

Ionospheric Researches; Collected (Cont.)	SOV/5743	14
Kerblay, T. S., and Ye. M. Kovalevskaya. Correlation of foF2 With Solar Activity Indices	22	
Driatskiy, V. M. Processes in the Lower Ionosphere in High Latitudes During the Solar Flare of February 23, 1956	27	
Fel'dshteyn, Ya. I. The Nocturnal E-Layer According to Observations at the Dikson Island Observatory	34	
Pankratova, N. S. Irregular Phenomena in the F-Region of the Ionosphere According to Observations at the Dikson Island Observatory	40	
Cherenkova, Ye. P. Certain Regularities in the Behavior of the Lower Ionosphere Over Dikson Island	51	
Gorbushina, G. N. On the Use of Single Reflections for Evaluating Absorption in the Ionosphere According to Observations at Dikson Island	60	

Card 3/5

14

Ionospheric Researches; Collected (Cont.)	SOV/5743
Struin, O. N., and Ya. I. Fel'dshteyn. Nondeviating Absorption of Radio Waves in the Auroral Zone	66
Gusev, V. D., and S. F. Mirkotan. On Certain Anomalies During an Investigation of Ionospheric Drifts	77
Rapoport, Z. Ts. On the Question of Determining the M3000 Coefficient	83
Likhter, Ya. I., and G. I. Terina. Certain Results on Investigating the Intensity of Radio Atmospherics (Strays) at Moscow	90
Rodionov, Ya. S. A Possible Method of Determining Effective Recombination Coefficients and the Rate of Ionization in the Ionosphere	95
Zakharov, V. I., and Z. K. Shibayev. Effective Recombination	

Card 4/5

14
Ionospheric Researches; Collected (Cont.) SOV/5743

Coefficient in the Ionosphere According to Observations
at Dikson Island Observatory 100

AVAILABLE: Library of Congress

Card 5/5

JA/dmm/jw
11-7-61

ACC NR: AP7004251 (A) SOURCE CODE: UR/0106/67/000/001/0058/0066

AUTHOR: Pankratova, O. I.; Pshenichnikov, A. P.

ORG: none

TITLE: Results of an analysis of the daily average traffic flow distribution over the Moscow City telephone network

SOURCE: Elektrosvyaz', no. 1, 1967, 58-66

TOPIC TAGS: telephone system, telephone network, telephone exchange, telephone traffic, telephone ~~traffic flow administration~~

ABSTRACT: The results of an analysis of the intraexchange intramain exchange and interexchange traffic over the Moscow City telephone network from 1946 to 1963 are presented. The concepts of the coefficient of intraexchange communication and the standardized factor of range between the subscriber and exchange equipment are used to determine the principles governing changes in traffic flow during the development of the network. Some considerations are offered leading

Card 1 / 2

UDC: 621. 395. 31

ACC NR: AP7004251

to future planning of traffic flow. The authors thank Ye. V. Markhay and G. B. Metel'skiy for their help. Orig. art. has: 7 figures and 4 formulas. [Author's abstract]

[NT]

SUB CODE: 17⁰⁵/SUBM DATE: 03Jun66/ORIG REF: 004/

Card 2/2

PANKRATOVA, O.I.

Calculation of clusters of lines with a mixing selector using an
effective access technique. Elektrosviaz' 17 no.7:63-69 J1
'63. (MIRA 16:9)
(Telephone)

PANKRATOVA, O.I.

Evaluation of the quality of telephone communications in bunched
conductors with rigidly clamped registers. Elektrosviaz' 16 no.6:
64-71 Je 162. (MIRA 15:6)

(Telephone)

PANSRATOVÁ, O.M.

Supplying gas to Transcaucasia; brief statistical data;
Gas. depo no. 9353 '63. (MERA 17:12)

GUTTSAYT, Z.I.; KRAVCHENKO, V.A.; NIKITIN, N.S.; PANICHEVA, A.G. Prini-
mali uchastiye: GOL'DSHTEYN, R.I.; PANKRATOVA, O.M.; SAGAKSKAYA,
V.G. KORYAGIN, I.D., kand.ekonom.nauk, red.

[Petroleum industry of the capitalist countries of Western
Europe, the Near, Middle, and Far East, Canada, and Latin
America] Neftianaya promyshlennost' kapitalisticheskikh stran
Zapadnoi Evropy, Blizhnego i Srednego Vostoka, Dal'nego Vostoka,
Kanady i Latinskoi Ameriki; kratkii obzor statisticheskikh dannykh.
Pod red. I.D.Koriagina. Moskva, 1959. 302 p.

(MIRA 13:11)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut
nauchnoi i tekhnicheskoy informatsii.

(Petroleum industry)

BARK, S.Ye., red.; VIDGORCHIK, D.Ya., red.; KACHUR, O.Yu., red.;
RAVICH, M.B., red.; TSIKERMAN, L.Ya., red.; PANKRATOVA,
O.M., ved. red.

[Use of gas in industry] Ispol'zovanie gaza v promyshlennosti. Moskva, 1962. 109 p. (MIRA 16:10)

L. Institut tekhnicheskoy informatsii i ekonomicheskikh
issledovaniy po neftyanoy i gazovoy promyshlennosti.
(Gas as fuel)

L 31124-66 EWT(1) IJP(c) AT
ACC NR: AP6011454

SOURCE CODE: UR/0109/66/011/004/0731/0740

30
29
B

AUTHOR: Flyagin, V. A.; Pankratova, T. B.

ORG: None

TITLE: Shaping trochoidal electron beams in long-optics systems

SOURCE: Radiotekhnika i elektronika, v. 11, no. 4, 1966, 731-740

TOPIC TAGS: SHF tube, electron beam, electron field interaction

ABSTRACT: The results are reported of a theoretical and experimental investigation of the shaping of trochoidal electron beams in crossed E- and H-fields when the electron velocities have small spread and their rotational energy is high; the electric field is constant, and the magnetic varies slowly along the electron-optical system. The results of numerical solution of the equations describing travel of electrons in the shaping region are compared with the results of calculations based on an adiabatic approximation. It is found that the above systems permit shaping trochoidal beams having high rotational energy of electrons, low drift speed, and small velocity spread in the beam, $\Delta v/v_{av} \approx 1\%$. The experiments have shown that there are no dynamic processes in the beam if the cathode is operated under limited-temperature conditions. The relative velocity spread depends on cathode conditions and remains constant throughout the intermediate region. The adiabatic

Card 1/2

UDC: 539.124.18

L 31124-66

ACC NR: AP6011454

approximation yields reliable results even with fairly abrupt change of the magnetic field, $\Delta H/H_{av} \approx 0.25$. "The authors wish to thank I. M. Bleyvas for his help in solving problems on a special analog computer." Orig. art. has: 8 figures and 4 formulas.

[03]

SUB CODE: 09 / SUBM DATE: 09Dec64 / ORIG REF: 008 / OTH REF: 002/ ATD PRESS: 4239

Card 2/2 CC

L 13136-66 EWT(1)/EWA(h)

ACC NR. AP6000741

SOURCE CODE: UR/0386/65/002/009/0430/0435

AUTHOR: Gaponov, A. V.; Gol'denberg, A. L.; Grigor'yev, I. P.; Orlova, I. M.; Pan-
kratova, T. B.; Petelin, M. I.

ORG: Gor'kiy Scientific Research Radiophysics Institute (Gor'kovskiy nauchno-
issledovatel'skiy radiofizicheskiy institut) 59

TITLE: Induced synchrotron radiation of electrons in cavity resonators

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.
Prilozheniye, v. 2, no. 9, 1965, 430-435

TOPIC TAGS: microwave technology, cavity resonator, microwave plasma, maser radar

ABSTRACT: The authors describe the elements of apparatus (Fig. 1) aimed at increasing the total induced synchrotron radiation power by increasing the volume of the "active medium" (cross section of the electron beam or the volume of the nonequilibrium magnetoactive plasma), through the use of quasi-optical electrodynamic systems of the "open" type. Some results are presented of observation of coherent synchrotron radiation of helical electron beams in "open" cavity resonators of sufficiently large volume. Self-excitation (generation) of electromagnetic oscillations at the electron gyrofrequency (magnetic field $H_0 = 3200$ oe, $\lambda = 3.4$ cm) was observed in a resonator constituting a 20 cm section of rectangular waveguide (TE_{011} mode). The electron beam was introduced at the maximum of the electric field from the end, through a waveguide biased beyond cutoff. The second, open end of the cavity was connected with a large-section waveguide used to extract the energy and to serve simultaneously as a collect-

Cord 1/2

L 13136-66

ACC NR: AF6000741

or. The power of the generated radiation increased monotonically with increasing electron rotation velocity and with decreasing longitudinal velocity, and also with increasing electron current. At $\omega \approx \omega_H$ (ω = radiation frequency, ω_H = electron gyrofrequency) the power obtained was 6 w at current 80 ma and beam voltage 8 kv, while at $\omega \approx 2\omega_H$ the power was 190 w at 320 ma and 19 kv. Further increase in power was hindered by difficulties in cooling the generators. Furthermore, a gyroresonance discharge was produced in the residual gas in the apparatus with $\omega \approx \omega_H$.

The same causes kept the electron efficiency from reaching the theoretically predicted value of 19%. In experimental maser models with trochoidal electron beams and traveling waves, the efficiency reaches 10--15%. Orig. art. has: 3 figures and 1 formula.

SUB CODE: 20/
17/ SUBM DATE: 09Sep65/ ORIG REF: 007/ OTH REF: 004

Card 2/2 NW

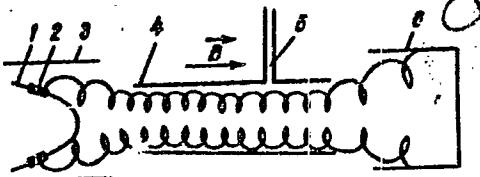


Fig. 1. Schematic diagram of oscillator using induced electron synchrotron radiation. 1 - Cathode, 2 - emitting surface, 3 - anode, 4 - resonator, 5 - high-frequency power output, 6 - collector, B - static magnetic field.

FLYAGIN, V. A.; PANKRATOVA, T. B.

Experimental study of methods for the formation of trochoidal electron beams by photographing electron trajectories. Izv. vys. ucheb. zav.; radiofiz. 5 no.5:956-962 '62.
(MIRA 15:10)

1. Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete.

(Electron optics)

PANKRATOVA, Valentina

Grandmother Smirnova. Rabotnitsa 34 no.3:26 Mr '56. (MLRA 9:5)
(Smirnova, Evdokiia Semenovna)

PANKRATOVA, V.G. (g. Kalinin)

Methods for the approximation of areas. Mat.v shkole no.3:26-31
My-Je '56. (MLRA 9:8)
(Mathematics--Problems, exercises, etc.)

PANKRATOVA, V.G.; POLOYKO, Ye.S. (Kalinin)

Some means for raising the efficiency of algebra lessons in
the 6th grade. Mat. v shkole no. 6:31-35 N-D '60.
(MIRA 14:2)
(Algebra--Study and teaching)

ACC NR: AP7005110

SOURCE CODE: UR/0079/66/036/009/1702/1705

RAZUVAYEV, G. A., PANKRATOVA, V. N., Scientific Research Institute of Chemistry under the Gor'kiy State University imeni N. I. Lobachevskiy (Nauchno-issledovatel'skiy institut Khimii pri Gor'kovskom gosudarstvennom universitete) "Photo- and Thermodecomposition of Diphenyl Cadmium in Organic Solvents"

Moscow, Zhurnal Obshchey Khimii, Vol 36, No 9, 66, pp 1702-1705

Abstract: These reactions were investigated either in an atmosphere of dry nitrogen or in a vacuum. The photoreactions were carried out in quartz tubes irradiated with UV light, and the thermal reactions, in molybdenum glass ampoules. The photoreactions were carried out in dioxane and in benzene, and the thermal reactions, in benzene with and without platinum black, on heating at 215-220°C for 75-80 hr. The photoreaction between diphenyl cadmium and dioxane resulted in the separation of metallic cadmium. The phenyl radicals form benzene, capturing hydrogen from the solvent. Irradiation and heating of benzene solutions of diphenyl cadmium resulted in decomposition and the separation of diphenyl and cadmium. Interaction with benzene was observed. There was no exchange of phenyl radicals between benzene and diphenyl cadmium except, insignificantly, in the case of thermal decomposition in benzene. The homolytic photo- and thermodecomposition of diphenyl cadmium follows a course similar to that of the decomposition of diphenyl zinc. Orig. art. has: 3 formulas. [JPRS: 38,970]

TOPIC TAGS: organocadmium compound, thermal decomposition

SUB CODE: 07 / SUBM DATE: 06Jul65 / ORIG REF: 012 / OTH REF: 002

Car. 1/1

541.144.8 + 547.35

TEPLITSKAYA, Ye.S.; MALAYA, L.P.; MIRGORODSKAYA, A.K.; SHEYKO, Z.A.;
KOGAN, TS.I.; OSIPOVA, Ye.S.; GIRGORASH, N.G.; PANKRATOVA, V.S.;
GORBACHEVA, L.Ye.

Species of dysentery pathogens encountered in 1959 in certain regions
of Dnepropetrovsk Province and their sensitivity to the dysentery
bacteriophage and antibiotics. Vrach. delo no.9:116-118 S '61.

(MIRA 14:12)

(DNEPROPETROVSK PROVINCE—SHIGELLA)
(BACTERIOPHAGE) (ANTIBIOTICS)

ACC NR: AT6036937

SOURCE CODE: UR/0000/66/000/000/0153/0158

AUTHORS: Guzman, I. Ya.; Pankratova, V. S.; Makarova, T. S.; Vinogradova, L. V.; Logacheva, N. S.

ORG: none

TITLE: The influence of some technological parameters on the manufacture and properties of cellular carborundum light-weight refractories

SOURCE: Nauchno-tekhническое общество чёрной металлургии. Московское пра-
вление. Высокогорные материалы (Highly refractory materials). Moscow, Izd-
vo Metallurgiya, 1966, 153-158

TOPIC TAGS: carborundum, silicon carbide, silicon, refractory product

ABSTRACT: A method for obtaining light-weight, cellular carborundum refractories made of β -SiC, Si_2ON_2 , and SiO_2 is described. This investigation supplements the results of I. Ya. Guzman and V. S. Morozova (Ogneupory, 1963, No. 12, 558). The method consists of adding an intimate mixture of SiC + Si to an aqueous HCl solution and of subsequent firing in carbon-containing media in a CO + N₂ atmosphere. The effects of the silicon composition and grain size of the mixture, pH of suspension, and the firing temperature on the properties of the finished product were investigated. The experimental results are tabulated. It was found that the best results were

Card 1/2

ACC NR: AT6036937

obtained at pH 3--4, a moisture content of suspension of 40%, and an Si content of 40%. The optimum firing temperature was found to be 1300--1400C. On the basis of the above results, a pilot project for the manufacture of refractory bricks has been initiated at the Podolsk Refractories Plant. Orig. art. has: 5 tables.

SUB CODE: 11/ SUBM DATE: 02Nov65/ ORIG REF: 002

Card 2/2

PANKRATOVA, V. Ya.

Effect of fertilizers on the development of benthonic fauna in
vimba-chalcalburnus nursery ponds. Trudy probl. i tem. sov. no.7:
46-51 '57. (MLRA 10:4)
(Psekups Valley--Fish ponds) (Fertilizers and manures)
(Fresh-water fauna)

PANKRATOVA, V.Ya.

Tendipedid larvae of some rivers of Krasnodar Territory.
Trudy Zool.inst. 26:365-374 '59. (MIRA 13:5)
(Krasnodar Territory--Chironomidae)

Among the titles and authors of papers and other expected participants at the 15th International Conference of Limnology in Minsk, Belarus, 20-25 Aug 85, are the following:

- USSR
- GAVENSKAYA, N. S., Kaliningrad College of Fishery, Kaliningrad - "The role of high aquatic plants in trophic cycles of fresh water bodies", Author: K. V. Astrakhan State Reservation, GOREBUNOV, K. V., Astrakhan State Reservation, INLEY, V. S., Sevastopol Biological Station, A. O. Korolevsky, Sevastopol - "The transformation of energy on the highest trophic levels of a production process and energetics of fish production" (Review Paper, Section IV)
 - KOROS, Nina Vasil'evna, Institute of Forestry, Academy of Science USSR - "The tropics of water bodies on different stages of their historical development"
 - KROGUS, I. V., Knuchatka Department, Pacific Institute of Marine Fishery and Oceanography - "On the connection of floods down of young fish of red salmon with the condition in a lake"
 - MIRONOV, Yevgeny Nikolayevich, Embarkation Department, Pacific Institute of Marine Fishery and Oceanography - "The influence of diet on biological productivity of red salmon products on the addition of red salmon products on the phosphate regime of spawning lakes"
 - MURZINOV, Sergey Iosifovich, Institute of Microbiology, Academy of Sciences USSR - "The role of microorganisms in the destruction of organic substances in a water body" and, "Decomposition processes, results and limnological significance, microbiological" (Plenary Session IV)
 - NESENKOVA, Tat'yana 'Iur', Bioclimatology Station, Gerens, Armenian SSR, accepted invitation, but has not submitted paper
 - PANKRAT'Yeva, V. Ya., Zoological Institute, Academy of Sciences USSR - "On the evolution of total pelagic larvae (Chalinocodidae) in connection with the conditions of existence of Belobors' Ural - "On the main concepts and directions of hydrobiology in the Soviet Union"
 - RASFORT, I. N., Laboratory of Limnology, Academy of Sciences USSR - "Microbiology of the detritus of lakes"
 - ROGOZIN, L. V., Institute of Geography, Academy of Sciences USSR, and GRANOV, Grigory I., Siberian Department of the Academy of Sciences USSR - "The Lake Baykal"
 - SOKHNOV, Nikolay Nikolayevich, Institute of Biology of Water Reservoirs, Academy of Sciences USSR - "Ecology of the photophytic phytoplots in connection with the estimation of the role of elements of pollutive matter on hydroconcentrations" and "On the question of the influence of sewage on waters"
 - VOL'KOV, O. M., Limnological Institute, Siberian Department of the Academy of Sciences USSR - "The ice regime of the Baykal Lake"
 - ZHIGDAEV, N. S., Moscow Biological Faculty, Moscow University, Moscow - "Influence of small elements in the Baykal Lakes"
 - TAROVS'KAYA, Aleksandra Ivanovna, Zoological Institute, Academy of Sciences USSR - "The fauna of high mountain water bodies of Middle Asia"
 - ZHABIN, V. I., Limnological Institute, Siberian Department, Academy of Sciences USSR - "Turn - phosphate at fertilization a water body over of the organic matter and goes biogenic elements"
 - ZHURAVLEV, P. A., Karpovskiy Scientific Institute of Hydrobiology of the State University, Ukrainian SSR - "Accumulation of organic matter (of the Caspian relief type) in water reservoirs of the Ukraine and the Crimea"

PANKRATOVA, V.Ya.

Bottom fauna of ponds of the Vimba-Bleak Hatchery and modifications induced by fertilization. Trudy Zool.inst. 26:296-346 '59. (MIR 13:5)

(Packups Valley--Fish ponds)

PANKRATOVA, V. Ya.

Larvae of Tendipedidae (Chironomidae) of the Oka River. Trudy
Zool. inst. 32:189-207 '64. (MIRA 17:11)

1. PANKRATOVA, V. YA.
2. USSR (600)
4. West Kazakhstan Province--Larvae
7. Larvae fauna of Tendipedinae in the ponds of the State Forest Belt region between Vishnaya Mountain and the Caspian Sea, Trudy Zool. inst., 11, 1952.
9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

~~PANKRATOVA, V. Ya.~~

Larva of Tendipedidae and Heleidae of marshes in the vicinity
of "Zaluch'ye." Zool. zhur. 33 no. 6:1293-1306 N-D '54. (MIRA 8:2)

1. Zoologicheskiy institut Akademii nauk SSSR.
(Zaluch'ye--Larvae)(Diptera)

MELIKADZE, I.G.; LARIN, R.R.; BEZHANOV, F. Kh.; Prinimali uchastiye:
KHUROSHVILI, G., inzh.; TSAGARELI, T., inzh.; ZAMTARADZE, E., inzh.;
BOGORISHVILI, G., tekhnik; MAYSURADZE, L., laborant; SHUBLADZE, G.,
laborant; PANKRATOVA, Ye., kamnerez.

Investigation of teschenite disintegration by the thermal method.
Soob. AN Gruz. SSR 34 no.3:633-640 Je '64 (MIRA 18:1)

1. Institut gornogo dela imeni G.A. TSulukidze AN Gruzinskoy SSR.
Submitted November 25, 1963.

PANKRATOVA, Yekaterina Ivanovna, assistent; SAL'NICHENKO, M.A., meto-
dist, red.; BAZENKOVA, K.I., red. izd-va; SUKMANOVA, K.G., tekhn.
red.

[Greenfalls, our virgin land] Zaniatye pary - nasha tselina.
Perm', Permskoe knizhnoe izd-vo, 1960. 17 p. (MIRA 14:12)

1. Kafedra obshchego zemledeliya Permskogo sel'skokhozyaystven-
nogo instituta (for Pankratova). 2. Dom politicheskogo prosve-
shcheniya (Sal'nichenko).

(Following)

PANKRATOVÀ, YE. M.

Dissertations defended at the Institute of Plant Physiology imeni V. A. Timiryazev for the academic degree of Candidate of Biological Sciences:

"Effect of Extra-Root Topdressing on Oxidation-Reduction Processes, Nitrogen Metabolism, and the Harvest Yield of Fruit Crops."

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

PANKRATOVA, Ye.M., kand.biolog. nauk

Effect of treating seeds with variable temperatures and trace
elements on the cold resistance and yield of corn. Agrobiologia
no.4:553-557 Jl-Ag 63 (MIRA 16:9)

1. Kirovskiy sel'skokhozyaystvennyy institut.
(Plants--Frost resistance)
(Plants, Effect of temperature on)
(Plants, Effect of trace elements on)

PANKRATOVA, Ye.M.

Effect of spray application upon the oxidation-reduction, nitrogen metabolism, and yield of fruit trees. Nauch. dokl. vys. shkoly; biol. nauki no.2:162-168 '61. (MIRA 14:5)

1. Rekomendovana kafedroy botaniki Kirovskogo sel'skokhozyaystvennogo instituta.
(FRUIT TREES--FERTILIZERS AND MANURES)
(PLANTS--METABOLISM)

PANKRATOVA, Ye.M.

Increasing the physiological activity and yields of fruit crops through foliar feeding. Fiziol. rast. 7 no. 5:584-590 '60. (MIRA 13:10)

1. Chernyshevskiy State University, Saratov.
(Fruit trees--Fertilizers and manures)

PANKRATOVA, Ye. P. Cand Agr Sci -- (diss) " Certain data on the biology of the blossoming and pollination of carrot seeds." Mos, 1958. 18 pp (Mos Order of Lenin Agr Acad im K. A. Timiryazev), 110 copies (KL, 36-58, 114)

PANKRATOVA, Ye. P.

USSR/Farm Animals - Honey Bee.

Q-4

Abs Jour : Ref Zhur - Biol., No 1, 1959, 2765

Author : Pankratova, Ye.P.

Inst : Moscow Agricultural Academy imeni K.A. Timiryazev

Title : Effect of Pollination by Bees on the Yield of Carrot Seed Plants .

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K.A. Timiryazeva, 1957, vyp. 30, ch. 2, 332-336.

Abstract : It was established that the role of wind in the pollination of carrots is insignificant; the principal carrot pollinizers are bees and flies. On the umbels freely pollinated by insects, the yield of carrot seed plants was 15.3 times higher as compared with the umbels covered by insulating gauze.

Card 1/1

PANKRATOVA, Z.P. (Makhachkala)

Use of preparations of Ranwolffia serpentina in the treatment of hypertension. Vrach.delo no.7;109-110 Jl '60. (MIRA 13:7)

1. Gospital'naya terapeuticheskaya klinika (zav. - dotsent Kh.E. Gadzhieyv) Dagestanskogo meditsinskogo instituta.
(FAUWOLFIA) (HYPERTENSION)

PANKRATOVICH, V.I.

~~M~~ putting out a burning gas gusher from a well. Gas. prom. no. 42
14-15 Ap '58. (MIRA 11:4)
(Gas, Natural) (Fire extinction--Explosion systems)

PANKRATS, I.P. (Krasnotur'insk)

Radiography of the mastoid process. Vest. rent. i rad. 32 no. 1:11
supplement '57 (MIRA 10:5)
(MASTOID PROCESS--RADIOGRAPHY)

PANKRATS, I.P.

PANKRATS, I.P. (Krasnotur'insk, Sverdlovskoy obl.)

New metal bed boards. Ortop.travm. i protez. no.3:50-51 My-Je
'55. (MLRA 8:10)

(ORTHOPEDICS, apparatus and instruments,
bed board, metal)

1. PANKRATSOV, P. A.
2. USSR (600)
4. Drainage - Asia, Central
7. Vertical drainage in the irrigated regions of Central Asia, Soob. TFAN SSSR, No. 30, 1951.
9. Monthly List of Russian Accessions, Library of Congress, March, 1953. Unclassified.

1. Pankratsov, P.A.
2. USSR (600)
4. ASIA, CENTRAL - DRAINAGE
7. Vertical drainage in the irrigated regions of Central Asia. Soob. TFAN SSSR
NO. 30, 1951.
9. Monthly List of Russian Accessions. Library of Congress, March 1953 Unclassified

PANKRAT'EV, A.

Novaia sistema gruzovykh tarifov morskogo flota. [The new tariff system in the
merchant marine of the U. S. S. R.] (Voinyi transport, 1940, no. 3, p. 7-10)

DLC: HE561.R8

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

PANKRAT'YEV, A. F.

"Electric Motors for Buildings Liable to Explosions, According to Foreign Data"

report presented at the All-Union Scientific and Technical Conference on the Electrical
Equipment in Buildings and Outside Installations Liable to Explosions, 14-19 April 1958,
Stalino
(Energet. Byulleten' , 1958, No. 7, pp 29-33)

SOV/112-58-2-2303

Translation from: Referativnyy zhurnal, Elektrotehnika, 1958, Nr 2, p 83 (USSR)

AUTHOR: Fankrat'yev, A. F., and Yudin, N. N.

TITLE: Automatic Explosion-Proof Electric Equipment for Underground
Mechanisms (Avtomatizirovannye vzryvobezopasnoye elektrooborudovaniye
dlya podzemnykh mekhanizmov)

PERIODICAL: V sb.: Raboty M-va elektrotekhn. prom-sti SSSR po mekhaniz. i
avtomatiz. nar. kh-va. I. M., 1956, pp 75-80

ABSTRACT: Explosion-proof electric equipment manufactured by the
"Kuzbasselektromotor" Plant is described. A short description is presented
of the construction and purpose of the squirrel-cage series KO and KOM motors,
the series PMV magnetic starter, the Type AFV feeder automatic circuit
breakers, type KUV push-button stations, and also a number of special motors
and electric apparatus for mining machinery recommended for use in automated
control schemes in underground work, particularly in an explosion-hazardous
medium.

A.V.S.

Card 1/1

TULIN, V.S., prof.; PANKRAT'YEV, A.F., inzh.

Concerning P.F. Kovalev's article. Vest. elektro prom. 34 no.8:
60-61 Ag '63. (MIRA 16:9)
(Electric apparatus and appliances—Standards)

PANKRAT'YEV, A.F., inzh.; POVOLOTSKIY, M.Ye., inzh.; KOVALEV, Ye.B., inzh.

A series of explosionproof asynchronous motors with 0.27kv. to
100 kv. power ratings. Vest. elektroprom. 34 no.3:4-7 Mr '63.
(MIRA 16:8)

(Electric motors, Induction)
(Mining machinery--Electric driving)

PANKRAT'YEV, A.F.

PANKRAT'YEV, A.F., inzhener; ZHIVOTOVSKIY, L.V., inzhener.

New series of 0.6--7 kwt explosionproof induction electric motors.
Vest.elektroprom. 27 no.9:24-27 S '56. (MEMA 10:9)

1. Zavod "Kuzbasselektrometor" Ministerstva elektrotekhnicheskoy
promyshlennosti.
(Electric motors, Induction)

YANOVSKYEV, Aleksandr Fedorovich. Plant Eng.

YASNYY, Vadim Kononovich, inzh.; PANKRAT'IEV, Aleksandr Fedorovich;
TULIN, V.S., doktor tekhn. nauk, prof., glav. red. toma;
KOLESNIKOVA, V.G., red.; LEVIN, L.M., red.; PROSTIN, V.F.,
red.; TEREKHOV, S.D., red.; FOKINA, I.V., red.; OSVAL'D,
E.Ya., red.izd-va; SABITOV, A., tekhn. red.

[The coal industry of capitalist countries] Ugol'naia pro-
myshlennost' kapitalisticheskikh stran. Moskva, Gosgortekh-
izdat. Vol.4. Pt.1.[Electric supply, communication, signaliza-
tion and lighting] Elektrosnabzhenie, sviaz', signalizatsiia
i osveshchenie. 1963. 314 p. (MIRA 16:10)
(Electricity in mining) (Mine communications)

PANKRAT'YEV, ALEKSEY YUR'YEVICH

N/5
756.5
.P2

PANKRAT'IEV, ALEKSEY YUR'YEVICH

Kommerscheskaya ekspluatatsiya morskogo transporta (Commerical utilization
of sea transportation) Moskva, morskoy transport, 1955.
490 p. Diags., Tables.

PANKRAT'YEV, A.G.

Acclimatization of the raccoon in the forests of the southern
Maritime Territory. Soob.DVFAK SSSR no.11:115-120 '59.
(MIRA 13:11)
1. Dal'nevostochnyy filial imeni V.L.Komarova Sibirsogo otdeleniya
AN SSSR.
(Maritime Territory--Raccoons)

PANKRAT'EV, A. IU.

O printsipakh tarifnoi klassifikatsii gruzov. [On the principles of tariff classification of freight]. (Sots. transport, 1934, no. 3, p. 82-89)

DLC: HE7.S6

Osnovnye zadachi ratsionalizatsii tarifnoi sistemy. [The main problems of rationalization of the tariff system]. (Sots. transport, 1933, no. 11-12, p. 39-46, sketch).

DLC: HE7.S6

Tarif na perevozku gruzov v konteinerakh. [Rates of freight shipment in containers]. (Sots. transport, 1934, no.11,p. 66-71).

DLC:HE7.S6

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

PANKRAT'YEV, Aleksey Yur'yevich; SOKOLOVA, Ye.I., redaktor; TIKHONOVA,
Ye.A., tekhnicheskiy redaktor.

[Trade operations of the merchant marine] Konmercheskaia ekspluata-
tatsiia morskogo transporta. Moskva, Izd-vo morskoi transport,
1955. 490 p.
(Merchant marine)

R
PANKAT'YEV, B.Ye.

Role of protective inhibition in thoracic surgery. Klin. med.,
Moskva '30 no. 11:15-20 Nov 1952. (CIML 23:5)

1, Honored Worker in Science Prof. B. Ye. Pankrat'yev. 2. Kiev.

ANICHKOV, M.N., dots.; ANTELAVA, N.V., prof.; BISENKOV, N.P., kand. med. nauk; BOGUSH, L.K., prof.; GRIGOR'YEV, M.S., prof.; DYSKIN, Ye.A., kand. med. nauk; KEVESH, Ye.L., prof.; KOLESOV, A.P.; KOLESOV, V.I., prof.; KUPRIYANOV, P.A., prof.; LINBERG, B.Z., prof.; MAKSIMENKOV, A.N., prof.; OSIPOV, B.K., prof.; SAVITSKIY, A.I., prof.; UVAROV, B.S.; UGLOV, F.G., prof.; KHOLDIN, S.A., prof.; PETROVSKIY, B.V., prof., otv. red.; BAKULEV, A.N., akademik, red.; GULAYAYEV, A.V., prof., red.; YEGOROV, B.G., prof., red.; PANKRAT'YEV, B.Ye., prof., red.; PYTEL', A.Ya., prof., red.; RIKHTER, G.A., prof., red.; FILATOV, A.N., prof., red.; CHAKLIN, V.D., prof., red.; RYBUSHKIN, I.N., doktor med. nauk, red.; RULEVA, M.S., tekhn. red.

[Multivolume manual on surgery] Mnogotomnoe rukovodstvo po khirurgii. Moskva, Medgiz. Vol.5. [Chest surgery; thoracic wall, pleura, and lungs] Khirurgija grudi; grudnaja stenka, plerva i legkie. 1960. 727 p. (MIRA 15:3)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Antelava, Bogush, Maksimenkov, Savitskiy, Kholdin, Chaklin).
2. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Kupriyanov, Petrovskiy, Yegorov).
(CHEST--SURGERY)

PANKRAT'EV, S. V.

Puti povysheniiia produktivnosti indeek (Methods of increasing the productivity of turkeys). Moskva, Pischepromizdat, 1952. 34 p.

SO: Monthly List of Russian Acquisitions, Vol. 7, No. 7, Oct. 1954

1. PANKRAT'YEV, G. V.
2. USSR (600)
4. Turkeys
7. Determining age and sex in turkeys. Ptitsvodstvo no. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

1. PANKRAT'YEV, G. V.
 2. USSR (600)
 4. Belen'kii, N. G.
 7. Academician N. G. Belen'kii's book "Standardizing protein in domestic fowl rations." Ptitsevodstvo no. 10, 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

PANKRAT'YEV, G. V.

"Groups of Moscow Turkey Breeds and Measures for Improving Them Further."
Cand Agr Sci, (no inst Affiliation), Zagorsk, 1954. (RZhBiol, No 5, Mar 55)

So: Sum. No 670, 29 Sept 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (15)

PANKRAT'YEV, Grigoriy Vasil'yevich, kand.sel'skokhoz.nauk; REDIKH,
Vladimir Karlovich, kand.sel'skokhoz.nauk; LARIONOV, V., doktor
biolog.nauk, red.; MESHCHANKINA, A.B., red.; LUK'YANOV, N.P.,
red.; SAYTANIDI, L.D., tekhn.red.

[Poultry raising on state farms] Sovkhoznoe ptitsevodstvo. Pod
red. V. Larionova. Moskva, Izd-vo M-va sel'. khoz. RSFSR, 1958.
220 p. (MIRA 12:1)

(Poultry)

PANKRAT'YEV, Ivan Matveyevich; IORDATIY, N., red.; MOLCHANOV, R.,
tekhn. red.

[How we conduct economic conferences] Kak my provodim ekonomiche-
skie konferentsii. Odessa, Odesskoe oblastnoe izd-vo, 1958. 21 p.
(MIRA 15:6)

1. Sekretar' Kiliyskogo raykoma Kommunisticheskoy partii Ukrayiny,
predsedatel' rayonnogo ekonomicheskogo soveta (for Pankrat'yev).
(Kiliya District--Farm management--Congresses)

PANKRAT'YEV, N., geroy Sotsialisticheskogo Truda

Groups of communist Labor. Stroitel' no.4:15 Ap '61. (MIRA 14:5)

1. Brigadir kompleksnoy brigady kommunisticheskogo truda tresta
Krasnodarstroy.
(Krasnodar--Construction industry)

PANKRAT'YEV, N.B.

AGALINA, M.S., inzh.; AKUTIN, T.K., inzh.; APRESOV, A.M., inzh.; ARISTOV,
S.S., kand. tekhn. nauk.; BELOSTOTSKIY, O.B., inzh.; BERLIN, A.Ye., inzh.;
BESSKIY, K.A., inzh.; BLYUM, A.M., inzh.; BRAUN, I.V., inzh.; BRODSKIY,
I.A., inzh.; BURAKAS, A.I., inzh.; VAINMAN, I.Z., inzh.; VARSHAVSKIY,
I.N., inzh.; VASIL'YEVA, A.A., inzh.; VORONIN, S.A., inzh.; VOYTSEKHOVSKIY,
L.K., inzh.; VRUBLEVSKIY, A.A., inzh.; GERSHMAN, S.G., inzh.;
GOLUBYATNIKOV, G.A., inzh.; GOHLIN, M.Yu., inzh.; GRAMMATIKOV, A.N., inzh.;
DASHEVSKIY, A.P., inzh.; DIDKOVSKIY, I.L., inzh.; DOBROVOL'SKIY, N.L., inzh.;
DROZDOV, P.F., kand. tekhn. nauk.; KOZLOVSKIY, A.A., inzh.; KIRILENKO,
V.G., inzh.; KOPENYANSKIY, G.D., kand. tekhn. nauk.; KORETSKIY, M.M., inzh.;
KUKHARCHUK, I.N., inzh.; KUCHER, M.G., inzh.; MERZLYAK, M.V., inzh.;
MIRONOV, V.V., inzh.; NOVITSKIY, G.V., inzh.; PADUN, N.M., inzh.;
PANKRAT'YEV, N.B., inzh.; PARKHOMENKO, V.I., kand. biol. nauk.; PINSKIY,
Ye.A., inzh.; PODLUBNYY, S.A., inzh.; PORAZHENKO, F.F., inzh.; FUZANOV,
I.G., inzh.; REDIN, I.P., inzh.; REZNIK, I.S., kand. tekhn. nauk.;
ROGOVSKIY, L.V., inzh.; RUDERMAN, A.G., inzh.; RYBAL'SKIY, V.I., inzh.;
SADOVNIKOV, I.S., inzh.; SEVER'YANOV, N.N., kand. tekhn. nauk.; SEMESHKO,
A.T., inzh.; SIMKIN, A.Kh., inzh.; SURDUTOVICH, I.N., inzh.; TROFIMOV,
V.I., inzh.; FEFER, M.M., inzh.; FIALKOVSKIY, A.M., inzh.; FRISHMAN,
M.S., inzh.; CHERESHNEV, V.A., inzh.; SHESTOV, B.S., inzh.; SHIFMAN,
M.I., inzh.; SHUMYATSKIY, A.F., inzh.; SHCHERBAKOV, V.I., inzh.;
STANCHENKO, I.K., otv. red.: LISHIN, G.L., inzh., red.: KRAVTSOV, Ye.P.,
inzh., red.; GRIGOR'YEV, G.V., red.; KAMINSKIY, D.N., red.; KRASOVSKIY,
I.P., red.; LEYTMAN, L.Z., red. [deceased]; GUREVICH, M.S., inzh., red.;
DANILEVSKIY, A.S., inzh., red.; DEMIN, A.M., inzh., red.; KAGANOV,
S.I., inzh., red.; KAUFMAN, B.N., kand. tekhn. nauk., red.; LISTOPADOV,
N.P., inzh., red.; MENDELEVICH, I.R., inzh., red. [deceased];
(continued on next card)

AGALINA, M.S.... (continued) Card 2.

PENTKOVSKIY, N.I., inzh., red.; ROZEMBERG, B.N., inzh., red.; SLAVIN,
D.S., inzh., red.; FEDOROV, M.P., inzh., red.; TSYMBAL, A.V., inzh., red.;
SMIRNOV, L.V., red. izd-va.; PROZOROVSKAYA, V.L., tekhn. red.
[Mining ; an encyclopedic handbook] Gornoe delo; entsiklopedicheskii
spravochnik. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po ugol'noi'
promyshl. Vol. 3.[Organization of planning; Construction of surface
buildings and structures] Organizatsiya proektirovaniia; Stroitel'stvo
zdanii i sooruzhenii na poverkhnosti shakht. 1958. 497 p. (MIRA 11:12)
(Mining engineering)
(Building)

VOL'BERG, Nikolay Yevgen'yevich; PANKRAT'YEV, Nikolay Vasil'yevich;
KOPERIN, V.V., inzh., nauchnyy red.; TABUNINA, M.A., red.izd-va;
RUDAKOVA, N.I., tekhn.red.

[Assembly of compressors] Montazh kompressornykh ustyanovok.
Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.mate-
rialam, 1961. 233 p.
(Compressors)

PANKRAT'IEV, O.N.; BANNIKOV, L.S.

Complete automation in the coke shop of the Magnitogorsk
Metallurgical Combine. Koks i khim. no.10:33-36 0 '61.
(MIRA 15:1)

1. Gosudarstvennyy vsesoyuznyy institut po proyektirovaniyu
predpriyatiy koksokhimicheskoy promyshlennosti.
(Magnitogorsk--Coke industry--Equipment and supplies)

PANKRAT'YEV, O.N.; BANNIKOV, L.S.

Complete automatic control of the coke industry. Koks i khis.
no.8:28-32 '60. (MIRA 13:8)

1. Giprokoks.
(Coke industry) (Automatic control)

BATALOV, A.B.; PANKRAT'YEV, P.V.

Genetic types of iron bisulfides in the Khondiza sulfide-complex metal deposits. Zap. Uz. otd. Vses. min. ob-va no.14: 78-85 '62. (MIRA 16:7)

(Gissar Range---Iron sulfides)

PANKRAT'YEV, P.V.

Recrystallization of quartz in the Khandiza ore deposit. *Uzb.geol.zhur.*
7 no.1:34-38 '63. (MIRA 16:4)

1. Institut geologii AN UzSSR.
(Cissar Range--Quartz)

BATALOV, A.B. [deceased]; PANKRAT'YEV, P.V.

Textures and structures of ores of the ore manifestation of the
sulfide-complex metal formation in the Surkhantau. Zap.Uz.odd.
Vses.mn. ob.via no. 15:88-98 '63. (MIRA 17:10)

BATALOV, A.B.; PANKRAT'YEV, P.V.

Distribution of trace elements in iron-bearing skarns of the Irisu
deposit. Uzb. geol. zhur. no.6:21-31 '60. (MIRA 14:1)

1. Institut geologii AN UzSSR.
(Irisu region—Iron ores)

PANKRAT'YEV, P.V.

New petroleum and gas research center. Uzb.geol.zhur. no.3:
92 '59. (MIRA 12:12)
(Tashkent--Petroleum research)

PANKRAT'YEV, P.V.; SHAMSUTDINOV, M.Sh.

Lithology and ore content of carbonate rocks of the Lower Carboniferous
of the Khandiza deposit (southwestern spurs of the Gissar Range).
Dokl. AN Uz.SSR. 20 no.1 40-43 '63. (MIRA 16:6)

1. Institut geologii AN Uzbekskoy SSR. Predstavлено членом-корреспон-
дентом AN Uzbekskoy SSR V.I.Popovym.
(Khandiza Valley--Rocks, Carbonate--Analysis)

PANKRAT'YEV, S.P.; ZEZHINA, M.V.; PISKUN, S.A.; LEBEDEV, N.N., inshener,
redaktor; UDOD, V.Ya. redaktor; SMOLYAKOVA, M.V., tekhnicheskiy
redaktor.

[Manual for the maintenance electrician in the building industry]
Spravochnik elektromontera-ekspluatatsionnika na stroitel'stve.
Pod red. N.N. Lebedeva. Izd. 3-e, dop. i perer. Moskva, Gos. izd-vo
lit-ry po stroit. i arkhitekture, 1955. 270 p. (MLRA 9:5)
(Electric engineering)

PANKRAT'YEV, S.F.; PISKUN, S.A.; ZENINA, M.V.; LEBEDEV, N.N., inzh., red.;
PAKHOMOVA, M.A., red.izd-va; BOROVNEV, N.K., tekhn.red.

[Electrician-operator in the construction industry] Elektromonter-
eksploatasionnik na stroitel'stve. Pod red. N.N.Lebedeva, Izd.4.,
dep. i perer. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i
stroit.materialam, 1958. 322 p. (MIRA 12:4)
(Electric engineering--Handbooks, manuals, etc.)

PANKRAT'YEV, S. F.

N/5
741.7
.F1
1955

Spravochnik electromontera-eksplutatsionnika na stroitel'stve. Reference book for maintenance electricians on construction jobs, by S. F. Pankrat'yev, M. V. Zenina i S. A. Piskun. 3. izd. dop. i perer. Moskva, Gosstroyizdat, 1955.
270 P. diagrs., tables.
"Spisok Literatury": P. 269-270.

PANKRAT'YEV, S. F.

N/5
741.7
.P1
1955

Spravochnik electromontera-ekspluatatsionnika na stroitel'stve. Reference book for maintenance electricians on construction jobs, by S. F. Pankrat'yev, M. V. Zenina i S. A. Piskun. 3. izd. dop. i perer. Moskva, Gosstroyizdat, 1955. 270 P. diagrs., tables.
"Spisok Literatury": P. 269-270.

PANKRAT'YEV, S. F.

N/5
741.7
.F1
1955

Spravochnik electromontera-ekspluatatsionnika na stroitel'stve. Reference book for maintenance electricians on construction jobs, by S. F. Pankrat'yev, M. V. Zenina i S. A. Piskun. 3. izd. dop. i perer. Moskva, Gosstrovizdat, 1955. 270 P. diagrs., tables. "Spisok Literatury": P. 269-270.

PANKRAT'YEV, V., inzh.

Helping inventors and efficiency promoters of the meat industry.
(MIRA 12:12)
Mias. Ind. SSSR. 30 no.4:51-53 '59.
(Meat industry--Equipment and supplies)

PANKRAT'YEV, Eng. V.

MEAT INDUSTRY

Promoting technical progress. Mias. ind. SSSR 23 No. 3 (1952)

9. Monthly List of Russian Accessions, Library of Congress, September 1952 1953, Uncl.

1. PANKRAT'YEV, V. Eng.
2. USSR (600)
4. Milk-Pasteurization
7. OPA-0, 6 make of steam pasteurizer. Mol.prom. 12 no. 12, 1952.
9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

PANKRAT'YEV, Vasiliy Aleksandrovich; MISHCHENKO, V.N., red.

[Power feed for woodworking machinery; its introduction
in Leningrad enterprises] Avtopodatchiki derevoobrabaty-
vaiushchikh stankov; opyt vnedreniya na leningradskikh
predpriatiakh. Leningrad, 1963. 23 p. (Leningradskii
dom nauchno-tehnicheskoi propagandy. Obmen peredovym opy-
tom. Seria: Derevoobrabatyvaiushchaia promyshlennost',
no.8) (MIRA 17:4)

MASLOVA, Nadezhda Semenovna; BORISOV, Yevgeniy Filippovich; PANKRAT'YEV,
Viliy Gavrilovich, mladshiy nauchnyy sotr.; PLOTNIKOV, K.N.,
red.; ZALKIND, A.I., red.; GERASIMOVA, Ye.S., tekhn. red.

[Wages and production costs in U.S.S.R. industries] Zarabotnaia
plata i sebestoimost' produktsii v promyshlennosti SSSR. Pod
obshchei red. K.N.Plotnikova. Moskva, Izd-vo ekon. lit-ry,
1962. 267 p. (MIRA 15:3)

1. Institut ekonomiki Akademii nauk SSSR (for Pankrat'yev).
2. Chlen-korrespondent Akademii nauk SSSR (for Plotnikov).
(Wage payment systems) (Costs, Industrial)

PANKRAT'YEV, Vladimir Pavlovich; TOMILIN, Yu.K.; MOISEYEV, L.K.:
KOSTINSKIY, D., red.

[United Republic of Tanzania] Ob"edinennaia Respublika
Tanzaniia. Moskva, Mysl', 1965. 94 p. (MIRA 18:4)

1. Ye. E. PANKRAT'EV
2. USSR (600)
4. Chest - Surgery
7. Role of protective inhibition in thoracic surgery. Prof. Ye. E. Pankrat'ev.

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

ACCESSION NR: AP4025306

S/0000/63/000/000/0163/0172

AUTHORS: Kalmykov, A. A.; Timofeyev, A. D.; Pankrat'yev, Yu. I.;
Nozdrachev, M. G.

TITLE: Investigation of a plasma source with the aid of a through
passage mass spectrometer

SOURCE: Diagnostika plazmy* (Plasma diagnostics); sb. stately.
Moscow, Gosatomizdat, 1963, 163-172

TOPIC TAGS: mass spectrometer, plasma source, plasmoid, plasmoid
acceleration, plasma injection, ion separation

ABSTRACT: In view of the lack of information on the internal struc-
ture of plasmoids and of a satisfactory description of the mechanism
of plasma acceleration in different plasma guns, and in view of the
difficulty of interpreting the experimental results on interaction
between plasmoids and magnetic fields owing to the lack of this in-

Card 1/3

ACCESSION NR: AT4025306

formation, a method is proposed wherein more detailed microscopic characteristics can be obtained with the aid of through-passage mass spectrometer. This mass spectrometer was used to investigate the mass and energy spectra of plasmoids from a Bostick gun (W. H. Bostick, Phys. Rev. v. 104, 2, 292, 1956). The operation of all the units of the instrument is described in detail in a separate article (Pribory* i tekhnika eksperimenta, in press). The conditions for optimal mass separation are described. In view of the short transit time employed, there is no need for additional modulation. The apparatus yields mass spectra of ions of given energy, from which the energy spectra of particles having different masses can be plotted. The angular distributions of the ions of different masses and energies were also investigated and it was found that ions with larger velocities form a narrower velocity cone than the slower ions. It is therefore concluded that measurement of the true energy distribution must be accompanied by measurement of the angular distribution of the particles and the number of particles of given energy must be

Card 2/3

ACCESSION NR: AT4025306

6

integrated over all the angles in order to ensure accuracy. The duration of the discharge exerts little influence on the energy spectra. The length of the plasmoid changes as it moves from the source because of the spread in particle velocity, and since the particle velocity decreases with increasing mass, the light ions are concentrated in the frontal part of the plasmoid and the heavy ones in the tail part. This spatial separation of the ions increases with increasing transit length. In the absence of the magnetic field the slow ions are rapidly lost because of the broad velocity cone. There are grounds for assuming that the plasmoids produced by other plasma guns, particularly coaxial, show a similar behavior. Orig. art. has: 9 figures.

ASSOCIATION: None

SUBMITTED: 19Oct63

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: NP, ME

NR REF Sov: 003

OTHER: 003

Card 3/3

SINEL'NIKOV, K.D.; SAFRONOV, B.G.; TIMOFEYEV, A.T.; PANKRAT'YEV,
Yu.I.

[Interaction between ions and electrons in an accelerated
ion beam] Izuchenie vzaimodeistviia mezhdu ionami i elek-
tronami v uskorenном puchke ionov. Khar'kov, Fiziko-tekhn.
in-t AN USSR, 1960. 209-214 p. (MIRA 17:1)

L 43799-66 EWT(1)/T IJP(c) AT/JGS/GD
ACC NR: AT6020415 (N)

SOURCE CODE: UR/0000/65/000/000/0172/0181

AUTHOR: Kalmykov, A. A.; Pankrat'yev, Yu. I.; Nozdrachev, M. G.; Shevchuk, B. A.

ORG: none

TITLE: Investigation of a discharge in a pulsed plasma source

78
77
B+1

SOURCE: AN UkrSSR. Issledovaniye plazmennykh sgustkov (Study of plasma clusters).
Kiev, Naukova dumka, 1965, 172-181

TOPIC TAGS: plasma source, plasma gun, pulsed magnetic field, ion acceleration, mass spectroscopy, high speed photography

ABSTRACT: The performance and characteristics of a plasma gun with a hot cathode are studied. The gun structure and operational parameters are described. The gun was operated with a pulsed magnetic field (20 μ sec) during which a much shorter high voltage pulse was applied to the cathode which was found to eject both ions and electrons. The collector received about one ampere of ion current during such pulsed operations. As in other guns, the ion acceleration occurred only during the first few tenths of a microsecond and the energy reached often exceeded the applied accelerating voltage. It was noted that when artificial transmission lines were used for the energy storage, plasma ejection occurred at each reflection of the wave thus forming a long train of plasmoids. The plasma properties were studied with a mass spectrometer, x-ray detec-

Card 1/2

L 43799-66

ACC NR: AT6020415

tors and high speed photography. The results for various pressure and current conditions are shown and analyzed in terms of the electric circuit interaction with a simple plasma model. Orig. art. has: 4 formulas, 7 figures.

SUB CODE: 20/ SUBM DATE: 11Nov65/ ORIG REF: 006/ OTH REF: 005

Card 2/2 PB

PANKRAT'YEV, YU. I., TERESHIN, V. I., TRUBCHANINOV, S. A., NOZDRACHEV, M. G.,
NABOKA, V. A., SAFRONOV, B. G., KALMYKOV, A. A., TIMOF'EYEV, A. D.,

"Plasma Guns Investigation,"

report presented at the 6th Intl. Conf. on Ionization Phenomena in Gases,
Paris, France, 8-13 Jul 63

KALMYKOV, A.A.; TIMOFEEV, A.D.; PANKRAT'YEV, Yu.I.; TERESHIN, V.I.;
VERESHCHAGIN, V.L.; ZLATOPOL'SKIY, L.A.

Method for measuring the energy and mass spectrum of the ion
component of a moving plasma. Prib. i tekhn. eksp. 8 no.5:142-
145 S-0 '63. (MIRA 16:12)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.

S/035/61/000/006/039/044
A001/A101

3.2100

AUTHOR: Pankrat'yev, Yu.N.

TITLE: "High-precision" spatial triangulation (Method of differentiated processes)

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 6, 1961, 19, abstract 6G165 ("Nauchn. zap. L'vovsk. politekhn. in-t. Ser. geod.", 1959, no. 5, 53 - 78)

TEXT: The author derives formulae for corrections of elements of mutual orientation of photographs at spatial triangulation with condition of side legs. Two methods are considered for adjustment of altitudes of the points on the basis of the formulae derived: analytical and optical-mechanical one; the latter is performed on a modernized topographical stereometer of CT4-2 (STD-2) type. The technological scheme of spatial triangulation and an example of calculations are presented. A formula is also derived for the expected accuracy in altitude positions of the points.

V. Orlov

[Abstracter's note: Complete translation]

Card 1/1

PANKRAT'YEV, Yu.N.; PUZANOV, B.S.; SERDYUKOV, V.M.; VIDUYEV,
N.G., doktor tekhn. nauk, prof., red.; KOTLYAROV,
Yu.L., red.

[Engineering photogrammetry] Inzhenernaia fotogrammetriia.
L'vov, Izd-vo L'vovskogo univ., 1964. 283 p.
(MIRA 18:2)

PANKRAT'YEV, Yu.N., inzh.; SERDYUKOV, V.M., inzh.

Use of the SD-1 stereograph for designing roads. Avt. dor. 27 no. 3:
15-16,18 Mr '64. (MIRA 17:5)

PANKRAT'YEV, Yu. N.

Pankrat'yev, Yu. N.

"Perfection of a differentiated method of spatial triangulation." Min Higher Education USSR. Moscow Inst of Engineers of Geodesy, Aerial Photography, and Cartography. Moscow, 1956. (Dissertation for the Degree of Candidate in Technical Sciences).

Knizhnaya letopis'
No. 25, 1956. Moscow

PANKRAT'YEV, Yu.N., kand.tekhn.nauk; SERDYUKOV, V.M., kand.tekhn.nauk

Using a stereo model for location surveying on the SID-2 stereometer by means of a stereo plotter. Trudy TSNIIIS no.49:104-137
'63. (MIRA 16:9)