On the use of the method of the ... S/141/63/006/001/010/018
E140/E135

crossed electric and magnetic fields. The method can also be used for the study of interactions in cavity resonators, for example, a homogeneous magnetoactive plasma in a cylindrical resonator.
There are 3 figures.

ASSOCIATION: Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete
(Scientific Research Institute of Radiophysics at Gor'kiy University)

SUBMITTED: May 17, 1962

Card 2/2

ACCESSION NR: AP4039725 S/0141/64/007/002/0251/0261

AUTHORS: Andronov, A. A.; Zheleznyakov, V. V.; Petelin, M. I.

TITLE: On the kinetic instability of a homogeneous magnetoactive plasma

SOURCE: IVUZ. Radiofizika, v. 7, no. 2, 1964, 251-261

TOPIC TAGS: plasma instability, magnetoactive plasma, plasma distribution, Boltzmann equation, plasma electron oscillation, plasma wave absorption

ABSTRACT: Results previously obtained by one of the authors (V. V. Zheleznyakov, IVUZ Radiofizika v. 4, 619, 1961) are generalized and used for an analysis of the kinetic instability of a homogeneous magnetoactive plasma with a specified momentum distribution function, in which the electromagnetic waves propagate at an arbitrary angle to the magnetic field. Unlike the case of longitudinal propagation

Card 1/2

ACCESSION NR: AP4043670 S/0109/64/009/008/1368/1373

AUTHOR: Gaponov, A. V.; Petelin, M. I.

TITLE: High-frequency instability of a curvilinear beam of electrons moving in a periodic static field

SOURCE: Radiotekhnika i elektronika, v. 9, no. 8, 1964, 1368-1373

TOPIC TAGS: electron beam, curvilinear electron beam, electron beam formation, SHF tube

ABSTRACT: The interaction (in a linear approximation) between a strongly accelerated thin electron beam focused by an arbitrary periodic electrostatic field and electromagnetic waves, in a cylindrical waveguide of arbitrary cross-section, is considered. The electron current is assumed to be so small that the normal mode $\vec{E}^* \simeq V_0\vec{E}^0(x, y)e^{i(\omega t - hz)}$ is close to the normal "cold" waveguide mode $\vec{E}^0 = \vec{E}^0(x, y)e^{i(\omega t - h_0 z)}$; $|h - h_0| \ll h_0$. The undisturbed motion of electrons in a static field is

Card 1/2

ACCESSION NR: AP4043670

represented by the superposition of a uniform longitudinal motion with a velocity v, a fast oscillating motion with a frequency $\Omega = 2\pi v/d$ (where d is the field period), and transverse drift oscillations due to the effective averaged field. It is proven that, with a resonance interaction between the electromagnetic wave and the electron beam, at combination harmonics of fast and drift oscillations, the h-f field increases along the waveguide. As the motion of strongly accelerated electrons in a periodic electrostatic field is similar to the motion of electrons in a slightly nonuniform h-f field, it is to be expected that the electron beam focused by an ω-frequency TW may prove unstable with respect to another wave whose frequency is a combination harmonic of ω and drift frequencies. Orig. art. has: 28 formulas.

ASSOCIATION: none

SUBMITTED: 18Mar63 ENCL: 00

SUB CODE: EC NO REF SOV: 006 OTHER: 003

Card 2/2

L 9951-65 EWT(l)/EWG(k)/EPA(sp)-2/EPA(w)-2/EEC(t)/T/EEC(b)-2/EWA(m)-2 Pz-6/
Pc-4/Pab-24/Pi-4 IJP(c)/AFWL/ESD(gs)/AFETR/SSD/ASD(a)-5/ESD(t)/RAEM(t)
ACCESSION NR: AP4045490 S/0109/64/009/009/1675/1679

AUTHOR: Gol'denberg, A. L.; Petelin, M. I. 13

TITLE: Focusing electron beams by periodic electro- and magnetostatic fields 21

SOURCE: Radiotekhnika i elektronika, v. 9, no. 9, 1964, 1675-1679

TOPIC TAGS: electron beam, electron beam focusing, electrostatic field, magnetostatic field

ABSTRACT: The focusing of a thin beam of electrons moving along a plane periodic trajectory under the influence of a 3-dimensional periodic electro- or magnetostatic field is theoretically considered. The problem of investigation of the stability of the periodic trajectory can be reduced to solving two of Hill's independent equations. A simple method is developed for qualitative evaluation of the maximum current which can be focused by the specified periodic field. The equations given in the article may be used for investigating electron beam-

Card 1/2

L 9951-65

ACCESSION NR: AP4045490

wave interactions, type ubitron electron-wave devices, and for synthesizing the sources of a static field which would ensure the stable motion of electrons over a specified periodic trajectory. Orig. art. has: 1 figure and 30 formulas.

ASSOCIATION: Gor'kovskiy gosudarstvenny*y universitet (Gor'kiy State University)

SUBMITTED: 10Jul63 DATE ACQ: 06 ENCL: 00

SUB CODE: EC NO REF SOV: 000 OTHER: 004

Card 2/2

L 13136-66 EWT(1)/EWA(h) SOURCE CODE: UR/0386/65/002/009/0430/0435

ACC NR: AP6000741

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

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

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 quasioptical 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 gyrofrequence (magnetic field H_0 = 3200 oe, λ = 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-

Card 1/2

L 13136-66
ACC NR: AP6000741

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.

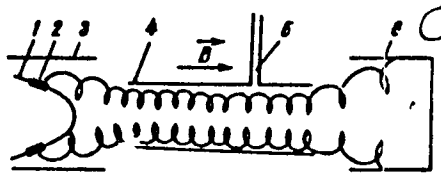


Fig. 1. Schematic diagram of oscillator using induced electron synchrotron radiation. 1 - Cathode, 2 - emitting surface, 3 - anode, 4 - resonator, 5 - high-frequency power output, 6 - collector, B - static magnetic field.

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

Card 2/2 MW

GAPONOV, A.V.; GOL'DENBERG, A.L.; GRIGOR'YEV, D.P.; ORLOVA, I.M.; PANKRATOVA, T.B.; PETELIN, M.I.

Induced synchrotron radiation of electrons in hollow resonators. Pis'. v red. Zhur. eksper. i teoret. fiz. 2 no.9:430-435 N '65. (MIRA 18:12)

1. Gor'kovskiy nauchno-issledovatel'skiy radiofizicheskiy institut. Submitted September 1965.

L 19447-65 SSD/SSD(c)/AFWL/ASD(a)-5/AFETR/RAEM(a)/ESD(gs)/ESD(t)

ACCESSION NR: AP4048883 S/0109/64/009/011/1987/1993

AUTHOR: Gol'denberg, A. L.; Petelin, M. I.

TITLE: Instability of periodic electron beams with respect to h-f electromagnetic disturbances

SOURCE: Radiotekhnika i elektronika, v. 9, no. 11, 1964, 1987-1993

TOPIC TAGS: electron beam, electron beam stability

ABSTRACT: The interaction is theoretically analyzed of electromagnetic waves with stationary periodic curvilinear electron beams which are focused by periodic static (electric or magnetic) fields. It is proven that a buildup of r-f oscillations in the beam is possible in such a system; the r-f field and, therefore, any deviation of electrons from the stationary path exponentially grow along the waveguide. Beam instability due to longitudinal, transverse, and combined bunchings (with respect to the stationary path) is investigated. "The authors wish to thank

Card 1/2

L 19447-65
ACCESSION NR: AP4048883

A. V. Gaponov for his constant attention to the work." Orig. art. has: 34 formulas.

ASSOCIATION: none

SUBMITTED: 10Jul63 ENCL: 00

SUB CODE: EC NO REF SOV: 007 OTHER: 002

Card 2/2

L 26975-65 EWT(1)/EPA(sp)-2/T/EEC(t)/EPR(w)-2/EWA(m)-2 Pg-6/Po-4/Pab-10/
Pi-4 IJP(c) AT
ACCESSION NR: AP5003258 S/0057/65/035/001/0168/0169

AUTHOR: Litvak, A.G./ Petelin, M.I./ Yakubovich, Ye.I. 21

TITLE: On ohmic heating of a partially ionized plasma by a uniform high-frequency field

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.1, 1965, 168-169

TOPIC TAGS: plasma, plasma heating, plasma temperature, steady state, weakly ionized plasma, fully ionized plasma

ABSTRACT: The heating of a three-component non-relativistic plasma (electrons, ions and atoms) by a high-frequency field is discussed briefly. The field is assumed directly to heat only the electrons. It is pointed out that a steady state is possible only when the concentration of neutral atoms greatly exceeds that of the charged particles and that in the steady state the electron temperature exceeds the ion temperature, which in turn exceeds the atom temperature. The energy loss by the neutral atoms, requisite for the existence of such a steady state, is not discussed nor do the equations presented contain a term describing it. The authors point out that the results of A.V.Gurevich (ZhETF 35,392,1958), who neglected collisions be-

Card 1/2

L 26975-65
ACCESSION NR: AP5003258

tween electrons and neutral particles and assumed that the ions and neutral particles had the same temperature, are valid only in a very narrow temperature interval. In a fully ionized plasma the sum of the electron and ion temperatures increases without limit, but their difference approaches a constant value.
Orig.art.has: 6 formulas and 2 figures.

ASSOCIATION: none

SUBMITTED: 08Jan64 ENCL: 00 SUB CODE:ME

NR REF SOV: 003 OTHER: 003

Card 2/3

L 27598-65 EWT(1)/EPA(sp)-2/EWA(w)-2/EEC(t)/T/EWA(m)-2 Pz-6/Po-4/Pab-10/Pi-4
IJP(c) AT
ACCESSION NR: AP5003243 S/0057/65/035/001/0108/0116

AUTHOR: Litvak, A.G./ Petelin, M.I./ Yakubovich, Ye.I. 21 53 40 B

TITLE: On the electron and ion distribution functions for a plasma in a slightly nonuniform high-frequency field

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.1, 1965, 108-116

TOPIC TAGS: plasma confinement, plasma heating, kinetic theory, high-frequency field

ABSTRACT: The electron and ion distribution functions for a completely ionized plasma confined in a high-frequency potential well are calculated with collisions taken into account. The thermal velocities are assumed to be small compared with the velocity of light. The kinetic equations are employed with collision integrals in the form given by L.D.Landau (ZhETF 7,203,1937). The equations of motion include the forces due to the applied high-frequency field and to the electric field arising from the average separation of charge. The coordinates and velocities of the particles are separated into oscillatory and "drift" components, and by suitably averaging over the former, kinetic equations are derived for the quasipar-

Card 1/2

L 27598-65

ACCESSION NR: AP5003243

2

ticles represented by the latter. These are solved on the assumptions that the number of particles in the body of the plasmoid is much greater than the number in the skin layer and that the mean free path of a particle greatly exceeds the dimensions of the region in which it is localized (the amplitude of the corresponding oscillatory component of the corresponding coordinate), and the distributions are found to be Maxwellian. The time variation of the ion and electron temperatures is calculated in the quasistationary approximation, and it is found that both ultimately increase with time, the electron temperature more rapidly than the ion temperature. The effects of loss of particles through the potential barrier and heating due to space dispersion are estimated in two appendices, and the H theorem is derived for particles described by Landau's collision integrals in a third. "The authors are deeply grateful to A.V.Gaponov and M.A.Miller for suggesting the work and for valuable advice." Orig.art.has: 41 formulas and 1 figure.

ASSOCIATION: none

SUBMITTED:08Jan64 ENCL: 00 SUB CODE: ME

NR REF SOV: 014 OTHER: 004

Card 2/2

PETELIN, P.V.

Baltic Scientific Research Institute of Maritime Fisheries and Oceanography. Biul. Okean kom. no.8:32-34 '61. (MIRA 15:1)
(Fisheries--Research)

PETELIN, S. M.

USSR/Medicine - Nervous System May/Jun 48
Medicine - Bath, Sulfur

"New Data on the Effects of Sulfur and Radon Baths in Pyatigorsk," S. M. Petelin, Cand Med Sci, Pyatigorsk Clinic, State Balneological Inst, 2 pp

"Nevropatol i Psikhiat" Vol XVII, No 3

Concludes that baths act on central nervous system by affecting defensive and regulative functions of hematoencephalic barrier.

14/49T71

PETELIN, S. M.

PETELIN, S. M. - "Clinical and Balneological Treatment of Postwar Traumata of the Peripheral Nerves of the Extremities." Sub 27 Jan 53, (No institute Given) (Dissertation for the Degree of Doctor in Medical Sciences).

SO: Vechernaya Moskva January-December 1952

KLIMENKO, M.M.; MALYSHEVA, L.N.; MIKHAYLENKO, G.V.; PETELIN, S.M.

Reflected symptoms as observed in patients with lumbosacral radiculitis during therapy at the Piatigorsk resort. Vop.kur. fizioter. i lech.fiz.kul't. 21 no.2:49-52 Ap-Je '56. (MLRA 9:9)

1. Iz nevrologicheskogo otdeleniya (zav. -- doktor meditsinskikh nauk S.M.Petelin) Bal'neologicheskogo instituta na Kavkazskikh mineral'nykh vodakh.
(SPINAL NERVE--DISEASES)
(PIATIGORSK--PHYSICAL THERAPY)

PETELIN, S.M

"Health-resort therapy for neural diseases" by N.S.Chetverikov. Reviewed by S.Petelin. Vop.kur., fizioter. i lech.fiz.kul't. 22 no.3:87-88 My-Je '57. (MIRA 11:1)
(NERVOUS SYSTEM--DISEASES)
(HEALTH RESORTS, WATERING PLACES, ETC.)
(CHETVERIKOV, N.S.)

SAVOSHCHENKO,I.S., dotsent, otv.red.; TSARFIS,P.G., starshiy nauchnyy sotrudnik, red.; VERBOV,A.F., starshiy nauchnyy sotrudnik, red.; VISHNEVSKIY,A.S., prof., red.; PETELIN,S.M., prof., red.; BARANOVSKAYA,L.V., tekhn.red.

[Current problems in balneotherapy; results of a meeting in honor of the 40th anniversary of the Soviet regime] Aktual'nye voprosy bal'neoterapii; itogi nauchnoi sessii, posviashchennoi 40-letiiu Sovetskoi vlasti. Stavropol' na Kavkaze, Izd-vo gazety "Stavropol'skaia pravda," 1959. 174 p. (MIRA 14:5)

1. Pyatigorsk. Pyatigorskiy gosudarstvennyy nauchno-issledovatel'skiy bal'neologicheskiy institut.
(HYDROTHERAPY)

PETELIN, S.M.

Influence of health resort treatment on patients with lumbosacral radiculoneuritis viewed in its electrophysiological aspect. Vop. kur., fizioter. i lech. fiz. kul't. 25 no.2:126-131 Mr-Ap '60. (MIRA 13:9)

1. Iz Bal'neologicheskogo instituta na Kavkazskikh Mineral'nykh Vodakh (dir. - dotsent I.S. Savoshchenko).

(ELECTROPHYSIOLOGY) (NERVES, SPINAL--DISEASES)

PETELIN, Sergey Mikhaylovich; DUBYNINA, Ye.I., red.; ZUYEVA, N.K., tekhn. red.

[Spa treatment of infectious lumbosacral radiculoneuritis] Infektsionnyi poiasnichno-kresttsovyi radikulonevrit i lechenie ego na jurorte. Moskva, Medgiz, 1961. 149 p.
(NEURITIS, MULTIPLE) (MIRA 15:3)

SHEYNBERG, O.A.; PETELIN, S.M.

"Exercise therapy in the clinical aspects of nervous diseases" by V.N.Moshkov. Reviewed by O.A.Sheinberg, S.M.Petelin. Vop. kur., fizioter. i lech. fiz. kul't. 26 no.1:83-84 '61. (MIRA 14:5)
(EXERCISE THERAPY) (NERVOUS SYSTEM--DISEASES)
(MOSHKOV, V.N.)

PETELIN, S.M., prof. (Pyatigorsk)

Infectious lumbosacral radiculoneuritis and its treatment at a health resort. Med. sestra 21 no.5:24-31 My '62. (MIRA 15:5)
(PYATIGORSK--HEALTH RESORTS, WATERING PLACES, ETC.)
(NERVES, SPINAL--DISEASES)

PETELIN, S.M., prof.; VOLKOVA, O.Yu., prof.; VISHNEVSKIY, A.S., prof.; PISLEGIN, A.K., prof.; KAMENSKIY, Ye.A., kand.med.nauk; MOLCHANOV, S.N., kand.med.nauk; PAPKOV, B.N., kand.med.nauk; ZASORINA, T.A., kand.med.nauk

In memory of Professor Aleksandr Aleksandrovich Lozinskii; obituar'. Vop.kur., fizioter.i lech.fiz.kul't. 27 no.2:188-189 Mr-Ap '62. (MIRA 15:11)

(LOZINSKII, ALEKSANDR ALEKSANDROVICH, 1868-1961)

VISHNEVSKIY, A. S., prof., red. Prinimali uchastiye: PETELIN, S. M., POZDEYEV, V. G., RUBINSKIY, S. ., TUROVEROV, K. K., MANIKOV, M. Ye., red.

[Basic principles and methodologies of climatotherapy] Osnovnye printsipy i metodiki klimatolecheniia. 196?, 4?2 p. (MIRA 18:12)

68030

SOV/155-58-6-32/36

~~9(1)~~ 9.1200

AUTHORS: Brandt, A.A., Pashin, Yu.N., Petelin, V.G.

TITLE: Investigation of the Focusing Properties of a Zone Antenna in the Range of Microwaves

PERIODICAL: Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskiye nauki, 1958, Nr 6, pp 201-207 (USSR)

ABSTRACT: In the paper the authors report on the results of an experimental investigation of the focusing properties of a zone or diffraction antenna. The antenna is produced of metallic as well as of dielectric zones which are calculated on the basis of the laws of geometric optics. The investigations were carried out with the wave length of 3 cm and show that the considered antenna possesses good focusing properties and can be applied for practical purposes. Contrary to the parabolic antenna the zone antenna has a selective effect; in its focus it concentrates the monochromatic component of the "white" radiation falling upon it.

Card 1/2

68030

Investigation of the Focusing Properties of a Zone Antenna in the Range of Microwaves SOV/155-58-6-32/36

There are 6 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvenny universitet imeni M.V. Lomonosova (Moscow State University imeni M.V. Lomonosov)

SUBMITTED: September 28, 1958

Card 2/2

FOTYEV, A. V., PETELIN V. P.

USSR (600)

Pollen, Fossil.

New gravity solution for spore-pollen and diatome analyses. Biul. MOIP. Otd. Geol. 27 no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952, UNCLASSIFIED.

PETELIN, V. P.

Discovery of authigenic glauconite in contemporary sediments. V. P. Petelin. *Byull. Moskov. Obshchestva Ispytatel. Prirody, Otdel Geol.* 27, No. 3, 89–90(1952).—A note describing the discovery of authigenic glauconite in the sediments of the Okhotsk Sea. The sample studied was taken from a depth of 160 m. near a volcanic island. A mineralogical analysis of the sample showed its components to be volcanic glass, pyroxene, plagioclase, organogenic calcite, organogenic opal, and glauconite. The largest quantity of the glauconite was of the 0.1–0.25-mm. fraction. Grains are of micro-aggregate structure. Av. n is 1.603–1.605, sp. gr. is 2.71–2.72, and hardness is 2–3. Some peculiarities of this glauconite, in comparison with other contemporary glauconites are the small contents of K_2O and Al_2O_3 and the increase in the contents of FeO and CaO. The increased content of CaO, however, might be the result of a mech. mixt. of $CaCO_3$ blocked in fissures of the grains. The structure of the mineral is extremely close to that of nontronite.

Gladys S. Macy

LISITSYN, A.P.; PETELIN, V.P.; UDINTSEV, G.B.

Current methods of obtaining long core samples of marine deposits (author's summary). Biul.MOIP. Otd.geol. 28 no.1:91-92 '53. (MLRA 6:11)
(Boring)

LISITSYN, A.P.; PETELIN, V.P.

Recent carbonate deposits in cold water seas (author's summary). Biul.MOIP. Otd.geol. 28 no.2:82-83 '53. (MLRA 6:11)

(Carbonates (Mineralogy))

PETELIN, V.P.

Discovery of authigenous glauconite in recent marine deposits.
Trudy Inst.okean. 8:220-228 '54. (MLRA 7:11)
(Glauconite)

PETELIN, V.P.

Recent marine deposits of silicious sponges. Biul.MOIP. Otd.geol. 29 no.1:67-70 Ja-F '54. (MLRA 7:4)
(Deep-sea deposits) (Sponges)

PETELIN, V. P.

USSR/ Geology - Oceanology

Card : 1/1

Authors : Lisitsyn, A. P., Petelin, V. P., and Udintsev, G. B.

Title : New achievements of Soviet Sea geology

Periodical : Priroda, 43, 6, 63 - 66, June 1954

Abstract : Brief excerpts are given on the work of the Institute of Oceanology of the Academy of Sciences USSR and the difficulties involved in studying the geological history of the sea and ocean bottoms. Illustrations.

Institution : Acad. of Sc. USSR, Institute of Oceanology

Submitted : ....

PETELIN, V.P.

Division of the Sea of Okhotsk into mineralogical districts.
Trudy Inst.okean.no.13:30-39 '55. (MLRA 8:11)
(Okhotsk, Sea of --Mineralogy, Determinative)

PETELIN,V.P.

Occurrence of minerals (except argillaceous minerals) in deposits of the Sea of Okhotsk. Biul.MOIP. Otd.geol.30 no.4:114-115 Jl-Ag'55. (MLRA 8:12)
(Okhotsk, Sea of--Mineralogy) (Okhotsk, Sea of--Ocean bottom)

PETELIN, V.P.

LISITSYN, A.P.; PETELIN, V.P.

Method for preliminary treatment of ocean bottom samples on board ships. Trudy Inst.okean. 19:240-251 '56. (MLRA 10:2)

(Ocean bottom) (Borings)

PETELIN, V.P.

Laboratory concentrator of sand and silt fractions. Trudy Inst.okean. 19:288-290 '56. (MIRA 10:2)

(Ocean bottom) (Oceanographic research)

PETELIN, V.P.; FOTIYEV, A.V.

Harmless gravity solutions for laboratory geological work.
Trudy Inst.okean. 19:291-293 '56. (MLRA 10:2)

(Chemistry, Analytical--Quantitative)

PETELIN, V.P.

Rapid method for determining the median and quartiles. Biul.MOIP.Otd. geol.31 no.1:95-97 Ja-F '56 (MLRA 9:7)
(Geology--Statistics)

ZENKEVICH, N.L. (Moskva); PETELIN, V.P., kandidat geograficheskikh nauk (Moskva).

Photography of the ocean bottom. Priroda 45 no.6:95-99 Je '56. (MLRA 9:8)

1. Institut okeanologii Akademii nauk SSSR.
(Ocean bottom) (Photography, Submarine)

AUTHOR: None given

TITLE: Chronicle of the Sedimentary Rocks Section (Khronika sektsii osadochnykh porod)

5-3-13/37

PERIODICAL: Byulleten' Moskovskogo Obshchestva Ispytateley Prirody, Otdel Geologicheskiy, 1957, No 3, p 159 (USSR)

ABSTRACT: On 22 January 1957, at a meeting of the Sedimentary Rock Section of the Moscow Society of Naturalists, M.S. Shvetsov, Chairman of the Section, reported on the section's activity. Then the members of the bureau of the Section were re-elected: G.I. Bushinskiy, Yu.K. Goretskiy, V.P. Petelin, S.V. Tikhomirov and M.S. Shvetsov. The following reports were delivered in the Section during the duration of the meeting from 22 January to 22 February 1957: A.G. Kossovskaya, N.V. Logvinenko and V.D. Shutov on "Formation Stages of Sedimentary Terrigenous Rocks"; V.V. Dobrovol'skiy on "Mineralogy of Quaternary Sediment Hypergenesis", and V.P. Petelin on "Sedimentation Activity of Suspension Currents".

AVAILABLE: Library of Congress

Card 1/1

PETELIN, V.P.

Mineralogy of sand-aleurite fractions in the sediments of the Sea of Okhotsk. Trudy Inst. okean. 22:77-138 '57. (MIRA 11:3)
(Okhotsk, Sea of--Silt)

PETELIN, V. P.

BURKOV, V.A.; PETELIN, V.P.

Experience in conducting complex oceanographic work in regions of great depth. Trudy Inst. okean. 25:3-6 '57. (MIRA 11:2)
(Deep-sea deposits)

PETELIN, V.P.

Simplified method for calculating the granulometric coefficients of bottom sediments. Biul. Okean. kom. no.1:52-59 '58.
(MIRA 11:9)

1. Institut okeanologii AN SSSR.
(Sedimentation analysis)

KUDINOV, Ye.I.; PETELIN, V.P.

Equipment and methods used in taking samples of bottom sediments and their primary processing. Biul.Okean.kom. no.2:34-30 '58. (MIRA 12:5)

(Deep-sea deposits)

SOV-5-58-2-7/43

AUTHOR: Petelin, V.P., Ostroumov, E.A.

TITLE: Some Peculiarities in the Distribution of Iron in the Sediments of the Sea of Okhotsk (O nekotorykh osobennostyakh raspredeleniya zheleza v osadkakh Okhotskogo morya)

PERIODICAL: Byulleten' Moskovskogo obshchestva ispytateley prirody - Otdel geologicheskiy, 1958, Nr 2, pp 93-102 (USSR)

ABSTRACT: The research work done during 1949-1953 by an expedition on the ship "Vityaz'" has proved that a special character can be noted in the distribution of the Okhotsk Sea deposits in contrast to other seas. The author of this article based his research on the studies of P.L. Bezrukov and G.B Udintsev. He established that the greatest concentration of iron (on the average 5 %) can be observed in the sandy sediments in regions adjoining the Kurile Islands and Kamchatka (Figures 1 and 2); the maximum percentage, about 11 11 %, has been found in the Fourth Kurile Strait (Figure 1). He quotes various Soviet scientists who have made studies in this field, such as A.N. Zavaritskiy, V.I. Vlodavets, Yu V Liverovskiy and N.M. Strakhov, and arrives at the conclusion that the basic mass of iron gets into the Okhotsk Sea sediments together with clastic material consisting, on the one

Card 1/2

Some Peculiarities in the Distribution of Iron in the Sediments of the Sea of Okhotsk

hand of erosion products of the dry land, and on the other hand of products of recent volcanic activity. The concentration of the main iron-containing minerals in the settling clastic material, and the distribution of these minerals according to the granulometric spectrum determines the character of the iron distribution in the sediments of the Okhotsk Sea. Therefore, as far as the distribution is concerned, the Okhotsk Sea can be regarded as a special type of sea basin - a basin with maximum Clark-type concentrations of iron in the coastal zones.
There are 4 maps, 1 table and 31 references, 30 of which are Soviet and 1 German.

1. Sea of Okhotsk--Properties 2. Sedimentation 3. Iron--Distribution 4. Iron--Sources

Card 2/2

BEZRUKOV, P. L. and DeTELLE, L. F.

"Sediments of the Western Pacific Trenches."
Report xxx to be submitted for the Intl. Oceanographic Congr. [illegible],
31 Aug - 11 Sep 1959.

(Inst. of Oceanology, Moscow)

PETELIN, V.P.

Oceanographic investigations in the northwestern part of the Pacific Ocean, April-June 1955. Trudy Inst.okean. 16: 98-132 '59. (MIRA 13:3)
(Pacific Ocean--Oceanographic research)

PETELIN, V.P.

Bottom sediments in Kronotskiy Gulf. Trudy Inst.okean. 36: 21-31 '59. (MIRA 15:4)
(Kronotskiy Gulf--Deep-sea deposits)

3(9)

AUTHORS: Zhuze, A. P., Petelin, V. P., Udintsev, G. B. SOV/20-124-6-33/55

TITLE: The Problem of the Origin of Diatomaceous Oozes Containing Ethmodiscus rex (Wall.) Hendey
(K voprosu o proiskhozhdenii diatomovykh ilov s Ethmodiscus rex (Wall.) Hendey)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 6, pp 1301-1304 (USSR)

ABSTRACT: Bottom sediments occur in the tropical zone of the ocean which consist almost entirely of shells of the diatoms mentioned in the title. Their thickness attains 5-7 m in depressions. The portion of other organic remains in these oozes is very insignificant. Since E. rex rarely occurs in tropical plankton, the problem of the origin of these oozes is broached. E. rex is a Recent oceanic species of the tropical zone of the ocean and occurs, for example, along the Californian coast the entire year where the warm Californian current flows by (Ref 10); further, in the western part of the Pacific up to 42° north latitude, and finally in the Indian Ocean (Ref 5). This is

Card 1/3

practically all that is known about the distribution of E. rex in the world oceans. Figure 1 shows a summary of the distribution of Ethmodiscus oozes. Various hypotheses were made concerning the cause of the rarity of these diatoms: a. the oozes are redeposited and are of Tertiary origin (Ref 11). b. the sudden and therefore very short development of E. rex (Ref 12). c. the durability of the shells of these diatoms. Particles with special properties are deposited in narrowly limited areas by complicated relations between the currents, the relief of the ocean floor, and the size and shape of the sedimentary particles (Ref 8). The authors would like to divide the problem into two parts: A. the reason for the large proportion of shells of E. rex in sedimentation in comparison with other diatoms. B. the irregular distribution of the oozes mentioned on the ocean floor. They answer these questions in the following manner: A. the shell of E. rex is much larger (300 - 1800 μ) than the shells of other tropical diatoms, is better preserved, and is supplied in large quantities by this species which lives the entire year. The authors reject the hypothesis that these oozes are redeposited. Further examples

 of the lack of agreement of the role of diatoms in plankton

The Problem of the Origin of Diatomaceous Oozes Containing Ethmodiscus rex (Wall.) Hendey

SOV/20-124-6-33/55

and sediment could be cited. B. The shell size of E. rex is also of significance in answering this question. Such large particles have a high suspensionability in sea water, sink only slowly to the bottom, and therefore react especially easily to the slightest water movements in the sediment near the floor. This must lead to a predominant downward washing of the Ethmodiscus shells by basal elevations into the depressions. The material collected during the 25th voyage of the "Vityaz'" expedition ship in the Philippine Trench of the Pacific has fully confirmed the above considerations of the authors. Consequently they arrive at the conclusion that the thick accumulations of pure Ethmodiscus ooze in the Pacific are of Recent origin. There are 1 figure and 13 references, 2 of which are Soviet.

ASSOCIATION: Institut okeanologii Akademii nauk SSSR
(Institute of Oceanography of the Academy of Sciences, USSR)

PRESENTED: October 6, 1958, by N. M. Strakhov, Academician

SUBMITTED: October 2, 1958

Card 3/3

PETELIN, V.P., SYSOYEV, N.N.

Third and fourth cruises of the "Vitiaz" under the program of the International Geophysical Year. Mezhdunar. geofiz. god no.8:47-59 '60. (MIRA 13:6)
(Pacific Ocean--Oceanographic research)

BOGOROV, V.G.; DOBROVOL'SKIY, A.D.; PETELIN, V.P.; SERGEYEV, I.V.

First expeditions of the "Vitiaz'" under the program of the International Geophysical Year (cruises 25, 26, and 27). Trudy Inst.okean. 40:3-22 '60. (MIRA 14:8)
(Pacific Ocean--Oceanographic research)

BEZRUKOV, P.L.; PETELIN, V.P.

Manual for the collection and preliminary processing of marine sediment samples. Trudy Inst. okean. 44:81-111 '60.
(MIRA 14:2)

(Deep-sea deposits)

SAIDOVA, Khadyzhat Magommetovna; PETELIN, V.P., otv. red.; KOTLYAREVSKAYA, P.S., red. izd-va; KASHINA, P.S., tekhn. red.; POLYAKOVA, T.V., tekhn. red.

[Foraminiferal ecology and paleogeography of seas of the Soviet Far East and the northwestern part of the Pacific] Ekologiia foraminifer i paleogeografiia dal'nevostochnykh morei SSSR i severo-zapadnoi chasti Tikhogo okeana. Moskva, Izd-vo Akad.nauk SSSR, 1961. 231 p. illus.
(MIRA 15:2)

(Far East--Foraminifera) (Far East--Paleogeography)

PETELIN, V. P.

Papers submitted for the 10th Pacific Science Congress, Honolulu, Hawaii 21 Aug-6 Sep 1961.

FEIELIN V. P.

Papers submitted for the 10th Pacfic Science Congress, Honolulu, Hawaii 21 Aug-6 Sep 1961.

NAGIBINA, M. S., Institute of Geology - "Mesozoic depressions and troughs of east Asiatic type and their position in the systematics of tectonic forms" (Section VII.C)

NELEPO, B. A., Moscow State University, Physical Faculty - "The gamma-ray spectrometric measurements of artificial radioactivity in upper layers of the ocean" (Section VII.B.6)

NESTEROV, V. G., Chair of Forestry, The Agricultural Academy imeni K. A. Timiryazev - "Forest fire research and methods of fire control" (Section V.3)

OSTROUMOVA, T. A., Institute of Oceanology - "Biogeographical and morphological analysis of reproduction and development of flatfish in the seas of the northwest Pacific" (Section III.C)

OZMIDOV, R. V., Institute of Oceanology - "Investigation of the horizontal turbulent exchange in the Pacific Ocean" (Section VII.3)

PARIN, N. V., Institute of Oceanology - "Regularities in the geographical distribution of flying fishes in the Pacific Ocean" (Section VII.C)

PERGAMENT, M. A., Institute of Geology - "Stratigraphic horizons in the cretaceous deposits of Kamchatka" (Section VII.C)

PEVZLIN, V. P., Institute of Oceanology - "The processes of recent sedimentation in the western part of the equatorial zone in the Pacific" (Section VII.C.1)

PETRUSHEVSKIY, B. A., Institute of Earth Physics imeni O. Yu. Schmidt - "The seismic geological conditions in the northwestern outlying area of the Pacific basin" (Section VII.C.2)

PONOMAREVA, L. A., Institute of Oceanology - "Euphausiidae in the northern part of the Pacific" (Section III.C)

PORTENKO, L. A., Institute of Zoology - "The problem of the Bering land bridge from the zoological point of view" (Section III.A.5.a)

PUSHCHAROVSKIY, Yu. M., Institute of Geology - "Some specific features in the tectonics of the north part of the Pacific belt" (Section VII.C)

PYRKIN, Yu. G., Moscow State University, Physical Faculty - "A new deep-sea device for recording currents ("HGU")" (Section VII.B.5)

RADKEVICH, Ye. A., Institute of Geology - "On the stability and inheritance of structural elements in the frame of the Pacific Ocean depression" (Section VII.C)

RASS, T. S., OSTROUMOVA, T. A., and GORBUNOVA, N. N., Institute of Oceanology - "Geographical regularities in regard to reproduction and development of ease fishes in the northern part of the Pacific" (Section III.C)

ROMANKEVICH, Ye. A., Institute of Oceanology - "Organic substance in bottom sediments in the western part of the Pacific" (Section VII.C.1)

RUDICH, Ye. M., Institute of Earth Physics imeni O. Yu. Schmidt - "Relations between deep focus earthquakes in the eastern margin of Asia and large structures of the earth crust" (Section VII.C.2)

RYABCHIKOV, A. M., Moscow State University, Geographical Faculty - "The structure of natural zonatic in east Asia" (Section VI.C)

RYKUNOV, L. N., Moscow State University, Physical Faculty, Chair of Hard Crust - "The correlative method for studying microseisms" (Section VII.C.2)

SAYDOVA, Kh. M., Institute of Oceanology - "The distribution of bottom line Foraminifera in the northern part of the Pacific and its use for the reshaping of the paleorelief" (Section VII.C.1)

SAMOYLENKO, V. S., Institute of Oceanology - "Problems concerned with the theory of formation of the temperature regime in seas and oceans" (Section VII.A)

SEMINA, G. I., Institute of Oceanology - "Biogeographical zonation of the Pacific Ocean in regard to phytoplankton" (Section III.A)

SEROVA, M. Ya., Institute of Geology - "Paleogene Foraminifera of Kamchatka" (Section VII.C)

SAVILOV A I

SAVILEV, A. Y., Institute of Oceanology - "Velella and Physalia in the pleiston of the Pacific" (Section III.C)

SHEYNMAN, Yu. M., Institute of Earth Physics imeni O. Yu. Schmidt - "Mechanism of ocean-magmas (?) origin" (Section VII.C.2)

SHOSHIN, A. A., The Central Organization of Leningrad - "The main problems of human illness geography and their significance for prophylactic medicine" (Section VII.B.4)

SHUMSKIY, P. A., Institute of Permafrost Studies - "Glaciology of Antarctica" (Section VII.D.1)

SYSOYEV, N. N., Institute of Oceanology - "Methods for measuring deep currents in the ocean and some results of their application in the Pacific Ocean" (Section VII.B.5)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012402

S/169/62/000/010/051/071
D228/D307

AUTHORS: Petelin, V.P. and Ostroumov, E.A.

TITLE: Geochemistry of the bottom sediments of the Sea of Okhotsk

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 10, 1962, 7, abstract 10V57 (In collection: Sovrem. osadki morey i okeanov, M., AN SSSR, 1961, 380-403)

TEXT: Research results, based on the data of expeditions of the Institut okeanologii AN SSSR (Institute of Oceanology, AS USSR) in 1949-1953, are generalized. The chemical composition of the sediments is described, and the nature and the distribution patterns of a number of elements are established, as are their interrelation and ways of entry into the sea. The complex of chemical elements and compounds under consideration includes Fe, Ti, V, J, Mn, Mo and P, most of which enter the sea with the products of denudation and volcanism; and also $CaCO_3$, amorphous SiO_2, organic C, sulfidic S, and H_2S, the origin and formation of which is related

Card 1/2

Geochemistry of the bottom ... S/169/62/000/010/051/071
D228/D307

to biogenic processes in seawater and in the upper sediment layer. The sediment distribution features and peculiarities characteristic of the Sea of Okhotsk are exposed.
[Abstracter's note: Complete translation]

Card 2/2

PETELIN, V.P.

Selecting the method for mineralogical analysis of sand and silt fractions of marine bottom sediments. Trudy Inst. okean. 50:170-183 '61. (MIRA 15:1)
(Sediments (Geology)--Analysis)

PETELIN, V.P.

Second Mediterranean oceanographic expedition of the research ship "Akademik S.Vavilov." Okeanologiia 1 no.3:549-553 '61.
(MIRA 16:11)

PETELIN, V.P.; ALEKSINA, I.A.

Selecting the method for aquatic mechanical analysis of marine bottom sediments. Okeanologiia 1 no.4:717-733 '61. (MIRA 14:11)
(Deep-sea deposits--Analysis)

BEZRUKOV, P.L.; PETELIN, V.P.

Bottom sediments of deep-sea trenches in the western part of the Pacific Ocean. Trudy Okean kom. 10 no.3:66-69 '62. (MIRA 15:3)

(Pacific Ocean--Deep-sea deposits)

PETELIN, V.P.; SKORNYAKOVA, N.S.; ROMANKEVICH, E.A.; BEZRUKOV, P.L.; LISITSYN, A.P.;

Map of the Pacific Ocean Sediments

Report submitted for the 13th General Assembly, IUGG, (Oceanography), Berkeley, California, 19-31 Aug 63.

PETELIN, V. P. ALEKSINA, I. A.

Mineralogical Provinces of the Pacific Ocean

report submitted for the 13th General Assembly, IUGG (Oceanography), Berkeley, California, 19-31 Aug 63

PETELIN, V.P.

Accelerating and improving the quality of the mechanical analysis of an aqueous suspension of marine bottom sediments. Okeanologiia 3 no.6:1099-1105 '63. (MIRA 17:4)

1. Institut okeanologii AN SSSR.

KOZLOVA, Ol'ga Georgiyevna; LISITSYN, A.P., otv. red.; PETELIN, V.P., red.

[Diatoms in the Indian and Pacific sectors of the Antarctic] Diatomovye vodorosli Indiiskogo i Tikhookeanskogo sektorov Antarktiki. Moskva, Izd-vo "Nauka," 1964. 167 p. (MIRA 17:6)

AKSENOV, A.A.; PETELIN, V.P.

Distribution of heavy minerals in the Black Sea. Geologiia i
4 no.2:295-299 '64. (MIRA 17:6

1. Institut okeanologii AN SSSR.

PETEL IN, V.P.

Increasing the quality of particle-size analysis of marine bottom sediments. Okeanologiia 4 no.4:695-698 '64. (MIRA [illegible])

PETELIN, V.P.

Characteristics of the formation of the mineral composition of sandy-silt fractions in the bottom sediments of the Pacific Ocean. Lit. i pol. iskop. no.4:59-71 Jl-Ag '65. (MIRA 18:9)

1. Institut okeanologii AN SSSR, Moskva.

PETELIN, V.P.

Basic type [illegible] concentrates of heavy minerals [illegible] Pacific Ocean basin. Okeanologiia 4 no.6:1052-1058 '64.
(MIRA 18:2)

1. Institut okeanologii AN SSSR.

I 22485-66 EWT(1)/ECG/ EWA(h) GW
ACC NR: AP6007655 (N) SOURCE CODE: UR/0213/66/006/001/0172/0175

AUTHOR: Petelin, V. P.

ORG: none

20
B

TITLE: Thirty-seventh voyage of the expeditionary vessel Vityaz'. (Central part of the Pacific Ocean)

SOURCE: Okeanologiya, v. 6, no. 1, 1966, 172-175

TOPIC TAGS: oceanographic expedition, solar eclipse, ocean current

ABSTRACT: Observations of a solar eclipse on 30 May 1965, the turbulent regime of the lowest atmospheric layer, of the surface and active oceanic layer and its spectra, seismic parameters (using seismic methods) for determining the bottom formation thickness and oceanic structure of the earth's crust and other oceanographic studies made during the Vityaz' voyage to an atoll in the southern group of the Cook Islands are described. The data show sea bottom elevations of 100 to 500 m and 0.5 to 5.0 miles in width in the southern depression of the Pacific ocean; the existence of underwater mountains in the northwestern, central and southern depressions and the existence of two underwater mountains between Samoa and the Cook Islands at depths ranging from 1368 to 3919 m. It was found that the critical depth for the carbonate deposits in the southern depression of the pacific ocean is 4500 m. The maximum concentrations

Card 1/2 UDC: 551.46.07(265/266)

L 22485-66

ACC NR: AP6007655

of iron-manganese concretions (25-35 km) are in the southern depression. The thickness of bottom deposits near the southern group of the Cook Islands reaches 1000 m, and is 300 to 1000 m in the southern and northern tradewind currents. It is estimated that the daily deposition in the Samoa-Cook Islands profile is from 0.160 to 1.028 $\cdot 10^{-3}$ gr/m^3. Orig. art. has: 1 figure.

SUB CODE: 08/ SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 000

Card 2/2 BK

PETELINA, A.L.; ARTYUKHOVA, S.A.

Developing the technique and recipes for the production of new preserve types from frozen rosefish. Trudy BaltNIRO no.7:185-192 '61. (MIRA 15:2)

(Kaliningrad--Fish, Canned) (Rosefish)

PETKLINA, A.M., inzh.

Using governors without feedback for oil-turbine pumps and steam-turbine packings. [Trudy] LMZ no.5:90-97 '57. (MIRA 11:6)
(Governors (Steam engine))

8(6), 14(6)

SOV/113-59-4-6583

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 4, p 78 (USSR)

AUTHOR: Petelina, A. M.

TITLE: Use of No-Feedback Regulators on an Oil Turbopump and on a Steam-Turbine Packing

PERIODICAL: Tr. Leningr. metallich. z-da, 1957, Nr 5, pp 90-97

ABSTRACT: The general operating principle and construction of a steam-oil regulator without feedback are considered. The regulator is intended for automatically starting an oil turbopump on oil-pressure drop in the regulation system. Two no-feedback pressure regulators are considered; one is intended for maintaining steam pressure in the packing chambers of a turbine unit constant; the other is intended for controlling the ejector of a packing-gland heater which sucks the steam-air mixture out of the external packings of the turbine. Results of testing the regulators at a plant stand and at a powerhouse are reported.

I. I. G.

Card 1/1

Petelina, A.M.

USSR/Soil Science - Genesis and Geography of Soil -2

Abs Jour : Ref Zhur - Biol., No 3, 1958, [illegible]

Author : Petelina, A.M.

Inst : Soil Science Institute of the Academy of Science KazSSR

Title : Characteristics of Soil Formation on the Caspian Sands.

Orig Pub : Tr. In-ta pochvoved. Akad Nauk KazSSR, 1956, 4, 146-19[illegible]

Abstract : This is a description of the characteristics of soil formation on the Northern Caspian sands and also of the soil formations most widely spread in this region -- sands with traces of soil and also fully develcped soils. The following soils are found in this latter group: gray-brown sandy soils, sandy loams, argillacecus soils, meadow-gray-brown friable sandy soils, alluvial meadow marshsoils, peat-marsh soils, and salt-marsh waste /sorovyye/ soils. The formation of the soils is discussed in connection with

Card 1/2

Card 2/2

TETELINA, A. M., SOKOLOV, A. A.

Soils - Caspian Depression

Soils of the Caspian Lowland, Pochvovedenie, No. 1, 1952.

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

PETELINA, A. M.

Petelina, A. M., Engineer. Application of Controllers Without Feedback for Oil Turbine Pump and Steam Turbine Seals page 90

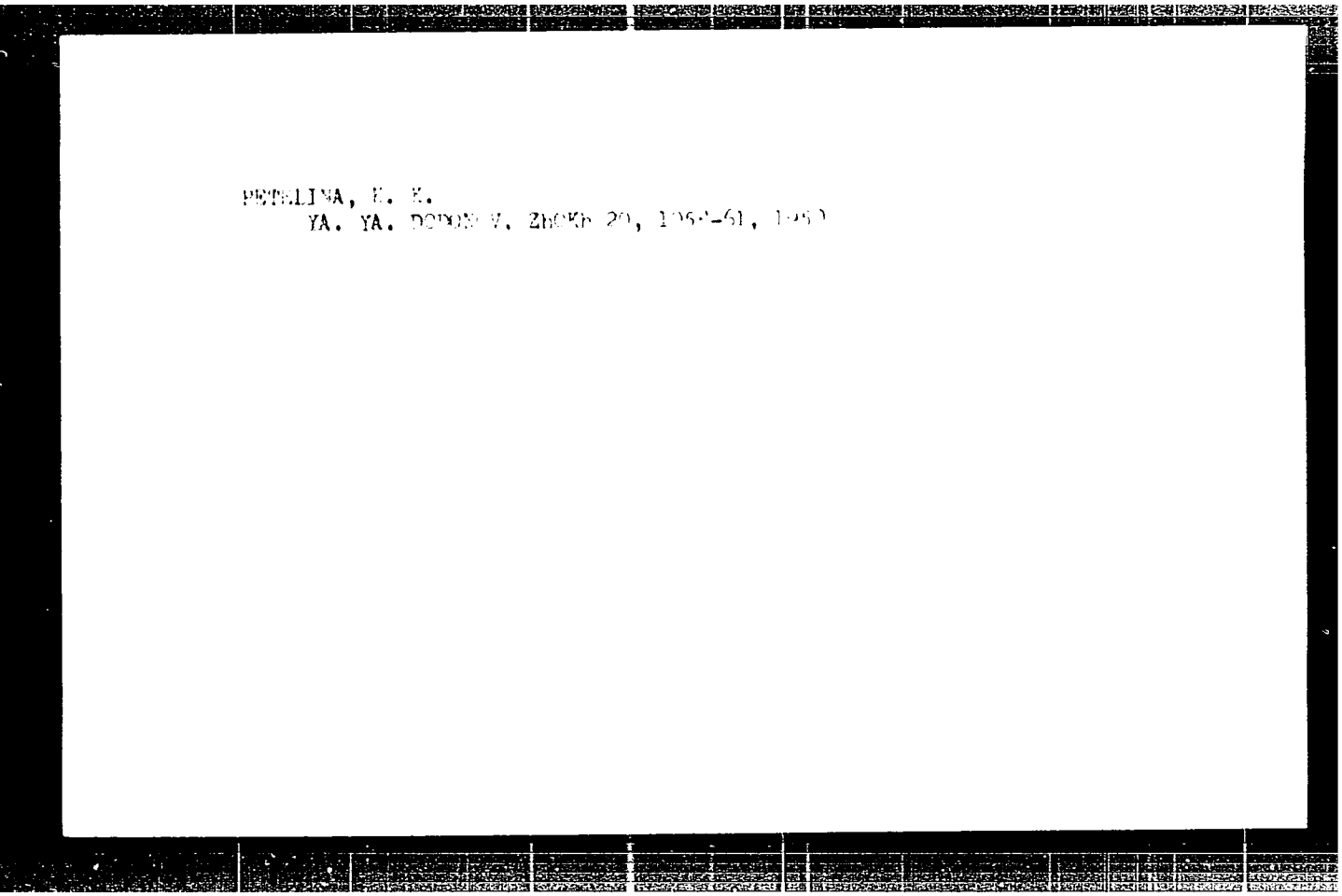
In this article the author presents results of testing an experimental steam and oil regulator used in the steam turbine installations. The author concludes that the regulator developed for automatic start-up of turbine oil pump and control of steam flow through turbine seals has been found to be satisfactory and reliable under various operating conditions. The article contains schematic diagrams and descriptions of the regulator.

Steam and Gas Turbine Construction, Moscow Mashgiz, 1957, 351 pp.

PETELINA, K. K.

Ya. Ya. Dodonov, N. K. Pado, K. K. Petelina, and N. M. Petrova - "Synthesis of the racemic oxides of N-propyl- and N-isopropyltetrahydroquinoline." (p. 1058)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1950, Vol. 20, No. 6.



PETELINA, E. K.
YA. YA. [illegible] V. ZHURN. 20, 1951-61, 1951

KARASEVA, Ye.V.; PETELINA, L.P.; GERMAN, A.L.

Studying natural foci of leptospirosis in Akmolinsk Province.
Biul.MOIP.Otd.biol. 61 no.6:123 N-D '56. (MIRA 10:8)
(AKMOLINSK PROVINCE--RODENTS AS CARRIERS OF DISEASE)
(LEPTOSPIROSIS)

GRINEVICH, G.A.; GARTSMAN, L.B.; RAKHIMOV, Kh.; PETELINA, N.A.; FAZYLOV, Kh.F., akademik, otv. red.; SHAFEYEVA, K.A., red.; SOKOLOVA, A.A., red.; KARABAYEVA, Kh.U., tekhn. red.

[Study of the characteristics of regenerative power sources; wind, water, and solar energy] Issledovaniia kharakteristik rezhima vozobnovliaiushchikhsia istochnikov energii vody, vetra i solntsa. Tashkent, 1963. 205 p. (MIRA 16:8)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut energetiki i avtomatiki. 2. AN UzSSR (for Fazylov).
(Power resources)

S/169/62/000/007/119/149
D228/D307

AUTHOR: Petelina, N. A.

TITLE: Trial estimation of some helio-energy characteristics for the city of Tashkent

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 7, 1962, 69, abstract 7B367 (V sb. Vopr. energ., avtomatiki, gorn. dela i legk. prom-sti, Tashkent, AN UzSSR, 1961,76-80)

TEXT: It is suggested that information on the frequency of daily radiation totals should be used to obtain data about the actual inflow of solar energy in different periods. Graphs of the frequency of daily solar radiation totals for each season were plotted on the basis of the results of multiyear observations. Moreover, for solar power engineering purposes it is important to know the variability of the solar radiation's inflow during short time intervals. Actinograph recordings can be used to obtain such information. [Abstracter's note: Complete translation.]

Card 1/1

ZVEREV, G.M.; PETELINA, N.G.

Electron paramagnetic resonance of Co^{2+} ions in corundum. Zhur. eksp. i teor. fiz. 42 no.5:1186-1190 My '62. (MIRA 15:9)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.
(Paramagnetic resonance and relaxation) (Cobalt) (Corundum)

37864
S/056/62/042/005/008/050
B125/B108

AUTHORS: Zverev, G. M., Petelina, N. G.

TITLE: Electron paramagnetic resonance of Co^{2+} ions in corundum

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 5, 1962, 1186 - 1190

TEXT: Various versions of the theory of electron paramagnetic resonance of Co^{2+} are checked. Cobalt ions in the Al_2O_3 lattice form two nonequivalent systems with a common axis of trigonal symmetry, but with different constants of the spin Hamiltonian. The following values were obtained from measurements of the $g_\perp$ factors:

ν, 10^9 cps	9	37	71
ion system I	4.947 ± 0.003	4.936 ± 0.003	4.938 ± 0.003
ion system II	4.855 ± 0.005	4.850 ± 0.005	4.850 ± 0.005

The results for $9 \cdot 10^9$ are taken from G. M. Zverev and A. M. Prokhorov

Card 1/3

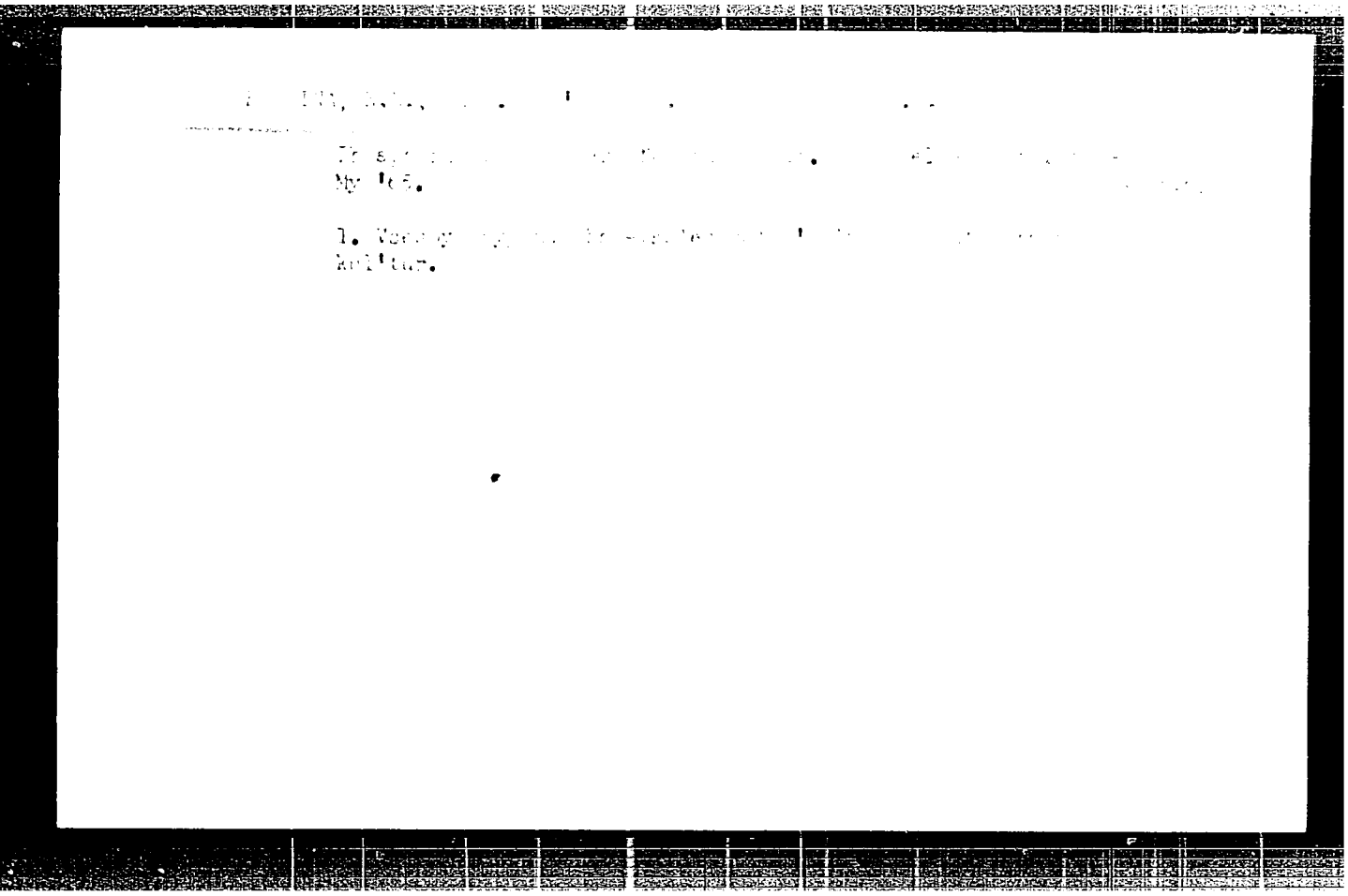
(ZhETF, 39, 57, 1960). The high values of $g_{\perp}$ for I and II at $9 \cdot 10^9$ cycles are probably due to the circumstance that at this frequency the hyperfine structure is comparable to the mean magnetic field strength. The experiments do not confirm the expected diminution of $g_{\perp}$ with increasing frequency. The temperature dependence τ_1 (T) of spin-lattice relaxation time was measured by the method of continuous saturation using a 3.2-cm microwave spectroscope. The following relation is fairly satisfied for the system I at 9 - 30°K: $\tau_1 = 1.6 \cdot 10^{-11} e^{\delta I/kT}$ sec, while $\tau_1 = 10^{-12} e^{\delta II/kT}$ is satisfied for the system II at 14 - 26°K. Below 4.2°K, τ_1 is inversely proportional to T in both systems. $\delta_I = 110 \pm 15$ cm^{-1}, $\delta_{II} = 185 \pm 20$ cm^{-1}. The experimental form of $\tau_1(T)$ is explained by the relaxation process through an excited state, as suggested by R. Orbach (see reference) for magnesium-cerium nitrate. This excited state is respectively 110 cm^{-1} and 185 cm^{-1} above the ground state for the ion groups I and II. The process mentioned above determines relaxation as far as 30°K. The g-factors and the spin-lattice relaxation time of Co^{2+}

Electron paramagnetic resonance...

ions in an Al_2O_3 lattice can be explained under the usual assumptions on the character of the crystal field (A. Abragam, M. H. L. Pryce. Proc. Roy. Soc., A206, 173, 1951). The values of b determined from the relaxation experiments are suited for stricter calculations taking account of the covalent bond. "Two-stage" relaxation must play an important part also in the other ions of the iron group. There are 2 figures and 1 table. The most important English-language reference is: C. B. P. Finn, R. Orbach, W. P. Wolf. Proc. Phys. Soc., 77, 261, 1961.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: December 23, 1961



PETELINA, N.N.

Corn on experimental lots. Biol. v shkole no.2:58-60 Mr-Ap '63.
(MIRA 16:4)

1. Vsesoyuznaya selektsionnaya opytnaya stantsiya krupyanykh i zernobobovykh kul'tur, Orel.
(Corn (Maize)---Field experiments)

PETELINA, N.N., kand.sel'skokhozyaystvennykh nauk; SAVKINA, A.D., agronom

"Buckwheat cultivation" by G.V. Kopel'kievskii. Reviewed by N.N. Petelina, A.D. Savkina. Zemledelie 23 no.1:92-93 Ja '60. (MIRA 13:12)

(Buckwheat) (Kopel'kievskii, G.V.)

[illegible] Y.[illegible], [illegible]NA, V.A., PETELINA, O.N., IOFFE, R.M., TSYPLAKOVA, N.A.; [illegible] K.Z.

Effectiveness of compound health resort treatment of residual phenomena following infectious diseases of the central nervous system. Sbor. nauch. rab. vrach. san.-kur. uchr. profsoiuzov no.1:24-32 '64. (MIRA 18:10)

1. Ivanovskiy nevrologicheskiy sanatoriy "Mayak" (glavnyy vrach R.Z.Fartigulova, nauchnyy rukovoditel' prof.S.M.Petelin).

SHRAYERMAN, M.R.; PETELINA, S.B.

Modifying fused fluxes by metallic and mineral additives. Svar. proizv. no.5:14-16 My '58. (MIRA 11:6)

1.TSentral'nyy nauchno-issledovatel'skiy institut tekhnologii svarki.
(Flux (Metallurgy))

PETELINA, S. E. Sep '4

USSR/Metallurgy - Welding, Steel Metal

"Semiautomatic Welding of Sheet Metal Constructions by Spot Angle Welds," M. I. Shrayerman, B. G. Yungel'son, Engineers, S. E. Petelina, Technician

"Avtogen Delo" No 9, pp 21-24

Considering welding under flux by means of spot angular welds as most effective method for welding penetrable joints of thin-plate constructions, discussion various elements of thechnology, such as geometrical parameters of spot and their dependence welding conditions, mech properties of spot, selection of spot dimensions, and spacing of spots, materials and equipment, prepn for welding, and welding technique. Chief advantage of method is considerable decrease in deformation of constructions to be welded.

232T80

SHRAYEROAN, [illegible], Eng. YU[illegible]EL'SON, B. [illegible],
Eng.; PETELINA, [illegible].B.

Electric Welding

Semi-automatic welding of thin sheet-metal constructions by means of spot fillet welds.
Avtog. delo, 23, no. 9, 1952

Monthly List of Russian Accessions, Library of Congress, November 1952, Unclassified