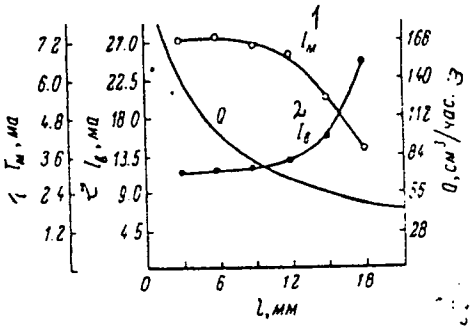
Some peculiarities of an...



Legend to Fig. 2: Change of the ion current of the target, of the extracted current, and of the gas consumption as a function of the channel length. 1 - target current, ma; 2 - extracted current, ma; 3 - cm^3/hr.

Fig. 2

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Some peculiarities of an...

Legend to Fig. 3: Ion current of the target versus extracting voltage. 1 - channel length l = 10 mm, 2 - l = 15 mm. 3 - U_{extr} (= extracting voltage), kv.

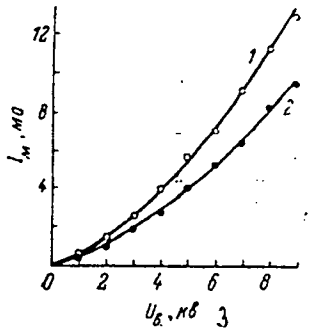


Рис. 3. Ток ионов мишени в зависимости от напряжения вытягивания.

1 — длина канала $l = 10$ мм, 2 — $l = 15$ мм.

Fig. 3

Card 7/8

Some peculiarities of an...

Legend to Fig. 4: Distribution of the ion-current density over the beam cross section versus half angle of divergence (aperture angle). 1 - density of ion current, ma/cm^2, 2 - angle of deflection from the axis.

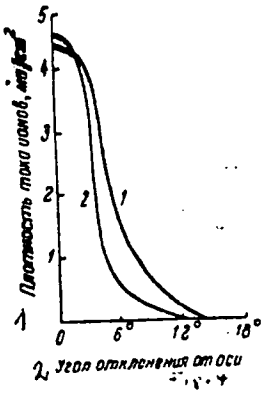


Fig. 4

Card 8/8

VASIL'YEV, R.D.; DOROFEYEV, G.A.; MORDOVSKAYA, G.S.; PETROV, V.I.; PIMENOV, M.I.

Study of a thermal neutron source. Atom. energ. 15 no.3: 200-204 S '63. (MIRA 16:10)

(Neutron sources)

L 27228-65 EWG(j)/EWT(m)/EPF(c)/EPR/EWP(j)/T/EWA(h)/EWA(1) Pc-4/Pr-4/Ps-4/Peb 36
DIAAP WW/RM S/0120/64/000/006/0032/0033 32 B
ACCESSION NR: AP5002142

AUTHOR: Vasil'yev, R. D.; Dorofeyev, G. A.; Petrov, V. I.; Pimenov, M. I.

TITLE: Measuring the neutron yield of pulsed neutron tubes 19

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1964, 32-33

TOPIC TAGS: neutron source, neutron yield, neutron detector

ABSTRACT: An activation method is described of determining the neutron yield of a pulsed neutron tube by means of a device calibrated in a continuous neutron beam. The neutron detector was represented by a plexiglas cylinder whose diameter and height were 25 cm. Inside the cylinder, three Geiger counters were symmetrically mounted. The detector was placed at a distance of 10 cm or more from a tritium target in a sealed tube. Neutrons were produced by bombarding the target with 100-kev deuterons; the frequency of the neutron pulses was 1—400 cps; their duration, 10^{-6}—10^{-3} sec. The detector was irradiated by D, T-neutrons

Card 1/2

L 27228-65

ACCESSION NR: AP5002142

obtained from a continuous neutron source for 1,000 sec, and a curve of decay of activated-to-saturation silver was measured. From these experiments, the coefficients for a neutron-yield formula were calculated. The average number of neutrons per pulse was found to be about 5×10^6. "The authors wish to thank V. T. Shchebolev for lending them the neutron source and for his help in the experimentation." Orig. art. has: 6 formulas.

ASSOCIATION: none

SUBMITTED: 25Nov63 ENCL: 00 SUB CODE: NP

NO REF SOV: 000 OTHER: 000

Card 2/2

L 37120-66 EWT(l)/EWT(m)/T/EWA(t)/ETI IJP(c) JD GG
ACC NR: AP6015769 (A,N) SOURCE CODE: UR/0048/66/030/005/07 .3/0798

AUTHOR: Spivak, G. V.; Pavlyuchenko, O. P.; Petrov, V. I.

ORG: Physics Department, Moscow State University im. M.V.Lomonosov (Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta)

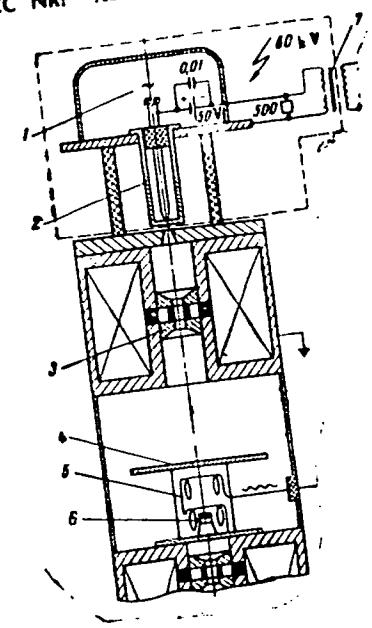
TITLE: Electron microscopic observation of domain structure dynamics in magnetic films /Report, Fifth All-Union Conference on Electron Microscopy held in Sumy 6-8 July 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 5, 1966, 793-798

TOPIC TAGS: electron microscope, ferromagnetic film, magnetic domain structure, stroboscope

ABSTRACT: Alterations in the domain structure of ferromagnetic films during rapid magnetization switching have been observed with a stroboscopic electron microscope. The present paper is devoted to a brief discussion of the technique. A cross section diagram of the electron transmission microscope employed in the investigations is shown in the figure. The magnetizing unit was similar to that of E.Fuchs and W.Liesk (Optik, 19, 307 (1962)); it was supplied with alternating current, and the windings were made to form part of a resonant circuit in order to increase the magnetizing field. Only four of the windings were employed because full compensation of the motion

Card 1/3



Cross section of the stroboscopic electron transmission microscope. 1 - electron gun; 2 - gate; 3 - condenser lens; 4 - shield; 5 - magnetizing unit; 6 - specimen holder; 7 - isolating pulse transformer.

of the image was not required with stroboscopic operation. The microscope was operated ordinarily in the focused condition. The electron beam was normally cut off by a 50 V potential applied to the gating electrode 2, and was turned on by a 60 V 0.5 microsec strobe pulse. The high cut off voltage was found to be necessary to prevent transmission during the off phase of the cycle of a low current of exceptionally high energy electrons, which led to considerable deterioration of the image. It was found that the stability of the domain structure from cycle to cycle that is requisite for stroboscopic observation obtains only at low switching fields, wherein the switching takes place by reversible domain wall displacement. The sharpness of the stroboscopic photographs depended strongly on the duty factor, the required exposure becoming excessive at low duty factors. By reducing the magnification, operating the microscope in

L 37[illegible]-66
ACC NR: AP6015769

the focused condition, increasing the accelerating potential to 60 kV, and [illegible] the pulse current to 1 mA, it was possible to record at a duty factor of 2.[illegible] with an exposure only an order of magnitude longer than is required with normal operation under static conditions. Several photographs of the domain structures of Permalloy films are presented, which illustrate the resolution achieved and show the motions of the domain walls during a portion of the magnetization cycle. It is concluded that a stroboscopic electron transmission microscope can be employed to investigate the variations of the domain structure of thin ferromagnetic films during magnetization switching under conditions when the processes involved are reversible, and that the sharpness of the image depends on the stroboscopic duty factor and on the stability of the domain configurations from cycle to cycle. Orig. art. has: 6 figures.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 001/ OTH REF: 005

Card 3/3

L 01862-67 EWT(l)/EWT(m)/EWP(t)/ETI IJP(c) JD/WW/GD

ACC NR: AT6029304 SOURCE CODE: UR/0000/66/000/000/0007/0026

AUTHOR: Petrov, V. I.; Polozhikhin, A. I.; Semenov, A. G.

ORG: none

TITLE: Heat transfer to sodium in a small diameter tube at high heat loads

SOURCE: Moscow. Energeticheskiy institut. Teploobmen v elementakh energeticheskikh ustanovok (Heat exchange in power installation units). Moscow, Izd-vo Nauka, 1966, 7-26

TOPIC TAGS: convective heat transfer, sodium, heat transfer fluid

ABSTRACT: The article reports the results of a study of heat transfer during the movement of sodium in a heated copper tube with an inside diameter of 0.09 mm. Data were obtained at specific heat loads reaching 20 x 10^6 watts/m^2 over a range of velocities from 1.7-30 meters/sec, at Reynolds numbers Re = (4.5-71) x 10^3 and Peclet numbers from 27 to 485. The circulation loop was made of 1Kh18N9T steel. The article shows an overall scheme of the apparatus and detailed mechanical drawings of the experimental tube. The temperature of the outer surface of the tube was measured with six Chromel-Kopel thermocouples located at intervals of 5 mm. Detailed experimental data are shown in an extensive table (four pages). Based on this data, a figure illustrates the change in the Nusselt number as a function of the Peclet number for a

Card 1/2

L 01862-67
ACC NR: AT6029304

tube with a diameter of 1.09 mm. The majority of previous experiments on heat transfer to liquid metals have used tubes with a diameter greater than 8-10 mm and specific heat loads not exceeding approximately 1×10^6 watts/m^2. The results of the present investigation indicate that the relationship $Nu = 5 + 0.025\ Pe^{0.8}$ can, in the majority of cases, be applied accurately in the calculation of heat transfer to alkali metals up to a tube diameter of 1 mm and specific heat loads of approximately 20×10^6 watts/m^2. Orig. art. has: 23 formulas, 7 figures and 1 table.

SUB CODE: 13, 20/ SUBM DATE: 05Apr66/ ORIG REF: 009/ OTH REF: 001

Card 2/2 LC

PETROV, V.I.

Cleaning spectral carbon electrodes by etching. TSvet. met. 26 no.2:79 Mr-Ap '53. (MLRA 10:9)
(Electrodes)

PETROV, V. I.

(1)

New method of studying heat transfer in the boiling of liquids. P. G. Poletavkin, V. I. Petrov, I. D. Dodonov, and I. T. Alad'ev (*Dokl. Akad. Nauk SSSR*, 1953, 90, 775—776).—Heat transfer is measured from a thin-walled, direct electrically heated tube to a boiling liquid inside it, the tube being surrounded externally by a non-boiling liquid at the temp. of the tube, so as to prevent superheating when boiling occurs inside the tube. Some measurements with water are recorded. R. C. MURRAY.

10/16/54

24-(6) PHASE I BOOK EXPLOITATION SOV/1826

Akademiya nauk SSSR. Energeticheskiy institut

Teploperedacha i teplovoye modelirovaniye (Heat Transfer and Modeling of Heat Processes) Moscow, Izd-vo AN SSSR, 1959. 619 p. Errata slip inserted. 3,500 copies printed.

Resp. Ed.: M. A. Mikheyev, Academician; Ed. of Publishing House: D. A. Ivanova; Tech. Ed.: G. N. Shevchenko.

PURPOSE: The book is intended for scientists concerned with heat transfer, heat emission, and hydraulics of liquid metals, etc.

COVERAGE: This collection is dedicated to the memory of Academician M. V. Kirpichev who in the twenties initiated a systematic investigation of heat transfer processes and the efficiency of heat apparatus. Later he led the development of research work in this field. Two special collections devoted to works of Kirpichev's school have been published, one in 1938, Materialy sovesshchaniya po modelirovaniyu (Materials of the Conference on Modeling) and in 1951, Teoriya podobiya i modelirovaniya (Theory of Similitude and Modeling). The present collection prepared in 1956 represents further development of the work of this school. This theory is fundamental for the analysis of many heat problems in the field of electrical and radio engineering. Of great importance are the hydraulics of liquid metals which as a new kind of heat carrier may be used in the various branches of modern engineering. As a result of special investigations of some cases of convective heat transfer, a dependence of the process on the kind of liquid, temperature, pressure, direction of the heat flow, and other factors, was discovered and established. On the basis of a wide generalization of experimental data, new dependable recommendations for heat analysis of engineering equipment were developed. Of no less interest is the work on heat transmission in boiling liquids and the condensation of vapors. All investigations are based on the theory of similitude, the nature of which, according to M. V. Kirpichev, is that of "experimentation." Work on the theory of a regular regime applied to a system of bodies with an internal source of heat is of interest for the future.

Card 2/20

Heat Transfer (Cont.) SOV/1826

Petrov, V. I. and I. T. Aladyev. On the Measurement of Steam Content in Boiling With Heating 272

The article describes a method of measuring steam content based on the phenomenon that in the process of boiling with undermeating in a flow of a liquid, little steam is available on the heated surface. The fluid is circulating in a close contour, having a free surface on which boiling appears. Data on this subject have been obtained by A. Reys (H. Buchberg, Stanford University) but are judged insufficient. There are 3 references: 1 Soviet and 1 English.

Mikheyev, M. A., O. S. Fedynskiy, V. M. Boryugin, V. I. Petrov. Heat Emission in the Flow of Metals in Pipes 69

This article gives results of the first most complete investigation of average heat emission in a turbulent flow of liquid metals through straight pipes. Supplementing the report of the International Conference on the Peaceful Use of Atomic Energy, this article provides more complete tables of values and descriptions of experiments. M. A. Val'tukhov, A. V. Galkov, and G. M. Chizhevskaya cooperated with the authors in conducting experiments; N. A. Nikol'skiy, P. V. Klassen, A. N. Solov'yev, K. A. Kalakutskaya, and I. M. Pchelkin with the cooperation of V. A. Vel'tishcheva determined the physical properties of metals; data on the viscosity of lead, mercury, and sodium are taken from the works of Khalilov, Shidlovskiy, and Chiong. There are 8 references: 4 Soviet, and 4 English.

Distr: 4E2c/4E2d(b) 2 cys/4E3b/4E3c 2 cys/4E3d
4E2b(v)

12
2 - BW (BW/JW)
1 - MJC (JD)
1 - MJC (JB)
1 - RS
8

Heat transfer to metals flowing through pipes. M. A. Mikheev, O. S. Fedynskii, V. M. Deryugin, and V. I. Subbotin. *Teploperedacha i Teplovoe Modelirovanie, Akad. Nauk S.S.S.R., Energet. Inst. im. G. M. Krzhizhanovskogo* 1959, 69–86.—Expts. were carried out using a steel pipe, coated electrolytically on the outside with Cu. Temps. were detd. by means of thermocouples mounted in the pipe wall. Drawings and a description of exptl. app. are given. The pipe was heated by either an elec. resistance heater, or by oil at a max. temp. of 320°. Tests were run under conditions of both heating and cooling. The velocity of the liquid metals was varied from 0.1 to 20 m./sec., the heat flux from 2×10^4 to $\sim 1 \times 10^6$ kcal./sq. m.-hr., Reynolds no. (Re) from 1×10^4 to 6.5×10^5, and Prandtl no. (Pr) from 4×10^{-3} to 3.2×10^{-2}. Extensive tables of the phys. properties of liquid Hg, Sn, Bi, Na, Bi (55.5%)–Pb(44.5%) eutectic, and K(78%)–Na(22%) eutectic are given. Extensive heat-transfer data for Hg, Bi–Pb eutectic, Bi, Sn, Na, and K–Na alloy are reported. All the exptl. data were correlated by relation $Nu = 3.3 + 0.014 (Pe)^{0.8}$, where Nu is the Nusselt no. and Pe = (Re) (Pr). Certain of the data, i.e. for Sn and for Na-K were better expressed by $Nu = 4.8 + 0.014 (Pe)^{0.8}$. H. J. Wagner

S/120/61/000/002/035/042
E032/E114

AUTHOR: Petrov, V.I.

TITLE: Zirconium targets deposited on copper and silver

PERIODICAL: Pribory i tekhnika eksperimenta, 1961, No.2, pp.174-176

TEXT: The present author discusses a method for the preparation of zirconium targets on copper and silver. It was found in preliminary experiments that a copper foil in intimate contact with a zirconium foil will bond together when heated in a vacuum to 600-700 °C. However, it was found that the zirconium layer does not show a strong absorption of hydrogen. In subsequent work the zirconium layer was therefore separated from copper by a silver foil. The apparatus employed for preparing such composite foils is shown in Fig.1. The flat end of a copper cup having a carefully prepared surface is used as the copper target. The zirconium foil (0.03 mm) and the silver foil (0.01 mm) are pressed against the copper surface by the load 2 (1 kg). The pressure is transmitted by the graphite rod 3 and the quartz tube 4. The assembly is heated by a high-frequency furnace supported by the quartz tube 5. The displacement gauge 6 carries a scale divided

Zirconium targets deposited on ...

into 0.002 mm divisions. The entire assembly is placed in a vacuum of 5 x 10^{-6} mm Hg. As the heating process begins, the displacement gauge shows an increase in the length of the apparatus, and as soon as the silver begins to melt the gauge pointer moves in the opposite direction. It is estimated that the average atomic ratio of titium to zirconium in these targets is about 1.4. In order to ensure a better heat transfer the target was later modified, as shown in Fig.2. In the modified form it is in the form of a disc with spiral channels for water cooling. The modified form of the complete apparatus is illustrated in Fig.3, in which 2 is the water-cooled target and 4 is a piston which transmits the pressure (300 kg/cm^2). Fig.4 shows the apparatus used for preparing zirconium targets on silver. The silver is loaded into the graphite crucible 1. The latter has an aperture which is covered by the graphite rod 2. This rod can be raised by means of the thread 4. The silver is heated by the high-frequency heater and can be poured out onto the zirconium foil 3 by opening the aperture on the crucible. The foil is kept in position by the steel ring 5 and is supported by the quartz tube 6. Tritium to zirconium ratios of about 1.8 were obtained.

S/120/61/000/002/035/042
Zirconium targets deposited on E032/E114

Acknowledgements are expressed to O.V. Soptsov for practical assistance and to V.V. Kesarev for help with the saturation of the zirconium targets with hydrogen isotopes.
There are 4 figures and 3 English references.

SUBMITTED: May 27, 1960

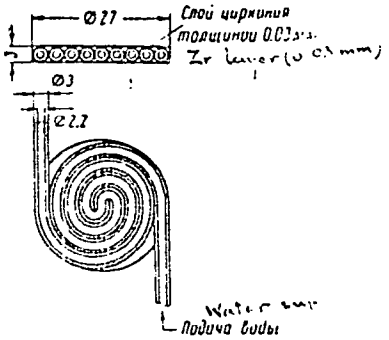


Fig.2

Card 3/5

Zirconium targets deposited on ....

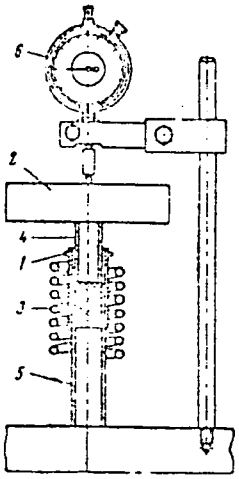
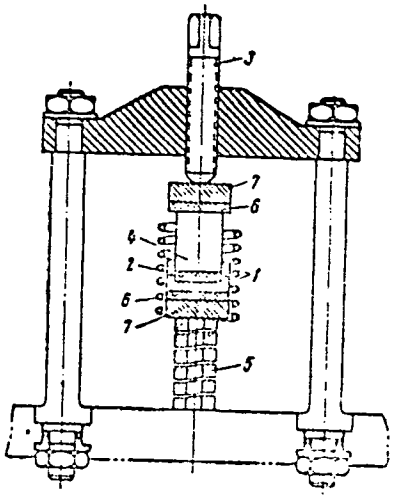
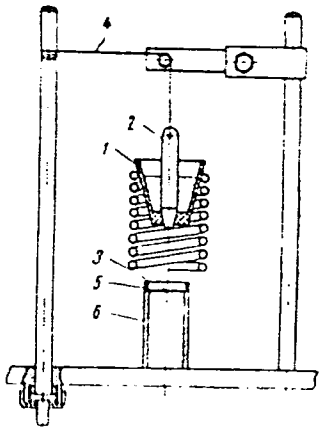


Fig. 1

Zirconium targets deposited on S/120/61/000/002/035/042
E032/E114





Card 5/5 Fig.3 Fig.4

ASTAKHOV, O.P.; PETROV, V.I.; FEDYNSKIY, O.S.

Note on contact thermal resistance in heat transfer to liquid metals. Atom. energ. 11 no.3:255-257 S '61. (MIRA 14:9)
(Heat--Transmission)

ACC NR: AP6022207 SOURCE CODE: UR/0115/66/000/005/0063/0065

AUTHOR: Vasil'yev, R. D.; Dorofeyev, G. A.; Petrov, V. I.; Pimenov, M. I.; Shevchenko, V. F.

ORG: none

TITLE: Calibrating thermal-neutron radiometers in diffused flux

SOURCE: Izmeritel'naya tekhnika, no. 5, 1966, 63-65

TOPIC TAGS: radiometer, thermal neutron

ABSTRACT: The possibility of using a graphite moderator as a source of thermal neutrons for calibrating neutron radiometers was explored. A fast-neutron source ($T(d,n)He^4$ reaction) was placed inside a cavity in the graphite. With thick industrial ZrT and TiT targets, the neutron yield reached 10^9 per sec, at 100 kv and 100 μamp in the cascade accelerator. Theoretically, $Q/P = 7000$ per cm^2; experimentally, 5600 per cm^2; here, Q - yield of fast neutrons, P - thermal-neutron flux density. Hence, a field of thermal neutrons with a density of 10^6 neutr/sec.cm^2 was feasible; these neutrons had a Maxwellian energy distribution and a temperature of 293°K. The technique of calibration of Soviet-made RUP-1 radiometer is described in some detail. The radiometer calibrated in a directional flux showed readings by 30% lower than true value of measurand when used in diffused fluxes. Orig. art. has: 7 formulas.

SUB CODE: 18 / SUBM DATE: none / ORIG REF: 005 / OTH REF: 001

Card 1/1 UDC:621.039.564.2

L 07957-67 EWT(m)

ACC NR: AT6031328 SOURCE CODE: UR/3163/66/000/004/0026/0033

AUTHOR: Vasil'yev, R. D.; Dorofeyev, G. A.; Petrov, V. I.; Pimenov, M. I.; Shevchenko, V. F.

ORG: none

27
19 B+1

TITLE: Determination of the yield of nuclear reactions in thick targets with energies up to 100 Kev

SOURCE: Soyuznyy nauchno-issledovatel'skiy institut priborostroyeniya. Doklady, no. 4, 1966. Opredeleniye vykhoda reaktsiy Deyteriy (deyton, neytron) Geliy tri i Tritiy (deyton, neytron) Geliy chetyry v tolstykh mishenyakh pri energiyakh

TOPIC TAGS: nuclear reaction, neutron, deuteron, neutron flux, all-wave counter/NG-200 cascade accelerator

ABSTRACT: On the basis of previous works, a determination is made of the yield of nuclear reactions $D(d,n)He^3$ and $T(d,n)He^4$ in commercially produced thick targets along accompanying particles at deuteron energies up to 100 Kev. The neutron yield was measured with an NG-200 cascade accelerator. Confirmation was made of the virtual absence of scattering in target nuclei Ne^3

Card 1/2 UDC: 539.17

ACC NR: AT6031328

escaping toward the counter. Results of the calibration of the all-wave counter confirm the corrections of the method used to determine the neutron flux density and the yield of the reactions $D(d,n)He^3$ and $T(d,n)He^4$. Orig. art. has: 4 figures and 11 formulas.

SUB CODE: 20, 18/ SUBM DATE: 20Oct65/ ORIG REF: 001/ OTH REF: 006/

Card 2/2 egh

L 07958-67 EWT(m)

ACC NR: At6031327 SOURCE CODE: UR/3163/66/000/003/0022/0025

AUTHOR: Vasil'yev, R. D.; Dorofeyev, G. A.; Petrov, V. I.; Pimenov, M. I.; Shevchenko, V. F.

ORG: none

TITLE: On the problem of using nuclear reactions to calibrate radiometers of fast neutrons

SOURCE: Soyuznyy nauchno-issledovatel'skiy institut priborostroyeniya. Doklady, no. 3, 1966. K voprosu ob ispol'zovanii yadernykh reaktsiy Deyteriy (deyton, neytron) Geliy tri i Tritiy (deyton, neytron) Geliy chetyry dlya graduirovki radiometrov bystrykh neytronov, 22-25

TOPIC TAGS: radiometer, nuclear reaction, neutron, neutron detector, neutron flux/NG-200 generator

ABSTRACT: A study is made of the calibration of neutron radiometers with energies close to 2.5 and 14 Mev, formed during nuclear reactions $D(d,n)He^3$ and $T(d,n)He^4$ respectively. A neutron NG-200 generator was used as the accelerator. It was found that in some cases, neutrons from reaction

Card 1/2 UDC: 539.1.075.2.089:539.172.4

L 07958-67

ACC NR: AT6031327

$T(d,n)He^4$ can be used to adjust instruments intended to register neutrons from reaction $D(d,n)He^3$. The calibration error of neutron radiometers for both reactions was calculated as being the sum of the mean square errors in the determination of the neutron flux density and the readings of the calibrated instrument, and was of the order of 5 to 10%. Orig. art. has: 1 figure and 1 formula.

SUB CODE: 20, 18/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 001/

Card 2/2 egh

L 07560-67 EWT(1) WW/GD
ACC NR: AT6029311 SOURCE CODE: UR/0000/66/000/000/0064/0068

AUTHOR: Petrov, V. I. 43
B+/

ORG: none

TITLE: The temperature drop in a plate heated by internal sources of heat whose specific power depends on the temperature

SOURCE: Moscow. Energeticheskiy institut. Teploobmen v elementakh energeticheskikh ustanovok (Heat exchange in power installation units). Moscow, Izd-vo Nauka, 1966, 64-68

TOPIC TAGS: thermodynamic analysis, heat conductivity, conductive heat transfer

ABSTRACT: The heat conductivity equation for the problem under consideration has the form:

$$\frac{d}{dx}\left[\lambda(t)\frac{dt}{dx}\right] + q_0(t) = 0. \qquad (1)$$

The solution of this equation, with constant specific power of the internal heat sources q_v, is contained in many textbooks on heat transfer. However, if, in addition to q_v, the heat conductivity is also a constant quantity, then the solution of the equation is expressed by the dependence of the temperature on q_v, λ, x, the thickness of the plate, δ, and the boundary conditions in explicit form. Taking account of the

Card 1/2

dependence of the heat conductivity coefficient on the temperature, at constant q_y, does not bring about any difficulties in the solution of Equation (1). However, in this case, the function sought is not the temperature, but the auxiliary function

$$\Psi(t) \equiv \int_0^t \lambda(t)\,dt. \qquad (2)$$

Here, the temperature becomes an implicit function of the given parameters. The rest of the article consists of a mathematical treatment of the problem as posed above. Orig. art. has: 17 formulas and 1 figure.

SUB CODE: 20/ SUBM DATE: 06Apr66/ ORIG REF: 003

L 07561-67 EWT(1) WW/GD

ACC NR: AT6029310 SOURCE CODE: UR/0000/66/000/000/0059/0064

AUTHOR: Petrov, V. I.

ORG: none

TITLE: Stabilized convective heat transfer in tubes with a linear dependence of the heat flux on the wall temperature

SOURCE: Moscow. Energeticheskiy institut. Teploobmen v elementakh energeticheskikh ustanovok (Heat exchange in power installation units). Moscow, Izd-vo Nauka, 1966, 59-64

TOPIC TAGS: convective heat transfer, heat transfer coefficient, thermodynamic analysis

ABSTRACT: The article considers the case when the heat transfer coefficient remains constant, while the heat load depends linearly on the wall temperature. Under these conditions, an analysis is made of the change along the length of the tube of the wall temperature, the liquid temperature, and the heat flux. In place of the usual expression for the heat transfer coefficient, the analysis makes use of the corresponding relationship in differential form. In order that the heat transfer coefficient remain constant at any point over the length of the tube, that is,

$$\alpha = \frac{q}{t_{wall} - t_{liq}} \neq f(x),$$

Card 1/3

it is necessary and sufficient that the following condition be fulfilled for all values of x in this section

$$\frac{d}{dx}\left(\frac{q}{t_{ex\,wall} - t_{av\,liq}}\right) = 0.$$

Differentiating, we get

$$\frac{1}{t_{ex\,wall} - t_{av\,liq}}\left[\frac{dq}{dx} - \frac{q}{t_{ex\,wall} - t_{av\,liq}} \cdot \frac{d}{dx}\left(t_{ex\,wall} - t_{av\,liq}\right)\right] = 0.$$

Setting each of the factors equal to zero, and limiting the final magnitude of the temperature gradient, we obtain the condition for the constancy of the heat transfer coefficient over the length of the tube; this may be written in the following form:

$$\alpha = \frac{\frac{dq}{dx}}{\frac{dt_{ex\,wall}}{dx} - \frac{dt_{av\,liq}}{dx}} = \text{const.} \qquad (1)$$

The remainder of the article is devoted to a mathematical treatment of the problem under the above initial conditions. The final expression has the form

$$\ln\frac{t_{cp}(x)+\frac{q_0}{b}}{t_{cp}(0)+\frac{q_0}{b}}=\frac{bx}{A\left(1-\frac{b}{\alpha}\right)}$$

$$\ln\frac{t_{cp}(x)+\frac{1}{\beta}}{t_{cp}(0)+\frac{1}{\beta}}=\frac{x}{A\left(\frac{1}{q_0\beta}-\frac{1}{\alpha}\right)}. \qquad (13)$$

Here, β is the temperature coefficient of the electric resistance of the material of the wall. Orig. art. has: 13 formulas.

SUB CODE: 20/ SUBM DATE: 05Apr66

Card 3/3 nst

SOV/137-58-9-18744

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 92 (USSR)

AUTHORS: Strelets, Kh.L., Voynitskiy, A.I., Ivanov, A.I., Petrov, V.I., Sergeyev, V.V., Forsblom, G.V.

TITLE: Studies in the Metallurgy of Titanium (Raboty v oblasti metallurgii titana)

PERIODICAL: V sb.: Legkiye metally. Nr 4. Leningrad, 1957, pp 114-126

ABSTRACT: A review of studies of titanium metallurgy in the USSR comprising the production of anhydrous $TiCl_4$, the development of processes and equipment for reduction of $TiCl_4$ by Mg and Na, the purification of Ti sponge, the electrolysis of Ti and Ti(O) chlorides, the electrolytic refining of Ti, etc. The studies and investigations performed have made it possible to organize large-scale industrial extraction of Ti in the USSR.

Ye Z

1. Metallurgy--USSR 2. Titanium--Study and teaching

Card 1/1

SOV/32-24-9-14/53

AUTHORS: Zalesov, Yu. P., Markman, A. L., Petrov, V. I., Buzhenko, M. A., Korobtsov, A. A., Pilipenko, A. T., Kugay, L. N.

TITLE: Communications in Brief (Korotkiye soobshcheniya)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 9, pp 1070-1073 (USSR)

ABSTRACT: Yu. P. Zalesov and A. L. Markman (Srednoaziatskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta zhirov, (Central Asian Branch of the Allunion Scientific Fat Research Institute) have evolved a method for the determination of gossypol in cottonseed oil. Gossypol is extracted with an aqueous alkaline solution; in this process gossypolates are formed, which solve well in water, and which are eventually determined gravimetrically or volumetrically.
V. I. Petrov, M. A. Buzhenko and A. A. Korobtsov (Tsentral'nyy nauchno-issledovatel'skiy dizel'nyy institut) (Central Scientific Diesel Research Institute) have evolved a determination method for acetone in air, water, and waste gases. It is based on the reaction of acetone with hydrochloride hydroxyl amine. The resultant hydrochloric acid is determined photometrically, using a green light filter and methyl orange as an indicator.

Card 1/3

A. T. Pilipenko and L. N. Kugay (Institut metallokeramiki i spetsial'nykh splavov AN USSR) (Institute of Powder Metallurgy and Special Alloys of the AS UkrSSR) propose a method for the determination of boron and borides in some metals. With the borides of titanium, zirconium, niobium, tantalum, chromium, tungsten, and molybdenum, an alkaline fusion should be carried out in iron or nickel crucibles at 700°, the substance being 0,1 - 0,2 g, and small quantities of sodium peroxide being added. The analysis procedure is described.

ASSOCIATION: Sredneaziatskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta zhirov (Central Asian Branch of the All-Union Scientific Fat Research Institute)
Tsentral'nyy nauchno-issledovatel'skiy dizel'nyy institut (Central Scientific Diesel Research Institute)
Institut metallokeramiki i spetsial'nykh splavov AN USSR (Institute of Powder Metallurgy and Special Alloys, AS UkrSSR)

RETROV, V.I., dotsent

Treatment of the wound after the removal of skin. Vest.khir. 87 no.7:83-84 Jl '61. (MIRA 15:8)

1. Iz 2-y gospital'noy khirurgicheskoy kliniki (nach. - prof. Ye.V. Smirnov) Voyenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova.

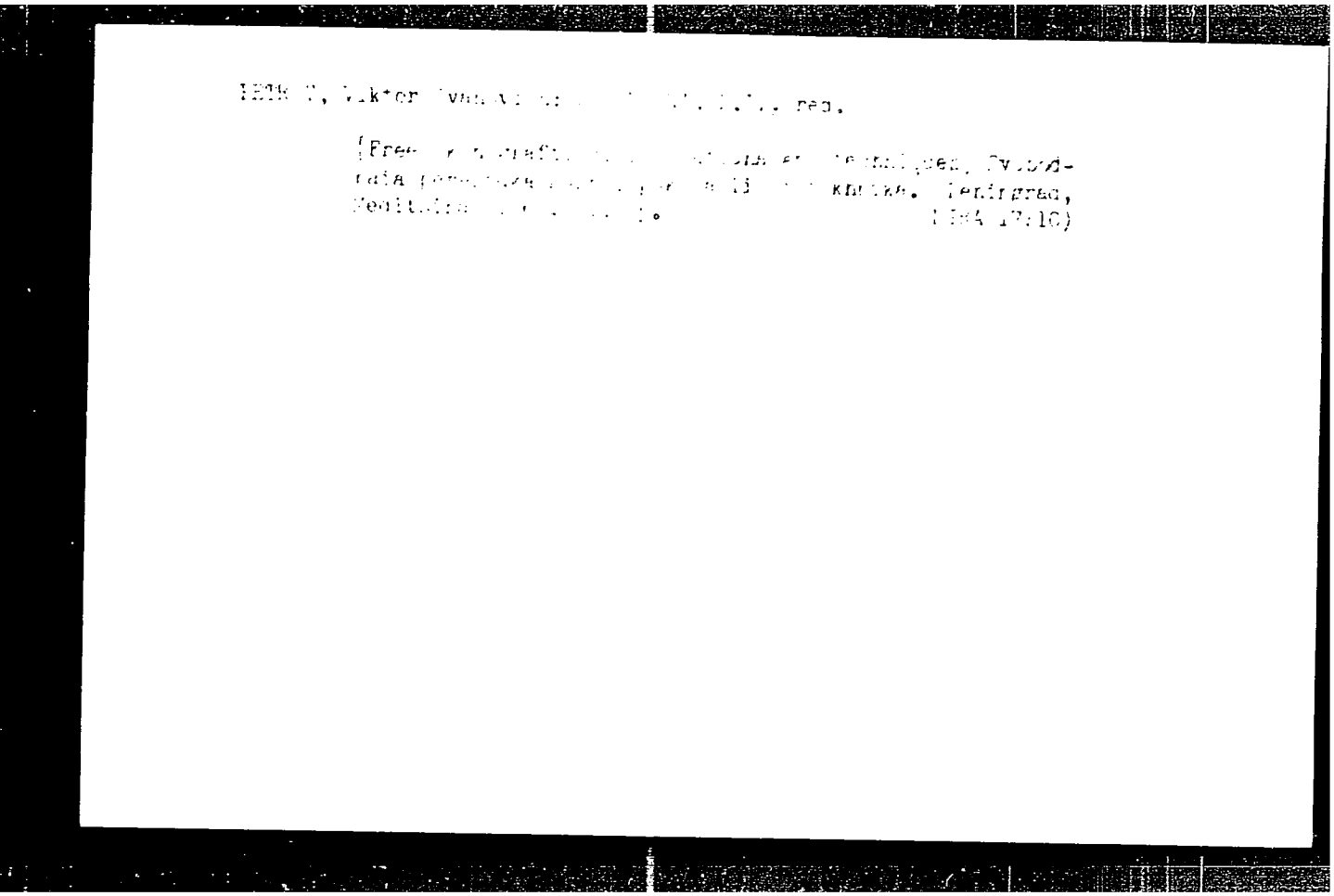
(SKIN GRAFTING)

PETROV, V.I., dotsent

Treatment of the wound after the removal of skin. Vest.khir. 88 no.7:80-84 Jl '62. (MIRA 15:8)

1. Iz 2-y gospital'noy khirurgicheskoy kliniki (nachc. - prof. Ye.V. Smirnov) Voyenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova.

(SKIN GRAFTING)



PETROV, V.I., dotsent

Roentgen anatomical study of the lungs in forensic expert testimony. Vest. rent. i rad. no.5:64-68 S-O '54.

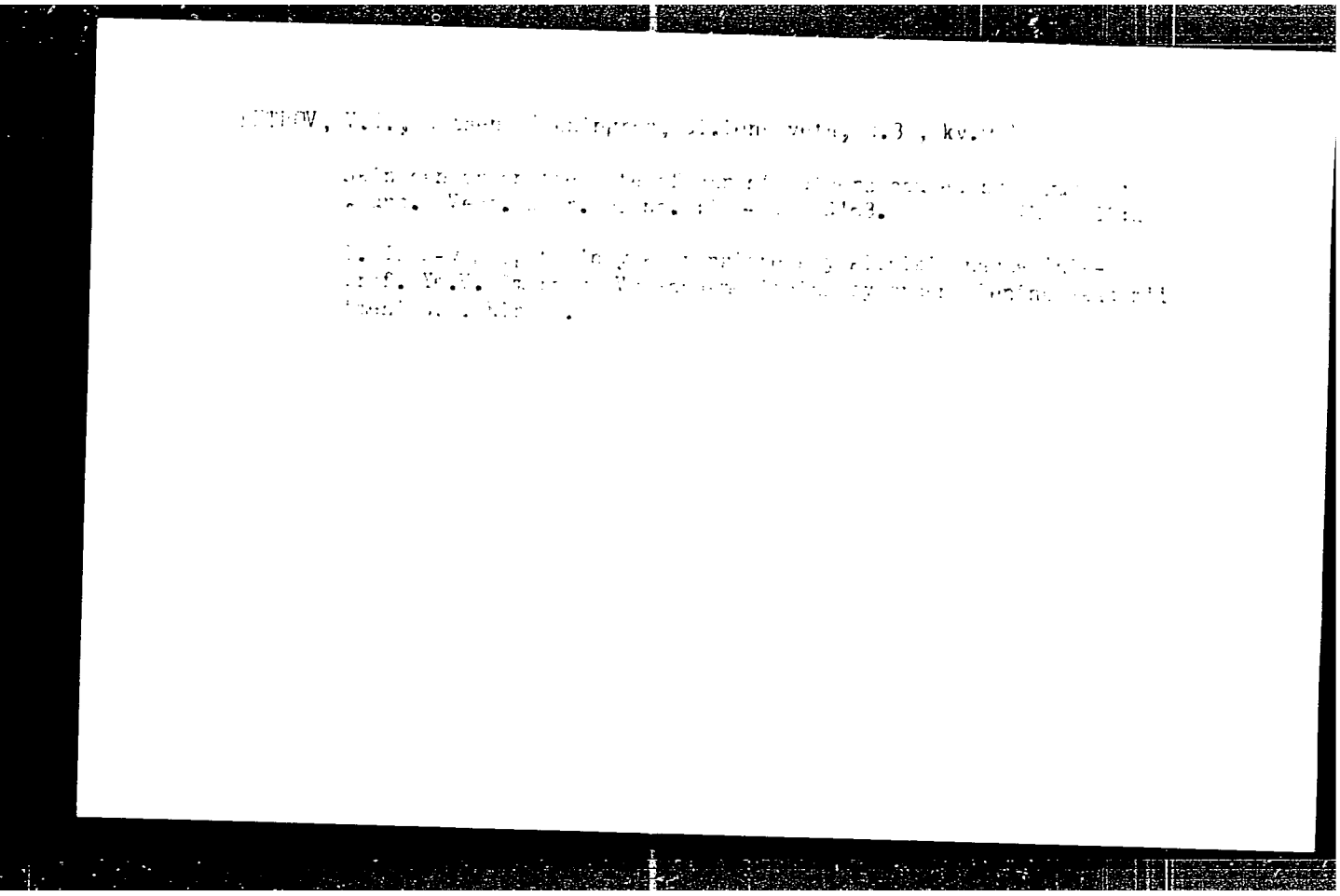
1. Iz kafedry rentgenologii (zav. prof. Yu.N.Sokolov) TSentral'nogo instituta usovershenstvovaniya vrachey (dir. V.P.Lebedeva) i Moskovskoy oblastnoy sudebnomeditsinskoy ekspertizy (zav. L.N.Dodina)
(LUNGS, radiography,
med. legal aspects)
(JURISPRUDENCE, MEDICAL,
lungs x-ray in)

PETROV, V.I.

Epidemiology of epidemic hepatitis in Dnepropetrovsk. Zhur. mikrobiol., epid. i immun. 40 no.6:18-22 Je '63.

(MIRA 17:6)

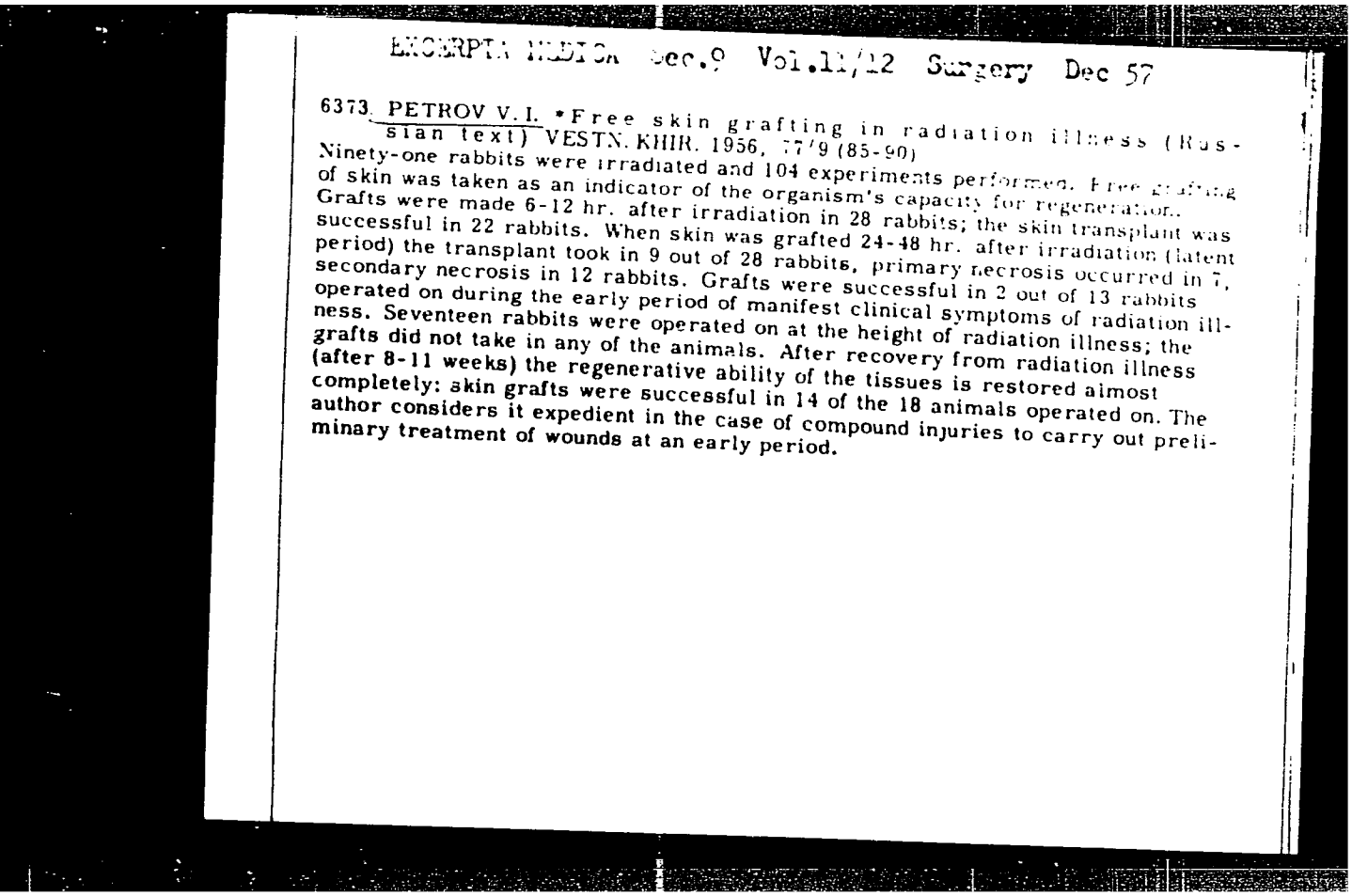
1. Iz Dnepropetrovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.



PETROV, V.I., dotsent; KOTEGOVA, G.K.

Surgical treatment of fractures of the long bones [with summary in English, p.159] Vest.khir. 77 no.6:71-76 Je '56. (MLRA 9:8)

1. Iz gospital'noy khirurgicheskoy kliniki No.1 (nach. - prof. Ye.V.Smirnov) Voyenno-morskoy meditsinskoy akademii. Leningrad, Fontanka, 106, gospital'naya khirurgicheskaya klinika No.1.
(FRACTURES, surgery,
intramedullary nailing (Rus))



EXCERPTA MEDICA Sec.9 Vol.11/12 Surgery Dec 57

6373. PETROV V. I. *Free skin grafting in radiation illness (Russian text) VESTN. KHIR. 1956, 77/9 (85-90)

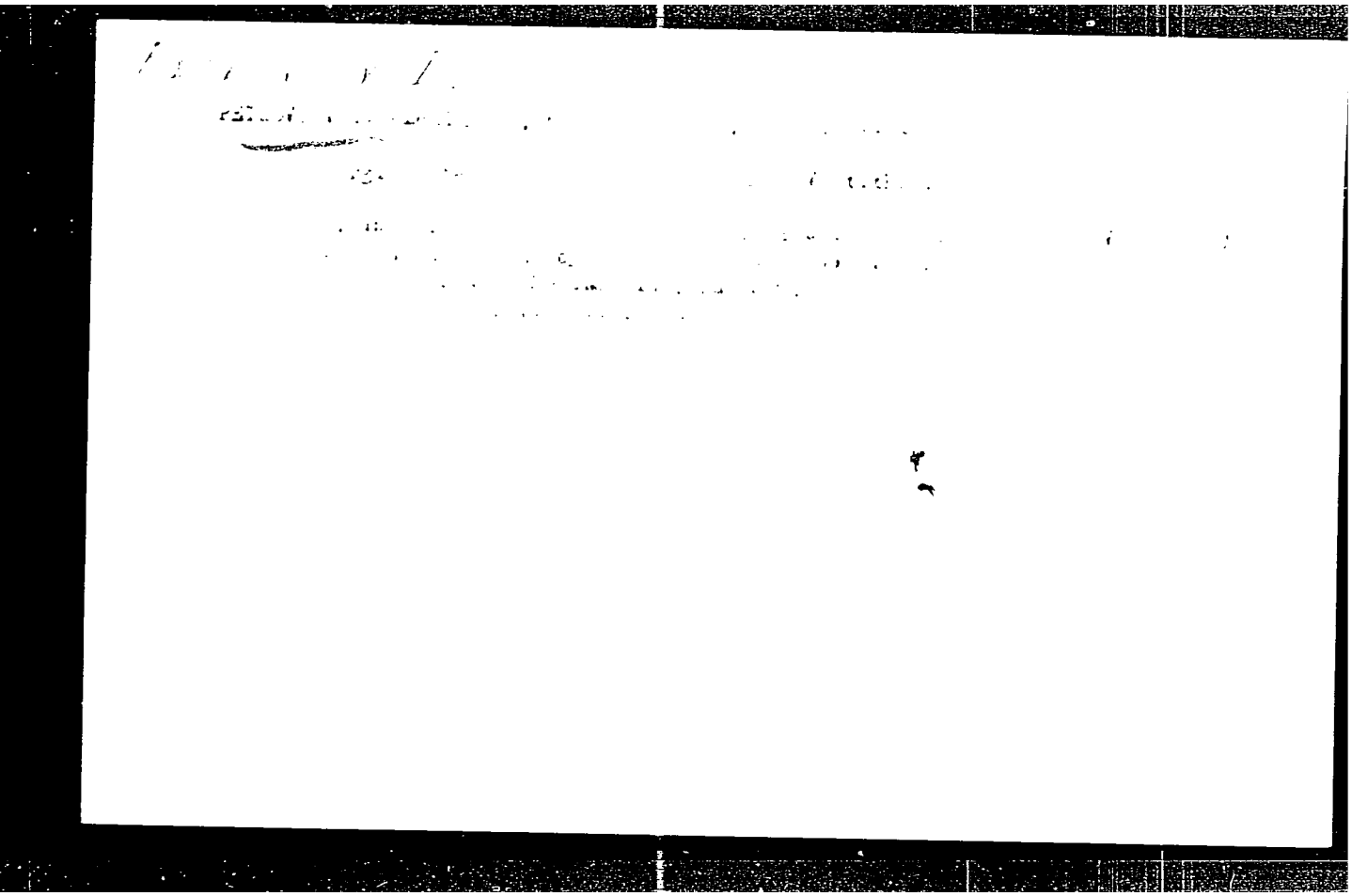
Ninety-one rabbits were irradiated and 104 experiments performed. Free grafting of skin was taken as an indicator of the organism's capacity for regeneration. Grafts were made 6-12 hr. after irradiation in 28 rabbits; the skin transplant was successful in 22 rabbits. When skin was grafted 24-48 hr. after irradiation (latent period) the transplant took in 9 out of 28 rabbits, primary necrosis occurred in 7, secondary necrosis in 12 rabbits. Grafts were successful in 2 out of 13 rabbits operated on during the early period of manifest clinical symptoms of radiation illness. Seventeen rabbits were operated on at the height of radiation illness; the grafts did not take in any of the animals. After recovery from radiation illness (after 8-11 weeks) the regenerative ability of the tissues is restored almost completely: skin grafts were successful in 14 of the 18 animals operated on. The author considers it expedient in the case of compound injuries to carry out preliminary treatment of wounds at an early period.

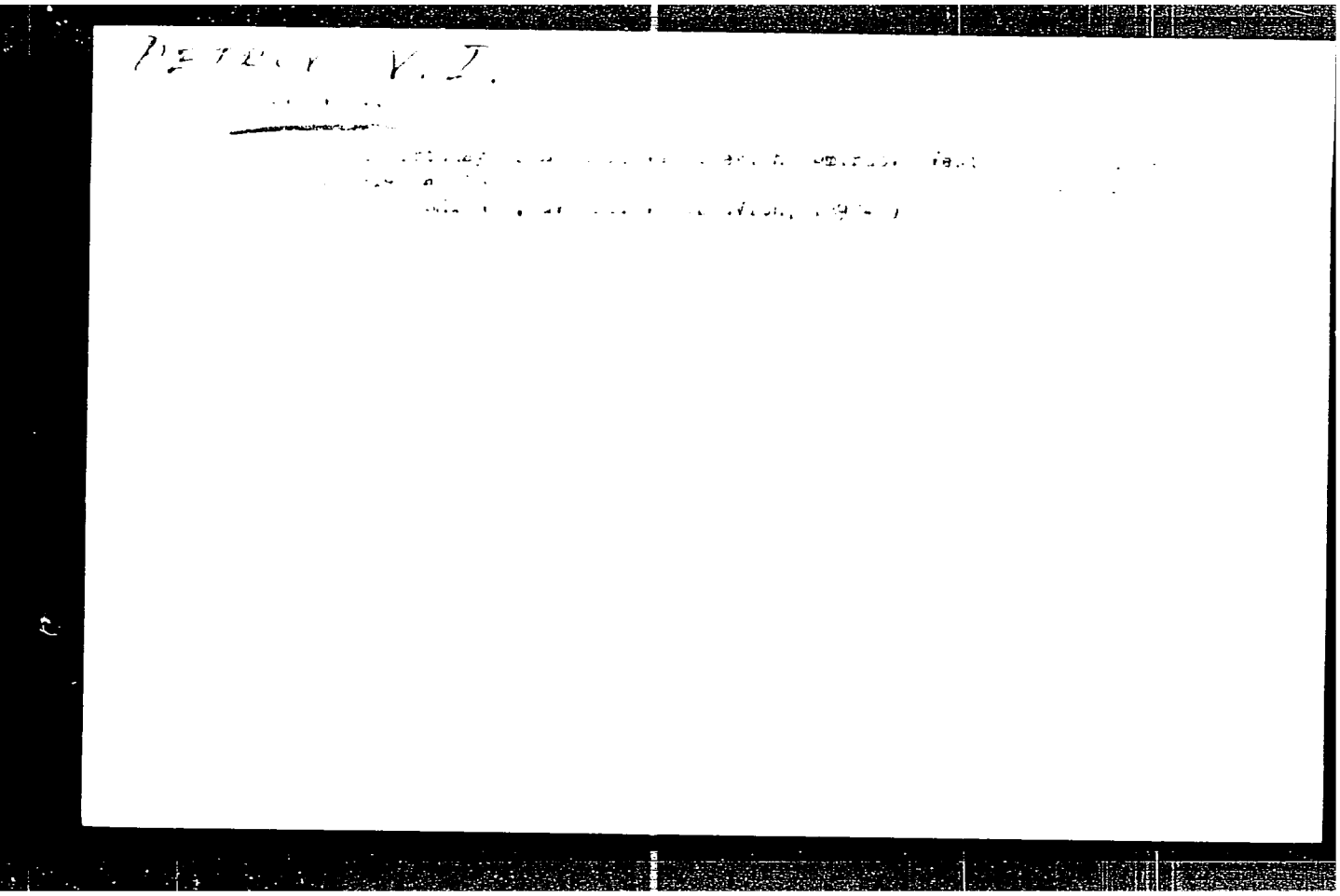
PETROV, V.I., dotsent

Radiotherapy of cancer of Vater's ampulla. Vest.khir. 77 no.12: 108-110 D '56. (MLRA 10:2)

1. Iz 1-y gospital'noy khirurgicheskoy kliniki (nach. - prof. E.V. Smirnov) Voyenno-morskoy meditsinskoy akademii. Adres avtora Leningrad, Fontanka, d.106, 1-ya gospital'naya khirurg. klinika VMMA

(BILE DUCT, COMMON, neoplasms
radiother. of cancer of Vater's diverticulum)
(RADIOTHERAPY, in various dis.
cancer of Vater's ampulla)





PETROV, V.I. (Lipetsk, Donskaya, ul., d.5, kv.7)

Phagedenic ulcer. Vest.khir. 81 no.10:136-137 O '58 (MIRA 11:11)

1. Iz khirurgicheskogo otdeleniya bol'nitsy (glavnyy vrach - V.I. Petrov) Lipetskogo traktornogo zavoda.
(THORAX, ulcer
phagedonic, in inf. (Rus))

PETROV, V.I.

Ganglioneuroma of a sympathetic nerve [with summary in English]. Vest.khir. 81 no.12:23-27 D '58. (MIRA 12:2)

1. Iz gospital'noy khirurgicheskoy kliniki No.2 (zav. - prof. Ye.V. Smirnov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova. Adres avtora: Leningrad, nab. Fontanki, 106, gospital'naya khirurgicheskaya klinika No.2.

(GANGLIONEUROMA, case reports
autonomic ganglia, cervical, thoracic & abdom. segments (Rus))
(GANGLIA, AUTONOMIC, neoplasms
ganglioneuroma of cervical, thoracic & abdom. segments (Rus))

PETROV, V. I. Cand Med Sci -- (diss) "Evaluation of the functional state of vessels in cases of obliterating endarteritis." Mos, 1959. 12 pp (1st Mos Order of Lenin Med Inst im I. M. Sechenov), 200 copies (KL, 47-59, 117)

PETROV, V.I.

Evaluation of the functional state of the peripheral vessels in obliterating endarteritis. Khirurgiia 35 no.9:22-28 '59. (MIRA 13:12)

(ARTERIES—DISEASES)

[illegible], [illegible]

"X-Ray Diagnosis of [illegible]onary Actino[illegible]," [illegible]-

[illegible]a, No. [illegible], [illegible], [illegible] Se [illegible],

[illegible] Sci. [illegible] Inst., [illegible].

PETROV, V. I.

USSR/Medicine - Roentgenology

Card 1/1

Authors : Petrov, V. I., Candidate Medical Sciences

Title : Clinico-roentgenological symptomology of sigmoid flexures of the intestine

Periodical : Vest Rentgen i Radiol 1, 62-68, 1954

Abstract : Describes some of the X-ray symptoms of sigmoid flexures of the intestine not ordinarily detected in the diagnosis when in the early stages. Four references; all USSR. Five photographs (X-rays); three drawings.

Institution : Chair of Roentgenology (Chief-Professor Yu. N. Sokolov) Central Institute for the Advanced Training of Physicians (Director-V. P. Lebedeva), and Roentgenological Division (Chief-Candidate Medical Sciences V. I. Petrov) Moscow Oblast Scientific-Research Clinical Institute imeni M. F. Vladimirskiy (Director-P. M. Lionenko)

Submitted : Presented at the meeting of the Moscow Society of Roentgenologists and Radiologists on January 5, 1953.

PETROV, V.I., kandidat meditsinskikh nauk

An apparatus for introducing contrast medium into the intestines. Vest.rent. i rad. no.5:82-84 S-O '55. (MLRA 9:1)

1. Iz kafedry rentgenologii (zav.--prof. Yu.N. Sokolov) TSentral'nogo instituta usovershenstvovaniya vrachey (dir.--prof. V.P. Lebedeva) i rentgenologicheskogo otdela (zav.--kandidat meditsinskikh nauk K.F.Ochkin Moskovskogo oblastnogo nauchno-issledovatel'skogo instituta imeni M.F.Vladimirskogo (dir.--kandidat meditsinskikh nauk P.M.Leonenko)

(INTESTINES, radiography
contrast medium introduction, appar.)
(RADIOGRAPHY, appar. and instruments
appar. for introduction of contrast media)

KOROLEVICH, Ye.M.; PETROV, V.I.

Meningeal syndrome in Rustitiskii's disease. Klin.med. 33 no.3: 81-84 Mr '55. (MLRA 8:5)

1. Iz kafedry terapii Tsentral'nogo instituta usovershenstvovaniya vrachey (zav. kafedroy prof. S.A.Posledova) i 1-go terapevticheskogo otdeleniya Gorodskoy klinicheskoy bol'nitsy No. 6 (glavnyy vrach N.S.Shevyakov).

(MYELOMA, PLASMA CELL, manifestations, meningeal synd.)
(MENINGES, in various diseases, myeloma, plasma cell)

PETROV, V.I., kandidat meditsinskikh nauk; TELEGIN, I.V. (Moskva)

Significance of contrast X-ray diagnosis of volvulus of the small intestine. Klin.med., 33 no.11:70-72 N '55. (MLRA 9:7)

1. Iz I kafedry rentgenologii i meditsinskoy radiologii (zav.-prof. Yu.N.Sokolov) Tsentral'nogo instituta usovershenstvovaniya vrachey i rentgenologicheskogo otdela (zav.-kandidat meditsinskikh nauk K.F.Ochkin) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni M.F.Vladimirskogo

(INTESTINAL OBSTRUCTION, diagnosis, x-ray)

PETROV, V.I., kandidat meditsinskikh nauk; TELEGIN, I.V.

Acute dilatation of the duodenum and stomach. Vest.rent. i rad. 31 no.2:86-88 Mr-Ap '56. (MIRA 9:8)

1. Iz kafedry rentgenologii (zav. prof. Yu.N.Sokolov) TSentral'nogo instituta usovershenstvovaniya vrachey (dir. prof. V.P.Lebedeva) i rentgenologicheskogo otdela (zav. kand. med. nauk K.F. Ochkin [deceased]) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni M.F.Vladimirskogo (dir. P.M.Leonenko)
(STOMACH, diseases,
dialat., x-ray (Rus))
(DUODENUM, diseases,
dilat., x-ray (Rus))

PETROV, V.I., kandidat meditsinskikh nauk

Importance of X-ray investigation with contrast media in the diagnosis of volvulus. Khirurgiia 32 no.6:50-53 Je '56.
(MLRA 9:10)

1. Iz 1-y kafedry rentgenologii i meditsinskoy radiologii (zav. - prof. Yu.N.Sokolov) TSentral'nogo instituta usovershenstvovaniya vrachey i rentgenologicheskogo otdela (zav. - kandidat meditsinskikh nauk K.F.Ochkin) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo institutaimeni M.F.Vladimirskogo.

(INTESTINAL OBSTRUCTION, etiol. and pathogen.
volvulus, ileocolic, x-ray diag.)
(COLON, DIS.
colvulus ileocolic, x-ray diag.)
(ILEUM, dis.
same)

USSR / Human and Animal Morphology, Normal and Pathological. S-1

Abs Jour : Ref Zhur - Biol., No 18, 1958, No 83628

Author : Petrov, V. I.

Inst : Moscow Oblast Scientific Research Clinical Institute, Moscow Oblast Department of Health.

Title : Clinico-Radiological Diagnosis of Intestinal Obstruction. (Investigative Method and Symptomatological Approach). In Aid of the Practicing Medical Radiologist.

Orig Pub : Mosk. obl. otd. zdravookhr. Mosk. obl. n.-i. klinich. in-t, M., 1957, 136 str. il.

Abstract : No abstract.

Card 1/1

PETROV, V.I., kand.med.nauk

Creation of the Moscow Province Society of Roentgenologists and Radiologists. Vest. rent i i rad. 35 no. 4:77 Jl-Ag '60. (MIRA 14:2)

1. Predsedatel' pravleniya Moskovskogo oblastnogo nauchnogo obshchestva rentgenologov i radiologov.
(MOSCOW PROVINCE—RADIOLOGICAL SOCIETIES)

PETROV, V.I. (Moskva, Zh-28, Durasovskiy pereulok, d.9, kv.2)

X-ray examination of the intestine under polyclinic conditions. Vest.rent.i rad. 35 no.1: 14-18 Ja-F '60. (MIRA 13:6)

1. Iz rentgeno-radiologicheskogo otdela (rukovoditel' - starshiy nauchnyy sotrudnik V.I. Petrov) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni M.F. Vladimirskogo (dir. - kand.med.nauk P.M. Leonenko).
(INTESTINES radiogr.)

KUZNETSOV, I.S., kand.meditsinskikh nauk; PETROV, V.I., kand.meditsinskikh nauk; FEDOTOV, P.D.

Roentgen diagnosis of actinomycosis of the thoracic and abdominal cavity. Vest. rent. i rad. 35 no. 5:37-43 S-O '60. (MIRA 13:12)

1. Iz rentgeno-radiologicheskogo otdela (zav. - kandidat meditsinskikh nauk V.I. Petrov) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni M.F. Vladimirskogo (dir. - kand.med. nauk P.M. Leonenko).
(ACTINOMYCOSIS)

SOKOLOV, Yu.N.; PETROV, V.I.

Problem of the diagnosis of gastric cancer. Vop. onk. 6 no. 11:3-11 N '60. (MIRA 14:1)

(STOMACH—CANCER)

PETROV, V.I., kand.med.nauk; DOBROKHAVOV, A.S.; AVRAMOV, A.N.

Tracheobronchoscopy and bronchography under anesthesia using relaxants.
Sov. med. 25 no.11:118-120 N '61. (MIRA 15:1)

1. Iz gospital'noy khirurgicheskiy kliniki (dir. - deystvitel'nyy chlen AMN SSSR prof. B.V.Petrovskiy) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(BRONCHOSCOPY) (BRONCHI--RADIOGRAPHY)
(TRACHEA--EXPLORATION) (MUSCLE RELAXANTS)

PETROV, V. I.

Doc Med Sci - (diss) "Roentgenodiagnostics of mechanical obstruction of the intestine." Moscow, 1961. 29 pp with diagrams; (State Scientific Research Roentgeno-Radiological Inst of the Ministry of Public Health RSFSR); number of copies not given; price not given; list of author's works on pp 27-28 (17 entries); (KL, 6-61 sup, 235)

SMIRNOV, Ye.V.,prof.; PETROV, V.I., dotsent

Resection of the stomach for bypass in duodenal stasis complicated by pancreatitis. Vest.khir. no.1:7-13'63. (MIRA 16:7)

1. Iz kliniki gospital'noy khirurgii No.2 (zav.-prof. Ye.V. Smirnov) Voyenno-meditsinskoy akademii imeni S.M.Kirova)
(STOMACH—SURGERY) (PANCREAS—DISEASES)
(DUODENUM—DISEASES)

PETROV, V.I., prof. (Moskva, Pokrovskiy bul., d.8, kv.8)

Roentgenological symptomatology of volvulus of the cecum. Vest. rent. i rad. 38 no.1:16-20 Ja-F'63. (MIRA 16:10)

1. Iz Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni M.F.Vladimirskogo (dir. -zasluzhennyy vrach RSFSR P.L.Leonenko).

PETROV, V.I.; KOLEROVA, N.V.; KOVTUNENKO, V.T.; SILAYEV, A.D.

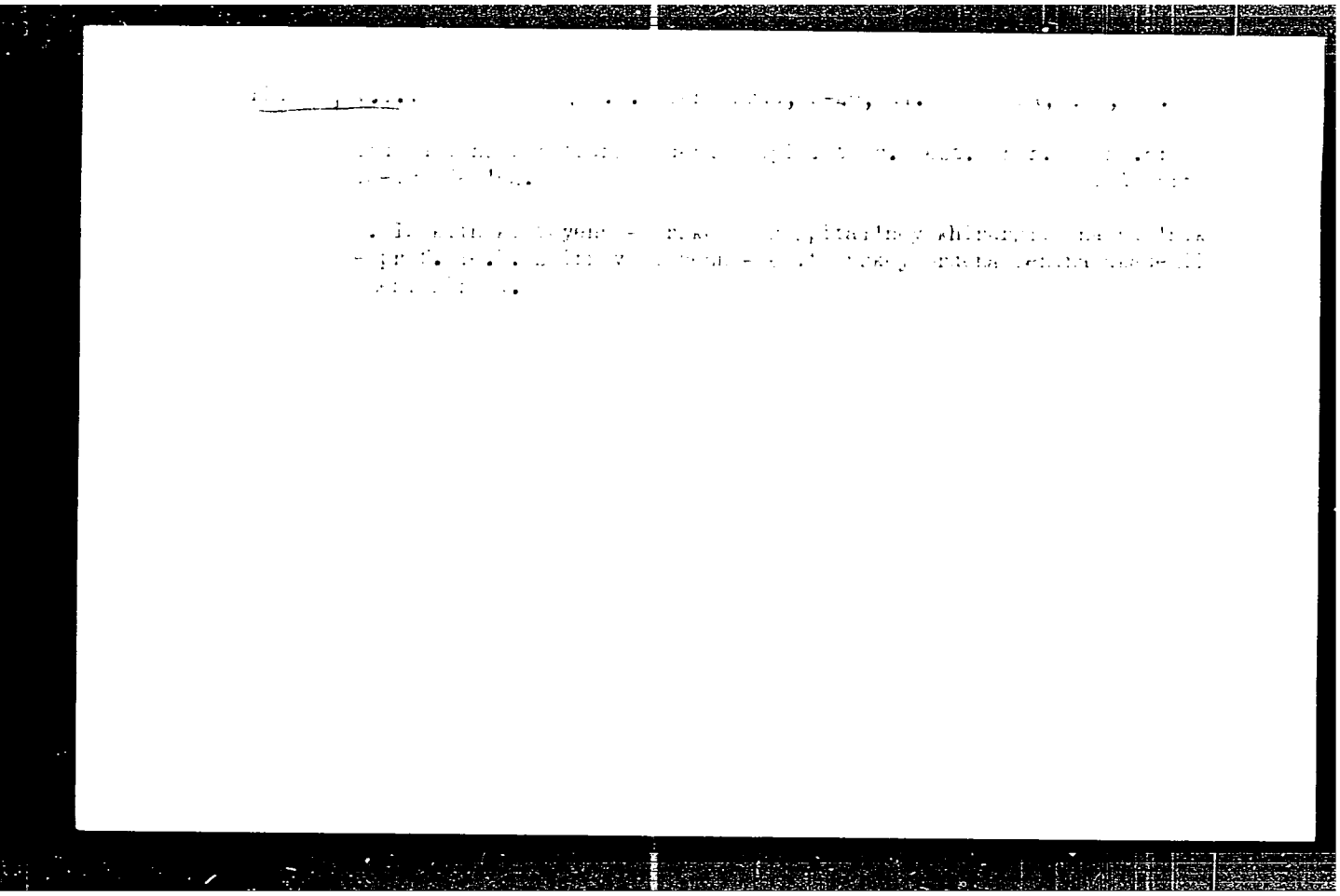
Methodology of preparing an aqueous suspension of barium for X-ray examination of the gastrointestinal tract. Vestn. rent. i rad. 38 no.3:61-63 My-Je '63. (MIRA 17:7)

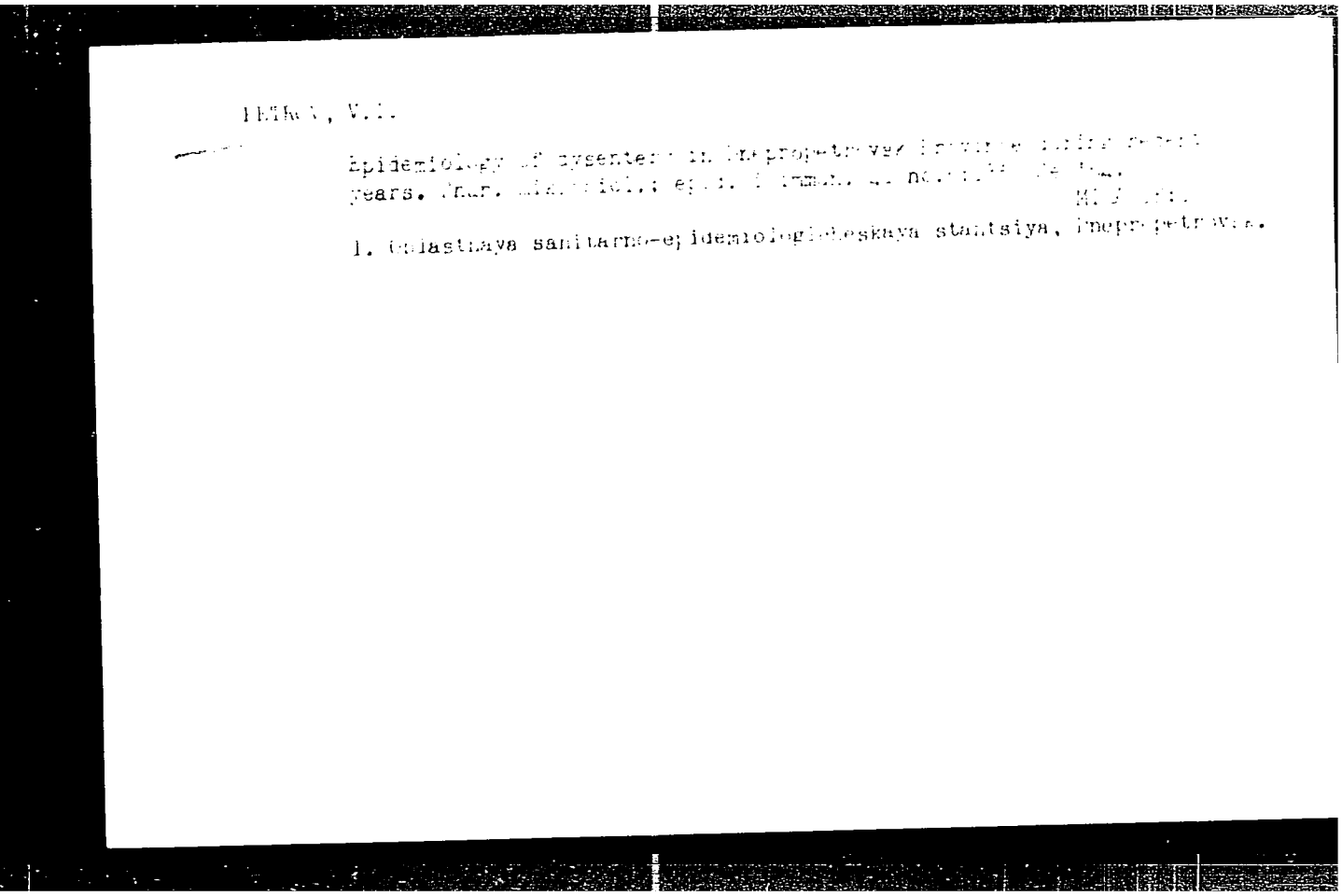
1. Iz rentgeno-radiologicheskogo otdela (rukovoditel' - prof. V.I. Petrov) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni M.F. Vladimirskogo (direktor - zasluzhennyy vrach RSFSR P.M. Leonenko).

PETROV, V.I., prof.

Methods of cineroentgenographic examination of the stomach. Vestn. rentgen. i radiol. 38 no.4:18-21 Jl-Ag'63 (MIRA 17:2)

1. Iz Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni M.F.Vladimirskogo (dir. - zasluzhennyy vrach RSFSR P.M.Leonenko).





IMkv, V.I.

Epidemiology of dysentery in Dnepropetrovsk [illegible] years. Zhur. mikrobiol., epid. i immun., no. [illegible] M.[illegible]

1. Oblastnaya sanitarno-epidemiologicheskaya stantsiya, Dnepropetrovsk.

PETROV, V.I.; KRUK, S...; FOLEROVA, N.V.

Some characteristics of clinical and X-ray symptomatology of cancer of the right and left halves of the large intestine. Vest. rent. i rad. 39 no.1:49-54 Ja-F '64. (MIRA 18:6)

1. Rentgenoradiologicheskiy [illegible] Moskovskogo [illegible] nauchno-issledovatel'skogo [illegible] instituta imeni [illegible].

PETRO[illegible], V. I., Engr. [illegible]

Dissertati[illegible]: "[illegible] Water-[illegible]" [illegible]
[illegible]
1[illegible] Dec 4[illegible].

[illegible]: [illegible], [illegible]

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240510019-8"

PETROV, V.I.

Stamping of a die. TSvet. met. 27 no.1:78-79 Ja-F '54. (MLRA 10:9)

1. Zavod Glavtsvetmetobrabotki.
(Dies (Metalworking))

PETROV, V.I.

GORBOV, V.A., dotsent; LASKINA, V.P., assistent; PETROV, V.I., ordinator

Hygienic study of dwellings. Gig. i san. 21 no.11:64-65 N '56.
(MLRA 10:2)

1. Iz kafedry kommunal'noy gigiyeny I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.

(HOUSING
hygienic study of dwellings)
(HYGIENE
of dwellings)

PETROV, V.I.

Cases of poisoning by phenol vapors of workers engaged in extinguishing a coke fire with phenol water. Gig.i san. 25 no.2:60-62 F '60. (MIRA 13:6)

1. Iz Dnepropetrovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.
(PHENOLS toxicol.)

PETROV, V.I.

Effectiveness of utilizing the excess sewage of a coke chemical factory for quenching coke. Gig. i san. 25 no. 12:75-77 D '60. (MIRA 14:2)

1. Iz Gosudarstvennoy sanitarnoy inspektsii Dnepropetrovska.
(WATER--POLLUTION) (COKE)

PETROV, V.I.

Comparative characteristics of air pollution in a machine shop during electric welding with various types of electrodes. Gig.i san. 26 no.12:87-88 D '61. (MIRA 15:9)

1. Iz Dnepropetrovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.

(WELDING--HYGIENIC ASPECTS)

PETROV, V. I. (Dnepropetrovsk)

Incidence of neuralgia, neuritis, and radiculitis in Dnepropetrovsk metallurgical workers, and measures to reduce it. Gig. truda i prof. zab. 5 no.7:50-52 Jl '61. (MIRA 15:7)

1. Gorodskaya sanitarno-epidemiologicheskaya stantsiya.

(DNEPROPETROVSK—METAL WORKERS—DISEASES AND HYGIENE)
(DNEPROPETROVSK—NERVOUS SYSTEM—DISEASES)

PETROV, Vasiliy Ignat'yevich; AVILOV, B.I., red.; ZENIN, V.V., tekhn. red.

[Public labor under socialism and the steady growth of its productivity]Obshchestvennyi trud pri sotsializme i neuklonnyi rost ego proizvoditel'nosti. Saratov, Izd-vo Saratovskogo univ., 1961. 41 p. (MIRA 15:9)
(Labor and laboring classes) (Labor productiviy)

PETROV, V.I.

Cyanides in industrial wastes from ferromanganese blast furnaces with "humid" gas purifiers. Gig. i san. 26 no.4:98-99 Ap '61. (MIRA 15:5)

1. Iz Dnepropetrovskoy sanitarno-epidemiologicheskoy stantsii.
(INDUSTRIAL WASTES) (CYANIDES)

PETROV, V.I.

Diffusion of suppurative skin diseases among workers in the metallurgical industries. Gig. i san. 26 no.6:107 Je '61. (MIRA 15:5)

1. Iz Dnepropetrovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.
(METALWORKERS--DISEASES AND HYGIENE) (SKIN--DISEASES)

PETROV, V.I.

Research and practical work of public health physicians. Vrach. delo no. 3:113 Mr '61. (MIRA 14:4)

1. Dnepropetrovskaya gorodskaya sanitarno-epidemiologicheskaya stantsiya.
(DNEPROPETROVSK—PUBLIC HEALTH)

CA PETROV, V I.

23

Strong acid—a guarantee for successful pulp mill operation. V. I. Petrov. *Bumazh. Prom.* 24, No. 2, 38-43 (1949).—Performances of a mill in 1947, 1948, and 1949 are compared, during which years cooking acid averaged 3.37%, 4.92%, and 7.16% total SO_2. Pulp hardness in degrees Bjorkman decreased from 89 to 83 to 77, the dirt count decreased from 5752 to 3830 to 2700, viscosity decreased from 478 to 825 to 840 millipoises, and breaking length in m. increased from 6310 to 7304 to 8747. Pyrites consumption decreased from 377 to 329 to 269 kg., limestone consumption from 293 to 189 to 168 kg.; steam, power, and water consumption decreased; digester yield increased from 19.06 to 20.9 to 22.2; consumption of liquid Cl decreased from 64.0 to 50.0 to 54.6 kg.

Marshall Sittig

PETROV, Vladimir Ivanovich; KOPEL'MAN, S., red.; MIRONOVA, A.M., tekhn. red.

[Clinical and X-ray diagnosis of intestinal obstruction] Kliniko-rentgenologicheskaia diagnostika kishechnoi neprokhodimosti. Moskva, Meditsina, 1964. 261 p. (MIRA 17:3)

PETROV, V.I.

Relationship of the method of sanitary clearance to dysentery morbidity in Dnepropetrovsk. Vrach.delo no.8:123-124 Ag '62. (MIRA 15:11)

1. Dnepropetrovskaya gorodskaya sanitarno-epidemiologicheskaya stantsiya.

(DNEPROPETROVSK—DYSENTERY)
(DNEPROPETROVSK—REFUSE AND REFUSE DISPOSAL)

PETROV, V.I. (Dnepropetrovsk)

Apropos of the article by P.I.Barannik and S.S.Poznanskii, "The sanitary and epidemiological station as a base for training physicians of a medical institute." Sov.zdrav. 21 no.12:23-25 '62. (MIRA 15:12)

(PUBLIC HEALTH--STUDY AND TEACHING)

PETROV, V. I. (Dnepropetrovsk)

Characteristics of the working conditions for radiograph operators in a machine-building factory. Gig. truda i prof. zab. no.3:52-53 '62. (MIRA 15:4)

(RADIOLOGY, INDUSTRIAL)
(MACHINERY INDUSTRY--HYGIENIC ASPECTS)

PETROV, V. I.; TUROVSKAYA, Ye. B.; OBRAZTSOVA, M. Ye. (Dnepropetrovsk)

Possibility of mercury contamination of physics laboratories in high schools. Gig. truda i prof. zab. no.2:58 '62. (MIRA 15:2)

1. Gorodskaya i rayonnaya sanitarno-epidemiologicheskiye stantsii.

(MERCURY—TOXICOLOGY) (SCHOOL HYGIENE)

PETROV, V. I., dotsent

Surgical treatment of ulcers caused by x-rays. Vest. khir. no.4: 100-102 '62. (MIRA 15:4)

1. Iz 2-y gospital'noy khirurgicheskoy kliniki (nach. - prof. Ye. V. Smirnov) Voyenno-meditsinskoy ordena Lenina akademii im. S. M. Kirova.

(RADIATION SICKNESS) (ULCERS)

PETROV, V.I. (Dnepropetrovsk)

Planning antiepidemic measures within the work complex of sanitary epidemiology stations. Sov. zdrav. 21 no.6:48-51 '62. (MIRA 15:5)

1. Iz Gorodskoy sanitarno-epidemiologicheskoy stantsii Dnepropetrovska.
(EPIDEMIOLOGY)

L 54525-65

ACCESSION NR: AP5017991 UR/0240/64/000/009/0067/0069

AUTHOR: Petrov, V. I. (Chief physician); Ponomareva, M. I. (Meritorious physician UkrSSR)

TITLE: Some results in improving the sanitation and epidemiological service to settlements in Dnepropetrovskaya oblast

SOURCE: Gigiyena i sanitariya, no. 9, 1964, 67-69

TOPIC TAGS: health, sanitation, epidemiology, medical personnel

ABSTRACT: The article describes the exemplary work done in the oblast to improve sanitary and epidemiological measures and to enlarge the staff of medical personnel in accordance with the directives of the Central Committee CPSU and the Council of Ministers USSR. Orig. art. has 3 tables.

ASSOCIATION: Oblastnaya sanepidstantsiya, Dnepropetrovsk (Oblast Sanitary Epidemiological Station)

SUBMITTED: 18Jun63 ENCL: 00 SUB CODE: LS

NO REF SOV: 000 OTHER: 000 JPRS

Card 1/1

L 14047-65 ; AFETR/SSD/AFMD(c)/AFWL/ESD(c)
ACCESSION NR: AP4048843 S/0119/64/000/011/0029/0029

AUTHOR: Manyakin, G. I.; Petrov, V. I.

TITLE: PTR-3-type transistorized temperature regulator

SOURCE: Priborostroyeniye, no. 11, 1964, 29

TOPIC TAGS: automatic temperature control, thermal resistance, temperature sensor, thermistor

ABSTRACT: The PTR-3-type temperature regulator is used as a three-position command instrument in an automatic temperature-control system. A thermistor forms one arm of an a-c bridge, which serves as an error sensor (see Fig. 1 of the Enclosure). The set point and control limits are regulated by potentiometers (R_2 and R_6). An error signal from the bridge passes through two amplification stages (PP1 and PP2), which use a common emitter. A phase-sensitive stage (PP3) controls two triggers (PP4 and PP7), which operate relays (P_1 or P_2). The latter actuate auxiliary refrigerating or heating units, depending on the sense of the error signal. The instrument has an operating

Card 1/3

L 14047-65
ACCESSION NR: AP4048843

range of -40 to +130C, differential control limits about the set point of 0.5 to 12C, and inertia not exceeding 30 sec. This instrument is in standard production at the Orlov Instrument Factory. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 01 SUB CODE: IE, EC

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3135

Card 2/3

L 14047-65
ACCESSION NR: AP4048843

ENCLOSURE: 01

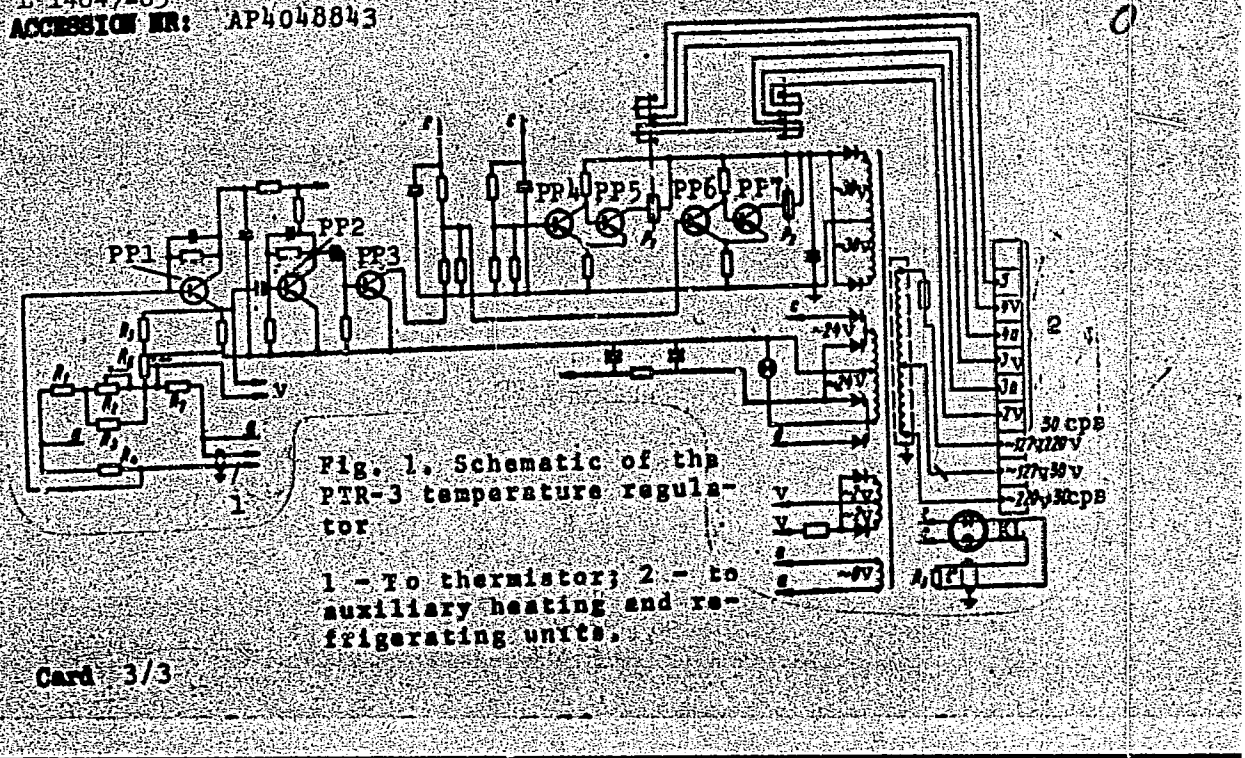


Fig. 1. Schematic of the PTR-3 temperature regulator

1 - To thermistor; 2 - to auxiliary heating and refrigerating units.

Card 3/3

PETROV, V. I.

Novoe v organizatsii sotsialisticheskogo sorevnovaniia na zheleznodorozhnom transporte. / New organization of socialist competition on railroads /. (Sots. transport, 1933, no. 11-12, p. 25-37).

DLC: HE7.S6

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

PETROV, V.I.

IOANNISYAN, A.I., professor, doktor tekhnicheskikh nauk; BUTURLOV, V.V.; VERTSMAN, G.Z., kandidat tekhnicheskikh nauk; PETROV, V.I., kandidat tekhnicheskikh nauk.

[Railroad planning and construction; part 1; railroad planning] Proektirovanie i postroika zheleznykh dorog. Chast' 1. Proektirovanie zheleznykh dorog. Moskva, Gos. transp. zhel-dor. izd-vo, 1953- v.1. p.[483]. (MLRA 6:12)

(Railroad engineering)

PETROV, V.I., inzhener

Engineering specifications for designing and laying railroad superstructures. Transp.stroi 5 no.5:30-32 Jl '55.
(Railroad engineering) (MLRA 8:12)

PETROV, V.I., kandidat tekhnicheskikh nauk.

Book on designing narrow gauge railroads ("Designing narrow gauge railroads." A.I. Ioannisian. Reviewed by V.I. Petrov.) Transp. stroi. 6 no.4:30-31 Ap '56. (MLRA 9:8)
(Railroads, Narrow gauge) (Ioannisian, A.I.)

PETROV, V.I., kandidat tekhnicheskikh nauk; TSENIN, S.S., kandidat tekhnicheskikh nauk.

Economic development of the eastern regions and their transportation systems. Zhel.dor.transp. 38 no.10:42-48 O '56. (MLRA 9:11)
(Siberia--Railroads)

PETROV, V.I.

Use powerful equipment against snowfall. Put' i put. khoz. no.1:
6-8 Ja '57. (MIRA 10:4)
(Railroads--Snow protection and removal)

Fe+. 1 11. 1

MARUSICHENKO, N.F. (Krasnovodsk); PETROV, V.I., inzh. (Kiyev); GOREMYKIN, B.N.

Letters to the editor. Put' i put. khoz. no.2:45 F '58. (MIRA 11:3)

1. Starshiy inzhener distantsii, g. Gor'kiy (for Goremykin).
(Railroads)