"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHPARONOV, M.I.; [illegible], Ya.Ya.

Dielectric properties and molecular structure of water-[illegible] solutions. Zhur. strukt. khim. 6 no.1:21-26 Ja-F '65. (MIRA [illegible])

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova. Submitted October 2, 1963.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

L 8197-66 EWT(1)/EWT(m)/EWP(j)/T IJP(c)/RPL DS/WW/GG/RM

ACC NR: AP5027905 SOURCE CODE: UR/0189/65/000/005/0023/0027

44,55 44,55 44,55

AUTHORS: Petrova, A. A.; Shakhparonov, M. I.; Grishin, A. P.

B+1

44,55

ORG: Moscow State University, Chair of Physical Chemistry (Moskovskiy gosudarstvennyy universitet, kafedra fizicheskoy khimii)

21,44,55 15

TITLE: Light scattering in solutions of polymethacrylate-depressor

SOURCE: Moscow. Universitet. Vestnik. Seriya II. Khimiya, no. 5, 1965, 23-27

TOPIC TAGS: polymer, polymethacrylate, light scattering, visible light, aliphatic alcohol, refractive index

ABSTRACT: The scattering of nonpolarized monochromatic light (λ = 4358 Å) at 20C by various solutions was studied. The solutions included nonfractionated polymethacrylate in n-hexane, cyclohexane, diethylamine, a 1:1 by volume mixture of n-hexane and n-propyl alcohol, and n-hexane and cyclohexane containing 1 wt % of thoroughly purified paraffin of molecular weight M = 386, m p 56.5C respectively.

Card 1/3 UDC: 665.521.5:678.744.325

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

L 8197-66

ACC NR: AP5027905

It was desired to characterize the molecular state of the polymethacrylate-depressor in different solvents. The polymethacrylate was synthesized from a mixture of aliphatic alcohols (composition in wt % C_{12} - C_{13} -- 22.8; C_{14} -- 15.8; C_{15} -- 27.4; C_{16} -- 28.6; $C_{>16}$ ~6.0) to determine the refractive index, the light intensity, and the degree of depolarization. The experimental procedure of N. P. Zakurdayeva, A. A. Petrova, V. S. Bronshvager, and D. K. Beridze (Zavodsk. lab., No. 11, 1407, 1964) was followed. The average molecular weight $\bar{M}\omega$, the molecular dimensions, and the second virial coefficient A_2 were calculated after V. Ye. Eskin (Uspekhi fiz. nauk, 82, No. 4, 1964). For each solution at least two Zimm diagrams were constructed. It was found that the investigated molecules behaved as Gaussian clusters with $\bar{M}_\omega = 0.6\text{-}0.7 \times 10^6$ and inertial radius of ~270 Å. Values for $\bar{M}_\omega$, A_2, $\sqrt{\overline{r^2}}$ (the mean inertial radius of the macromolecules), and $\sqrt{\overline{h^2}}$ (the mean statistical distance between the ends of clusters) are tabulated. The results are compared with literature data on light scattering and viscosity for a number of polyalkylmethacrylates. It is concluded that the properties of polymethacrylate-depressor solution are similar to those of fractions of polylaurylmethacrylate in n-butyl acetate. The characteristic viscosity

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L 8197-66

ACC NR: AP5027905

$[\eta]$ and the mean distance between the ends of polymethacrylate molecules ($\overline{h^2}$) are given by $[\eta]=8{,}64\cdot10^{-5}\overline{M}_{\omega}^{0{,}64}$ и $(\overline{h^2})^{1/2}=0{,}35\overline{M}_{\omega}^{0{,}54}$.

To elucidate the depressant mechanism of the polymethacrylate-depressor, solutions of the latter in benzene, chloroform, and carbon tetrachloride were also studied. It was found that for these solvents the viscosity $[\eta]$ and the mean distance $(\overline{h^2})$ are given by the same expressions as above, and that A_2 is given by $A_2=9{,}778\cdot10^{-3}\,\overline{M}_{\omega}^{-0{,}353}$. Orig. art. has: 1 graph and 2 tables.

SUB CODE: 00/ SUBM DATE: 24Nov64/ ORIG REF: 003/ OTH REF: 008

nw

Card 3/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

L 53596-65 EWT(m)/EPF(c)/EPR/EWP(j) Pc-4/Pr-4/Ps-4 RPL WW/RM

ACCESSION NR: AP5011001 UR/0204/65/005/002/0288/0293

36
33
B

AUTHORS: Shakhparonov, M. I.; Petrova, A. A.; Grishin, A. P.

TITLE: The mechanism by which polymethacrylate acts as a pour-point depressant

SOURCE: Neftekhimiya, v. 5, no. 2, 1965, 288-293

TOPIC TAGS: pour point depressant, polymethacrylate, additive, light scattering, virial coefficient

ABSTRACT: Polymethacrylate is commonly used as a pour-point depressant in paraffin oils. In this study of the mechanism of this depressant effect, the authors replaced the mineral oils by individual solutions in order to examine how the depressant property changes with different solvents, to compare these changes with structures of the solid phase, and to obtain data on the macromolecular state of the additive in the different solutions. It was found that the depressant action of polymethacrylate in equal volumes of hexane and propyl alcohol is much less than in pure hexane. In carbon tetrachloride, chloroform, and diethylamine, only weak depressant action was observed. Microscopic studies of paraffin crystals indicate that polymethacrylate has little effect on the size and form of the paraffin crystals separating from solution. In solutions of hexane,

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L 53596-65

ACCESSION NR: AP5011001

3

paraffin and hexane, propyl alcohol, and paraffin, the components in the solutions are similar in structure and chemical nature of the molecules. Average molecular weights, form, and size of the depressant molecules, and the second virial coefficient, were determined by observations of light scattering. These were found to be very nearly the same for the various solvents. In all cases the polymer molecules appeared to form knots having an inertial radius of about 270 Å. Any change that does occur in depressant action from one solvent to another apparently results from change in the arrangement of polar and nonpolar groups in these knots, which form the macromolecules of the additive. It is concluded that positive deviation of a solution from the properties of an ideal solution, when polymethacrylate is dissolved in it, leads to diminution in the depressant effect of the additive. "The authors are very grateful to L. A. Potolovskiy and K. F. Fishman for kindly supplying them with additive samples." Orig. art. has: 1 figure, 3 tables, and 4 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 16Jun64 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 006 OTHER: 001

Card 2/2 BAB

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHPARONOV, M.I.

Proton photoconductivity. Zhur.fiz.khim. 39 no.7:1770-1771 Jl '65. (MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

L 1148-66 EWT(1)/EPF(n)-2/EED(b)-3/ETC(m) IJP(c) WW

ACCESSION NR: AP5023689 UR/0076/65/039/009/2237/2244
541.8+547

AUTHOR: Sukhotina, G. G.; Shakhparonov, M. I.

TITLE: Study of the hyperacoustic properties of benzene-toluene, benzene-*p*-xylene, and pyridine-*p*-xylene solutions

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 9, 1965, 2237-2244

TOPIC TAGS: vibration relaxation, Rayleigh scattering, benzene, toluene, xylene, pyridine, acoustic absorption

ABSTRACT: The aim of the work was to obtain experimental data on the hyperacoustic properties of ideal solutions and solutions with positive deviations from ideality in the presence of a pronounced dependence of vibration relaxation time on the concentration of the components, and to compare these data with the predictions of the theory of vibration relaxation, taking into account existing information on the structure and properties of these systems. The fine structure of the Rayleigh line of light scattering was studied in the solutions benzene-toluene at 17°C, benzene-*p*-xylene at 18°C, and pyridine-*p*-xylene at 22°C. The velocities of the hypersound

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L 1148-66

ACCESSION NR: AP5023689

3

were determined, and the acoustic relaxation times were calculated with the assumption that the relaxation is related to the thermal excitation and to the deactivation of intramolecular vibrations. In the case of benzene-toluene solutions, where deviations from Raoult's law are very slight, the acoustic properties within the range of experimental error qualitatively follow the equations of the simplified theory of vibration relaxation. In the case of solutions of benzene and pyridine in *p*-xylene (positive deviations of the thermodynamic properties from ideality), some discrepancies are observed between the sound absorption data given by the experiment and the theoretical estimates of the sound absorption coefficient. It is postulated that these discrepancies are due to concentration fluctuations and to the relaxation of these fluctuations. Orig. art. has: 3 figures, 4 tables, and 13 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 28Jun64 ENCL: 00 SUB CODE: GP, GC

NO REF SOV: 011 OTHER: 004

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHPARONOV, M.I.

Resonance migration of intramolecular vibrations. Zhur.fiz. Khim. 39 no.10:2370-2375 O '65.

(MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova. Submitted May 8, 1964.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHPARONOV, M.I.

Theory of solutions. Part 13. Zhur.fiz.khim. 39 no.11:2637-2642 N '65. (MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

[illegible] SHAKHRABANOV, M.[illegible]; [illegible], [illegible]

Scattering of light in solutions of polymethacrylate depressor. Vest. Mosk. un. Ser. 2:Khim. 20 no. 5:23-27 S-O '65. (MIRA 18:12)

1. Kafedra [illegible]neskoy khimii Moskovskogo gosudarstvennogo universitata. Submitted Nov. 24, 1964.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

L 31184-66 EWP(j)/EWP(k)/EWT(1)/EWT(m)/T IJP(c) RM/WG/WW/JW

ACC NR: AP6022544 SOURCE CODE: UR/0189/66/000/001/0009/0012

78
B

AUTHOR: Sukhotina, G. G.; Shakhparonov, M. I.

ORG: Department of Physical Chemistry, Moscow State University (Kafedra fizicheskoy khimii Moskovskogo gosudarstvennogo universiteta)

TITLE: Acoustic relaxation and rate of propagation of hypersonic waves in liquids

SOURCE: Moscow. Universitet. Vestnik. Seriya II. Khimiya, no. 1, 1966, 9-12

TOPIC TAGS: vibration relaxation, vibration propagation, propagation velocity, intramolecular mechanics, vibration frequency, acoustics

ABSTRACT: The study aims at calculating parameters of acoustic relaxation of several liquids at 20° based on experimental and literature data. The objects of the investigation were selected so that it was possible to trace the relationship between time of relaxation and lowest frequency of lowest intramolecular oscillations ν. Measurements of the velocity of hypersound V_{hyp} in decane, cyclohexane, decaline, ortho- and paraxylols, styrene, nitromethane, acetonitrile, tri- and tetrachloroethylene were made by the authors on an experimental device described in an earlier report.

A. Normatov and O. Shakirov took part in the measurements of propagation rate and ultrasonic absorption in liquids. Orig. art. has 1 figure and 2 tables. [JPRS]

SUB CODE: 20, 07/ SUBM DATE: 25May65/ ORIG REF: 003

Card 1/1 UDC: 665.521.5: 678.744.325

0915 0553

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHPARONOV, V., inzh; RODIONOV, B., inzh.

"Zero" cycle of an industrial building of a new type. Stroitel' 8 no.4:5-6 Ap '62. (MIRA 15:7)
(Concrete footings)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHIRIN, P.K., kand.tekhn.nauk; SHAKHPARONOV, V.V., inzh.

Experience in organizing the construction of a new-type industrial building. Prom. stroi. 39 no.3:9-11 '61. (MIRA 14:4)
(Factories—Design and construction)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

PROSTAKOV, N.S.; SHAKHPARONOVA, L.A.; KIRILLOVA, L.M.

Substituted pyridines. 2,5-Dimethyl-4-benzoylpyridine and 2,5-dimethylpyridyl-2-aniline. Zhur. ob. khim. 34 no.10: 3231-3234 O '64. (MIRA 17:11)

1. Universitet druzhby narodov imeni Patrisa Lumumby.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

S/081/62/000/005/105/112
B167/B101

AUTHORS: Shakh-Paron'yants, A. M., Epshteyn, V. G.

TITLE: Some properties of СКИ(SKI) isoprene rubber vulcanizates

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 643, abstract 5P288 (Uch. zap. Yaroslavsk. tekhnol. in-ta, v. 6, 1961, 147 - 154)

TEXT: An increase in the degree of vulcanization of SKI (e. g. by increasing the proportion of sulfenamide БТ(BT) accelerator from 1 to 3 % by weight produces an increase in the elastic modulus, a decrease in the relative extension, (to between 500 - 600 %), and a decrease in the tensile strength of the vulcanizates (from 250 to 20 - 25 kg/cm^2), as a result of difficult crystallization in the dense molecular lattice containing numerous sulfur links. The decrease in the strength of SKI rubber, after it has passed through a maximum, is also explained by hindered crystallization and by destruction. SKI and its vulcanizates oxidize more rapidly than natural rubber, and the oxidation is accelerated by a higher alkali content. The most effective antideteriorants for SKI and its vulcanizates are 4010 and

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

Some properties of СКИ(SKI)...

S/081/62/000/005/105/112
B167/B101

1,4-diphenylphenylenediamine in conjunction with neozone D. Addition of anisidine to the SKI mixture induces oxidative cross-linking and enhances the modulus of the rubbers. [Abstracter's note: Complete translation.]

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

22 (1) SOV/27-59-2-21/30

AUTHORS: Shakhper, P., Director, and Shubina, O., Chief

TITLE: Training of Workmen at the Enterprises (Obucheniye rabochikh na predpriyatiyakh)
A Teaching Unit at the Building Site
(Uchebnyy punkt na stroyke)

PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1959, Nr 2, pp 30 - 31 (USSR)

ABSTRACT: The training of workers at the "Kemerovotsentrostroy" Trust is being carried out by the Teaching Unit. This unit also organizes the introduction of progressive labor methods, stresses the latest advances in engineering and popularizes the concept of advanced experience. Highly skilled workers, many of whom have mastered 2 to 3 specialities, do the basic work in studying and assimilating advanced labor methods. They also conduct practical training in the groups attached to them. Systematic guidance and training supervision are done by the Teaching Unit Director and one person in charge of the technical education section. Instruction in the main building fields-bricklayers, fitters and plasterers - is

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SOV/27-59-2-21/30

Training of Workmen at the Enterprises
A Teaching Unit at the Building Site

conducted in teams of 14 to 25 persons who are learning the same vocation. Practical training takes place at the building site. Theoretical knowledge is also acquired by the apprentice in independent study from books and in Teaching Unit Workshops. The author further mentions schools of advanced labor methods where experienced workers are trained as well as young graduates from Labor Reserve Schools. The "Kemerovotsentrostroy" and the "Stalinskpromstroy" Trusts are designated as the leading building organizations of the Kemerovo Sovnarkhoz.

ASSOCIATION: Trest "Kemerovotsentrostroy" ("Kemerovotsentrostroy" Trust)

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHPER, P.; MEL'NICHENKO, I.

Plaster which requires no smoothing. Stroitel' no.9:24, 4 of cover S '61. (MIRA 14:12)

1. Zamestitel' direktora Kemerovskogo filiala Gosudarstvennogo instituta po vnedreniyu peredovykh metodov raboty i truda v stroitel'stve Nauchno-issledovatel'skogo instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR (for Shakhper). 2. Starshiy instruktor Kemerovskogo filiala Gosudarstvennogo instituta po vnedreniyu peredovykh metodov raboty i truda v stroitel'stve Nauchno-issledovatel'skogo instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR (for Mel'nichenko).
(Plastering)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHPORONYAN, S.S.

Application of forceps in local anesthesia. Akush.i gin. no.1:58-59 Ja-F '54. (MLRA 7:6)

1. Iz Yaroslavskogo gorodskogo rodil'nogo doma (glavnyy vrach N.S.Kuznetsova). (Anesthesia in obstetrics) (Labor, Complicated) (Forceps, Obstetric)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SOV/124-57-8-9316

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 8 p 108 (USSR)

AUTHORS: Oniashvili, O. D., Shakhramanov, G. S.

TITLE: The Evaluation of the Boundary Effect in the Static Calculation of Spherical Shells (Otsenka granichnogo effekta pri staticheskom raschete sfericheskikh obolochek)

PERIODICAL: Tr. In-ta stroit. dela AN GruzSSR, 1955, Vol 5, pp 55-60

ABSTRACT: The authors submit an approximate evaluation of the state of stress in a shallow spherical shell that is rectangular in planview with relation to the character of the boundary conditions. By means of integrating the shallow-shell equation of the engineering moment theory with the help of the variational method it is proved that the influence of the boundary effect increases with an increase in the shallowness of the shell and attains a maximum in the limit case of a thin flat plate.

V. G. Rekach

Card 1/1

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SOV/124-57-3-3413

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 3, p 112 (USSR)

AUTHOR: Shakhramanov, G. S.

TITLE: The Design Calculation of Thin-walled Cylindrical Shells in Accordance With Generalized Formulas (Raschet tonkostennykh tsilindricheskikh obolochek po obobshchennym formulam)

PERIODICAL: Tr. nauch. korrespondentov In-ta stroit. dela. AN GruzSSR, 1956, Vol 1, pp 65-81

ABSTRACT: The paper suggests some design-calculation formulas for the determination of the normal longitudinal stresses and the transverse bending moments in a prismatic hipped structural element which takes the place of a cylindrical shell having vertical side elements in its calculation with the aid of eight-term differential equations. The formulas obtained as a result of the solution of the system of algebraic equations contain, besides coefficients which depend on the geometric dimensions, fundamental beam functions and the coefficients of an expansion according therewith of the external load, as well as six constant values determined in advance in terms of the central angle and of the nature of the external load; the paper

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SOV/124-57-3-3413

The Design Calculation of Thin-walled Cylindrical Shells (cont.)

adduces tables of these values for circular-cylindrical shells with 60, 90, and 120° central angles.

A. K. Mroshchinskiy

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAMANOV, G. S.

SOV/124-58-7-7946

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 7, p 94 (USSR)

AUTHORS: Oniashvili, O. D., Shakramanov, G. S.

TITLE: On the Vibrations of Plates (K voprosu o kolebaniyakh plastinok)

PERIODICAL: Tr. In-ta stroit. dela, AN GruzSSR, 1957, Vol 6, pp 31-34

ABSTRACT: The Bubnov-Galerkin method is used to determine the lowest natural frequency of a rectangular plate some of whose edges are clamped, the others being supported along their contours.
V.V. Bolotin

1. Metal plates--Vibration

Card 1/1

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

KAZIYEV, M.A.; SHAKHRAMANOVA, N., redaktor; AGAYEVA, Sh., tekhnicheskiy redaktor

[History of the revolutionary struggle of the Baku proletariat (1905-1910)] Iz istorii revoliutsionnoi bor'by bakinskogo proletariata (1905-1910 gg.) Baku, Izd-vo Akad. nauk Azerbaidzhanskoi SSR, 1956. 233 p. (MLRA 10:5)

(Baku--Labor and laboring classes)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

MACHNEV, B.N., inzh. (Kolomna); NAYMAN, A.M., inzh. (Kolomna); NESTEROV, E.I., inzh. (Kolomna); SHAKHRAY, D.I., inzh. (Kolomna); KHLEBNIKOV, Yu.V., inzh. (Kolomna)

Prospects of the use of gas-turbine locomotives. Znel.-dor.transp. 45 no.12:48-52 D '63. (MIRA 17:2)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY D M.
p 2

AUTHOR: Sergeyev, A.S., Docent 105-58-5-25/28

TITLE: Dissertations (Dissertatsii)

PERIODICAL: Elektrichestvo, 1958, Nr 5, pp. 91-92 (USSR)

ABSTRACT: For the Degree of Candidate of Technical Sciences.
At the Ural Polytechnic Institute imeni Kirov (Ural'skiy politekhnicheskiy institut im. Kirova):
S.D.Levintov on June 27, 1949 "Electromechanic Transition Processes in a Synchronous Motor in the Case of Periodic Load (of the Compressor Type)". Official opponents: N.S.Siunov, Professor, Doctor of Technical Sciences, I.D.Urusov, Docent and A.T.Blazhkin, Candidate of Technical Sciences.
I.S.Pinchuk on June 27, 1949 "Electromechanic Transition Processes in Asynchronous Motors". Official opponents: N.S.Siunov, Professor, Doctor of Technical Sciences, A.A.Yanko-Trinitskiy, Docent, Candidate of Technical Sciences and P.M.Chudnovskiy, Engineer.
I.D.Urusov on June 27 1949 "The Mechanical Strength of the Casing of Electric Machines Subjected to the Action of Electromagnetic Loads". Official opponents: I.B.Sokolovskiy, Doctor of Technical Sciences and M.V.Belyayev, Docent, Candidate of Technical Sciences.

Card 1/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

Dissertations 105-58-5-25/28

S.P.Sitnikov on March 6, 1950 "Some Problems Connected with the Theory of Arc-Extinguishing Devices". Official opponents: N.S.Siunov, Professor, Doctor of Technical Sciences, V.G.Stepanov, Docent, Candidate of Technical Sciences and V.M.Sin'kov, Docent, Candidate of Technical Sciences.

D.M.Shakhray on June 26, 1950 "The Investigation of a Special System for the Electric Equipment of Dredges". Official opponents: I.B.Sokolovskiy, Professor, Doctor of Technical Sciences, M.V. Belyayev, Docent, Candidate of Technical Sciences and A.Ye.Tropp, Candidate of Technical Sciences.

G.P.Kropachev on June 30, 1953 "Investigation of an Asynchronous Starter in Synchronous Machines with Salient Poles and Withou Starter Cage". Official opponents: N.S.Siunov, Professor, Doctor of Technical Sciences, S.A.Volotkovskiy, Doctor of Technical Sciences and M.A.Pirumyan, Docent.

V.P.Shasherin on January 18, 1954 "Some Problems of Cathode-Oscillographic Measurements when Testing High-Frequency Apparatus". Official opponents: N.S.Siunov, Professor, Doctor of Technical Sciences and V.G.Stepanov, Candidate of Technical Sciences.

R.N.Urmanov on June 7, 1954 "Investigation and Calculation of Circuits with a Three-Phase Welding Arc". Official opponents: S.A.Volotkovskiy, Professor, Doctor of Technical Sciences and G.P.Mikhaylov, Professor, Doctor of Technical Sciences.

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Dissertations

105-58-5-25/28

At the Sverdlovsk Mining Institute imeni Vakhrushev (Sverdlovskiy gornyy institut im. Vakhrusheva):
I.P.Petrov on February 15, 1954 "Electric Locomotive for Pits with Repulsion Traction Motors for Single-Phase Currents of Normal Frequency". Official opponents: N.S.Siunov, Professor, Doctor of Technical Sciences and A.T.Blazhkin, Docent, Candidate of Technical Sciences.

At the Gor'kiy Polytechnic Institute imeni Zhdanov (Gor'kovskiy politekhnicheskiy institut im. Zhdanova):
S.N.Shevchuk on June 14, 1949 "Problems of Insulation against Loss of Heat in Electromotors of Metal-Working Machines". Official opponents: D.M.Morozov, Professor, Doctor of Technical Sciences, N.V.Shchedrin, Docent, Candidate of Technical Sciences and M.P.Shvakov, Engineer.

A the Tomsk Polytechnic Institute imeni Kirov (Tomskiy politekhnicheskiy institut im. Kirova)):
G.F.Pukhova on March 26, 1947 "On the Problem of the Automatic Re-Connection of Individual Lines in the Case of Electric Transmission with Bilateral Feed". Official opponents: V.A.Voronov, Professor, Doctor of Technical Sciences and I.D.Kutyavin, Candidate of Technical Sciences.

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Dissertations 105-58-5-25/28

A.N.Zhilin on April 26, 1950 "Transition Processes in Three-Phase Circuits in the Case of Non-Simultaneous Phase Connection". Official opponents: V.K.Shcherbakov, Professor, Doctor of Technical Sciences and Yu.Ye.Nebolyubov, Docent, Candidate of Technical Sciences.

V.A.Abakumov on June 30, 1950 "Automation of a Series-Wound Motor According to the Leonard Circuit with Shunt-Wound Generator". Official opponents: I.A.Balashev, Professor, Doctor of Technical Sciences and L.I.Gandzha, Docent, Candidate of Technical Sciences.

V.U.Kostikov on March 13, 1954 "Methods of Determining Equivalent Specific Electric Conductivity". Official opponents: V.K.Shcherbakov, Professor, Doctor of Technical Sciences and V.N.Titov, Docent, Candidate of Technical Sciences.

AVAILABLE: Library of Congress

1. Scientific reports--USSR 2. Electrical equipment--USSR
3. Electrical engineering--USSR

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

MAMAYEV, G.T.; SHAKHRAY, F.V.

Timber resources of the Komi A.S.S.R. and prospects for their utilization. Trudy Komi fil. AN SSSR no.3:5-12 '55. (MLRA 9:10)
(Komi A.S.S.R.--Lumbering) (Forests and forestry)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY, F.V.

KARGIN, V.A.

5(3) P4 PHASE I BOOK EXPLOITATION SOV/1589

Akademiya nauk SSSR.

Khimiya bol'shikh molekul; sbornik statey (Chemistry of Large Molecules; Collection of Articles) Moscow, Izd-vo AN SSSR, 1958. 299 p. (Series: Akademiya nauk SSSR. Nauchno-populyarnaya seriya) 30,000 copies printed.

Compiler: G.V. Sklovskiy; Resp. Ed.: A.V. Topchiyev, Academician; Ed. of Publishing House: V.A. Boyarskiy; Tech. Ed.: I.N. Guseva.

PURPOSE: This book is intended for a wide circle of readers including those who have had no training in chemistry. It can also serve as a manual for propagandists, teachers, and journalists.

Chemistry of Large Molecules (Cont.) SOV/1589

COVERAGE: This collection of articles reflects the trend for the future development of the Soviet chemical industry as indicated by the May plenary session of the Central Committee of the Communist Party within the framework of the new Seven Year Plan. These articles were published in newspapers and journals. The authors, scientists and industry workers, developed the theme of accelerated development of the chemical industries, and sciences, with stress on the manufacture of synthetic fibers, plastics, and other materials. Some of the articles were abridged, revised, or enlarged. The articles were selected so as to give an adequate survey of the chemistry and technology of high-molecular-weight compounds and their use in industry, agriculture, and in the manufacture of consumers' goods. Mentioned are raw materials for the production of polymers. This book belongs to the popular-science series of the Academy of Sciences. Similar volumes are intended for future publication. No references are given.

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Demenev, P.V. Scientists From the Urals in the Struggle for Progress in Technology

Shakhray, F.V. An Inexhaustible Source for the Production of Valuable Materials 286

Shur, A.M. Unlimited Possibilities 290

AVAILABLE: Library of Congress 295

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APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY, F.V.; PARASHCHENKO, G., red.; TIMUSHEV, S., otv. za vypusk; TSIVUNIN, I., tekhn.red.

[Ways of developing wood chemistry in the Komi A.S.S.R.] Puti sozdaniia lesokhimii v Komi ASSR. Syktyvkar, Komi knizhnoe izd-vo, 1959. 21 p. (MIRA 13:6)

1. Chlen nauchno-tekhnicheskogo obshchestva lesnoy promyshlennosti (for Shakhray).
(Komi A.S.S.R.--Wood--Chemistry)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

AZIZOV, K.I.; PODOPLELOV, V.P.; SHAKHRAY, F.V.

Forty years of the lumbering industry of the Komi A.S.S.R. and problems of its further development. Izv.Komi fil.Geog.ov-va SSSR no.7:15-24 '62. (MIRA 15:12)

(Komi A.S.S.R.--Lumbering)
(Komi A.S.S.R.--Woodworking industries)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY, F.V.

The Syktyvkar lumbering complex. Prob. Sev. no.5:153-160 '63. (MIRA 16:11)

1. Komi filial AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY, I.; BEGIDZHANOV, M., inzh.

New work norms and labor organization at a machine-tool plant. Sots. trud 5 no.4:113-117 Ap '60. (MIRA 13:9)

1. Direktor Kolomenskogo zavoda tyazhelogo stankostroyeniya (for Shakhray).
(Kolumna--Machine-tool industry--Production standards)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY, I. M.

PA 29/49T27

USSR/Engineering
Mechanization

Aug 48

"Mechanization of Production Processes in the Kolomenskiy Engine Works," I. M. Shakhray, I. A. Kholodilin, Engineers, 3 pp

"Mekh Trud i Tyazh Rabot" No 8

Briefly describes various reforms instituted at this factory in an attempt to fulfill the present Five-Year Plan. Includes sketches of some of the mechanized equipment.

[redacted]

29/49T27

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

YURKIN, S.; KHIZHNYAK, P.; CHENKIN, A.; KUZNETSOVA, Ye.; SHAKHRAY, L.; KALASHNIKOV, K., kand. sel'skokhoz. nauk (Pushkin)

Meetings, conference and seminars. Zashch. rast. ot vred. i bol. 10 no.7:55-58 '65. (MIRA 18:10)

1. Uchenyy sekretar' Nauchno-tekhnicheskogo soveta Ministerstva sel'skogo khozyaystva SSSR (for Yurkin). 2. Zamestitel' nachal'nika Upravleniya zashchity rasteniy Ministerstva sel'skogo khozyaystva RSFSR (for Chenkin). 3. Zaveduyushchaya sektorom signalizatsii i prognozov po RSFSR Upravleniya zashchity rasteniy Ministerstva sel'skogo khozyaystva RSFSR (for Kuznetsova).

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHNA/, I.I.

Novye tekhnologicheskie protsessy v mashinostroenii. Sverdlovsk, Mashgiz, 1945. 86, (2) p. illus.

Bibliography: p. 85-(87)

New technological processes in mechanical engineering

DLC: TJ1160. S45

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

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY, N.I.

Peredovye tekhnologicheskie protsessy v mashinostroenii. Moskva, Mashgiz, 1950. 247 p. illus.

Bibliography: p. 241-(246)

Advanced technological processes in mechanical engineering

DLC: TJ145. S5

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

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY, M.L.

SERGIYENKO, V.A.; NEZABYTOVSKIY, K.P.; GORELOV, V.M., inzhener, redaktor; SHAKHRAY, M.L., professor, retsenzent

[Metal drawing] Protiagivanie. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1952. 90 p. [Microfilm] (MLRA 7:10)
(Metal drawing)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

POPOV, V.A., laureat Stalinskoy premii; YEREMIN, A.N., kandidat tekhnicheskikh nauk, retsenzent; SHAKHRAY, M.L., professor, redaktor; DUGINA, N.A., tekhnicheskiy redaktor.

[Surface quality in face milling] Kachestvo poverkhnosti pri tortsevom frezerovanii. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. litry, 1952. 138 p. [Microfilm] (MLRA 7:10)
(Milling machines) (Surfaces (Technology))

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SEREBROVSKIY, V.B.; SHAKHRAY, M.L., professor, retsenzent; GORELOV, V.M., inzhener, redaktor; DUGINA, N.A., tekhnicheskiy reaktor

[The quality of machine part surfaces] Kachestvo poverkhnosti detalei mashin. Pod red. V.M.Gorelova. 2-e izd. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 44 p. (Nauchno-populiarnaia biblioteka rabochego stanochnika, no.8) (MLRA 8:3)
(Metal cutting) (Surfaces (Technology))

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY, M.L.; SHARIN, Yu.S., redaktor; DUGINA, N.A., tekhnicheskiy redaktor

[Progressive technological processes in machine building] Peredovye tekhnologicheskie protsessy v mashinostroenii. Izd. 2-e, dop. i perer. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 267 p. (MLRA 8:7)
(Machinery industry)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY, M.L.

SERGIYENKO, Vasiliy Aleksandrovich; NEZABYTOVSKIY, Konstantin Pavlovich; SHAKHRAY, M.L., professor, retsenzent; SHABASHOV, S.P., kandidat tekhnicheskikh nauk, redaktor; DUGINA, N.A., tekhnicheskiy redaktor.

[Metal drawing] Protiagivanie. Izd.2-oe, perer. i dop. lit-ry, 1955. 162 p. (MLRA 9:2)

(Metal drawing)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

RABOTIN, Aleksandr Nikolayevich; SHAKHRAY, M.L., prof., retsenzent; GORELOV, V.M., inzh., red.; DUGINA, N.A., tekhn.red.

[Precision in the tooling of machine parts] Tochnost' obrabotki detalei mashin. Pod red. V.M.Gorelova. Izd.3. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 41 p. (Nauchno-populiarnaia biblioteka rabochego stanochnika, no.21) (MIRA 12:7)

(Machinery)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY, P.G.

Preparation of stuffed birds. Est. v shkole no.4:92 Jl-Ag '54.
(MLRA 7:8)

1. Uchitel' Khoynikovskoy belorusskoy shkoly no. 1 Polesskoy oblasti.
(Birds--Collection and preservation) (Taxidermy)

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L 59172-65 EWG(j)/EWT(m)/EPF(c)/EWP(j)/T/EWA(h)/EWA(c)/EWA(1) Pc-4/Pr-4/Peb RM
ACCESSION NR: AP5015241 UR/0286/65/000/009/0023/0023
541.15:547.313.2

AUTHOR: Glushnev, V. Ye.; Kolbanovskiy, Yu. A.; Patalakh, I. I.; Polak, L. S.; Popov, V. T.; Chelnokov, V. A.

TITLE: Radiation-induced synthesis of organic compounds with various functional groups. Class 12, No. 1[illegible]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov no. 9, 1965, 23

TOPIC TAGS: radiation, radiation induced synthesis

ABSTRACT: An Author Certificate has been issued for a radiation-induced synthesis of organic compounds having various functional groups, such as carboxylic acids, amines, nitro and nitroso compounds, thio compounds, alcohols, etc. The method consists in the ionizing irradiation of a reaction mixture comprising a monomer, such as ethylene, and a reactant, such as CO_2, NH_3, NO_2, NO, H_2S, SO_2, H_2O, etc., which determines the type of the derivative formed. To increase the radiation yield and to obtain a compound having the desired molecular weight, the reaction mixture is irradiated in the presence of a catalyst, e.g., aluminum oxide or silica gel. [SM]

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L 58478-65

ACCESSION NR: AP5015241

ASSOCIATION: none

SUBMITTED: 12Jun63 ENCL: 00 SUB CODE: GC, MP

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4019

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SHAKHRAY, V. A.

The conversion of 2-hexene and isopropyl chloride on the complex catalysts. A. A. Mikhnovskaya, S. R. Sergienko, and V. A. Shakhraĭ. *Trudy Inst. Nefti, Akad. Nauk S.S.S.R.* 4, 81-92(1954).—To 4 g. of ice-cooled anhyd. $AlCl_3$ in a round-bottom flask, with reflux condenser, is added dropwise while stirring 2.67 g. of a mixt. of 35% nitroethane, 10% 1-nitropropane, and 55% 2-nitropropane. After stirring 1 hr., the mixt. forms a viscous liquid (I). The mixt. of isopropyl chloride and 2-hexene (mol. ratio 1:1) at 0° and normal pressure form in the presence of I 15-17% hexyl chlorides, and 32-36% dimers and alkylpolymers of hexene during 3-4 hrs. The major part of the hexyl chlorides, b. 123.4°, is 2-chlorohexane. At 0° and normal pressure alkylation of hexene with isopropyl chloride does not take place. Under the same conditions isoprene in the mixt. with isopropyl chloride spontaneously polymerizes. M. Charmandarian

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SHAKHRAY, V. A.

5(3); 11(4) PHASE I BOOK EXPLOITATION SOV/2221

Akademiya nauk SSSR. Institut nefti

Trudy, t. 12 (Transactions of the Petroleum Institute, USSR. Academy of Sciences, Vol 12) Moscow, Izd-vo AN SSSR, 1958. 395 p. Errata slip inserted. 1,700 copies printed.

Ed.: S. R. Sergiyenko, Professor; Ed. of Publishing House: K. G. Mityesserov; Tech. Ed.: V. V. Golubeva.

PURPOSE: The book is intended for scientists, engineers, and technicians in the petroleum industry.

COVERAGE: This collection of articles describes the results of studies on the chemistry and technology of petroleum and gas conducted in the laboratories of the Petroleum Institute, Academy of Sciences, USSR, in 1956 and 1957. A new section "Petrochemical Synthesis and Technology of Petroleum" has been included in the collection of articles. A list of investigations published by the associates of the Institute in 1956 and 1957 and a list of dissertations for the Doctor's and Candidate's degrees presented in 1956 and 1957 at open sessions of the Academic Council of the Petroleum Institute, Academy of Sciences, USSR, are given.

N. Kh. Iskhakova, F. V. Korenevskaya, I. A. Musayev, and V. V. Shchekin. Change in the Activity of Silica Gel in the Chromatographic Separation of Hydrocarbons 35

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Sergiyenko, S. R., and A. A. Mikhnovskaya. The Chemical Nature of High-Molecular Weight Monocyclic Aromatic Hydrocarbons of Romashkino (Devonian) Petroleum. Part 19 136

Sergiyenko, S. R., I. A. Nozhkina, and Ye. V. Nozdrina. Investigation of the Chemical Nature of High-Molecular Weight Condensed Dicyclic Aromatic Compounds of Romashkino Petroleum by the Catalytic Hydrogenation Method in the Presence of Raney Ni. Part 20 147

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Sergiyenko, S. R., I. A. NOzhkina, and Ye. V. Nozdrina. Hydrogenation of Tars Isolated from Romashkinskaya Petroleum. Paper 22 168

Sergiyenko, S. R. V. I. Korchagina, P. N. Galich, L. I. Rutman, B. E. Davydov, and M. I. Krasavchenko. Effect of the Depth of Selective Cracking on the Composition and Properties of Heavy Residual Petroleum Fraction. Part 23 173

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SERGIYENKO, S.R.; DAVYDOV, B.E.; LITMANOVICH, A.D.; SHAKHRAY, V.A.

Some physicochemical properties of petroleum asphaltenes and tars in solution. Article No.14. Trudy Inst.nefti 12:76-82 '58. (MIRA 12:3)

(Tar) (Asphaltenes)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

POLAK, L.S.; CHERNYAK, N.Ya.; SHAKHRAY, V.A.; SHCHERBAKOVA, A.S.

γ-Radiolysis of hexane in the presence of small amounts of benzene. Neftekhimiia 1 no.5:695-699 S-O '61. (MIRA 15:2)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Hexane)(Radiation)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHRAY, V. A.

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SOV/6177

PHASE I BOOK EXPLOITATION

Akademiya nauk SSSR. Institut neftekhimicheskogo sinteza

Radioliz uglevodorodov; nekotoryye fiziko-khimicheskiye problemy (Radiolysis of Hydrocarbons; Some Physicochemical Problems) Moscow, Izd-vo AN SSSR, 1962. 207 p. Errata slip inserted. 5000 copies printed.

Resp. Eds.: A. V. Topchiyev, Academician, and L. S. Polak, Doctor of Physics and Mathematics; Ed.: L. T. Bugayenko; Tech Ed.: Ch. A. Zentsel'skaya.

PURPOSE: This book is intended for physical and industrial chemists interested in the properties and behavior of irradiated hydrocarbons.

COVERAGE: The book gives a systematic presentation of the results of research on the radiolysis of hydrocarbons carried out from 1957 through 1961 at the Laboratory of Radiation Chemistry, Institut neftekhimicheskogo sinteza AN SSSR (Institute of Petro-

Card 1/4

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chemical Synthesis, Academy of Sciences USSR). Although the results were obtained for individual compounds, they may be generalized and applied to other members of the same homologous series. The following persons participated in making the experiments and in writing the text: V. G. Boryezkin, V. E. Glushnev, Yu. A. Kolbanovskiy, I. M. Kustanovich, V. D. Popov, A. Ya. Temkin, V. D. Timofeyev, N. Ya. Chernyak, V. A. Shakhray, E. B. Shlikhter, A. S. Shchorbakova, B. M. Kegodov, A. Z. Peryshkina, N. M. Rytova, T. A. Tegina, Yu. B. Emin, A. M. Brodskiy, V. N. Voyevodskiy, P. Ya. Glazunov, B. A. Smirnova, and Yu. L. Khait. References, mainly Soviet and English, follow individual chapters.

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Foreword 3

Ch. I. Physicochemical Characteristics of Hydrocarbon Radiolysis 5

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43235
S/844/62/000/000/052/129
D287/D307

AUTHORS: Berezkin, V. G., Polak, L. S. and Shakhray, V. A.

TITLE: Investigations of the mechanism of formation of heavy radiolysis products of hexane in liquid and solid phases

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khimii. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962, 312-316

TEXT: The C_9-C_{12} fractions, obtained during the radiolysis of hexane, were analyzed by gas-liquid chromatography, using the silicone oil ПФМС-4 (PFMS-4) as the stationary liquid phases. The experiments were carried out at 150°C, the efficiency of the 5 m long, 6 mm diameter column being approximately 3000 theoretical plates, N_2 was used as carrier (accuracy of analysis: ± 5%). Hexane samples irradiated with a dose of 1.7×10^{21} ev/g were subjected to preliminary concentration at -5°C. The degree of concentration of the samples varied within the limits 30 - 40. Experimental data ob-

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tained were in good agreement with previously published views on the mechanism of radiolysis in the solid phase (DAN SSSR, 129, 1042 (1959)). Products obtained during irradiation of hexane with 10^{21} ev/g at room temperature make it possible to assume that formation of C_{13} hydrocarbons is accompanied by the addition of a CH_3-radical to the double bond of 2- and 3-hexanes and subsequent recombination of the C_6 and C_7 radicals. The higher products are isomeric and thus the ratio of the concentrations of primary radicals to the total of secondary radicals at constant concentrations of hexyl radicals can be calculated, by assuming that the concentration of the products in irradiated hexane is directly proportional to the rate of the individual recombination reactions. Identical values for the secondary radicals at 195 and 77°K indicate that the aggregate composition does not affect the ratio of concentrations of the radicals obtained during the cleavage of the C-H bonds. The degree of probability of radical cleavage of various bonds in the starting molecule was calculated to clarify the mechanism of primary processes during radiolysis and to be able to

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predict the composition of higher saturated hydrocarbons, for a constant concentration of radicals which are formed during the irradiation of liquid alkanes. Splitting off of an H atom from secondary C atoms is approximately 3 times more probable than from primary C atoms. The constant concentration of R_3, R_4 and R_5 at 300°K was also calculated, to determine the probability of cleavage of the H_3C-CH_2- and $-CH_2-CH_2-$ bonds and it was proved that for hydrocarbons with even and odd numbers of C-atoms the probability of cleavage along the CH_3-CH_2 bond is 5 times smaller than cleavage along the $-CH_2-CH_2-$ bond. There are 2 tables and 1 figure.

ASSOCIATION: Institut neftekhimicheskogo sinteza, AN SSSR (Institute of Petrochemical Synthesis, AS USSR)

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VIZIR,' P.Ye. [Vizir, P.IE], SHAKHRAY, V.Ya. [Shakhrai, V.IA]

Role of filterable forms of pathogenic bacteria in the pathogenesis and immunogenesis of infections. Mikrobiol. zhur. 20 no.3:42-48 '58 (MIRA 11:11)

1. Iz Instituta mikrobiologii AN USSR.
(BACTERIA, PATHOGENIC)

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E075/E484

5.4600
11.1210

AUTHORS: Polak, L.S., Chernyak, N.Ya., Shakhray, V.A., Shcherbakova, A.S.

TITLE: γ-radiolysis of n-hexane in the presence of small admixtures of benzene

PERIODICAL: Neftekhimiya, v.1, no.5, 1961, 695-699

TEXT: The authors investigated the composition of the main products of radiolysis of hexane in the liquid phase at 20°C in the presence of small additions of benzene. Great care was taken to purify the hexane before radiolysis. It was washed with oleum, alkaline solution and water, dried with $CaCl_2$, passed through silica gel and distilled. Benzene used was of cryoscopic grade and thiophane free. Solutions of benzene in hexane (10^{-4} to 10^{-1} mole/litre) were placed in special ampules. Before sealing, air was removed from the solutions by repeated freezing to -196°C and melting in high vacuum (5×10^{-3} mm Hg). After sealing, all ampules were irradiated simultaneously with γ-rays for 80 h using Co^{60}. Radiation dosage was 4×10^{15} eV/sec cm^3. It is shown that yields of products resulting from the rupture of C - H bonds,

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γ-radiolysis of n-hexane ...

i.e. H_2, C_6H_{12}, C_8H_{18} - $C_{12}H_{26}$ and C_2-C_4 fractions, begin to decrease for the solutions containing 10^{-4} mole/litre of benzene. Practically no further changes in the yields occur for benzene concentrations of about 10^{-3} mole/litre and upwards. Thus the solutions become "saturated" with the radiation inhibitor, the maximum decrease in the yields of hydrogen being about 20%. The yields of heavy radiolysis products and hexane are also decreased by about 20% irrespective of the chemical mechanism in which they were formed. The constancy of composition of the heavy residue was checked by mass spectroscopy. For the products forming when C-C bonds are ruptured, i.e. C_2 - C_4 fractions, the yields are lowered only by 14%. In this case benzene shows less inhibiting action. Since the percentage of various fractions is approximately the same for all C_2 - C_4 fractions, it is inferred that the inhibition affects equally odd and even carbon numbered hydrocarbons. The authors explain the fact that the inhibiting action does not depend on differences in chemical mechanisms of product formation, by postulating that the inhibitor accepts at least a part of excitation energy from molecules, radicals or ions

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γ-radiolysis of n-hexane ... S/204/61/001/005/008/008
E075/E484

directly from excited electronic levels before the energy is transmitted to vibrational levels, which establishes conditions for chemical reactions. Further process of decomposition of excited species does not depend on the presence of small amounts of inhibitors. Consequently the composition of stable radiolysis products h a r d l y c h anges. Acknowledgments are expressed to N.M.Rytova for her assistance. There are 2 figures, 2 tables and 12 references: 5 Soviet-bloc and 7 non-Soviet-bloc. The four most recent references to English language publications read as follows: Ref.4: F.H.Krenz. Nature, v.176, 1955, 1113; Ref.5: M. Burton, S. Lipsky, M.P.Reddy. J. Chem. Phys., v.26, 1957, 1337; Ref.6: G. Freeman. J. Chem. Phys., v.33, 1960, 71; Ref.7: D.R.Kalkwarf. Nucleonics, v.18, no.5, 1960, 76.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR (Institute of Petrochemical Synthesis AS USSR)

SUBMITTED: September 5, 1961

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKURAV, [illegible], [illegible].

Increasing the reliability and durability of machine tools. Mashinostroenie no.[illegible] My-Je '65. (MIRA 18:6)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

ZHABITSKAYA, L.G.; SHAKHRIMAN'YAN, I.K.

Using the testimonies of witnesses for the study of perceptual processes. Vop. psikhol. 11 no.2:148-154 Mr-Ap '65. (MIRA 18:6)

1. Kishinevskiy gosudarstvennyy universitet.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHSUVARLI, M.A.; ALIYEVA, S.I.; BAYRAMALIBEKOVA, R.T.

Unusual localization of Taenia saginata with exhalation of the proglottis through the nose. Med.paraz. i paraz.bol. 33 no.3:354-355 My-Je '64. (MIRA 18:2)

1. Klinicheskoye otdeleniye Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Kirova i kafedra bolezney ukha, gorla, nosa Meditsinskogo instituta imeni Narimanova.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHSUVARLI, M.A.; KULIYEV, N.Dzh.

Treatment of necatoriasis with naphthamone (alcopar).
Azerb. med. zhur. 42 no.8:40-43 Ag '65. (MIRA 18:11)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

GUSEYN-ZADE, K.M., kand. med. nauk; SHAKHSUVARLY, M., red.

[Cutaneous leishmaniasis; Borovskii's disease] Kozhnyi leishmanioz; bolezn' Borovskogo. Baku, Azerbaidzhan.gos. izd-vo, 1965. 137 p. (MIRA 18:10)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

KOBRINSKIY, N.Ye.; SHAKHSUVAROV, D.N., redaktor; MURASHOVA, N.Ya., tekhnicheskiy redaktor.

[Continuous mathematical calculators; principles of design] Matematicheskie mashiny nepreryvnogo deistviia; osnovy ikh ustroistva. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1954. 447 p. (MLRA 7:11)

(Calculating machines)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

TIKHONOV, A.N.; SHAKHSUVAROV, D.N.

Method of computing electromagnetic fields excited by an alternating current in schistose media. Izv.AN SSSR Ser.geofiz.no.3:245-251 Mr '56. (MLRA 9:7)

1.Akademiya nauk SSSR, Geofizicheskiy institut.
(Electromagnetism)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

TIKHONOV, A.N.; SHAKHSUVAROV, D.N.

Possibility of utilizing the impedance of a natural terrestial electromagnetic field for studying its upper layers. Izv.AN SSSR. Ser.geofiz. no.4:410-418 Ap '56. (MLRA 9:8)

1. Akademiya nauk SSSR, Geofizicheskiy institut.
(Terrestrial electricity)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHSUVAROV, D.N.

Method of interpreting observational data on electrical fields in dipole sounding. Izv.AN SSSR.Ser.geofiz. no.5:497-503 My '56. (MLRA 9:8)

1. Akademiya nauk SSSR, Geofizicheskiy institut.
(Prospecting--Geophysical methods)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHSUVAROV, D. N., Candidate Phys-Math Sci (diss) -- "Some problems in the theory of dipole electromagnetic sounding". Moscow, 1959. 5 pp (Acad Sci USSR, Inst of Phys of the Earth of the Acad Sci USSR im O. Yu. Shmidt), 125 copies (KL, No 24, 1959, 127)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHSUVAROV, D.N.

16(1) PHASE I BOOK EXPLOITATION SOV/2660

Vsesoyuznyy matematicheskiy s"yezd. 3rd, Moscow, 1956

Trudy. t. 4: Kratkoye soderzhaniye sektsionnykh dokladov. Doklady inostrannykh uchenykh (Transactions of the 3rd All-Union Mathematical Conference in Moscow. vol. 4: Summary of Sectional Reports. Reports of Foreign Scientists) Moscow, Izd-vo AN SSSR, 1959. 247 p. 2,200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Matematicheskiy institut.

Tech. Ed.: G.N. Shevchanko; Editorial Board: A.A. Abramov, V.G. Boltyanskiy, A.M. Vasil'yev, B.V. Medvedev, A.D. Myshkis, S.M. Nikol'skiy (Resp. Ed.), A.G. Postnikov, Yu. V. Prokhorov, K.A. Rybnikov, P. L. Ul'yanov, V.A. Uspenskiy, N.G. Chetayev, G. Ye. Shilov, and A.I. Shirshov.

PURPOSE: This book is intended for mathematicians and physicists.

COVERAGE: The book is Volume IV of the Transactions of the Third All-Union Mathematical Conference, held in June and July 1956. The book is divided into two main parts. The first part contains summaries of the papers presented by Soviet scientists at the Conference that were not included in the first two volumes. The second part contains the text of reports submitted to the editor by non-Soviet scientists. In those cases when the non-Soviet scientist did not submit a copy of his paper to the editor, the title of the paper is cited and, if the paper was printed in a previous volume, reference is made to the appropriate volume. The papers, both Soviet and non-Soviet, cover various topics in number theory, algebra, differential and integral equations, function theory, functional analysis, probability theory, topology, mathematical problems of mechanics and physics, computational mathematics, mathematical logic and the foundations of mathematics, and the history of mathematics.

Shakhsuvarov, D.N. (Moscow). A study of electromagnetic fields in laminar media 125

Section on the History of Mathematics

Akhadova, M.A. (Bukhara). Works of mathematicians of Central Asia on the theory of parallel lines 126

Kotek, V.V. (Kiyev). On the question of Leonard Euler's world outlook 126

Kochev, V.A. (Sverdlovsk). From the studies of V.G. Imshenetskiy in the field of the theory of the integration of partial differential equations 127

Lunts, G.L. (Moscow). Application of Lobachevskiy's criterion 128

Maystrov, L.Ye. (Moscow). On the mathematical symbols and terms found in new archaeological discoveries in the territory of ancient Russia 128

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SOV/49-59-7-2/22

AUTHORS: Tikhonov, A. N., ~~Shakhsuvarov, D. N.~~

TITLE: The Electromagnetic Field in a Distant Zone of a Dipole

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1959, Nr 7, pp 946-955 (USSR)

ABSTRACT: The asymptotic field generated by a dipole in a stratified medium is described. A graph of the electric component $\tilde{E}_x$ calculated according to Ref 1 for the 2-layer geological cross-section is illustrated in Fig 1. Fig 2 represents a similar graph for a 4-layer cross-section with an application of a non-conductive screening. The magnetic field B_z in the 1-layer medium placed on an insulator is illustrated in Fig 3. The vertical component of B_z and the electric component E_x are defined by Eq (1), where the function $Z(\lambda, z)$ for the layer $z_1 < z \leqslant 0$ is found from Eqs (2) to (6) and the limiting conditions of $Z_m(z)$ are given by Eq (7). The value of B_z calculated from Eq (5) can be expressed as:

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The Electromagnetic Field in a Distant Zone of a Dipole

$$\tilde{r}^2\tilde{B}_z = \tilde{B}_o + \frac{1}{\tilde{r}^2}\tilde{B}_2 + \frac{1}{\tilde{r}^4}\tilde{B}_4 + \dots ,$$

In a particular case of the homogeneous layer $\left[\gamma(z) = \text{const}\right]$, the separation coefficients of the function $Z(\gamma, 0)$ can be defined as Z_1 and Z_2 (top of p 950) and the function $f(\lambda, z)$ can be found from Eqs (8) to (13) which are substituted into Eq (1). Thus the general formulae (14) are obtained, which, in the 1-layer case, becomes Eq (15) (Fig 4). The vertical component of the field $\tilde{B}_z$ of low frequency for the layer conductivity $\gamma = \gamma(z)$ can be considered as a function $\tilde{B}_z$ $(z = 0, \omega)$ for small values of ω. Then the function $Z_1(z, \omega)$ can be defined from Eqs(16) to (21). Similarly, the function $Z_2(z, \omega)$ can be defined

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from Eqs (22) to (28) and then $\tilde{B}_z$ is determined as

$$\tilde{B}_z = \frac{6}{k^2 r^2}\left[\frac{2}{k^2 z_1^2} + \frac{1}{3}\right] .$$

If the layer is of an ideal conductivity ($\gamma_2 = \infty$) , then instead of the limiting conditions (7), those expressed in Eq (29) should be considered. Thus, the functions (30) and (31) are defined. The relationship of the amplitude of the asymptotic value of $\tilde{E}_x^{as}$ and the magnitude of h_2/Λ is illustrated in Fig 4, curve (6). As a result of these calculations, a method of interpolation can be devised, when difficulties occur in measuring the field, due to limitations of the apparatus. In this case, the formula on p 955 can be applied where $\bar{B}_z^*$ and $\bar{B}_2^*$ are the real and interpolated values of B_z^* . There are 4 figures and 2 Soviet references.

ASSOCIATION: Akademiya nauk SSSR, Institut fiziki Zemli (Academy of Sciences, USSR, Institute of Physics of the Earth)

SUBMITTED: December 29, 1958.

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SOV/49-59-8-14/27

AUTHORS: Tikhonov, A.N., Shakhsuvarov, D. N. and Rybakova, Ye.V.

TITLE: An Attempt to Distinguish the Equivalent Layers by Means of an Alternating Electric Field

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1959, Nr 8, pp 1202-1205 (USSR)

ABSTRACT: The known method of a vertical electric sounding by means of direct current cannot be applied for determining, for example, a two-layer cross-section for

$$S = \frac{h_1}{\rho_1} + \frac{h_2}{\rho_2} = \text{const}$$

as illustrated in Fig 1. However, a method can be considered when $u_i = \rho_i/\rho_1$ (ρ_i - specific resistance) and an alternating current is applied. Fig 2 illustrates the ρ_k curves 1 and 2 of the equivalent cross-section, where the curve 3 representing DC is also included. The frequencies for both curves are shown in Fig 3 and the phase of the electric field E_x for the layers 1 and 2 is shown in Fig 4 (r^x= 11 km). The phase of sounding

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SOV/49-59-8-14/27

An Attempt to Distinguish the Equivalent Layers by Means of an Alternating Electric Field

frequency for different distances is shown in Fig 5, while Fig 6 gives the amplitude $\bar{B}_z$ (r = 11 km) and Fig 7 shows the magnetic component $\vartheta \bar{B}_z$ (r = 11 km). These curves indicate that a displacement of the electromagnetic field can be applied for the determination of layers equivalent to the DC method. The method described can also be used in a multi-layered cross-section.

There are 7 figures and 5 Soviet references.

ASSOCIATION: Akademiya nauk SSSR Institut fiziki Zemli (Institute of Physics of the Earth, Ac.Sc., USSR)

SUBMITTED: December 29, 1958

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SOV/49-59-10-3/19

AUTHORS: Tikhonov, A. N., Shakhsuvarov, D. N., and Rybakova, Ye. V.

TITLE: On the Resolving Power of Electromagnetic Sounding in the Presence of Intermediate Non-conductive Layers

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya 1959, Nr 10, pp 1455-1459 (USSR)

ABSTRACT: In the case of alternating electromagnetic fields the presence of a non-conductive layer does not act as a barrier and therefore such fields permit in principle investigation of screened formations. Only a certain range of frequencies can be considered in this case, i.e. the amplitude and phase characteristics of the magnetic and electric components should be determined according to their properties. This can be explained by Fig 1, where curve 1 is calculated for a four-layer cross section with the following parameters: $h_2 = h_1/64$ $h_3 = h_1$, $h_4 = \infty$; $\rho_2 = \infty$, $\rho_3 = \rho_1$, $\rho_4 = \infty$. This curve is similar to that for a two-layer cross-section, but the thickness of the second layer is equal to that of the top one: $h_1 = h_2 = h_3$,

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On the Resolving Power of Electromagnetic Sounding in the Presence of Intermediate Non-conductive Layers

$h_4 = \infty$; $\rho_2 = \infty$, $\rho_3 = \rho_1$; $\rho_4 = \infty$. Curve 3 corresponds to a layer of the thickness h_1 placed on an insulator. In all these three cases $r/h_1 = 8$ (r - distance between receiving and transmitting dipoles). It can be seen that a suitable range of frequencies should be chosen so that $-0.1 < \lg \lambda_1/r < 0.3$ (λ_1 - wavelength in top layer). If, for instance, $\rho_1 = 10$ ohms and r = 10 km, then this range will be $0.2h < f < 1h$. This is illustrated in Fig 2 which gives the phase-frequency curves corresponding to Fig 1. Fig 3 shows the amplitudes in relation to the distance r for a given frequency, where the curves 1 and 2 correspond to Fig 1, and the curve 3 - three-layer cross section with $h_2 = h_1/64$, $h_3 = \infty$; $\rho_2 = \infty$; $\rho_3 = \rho_1$. The frequency curves of the amplitude $\tilde{E}_x$ are illustrated

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On The Resolving Power of Electromagnetic Sounding in the Presence of Intermediate Non-conductive Layers

in Figs 4 and 5. There are 8 figures and 1 Soviet reference.

ASSOCIATION: Akademiya nauk SSSR. Institut fiziki Zemli (Academy of Sciences USSR. Institute of Physics of the Earth)

SUBMITTED: December 29, 1958

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SOV/49-59-11-16/28

AUTHORS: Tikhonov, A. N., Shakhsuvarov, D. N., and Rybakova, Ye. V.

TITLE: On the Properties of an Electromagnetic Field Generated by the Dipole in a Layer on an Insulator

PERIODICAL: Izvestiya Akademii nauk, SSSR, Seriya geofizicheskaya, 1959, Nr 11, pp 1670-1672 (USSR)

ABSTRACT: The vertical components Bz of the magnetic field are considered in relation to the electric field generated by a dipole . The amplitude curves derived from Eq (1) are shown in Fig 1 where $|B_z|$ - non-dimensional amplitude, μ - magnetic permeability, I - current, r - distance between electrodes, λ - wave-length in top layer, h - thickness of layer. The analysis of data can be done on squared paper, then the magnitude $\bar{B}$, i.e. the vertical displacement, can be calculated from Eq (2). The magnitude of horizontal displacement Δ can be expressed as Eq (3), where $S = \mu h$ - effective conductivity. The magnitude of S can be determined from Eq (7) (Fig 2). The thickness h can be found from Eq (10) (Fig 3). The phase curve is shown in Fig 4, for which the thickness h can be

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SOV/49-59-11-16/28

On the Properties of an Electromagnetic Field Generated by the Dipole in a Layer on an Insulator

determined for the conductivity calculated from Eq (3). Thus the parameters of a layer can be defined from both the amplitudinal and phase curves. There are 4 figures and 2 Soviet references.

ASSOCIATION: Akademiya nauk SSSR, Institut fiziki Zemli (Academy of Sciences USSR, Institute of Physics of Earth)

SUBMITTED: December 19, 1958

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

SHAKHSUVAROV, D.N.; RYBAKOVA, Ye.V.

Applicability of representations of the far zone in electromagnetic frequency soundings. Izv. AN SSSR. Ser.geofiz. no.11:1604-1607 N'60. (MIRA 13:11)

1. AN SSSR, Institut fiziki Zemli.
(Electromagnetic prospecting)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410005-3

TIKHONOV, A.N.; SHAKHSUVAROV, D.N.

Asymptotic irregularities of electromagnetic fields induced by an alternating current dipole in layered media. Izv. AN SSSR. Ser. geofiz. no.1:107-110 Ja '61. (MIRA 14:1)

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