-gigienicheskiy i kontrol'nyy institut g. Sofiya (Bolgariya)
(FOOD PRESERVATION,
sterilization of meat & fish preserves, residual microflora (Rus))
(ANTISEPSIS AND ASEPSIS,
fish & meat sterilization in preserves, residual microflora (Rus))

USSR/Chemical Technology. Chemical Products and Their Application -- Food industry, I-28

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6718

Author: Panayotova, M., Bayl'ozov, D.

Institution: None

Title: Residual Microflora on Sterilization of Meat and Fish Canned Goods

Original Publication: Mikrobiologiya, 1956, 25, No 2, 211-216

Abstract: 1,293 cans of meat and fish food products were investigated to determine the adequacy of the currently utilized conditions of sterilization of canned foods. In 1.93% of these a residual microflora was detected which consisted of anaerobia and facultative, anaerobic, sporogenic microorganisms of the group Cl. putrificum, Cl. sporogenes, Bact. subtilis and of non-sporogenic organisms which were mostly micrococci. In canned meat products a residual microflora is encountered 3 times more often than in canned fish, and in the former predominate putrescent sporogenic anaerobia, while in the latter --

Card 1/2

BULGARIA/Chemical Technology. Chemical Products and H
Their Uses. Part III. Food Industry.

Abs Jour : Ref Zhur-Khimiya., No 19, 1958, 51954

Author : Ivanytcva, M., Baylozov, D. Kebedzhiyev, I.
Inst :
Title : A Study of Cleanliness of Heat and Fresh Canning Enterprises. Biological Methods of Hent Evaluation.

Orig Pub : Lekh. promishlenost, 1956, 5, No 12, 25-31

Abstract : In order to set norms for sanitary standards in the canneries, microbiological control of the productions and installations of several Bulgarian plants was effected. It was recommended to consider as sanitary and hygienic such plants in which 1 g

Card : 1/3

BAYL'OZOV, D.; PANAYOTOVA, M; VESELINOV, V.

Methods for detecting staphylococcal enterotoxin. Zhur.mikrobiol., epid.i immun. 33 no.8:101-104 Ag '62. (MIRA 15:10)

1. Iz TSentral'nogo nauchno-issledovatel'skogo veterinarno-gigiyenicheskogo instituta produktov zhivotnovodstva, Bolgariya.
(STAPHYLOCOCCUS) (TOXINS AND ANTITIOXINS)