PHASE I BOOK EXPLOITATION SOV/5405

Avduyevskiy, Vsevolod Sergeyevich, Yuriy Ivanovich Danilov, Valentin Konstantinovich Koshkin, Professor, Igor' Nikolayevich Kutyrin, Militsa Mitrofanovna Mikhaylova, Yuriy Sergeyevich Mikheyev, and Oleg Sergeyevich Sergel'

Osnovy teploperedachi v aviatsionnoy i raketnoy tekhnike (Principles of Heat Transfer in Aeronautic and Rocket Engineering) Moscow, Oborongiz, 1960. 388 p. Errata slip inserted. 8,800 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR.

Gen. Ed. (Title page): V. K. Koshkin, Professor; Ed. (Inside book): A. S. Ginevskiy, Candidate of Technical Sciences; Ed. of Publishing House: E. A. Shekhtman; Tech. Ed.: V. P. Rozhin; Managing Ed.: A. S. Zaymovskaya, Engineer.

PURPOSE: This textbook is intended for students in aeronautical

Card 1/20

Principles of Heat (Cont.)

SOV/5405

schools of higher technical education. It may also be useful to engineering and technical personnel and aspirants specializing in aircraft and rocket heat-exchange problems.

COVERAGE: The book presents the fundamental problems of heat exchange in modern aircraft and rocket engineering. Data were taken from both Soviet and non-Soviet sources. Problems of high-speed and high-temperature gas flow in the presence of chemical reactions in the boundary layer are discussed, and hydrodynamic methods of heat protection of surfaces and heating problems in winged flying vehicles are included. Attention is given to principles of heat exchange in rarefied gases and in nuclear power reactors. No personalities are mentioned. Chapters VIII to XV are based on non-Soviet literature. Chs. I and II were written by Professor V. K. Koshkin, Ch. III by Docent M. M. Mikhaylova, Ch. IV by Docent O. S. Sergel', Chs. V and VI by Docent Yu. S. Mikheyev, Ch. VII by Docent I. N. Kutyrin, Chs. VIII to XVI by Docent V. S. Avduyevskiy, and Ch. XVII by Docent Yu. I. Danilov.

Card 2/29

MIKHAYLOVA, M. M. and RUDNEV, G. P.

"Evaluation of the effectiveness of biomycin in treating brucellosis," appears in TABCON of "Biomycin (Experimental Study and Clinical use of Biomycin)", edited by A. F. Bilibin, Moscow 1954.

SO: Translation-417, 21 Jun 1955.

MIKHAYLOVA, M.M.; RUDNEV, G.P.

Urgent tasks in the clinical aspects and treatment of brucellosis. Lech. infekts. bol'. no.3:140-155 '57.
(BRUCELLOSIS) (MIRA 14:5)

RUDNEV, G.P., prof.; MIKHAYLOVA, M.M.

Peculiarities in the clinical aspects and antibiotic therapy in the over-all treatment of present-day brucellosis. Lech. infekts. bol'. no.4:164-188 '60. (MIRA 14:5)

1. Deystvitel'nyy chlen AMN SSSR (for Rudnev).
(BRUCELLOSIS) (ANTIBIOTICS) (ACTH)
(CORTISONE)

GURSKIY, Yu.N.; MIKHAYLOVA, M.M.; SHCHERBAK, Yu.F.

Use of oxytetracycline for intramuscular administration in the treatment of chronic brucellosis. Antibiotiki 5 no.2:110-114 '60. (MIRA 14:5)

1. Kafedra infektsionnykh bolezney (zav. - deystvitel'nyy chlen AMN SSSR prof. G.P.Rudnev) TSentral'nogo instituta usovershenstvovaniya vrachey, Moskovskaya gorodskaya ordena Lenina klinicheskaya bol'nitsa imeni S.P.Botkina (glavnyy vrach - prof. A.N.Shabanov).
(BRUCELLOSIS) (TERRAMYCIN)

KRASIKOVA, V. I.; LIKHONOSOVA, N. D.; MARUSHKINA, V. I.; KARASEVICH, Ye. K.; LUDANOVA, N.V.
MIKHAYLOVA, M. M.; OVCHINNIKOVA, L. P.

"Study on the intensity of brine microflora respiration during ham curing."

report submitted for European Mtg, Meat Res Workers, Roskilde, Denmark, [illegible] Aug 1964.

[illegible]ANLOVA, M.I.

[Collection of [illegible] heat transfer] Sbornik zadach i [illegible] rascheta po teploperedache. Moskva, Mosk. aviatsionnyi in-t im. S.Ordzhonikidze, 1963. [illegible] p. (MIRA 17:[illegible])

NIKOLAYEV, A.V.; MIKHAYLOVA, M.P.

Quaternary system $FeCl_3 - HCl - H_2O - (C_2H_5)_2O$. Izv. Sib. otd. AN SSSR no. 3:46-53 '61. (MIRA 14:5)

1. Institut reorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.

(Iron chloride) (Extraction (Chemistry))

NIKOLAYEV, A.V.; MIKHAYLOVA, M.P.

Diagram of the extraction of ferric chloride with ethyl ether. Dokl. AN SSSR 136 no.2:364-365 '61. (MIRA 14:1)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya Akademii nauk SSSR. 2. Chlen-korrespondent AN SSSR (for Nikolayev).
(Ether) (Iron chloride)

NIKOLAYEV, A.V.; MIKHAYLOVA, M.P.

Method of determining the composition of an extracted complex. Dokl. AN SSSR 136 no.5:1102-1103 F '61. (MIRA 14:5)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.
2. Chlen-korrespondent AN SSSR (for Nikolayev).
(Extraction (Chemistry)) (Complex compounds)

TAUTS, Ya. [Tauc, Je .], prof.; MIKHAYLOVA, M.P. [translator];
KOLOMIYETS, B.T., red.; TELESNIN, N.L., red.; REZOUKHOVA,
A.G., tekhn. red.

[Photoelectric and thermoelectric effect in semiconductors]
Foto- i termoelektricheskie iavleniia v poluprovodnikakh.
Pod red. B.T.Kolomiitsa. Moskva, Izd-vo inostr. lit-ry,
1962. 250 p. (MIRA 16:5)
(Semiconductors)

26490
9.4177

37933
S/181/62/004/005/022/055
B125/B108

AUTHORS: Mikhaylova, M. P., Nasledov, D. N., and Slobodchikov, S. V.

TITLE: Photomagnetic effect and photoconductivity in InP

PERIODICAL: Fizika tverdogo tela, v. 4, no. 5, 1962, 1227-1232

TEXT: The photomagnetic effect and the photoconductivity of n-type InP are investigated at 100-300° K for carrier concentrations of $n=8.4\cdot10^{16}$ to $2\cdot10^{17}$ cm^{-3} at 300°K. The photoelectromotive force at 300°K up to ~8000 oe increases linearly with the magnetic field strength. The photomagnetically induced photoelectromotive force of an electron semiconductor with impurities is $V_{pm} = I_0 HL(l/tn_1)$ with $L = \sqrt{D\tau_{pm}}$. The photoconductivity is then $V_{pc} = I_0 E\tau_{pc}(l/tn_1)$. l and t denote length and thickness of the sample, D is the diffusion constant. The lifetimes τ_{pm} and τ_{pc} are to be determined from photomagnetic effect and photoconductivity, respectively. The photoelectromotive force decreases with decreasing temperature. At the same time, photoconductivity increases
Card 1/2

S/181/62/004/005/022/055
B125/B108

Photomagnetic effect and ...

by more than ten times. It decreases at modulation frequencies of ~100 cycles. The electron lifetime at 300°K is $1.7\cdot10^{-3}-2.2\cdot10^{-3}$ sec, that of the minority carriers is $2\cdot10^{-6}-2.5\cdot10^{-7}$ sec. The diffusion length of the holes increases with increasing temperature. This temperature dependence is caused by the decrease of the hole lifetime with decreasing temperature. The electron lifetime increases with subsiding temperature. There are 5 figures. The most important English-language reference is: C. Hilsum, B. Holeman. Proceedings International Conference on Semiconductor Physics. Prague, 1960.

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

SUBMITTED: December 26, 1961

Card 2/2

MIKHAYLOVA, M.P.; NASLEDOV, D.N.; SLOBODCHIKOV, S.V.

Temperature dependence of current carriers lifetime in indium arsenide. Fiz. tver. tela 5 no.8:2317-2323 Ag '63. (MIRA 16:9)

1. Fiziko-tekhnicheskiy institut im. A.F.Ioffe AN SSSR, Leningrad.
(Indium arsenide--Electric properties)

ACC NR: AP6029038 (A) SOURCE CODE: UR/0413/66/000/014/0055/0055

INVENTORS: Mikhalev, I. I.; Novikov, A. N.; Bogdanov, A. S.; Kostyrev, V. A.; Mikhaylova, M. P.

ORG: none

TITLE: A method for producing an elastic heat-resisting glued joint in metals and in nonmetallic construction materials. Class 22, No. 183858

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 55

TOPIC TAGS: metal gluing, glue welding, glue, construction material, rubber

ABSTRACT: This Author Certificate presents a method for producing elastic heat-resisting glued joints in metals and in nonmetallic construction materials, with pressure applied in the course of gluing, and with the use of two different heat-resisting glues. To insure the elasticity of a glued joint under low gluing pressure, a mixture of two types of glues is used. One of the glues is characterized by low viscosity and frangibility (for instance, phenol polyvinylacetal), while the lower layer is made of an elastic glue (such as phenolic rubber).

SUB CODE: 13, 11/ SUBM DATE: 27Jan65

Card 1/1 UDC: 621.792.4.05

L 10794-67 EWT(1) IJP(c) AT
ACC NR: AP7003510

SOURCE CODE: UR/0202/66/000/004/0011/0015

AUTHOR: Agayev, Ya.; Burdukov, Yu. M.; Mikhaylova, M. P.; Nasledov, D. N.; Slobodchikov, S. V. 36

ORG: Physical-Technical Institute, Academy of Sciences Turkmen SSR)

TITLE: Mobility of current carriers in InAs

SOURCE: AN TurkmSSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 4, 1966, 11-15

TOPIC TAGS: semiconductor research, space charge

ABSTRACT: An attempt is made to relate the experimentally observed temperature behavior of mobility in a number of samples of n- and p-type InAs in the presence of an additional scattering mechanism on the space-charge regions. The semi-empirical Gossick-Weisberg relation admits a large number of variations for such mobility when it is compared with experiment. Sometimes, however, the impossibility of describing the observed temperature behavior and mobilities in real semiconductors of the type $A^{III}B^{V}$ in terms of known mobility models makes this mechanism highly applicable to the interpretation of certain experimental facts. Orig. art. has 2 figs. and 10 refs. Orig. art. has: 2 figures and 3 formulas. [JPRS: 38,695]

SUB CODE: 20 / SUBM DATE: 15Mar66 / ORIG REF: 002 / OTH REF: 008
Card 1/1
UDC: 539.293:546.289

MIKHAYLOVA, M. P. Cand. Physicomath Sci.

Dissertation: "On the theory of the Plane-Parallel Stable Motions of Gas."

28/12/50
Sci. Res. Inst. of Mechanics and Mathematics,
Moscow Order of Lenin State U. imeni .
M. V. Lomononov

SO Vecheryaya Moskva
Sum 71

MIKHAYLOVA, M. P.

USSR/Physics - Hydrodynamics, Shock Wave Mar 53

"Influence of Viscosity and Thermal Conduction on the Flow of Gas Behind a Strongly Warped Shock Wave," L. I. Sedov, M. P. Mikhaylova, and G. G. Chernyy, Chair of Hydromechanics, Moscow U

Vest Mos Univ, Ser Fizikomat i Yest Nauk, No 2, pp 95-100

State that during circulation of supersonic flow of gas around small-sized bodies with the formation of the main shock wave, one can expect that the considerable velocity and temp gradients behind it, arising in consequence of the great curvature of the shock wave, now require that greater attention be paid to the influence, mainly on discontinuities (jumps), of those terms in the relations that depend on the gas viscosity and heat conductivity. Attempts to evaluate such influence in the case of symmetrical circulation of the supersonic flow of gas around a body of revolution or profile with the formation of the main shock wave ahead of the body. 257T90

69294

10 6000

S/179/60/000/01/005/034
E031/E535

AUTHORS: Bam-Zelikovich, G.M., Bunimovich, A.I. and Mikhaylova, M.P. (Moscow)

TITLE: The Motion of Slender Bodies at Large Supersonic Velocities

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1960, Nr 1, pp 33-40 (USSR)

ABSTRACT: In Ref 1 (near sonic velocities) Karman and in Ref 2 (high supersonic velocities) Tsien discussed the flow round slender bodies assuming it to be plane or axisymmetric, potential and isentropic. The discussions of these authors, which were not strict because of the assumptions that the flow was potential and isentropic, clearly did not correspond to the physical properties of the flow. In the present paper Tsien's results are generalized to the case of three-dimensional motion, taking shock waves and vortices into account and it is shown that the problem of the steady flow round a slender body of a gas at large supersonic velocities can be reduced approximately to the problem of the unsteady motion of a gas in a space with one dimension fewer. A comparison of the results obtained

Card 1/4

69294

S/179/60/000/01/005/034
E031/E535

The Motion of Slender Bodies at Large Supersonic Velocities

with exact solutions establishes the limits within which the theory may be applied. Euler's equation, the equation of continuity and the adiabatic equation referred to a fixed coordinate system are transformed by changing the system to one rigidly attached to the body in which the x-axis is opposite to the direction of motion. Non-dimensional coordinates are introduced and simplications are made in accordance with the assumption that the body is slender. A parameter $K = M_o \frac{\delta}{b}$ is introduced (M_o is the Mach number referred to the velocity of sound in the undisturbed fluid, δ is a linear parameter characterizing the cross-section and b is the chord of the body). The question of shock waves is discussed. It is assumed that the direction of the tangent to the shock wave makes a small angle with the x-axis. Velocity, pressure and density on the shock wave are obtained in non-dimensional form. It is now clear that K and $\varkappa$ (ratio of the specific heats) are the only parameters of the flow. It is now shown that the above approximate

Card 2/4

4

69294

S/179/60/000/01/005/034
E031/E535

The Motion of Slender Bodies at Large Supersonic Velocities

formulation of the problem is the same as the formulation of the problem of unsteady motion in a space of one dimension fewer. The limits within which the derived similarity criteria may be applied are obtained by comparison with exact solutions. The first example is motion of a wedge in the direction of the x-axis at supersonic velocity. Good agreement is obtained for large Mach number and small wedge angle. As a second example the axisymmetric problem of the motion of a right circular cone in the direction of the x-axis at supersonic velocity is considered. Again agreement improves as the Mach number increases. The paper concludes with a determination of the functional form (depending on K) of the lift and drag forces for a wing of infinite span and an axisymmetric body.

(Note: This paper was published in a small number of copies in the Symposium "Teoreticheskaya gidromekhanika" (Theoretical Hydromechanics), Nr 4, 1949, where it was mentioned that it represented a report read at a seminary

Card 3/4

X

69294

S/179/60/000/01/005/034
E031/E535

The Motion of Slender Bodies at Large Supersonic Velocities

on hydromechanics at the Moscow State University in March, 1948).

There are 7 figures and 8 references, 2 of which are Soviet, 2 German and 4 English.

SUBMITTED: August 26, 1959

Card 4/4

84217
S/078/60/005/010/0[illegible]/02[illegible]
B004/B067

11.1370

AUTHORS: Klochko, M. A., Mikhaylova, M. P.

TITLE: Thermal Analysis of Systems Formed From Hydrazine With Acetone, Sulfur, and Lithium Chloride

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 10, pp. 2319-2324

TEXT: The authors describe an investigation of the electrical conductivity of systems, one component of which is hydrazine. To determine the conditions under which the components form homogeneous liquid phases, they studied the binary systems hydrazine - acetone, hydrazine - sulfur, hydrazine - hydrogen sulfide, and hydrazine - lithium chloride by thermal analysis. The system hydrazine - acetone was studied in the entire concentration range (Table 1, Fig. 1). Compound $N_2H_4 \cdot 2(CH_3)_2CO$ with the melting point at -37.8°C is formed. The crystallization temperature of the eutectics could not be exactly determined due to the high viscosity of the solutions. In the system hydrazine - sulfur (Table 2, Fig. 2)

X

Card 1/2

84217

Thermal Analysis of Systems Formed From Hydrazine With Acetone, Sulfur, and Lithium Chloride

S/078/60/005/010/015/021
B004/B067

compound N_2H_4S (melting point +15.0°C) is formed. The system has two eutectics, one at 33 mole% S (melting point -78.0°C) and the other at 65 mole% S (melting point -23.3°C). Since hydrogen sulfide is formed when adding sulfur to hydrazine, also the system N_2H_4 - H_2S was studied (Table 3, Fig. 3). Crystals having the composition $3N_2H_4.2H_2S$ are formed; they may be conserved only in H_2S atmosphere, and melt at +44.5°C. A H_2S content higher than 41.8 mole% could not be obtained in this system. The eutectic with 21.0 mole% H_2S melts at 38.0°C. The system N_2H_4 - LiCl was studied up to a content of 60 mole% LiCl (Table 4, Fig. 4). Compounds $3N_2H_4.LiCl$ (melting point +56.7°C) and $2N_2H_4$ LiCl (melting point [illegible]) are formed. The system shows three eutectics, one with 13.7 mole% LiCl (crystallization temperature 16.0°C), one with 29.5 mole% LiCl (crystallization temperature +45.5°C), and one with 39.0 mole% LiCl (crystallization temperature +67.0°C). There are 4 figures, 4 tables, and 10 references: 3 Soviet, 3 US, and 4 German.

SUBMITTED. October 9, 1958

Card 2/2

17 4210 also 1121
1327
10 6100

57752
S/040/60/024/005/016/028
C111/C222

AUTHOR: Mikhaylova, M.P. (Moscow)

TITLE: Motion of a Spherical Piston With a Constant Velocity in an Inhomogeneous Medium

PERIODICAL: Prikladnaya matematika i mekhanika, 1960, Vol. 24, No. 5, pp. 919-922

TEXT: The author considers the gas motion behind a spherical piston which is extended with constant velocity in a medium the ρ of which is variable:

$$\rho = \rho_1 [1 - \varepsilon z^{\varkappa}], \tag{1}$$

where z is the Cartesian coordinate ε is a small parameter, ρ_1, $\varkappa$ are constants.

Using the spherical coordinates r θ, φ, there exist three dimensionless variables:

$$\lambda = \frac{\gamma p_1}{\rho_1} \frac{t^2}{r^2}, \quad \mu = \varepsilon r^{\varkappa}, \quad \theta;$$

where $\gamma = c_p/c_v$ so that the sought velocity components, the pressure

Card 1/5

S/040/60/024/005/016/028
C111/C222

Motion of a Spherical Piston With a Constant Velocity in an Inhomogeneous Medium

and the density can be sought in the form

$$(2)\quad v_r = \frac{r}{t} V'_r(\lambda, \mu, \theta) \qquad v_\theta = \frac{r}{t} V'_o(\lambda, \mu, \theta),$$

$$p = \rho_1 \left(\frac{r}{t}\right)^2 P'(\mu, \theta) \qquad \rho = \rho_1 R'(\lambda, \mu, \theta).$$

If $V_0(\lambda)$, $P_0(\lambda)$, $R_0(\lambda)$ is the solution of the problem for $\mu = 0$ (cf. (Ref.2)) then it holds

$$(3)\quad V'_r = V_0(\lambda) + V^0_r(\lambda, \theta), \quad V'_\theta = V^0_\theta(\lambda, \theta) \qquad P' = P_0(\lambda) + \mu P^0(\lambda, \theta),$$

$$R' = R_0(\lambda) + \mu R^0(\lambda, \theta)$$

where V^0_r, V^0_θ etc are sought with the arrangemen

Card 2/5

87793
S/040/60/024/005/016/028
C111/C222

Motion of a Spherical Piston With a Constant Velocity in an Inhomogeneous Medium

$$V_r^0 = \sum_{\nu=0}^{\infty} P\,(\cos\theta) V_r^{(\nu)}(\lambda) \qquad R^0 = \sum_{\nu=0}^{\infty} P_\nu(\cos\theta) R^{(\nu)}(\lambda),$$

$$(6) \qquad P^0 = \sum_{\nu=0}^{\infty} P_\nu(\cos\theta) P^{(\nu)}(\lambda), \qquad V_\theta^0 = \sum_{\nu=0}^{\infty} (-1) \frac{dP_\nu}{d\theta} V_\theta^{(\nu)}(\lambda),$$

where P (cos θ) is a Legendre polynomial. By a repeated series arrangement for $V_r^{(\nu)}$, $R^{(\nu)}$ etc. and after the consideration of the boundary conditions the author finally obtains:

Card 3/5

87793
S/040/60/024/005/016/028
C111/C222

Motion of a Spherical Piston With a Constant Velocity in an Inhomogeneous Medium

$$v_r = \frac{r}{t}\left\{V_0 + \mu\left[\frac{b_{01}^{(0)}}{3\gamma P_{00}}\left(2\ \frac{\gamma P_{0n}}{3R_{0n}}\right) + \frac{b_{01}^{(2)}}{3\gamma P_{0n}}\left(1 + \frac{\gamma P_{00}}{R_{00}}\right)(3\cos^2\theta - 1)\right]\times\right.$$
$$\left.\times(1 - V_0)[-\ln(1 - V_0)]\right\} \qquad (16)$$

$$v_\theta = \frac{r}{t}\mu\left[\frac{b_{01}^{(2)}}{3R_{00}} + d_{11}^{(2)}(1 - V_0)\right]3\cos\theta\sin\theta\,[\ln(1 - V_0) + 1]$$

$$p = \rho_1\left(\frac{r}{t}\right)^2\left(P_{00}\left[1 - \frac{2}{3}(1 - V_0)\right] + \mu\left[b_{01}^{(0)} + \frac{1}{2}b_{01}^{(2)}(3\cos^2\theta - 1)\right]\times\right.$$
$$\left.\times\left\{\left[1 - \frac{4}{3}(1 - V_0)\right]\ln(1 - V_0) + 1 + \frac{1}{1}(1 - V_0)\right\}\right)$$

$$\rho = \rho_1\left(R_{0n} + \mu\frac{R_{00}}{\gamma P_{00}}\left[b_{01}^{(0)} + \frac{1}{2}b_{01}^{(2)}(3\cos^2\theta - 1)\right]\times\right.$$
$$\times\left\{\left[1 - \frac{2}{3}(1 - V_0)\right]\ln(1 - V_0) + 1 + \frac{16}{3}(1 - V_0)\right\} +$$
$$\left. + \mu\left\{\left[c_{03}^{(0)} + \frac{1}{2}c_{03}^{(2)}(3\cos^2\theta - 1)\right](1 - V_0)^{[illegible]}\right)$$

$$r_2 = r_{20}\left\{1 + \mu^*\left[c_0 + \frac{1}{2}c_2(3\cos^2\theta - 1)\right]\right\}$$

67793
S/040/60/024/005/016/028
C111/C222

Motion of a Shperical Piston With a Constant Velocity in an Inhomogeneous Medium

where the unknown constants can be obtained from the conditions for the shock wave, r_2 is the local vector of the shock wave, the index oo relates to the piston.

The author mentions V.P.Karlikov. There are 2 figures and 3 references: 2 Soviet and 1 Italian.

[Abstracter's note: (Ref.2) concerns L.I.Sedov, Similarity Methods and Dimension Methods in Mechanics]

SUBMITTED: October 7, 1959

Card 5/5

MIKHAYLOVA, M.P.

Piston moving in an inhomogeneous medium at constant speed.
Dokl. AN SSSR 141 no.4:826-828 D '61. (MIRA 14:11)

1. Predstavleno akademikom L.I. Sedovym.
(Pistons)

MIKHAYLOVA, M.P.

Motion of a gas behind a nonsymmetrical piston. Dokl. AN SSSR 148 no.1:61-63 Ja '63. (MIRA 16:2)

1. Predstavleno akademikom L.I. Sedovym.
(Fluid mechanics)

ACCESSION NR: AP4033415

S/0202/64/000/001/0013/0016

AUTHORS: Agayev, Ya.; Mikhaylova, M. P.; Slobodchikov, S. V.

TITLE: Photomagnetic properties of p-InAs

SOURCE: AN TurkmSSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 1, 1964, 13-16

TOPIC TAGS: photomagnetic effect, p indium arsenate, diffusion length, step up transformer, preamplifier, amplifier 28IM, voltage analyser AN 1 50, monochromator ZMR 2, globar lamp, sodium chloride

ABSTRACT: The spectral distribution of photomagnetic effect in p-InAs was studied experimentally at various temperatures. From the data obtained, estimates were made of the diffusion length for migration in n- and p-type InAs in the temperature range of 80-300K. The method used for the photomagnetic measurement was the one used by M. P. Mikhaylova, D. N. Nasledov, and S. V. Slobodchikov (FTT, t.5, vyp. 8, 2317, 1963; FTT, t.IV, vyp.5, 1962). The signal was fed into the step-up transformer of the preamplifier and then into a measuring amplifier 28 IM and a voltage analyz N-1-50. The specimen was placed in a glass cryostat with a sapphire window. It was possible to vary the magnetic field from 0 to 8000

Card 1/2

ACCESSION NR: AP4033415

oersteds. The plots of the spectral distribution of the photomagnetic effect and the photoconductivity were recorded by the monochromator ZMR-2, and a globar lamp was used as a source of radiation. The entry and exit gaps in the monochromator were about 0.5 mm. The linear dispersion of the instrument at a wavelength of 5 μ was ~ 1.2 μ/mm. The results showed that the curve of spectral distribution of photomagnetic effect shifted along the wavelength domain with temperature increase. The photomagnetic effect was very small at low temperatures, reaching a maximum at ~ 250K and then falling. The p-diffusion length also increased with temperature. It reached a peak of ~ 12 μ, corresponding to a temperature of 270K and then fell sharply. The n-diffusion length decayed uniformly with temperature. Orig. art. has: 4 figures and 2 equations.

ASSOCIATION: Fiziko-tekhnicheskiy institut, AN Turkmenskoy SSR (Physico-technical Institute, AN Turkmen SSR)

SUBMITTED: 11Dec63 DATE ACQ: 28Apr64 ENCL: 00

SUB CODE: SS, EM NO REF SOV: 002 OTHER: 003

Card 2/2

MIKHAYLOVA, M.P.; PODGORNOV, V.V.

Differential inequalities for equations with delayed argument. Dif. urav. 1 no.9:1183-1189 S '65. (MIRA 18:1

1. Udmurtskiy gosudarstvennyy pedagogicheskiy institut.

L 44148-65 EWA(h)/EWT(1)/T Ps-6/Peb IJP(c) AT

CCESSION NR: AP5010761 UR/0181/65/007/004/1272/1273

UTHOR: Mikhayleva, M. P.; Nasledov, D. N.; Slobodchikov, S. V. 27 26

ITLE: Spectral sensitivity shift of p-n junctions in InSb in an B
lectric field 21

OURCE: Fizika tverdogo tela, v. 7, no. 4, 1965, 1272-1273

OPIC TAGS: indium antimonide, p n junction, photosensitivity, hotocell, field emission, photoeffect

BSTRACT: It is reported that the position of the long wavelength dge of the spectral sensitivity of an InSb p-n junction depends on he applied electric field. The observed shifting of the long wave- ength edge of an InSb p-n junction as a function of reverse bias is hown in Fig. 1 of the Enclosure. Like the same phenomenon bserved previously in GaAs photocells, this effect is attributed to change in the coefficient of absorption in an intense electric ield. It was established that the maximum field intensity in the unction was 1.5 x 10^4 v/cm. The experimentally observed shifting as found to be somewhat smaller than the displacement predicted

Card 1/2

L 44148-65

ACCESSION NR: AP5010761

theoretically. This was attributed to the field emission taking place at microinhomogeneities in the region of the space charge which lowers the electric field. Orig. art. has: 2 formulas and 1 figure.

[CS]

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

[illegible] ENCL: 01 SUB CODE: SS, OP

[illegible] OTHER: [illegible] ATD PRESS: [illegible]

Card 2/3

L 04791-67 EWT(l)/EWT(m)/EWP(t)/ETI IJP(c) JD/AT
ACC NR: AP6024[illegible]

SOURCE CODE: UR/0181/66/008/007/2044/2047

AUTHOR: Gutkin, A. A.; Magerramov, E. M.; Mikhaylova, M. P.; Nasledov, D. N.

ORG: Physicotechnical Institute im. A. F. Ioffe, AN SSSR, Leningrad (Fiziko-tekhnicheskiy institut AN SSSR)

TITLE: Photosensitivity spectra of p-n junctions in InAs in the photon energy range 0.9 - 5 ev

SOURCE: Fizika tverdogo tela, v. 8, no. 7, 1966, 2044-2047

TOPIC TAGS: pn junction, photosensitivity, internal photoeffect, indium compound optic material, arsenide, spectral distribution, absorption coefficient, quantum yield

ABSTRACT: This is a continuation of earlier work (FTT v. 8, 712, 1966), where it was observed that the spectral distribution of the quantum yield of the internal photoeffect in the short-range region is connected with singularities of the band structure of GaAs. The present work extends the investigation to InAs. The InAs p-n junctions were obtained by diffusion of Cd in n-type material with electron density (0.5 - 1) x 10^{17} cm^{-3} and were produced at a depth of several microns. The hole concentration in the illuminated surface of the sample was approximately 10^{18} cm^{-3}. Several p-n junctions illuminated from the n-side were also tested. The long-wave part of the spectral characteristic of the junction was plotted with the aid of a ZMR-2 monochromator, and the measurements at higher energies were by the procedure described in the earlier paper. The measurements showed a narrow long-wave photosensitivity peak,

Card 1/2

L 04791-67
ACC NR: AP6024462

connected with the change of the absorption coefficient near the edge of the ground-state band, followed by a region of weak variation, a faster grwoth at ~0.7 - 1 ev photon energy, a reversal followed by minimum near 3.2 ev, and a renewed growth at higher energies. The results are shown to be connected with the variation of the quantum yield of the internal photoeffect as a result of secondary ionization. The threshold energy of the photon, starting with shich the quantum yield begins to grow, is found to be 0.7 - 0.8 ev at 293K and 0.9 - 1 ev at 100K, in agreement with theoretical calculations by others. The various sections of the spectrum are interpreted on this basis, and it is indicated in the conclusion that the actual quantum yield may not be as large as what follows from theoretical considerations, since account must be taken of the probability ratios of the different electronic transitions. The authors thank N. P. Yesina and N. N. Smirnova for preparing the InAs p-n junctions. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 03Dec65/ ORIG REF: 002/ OTH REF: 006

Card 2/2 afs

NIKOLAYEV, A.V.; MIKHAYLOVA, M.I.

Ternary systems hydrochloric acid - water - organic solvent. Izv. SO AN SSSR no.3 Ser. khim. nauk no.1:32-40 '63.
(MIRA 16:8)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.

MIKHAYLOVA, M.P.; [illegible]

Photo[illegible]
tver. tela [illegible]

1. Fiziko-[illegible] A.F. I[illegible] AN S[illegible],
Leningrad.

S/0181/64/006/005/1550/1552

ACCESSION NR: AP4034946

AUTHORS: Mikhaylova, M. P.; Nasledov, D. N.; Popov, Yu. G.

TITLE: The photoelectric properties of n type InAs at low temperatures

SOURCE: Fizika tverdogo tela, v. 6, no. 5, 1964, 1550-1552

TOPIC TAGS: photoelectric effect, indium arsenide, semiconductor, low temperature, photomagnetic emf, photoconductivity, temperature dependence

ABSTRACT: This compound has been studied in detail previously at temperatures between 80 and 300K, but the literature has no information on the properties at lower temperatures. The authors studied the photoelectric and photomagnetic properties of single crystals of n-type InAs in the interval 7 to 80K. Investigations were made at various impurity concentrations. The electron mobility was observed to fall slightly with decline in temperature from 80 to 7K, approximately according to the law $T^{\frac{1}{2}}$. The authors measured the dependence of the photoconductivity on electrical field strength, of the photomagnetic emf on magnetic field strength at various temperatures, and the dependence of both on intensity of irradiation. It was found that the photoconductivity depends linearly on the electrical field strength up to fields of about 0.2 v/cm. Saturation is reached at

Card 1/2

A(

hig

lin

It

decr

7K.

at a

incre

of hig

has:

...oserved to

...line in temperature

...etic emf may be due to

...temperatures through participation

...r those of electrons. Orig. art.

ASSOCIAT ...ziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR Leningrad (Physicotechnical Institute, AN SSSR)

SUBMITTED: 21Dec63

ENCL: 00

SUB CODE: SS, EM

NO REF SOV: 001

OTHER: 003

Card 2/2

24.2300

S/020/62/143/001/014/030
B104/B108

AUTHORS: Gel'fand, I. M., Corresponding Member AS USSR, Grayev, M. I., Zuyeva, N. M., Mikhaylova, M. S., and Morozov, A. I.

TITLE: Example of a toroidal magnetic field having no magnetic surfaces

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 1, 1962, 61-63

TEXT: The existence of magnetic surfaces can be proved and their exact equations derived only if the relevant magnetic field has some symmetry. In unsymmetric magnetic fields, the equations of these surfaces can only be approximated. An unsymmetric magnetic field with the scalar potential

$$\Psi = z + h_3 I_3(3r) \sin 3(\varphi - z) + h_0 I_0(3r) \sin 3z.$$

has been calculated numerically in a previous study (ZhTF, 31, no. 10 (1961)). The magnetic surfaces of such a field were shown to decompose at $h_3 = 3$, $h_0 = 0.125$. In the present study, this phenomenon is investigated in detail. The course of the lines of force is calculated

Card 1/2

Example of a toroidal magnetic ... S/020/62/143/001/014/030
B104/B108

and it is shown that the lines of force which should form the magnetic surfaces do not lie on a closed curve. Accordingly, no magnetic surface exists in this case. There are 3 figures and 3 references: 2 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: M. Spitser, Proc. of the II. Geneva Conference on the Peaceful Uses of Atomic Energy, 1958.

SUBMITTED: December 11, 1961

Card 2/2

[illegible]N'GINA, Vladilena Fed[illegible]vna, kand. [illegible] nauk; [illegible]
[illegible]ariya [illegible]ergeevna; [illegible], kand. tekhn. nauk,
red.

[Manufacture [illegible] [illegible] things from textile fabrics
[illegible]ined with [illegible]on and wool] Iz[illegible]lenie [illegible] [illegible]
iz tekstil'nykh mate[illegible]v, [illegible]vannykh [illegible]
sherst'iu. [illegible], [illegible] [illegible] p. [illegible]

S/020/63/148/006/009/023
B112/B186

AUTHORS: Gel'fand, I. M., Corresponding Member AS USSR, Grayev, M. I., Zuyeva, N. M., Mikhaylova, M. S., Morozov, A. I.

TITLE: The structure of a magnetic toroidal field having no magnetic surfaces

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 6, 1963, 1286-1289

TEXT: A large number of force lines of the field

$$\psi_3 + \psi_0 = H_0 z + h_3 I_3(3r) \sin 3(\varphi - z) - h_0 I_0(3r) \sin 3z$$

have been calculated numerically for $H_0 = 1$, $h_3 = 3$, $h_0 = 0.120$, 0.125, 0.130. From their plots a series of qualitative and quantitative properties of fields with collapsing magnetic surfaces are derived. There are 3 figures.

SUBMITTED: October 30, 1962

Card 1/1

ZUYEVA, N.M.; MIKHAYLOVA, M.S.; MOROZOV, A.I.

Example of the structure of a magnetic field with disintegrating magnetic surfaces. Dokl. AN SSSR 153 no.4:801-803 D '63. (MIRA 17:1)

1. Predstavleno akademikom M.A. Leontovichem.

L 60334-65 EWT(1) IJP(c)

ACCESSION NR: AP5018294

UR/0057/65/035/007/1189/1192
538.122

AUTHOR: Grayev, M. I.; Mikhaylova, M. S.; Morozov, A. I.

23
21
B

TITLE: On the structure of asymmetric toroidal magnetic fields

21

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 7, 1965, 1189-1192

TOPIC TAGS: magnetic field, toroidal field, helical magnetic field, perturbation

ABSTRACT: In a series of earlier papers (ZhTF, 31, No. 10, 1961; DAN SSSR, 143, No. 1, 1962; Ibid., 148, No. 6, 1963; Ibid., 153, No. 4, 1963) the authors and collaborators have discussed the structure of a three-turn helical magnetic field perturbed by a corrugated field. Further results of these calculations are reported in the present paper, but the calculations themselves are not presented and only one of them is described, and that only very briefly. The fields discussed are those derived from the scalar potential $V = z + 3I_3(3r)\sin 3(\varphi - z) + h_0 I_0(3r)\sin 3z$, where r, φ, z are cylindrical coordinates and h_0 is a parameter. The fields were treated as toroidal by identifying the points r, φ, z and $r, \varphi, z + 2\pi/3$. The behavior of the magnetic lines of force was characterized by their successive intersection points with the plane $z = 0$. The separatrix of this field is very involved, and the authors speak of an S-region rather than of the separatrix itself.

Card 1/2

L 60334-65
ACCESSION NR: AP5018294

2

There are two S-regions, of which the inner one has the form of three petals or
loops. The results reported in the present paper pertain to the region between
the inner and outer S-regions outside the loops. The image points of points on the
negative x-axis ($\varphi = x$) were determined and the displacement function $\delta(x)$ and the
function $\varphi_N(x)$ were calculated. These functions are defined in the references
cited above but not in the present paper. The function $\delta(x)$ is presented graphic-
ally. The following conclusions are adduced: 1) The amplitude of $\delta(x)$ is not
onotonic but has a minimum at $x = -0.022$. 2) There are regions on the negative
-axis at which $\delta(x)$ behaves as though it were tending to infinity. 3) The
ational points (i.e., those at which $\delta(x)$ vanishes) correspond to periodic solu-
ions with the period $2\pi N/3$. 4) For $h_0 = 0.125$ all the rational points outside the
etals are hyperbolic; for $h_0 = 0.120$ there were found two elliptic points on the
egative x-axis. The authors have devised a method for calculating the separatrix
hich is simpler than that of V.K.Mel'nikov (DAN SSSR, 148, No.6, 1963); they
escribe this method very briefly and present graphically a portion of the separa-
rix for $h_0 = 0.125$ which they have calculated by means of it. "The authors are
rateful to V.I.Arnol'd and V.K.Mel'nikov for discussing matters touched upon in
his paper." Orig. art. has: 3 formulas and 3 figures.

ard 2/3

L 60334-65

ACCESSION NR: AP5018294

0

ASSOCIATION: None

SUBMITTED: 02Oct64 ENCL: 00 SUB CODE: MM

NR REF SOV: 007 OTHER: 000

Card 3/3 dp

PA 65/49T58

MIKHAYLOVA, M. V.

USSR/Medicine - Sanitation Jun 49
Water, Pollution

"Sanitation Conditions in the Upa River in Tula Rayon," S. I. Ovsenev, M. V. Mikhaylova, Tula Oblast Lab of Sanitation and Hygiene, 4 pp

"Gig i San" No 6

The sector of the Upa River examined is contaminated by municipal sewage systems, factory sewage, and surface drainage. Industrial sewage water from metallurgical, sugar, and tanning factories does not comply with the standard for the amount of suspended matter (GOST 1324-47) established for

[redacted] 65/49T58

USSR/Medicine - Sanitation (Contd) Jun 49

second-class waterways such as the Upa River. Suggests necessary measures for improvement.

[redacted] 65/49T58

NIKITIN, V.N.; VOLKOVA, L.A.; MIKHAYLOVA, M.V.; BAKLAGINA, Yu.G.

Two crystalline modifications of 1,4-trans-polybutadiene. Vysokom. soed. 1 no.7:1094-1099 Jl '59. (MIRA 12:11)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR. (Butadiene)

AUTHOR:	Mikhaylova, M.V. SOV/5-58-4-31/43
TITLE:	Several Peculiarities of the Upper Jurassic Deposits in the **Eastern Part** of the Crimean Mountains (Nekotoryye osobennosti verkhneyurskikh otlozheniy vostochnoy chasti Gornogo Kryma)
PERIODICAL:	Byulleten' Moskovskogo obshchestva ispytateley prirody, Otdel geologicheskiy, 1958, Nr 4, pp 156-157 [illegible]
ABSTRACT:	This is a summary of a report given by the author at a conference of the Moscow Society of Naturalists on [illegible] May 1958. The Upper Jurassic deposits in the **Planerskoye** - Alushta - Belogorsk region consist of Callovian, Oxfordian and Kimeridgian-Tithonian sediments. The author subdivides them into lower, medium and upper deposits, and distinguishes between two zones in this region: the southern zone represented chiefly by clay and siltstone, and the northern zone consisting mainly of conglomerates, sandstone and limestone, sometimes alternating with clay.

1. Mountains--Geology 2. Geological time--Determination

Card 1/1

MIKHAYLOVA, M.V.

Structure and formation of Oxford bioherms near Sudak.
Izv.vys.ucheb.zav.; geol.i razv. 2 no.5:52-60 My '59.
(MIRA 12:12)

1. Moskovskiy geologorazvedochnyy institut im. S.Ordzhonikidze.
(Crimea--Geology, Stratigraphic)

MIKHAYLOVA, M.V.; SOLOV'YEV, A.V.

Types of carbonate reservoir rocks in Ciscaucasia and the Northern Caucasus. Trudy VNIGNI no.34:219-229 '61. (MIRA 15:7)
(Caucasus, Northern—Petroleum geology)
(Caucasus, Northern—Gas, Natural—Geology)

MIKHAL'CHENKO, V.M.[Mykhal'chenko, V.M.]; MISNICHENKO, C.M.;
MARCHENKO, T.I.; MIKHAYLOVA, M.Y.[Mykhailova, M.I.];
SHVED, M.P.; OSTAPENKO, M.G.[Ostapenko, M.H.];
BULDEY, I.A.; MARKIN, M.S., glav. red.; OSTAPENKO, M.G.
[Ostapenko, M.H.], otv. za vyp.; MINEVICH, M.I.[Minevych,
M.I.], tekhn. red.

[Soviet trade in the Ukrainian S.S.R.; statistical abstract] Radians'ka torhivlia v Ukrains'kii RSR; statystycnyi zbirnyk. Kyiv, Derzh. stat. vyd-vo, 1963. 318 p.
(MIRA 16:9)

1. Ukraine. Statisticheskoye upravleniye. 2. Otdel statistiki torgovli TSentral'nogo statisticheskogo upravleniya pri sovete ministrov Ukr. SSR (for Mikhal'chenko, Misnichenko, Marchenko, Mikhaylova, Shved, Ostapenko, Buldey). 3. Nachal'nik TSentral'nogo statisticheskogo upravleniya Ukr.SSR (for Markin).
(Ukraine--Commerce) (Ukraine--Statistics)

MIKHAYLOVA, M. Z.

3057. BRIQUETTING OF PEAT WITHOUT THERMAL DRYING. Ivanov, V.F. and Mikhailova, M.Z. Trud. Mosk. Torf. Inst. (Proc. Moscow Peat Inst.), 1953, (2), 127-135; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1955, (19), 44066). Laboratory and industrial tests have established that naturally dried peat, i.e. pneumo-peat, warmed milled peat and fines from sod peat can be briquetted without thermal drying at a maximum moisture content of 23 to 25% and size of 10 mm. The strength and bulk density are as good as those obtained after thermal drying. To increase the water resistance of the briquette the temperature of the matrix used for briquetting should be at least 150°C. Spontaneous heating of the peat improves the quality of the briquette. Diagrams are given for the briquetting of pneumo-peat and fines in mobile plants, for use at small peat undertakings and producer gas plants.

FU

T

MOROZOV, V.P., inzh.; MIKHAYLOVA, M.Z., inzh.; MUSIKHIN, K.M., inzh.

Results of testing molding and forming machines used in the manufacture of peat insulating boards. Torf.prom. 37 no.4:25-27 '60. (MIRA 13:7)

1. Lengiprotorf.

(Peat machinery--Testing)
(Insulating materials)

ORANSKAYA, M.A.; MIKHAYLOVA, N.A.

Dissociation pressure and vapor pressure of palladium chloride.
Zhur.neorg.khim. 5 no.1:12-15 Ja '60. (MIRA 13:5)
(Palladium chloride)

MIKHAYLOVA, V. A.

MIKHAYLOVA, V. A.: "[illegible]." [illegible]
State Medical Inst. (Dissertation [illegible] Degree [illegible]
Sciences)

SO: Knizhnaya Letopis' No. [illegible], [illegible] Moscow.

MIKHAYLOVA, N. A., Cand Med Sci (diss) -- "The role of psychogenic factors in the development and clinical manifestations of involution psychosis". Leningrad, 1959. 15 pp (State Order of Lenin Inst for the Advanced Training of Physicians im S. M. Kirov), 260 copies (KL, No 7, 1960, 128)

166T34

USSR/Hydrology - Turbidity Sep/Oct 50
Turbulence

"Influence of Large-Scale Turbulence on Turbidity Pulsations," M. A. Velikanov, N. A. Mikhaylova, Inst of Geog, Acad Sci USSR

"Iz Ak Nauk SSSR, Ser Geograf i Geofiz" Vol XIV, No 5, pp 421 - 425

Discusses problem of turbidity pulsations in turbulent stream carrying solid particles. Study made by high-speed photography with subsequent calculation of correlation coefficients of turbidity along stream. Results obtained

166T34

USSR/Hydrology - Turbidity (Contd) Sep/Oct 50

pointed up conclusion that turbidity pulsations are close to periodic, a result of the presence of large-scale structural formations in the turbulent stream. Submitted 29 Mar 50.

166T34

MIKHAYLOVA, N. A.

MIKHAYLOVA, N. A.

MIKHAYLOVA, N A

USSR/Geophysics - Sand Waves Jan/Feb 52

"Mechanism Governing the Formation and Motion of Sand Waves," N. A. Mikhailova, Inst of Geog, Laboratory of Waterways, Acad Sci USSR

"Iz Ak Nauk SSSR, Ser Geofiz" No 1, pp 47-56

Mechanism of formation and motion of sand waves was studied by means of movies and still photography. It was established that the dimensions of primary sand waves are of the order of macrostructural formations, i.e., one and one half to twice the stream depth. During further development the wave length reaches the 20-fold depth. Turbidity pulsations change in presence of sand waves. Submitted 25 Jun 51.

205T42

2

818. [illegible], N. A., Using high-speed motion-picture photography for examining the muddiness of the bottom part of a current (in Russian), Izv. Akad. Nauk SSSR Otd. tekh. Nauk no. 10, 1801-1806, Oct. 1952.

[illegible]

MIKHAYLOVA, N.A.

USSR.

✓ Zinc sulfides in the Devonian rocks of the western area of Urals. V. P. Florenskii and N. A. Mikhailova (I. M. Gubkin Petroleum Inst., Moscow). *Doklady Akad. Nauk S.S.S.R.* 86, 1215-17(1952).—Occurrences of sphalerite in Western Bashkiria are described and the geol. origin is discussed. 25 references. W. Farafonov

MIKHAYLOVA, E.I.

Petrology and Petrography

Dissertation: "The Petrography of the Givetian Deposits of the Ural-Volga Oil-Bearing Area and the Paleography of the Time of Its Formation." Cand Geol-Min Sci, Inst of Petroleum, Acad Sci USSR, Oct-Dec 1953. (Vestnik Akademii Nauk Moscow, Mar 54)

SO: SUM 213, 20 Sep 1954

Sep, Oct 53

MIKHAYLOVA, N. A.

USSR/Geophysics - Sand Waves

"The Structure of a Current in the Presence of Sand Waves," N. A. Mikhaylova and I. B. Naydenova, Lab of River Bed Processes, Section of Sci Solution of Water-Economy Problems, Acad Sci USSR

Iz Ak Nauk SSSR, Ser Geofiz, No 5, pp 445-450

Studied nature of current and turbidity distribution in the under-roll of sand waves which are in the process of forming. Used a motion-picture camera and a glass-bottomed container partially submerged in water for the investigation. Established that the velocity in the upper part of the current reaches a max immediately above the roll, thus narrowing the current's true cross section. Acknowledge advice of M. A. Velikanov, Corr-Mem Acad Sci USSR, and B. A. Fridman.

57T77

MIKHAYLOVA, N. A.

MIKHAYLOVA, N. A.--"Investigation of the Transfer of Solid Particles by a Turbulent Stream." Acad Sci USSR. Marine Hydrophysics Inst. Moscow, 1955. (Dissertation for the Degree of Candidate of Physicomathematical Sciences).

SO: Knizhnaya Letopis' No. 27, 2 July 1955

MIKHAYLOVA, N.A.

Mikhaylova, Nelli A.: Petrografiya devonskikh otlozheniy Uralo-Volzhskoy neftenosnoy oblasti i paleogeografiya vremeni ikh obrazovaniya. (Petrography of the Devonian Deposits in the Ural-Volga Petroleum-Bearing Region and the Paleogeographic Period of Their Formation). Moscow: Izdatel. Akad. Nauk S.S.S.R. 1961. 117 pp.

Nakoplenie i preobrazovanie organicheskogo veshchestva v sovremennykh morskikh osadkakh v svyazi s problemoy proiskhozhdeniya nefti; sbornik statey (The Accumulation and Conversion of Organic Substances in Contemporary Ocean Deposits from the Standpoint of the Genesis of Petroleum; Collection of Articles). Edited by M. F. Mirchink. [illegible]

AUTHOR: Mikhaylova, N. A. SOV/ 20-120-2-43/63

TITLE: New Traces of Volcanic Activity in the Devonian of the Volga-Ural Region (O novykh sledakh vulkanicheskoy deyatel'nosti v devone Volgo-Ural'skoy oblasti)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 2, pp. 390 - 392 (USSR)

ABSTRACT: In connection with exploring borings in the region of the Russkaya platform several finds of rocks among the Devonian and older deposits were reported which are in connection with volcanic processes (References 1-4). In Bashkiriya and Tatariya the author in the cores found intermediate layers of ash-tuffs in different horizons. Their thickness was not large and did not exceed 5-7 cm. The composition of these tuffs is described. The author considers the following facts worth mentioning: 1) The described intermediate layers are deposited between rocks of different age: Upper Givetian and Lower Frasnian. This indicates a repeated occurrence of volcanic processes during the sedimentation of the terrigeneous mass of the Middle and Upper Devonian in the region of Uralo-Povolzh'ye. 2) The composition of the eruption products is in all cases equal and corresponds

Card 1/2

New Traces of Volcanic Activity in the Devonian of SOV/ 20-120-2 48/63
the Volga-Ural Region

to lava of an andesite-basalt type. 3) The sedimentation of the ash material took place in water. This is indicated by intermediate carbonate layers with a marine fauna and shell splinters. The deposition of ash evidently took place comparatively fast, its amount was considerable, as an admixture of splinters of sedimentary origin is almost completely absent in almost all tuffs. 4) All investigated samples show traces of considerable secondary changes which mask the original nature of the tuffs. There are 4 **Soviet references.**

ASSOCIATION: Institut nefti Akademii nauk SSSR (**Petroleum** Institute, AS USSR)

PRESENTED: January 21, 1958, by S. I. Mironov, Member, Academy of Sciences, USSR

SUBMITTED: January 6, 1958

1. Volcanoes--USSR 2. Geological time--Determination
Card 2/2 **3. Sedimentation--Applications**

MIKHAYLOVA, N. A. (Moscow)

"Experimental Verification of the Theory of Flow Carrying Suspended Sediments."

Report presented at the First All-Union Congress on Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb 1960.

LEVIN, B.M., assistent; MIKHAYLOVA, N.A., kand.fiz.-matem.nauk

Use of Orlov's bathometer in measuring turbidity under laboratory conditions. Trudy MIIT no.107:47-69 '60.
(MIRA 13:7)

(Bathometer) (Turbidity)

MATVEYEV, K.V., ispolnyayushchiy obyazannosti dotsenta, kand.tekhn.nauk;
MIKHAYLOVA, N.A., kand.fiz.-matem.nauk

Investigating local channel deformations in the after bay.
Trudy MIIT no.107:70-80 '60. (MIRA 13:7)
(Hydraulics)

SARKISYAN, Sergey Galustovich; MIKHAYLOVA, Nelli Aleksandrovna, Prinimali uchastiye: NIKITINA, R.G., nauchnyy sotr.; TROFIMU, I.A., nauchnyy sotr.; FEDOROV, S.F., otv. red.; STOLYAROV, A.G., red. izd-va; VOLKOVA, V.G., tekhn. red.

[Paleogeography of the period of the formation of the terrigenous Devonian stratum in Bashkiria and Tatar A.S.S.R.] Paleogeografiia vremeni obrazovaniia terrigennoi tolshchi devona Bashkirii i Tatarii. Moskva, Izd-vo Akad. nauk SSSR, 1961. 231 p. (MIRA 15:1)

1. Chlen-korrespondent AN SSSR (for Fedorov).
(Bashkiria—Paleogeography) (Tatar A.S.S.R.--Paleogeography)

MIKHAYLOVA, N.A. (Moskva)

Problems in the experimental investigation of bottom layer of suspension in streams. Izv.AN SSSR.Otd.tekh.nauk.Mekh. i mashinostr. no.4:178-180 Jl-Ag '62. (MIRA 15:8)
(Hydrodynamics)

[illegible], [illegible] [illegible],

[illegible]

[illegible]

[illegible] tolshchi[illegible]

[illegible]

MIKHAYLOVA—N. L.

[illegible]

[illegible] в диапазоне 0,75–1,5 см

[illegible]

Пленочные болометры для измерения мощности СВЧ

А. В. [illegible]

Оптимальные параметры [illegible]

Н. Л. Михайлова

О [illegible] в диапазоне 3–30 Мгц

В. С. [illegible]

Метод калибровки и измерения [illegible] в диапазоне от 10 кгц до 30 Мгц

10 июня

(с 10 до 16 часов)

40

Г. Д. Бурдун,

[illegible]

Метод [illegible] в сантиметровом диапазоне волн

[illegible]

Устройство для исследования спектра излучения в миллиметровом и субмиллиметровом диапазонах

[illegible]

Измерение диэлектрической проницаемости [illegible] в диапазоне СВЧ

[illegible]

Точное измерение КСВН с помощью [illegible]

11 июня

(с 10 до 16 часов)

[illegible]

Методы измерения [illegible] в диапазоне 0,75–10,0 см

41

Report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORiE), Moscow, 8-12 June. 1959

L 03004-67 EWT(1) GW/WS-2

ACC NR: AP6033291 SOURCE CODE: UR/0141/66/009/005/1030/1032

20
B

AUTHOR: Alekseyev, V. A.; Krotikov, V. D.; Matveyev, Yu. G.; Mikhaylova, N. B.; Porfir'yev, V. A.; Ryazanov, V. P.; Sergeyeva, A. I.; Strezhneva, K. M.; Troitskiy, V. S.; Shmulevich, S. A.

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

TITLE: Results of measurements of lunar radio emissions at wavelengths of 7.93, 11.0, 14.2, and 20.8 cm

SOURCE: IVUZ. Radiofizika, v. 9, no. 5, 1966, 1030-1032

TOPIC TAGS: radio astronomy, parabolic antenna, LUNAR radio emission, LUNAR ENVIRONMENT

ABSTRACT: The mean effective temperature of the moon was measured in 1964—1965 at Zimenki Station on the 7.93, 11.0, 14.2, and 20.8 cm wavelengths. The basic measuring equipment included a radio telescope antenna 4 m in diameter and two receivers operating on wavelengths of 7.5—15 cm and 15—30 cm. The fluctuation sensitivity threshold of the receiving equipment was from 0.4° to 0.7° at a time constant of 16 sec. The radio emission of the moon was compared with the reference emission of a disk (diameter, 380 cm) coated with absorbing material. The disk was placed in the Fraunhofer region, 230 m from the telescope aperture. The results of measurements of the phase dependence of the moon's effective temperature are shown

Card 1/3 UDC: 523.164.34

L 23004-67

ACC NR: AP6033291

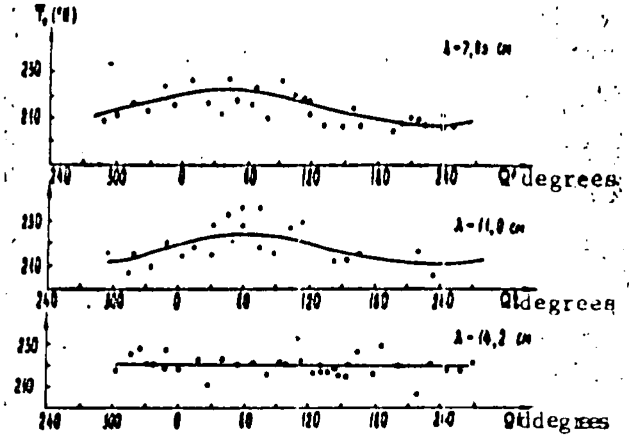

Fig. 1. Phase dependence of the mean effective temperature of the moon

in Fig. 1. A small change in the mean effective temperature as a function of the lunar phase was noted on the 7.93 cm and 11 cm wavelengths. The rms dispersion of the experimental points in regard to the approximated curves is ±3°. The variable portion of lunar radio emission should theoretically be 3.5--4K for the 14.2-cm wavelength. Since the rms dispersion of experimental points approximately equals this value, 22004-67

ACC NR: AP6033291

Fig. 1. shows only the value of the constant component of the mean effective temperature [illegible] which was 221K. Measurements on the 20.8-cm wavelength were conducted during the partial phase cycle. The constant component of the mean effective temperature for this wavelength was 225K. Error did not exceed ±0.5%. Orig. art. has: 1 formula, 1 table, and 1 figure.

SUB CODE: 03/ SUBM DATE: 25Feb66/ ORIG REF: 003/ ATD PRESS: 5099

awm

Card 3/3

L 05131-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6027737 SOURCE CODE: UR/0020/66/169/004/0882/0883

66
B

AUTHOR: Mikheyev, N. B.; Shmanenkova, G. I.

ORG: Biophysics Institute, Ministry of Health, SSSR (Institut biofiziki Ministerstva zdravookhraneniya SSSR)

TITLE: Adsorption of cesium and rubidium on ammonium chloride from solutions in organic solvents

SOURCE: AN SSSR. Doklady, v. 169, no. 4, 1966, 882-883

TOPIC TAGS: cesium, rubidium, adsorption, ammonium compound, chloride

ABSTRACT: The kinetics of adsorption of cesium and rubidium from alcohol and aqueous acetone solutions on finely divided NH_4Cl were studied by means of the radioisotopes Rb^{86} and Cs^{137}. The adsorption of Cs is expressed by the equation for adsorption kinetics on homogeneous surfaces, $\ln(C-C_\infty) = \ln(C_0-C_\infty)$, where C_0 is the initial Cs concentration, k a constant, C the concentration of the radioisotope at time t and C_∞ its concentration when the adsorption equilibrium has been reached. The adsorption kinetics of Rb are more complex in character: the adsorption is fastest in the beginning, then slows down and increases again toward the end of the process. To elucidate this behavior, the reversibility of the adsorption of Cs and Rb on NH_4Cl was studied and it was found that Cs is adsorbed reversibly and Rb partly irreversibly. The adsorption is thought to occur on centers of at least two types: on the first type, Rb is ad-

Card 1/2 UDC: 546.36'131+546.35'131

L 05131-67

ACC NR: AP6027737

sorbed rapidly and reversibly, and on the second, more slowly and to a large degree irreversibly. On the contrary, Cs is adsorbed only on centers of the first type, so that its adsorption is reversible. A study of the cocrystallization of Rb and Cs with NH_4Cl led to the conclusion that the course of the cocrystallization is not determined by the entire adsorption process but only by its fast stage. The paper was presented by Academician Spitsyn, V. I., 18 May 65. Orig. art. has: 2 figures.

SUB CODE: 07/ SUBM DATE: 13May 65/ ORIG REF: 003/ OTH REF: 001

Card 2/2

L 05831-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6030021 SOURCE CODE: UR/0020/66/169/005/1099/1101

AUTHOR: Mikheyev, N. B.; Shmanenkova, G. I.

ORG: Institute of Biophysics, Ministry of Health SSSR (Institut biofiziki ministerstva zdravookhraneniya SSSR)

TITLE: Separation of rubidium contaminant from cesium by the chromatographic method, using crystalline deposits from organic solvents

SOURCE: AN SSSR. Doklady, v. 169, no. 5, 1966, 1099-1101

TOPIC TAGS: rubidium, cerium, chromatographic analysis, adsorption chromatography, tracer study

ABSTRACT: Chromatographic separation of rubidium from cesium was studied by radioactive tracer technique. The object of the work was to develop an efficient separation technique for chemically similar elements. Two crystalline stationary phases were used: NH_4Cl and $(NH_4)_2SO_4$. In the first case, a saturated solution of NH_4Cl (containing Cs^{137} or Rb^{86} or both) in 97.5% acetone was passed at 0.5 ml/min through a column (7 cm in length and 0.5 cm in diameter) packed with crystalline NH_4Cl. The total volume of the liquid passed was equal to 1/3 of the void space of the column. Then, 24 ml of 97.5% acetone was passed at a rate of 0.5 ml/min. A similar procedure was used in the case of $(NH_4)_2SO_4$ column except that a 90% ethyl alcohol was used as a

Card 1/2 UDC: 543.544.2

L 05831-67

ACC NR: AP6030021

solvent. It was found that the adsorption of rubidium on both stationary phases was to a great degree irreversible. This irreversibility increased the adsorption duration. For 155 minute adsorption duration, the separation coefficient ($\alpha = K_{adsRb}/K_{adsCs}$) was equal to 41.0 in the case of $(NH_4)_2SO_4$ packing and it was only 4.8 for NH_4Cl packing when the adsorption duration was 160 minutes. Orig. art. has: 1 figure, 2 tables and 2 formulas.

SUB CODE: 07/ SUBM DATE: 06Oct65/ ORIG REF: 001/ OTH REF: 006

Card 2/2

44082

S/573/62/000/007/009/015
D201/D308

9.8300 (also 8912)

AUTHORS: Bartmer, A.Ye., Mikhaylova, N.D. and Chernyshev, V.Ye.

TITLE: Digital converters for the elimination of non-linearities in telemetering

SOURCE: Akademiya nauk SSSR. Institut elektromekhaniki. Sbornik rabot po voprosam elektromekhaniki. no. 7, 1962. Avtomatizatsiya, telemekhanizatsiya i priborostroyeniye, 314-322

TEXT: The authors show that the linearization of the frequency type of measuring transducers may be achieved by the application of telemetering of a digital frequency meter. Such a frequency meter consists of a reference crystal oscillator, two counters and a coincidence circuit, in which the frequency is measured by counting the number of periods of voltage over a calibrated time interval. By introducing certain constants into the two counters, their initial readings and their slopes become changed. If the output

Card 1/2

S/573/62/000/007/009/015
Digital converters ... D201/D308

frequency from the transducer is a nonlinear function of the measured quantity, the introduction of constants makes it possible to reproduce a function which is inverse to the transducer function. The reproduction can be made either in piecewise approximation over a certain (small) frequency range or, to any required degree of accuracy, over the whole frequency range by means of expanding the inverse function into a power series. Experiments with a digital frequency meter have proved the validity of the above mentioned. There are 5 figures.

Card 2/2

MIKHAYLOVA, N.D.

MIKHAILOVA, N.D.

Diagnosis of tumors of the head of pancreas and Vater's ampulla. Sovet. med. No. 2:11-12 Feb 52. (CIML 21:5)

1. Of the Propedeutic Therapeutic Clinic (Director--Prof. V.Kh. Vasilenko), First Moscow Order of Lenin Medical Institute.

MIKHAYLOVA, N. D.

USSR/Medicine - Dysentery

FD-547

Card 1/2 Pub. 148 - 10/23

Author : Mikhaylova, N.D.; Dmitriyev, A.A. ; and Petrovskiy, I. N.

Title : Treatment of chronic dysentery with alcohol vaccine according to Chernokhvostov's method.

Periodical : Zhur. mikrobiol. epid. i immun. 6, 30-31, Jun 54

Abstract : A vaccine prepared from Flexner and Sonne bacteria by the Moscow City Bacteriological Institute was used to treat 56 adults and 28 infants suffering from chronic dysentery. The vaccine was administered in progressively larger doses. After 8-9 injections, 43 of the adults suffering from Flexner dysentery gave negative stool cultures, and were released from the hospital. Three were cured after a second course of injections and four, after a second course plus supplemental treatment with sulfanilamides, bacteriophage and antibiotics. Three patients continued to eliminate the Flexner bacteria. One adult patient with Smith-Stutzer dysentery did not respond to this treatment. Two Sonne dysentery patients were released after the first course of treatment, a third required a second course. The 28 children were released after one course, but all of them after various intervals, were readmitted. None of the adults suffered relapses. No references are cited.

MIKHAYLOVA, N.D.

Data on phage typing of typhoid fever bacteria in Rostov Province.
Zhur. mikrobiol. epid. i immun. no.10:99 O '54. (MLRA 8:1)

1. Iz Rostovskogo-na-Donu instituta epidemiologii, mikrobiologii i gigiyeny.
(ROSTOV PROVINCE--SALMONELLA TYPHOSA)
(BACTERIOPHAGE)

MIKHAYLOVA, N.D. EXCERPTA MEDICA Sec.16 Vol.4/1 Cancer Jan 56

321. MIKHAYLOVA N. D. Med. Inst. Lenin, Moscow *Origin and clinical significance of the ether-soluble fraction of the serum bilirubin* (Russian text) Klin. Med. (Mosk.) 1955, 33/3 (71-75) Tables 2

The ether-soluble fraction of the serum bilirubin (ESF) was investigated in 180 cases of jaundice. It was positive in 36 cases: carcinoma of the papilla (5 cases), carcinoma of the head of the pancreas (22), viral hepatitis (4), liver cirrhosis (1), cholelithiasis (3), malignant tumour of the liver and bile ducts (1). It is concluded that if there is a concentration of ESF exceeding 2 mg./100 ml., cancer of the head of the pancreas or of the papilla can be inferred with a fairly high degree of certitude. The probable cause of the production of the ESF of the serum bilirubin is a simultaneous obstruction of the biliary and pancreatic tract.

Hoenig - Prague

MIKHAYLOVA, N.D. (Moskva)

[illegible]

"Clinical coprology" by I.A. Alekseev-Berman. Reviewed by N.D. Mikhailova. Klin. med. 34 no.4:93-95 Ap '56. (MIRA 10:1)

(FECES--ANALYSIS)

MIKHAYLOVA, N.D. (Moskva)

Chronic reticulo-endotheliosis. Klin.med. 34 no.7:64-67 Jl '56. (MIRA 9:10)

1. Iz propedevticheskoy terapevticheskoy kliniki (dir. - prof. V.Kh. Vasilenko) I Moskovskogo ordena Lenina meditsinskogo instituta
(RETICULOENDOTHELIOSIS, case reports)

MIKHAYLOVA, N.D.; MARGOLINA, E.S.

D.I. Fin'ko's "Color reaction of bile". Lab. delo 5 no.1:9-12 Ja-F '59. (MIRA 12:3)

1. Iz kafedry propedevtiki vnutrennikh bolezney (dir. - prof. V.Kh. Vasilenko) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(BILE) (LIVER--DISEASES--DIAGNOSIS)

MIKHAYLOVA, N.D.; MARGOLINA, E.S.

Reply to "Critical Remarks" of D.I.Fin'ko. Lab. delo 6 no.4:31 Jl-
Ag '60. (MIRA 13:12)
(BILE) (FIN'KO, D.I.)

MIKHAYLOVA, Nadezhda Danilovna; KOROVKIN, B.F., red.; BUGROVA, T.I.,
tekhn. red.

[Manual for coprological studies]Posobie po koprologicheskim
issledovaniiam. Leningrad, Medgiz, 1962. 145 p. (MIRA 16:2)
(FECES--ANALYSIS)

L 42188-66 EWT(1)

ACC NR: AT6008927 SOURCE CODE: UR/0000/65/000/000/0119/0125

AUTHOR: Ambrosovich, V. D.; Bartmer, A. Ye.; Mikhaylova, N. D.

ORG: none

TITLE: Numeral display panel for teleinformation systems

SOURCE: AN SSSR. Institut elektromekhaniki. Avtomaticheskiye i teleinformatsionnyye sistemy (Automatic and teleinformation systems). Moscow, Izd-vo Nauka, 1965, 119-125

TOPIC TAGS: display panel, signal processing, information processing, pulse coding

ABSTRACT: A remote character-display system is briefly considered which uses a telegraph-type pulse code and is intended for receiving, storing, and displaying on a panel the information sent from a central station. The information is transmitted, over a telephone line, in case of emergency or on request from the

Card 1/2

L 4188-66

ACC NR: AT6008927

display station. The system comprises (a block diagram is shown) a control unit, a shaping unit, a code distributor, a potential distributor, an internal-storage unit, a luminous display panel, and a power-supply unit. Normally, the line is used for two-way telephone traffic; the latter may be broken for display signal transmission. Principal circuit diagrams of the shaping unit and code distributor are explained. Orig. art. has: 3 figures.

SUB CODE: 09 / SUBM DATE: 14Jul65

Card 2/2

KHVILIVITSKAYA, Mariya Iosifovna. Prinimali uchastiye: ADAMOVA, A.V.; BOGOMAZOVA, V.P.; KALININA, Ye.V.; LIKHNITSKAYA, I.I.; MIKIRTUMOVA, Ye.V.; MIKHAYLOVA, N.F.; NIKIFOROVA, O.A.; SADOF'YEV, A.I.; SEL'KOV, Ye.A.; SOBOLEVA, A.V.; UL'YANOVA, L.S.; KHRUSTINA, S.B.; DEMBO, A.G., red.; KHARASH, G.A., tekhn. red.

[Adjustment of the body following pulmonary resection] O prisposobliaemosti organizma posle rezektsii legkogo. Leningrad, Gos. izd-vo med. lit-ry Medgiz, 1960. 170 p. (MIRA 14:9)

1. Kollektiv klinicheskogo otdela Leningradskogo nauchno-issledovatel'skogo instituta ekspertizy trudosposobnosti i organizatsii truda invalidov (for all except Khvilivitskaya, Dembo, Kharash).
(LUNGS—SURGERY)

CHAPLINSKIY, Ivan Andreyevich; POPOV, Yu.N., kand. tekhn. nauk, glavnyy red.;
MIKHAYLOVA, N.F., inzh., red.; [illegible]DICHENKO, I.S., kand. tekhn. nauk,
red.

[Criteria of ultimate resistance and ultimate plasticity of metals.]
Kriterii predel'nogo soprotivleniia i predel'noi plastichnosti metallov.
Novosibirsk, 1962. 20 p. (Novisibirsk. Elektrotekhnicheskii institut
sviazi. Uchenye zapiski, no.2). (MIRA 17:10)