GUTMAN, N.R.; GENDON, Yu.Z.; MENTKEVICH, L.M.; FAL'KOVA, I.I.

Mixed infection and interference of poliomyelitis and Coxsackie viruses. Trudy Mosk. nauch.-issl. inst. virus. prep. 2:153-157 '61. (MIRA 17:1)

FAL'KOVA, I.I.; GUTMAN, N.R.

Study of enteroviruses isolated from children. Vop.virus 7 no.4:64-71 Jl-Ag '62. (MIRA 15:8)

1. Kafedra virusologii TSentral'nogo instituta usovershenstvovaniya vrachey, Zaporozhskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya, Moskovskiy nauchno-issledovatel'skiy institut virusnykh preparatov.
(VIRUSES) (INTESTINES--MICROBIOLOGY)

SOLOV'YEV, V.D.; GUTMAN, N.R.; FAL'KOVA, I.I.

Virological study of an outbreak of aseptic meningitis in Zaporozh'ye. Vop.virus.7 no.5:539-544 S-O '62. (MIRA 15:11)

1. Moskovskiy nauchno-issledovatel'skiy institut virusnykh preparatov, Zaporozhskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya i kafedra virusologii TSentral'nogo instituta usovershenstvovaniya vrachey.
(ZAPOROZH'YE--MENINGITIS) (ECHO VIRUSES)

SOLOV'YEV, V.D.; GUTMAN, N.R.; FEL'MAN, I.A.

Virological research on an outbreak of diseases in the town of Slantsy. Sov. med. 26 no.11:95-97 N'62 (MIRA 17:3)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta virusnykh preparatov i Leningradskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.

GUTMAN, P.

Hard polyvinyl chloride, an anticorrosive material. p. 172. (WIADOMOSCI HUTNICZE, Vol. 10, No. 6, June 1954, Stalinogrod, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

GUTMAN, R.A.

VAS'KOVSKIY, S.A.; GUTMAN, R.A.; KULAGIN, I.K.; MAKAROV, A.P.

Application of automatic seam welding in the railroad car industry. Zhel. dor. transp. 38 no.11:28-31 N '56. (MLRA 9:12)

(Car wheels--Welding)

VAS'KOVSKIY, Stanislav Antonovich,; TSYPLAKOV, Nikolay Vasil'yevich,; GUTMAN, Raisa Aronovna,; BRAYLOVSKIY, N.G.,inzh., red.; BOBROVA, Ye. N., tekhn. red.

[Mechanization of electric welding operations in repairing cars; practices of the Southwestern Railroad car depots] Mekhanizatsiia elektrosvarochnykh rabot pri remonte vagonov; opyt vagonnykh depo IUgo-Zapadnoi dorogi. Moskva, Gos. transp. zhel-dor. izd-vo, 1958. 49 p. (MIRA 11:12)

(Railroads--Cars--Maintenance and repair)
(Electric welding)

GUTMAN, R.A., inzh.

Hard facing of coupling locks by means by a lying lamellar electrode. Svar. proizv. no.6:36-37 Je '61. (MIRA 14:6)

1. Vagonnoe depo stantsii Darnitsa.
(Hard facing)
(Electrodes)

GUTMAN, R.A., inzh. (Kiyev)

Mechanization of the welding work. Zhel. dor. transp. 45 no.11: 71 N '63. (MIRA 16:12)

GUTMAN, Rudolf Abramovich; PASHKOV, Boris Il'ich; ILYUSHIN, A.P., red.; VOLKOVA, V.G., tekhn. red.

[Cash registers, their operation and repair] Kontrol'no-kassovye apparaty, ikh ekspluatatsiia i remont. Moskva, Gos. izd-vo torg. lit-ry, 1963. 137 p. (MIRA 16:7)
(Cash registers—Maintenance and repair)

GUTMAN, R. M.

Gutman, R. M. and Pevzner, G. B. - "Some features of the clinical course of ulcerous infections in Invalids of the Fatherland War," Trudy Leningr. obl. gospitalya dlya lecheniya invalidov Otchestv. voyny, Leningrad, 1948, p. 241-52

SO: U- 3950, 16 June 53, (Letopis, 'Zhurnal 'nykh Statey, No. 5, 1949).

GUTMAN, R. M.

Gutman, R. M. - "On the problem of hemopoesis during hypertonic illness, treated by surgery," Trudy Leningr. obl. gospitalya dlya lecheniya invalidov Otechestv. voyny, Leningrad, 1948, p. 349-54

SO: u-3950, 16 June 53, (Letopis, 'Zhurnal 'nykh Statey, No. 5, 1949).

GUTMAN, R.M.

Cholesterinemia in lymphogranulomatosis. Klin.med. 38 no.1: 126-130 Ja '60. (MIRA 13:10)
(HODGIN'S DISEASE) (CHOLESTEROL)

GUTMAN, S.

Protecting Asynchronous Three-phase Motors from Running on Two Phases. ELECTROTEHNICA (Electrical Engineering), "12:536:Dec 55

KOLOTUSHKIN, V.; GUTMAN, S. (L'vov); MARTYNENKO, A. (L'vov); PYZHIK, I.; CHATSKIY, P. (Dmitrov)

Editor's mail. Sov. torg. 36 no.2:32-33 F '63. (MIRA 16:4)

1. Instruktor gorodskogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza, Khabarovsk (for Kolotushkin). 2. Glavnyy bukhgalter Universal'nogo magazina, Moskva (for Pyzhik).

(Khabarovsk—Distributive education)
(Retail trade)

GUTMAN, S. G.

Prilozheniye metoda elektroanalogiy k resheniyu zadach teorii upruqosti.
IZV. NII gidrotekhn., 26 (1940)

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

GUTMAN, S. G.

Gutman, S. G. A general solution of a problem of the theory of elasticity in generalized cylindrical coordinates. Doklady Akad. Nauk SSSR (N.S.) 58, 993–996 (1947). (Russian)

Cylindrical coordinates $(r, \theta, z) = (\alpha, \beta, \gamma)$ and spherical coordinates $(r, \theta, \varphi) = (-1/\gamma, \beta, 2 \tan^{-1} \alpha)$ are special instances of generalized cylindrical coordinates α, β, γ, for which

$$ds^2 = \left(\frac{d\alpha}{h_1}\right)^2 + \left(\frac{d\beta}{h_2}\right)^2 + \left(\frac{d\gamma}{h_3}\right)^2,$$

$$h_1 = (a\gamma + b)^2, \quad h_2 = h_3 = h_1 h_1^{-1}, \quad \frac{\partial h_1}{\partial \gamma} = 0.$$

The components of strain in such coordinates are expressed in terms of a harmonic and biharmonic function and these expressions simplify considerably in the case of ordinary cylindrical and spherical coordinates. *T. C. Doyle.*

Source: Mathematical Reviews, 1948 Vol 9, No. 5

GUTMAN, S. G. RESHENIE
25351

Nekotorykh Uravneniy Teorii Uprugosti Metodom Zlektroanalogii.
Izvestiya Vsesoyuz Nauch-In-TA Gidrotekhniki Im. Vedeneeva, T. XXXVI,
1948, S. 58-73.

SO: LETOPIS NO. 30, 1948

GUTMAN, S. G.

Gutman, S. G. A general solution of the plane problem of the equilibrium of a beam bounded by a logarithmic spiral. Doklady Akad. Nauk SSSR (N.S.) 60, 559-562 (1948). (Russian)

By introducing a system of curvilinear coordinates connected with the Cartesian coordinates by the formula $\alpha+i\beta=e^{\delta}\log\zeta$, $z=x+iy$, δ a parameter, the author obtains a solution of the biharmonic equation (Airy's stress function) which can be used to solve several problems of the equilibrium of curved beams bounded by logarithmic spirals.

I. S. Sokolnikoff (Los Angeles, Calif.)

Source: Mathematical Reviews, Vol 7 No. 7

All-Union Sci. Res. Inst. Hydraulic Eng. im. B. Ye. Vedeneyev

GUTMAN, S.G., professor, doktor tekhnicheskikh nauk.

On the slution of a plane problem of thermoelasticity under steady heat conditions. Izv. VNIIG no.45:17-20 '51. (MLRA 10:3)
(Elasticity) (Thermodynamics)

GUTMAN, S.G., prof., doktor tekhn. nauk

Determining thermal stresses during harmonic fluctuations of temperature. Izv. VNIIG 47:72-102 '52. (MIRA 12:6)
(Elastic solids) (Thermodynamics)

GUTMAN, S.G., prof., doktor tekhn. nauk

Investigation of a steady thermal flow in a composite medium of frozen and thawed soil. Izv. VNIIG 47:248-250 '52. (MIRA 12:6)

(Soils--Thermal properties)

GUTMAN, S.G., prof., doktor tekhn.nauk

Determining thermal stresses during harmonic fluctuations of temperature. Chapter 4. Izv.VNIIG 51:23-53 '54. (MIRA 12:5)

(Elastic plates and shells)

GUTMAN, S.G.

Solving the equations of Poisson and Helmholtz for a two-dimensional domain by means of three-dimensional electric-potential models. Nauch. dokl. vys. shkoly; energ. no.1:247-251 '58. (MIRA 11:10)

1.Vsesoyuznyy nauchno-issledovatel'skiyy institut gidrotekhniki im. B.Ye. Vedeneyeva.
(Harmonic functions--Electromechanical analogies)

Gutman, S. G.

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

68. M. S. Ganeeva, Kh. M. Mushtari, R. G. Surkin (Kazan): On a method of solving problems of the bending theory of shallow shells with the use of electronic digital computers.

69. G. T. Gasanov, B. G. Gurbanov (Baku): Solution of unsteady problems of hydrodynamics of viscous and visco-plastic fluids.

70. A. V. Gemmerling (Moscow): An approximate stability analysis of frames in the elastic-plastic range.

71. G. A. Geniev (Moscow): Some problems concerning the plane flow of compressible plastic media.

72. G. P. Geandshian (Erevan): On a problem of elastic-plastic torsion of an anisotropic shaft.

73. I. S. Gerasimov (Moscow): A dynamic problem for a conical shell.

74. M. V. Gzovskiy (Moscow): Tectonophysics — a new domain of application of mechanics to geological problems.

75. M. V. Gzovskiy, D. Osokina (Moscow): Simulating of processes of plastic deformation and rupture of solids with great variations of time and size.

76. V. G. Gmoshinskiy (Moscow): Development of a theory of pressure in rocks with the use of the methods of continuum mechanics.

77. I. I. Golberg (Moscow): Some generalizations of the basic equations of visco-elasticity.

78. I. I. Golberg (Moscow): The propagation of longitudinal waves in a visco-elastic rod.

79. A. M. Goldberg, V. G. Korotkin (Leningrad): Theoretical and experimental methods of design of the locks of the Stalingrad hydroelectric power plant.

80. Z. I. Goldenblat (Moscow): A generalized theory of plastic flow.

81. I. I. Goldenblat (Moscow): The theory of finite deformations of anisotropic elastic media.

82. I. I. Goldenblat, N. A. Nikolaenko (Moscow): A general creep theory of shells.

83. A. L. Goldenveiser (Moscow): Development of the theory of thin elastic shells.

84. A. L. Goldenveiser (Moscow): Asymptotic integration of the equations of the theory of thin elastic plates.

85. M. I. Gorbunov-Posadov (Moscow): Determination of the elastic zone boundary in a sand foundation, which approaches failure under the pressure of a rigid footing.

86. A. Ia. Gorgidze (Tbilisi): On secondary effects in torsion and bending of nearly prismatic bars.

87. L. V. Goralik (Leningrad): On filtration force and viscous friction in water-saturated sand under dynamical conditions.

88. O. A. Goroshko, G. N. Savin (Kiev): Contribution to the dynamics of inelastic one-dimensional sections of variable length.

89. A. S. Grigoriev (Moscow): On elastic-plastic deformation of non-homogeneous plates and disks.

90. A. S. Grigoriev (Moscow): Equilibrium of membrane shells of revolution for large displacements and strains.

91. G. S. Grigorian (Erevan): Creep design of thin orthotropic sandwich shells.

92. S. S. Grigorian (Moscow): The general equations of soil dynamics and some particular solutions.

93. D. V. Grilitskii (Lvov): Torsion of an elastic layer.

94. A. N. Grubin (Leningrad): Stress concentration in notched tension strips under large creep deformations.

95. V. S. Gubenko, V. I. Mossakovskii (Dnepropetrovsk): The pressure of an annular die on an elastic half space.

96. I. J. Gudushauri (Tbilisi): Effect of shear stresses in the design of foundation strips of arbitrary rigidity under arbitrary loads.

97. N. G. Gulkanjan (Erevan): The bending of a hollow prismatic rod with a rectangular hole.

98. A. M. Gutkin (Moscow): The limit equilibrium of an elastic-plastic disc that is compressed between rough rigid plates.

99. S. G. Gutman (Leningrad): A plane multiply-connected region subjected to a conservative body force and non-uniform heating.

100. S. G. Gutman (Leningrad): The equilibrium of a hollow cone under its own weight and hydrostatic pressure on one of its surfaces when the axis of the cone has an arbitrary orientation.

101. V. M. Darevskii, P. Z. Kahnskii (Moscow): Buckling of cylindrical cantilever shell with ring-stiffened edge under internal pressure.

PHASE I BOOK EXPLOITATION SOV/4042

Leningrad. Universitet

Polyarizatsionno-opticheskiy metod issledovaniya napryazheniy; trudy konferentsii 13-21 fevralya 1958 goda (Optical Polarization Method for Stress Analysis; Transactions of the Conference of February 13-21, 1958). [Leningrad] Izd-vo Leningradskogo univ., 1960. 451 p. Errata slip inserted. 2,400 copies printed.

Resp. Ed.: S.P. Shikhobalov; Ed.: Ye.V. Shchemeleva; Tech. Ed.: S.D. Vodolagina; Editorial Board: S.G. Gutman, L.M. Kachanov, V.M. Krasnov, T.D. Maksutova, N.I. Prigorovskiy, V.M. Proshko, N.S. Rozanov, and Ye.I. Edel'shteyn.

PURPOSE: This collection of 58 articles is intended for scientists and engineers concerned with experimental stress analysis of machine parts and structural components.

COVERAGE: The collection contains reports presented at the conference on optical polarization methods in stress analysis held February 13 - 21, 1958, in Leningrad and attended by 324 delegates including representatives of the People's Republic of China, the Polish People's Republic, the German Democratic Republic, and the Republic of Czechoslovakia. The reports discuss general theoretical problems and new methods of investigation and describe apparatus and materials used in the optical method. Solutions of specific two-dimensional and three-dimensional problems occurring in shipbuilding, aircraft design, engine construction, in various branches of heavy and precision machine design, in mining, metallurgy, hydraulic structures, railroad transport, in structural mechanics, geodynamics, in the control of stresses in products of the glass and electronic industry, etc., are given. Solution of the three-dimensional problem by means of the method of photoelasticity is introduced and the use of this method for the solution of problems associated with plasticity, creep, dynamics, hydrodynamics, etc., is demonstrated. Reports previously published elsewhere are printed here in abbreviated form. No personalities are mentioned. References are found at the end of 47 of the reports.

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PHASE I BOOK EXPLOITATION SOV/4042

Leningrad. Universitet

Polyarizatsionno-opticheskiy metod issledovaniya napryazheniy; trudy konferentsii 13-21 fevralya 1958 goda (Optical Polarization Method for Stress Analysis; Transactions of the Conference of February 13-21, 1958). [Leningrad] Izd-vo Leningradskogo univ., 1960. 451 p. Errata slip inserted. 2,400 copies printed.

Resp. Ed.: N.P. Shikhobalov; Ed.: Ye.V. Shchemeleva; Tech. Ed.: S.D. Vodolagina; Editorial Board: S.G. Gutman, L.M. Kachanov, V.M. Krasnov, T.D. Nakrutova, N.I. Prigorovskiy, V.M. Proshko, N.S. Rotarov, and Ye.I. Kiel'shteyn.

PURPOSE: This collection of 58 articles is intended for scientists and engineers concerned with experimental stress analysis of machine parts and structural components.

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Optical Polarization Method (Cont.) SOV/4042

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GUTMAN, S.G., prof., doktor tekhn. nauk

Modeling the action of gravity and hydrostatic pressure on twin centrifugal models. Izv. VNIIG 76.35-41 '64. (MIRA 18:10)

GUTMAN, S.R.; EFREMOV, V.A.

Apparatus for measuring the bioelectrical activity of muscle. Biul. eksp. biol. i med. 54 no.8:114-116 Ag '62. (MIRA 17:11)

1. Iz akademicheskoy gruppy deystvitel'nogo chlena AMN SSSR G.N. Speranskogo i iz Moskovskogo gorodskogo ortopedicheskogo gospitalya (nachal'nik - doktor med. nauk S.N. Voskresenskiy). Predstavlena deystvitel'nym chlenom AMN SSSR V.V. Parinym.

24(2), (5)

AUTHORS: Petrashen', M. I., Gutman, T. L., Balarin, M.

SOV/54-58-4-3/18

TITLE: Model of a Central Ion in the Theory of Ionic Crystals and Some of Its Results (Model' tsentral'nogo iona v teorii ionnykh kristallov i nekotoryye yeye rezul'taty)

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1958, Nr 4, pp 28-33 (USSR)

ABSTRACT: In this paper the authors give an approximate calculation of the energy of a central ion located in a lattice point of a cubic crystal lattice. For this purpose an ion in a crystal phosphorus is investigated, which corresponds to Seitz' model of crystal phosphorus (Ref 3). The general expression of the energy of a central ion consists of the sum of "internal" energy (energy which is described only by its wave function) and energy of the interaction between the electrons of the central ion and the crystal field $W = W_0 + W_1$. In the first approximation the crystal field is regarded as a field with lattice-like arranged point charges. W_1 contains Mandelung's constant and depends on the nuclear charge and number of electrons of the central ion

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Model of a Central Ion in the Theory of Ionic Crystals and Some of Its Results

and the lattice constant. The assumption of a point lattice is justified according to the experimental papers listed in references 5 and 6. In the second approximation the finite extension (and the electron distribution) of the surrounding ions is taken into account. In this case W_1 consists of W_1' and W_1'' of the electrostatic and exchange interaction. W_1' is expressed in the preceding form with the additional term $\Delta W_1'$, which takes into account the spatial extension of a neighboring ion. ΔW_1 is determined for an ion with its six next neighbors. The determination of an approximate expression for W_1'' proved to be very difficult. Further, the authors state that the exchange correction exercises less influence upon the value of the difference of energy levels than does the electrostatic correction upon the finite extension of ions. If the central ion under investigation is an activator, another term W_s must be added to the aforesaid equation (1), which takes into account that the one-electron function is not rectangular due to the introduction of the activator. There are 9 references, 6 of which are Soviet.

PETRASHEN', M.I.; GUTMAN, T.L.; BALARIN, M.

Model of the central ion in the theory of ionic crystals and some results of its use [with summary in English]. Vest. LGU 13 no.22:28-33 '58. (MIRA 12:4)

(Ionic crystals)

AUTHORS: Petrashen', M. I., Gutman, T. L. SOV/48-22-6-7/28

TITLE: Single-Electron Wave Functions of Tl^+ in Some Crystals (Odnoelektronnyye volnovyye funktsii Tl^+ v nekotorykh kristallakh)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya fizicheskaya, 1958, Vol. 22, Nr 6, pp. 668-670 (USSR)

ABSTRACT: This is a supplement to a paper already published (Ref 1). For the electron wave functions of the central ion the eigenfunctions of the equation by Hartree-Fock (Khartri-Fok) are here set up:

$$-\frac{1}{2}\Delta\psi_k + \left[-\frac{Z}{r} + V(\vec{r})\right]\psi_k(\vec{r}) - A^0\psi_k + U(\vec{r})\psi_k - A\psi_k = E_k\psi_k,$$

where $V(\vec{r})$ denotes the potential of the shielding of the central ion by electrons, $U(\vec{r})$ - potential of the electrostatic field of the crystal, A^0 and A - the corresponding exchange operators of the electrons of the central ion and the crystal electrons. All components of this equation are here represented in form of infinite series. A cubic crystal lattice serves as a basis. A method of approximation was used when solving the equations, which was based upon the conception that the crystal field forms

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a barrier of the height ΔE for the electrons of the central ion. The Slater (Sleter) method was used for calculation. The approximated solutions were obtained from the single-electron functions of the free Tl^+ ion according to Hartree. For the calculation of ΔE the 6 ions Cl^{-1}, which were nearest to the activator, were taken into account. The wave functions of Cl^{-1} were calculated by the Hartree method. The functions obtained were used for a first estimate of the ratio between $f\,{}^1S_0 - {}^3P_1$ and $f\,{}^1S_0 - {}^1P_1$. It is assumed that this manner of estimating made it possible for Soviet scientists to obtain results that show better agreement with experimental ones than those obtained by American scientists. There are 3 references, 2 of which are Soviet.

1. Thallium ions—Theory 2. Crystals—Electrostatic properties
3. Perturbation theory 4. Mathematics

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GUTMAN, T.L.

PHASE I BOOK EXPLOITATION SOV/5151

Leningrad. Universitet

Molekulyarnaya spektroskopiya (Molecular Spectroscopy) [Leningrad] Izd-vo Leningr. univ., 1960. 198 p. 4,700 copies printed.

Resp. Ed.: F. I. Skripov; Eds.: Ye. V. Shcheraleva and V. D. Piastro; Tech. Ed.: S. D. Vodolagina.

PURPOSE: This collection of articles is intended for scientific workers, instructors and students of physics and chemistry. It may also be used by engineers and technicians employing molecular spectroscopy.

COVERAGE: The collection of articles describes spectroscopic studies of liquids and solutions, and includes data on applied molecular spectroscopy. Individual articles deal with the molecular interaction in solutions, and specifically with the hydrogen bond problem. Works on the optimum utilization of spectral apparatus and on the analytical application of molecular spectroscopy are also included. Aspects of the structure of high and low molecular compounds and of molecular complexes are also covered. The collection was published in honor of the 70th birthday of Professor Vladimir Mikhaylovich Chulanovskiy, Soviet specialist in molecular spectroscopy and spectral analysis. There are no references.

TABLE OF CONTENTS:

Card 2/3

PERSHITS, Ya.N.; GUTMAN, V.I.

Effect of capture centers on the electric properties of alkali halide crystals. Uch.zap.Ped.inst.Gerts.no.207:149-162 '61. (MIRA 16:5)

1. Pskovskiy gosudarstvennyy pedagogicheskiy institut imeni S.M. Kirova.

(Electrons—Capture)
(Alkali metal halide crystals—Electric properties)

S/139/62/000/004/010/018
E132/E435

AUTHORS: Pershits, Ya.N., Gutman, V.I.

TITLE: The influence of foreign ions on electronic processes in ionic crystals

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Fizika, no.4, 1962, 123-129

TEXT: It is established that the influence of added colouring on the electrical properties of alkali halide crystals is caused by the presence in them as impurities of heavy metals, the ions of which act as centres for trapping electrons. The trapping of electrons by foreign ions in crystals irradiated by X-rays has been studied experimentally. A means of colouring crystals from a plane metallic cathode is described. Trapping of electrons by ionic impurities leads to additive or subtractive colouring of the crystal. As a result of additive colouring the neutralization of impurity ions takes place decreasing the number of trapping centres. The trapping of electrons leads to changes in the electrical properties of the crystals. There are 6 figures.

ASSOCIATION: Pskovskiy gospedinstitut (Pskov State-Pedagogical Institute)

SUBMITTED: May 3, 1961

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ACCESSION NR: AR4034659 S/0196/64/000/003/B005/B005

SOURCE: Ref. zh. Elektrotekhn. i energ., Abs. 3B26

AUTHOR: Gutman, V. I.; Parshits, Ya. N.

TITLE: Effect of foreign ions on the electron processes in ionic crystals. Abstract

CITED SOURCE: Izv. Leningr. elektrotekhn. in-ta, vy*p. 51, 1963, 185

TOPIC TAGS: ionic crystal, electron process in crystal, foreign ion in crystal

TRANSLATION: A method is described for tinging alkali-halogene crystals from a Ta cathode. The effect of additive tinging upon the electronic characteristics of alkali-halogene crystals is due to the heavy-metal impurities whose ions form centers of electron capture. Introduction of Cu, Ni ions into a decolorized crystal restores the original color. It is found that the ratio of F-center mobility at the second tinging to the mobility at the first tinging (K) is a definite characteristic of both natural and grown single crystals. On introduction of (Cu, Ni) ions, any crystal aquires the characteristics of a crystal with $K \neq 1$. On the other hand, the electronic tinging imparts the characteristics with $K = 1$ to any crystal. Variation in the luminous intensity J of the light passing through

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ACCESSION NR: AR4034659

x-rayed crystals with Cu impurity can be described by this formula

$$J = J_1 - (J_1 - J_0)\, e^{-\alpha t},$$

where J_0, J_1 are the initial and final luminous intensities, α is the probability of electron capture by an impurity center, t is the time of decolorizing.
[Pskovskiy gos. pedagogich. in-t im. S. M. Kirova]

DATE ACQ: 10Apr64 SUB CODE: SS ENCL: 00

Card 2/2

ACCESSION NR: AP4020293 S/0139/64/000/001/0003/0007

AUTHORS: Pershits, Ya. N.; Gutman, V. I.; Anosova, A. I.

TITLE: The effect of foreign ions on the electrical conductivity of irradiated alkali halide crystals

SOURCE: IVUZ. Fizika, no. 1, 1964, 3-7

TOPIC TAGS: ions, foreign ions, electrical conductivity, alkali halide, alkali halide crystal, irradiated crystal, coloration, bleaching, F center, cation vacancy

ABSTRACT: Investigations were made on the effect of irradiation by x-rays on the electrical conductivity of alkali-halide crystals activated by copper and of crystals subjected to electron coloration and bleaching. The specific conductivity was found generally to decline at first with irradiation, to reach some minimum, then to rise on further exposure to irradiation. Conductivity was found to increase consistently with rise in temperature. The changes observed in conductivity are generally associated with changes in number of cation vacancies.

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ACCESSION NR: AP4020293

Irradiation with x-rays produced new vacancies, and these produced an increase in electrical conductivity. The drop in conductivity at the beginning of irradiation may be explained by the association of cation vacancies (existing before irradiation) with complexes, thus making them unavailable for conduction. F electrons, forming during this irradiation, are captured by foreign ions, and this removes the ions from the conduction process. Minimal conductivity is associated with maximal breakdown voltage detected at any definite radiation dose. Orig. art. has: 4 figures.

ASSOCIATION: Pskovskiy gospedinstitut imeni S. M. Kirova (Pskov State Teachers Institute)

SUBMITTED: 15Oct62 DATE ACQ: 31Mar64 ENCL: 00

SUB CODE: PH NO REF SOV: 013 OTHER: 010

Card 2/2

L 10883-65 EWA(k)/EWT(1)/EPA(s)-2/EEC(t) Pt-10/Pi-4 AFETR/ASD(a)-5/AS(mp)-2
ACCESSION NR: AR4046547 ESD(gs)/BSD S/0058/64/000/008/E076/E076

AUTHORS: Anosov, A. I.; Gutman, V. I.; Pershits, Ya. N.

B

SOURCE: Ref. zh. Fizika, Abs. 8E580

TITLE: Effect of x-irradiation on the electric conductivity of ionic crystals with impurities

CITED SOURCE: Uch. zap. Pskovsk. ped. in-t. Yestestv. n., vy*p. 16, 1963, 22-26

TOPIC TAGS: x ray irradiation, electric conductivity, ionic crystal, alkali halide, impurity center, impurity conductivity

TRANSLATION: X-irradiation and additive coloring exert an identical influence on the ionic electric conductivity σ of alkali-halide crystals with foreign-ion impurities. The decrease in σ is due to recombination of the impurity ions and electrons, as a result of which

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the foreign ions cease to participate in the conductivity. The increase in σ with increasing integral radiation dose can be attributed to the formation of additional vacancies (RZhFiz, 1955, no. 10, 23112).

SUB CODE: SS ENCL: 00

Card 2/2

GUTMAN, V.M., inzh.

Mechanization of rubber feed to continuous vulcanization units.
Mekh.i avtom.proizv. 16 no.7:26 Jl '62. (MIRA 15:8)
(Feed mechanisms) (Vulcanization)

GONTAR', A.S., inzh.; GUTMAN, V.M., inzh.; KHMELEVSKIY, V.A., inzh.

Automatic line for machining aluminum ingots. Mekh. i avtom. proizv. 19 no.10:9-10 O '65. (MIRA 18:12)

GUTMAN, V.V.

USSR/Electricity - Dielectrics G-2

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6041

Author : Gutman, V.V.
Title : Electrically-Conducting Paper

Orig Pub : Bum. prom-sti, 1956, No 6, 12-15

Abstract : A study was made of the dependence of the resistance ρ of electrically-conducting paper on the amount and quality of the filler (lampblack or graphite), on the method with which the filler is introduced, and on the humidity. A graphite reduces the resistivity of the paper more strongly than lampblack. Calendering the paper reduces the resistivity in proportion to the pressure on the calanders. Heating with current for a period longer than several days reduces the resistance. The temperature dependence of the resistivity of paper located in moist atmosphere is subject to hysteresis, while that in dry atmosphere is linear. The resistivity of dry paper placed in an atmosphere with a relative humidity of 75%, increases by 20% within 20 hours, after which it becomes practically constant. In an atmosphere of saturated

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USSR/Electricity - Dielectrics G-2

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6941

vapor for 25 hours, ρ increases by three times without reaching saturation. The technology for the production of electrically-conducting paper of nine different grades with resistivity from 20 ohm/cm^2 to 6 x 10^5 ohm/cm^2 has been developed and is described in detail.

Card : 2/2

SUN' SIN-DUN [Sun Hsing-tung]; KAYGORODOV, A.M. [translator]; GUTMAN, Ye.I., red.; ZUBRILINA, Z.P., tekhn.red.

[Soya] Soia. [Translated from the Chinese] Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 248 p. (MIRA 12:1)

1. Sel'skokhozyaystvennyy institut provintsii Khebey, g.Baodin (for Sun' Sin-dun)

(Soybean)

YETS, A.G., dotsent; GUTMAN, Ye.S.

Problem of pelvic abscesses. Khirurgiia 37 no.3:60-61 Mr '61.
(MIRA 14:3)

1. Iz kliniki obshchey khirurgii (zav. - dotsent G.A. Dudkevich) Yaroslavskogo meditsinskogo instituta.
(PELVIS--ABSCESS)

S/196/61/000/009/039/052
E194/E155

AUTHORS: Bronfman, A.I., Gutman, Yu.M., and Kuz'mina, L.F.

TITLE: A valve-type magnetic lightning arrester for a voltage of 500 kV

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.9, 1961, 39, abstract 9I 247. (Vestn. elektroprom-sti, no.12, 1960, 32-35)

TEXT: Unlike lightning arresters for lower voltage classes, the arrester type РВМГ-500 (RVMG-500) uses magnetic spark gaps with rotating arc. This has permitted improvement of the protective characteristic and maintains for 500 kV circuits the insulation level previously adopted for 400 kV circuits. The use of magnetic spark gaps permits an increase in the arc-suppressing capacity of the arrester and ensures its reliable operation with currents up to 300 A peak; the remanent voltage with an impulse current of 10 kA has been reduced by 25%. The construction of the arrester is described and the principal electrical characteristics guaranteed by the manufacturer are given,

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A valve-type magnetic lightning ... S/196/61/000/009/039/052
E194/E155

including the volt-ampere and volt-second characteristics. The minimum breakdown-voltage occurs with a pre-discharge time of 5 - 10 microseconds. Then the minimum impulse coefficient is 0.7. Over the pre-impulse time range of 2 - 20 microseconds the impulse breakdown-voltage does not exceed 1200 kV peak. The relative reduction in remanent voltage combined with the reduction in the breakdown-voltage ratio made it possible to raise the insulation level of equipment protected by the arrester to 2.5 times the phase voltage. The main constructional and operating features of the arrester are given.
5 figures, 3 literature references.

[Abstractor's note: Complete translation.]

Card 2/2

BROIFMAN, A.I., inzh.; GUTMAN, Yu.M., inzh.

Gas-type magnetic valve discharger with a 330 kv. voltage rating.
Vest. elektroprom. 32 no.9:73-74 S '61. (MIRA 14:8)
(Electric lines--Overhead) (Electric protector)

GUTMAN, Yu.M.; STEPINA, N.I.; FILIPPOV, A.A.

Discharge voltages of air and line insulation subject to the action of switching surges with simplest form. Izv. NIIPT no.9:251-273 '62. (MIRA 15:12)

(Electric power distribution) (Transients (Electricity))
(Electric insulators and insulation)

BRONFMAN, A.I., inzh.; GUTMAN, Yu.M., inzh.

Valve-type multiple unit magnetic discharger for 500 kv.
Vest.elektroprom. 33 no.4:29-33 Ap '62. (MIRA 15:4)
(Electric lines--Overhead) (Electric protection)

PTICHKIN, Petr Nikolayevich. Prinimal uchastiye GUTMAN, Yu.M.; AFANAS'YEV, V.V., kand. tekhn.nauk, red.; ZHITNIKOVA, O.S., tekhn. red.

[Valve dischargers] Ventil'nye razriadniki. Moskva, Gosenergoizdat, 1963. 145 p. (MIRA 16:5)
(Electric protection) (Electric discharges)

GUTMAN, Yu.M., inzh.

Discharge voltages of long insulator chains with presence of switching waves. Elek sta. 35 no.10:59-64 O '64.
(MIRA 17:12)

VOKALEK, Ya., [Vokalek, J.], inzh.; KUCHERA, Ya. [Kucera, J.], kand. tekhn. nauk; GUTMAN, Yu.M., inzh.; TIKHODEYEV, N.N., kand. tekhn. nauk; FILIPPOV, A.A., kand. tekhn. nauk

Discharge voltages of line insulation during switching surges. Elek. sta 36 no.4:55-63 Ap '65. (MIRA 18:6)

1. Nauchno-issledovatel'skiy institut energetiki Chekhoslovatskoy Sotsialisticheskoy Respubliki (for Vokalek, Kuchera). 2. Nauchno-issledovatel'skiy institut postoyannogo toka (for Gutman, Tikhodeyev, Filippov).

SIDOROV, Fedor Filippovich; ALEKSEYEV, G.P., inzh., red.; BUSHUYEV, N.M., kand.tekhn.nauk, red.; GUTMAN, I.M., inzh., red.; KUZ'MOV, M.T., inzh., red.; IGNAT'YEV, M.G., agronom, red.; PICHAK, F.I., kand. tekhn.nauk, red.; PLAKSIN, V.N., inzh., red.; POLKANOV, I.P., kand.tekhn.nauk, red.; MARCHENKOV, I.A., tekhn.red.

[Mechanic for combines and agricultural machinery] Slesar' po remontu kombainov i sel'skokhoziaistvennykh mashin. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 107 p. (MIRA 14:3)

(Agricultural machinery--Maintenance and repair)

GUTMAN, I. R., jt. au.

Aslanova, M. A.

Technology of petroleum and gas. Baku, Azneftizdat, 1947. 391 p. (49-15783 Rev.)

TP690.A79

S/081/63/000/001/050/061
B144/B186

AUTHORS: Gutman, I. R., Kocharyan, V. A.

TITLE: Attempt to produce high-quality automotive gasolines

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1963, 456-457, abstract 1P128 (Novosti neft. i gaz. tekhn. Neftepererabotka i neftekhimiya, no. 6, 1962, 5-7)

TEXT: The attempt to obtain automotive gasoline components in the New Baku NPZ 5 high-octane showed the possibility of effecting a change-over in the production of the works from A-66 to A-72 gasoline within 2 years. The components used are: the cut boiling in the 40-195°C range obtained by catalytic cracking of thermal-cracking kerosene; the 45-195°C cut obtained by combining the thermal cracking of mazout with the reforming of straight-run ligroin; the 160-195°C cut separated for its part from the 160-270°C cut obtained by two-stage catalytic cracking of the kerosene-gasoil fraction; a wide-boiling pentane amylene cut boiling from 20 to 150°C, separated from the gases of thermal cracking; the 20-50°C pentane cut obtained from plants producing alkylate. Data are given on the

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Attempt to produce high-quality ... S/081/63/000/001/050/061
B144/B186

properties of the components enumerated, flow diagrams of some production units are shown, and also the analysis of the gasoline developed is indicated. Additionally the increase of the octane number, the introduction of the components into the composition of the A-72 gasoline reduces its production cost by 32%. [Abstracter's note: Complete translation.]

Card 2/2

ALEKSANDROV, N.N.; GUTMAN, Z.M.

Status of prevention, diagnosis and treatment of malignant tumors in the White Russian S.S.R.; data for 1962. Zdrav. Bel. 9 no.6:3-6 Je '63. (MIRA 17:5)

1. Iz Nauchno-issledovatel'skogo instituta onkologii i meditsinskoy radiologii (direktor - prof. N.N. Aleksandrov).

GUTMANA, L.

Gutmana, L. "The problem of multiple neuritis," Trudy med. fak. Kaunassk. un-ta, Vol. I, 1948, p. 247-55. In Lithuanian, Russian abstract - Bibliog: 6 items

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

VENSLAUSKAS, M.; GUTMANAS, A.

Clarification of the adequate effect from the viewpoint of N.Rashevskii's theory of stimulation. Liet. TSR Mokslo akad. darb. [Biol.] 1:211-215 '62.

(PHYSIOLOGY)

S/181/63/005/004/006/047
B102/B186

AUTHORS: Gutmanas, E. Yu., Nadgornyy, E. M., and Stepanov, A. V.

TITLE: Investigation of the movement of dislocations in sodium chloride crystals

PERIODICAL: Fizika tverdogo tela, v. 5, no. 4, 1963, 1021 - 1026

TEXT: The authors studied the motion of single dislocations in monocrystalline NaCl samples of different purity (Ca content $<10^{-3}$% (I), $\sim10^{-2}$% (III)) in a large interval of loads applied, and measured the velocities of such dislocations. As in the previous investigations (cf. present periodical) the method of selective etching was applied to measure the load dependence of the velocities of screw and edge dislocations. For the investigations crystals were chosen with no more than 10^4 dislocations per cm^2 and block areas of about 1 mm^2; the dislocations were observed at the {100} slip plane. The graphs obtained for I and III, $\log v_d = f(\log \tau)$, τ being the load (g/mm^2), were compared with the corresponding curves obtained for LiF by Johnston and Gilman (J. Appl. Phys., 30, 129, 1959); comparison

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is made for two types of LiF: LiF_T with high and LiF_M with low yield point. The $v(\tau)$ curve obtained for III coincides with that for LiF_M. In general, $v_d \sim \tau^n$ is valid for $v_d > 10^{-4} - 10^{-5}$ cm/sec, where $n \simeq 8$ (for I), $n \simeq 17$ (III), $n \simeq 25$ (LiF_T). Not only does the slope of the curves increase with I→III→LiF_T but also the curves become shifted toward higher τ. In the case of small velocities ($< 10^{-4} - 10^{-3}$ cm/sec) $v_d = A_1 e^{B_1 \tau}$, with $A_1 = 3.5 \cdot 10^{-8}$ ($1.0 \cdot 10^{-12}$) and $B_1 = 154$ (80) for I (III). The relation $v_d = A_2 e^{-B_1/\tau}$, proposed for LiF, may be applied to NaCl only in the case of high velocities. There are 5 figures and 2 tables.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR Leningrad (Physicotechnical Institute imeni A. F. Ioffe AS USSR, Leningrad)

SUBMITTED: October 4, 1962

GUTMANIS, Krists; GUTMANE, Laima; PETERSONS, E., kand. sel'khoz. nauk, retsenzent; MILLERS, A., st. nauchn. sotr., retsenzent; SHKLENNIKS, Ch., red.; PILADZE, Z., tekhn. red.

[Significance and use of vitamins in vegetable growing] Vitaminu nozime un pielietosana darzenu audzesana. Riga, Latvijas PSR Zinatnu akademijas izd-va, 1962. 54 p. (MIRA 17:2)

1. Biologicheskiy institut Akademii nauk Latviyskoy SSR (for Petersons, Millers).

GUTMANIS, D., fel'dsher (Virgi, Latviyskaya SSR)

Outpatient journal is an obsolete form of recording. Fel'd. i akush. 28 no.4:33 Ap'63. (MIRA 16:8)
(MEDICAL RECORDS)

GUIMANIS, K.K.

GUIMANIS, K.K.: A study of various forms of riboflavin in plants". Riga, 1955. Acad Sci Latvian SSR, Inst of Microbiology. (Dissertations for the Degree of Candidate of Biological Sciences).

SO: Knizhnaya letopis' No 45, 5 November 1955. Moscow.

V Products of bromination and amination of usnic acid (and their antibiotic activity). K. Gūtmanis (Inst. Biol., Acad. Sci. Latv. S.S.R., Riga). *Izvestiya Akad. Nauk Latv. SSR Zinātņu Akad. Vestis* 1955, No. 6 (Whole No. 95), 46–9 (Russian summary, 49–50).—Mixts. of usnic acid (I), m. 196°, and liquified NH_3 were sealed in glass and kept at several temps. At room temp., a water-sol. diimide (II), m. 250°, was pptd. with $(NH_4)_2SO_4$ from the reaction product. At 80° the EtOH-insol. part of the reaction product was II, m. 240–50°; the EtOH-sol. part was a brown substance, m. 110–50°, probably a mixt. of mono- and diimide. Bromide (III) of I, m. 70°, yellow-brown, was prepd. by heating to 100° 0.1 g. I with 0.1 ml. Br in 5 ml. $CHCl_3$, sealed in glass, for 1 hr.; III was sol. in Et_2O and Me_2CO and insol. in H_2O. III with NH_4OH formed an Et_2O-sol. diimide (IV) of III, m. 152°, and an Et_2O-insol. mixt., m. 260° (V), of mono- and diimide of III. With $NHMe_2$ (VI) in Et_2O, III formed a mixt. of Et_2O-sol. III.2VI and Et_2O-insol. III.VI addn. compds., by a reaction with the keto group of III. With $PhNH_2$ in abs. EtOH, III formed III.2$PhNH_2$; the compd. was not salt-like. Antibiotically active *in vitro* were: to *Mycobacterium tuberculosis*, only V and III (pptd. with H_2O from Me_2CO), at concn. 1:350,000, and I at 1:50,000; to *Staphylococcus aureus*, IV at 1:25,000, and V and II at 1:250,000. All derivs. of I, and I, were active with respect to infusoria, and none to *Bacterium coli*. A. Dravnieks

GUTMANIS, K.

New data on contents of various forms of riboflavine in plants. K. Gutmanis. *Latvijas PSR Zinatnu Akad. Vestis* 1955, No. 11, 85–7(Russian summary, 87–8).—Contents of loosely bound (I), tightly bound (II), and total (III) riboflavine in vegetables, plants, and grains were detd. II was 1.5–4 times higher than I. III was 5–10 γ per g. of the nondehydrated mass. A. Dravnieks

[illegible], [illegible]

[illegible]thesis of riboflavin and [illegible]entative processes in [illegible]. p. 73.

LATVIJA[illegible] . [illegible] RIGA, LATVIA. No. 3, 1959

Monthly List of East European Acc[illegible]ions. (EEAI) LC, Vol. [illegible], no. [illegible], Feb. 1960 Uncl.

GUTMANIS, K. (Riga)

Accumulation of riboflavin in higher plants. Vestis Latv ak no.10: 147-152 '59. (EEAI 9:10)

1. Latvijas PSR Zinatnu akademija, Biologijas instituts.
(Latvia--Plants) (Riboflavine)

GUTMANIS, K. (Riga)

Effect of artificial light on the biological composition of tomatoes.
Vestis Latv ak no.11:129-132 '59. (EEAI 9:11)

1. Latvijas PSR Zinatnu akademija, Botaniskais darzs.
(Latvia--Tomatoes) (Light)

GUTMANIS, Krists; PETERSONS, E., kand. sel'khoz. nauk, retsenzent; BRENCSONS, A., retsenzent; SKLENNIKS, C., red.; PILADZE, Z., tekhn. red.

[Biochemical composition of fruits of the Latvian S.S.R.] Latvijas PSR auglu biokimiskais sastavs. Riga, Latvijas PSR Zinatnu akademijas izdevnieciba, 1961. 96 p. (MIRA 15:3)
(Latvia--Fruit)

GUTMANIS, K.

Chemical composition of individual types of vegetables. Vestis Latv ak no.9:101-104 '61.

1. Latvijas PSR Zinatnu akademija, Botaniskais darzs.

GUTMANIS, Krists; GUTMANE, Laima; PETERSONS, E., kand. sel'khoz. nauk, retsenzent; MILLERS, A., st. nauchn. sotr., retsenzent; SKLENNIKS, Ch., red.; PILADZE, Z., tekhn. red.

[Significance and use of vitamins in vegetable growing] Vitaminu nozime un pielietosana darzenu audzesana. Riga, Latvijas PSR Zinatnu akademijas izd-va, 1962. 54 p. (MIRA 17:2)

1. Biologicheskiy institut Akademii nauk Latviyskoy SSR (for Petersons, Millers).

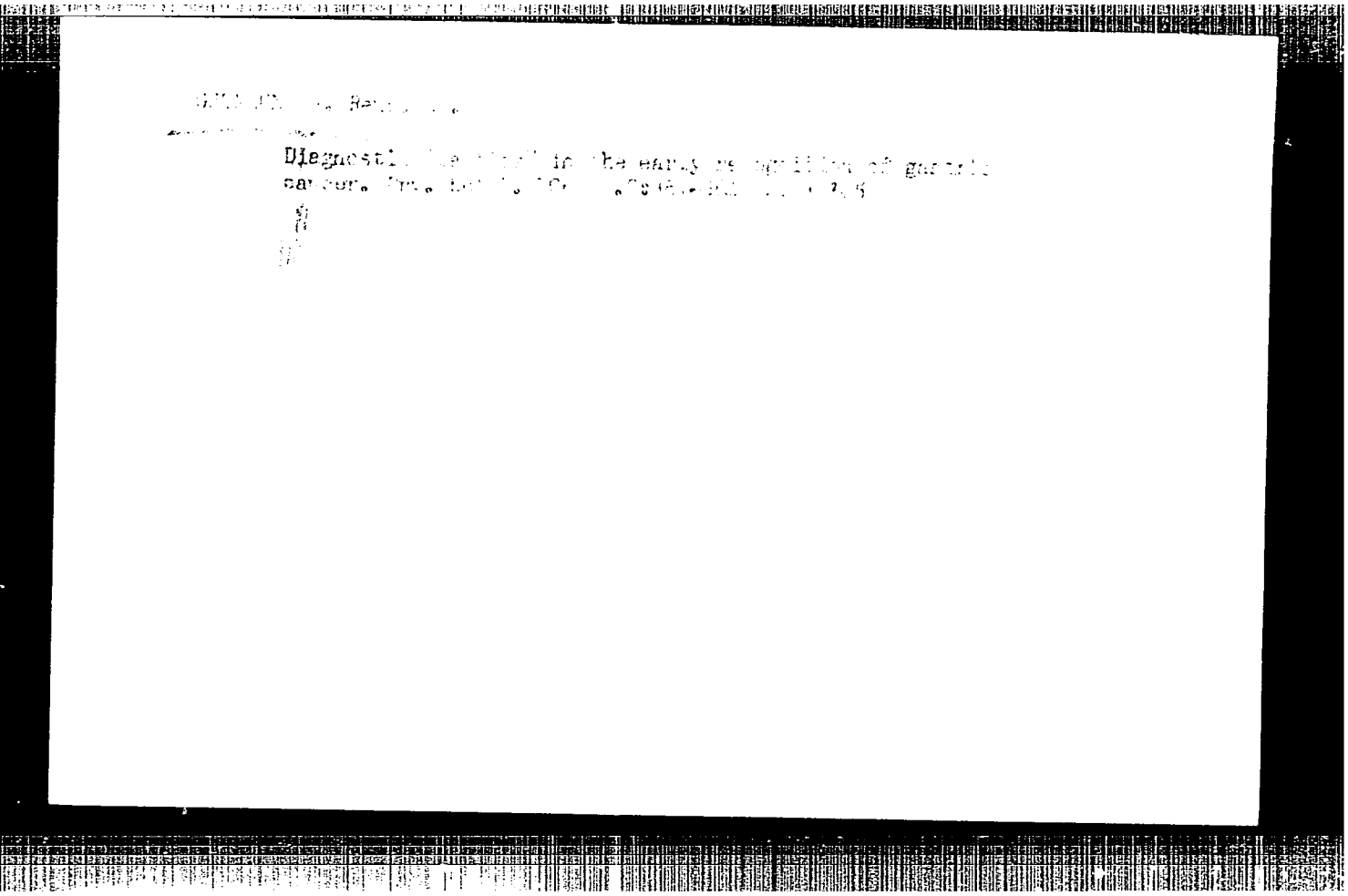
ZUNDE, I., [illegible] sel'khoz. nauk, [illegible]; [illegible], [illegible] sel'khoz. nauk, red.; Y[illegible], [illegible] red.; [illegible], K., kand. biol. nauk, red.; [illegible], kand. sel'khoz. nauk, red.

[Economically useful plants] Tautsaimnieciba [illegible] augi. Riga, Latvijas PSR Zinatnu akad. Izd-ba. [illegible] 194 p. [in Latvian] [illegible]

1. Akademiya nauk Latviyskoy SSR. Biologicheskiy institut (for Petersons).

GUTMANN, Arnost

Conference on physical education research. Vestnik CSAV 72 no.3:374-377 '63.



Gutmann E. Navrat koxni citlivosti po preruseni nervu Recovery of skin sensitivity after severance of the nerve Biologicke Listy 1947, 28/1 (18-26)

In seven rabbits the sural nerves were cut and the recovery of sensitivity to pain and touch was tested by the use of reflexes. It was found that recovery of touch sensitivity appears later than that of pain. The author suggests that this difference depends on the degree of myelination. The pain givres are thin whereas the touch fibres are thick, being enveloped by a larger medullary sheath. The development of this sheath requires more time.

Kurasek-Prague

So: Physiology, Biochemistry and Pharmacology, Section II, Vol. 1, #1-6

GUTMANN, E.
(5213)

Dept. for Res. on Nervous System, Univ. of Prague, Czechoslovakia Effect of delay of innervation on recovery of muscle after nerve lesions Journal of Newrophysiology 1948, 11/4 (279-294) Graphs II Tables 4 Illus. 6

Study was made of the recovery of muscle after immediate and delayed reinnervation following crushing and suture of the peroneal nerve in the rabbit. The time of onset and degree of motor function as well as the changes in muscle fibre size and weight were used as criteria of the recovery process. It was shown that the recovery of muscle fibre size after delayed suture is more defective than after delayed reinnervation following nerve crushing. This is thought to be due to shunting of nerve fibres into functionally wrong channels after nerve suture. The experiments indicate that 'up to a period of 8 months of denervation, the poor degree of functional recovery following reinnervation is due to deficient maturation of the nerve fibres. The rate of regeneration of nerve fibres is apparently not affected after such periods of denervation'. After longer periods recovery of muscle fibres becomes more deficient, the degree of muscle atrophy being then apparently a decisive factor in limiting functional recovery.

Tarlov - New York (Sec. VIII)

So: Excerpta Medica, Vol. II, No. 10, Sect. II, Oct. 1949

GUTMANN, A.; HORVATH, M.

Planning of biologic and medical research. Cas.lek.cesk. 89 no.27: 777-781 7 July 50. (CLML 19:4)

GUTMANN, E; RYCHLIK, I; VRBOVA, G.

Cerebral edema. Cas. lek. cesk. 89 no.51:1449-1454 21 Dec 50.
(CIML 20:4)

1. Of the Institute for Brain Research (Head-- Prof. Vl.Hasko-vec, M.D.).

VRBOVA G., GUTMANN E., JIROUT J., RYCHLIK I.

Poruchy vodniho metabolismu mozkove tkane pri roentgenovem ozareni. [Water metabolism disorders of the brain tissue in roentgen irradiation] Cas. lek. cesk. 90:25 22 June 51 p. 770-3.

1. Of the Central Institute of Biology (Head—Prof. Ivan Malek, M.D.), Neuro-Physiological Section.
2. Of the Neurological Clinic of Charles University, Prague (Head—Prof. K. Henner, M.D.).

CLML 20, 10, Oct. 51

GUTMANN, E.

GUTMANN, E.; HOLUBAR, J.

Prophylactic surgery of the central nerve stump. Biol.listy 31 no. 3-4:139-143 Jan 51. (CIML 20:5)

1. Of the Institute for Brain Research (Head--Prof.L.Haskovec,M.D.) and of the Institute of Physiology (Head--Prof.V.Laufberger,M.D.) of the Medical Faculty of Charles University, Prague.

GUTMANN, E.; POUPA, O.; RYCHLIK, I.; VRBOVA, G.

Osmotic cerebral edema. Biol. listy, Praha 32 no.3:159-174 Dec 51.
(CLML 21:5)

1. Of the Central Institute of Biology (Head--Prof. I. Malek, M.D.) and of the Institute of General Physiology (Head--Prof. F. Karasek, M.D.). Experimental work has been done at Institute of Brain Research (Head--Prof. H. Haskovec, M.D.).

GUTMANN, E.

Jiri Prochazka and the reflex theory. Cesk. fysiol. 1 no.1:2-8 1952.
(CLML 23:4)

1. Of the Physiological Department of the Central Institute of Biology.

GUTMANN, E.; VRBOVA, G.

Reflex regulation of metabolic so-called trophic function. Cesk. fysiol. 1 no.1:26-37 1952. (CIML 23:4)

1. Of the Physiological Department of the Central Institute of Biology.

GUTMANN, E.; VRBOVA, G.

Reflex regulation of metabolic, the so-called "trophic", processes [with summary in German] Chekh. fiziol. 1 no.1:38-52. (MLRA 6:12)

1. Tsentral'nyy institut biologii, Fiziologicheskoye otdeleniye, Praha.
(Metabolism)

GUTMANN, E.; VRBOVA, G.

Stability of water metabolism in the brain. Cesk. fysiol. 1 no.2: 99-107 1952. (CLML 23:4)

1. Of the Physiological Department of the Central Institute of Biology (Director--Malek).

BERANEK, R.; FANTIS, A.; GUTMANN, E.; VRBOVA, G.

Cerebral edema following trephining. Cesk. fysiol. 1 no.2:108-115 1952. (CLML 23:4)

1. Of the Physiological Department of the Central Institute of Biology (Director--Malek). 2. Experimental work.

GUTMANN, E.; VRBOVA, G.

Stability of water metabolism in the cerebrum [with summary in German]. Chekh. fiziol. 1 no.2:130-141 '52. (MLRA 6:12)

1. Tsentral'nyy institut biologii, fiziologicheskoye otdeleniye, Praha. (Brain) (Water in the body)

BERANEK, R.; FANTIS, A.; GUTMANN, E; VRBOVA, G.

Cerebral edema following trepanation [with summary in German]. Chekh. fiziol. 1 no.2:142-152 '52. (MLRA 6:12)

1. Tsentral'nyy institut biologii, fiziologicheskoye otdeleniye, Praha.
(Brain--Surgery) (Edema)

GUTMANN, E.; VRBOVA, G.

Physiology of a tenotomized muscle. Chekh. fiziol. 1 no.3:205-219 Sept 52.

1. TSentral'nyy institut biologii, fiziologicheskoye otdeleniye, Praga.

(MUSCLES, physiology, eff. of tenotomy)

GUTMANN, E.; HOLUBAR, J.

Degeneration of the terminal organs in striated and smooth muscles. Chekh. fiziol. 1 no.3:220-229 Sept 52.

1. TSentral'nyy Institutbiologii, fiziologicheskoye otdeleniye i fiziologicheskiy institut universiteta imeni Karla IV, Praga.
(MUSCLES, physiology,
eff. of denervation)

GUTTMANN, E., Doc. dr.

Research planning in physiology. Cas.lek.cesk. 91 no.17:514-519 25 Apr 52.

(PHYSIOLOGY, in Czech., research planning)

(RESEARCH, physiol. in Czech., planning)

GUTMANN, E.

Pathophysiology of poliomyelitis with special reference to propioceptors. Cas.lek.cesk. 91 no.44:1243-1250 31 Oct 52.

1. Ustredni ustav biologicky, fisiol. odd.
(POLIOMYELITIS, physiology,
propioceptors)
(NERVOUS SYSTEM, in various diseases,
polio., propioceptors)

BERANEK, R.; GUTMANN, E.

Effect of nociceptive stimulus upon regenerative processes in the peripheral nerve. Chekh.fiziol.2 no.2:148-157 '53.
(MLRA 7:2)

1. Biologicheskiy institut Chekhoslovatskoy Akademii nauk, fiziologicheskoye otdeleniye, Praha. (Nervous system)

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(GLYCOGEN, metabolism,
*eff. of nociceptive irritation of striated musc.)
(MUSCLES, physiology,
*eff. of nociceptive irritation on glycogen metab.)

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muscles, synthesis during recovery after denervation & tenotomy)
(MUSCLES, metabolism,
glycogen, synthesis during recovery after denervation & tenotomy)
(WOUNDS AND INJURIES, experimental,
musc., glycogen synthesis during recovery)