

SMIRNOV, V.A.

Buckwheat yields and climate. Mat. Fen. kom. Geog. ob-va  
SSSR no.1:34-39 '62. (MIRA 17:3)

67792

S/040/60/024/005/015/028  
C111/C222

11 3000

AUTHOR: Smirnov, V.A. (Moscow)

TITLE: On the Emanation of a Plane Supersonic Jet Into a Resting Medium

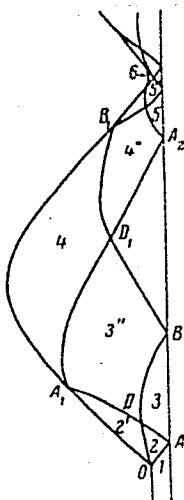
PERIODICAL: Prikladnaya matematika i mekhanika, 1960, Vol. 24, No.5,  
pp.916-919

TEXT: The author investigates the emanation of a plane supersonic jet out of a straight opening into a resting medium. Only the half of the jet is considered since the symmetry plane can be understood as a rigid wall. The figure schematically shows the individual regions of flow, e.g. the regions 1, 3' correspond to constant flows, region 3 corresponds to the interaction of the incident wave and the wave reflected from the wall. Now the flow is pursued from region to region, so e.g. the flow in the region 4 is determined by the boundary conditions on the characteristic curve  $A_1D_1$  and on the free boundary of the flow. Thus a rigorous solution is obtained, where it is found that the flow in every region is determined by a linear combination of two (the same for all regions) functions. The principal result consists in the statement that for an arbitrary ratio  $\gamma$  of the Mach numbers of the initial ray and of the boundary of the ray as well as for arbitrary  $\alpha$  the characteristic curves intersect at the  
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On the Emanation of a Plane Supersonic Jet Into a Resting Medium

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Card 2/3

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S/020/60/135/005/010/043  
B019/B067

10.2000

AUTHOR: Smirnov, V. A.  
 TITLE: Interaction Between a Simple Wave and a Contact Discontinuity  
 PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 5, pp. 1076-1078

TEXT: An exact solution is given of the above problem for a number of values for  $\kappa = c_p/c_v = (2n+3)/(2n+1)$ , where  $n$  is an integer number. Fig. 1 shows a scheme of the ranges where a simple wave flows through a contact discontinuity. Simple waves corresponding to the incident, the reflected, and the passing waves are observed in the ranges I, III, and IV. In range II, an unsteady flow is observed which is due to an interaction between the incident and the reflected wave. This flow is determined from the function:

$$\chi(c, v) = \left(\frac{v}{c}\right)^{2n} \left\{ \frac{1}{c} \psi\left(c + \frac{\kappa-1}{2} v\right) + \frac{1}{c} \psi\left(c - \frac{\kappa-1}{2} v\right) \right\} \quad (2)$$

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S/258/62/002/001/G13/013

I028/I228

AUTHOR: Nikol'skiy, A. A. and Smirnov, V. A. (Moscow)

TITLE: Action of a shock wave on an obstacle

PERIODICAL: Inzhenernyy zhurnal, v. 2, no. 1, 1962, 181-188

TEXT: After the wave passage, a flow is established past the obstacle, similar to steady potential flow having at infinity a velocity equal to the velocity of the gas particles behind the front of the undisturbed shock wave. the similarity will be complete if the impulses are taken after a certain finite time (when the passing through and the reflected waves are sufficiently far away), and if the velocities of the gas particles are sufficiently small (so that flow eddying can be neglected). The distribution of the pressure impulses on the surface of different obstacles (cylinder, rectangle, ellipsoid, sphere) is determined under those assumptions, and the angular momentum of the pressure impulses is calculated. There are 7 figures.

ASSOCIATION: Institut mekhaniki AN SSSR (Institute of Mechanics AS USSR)

SUBMITTED: October 3, 1961

Card 1/1

PODOL'NIY, O.A. (Moskva); RUSLANOV, V.I. (Moskva); SMIRNOV, V.A.; (Moskva);  
UKOLOV, I.S. (Moskva)

Modeling of the frontal resistance of soil during vibrational  
pile driving. Izv. AN SSSR. Tekh. kib. no.4:191-192 J1-Ag '64.  
(MIRA 17:12)

VOLODCHENKO, K.G.; BONAS, O.V.; ISAKOV, L.I.; SMIRNOV, V.A.; KUNICHENKO, M.S.; LASHKOVA, Ye.A.; UVAROVA, N.A.; CHEVOTKINA, M.A.; NIKOLAYEV, P.S., glavnyy red.; SEREBRYAKOV, L.P., glavnyy red.; DERZHAVINA, N.G., red.; GUROVA, O.A., tekhn.red.; IVANOVA, A.G., tekhn.red.

[ENV unified production norms for operations in geological prospecting; mining operations] Edinye normy vyrabotki na geologorazvedochnye raboty (ENV); gornoprokhodcheskie raboty. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane neдр, 1959. 123 p. (MIRA 13:6)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany neдр.
2. Otdel ekonomiki geologorazvedochnykh rabot Vsesoyuznogo nauchno-issledovatel'skogo instituta mineral'nogo syr'ya (VIMS) (for Volodchenko, Bonas, Isakov, Smirnov, Kunichenko, Lashkova, Uvarova, Chevotkina).

(Mining engineering--Standards)

3/081/62/000/009/028/075  
B156/5101

AUTHOR: Smirnov, V. A.

TITLE: Rare and dispersed elements in igneous rock in the Udinskaya depression (Western Transbaykalia)

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1962, 119, abstract 9065 (ob. "Vopr. rudn. geofiz.", no. 2, Gosgeoltekhizdat, 1961, 122 - 130)

TEXT: A study is made of the distribution of radioactive and certain dispersed elements in igneous rock of the Udinskaya depression, bordered by Caledonian formations and characterized by the wide development of paleozoic and mesozoic intrusions. U in the rock was determined by a luminescence method, Th and Ra radiochemically, and the Al, Ti, Mo, Zr, Nb, Sn, Ga, Co, La, Y and Yb contents by semi-quantitative spectral analysis. Results from a study of the geochemical features of the igneous rock in one of the depressions of the central part of Western Transbaykalia confirm the tendency for radioactive and dispersed elements to accumulate. This tendency, found in many regions increases the acidity and alkalinity of the rock during the  
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S/169/62/000/009/056/120  
D228/D307

AUTHOR: Smirnov, V. A.

TITLE: Aerial gamma-ray spectrometric surveying in exploration and geologic mapping

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 9, 1962, 42, abstract 9A279 (In collection: Vopr. rudn. geofiz., no. 3, M., Gosgeoltekhizdat, 1961, 165-175) ✓

TEXT: The main principles of aerial gamma-ray spectrometry in prospecting and geologic mapping are stated. The method is based on the difference in the spectral composition of  $\gamma$ -radiation of elements of the uranium and the thorium family. In measurements with a two-channel analyzer the nature of a  $\gamma$ -anomaly's radioactivity is determined by calculating the spectral factors. These represent the ratio of the anomalous radiation intensity increase in pulses/second on the channel of total counting, which registers  $\gamma$ -quanta with an energy of 0.05 - 0.1 Mev above background, to that on the channel of discrimination counting, which records  $\gamma$ -quanta

Card 1/2

MAFLEYEV, A.V., OMERNOV, V.A., VAVILIN, I.H., YAKOVLEV, Yu.P.,  
KONNILOV, P.M.

Experience in using the method of reducing local aerogamma  
anomalies to the level of the earth's surface for aeroradiometric  
prospecting. Vop. rud. geofiz. no.5:76-87 '65.

(MIRA 18:9)

USSR/Medicine - Brucellosis  
Medicine - Nervous System, Diseases

Aug 48

"Clinical Data on Affections of the Peripheral and Central Nervous Systems, the Mesenchyma and the Striated Muscles in Brucellosis," V. A. Svirnov, 2 pp

"Sov Med" No 8

Children infrequently are afflicted with brucellosis. Studies on brucellosis of the peripheral nervous system included studies on infection of the mesenchyma and mesodermal apparatus. Studies 200 cases divided into four groups: (1) infections of the peripheral nervous system, (2) of the muscles and bones, (3) of the peripheral nervous system accompanied by disruption of the central nervous system.

USSR/Medicine - Brucellosis (Contd)

Aug 48

tion of mesenchyma and mesoderm functions, and (4) of the central nervous system.

24/49778

S'MIRNOV, V. A.; KOZLOZ, N. D.; BYSTRAYAKOV, L. V.; ANDREYEV, V. I.;  
KONYAKHIN, M. A.; POLYAKOVA, I. M.; SUKROKHO, T. A.

"Urgent problems of modern dysentery in children."

Report submitted at the 13th All-Union Congress of Hygienists,  
Epidemiologists and Infectionists. 1959

SMIRNOV, V. A.

Mar 67

U.S.S.R./Medicine - Eye, Diseases  
Diseases, Internal

"Changes in the Pupils due to Internal Diseases," V. A. Smirnov, Clinic of Nervous  
Diseases, Second Moscow Med Inst imeni I. V. Stalin, 5 pp

"Klin Med" No 3

PA 65/49166

SHIRNOV, V. A.

Clinical significance of the physiologic and pathologic mobility of  
eye-pupils. *Klin. med.*, Moskva 28-7, July 50. p. 75-6

I. Of the Clinic for Nervous Diseases (Director--Honored Worker in  
Science I. N. Filimonov), Corresponding Member of the Academy of  
Medical Sciences USSR; Second Moscow Medical Institute imeni  
I. V. Stalin.

*CLM*. 19, 5, Nov., 1950.

*Смирнов, В. А.*  
SMIRNOV, V. A.

Papillary modifications in cerebral air contusions. Sovet. med.  
No. 12, Dec. 50. p. 22-3

1. Of the Clinic of Nervous Diseases (Director -- Prof. N. I.  
Grashehenkov, Corresponding Member of the Academy of Sciences  
USSR and Active Member of the Academy of Medical Sciences USSR),  
Second Moscow Medical Institute under I. V. Stalin.

GBM 20, 3, March 1951

SMIRNOV, V. A.

"The Condition of the Pupils in Normal and Pathological States."  
Sub 12 Nov 51, Second Moscow State Medical Institute I. V. Stalin.

Dissertations presented for science and engineering degrees in  
Moscow during 1951.

SC: Sum. No. 429, 9 May 55

*Doctor of Medical Sciences*



SMIRNOV, V. A.

Pupils, iris and age. Uchen zapski vtor. moskov. med. Inst.  
Stalina 1:61-74 1951. (CIAM 21:3)

1. Docent. 2. Clinic for Nervous Diseases (Head -- N. I.  
Grashchenkov, Active Member of the Academy of Medical Sciences  
USSR.

SMIRNOV, V. A.

Structure of paths forming the arc of the pupillary reflex  
to light. Nevropat. psikhiat., Moskva 20 no.3:32-35 May-  
June 1951. (CML 20-11)

1. Docent. 2. Of the Clinic for Nervous Diseases (Director  
Honored Worker in Science I. N. Filiminov, Corresponding  
Member of the Academy of Medical Sciences), Second Moscow  
Medical Institute imeni I. V. Stalin.

SMIRNOV, V.A.

Significance of pupils in syphilis. Vest. vener., Moskva no. 6:  
16-21 Nov-Dec 1952. (GIML 24:1)

1. Docent. 2. Of the Clinic for Nervous Diseases of Second Moscow  
Medical Institute imeni I. V. Stalin (Director -- Honored Worker  
in Science Prof. I. N. Filimonov, Corresponding Member AMS USSR).

SMIRNOVA, Y. A., REEF.

Brain - Abscess

Unusual localizations of otogenous abscesses of the brain. *Vopr. otol.* 11, No. 5, 1952

Monthly List of Russian Acquisitions. Library of Congress. December 1952. UNCLASSIFIED.



SMIRNOV, V.A.

Action of various portions of bordering sympathetic stem on the pupillary sympathetic innervation. Zh. nevropat. psikhiat., Moskva 52 no. 6: 49-54 June 1952. (GLML 23:3)

1. Of the Clinic for Nervous Diseases (Director -- Prof. N. I. Grashchenkov, Corresponding Member of the Academy of Sciences USSR), Second Moscow Medical Institute imeni I. V. Stalin.

SMIRNOV, V. A.

Nervous System, Sympathetic

Effect of various sectors of the sympathetic trunk upon the sympathetic innervation of pupils, Zhur. nevr. i psikh., 53, No. 6, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. Unclassified.

SECRET

Approved for release by NSA on 05-08-2014 pursuant to E.O. 13526, [FOIA(b)(7) - (D), (S) and (T) are in (S) and (T) and (S) and (T) are in (S) and (T)].

TO: [REDACTED]



SMIRNOV, V.A.

Treatment of pelvic disorders in injuries of the spinal cord and cauda equina by ionogalvanization with pilocarpine and atropine. *Klin. med.*, Moskva 31 no. 1:63-67 Jan 1953. (CLML 24:1)

1. Docent. 2. Of the Clinic for Nervous Diseases (Director -- Honored Worker in Science Prof. I. N. Filimonov, Corresponding Member **AMS** USSR), Second Moscow Medical Institute imeni I. V. Stalin.

SMIRNOV, V.A.

Miosis and mydriasis in normal and pathological states. Zhur.nevr.i psikh.  
53 no.5:340-342 My '53. (MLRA 6:5)

1. Klinika nervnykh bolezney II Moskovskogo meditsinskogo instituta imeni  
I.V. Stalina. (Pupil (Eye))

Describes technique for determining whether miosis or mydriasis are due to disturbances of the sympathetic or parasympathetic innervation of the pupil. This technique involves use of cocaine, pilocarpine, and atropine eye drops. With the aid of this technique, studied paralytic and/or spastic miosis due to various nerve diseases, high blood pressure, and other conditions. Also investigated miosis and mydriasis due to the action of various poisons. Emphasizes the cortical origin of the pupillary reactions studied.

255T44

SMIRNOV, V.A., professor.

Treatment of nocturnal incontinence of urine. *Pediatriia*  
no.4:68-70 J1-Ag '55. (MLRA 8:12)

1. Iz kliniki nervnykh bolezney (dir.-zasluzhennyi deyatel'  
nauki chlen-korrespondent Akademii meditsinskikh nauk SSSR  
prof. I.N.Filimonov) II Moskovskogo meditsinskogo instituta  
imeni Stalina.

(URINATION DISORDERS,  
incontinence, nocturnal, in child, ther.)

SMIRNOV, V.A.

EXCERPTA MEDICA Sec.2 Vol.10/2 Physiology, etc Feb57

834. SMIRNOV V.A. \*The autonomic nervous system and its pathology Z. NEVROPAT. PSIKHIAT. (Mosk.) 1955, 55/1 (31-34) (Russian text) Questions asked by Bogolepov in vol. 5 of the same journal (1954) are answered. The functional unity of the sympathetic and parasympathetic components of the ANS and their uninterrupted connection with the CNS, via cortical direction, are emphasized. Clinical and experimental observations point to a special function of each component of the ANS, these functions, however, being not antagonistic but synergistic and dictated by the needs of the organism. The cerebral cortex regulates the activity of all autonomic formations, both in the diencephalon and in other subcortical, spinal and extraspinal autonomic structures. (II, 8\*)

SMIRNOV, V.A.

[Nocturnal enuresis] Nochnoe nederzhanie mochi. Moskva, Medgiz,  
1957. 112 p. (MIRA 11:1)

(URINE--INCONTINENCE)

SMIRNOV, V.A. (Moskva); GOL'DENBERG, L.I. (Moskva)

Affection of the nervous system following rabies vaccination.  
Klin. med. 35 no.2:114-118 F '57 (MLRA 10:4)

1. Iz kliniki nervnykh bolezney (dir.-prof. I.N. Filimonov)  
II Moskovskogo meditsinskogo instituta i nervnogo otdeleniya  
2-y Gorodskoy bol'nitsy imeni Veysbroda (glavnyy vrach A.I.  
Khromova)

(RABIES, prev. & control  
vacc., causing lesions of NS)

(NERVOUS SYSTEM, dis.  
caused by rabies. vacc.)

SMIRNOV, V.A.

Preliminary data on the use of anticoagulants and coagulants in treatment and prevention of disorders of cerebral circulation [with summary in French]. Zhur.nevr. i psikh. 57 no.8:1001-1005 '57.

(MIRA 10:11)

1. Klinika nervnykh bolezney (dir. - prof. I.N.Filimonov) II Moskovskogo meditsinskogo instituta imeni I.V.Stalina.

(BRAIN, blood supply,

disord., anticoagulant & coagulant ther. (Rus))

(ANTICOAGULANTS, therapeutic use,

brain circ. disord. (Rus))

(BLOOD COAGULATION,

coagulants, ther. & prev. of cerebral circ. disord.

(Rus))

SMIRNOV, V.A.; KRUPINA, T.N.

"Collection of works on problems in neurology and psychiatry."  
Reviewed by V.A.Smirnov, T.N.Krupina. Zhur.nevr. i psikh. 57  
no.11:1435-1437 '57. (MIRA 11:1)  
(NEUROLOGY) (PSYCHIATRY)



SMIRNOV, V.A., prof., (Moskva)

Combined treatment of thrombotic insults. Klin.med. 36 no.9:45-50  
S'58 (MIRA 11:10)

1. Iz Kliniki nervnykh bolezney (dir. - prof. I.N. Filimonov)  
II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.  
(CEREBRAL EMBOLISM AND THROMBOSIS, ther.  
combined ther. (Rus))

EXCERPTA MEDICA Sec 12 Vol 13/11 Ophthalmology Nov 59

1674. THE EFFERENT PATHWAYS OF THE PUPILLARY REFLEX (Russian text) -  
Smirnov V. A. and Chakhnovitch A. R. - ZH. NEVROPAT. I  
PSIKHIAT. 1958, 58/8 (948-952) Graphs 2 Illus. 2

Unilateral extirpation of the superior cervical sympathetic ganglion in 6 cats has been performed. One month after the operation, reflectory constriction and dilatation of the pupils were observed, with diminished amplitude on the side operated upon. The parasympathetic innervation is responsible for both the constriction and dilatation of the pupils, while sympathetic innervation exerts only an auxiliary effect, influencing the character of the reflex. Cernáček - Bratislava (VIII, 12)

SMIRNOV, V.A.

Therapy of vascular hypotonia and the prevention of thrombotic in-  
sultus. Zhur.nevr. i psikh. 59 no.8:941-943 '59. (MIRA 12:12)

I. Klinika nervnykh bolezney (zav. kafedroy - prof. I.N. Filimonov)  
II Moskovskoye meditsinskogo instituta imeni N.I. Pirogova.  
(HYPOTENSION ther.)  
(CEREBRAL EMBOLISM AND THROMBOSIS prev. & control)

SMIRNOV, V.A., prof.

Prescribing coagulants and anticoagulants in hemorrhagic and thrombotic attacks. Vrach. delo no. 1:60-64 '61. (MIRA 14:4)

1. Kafedra nervnykh bolezney (zav. - prof. N.K. Bogolepov) Vtorogo Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.  
(APOPLEXY) (ANTICOAGULANTS (MEDICINE))

SMIRNOV, V. A., prof. (Moskva)

Recognition of various types of disorders of the cerebral  
circulation. Klin. med. no.9:136-139 '61. (MIRA 15:6)

1. Iz kafedry nervnykh bolezney (zav. - prof. V. A. Smirnov)  
Moskovskogo meditsinskogo stomatologicheskogo instituta.

(CEREBROVASCULAR DISEASE)

SMIRNOV, V.A., prof.

Pathogenesis, clinical aspects and treatment of vascular hypotony and the prevention of thrombotic insults in this case. Trudy Gos.nauch-issl.inst.psikh. 25:422-439 '61. (MIRA 15:12)

1. Iz kliniki nervnykh bolezney 2-go Moskovskogo gosudarstvennogo meditsinskogo instituta imeni N.I.Pirogova (zav. kafedroy prof. N.K.Bogolepov).

(THROMBOSIS)

(HYPOTENSION)

SMIRNOV, V.A., prof.

Vascular hypotonia, its form of regional stenosis of the  
intracranial vessels and its treatment. Zdrav.Bel. 8 no.12:  
17-19 D '62. (MIRA 16:1)

1. Kafedra nervnykh bolezney (zav. - prof. V.A.Smirnov)  
Moskovskogo meditsinskogo stomatologicheskogo instituta.  
(HYPOTENSION) (CEREBROVASCULAR DISEASE)

SMIRNOV, V.A.

Preapoplectic states and therapeutic measures for them.  
Zhur. nevr. i psikh. 64 no.2:180-185 '64. (MIRA 17:5)

1. Kafedra nervnykh bolezney (zaveduyushchiy -- prof. V.A.  
Smirnov) Moskovskogo meditsinskogo stomatologicheskogo  
instituta.



SMIRNOV, V.A.

Parasympathetic innervation of tissue formations of the face.  
Zhur. nevr. i psikh. 65 no.8:1184-1190 '65.

(MIRA 18:8)

1. Kafedra nervnykh bolezney (zaveduyushchiy - prof. V.A.  
Smirnov) Moskovskogo meditsinskogo stomatologicheskogo instituta.

L 21423-66 EMT(m)/EMP(t) IJP(c) JD  
ACC NR: AP6011494

SOURCE CODE: UR/0386/66/003/007/0287/0291

AUTHOR: Ivanov-Omskiy, V. I.; Kolomiyets, B. T.; Smirnov, V. A.

ORG: Physicotechnical Institute im. A. F. Ioffe, Academy of Sciences SSSR (Fiziko-  
tehnicheskiy institut Akademii nauk SSSR)

TITLE: Spectrum of electromagnetoluminescence in InSb

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.  
Prilozheniye, v. 3, no. 7, 1966, 287-291

TOPIC TAGS: indium antimonide, radiative recombination, luminescence, spectral  
distribution

ABSTRACT: The authors calculate the spectral distribution of recombination radiation caused by the magnetoconcentration effect (electromagnetoluminescence--EML) in InSb at room temperature, which they observed earlier (Dokl. AN SSSR v. 161, 1307, 1965). Recombination radiation was excited by applying a pulsed electric field to a sample of almost intrinsic p-InSb placed in a magnetic field perpendicular to the electric one. The radiation was gathered in a third mutually-perpendicular direction, guided to a monochromator, and recorded with a photoreceiver of gold-doped germanium. The pulse duration was 2-3  $\mu$ sec at a repetition frequency 2-3 cps. A pulsed synchronous detector was used to increase the

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signal/noise ratio at the output of the broadband amplifier. The spectral width of the monochromator slit was  $0.3 \mu$  at a wavelength of  $6 \mu$ . The oscillograms of the sample-current and photoreceiver signal pulses show that the observed signal has a very low rise time (of the order of  $0.2-0.3 \mu\text{sec}$ ), so that the observed signal can be ascribed to electromagnetoluminescence. EML spectra of p-InSb with acceptor density  $5 \times 10^{18} \text{ cm}^{-3}$  for different intensities of the electric and magnetic fields E and H show that with increasing product  $E \times H$ , which determines the concentration of the excess carriers on the crystal face from which the radiation is observed, the maximum of the emission intensity shifts markedly toward the short-wave part of the spectrum, and the spectral-band shape and width are simultaneously changed. This shift can be connected with the appreciable increase of the concentration of the excess carriers, which fill noticeably the bottom of the conduction band. The shift of the maximum and the broadening of the spectral band may be due, in addition, to heating of the electron gas under the influence of the electric field, but this heating of the electron gas cannot influence noticeably the spectral distribution of the radiation. It is also noted that in the analysis of EML spectra it is necessary to take into account the principal inhomogeneity in the distribution of the carriers. The difficulties entailed in simultaneous account of all the foregoing circumstances does not permit at present an exact estimate

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ACC NR: AP6011494

of the density of the excess carriers near the surface from which the radiation is observed. A rough order-of-magnitude estimate without account of heating of the electron gas shows that at maximum electric and magnetic field there are  $\sim 10^{-8}$  carriers per  $\text{cm}^3$  in the immediate vicinity of the crystal face. The authors thank A. Yu. Ushakov for constructing and furnishing the pulsed synchronous detector.  
Orig. art. has: 2 figures and 1 formula. [02]

SUB CODE: 20/    SUBM DATE: 10Feb66/    ORIG REF: 002/    ATD PRESS: 4221

Card 3/3 *WJL*

GENERAL, ... SUMMARY, ... ... V.A.

... information in the name of the ...  
... (MIA ...)

SMIRNOV, V.A.; ROZENFELD, V.M.; LYAKHOVA, R.P.

Determining the optimum variant of the gas-supply system for centralized gas consumers. Gaz. delo no.7:27-30 '65. (MIRA 18:9)

1. Saratovskiy gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut po ispol'zovaniyu gaza v narodnom khozyaystve.

SMIRNOV, V.A., inzh. (Moskva)

Calculating flexible threads with simultaneous action of vertical  
and horizontal loads. Issl. po teor. sooruzh. no.11:259-266 '65.  
(MIRA 18:10)

SEMCHENKO, V.D.; SMIRNOV, V.A.

Reduction of carbon dioxide in aqueous solutions by  
alkali metal amalgams under pressure. Zhur.prikl.khim.  
38 no.11:2452-2459 N '65.

(MIRA 18:12)

1. Submitted October 5, 1963.



LIN'KOV, Ye.M.; SMIRNOV, V.A.; VINOGRAD, B.S.B.

Filmster studies of rock bursts. Uch. zap. LGU no. 324:155-161 '64.  
(MIRA 18:4)

IVANOV-OMSKIY, V.I.; KOLOMIYETS, B.T.; SMIRNOV, V.A.

Recombination radiation in InSb due to the magnetocentrifugal effect. Dokl. AN SSSR 161 no.5:1308-1309 Ap '65. (MIRA 18.5)

1. Fiziko-tehnicheskly institut im. A.F.Ioffe AN SSSR. Submitted November 13, 1964.

TRESHCHEV, Ivan Il'ich; SUFRUN, G.F., doktor tekhn. nauk,  
retsenzent; SMIRNOV, V.A., kand. tekhn. nauk, nauchn.  
red.; ROZENGAUZ, N.M., red.

[Asymmetrical operating modes of a.c. machines of ships]  
Nesimmetrichnye rezhimy sudovykh mashin peremennogo toka.  
Leningrad, Sudostroenie, 1965. 247 p. (MIRA 18:5)

SMIRNOV, V.A., assistant

Case of leukemic lymphadenosis with a tumor-like aggressive growth of the thyroid gland in a five-year old child. Zdrav. Kazakh. 18 no.1:70-73 '58. (MIRA 13:7)

1. Iz kafedry patologicheskoy anatomii (zav. - dotsent D.M.Taranov) Semipalatinskogo gosudarstvennogo meditsinskogo instituta. (LEUKEMIA) (THYROID GLAND--TUMORS)

SMIRNOV, V.A.

Skin cancer in Kazakhstan. Vop.onk. 7 no.8:21-29 '61.

(MIRA 15:1)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. P.P. Ochkur)  
Kazakhskogo gosudarstvennogo ~~meditsinskogo~~ instituta.  
(KAZAKHSTAN--SKIN--CANCER)

SMIRNOV, V.A.

Regional peculiarities in the distribution of skin cancer in Kazakhstan.  
Zdrav. Kazakh. 21 no.1:29-32 '61. (MIRA 14:3)

1. Iz kafedry patologicheskoy anatomii (zav. - professor P.P.Ochkur)  
Kazakhskogo meditsinskogo instituta.  
(KAZAKHSTAN--SKIN--CANCER)

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32557  
S/177/61/000/006/002/003  
D298/D305

AUTHORS:

Agadzhanyan, N.A., Major, Medical Corps, Candidate of Medical Sciences, Vakar, M.I., Colonel, Medical Corps, Candidate of Medical Sciences, Smirnov, V.A., Major, Medical Corps, and Chernyakov, I.N., Major, Medical Corps, Candidate of Medical Sciences

TITLE:

Change in pulmonary ventilation with excess pressure respiration at high altitudes

PERIODICAL:

Voyenno-meditsinskiy zhurnal, no. 6, 1961, 58-61

TEXT: The authors developed a special device and method for determining pulmonary ventilation in a pressure chamber. A.I. Shaposhnikov, a Lieutenant-Colonel in the Engineering Branch, assisted the authors in devising the method. The device (see figure) consists of a mask (1) giving an airtight seal with the face, a gas meter (6) fitted in an airtight case, tubes connecting the mask with the meter, and valves for controlling the direction of the oxygen flow in the system. During

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Change in pulmonary ...

excess pressure respiration oxygen passes from the oxygen apparatus (12) along the tube (10) through the valve (8) and into the space within the helmet. When the subject inhales, it then passes through the valve (2) under the mask and into the lungs. From the lungs the air enters the gas meter through the tubes (3 and 4), and from the meter it passes through the tube (7) and valve (9) into the atmosphere. With this arrangement no exhaled air escapes from the system without passing through the meter and no oxygen passes inadvertently through the same meter. Oxygen which enters the space within the helmet during the exhalation phase is released into the atmosphere through valves (11) and (9), bypassing the meter. Valves (5) and (11) close during inhalation and prevent air from the tubes and gas meter from entering the space within the helmet. The positioning of the gas meter before the exhalation valve (9) ensures that the pressure in the lungs and the pressure in the gas meter are practically equal. This enables the absolute values of pulmonary ventilation to be determined immediately without prior calculations reducing the pressure of the air passing through the gas meter to the pressure in the lungs. Control experiments showed that under normal

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Change in pulmonary ...

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mainly by an increase in the depth of the respiratory movements and, consequently, an increase in the volume of respiration. These results, however, were obtained in respiration at an excess pressure of 15-25 mm Hg and without the use of compensating clothing. With increased pressure, the material of the compensating suit became harder. This led to an increased pressure on the body, especially in the thoracic and abdominal regions, during the inhalation phase, and a reduction of suit pressure during exhalation, whereas for free respiration the opposite should be the case. The pressure difference between the respiration phases sometimes reached 40-60 mm Hg or more. Under normal conditions chest expansion during respiration was 0.6-1.2 cm, whereas under excess pressure respiration it comprised a mere 0.2-0.4 cm. This reduction in the amplitude of the respiratory movements naturally led to a reduction in the volume of respiration. The authors conclude that, in addition to their basic function of compensating for increased pressure in the lungs, high altitude suits also give rise to factors that complicate respiration and blood circulation. The authors' observations took no account of the

Card 4/5,

SMIRNOV, V.A.

Dynamics and other properties of unconditioned and conditioned cardiovascular responses to administration of a low dose of acetylcholine. Fiziol. zhur. 49 no.12:1432-1439 D '63.

(MIRA 17:12)

1. From the Department of Physiology, Medical Institute, Dnepropetrovsk.

SMIRNOV, V.A.; SHAKHNOVICH, A.R. (Moskva)

Pupillary component of the orientation reflex in chronic  
alcoholism. Trudy Gos. nauch.-issl. inst. psikh.38:196-202  
'63 (MIRA 16:11)

\*

SMIRN, V. A.

Dissertation defended for the degree of Candidate of Philosophical Sciences  
at the Institute of Philosophy, 1962

"Deductive Method and Several Problems of Logical Analysis."

Vestnik Akad. Nauk, no. 4, 1963, pp 119-145

ACCESSION NR: AR4031066

S/0044/64/000/002/A018/A018

SOURCE: Referativnyy zhurnal. Matematika, Abs. 2A123

AUTHOR: Smirnov, V. A.

TITLE: Observations on the cause of a syllogistics system and a general theory of deduction

CITED SOURCE: Sb. Probl. logiki. M., AN SSSR, 1963, 64-83

TOPIC TAGS: syllogistics system cause, general deduction theory cause, Aristotle axiomatized logics, propositional calculus

TRANSLATION: In general, the axiomatized syllogistics of Aristotle is constructed on the basis of the propositional calculus or, at least, on the basis of certain principles of the propositional calculus. In this article, the author sets forth a syllogistics system which is not based on the propositional calculus.

In § 1 an inductive definition is given for deriving the formula  $E$  from the set of premises  $\Gamma(\Gamma \vdash E)$ . A number of metalogical rules are proved which do not depend upon the adopted axiomatics, for example:

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ACCESSION NR: AR4031066

$$\frac{\Delta_1 \vdash C_1; \dots; \Delta_n \vdash C_n; C_1, \dots, C_n, \Gamma \vdash E}{\Delta_1, \dots, \Delta_n, \Gamma \vdash E}$$

In § 2 the desired syllogistics system is constructed. The formulas are expressions of the  $Kmn$ -type, where  $m$  and  $n$  are variables and  $K$  is one of four logic constants  $A, E, I, O$ . There are no axioms in the system. There exist six

basic rules of derivation:  $R_1 \frac{Aab, Abc}{Aac}$  (Barbara),  $R_2 \frac{Aab, Ebc}{Eac}$  (Celarent),  
 $R_3 \frac{Iab}{Iba}$  (inversion I),  $R_4 \frac{Aap}{Iab}$  (transition from the general to the particular),  
 $R_5 \frac{\Gamma, P \vdash Q}{\Gamma, P^* \vdash Q^*}$  (where  $P^*$  and  $Q^*$  are formulas formed from  $P$  and  $Q$  respectively by substituting  $O$  for  $A$  and  $I$  for  $E$ , and vice-versa),  $R_6$ : the derivation remains valid if in the set of premises and in the derived formula, one of the variables is substituted for the other. It is shown how the general rules of syllogistics (rules of inversion, all modes, rules of complex syllogisms, etc.) are derived from rules  $R_1$ - $R_6$ .

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ACCESSION NR: AR4031066

In § 3, the author constructs two variations of the system which is equivalent to the classical propositional calculus. System S<sub>1</sub> is defined by 5 derivational rules:

$$R_1 \frac{A, B}{A \& B} \quad R_2 \frac{A \& B}{A} \quad R_3 \frac{A \& B}{B}$$

$$R_4 \frac{\neg \neg A}{A} \quad R_5 \frac{\Gamma, A \vdash B; \Gamma, A \vdash \neg B}{\Gamma \vdash \neg A}$$

System S<sub>2</sub> is defined also by 5 rules:

$$R_1, R_2, R_3, R_4, R_5 \frac{\Gamma, A \vdash B}{\Gamma, \neg B \vdash \neg A}$$

C. Crlovskiy.

DATE ACQ: 19Mar64

SUB CODE: MM

ENCL: 00

Card 3/3

ACCESSION NR: AP4006824

S/0120/63/000/006/0093/0094

AUTHOR: Vorob'yev, G. A.; Mesyats, G. A.; Rudenko, N. S.; Smirnov, V. A.

TITLE: Pulse generator of steep 150 kv pulses

SOURCE: Pribory\* i tekhnika eksperimenta, no. 6, 1963, 93-94

TOPIC TAGS: pulse generator, hv pulse generator, steep pulse generator, pulse structure

ABSTRACT: An improvement in the Arkad'yev-Marks. surge generator circuit is described which permits shortening the impulse front from the ordinary  $10^{-7}$  to  $10^{-9}$  sec. Parasitic inductance of the surge generator is compensated by a non-inductive (type KOB-3) capacitor in each stage and by a special 150-pf noninductive capacitor connected across the test piece. The latter capacitor is briefly described and its design sketch is given. The conventional output sphere gap is replaced by a needle gap to suppress oscillations; the most stable switching is

Card 1/2



ACCESSION NR: AP4006824

found to occur when the discharge takes place over a surface of a solid dielectric. Three oscillograms illustrate the operation of the surge generator. Orig. art. has: 4 figures and 2 formulas.

ASSOCIATION: Tomskiy politekhnicheskiy institut (Tomsk Polytechnic Institute)

SUBMITTED: 11Jan63

DATE ACQ: 24Jan64

ENCL: 00

SUB CODE: SD

NO REF SOV: 004

OTHER: 000

Card 2/2

I, 12960-65 EWP(m)/EFP(n)=2/EWP(t)/EWP(b) Pa-4 JD/JG  
ACCESSION NR: AR4044206 S/0137/64/000/006/G030/G030

SOURCE: Ref. zh. Metallurgiya, Abs. 6G192

AUTHOR: Kudryavtsev, Yu. D.; Golubchik, Ye. M.; Smirnov, V. A. 3

TITLE: Electrolytic production of chromium-molybdenum alloy

CITED SOURCE: Tr. Novocherk. politekhn. in-ta, v. 146, 1963(1964), 41-46

TOPIC TAGS: electrolytic production, chromium based alloy, molybdenum containing alloy

TRANSLATION: For production of Cr-Mo-alloy (containing 10-11% Mo) there is recommended the electrolytic composition (in g/l),  $\text{CrO}_3$  - 250,  $\text{MoO}_4$  - 80,  $\text{H}_2\text{SO}_4$  - 2.5; at  $D_k = 40 \text{ a/dm}^2$  and a temperature of  $45-50^\circ$ , the current efficiency is 11-12%.

SUB CODE: MM

ENCL: 00

Card 1/1

SMIRNOV, V.A., inzh.

Design for a three-span beam of varying profile. Transp. stroi. 13  
no.7:62-63 JI '63. (MIRA 16:9)  
(Beams and girders)

BAKHAROV, F.M.; DAVYDOVA, M.I.; ZARUBINA, I.L.; POPOV, A.I.; SEVOST'YANOV, V. G.  
Yo.; SMIRNOV, V.A.

Microspectrophotometer for both the ultraviolet and the visible  
spectrum regions (MUF-5). TSitologiya 6 no.1:114-120 Ja-F 1964.  
(MIRA 17:19)

1. Leningradskoye ob"yedineniye optiko-mekhanicheskikh predpriyatiy.

VELIKAYA, Yelizaveta Ivanovna; SHELBOVAL, Viktoriya Konstantinovna;  
TOMASHEVICH, Vladimir Konstantinovich; SMIRNOV, V.A.,  
prof., respondent; MALSHENKO, A.I., prof., respondent;  
BERTMAN, G.I., prof., respondent; VOYTYA, A.A., red.

[General methods of control in fermentation industries]  
Obshchie metody kontrol'na i sledit'sykh proizvodstv. Mo-  
skva, Pishchevaya promyshlennost', 1961. 273 p.  
(MIRA 17:9)

S. I. IZMAYEV, V. I. ...

... the ... value of the extinction-reduction potential ...  
... in ... their ... and genesis. Izv. vys. uchebn. ...  
... (MIRA 1977)

... in ... university ... M. S. ...

GRACHEV, F.G., kand. tekhn. nauk; SMIRNOV, V.A., gornyy inzh.; YELIN, S.N., gornyy inzh.; SUKHODREV, V.M., gornyy inzh.; TOROCHKOV, G.S., gornyy inzh.

Using the RSh-1 roller bit boring machine in apatite strip mines. Gor. zhur. no.8:37-39 Ag '64.

(MIRA 17:10)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut gornokhimicheskogo syr'ya (for Grachev, Smirnov). 2. Kombinat "Apatit" (for Yelin, Sukhodrev, Torochkov).

SMIRNOV, V. A. and M. I. SOLODOV

Kholodnaya obrabotka stekla; posobie dlia rabochikh-optikov. Moskva, Mashgiz, 1949-  
130 p. illus.

Bibliography: p. (128)

Cold treatment of optical glass; manual for workers in optics.

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress,  
1953.



SMIRNOV, Vsevolod Aleksandrovich; GRODENSKIY, G.P., redaktor; KORENYUK, Z.P.,  
tekhnicheskiy redaktor; NIKONOVA, V.I., tekhnicheskiy redaktor.

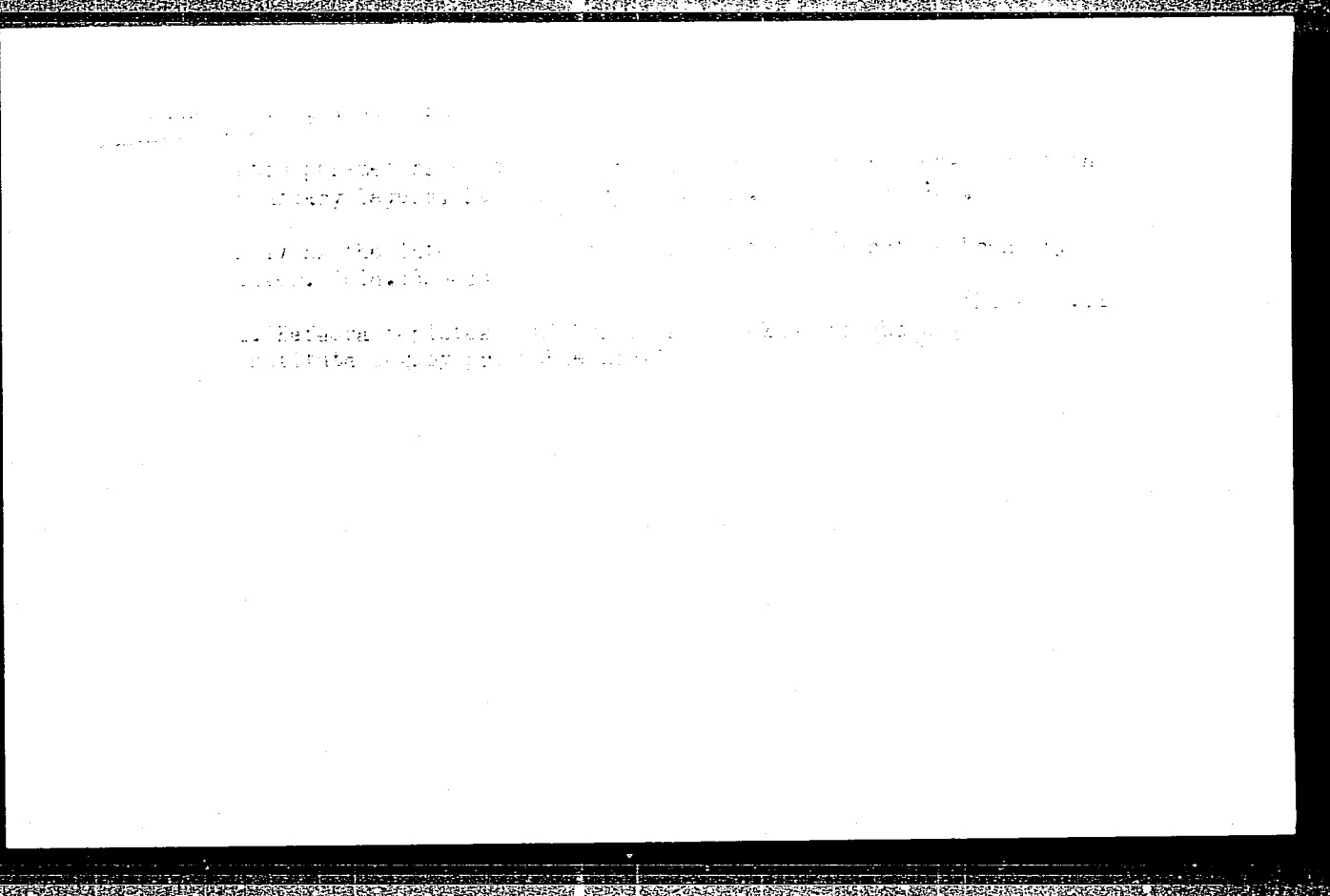
[Experiments and homemade equipment in physics] Opyty i samodelki po  
fizike. Leningrad, Gos.izd-vo detskoi lit-ry, 1955. 110 p.  
(Physics--Experiments) (Physical instruments) (MIRA 8:5)

SHIRNOV, V.A., elektromonter.

Perfected electric distiller. TSement 19 no.6:30-31 N-D '53. (MLRA 6:12)

1. Gosudarstvennyy institut proyektirovaniya predpriyatiy i po nauchno-issledovatel'skom rabotam tsementnoy promyshlennosti.

(Water, Distilled)



SMIRNOV, V.A., assistant

Generalized integral relationships of the free convective boundary layer. Nauch. trudy MTILP no.27:293-298 '63.

(MIRA 17:11)

1. Kafedra teplotekhniki Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.

LIN'KOV, Ye.M., kand.fiziko-matem. nauk; SMIRNOV, V.A., inzh.

Development and testing of a tiltmeter. [Trudy] VNIMI no.49:  
84-89 '62. (MIRA 17:4)

1. Leningradskiy gosudarstvennyy universitet (for Lin'kov).
2. Vsesoyuznyy nauchno-issledovatel'skiy marksheyderskiy institut (for Smirnov).

SMIRNOV, V.A. (Moskva)

Isentropic expansion of a flat gas layer into vacuum under  
variable initial conditions. Inzh.zhur. 3 no.4:700-706. '63.  
(MIRA 16:12)

1. Institut mekhaniki AN SSSR.

SMIRNOV, V.A.

Skin cancer in Kazakhstan in the light of endemic pathology.  
Trudy Inst. klin. i eksp. khir. AN Kazakh. SSR 8:80-87 '62.  
(MIRA 17:7)

SMIRNOV, V.A. (g. Saransk, Mordovskaya ASSR, Respublikanskaya bol'nitsa,  
Dom vrachey, kv.2)

Diagnosis of strangulated inguinal hernias in young children.  
Vest.khir. no.5:71-74 '61. (MIRA 15:1)

1. Iz khirurgicheskogo otdeleniya (zav. - V.A. Smirnov) Saranskoy  
respublikanskoy bol'nitsy Mordovskoy ASSR.  
(HERNIA)



SMIRNOV, V.A., inzh. (Moskva)

Numerical method of calculating suspension bridges taking into  
account geometric nonlinearity. Issl. po teor. sooruzh. no.13:  
237-249 '64. (MIRA 18:2)

SMIRNOV, V.A.

Petrovskii's operation in a case of cardiac aneurysm caused by  
a wound. Khirurgiia no.1:132-134 '62. (MIRA 15:11)

1. Iz khirurgicheskogo otdeleniya Saranskoy respublikanskoy bol'-  
nitsy (glavnyy vrach V.G. Mirskov) Mordovskoy ASSR.  
(HEART--WOUNDS AND INJURIES) (CARDIAC ANEURYSMS)

S/170/62/005/009/008/010  
B104/B102

AUTHORS: Kolosov, S. P., Ostryakov, I.A., Smirnov, V. A., Shelenkov,  
V. M.

TITLE: Current-conducting polymers as thermistors

PERIODICAL: Inzhenerno-fiz. cheskiy zhurnal, v. 5, no. 9, 1962, 85 - 89

TEXT: Thermoelectric characteristics of 16 different current conducting polymers as determined experimentally are given. The characteristics of other polymers are similar to these. Two groups of specimens were studied: (1) based on mixtures containing a constant weight of filler with varying weights of polyisobutylene and/or polyethylene; (2) based on mixtures containing constant weights of polyisobutylene and/or polyethylene with varying weights of fillers. The specimens in the first group were of the type П-85А (P-85Kh), П-118Х (P-118Kh) etc., those in the second group: С-50Х (S-50Kh), С-60Х (S-60Kh) etc. Using the analogy between thermistors and polymers, the design of current circuits with conducting polymers is discussed and relations for the behavior of the thermopolymers under transient conditions are derived. There is 1 table.

Card 1/2

SMIRNOV, V.A.; NIKONOV, B.P.

Emission and adsorption properties of the system barium oxide - barium.  
Radiotekh. i elektron. 9 no.2:308-316 F '64. (MIRA 17:3)

KOROTKOV, Georgiy Sergeyevich; SMIRNOV, Vladimir Alekseyevich;  
SONINA, Leonida Matveyevna; SHALYT, G.M., red.; BUL'DYAYEV,  
N.A., tekhn. red.

[Experience in the use of complex automatic and remote control in a district of a municipal electric power distribution network] Opyt kompleksnoi avtomatizatsii i telemekhanizatsii raiona gorodskoi elektricheskoi seti. Moskva, Gosenergoizdat, 1963. 119 p. (MIRA 16:6)  
(Electric power distribution)

BESSONOV, A.N.; GEL'BUKH, L.A.; YELISTRATOV, I.F.; SMIRNOV, V.A.;  
TARSKIY, Yu.S., kapitan 2 ranga, red.; CHAPAYEVA, R.I.,  
tekhn. red.

[Underwater search] Podvodnyi poisk. Moskva, Voenizdat,  
1963. 93 p. (MIRA 16:10)  
(Diving, Submarine) (Underwater television)  
(Underwater acoustics)

SMIRNOV, V.A., inzh.

Seismic zoning of mine areas of the Kizel Basin. [Trudy]  
VNIMI no.48:49-57 '62. (MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy marksheyderskiy  
institut.

(Kizel Basin--Rock bursts)  
(Seismology)

L 07072-67 EWI(m)/ENP(j) LJP(c) RM  
ACC NR: AP6030699

SOURCE CODE: UR/0195/66/007/004/0583/0588

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23  
B

AUTHOR: Smirnov, V. A.; Alfimov, M. V.

ORG: Branch of the Institute of Chemical Physics, AN SSSR (Filial Instituta Khimicheskoy fiziki AN SSSR)

TITLE: Experimental determination of the coefficient characterizing the probability of the  $\Delta m = \pm 2$  transition for triplet states of organic molecules

SOURCE: Kinetika i kataliz, v. 7, no. 4, 1966, 583-588

TOPIC TAGS: phenanthrene, kinetic equation, polyvinyl acetate, paramagnetic absorption, coronene

ABSTRACT: It is proposed to determine the coefficient  $\alpha$  (ratio of probabilities of the  $\Delta m = \pm 1$  to the  $\Delta m = \pm 2$  transitions) for metastable (triplet) states of aromatic molecules by excitation with ultraviolet light. By considering the kinetic equations and by neglecting certain terms said to be negligible, a formula is derived for the steady state concentration of molecules at the triplet level. On the basis of comparison with a standard reference material, a formula for computing  $\alpha$  is established:

$$\alpha_s = \frac{n_0(1-\tau_1/\tau_0)}{\frac{S_T}{S_B} n_B}$$

UDC: 541.141.7

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ACC NR: AP6030699

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where  $n_0$  and  $n_g$  are the concentrations of the substance being studied and the standard respectively,  $S_T$  and  $S_g$  are the areas under the absorption curves for the material and the standard respectively,  $\tau_0$  is the lifetime of molecules at the triplet level, and  $\tau_1$  is the time of accumulation of molecules at the triplet level as a result of excitation by ultraviolet light (relaxation time). Coronene and phenanthrene, the substances investigated, were dissolved, together with polyvinyl acetate, in benzene and the solvent evaporated. Thin films were used, about 4 mg in weight and about 0.08 mm in thickness. The concentration of the material studied was 0.005 g per gram of film. Crystals of  $\text{CuCl}_2 \cdot 2\text{H}_2\text{O}$  were used as the standard for the paramagnetic absorption studies. Standard equipment was used: a radiospectrometer, a mercury lamp with filter, and optical measuring devices. The authors obtained a value for  $\alpha$  of 30 for phenanthrene and of 35 for coronene, and consider that their experimental study of these two aromatics substantiate the validity of their proposal. They concede, however, that the  $\alpha$  values obtained differ by about one order of magnitude from theoretical values calculated by a formula proposed by I. V. Aleksandrov and K. K. Pukhov (*Optika i spektroskopiya*, 17, p. 944, (1964)) which yields 2.6 for phenanthrene and 5 for coronene. In conclusion, the authors thank I. V. Aleksandrov, N. Ya. Buben, V. L. Yermolayev, and K. K. Pukhov for discussing the results. Orig. art. has: 12 formulas, 4 figures.

SUB CODE: 07/

SUBM DATE: 25Jan65/

ORIG REF: 006/

OTH REF: 003

Card 2/2 *LC*

L 06234-67 EWT(m)/EWP(j) JW/RM SOURCE CODE: UR/0195/66/007/004/0766/0767  
ACC NR: AP6030707

54  
B

AUTHOR: Alfimov, M. V.; Batekha, I. G.; Smirnov, V. A.

ORG: Affiliate of the Institute of Chemical Physics, AN SSSR (Filial Instituta khimicheskoy fiziki AN SSSR)

TITLE: Change in the steady concentration of triplet states and the photosensitized decomposition of methyl alcohol

SOURCE: Kinetika i kataliz, v. 7, no. 4, 1966, 766-767

TOPIC TAGS: absorption spectrum, photosensitivity, EPR spectrum, photon, ionization

ABSTRACT: Irradiation of carbazole solutions in methyl alcohol causes the formation of triplet states of carbazole in concentrations sufficient to be observed by the EPR method. The concentration drops 3-4 times in several minutes. Absorption spectra show that this drop is due mostly to the decomposition of the impurity into positive ions and electrons. Ionization proceeds from the triplet level. One of possible mechanisms underlying the photosensitized decomposition of alcohols is the two-photon ionization of amine molecules and the reaction of electrons with the alcohol molecules. The electron-molecule mechanism of radical formation is confirmed by the existence of the induction period on the kinetic curve of the formation of CH<sub>2</sub>OH radicals.

SUB CODE: 07/      SUBM DATE: 28Dec65/      ORIG REF: 005/      OTH REF: 002  
UDC: 541.144.8 : 547.261

Card 1/1

AKULOV, L.S.; ACHIL'DIYEV, U.I.; VOLOSOV, G.D.; GORDON, L.I.; GRIN, G.V.;  
GROMOV, M.A.; KIRILLOV, A.Ya.; LIFSHITS, N.I.; MITROPOL'SKIY, A.V.;  
RAYSKIY, I.D.; SMIRNOV, V.B.; PAYVUSOVICH, A.Kh.; FEDOROVA, I.Yu.;  
TSYPIN, I.M.; CHEKHOVICH, D.I.; ISKOVA, A.K., red.; SUDAK, D.M.,  
tekh.red.

[Handbook on equipment for commercial enterprises and public food  
service] Spravochnik po oborudovaniyu dlia predpriyatii torgovli  
i obshchestvennogo pitaniia. Moskva, Gos.izd-vo torg.lit-ry,  
1959. 322 p. (MIRA 12:12)

1. Inzhenerno-tekhnicheskiye rabotniki Upravleniya torgovogo  
oborudovaniya i Tsentral'nogo konstruktorskogo byuro torgovogo  
mashinostroyeniya (for all except Ishkova, Sudak).  
(Business enterprises--Equipment and supplies)  
(Restaurants, lunchrooms, etc.--Equipment and supplies)

S/112/59/000/012/091/097

AO52/A001

616000

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 12, p. 259,  
# 25738

AUTHOR: Smirnov, V.B.

TITLE: Selection of Parameters of Stereoscopic Television Systems

PERIODICAL: Sb. tr. Leningr. elektrotekh. in-ta svyazi, 1957, No. 2, (32),  
pp. 194-205

TEXT: Conditions are considered which must be satisfied by a television 3-dimensional system to secure the possibility of perceiving a 3-dimensional image and of obtaining the necessary quality of the image depth reproduction. Coefficients of the depth, linear and angular magnification are determined for an idealized system in which the characteristics of transmitting and receiving tubes, as well as the radio channel, are taken as ideal. Depth distortions due to parameters of the system and the problems of optical fatigue, caused by the presence of an additional parallax, are investigated. Formulae are derived by which conditions

Card 1/2

SMIRNOV, V.B.

83502

S/048/60/024/007/001/011  
B019/B060

24.6600

AUTHORS: Bashilov, A. A. (Deceased), Larionov, O. V., Nikitin,  
M. K., Smirnov, V. B.

TITLE: Eu<sup>145</sup> Production in Ta Spallation Reactions /19

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960,  
Vol. 24, No. 7, pp. 788-790

TEXT: This is the reproduction of a lecture delivered at the 10th  
All-Union Conference on Nuclear Spectroscopy held in Moscow from January  
19 to 27, 1960. The authors studied the Eu<sup>145</sup> production in Ta spallation  
reactions produced by 660-Mev protons. The synchrocyclotron used belonged  
to the OIYaI (Joint Institute of Nuclear Research). The Eu isotopes pro-  
duced in the reactions were examined with gamma rays. Six hours after the  
Ta target irradiation, the rare earths were chemically separated and the  
fractions of the individual rare earth elements were further separated.  
The Eu fraction was purified chromatographically and was then added to a  
diluted HNO<sub>3</sub> solution containing La<sup>3+</sup> for the prevention of absorption.

Card 1/2

ACCESSION NR: AP4031184

S/0056/64/046/004/1490/1492

AUTHOR: Anton'yeva, N. M.; Nikitin, M. K.; Smirnov, V. B.

TITLE: Emission of Pd<sup>100</sup>

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 4, 1964, 1490-1492

TOPIC TAGS: palladium-100, palladium-100 emission, palladium-100  $\gamma$  spectrum, palladium-100 decay scheme, conversion electron spectrum,  $\gamma\gamma$  coincidences, transition energies

ABSTRACT: The emission of radioactive Pd<sup>100</sup> was investigated with a "ketron" type magnetic spectrometer, scintillation  $\gamma$  spectrometers, and a total-absorption  $\gamma$  spectrometer. To interpret the observed activity, the accumulation and decay of the 238 keV line belonging to the daughter isotope of Pd<sup>100</sup> (Ra<sup>100</sup>) was measured and the analysis of the curve leads to the conclusion that the activity observed, with a half life  $3.7 \pm 0.3$  days, should be ascribed to Pd<sup>100</sup>. The intensities of all the observed  $\gamma$  lines agrees with this half line. The sum lines with energies 158, 126, and 84 keV agree with the data of Pd<sup>100</sup>  $\gamma\gamma$  coincidences. The results were used to compile a level scheme for the decay of Pd<sup>100</sup>, containing all the observed  $\gamma$  transitions, except the one with 52 keV energy. The high K/L ratios for

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the most intense  $\gamma$  transitions (74.4 and 83.8 keV) show that these can be of the M1 or E1 type.

ASSOCIATION: Fizicheskiy institut Leningradskogo gosudarstvennogo universiteta  
(Physics Institute of the Leningrad State University)

SUBMITTED: 26Oct63

DATE ACQ: 07May64

ENCL: 02

SUB CODE: NP

NR REF SOV: 000

OTHER: 001

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ACCESSION NR: APW031184

ENCLOSURE: 01

Transition energies, energy difference K - L and K - M, relative intensities of conversion lines and of gamma transitions, and gamma-gamma coincidence results.

№ пп.	Av. keV	Наб-людается ли	K-L, keV	K-M, keV	K/K <sub>84keV</sub>	K/L	J <sub>K</sub> /J <sub>γ84keV</sub>	γ-переходы, совпадающие с данным hv, keV
1	32,4±0,2	K, L, M	L-M = 2,84±0,08	—	—	—	1,5±0,5	—
2	41,0±0,5	K	—	—	—	—	1,5±0,8	—
3	51,7±0,5	K	—	—	—	—	—	—
4	74,4±0,4	K, L, M	20,0±0,2	22,8±0,2	52±8	8,4±0,8	65	84
5	83,8±0,4	K, L, M	10,0±0,2	22,8±0,2	100	0,0±0,0	100	32, 42, 74
6	120,5±0,5	K, L	19,6±0,2	—	1,6±0,3	—	10	32
7	158,1±0,5	K, L	—	—	—	—	1,3	нет

1 - observed lines  
2 - γ transitions coinciding with a given hv

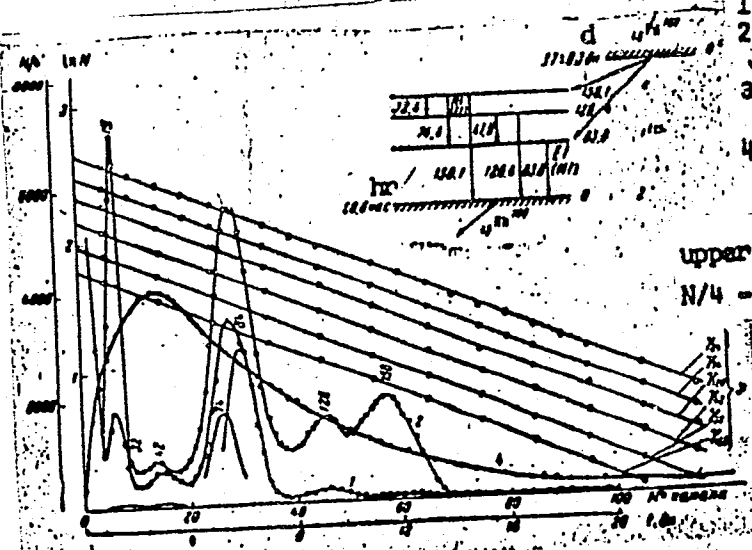
The relative intensities J<sub>K</sub>/J<sub>γ84keV</sub> are accurate to within 20%

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ENCLOSURE: 02

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- 1 - gamma spectrum of Pd<sup>100</sup>;
- 2 - gamma spectrum of total absorption of gamma radiation of Pd<sup>100</sup>.
- 3 - decrease in gamma line intensity with half-life 3.7 ± 0.3 days
- 4 - accumulation and decay of 2390 keV gamma line intensity in Rh<sup>100</sup>

upper right - proposed Pd<sup>100</sup> decay scheme  
 N/4 - number of counts in 4 minutes.

channel no.  
 days

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ANTON'YEVA, N.M.; BASHILOV, A.A. [deceased]; DZHELEPOV, B.S.; KAUN, K.G.  
MEYER, A.F.A.; SMIRNOV, V.B.

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1. Fizicheskiy institut Leningradskogo gosudarstvennogo  
universiteta. (Europium--Isotopes) (Isotope separation)

ANTON'LEVA, N. M.; NIKITIN, M. K.; SMIRNOV, V. B.

"Radiations of Rh<sup>100</sup>."

"Radiations of Pd<sup>101</sup>."

reports submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22  
Feb 64.

NIFI, LGU (Sci Res Inst Physics, Leningrad State Univ)

LEONTEVA, N. M.; NIKITIN, M. K.; SMIRNOV, V. B.

"Investigations of the Decay Scheme of Pd<sup>100</sup>."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22  
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NIFI LGU (Sci Res Inst Physics, Leningrad State Univ)