ZHUKOV, A.I.; NAZAROV, A.S.

Sorption of titanium (IV) on the KU-1 cation exchanger. Zhur. neorg. khim. 9 no.6:1465-1471 Je '63 (MIRA 17:8)

1. Ural'skiy politekhnicheskiy institut imeni Kirova.

LENSKIY, Vasiliy Alekseyevich; PAVLOV, Vasiliy Ivanovich [deceased]; ABRAMOV, N.N., retsenzent; ZHUKOV, A.I., retsenzent; YAKOVLEV, S.V., retsenzent; LOHACHEV, P.V., retsenzent; REZVIN, Ye.Ye., retsenzent; TIKUNOV, B.S., kand. tekhn. nauk, red.; MARTYNOV, A.P., red.

[Water supply and sewerage] Vodosnabzhenie i kanalizatsiia. Izd.3., perer. i dop. Moskva, Vysshaia shkola, 1964. 386 p. (MIRA 17:10)

ZHUKOV, A.I.; BERNAD, V.V.

All-purpose unit for the odorization of gas in a gas pipeline.
Gaz. delo no.6:20-23 '64. (MIRA 17:8)

1. Krasnodarneftеproyekt.

ZHUKOV, A.I.; MARKOVA, V.M.; PAVLINOV, R.V.

Sorption of pyridine by carboxylic resins. Zhur. prikl. khim. 37 no. 4:860-864 Ap '64. (MIRA 17:5)

1. Ural'skiy politekhnicheskiy institut imeni Kirova.

ZHUKOV, A.I. (Sverdlovsk)

Metallized flow-type glass electrode for measuring pH. Zhur.fiz.khim. 37 no.1:235-237 Ja '63. (MIRA 17:3)

1. Ural'skiy politekhnicheskiy institut imeni Kirova.

ZHUKOV, A.I.; KAZANTSEV, Ye.I.; YAKOVLEV, A.V.

Separation of thorium and uranium (VI) on the resin KU-2. Zhur. prikl. khim. 36 no.4:743-750 Ap '63. (MIRA 16:7)

1. Ural'skiy politekhnicheskiy institut imeni Kirova.
(Thorium) (Uranium) (Ion exchange resins)

20755

11.3900, 14.3500, 16.6500, 16.4600 S/558/60/000/006/003/006
E031/E435

AUTHOR: Zhukov, A.I. 16.4100

TITLE: On the Problem of the Convergence of Difference Methods for the Solution of the Cauchy Problem

PERIODICAL: Akademiya nauk SSSR. Vychislitel'nyy tsentr. Vychislitel'naya matematika; sbornik, No.6, 1960, pp.34-62

TEXT: As an introduction to the main thesis of his paper, the author considers the one-dimensional heat conduction equation. If an attempt is made to solve this equation over a rectangular mesh whose step lengths do not satisfy the stability conditions, it is observed that the unstable solutions always oscillate about the exact solution. Thus the question arises of the existence of a functional space in which the solution of the difference equation converges to that of the differential equation even when the stability condition is broken. Such a space will be shown to exist and in it the following fact is true: if, as the step lengths of the mesh diminish, the difference equation tends to the differential equation, then the solution of the difference equation converges to the solution of the differential equation. In order

Card 1/9

On the Problem of ...

to take advantage of this it is necessary to find a way of transforming the convergence in the functional space into convergence of a more "usual" kind. In the sequel only equations with constant coefficients will be considered, although generalization to equations with coefficients depending on the time and to systems of equations is not difficult. The difference formulae discussed are not the most general. Consider the space Z of all integral analytical functions $\varphi(z)$ of the complex variable z, which satisfy the condition

$$|z^k \varphi(z)| \leqslant c_k e^{a|y|} \qquad (k = 1,2,\ldots)$$

where the positive constants a and c_k depend on the function φ. For any locally integrable function $f(x)$ which increases not faster than some power of $|x|$, as $|x| \to \infty$, a continuous linear functional f can be defined over the whole space Z. The term "generalized function" will be used for f. Generalized functions form a full linear space Z' conjugate to Z. The Fourier transforms of the functions φ in Z form a full linear

Card 2/9

On the Problem of ...

space K, and conjugate to K is the full linear space K' of generalized functions over K. Three operators (the shift operator, the differentiation operator and the operator corresponding to multiplication by a function) which act on f are defined. As a final preliminary it is necessary to say something about convolution operators. The following theorem is proved: every convolution operator A in the space Z' is transformed by the Fourier transformation into an operator corresponding to multiplication by a function in the space K', this function being the Fourier transform of the kernel of the operator A (the kernel is the functional $A\delta$, where δ is the delta function). It is further proved that if the sequence of operators $A_n = \omega_n(iD)$ (where D is the differentiation operator) converge to the operator A as n tends to infinity, then the sequence of operators

$$B = \left(1 + \frac{A_n}{n}\right)^n$$

tends to the operator $B = e^A$. Turning now to the consideration of the convergence of the solution of the difference equation to

On the Problem of ...

the solution of the differential equation, the equation $\partial f/\partial t = Af$ (where A is an arbitrary convolution operator) is considered. If we write $f_{t+\tau}$ for $f(x, t+\tau)$, where $n\tau = t_1 - t_0$ (the difference between the initial and some later values of t) and approximate to the operator $e^{\tau A}$ by the operator B_τ then the following theorem can be proved: if the equation $f_{t+\tau} = B_\tau f_t$ can be written in the form

$$\frac{f_{t+\tau} - f_t}{\tau} = A_\tau f_t$$

and if, as $\tau \to 0$, the operator A_τ converges to the operator A, then the operator B_τ^n converges to the operator $e^{(t_1 - t_0)A}$, so that the functional $f_n^* = B_\tau^n f_0$ converges to the differential equation for $t = t_1$. The problem of using this result can be stated in the following general manner: given a sequence of functionals f_φ in the space Z' which converges to a regular functional $f = f(x)$, it is required to construct a

Card 4/9

On the Problem of ...

sequence of functions $f_{\nu}^{M}(x)$, starting from the f_{ν} which converges to the function $f(x)$ in some "ordinary" sense. This construction will be called "smoothing". Two techniques are available. In the first we select some family of approximating functions $v(x, c_k)$ depending on m parameters c_k, and assume that the function $f(x)$ can be sufficiently well approximated to by such functions. Then in the space Z we select m functions η_i and for each functional f_{ν} choose an approximating function $v(x, c_k)$ so that m equations of the type $(v, \eta_i) = (f_{\nu}, \eta_i)$ are satisfied $\left((f, \varphi) = \int_{-\infty}^{\infty} \overline{f(x)} \varphi(x) dx \right)$

Such a function we denote by $f_{\nu}^{M}(x)$ and this sequence will have as its limit $f(x)$. The second method is known as the method of moments. The functional f (belonging to Z') has a moment of the m-th order if its Fourier transform g (belonging to K') is a functional which is regular in any neighbourhood of the point $x = 0$ and which has there continuous derivatives of all orders up to and including the m-th. The value of the moment is given by

Card 5/9

On the Problem of ...

the expression $\mu_m = (-1)^m g^{(m)}(0)$. The following theorem is proved: let there be given in the space Z' a convergent sequence of convolution operators A_ν. If the functional f_0 has an m-th moment, then each functional $f_\nu = A_\nu f_0$ also has an m-th moment and the sequence of these moments converges to the m-th moment of the functional $f = \lim A_\nu f_0$. To illustrate the foregoing theory, the equation $\partial f/\partial t = a\partial f/\partial x$ is considered, with the finite difference formula

$$f(x,t+\tau) = f(x,t) + a\frac{\tau}{2h}\left[f(x+h,t) - f(x-h,t)\right]$$

which is unstable. The values $a = -1$, $h = \tau$, and the initial conditions:

$$f_0 = 1 \text{ for } -1.6 \leqslant x \leqslant 1.6$$
$$f_0 = 0 \text{ for } |x| > 1.6$$

are chosen. On the basis of the initial conditions and the form of the differential equation, a function $v(x,a,b,c)$ is chosen so that $v = 0$ for $x \leqslant a$ and $x > b$, and $v = c$ otherwise. The moments μ_0, μ_1 and μ_2 of this function are determined in terms of a, b, c and the equations solved to give a, b, c in

Card 6/9

terms of the moments. From this it follows that the method is applicable if $\mu_0\mu_2 > \mu_1^2$. The results are illustrated for $h = 0.1$ and $h = 0.2$. As h diminishes, the function v approximates increasingly better to the solution of the differential equation. An alternative finite difference formula is briefly discussed but, since the calculations do not differ in principle from the example just given, the details are not pursued in the paper. As a final example, the solution of the equation $\partial f/\partial t = \partial^2 f/\partial x^2$ is taken as initial data for the solution of the equation $\partial f/\partial t = -\partial^2 f/\partial x^2$. The finite difference formula is

$$f(x,t + 0.0625) = f(x,t) - [f(x - 0.25,t) - 2f(x,t) + f(x + 0.25,t)]$$

and this is unstable. We calculate the moments of the solution for $t = 0.5$ from the expression

$$\mu_m = h^{m+1} \sum_{k=-28}^{k=28} k^m f(kh)$$

S/558/60/000/006/003/006
E031/E435

On the Problem of ...

Now f is expanded in the form

$$f = c_0\varphi + c_2\varphi^{(2)} + c_4\varphi^{(4)} + c_6\varphi^{(6)} + c_8\varphi^{(8)}$$

where

$\varphi = (2\pi)^{-1/2}\exp(-x^2/2)$ and superscripts denote derivatives. When the c_k are determined from the moments, a function is obtained which is a good approximation to the solution of the equation $\partial f/\partial t = \partial^2 f/\partial x^2$ for initial conditions corresponding to two like sources of heat concentrated at the points $x = -1$ and $x = 1$. The examples show that the application of unstable formulae for the numerical solution of the Cauchy problem is, in principle, quite possible but the process of smoothing requires considerable additional calculations. Moreover, the calculation of the moments of a strongly oscillating function lead to the loss of significant figures. Hence unstable formulae can scarcely compete with stable ones at the present stage of the development. It is true, of course, that there are problems for which stable formulae do not exist and, from what has been said

Card 8/9

20755

S/558/60/000/006/003/006
E031/E435

On the Problem of ...

above,it is clear that this view may have to be subjected to reappraisal, bearing in mind nevertheless that the method of finite differences may not always be the best approach. There are 6 figures and 4 Soviet references.

Card 9/9

35868

24.4300

S/044/62/000/002/061/092
C111/C222

AUTHOR: Zhukov, A. I.

TITLE: The application of the method of characteristics in solving one-dimensional problems of gas dynamics

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1962, 38, abstract 2V204. ("Tr. Matem. in-ta AN SSSR", 1960, 58, pp. 150, ill.)

TEXT: The author describes in detail the characteristics method for the equations of gas dynamics which are obeyed by the one-dimensional instationary flow

$$\frac{\partial \rho}{\partial t} + u\frac{\partial \rho}{\partial r} + \rho\frac{\partial u}{\partial r} = -\nu\frac{\rho u}{r}, \quad \frac{\partial u}{\partial t} + u\frac{\partial u}{\partial r} + \frac{1}{\rho}\frac{\partial p}{\partial r} = 0,$$

$$\frac{\partial s}{\partial t} + u\frac{\partial s}{\partial r} = 0, \quad p = p(\rho, s) \quad .$$

Here t, r are independent variables; u, ρ, p, s are the sought functions; $\nu = 0, 1, 2$ correspond to the plane, cylindrical and spherical cases, respectively. The dependence $p(\rho, s)$ is arbitrary. The original

Card 1/4

The application of the method of ...

equations are derived in an integral and a differential form. The first is the more general as it allows discontinuous solutions. The equations of the characteristics are given; the Riemann invariants and the Lagrange coordinates t, R are introduced. The principle of the method is the following. The differential equations of the characteristics are written as difference equations. These allow, for example, the calculation of the coordinates and the sought functions at the intersection of the characteristics through two known points on the t, R-plane. The applied difference formulas have a remainder of order h^3, where h is the step in the coordinate t. The error of the method in calculating a given point of the t, R-plane has the order h^2. Various methods of estimating the error are suggested, and their simultaneous application allow one to draw practically dependable conclusions on the exactness of the calculation. Formulas are derived for the three relationships of $p(\varrho, s)$: $p=k\varrho^{\varkappa}$, $p=a(k\varrho^{\varkappa} - \varrho_0^{\varkappa})$, $p=b(\varrho^{\mu} + k\varrho^{\varkappa})$, where k, a, b, $\varkappa$, μ are constants. The calculating scheme by using the boundary conditions is considered. Formulas for an example are given. In particular, special flows -- extension waves and strong discontinuities are examined. Conditions are given for the development of

Card 2/4

The application of the method of ...

extension waves, and the propagation process of the discontinuities of the first derivatives of the functions are described. Relationships of the discontinuity points of two possible kinds are given: on the contact-discontinuities and on the shock-waves. Various schemes are suggested for the calculation of flows with contact-discontinuities. Calculation schemes covering the presence of shock-waves are considered in detail. Weak shock-waves require a special method of calculation. A method for calculating shock-waves which originate somewhere in the t, R-domain is given. The initial values of the problem may contain arbitrary discontinuities, which may satisfy neither the conditions at the starting point of the extension waves, nor conditions at the strong discontinuity points. Such discontinuities generally split into three discontinuities, each of which can be either a shock-wave, a contact-discontinuity or an extension wave which can also be called a discontinuity.

A special part of the paper is devoted to the calculation of the splitting of an arbitrary discontinuity. In some $p(\varrho,s)$-relationships, p can become negative in the t, R domain. The physical requirement that the pressure p may not be negative leads to the development of

The application of the method of ...

"separation" domains in which p = 0. The analytical solution of the original equations for the separation is obtained. The character of this domain is examined. It is shown, among others, that the separation is limited on one side by a shock-wave. An integral control method is suggested, according to which the exactness with which the initial integral equation are satisfied are tested by some closed contours of the t, R domain. Appendix I gives suggestions for the set-up of programs for electronic computers. Appendix II gives an example.

[Abstracter's note: Complete translation.]

Card 4/4

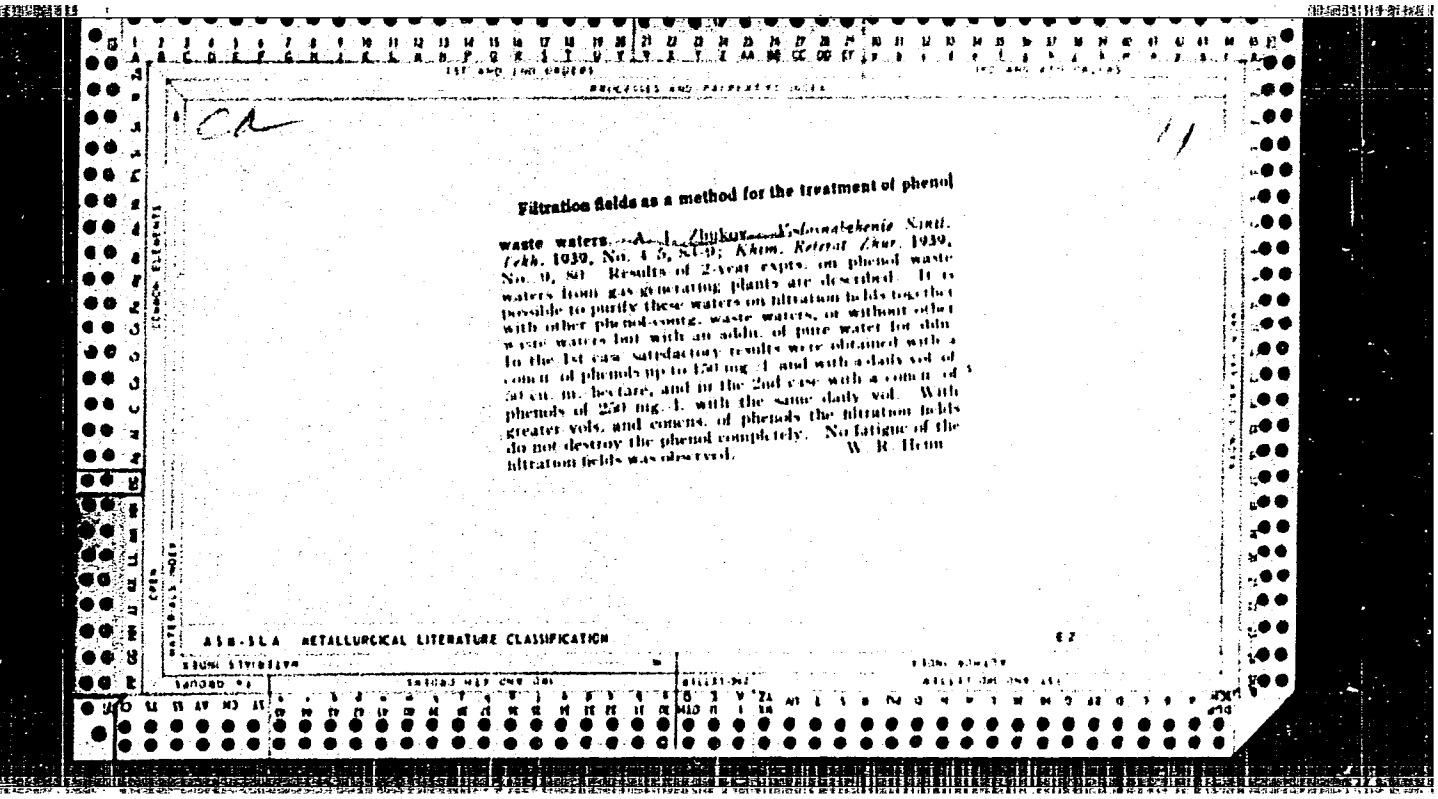
ZHUKOV, Anatoliy Ivanovich; KOZLOV, V.D., red.; YERMAKOVA, Ye.A., tekhn. red.

[Introduction into the relativity theory] Vvedenie v teoriiu otnositel'nosti. Moskva, Gos. izd-vo fiziko-matem. lit-ry, 1961. 171 p. (MIRA 14:11)

(Relativity (Physics))

ZHUKOV, Anatoliy Ivanovich; PETROVSKIY, I.G., akademik, otv.red.; NIKOL'SKIY, S.M., prof., zam.otvetstvennogo red.; RYVKIN, A.Z., red.izd-va; MANAGONOVA, I.A., tekhn.red.; GUS'KOVA, O.M., tekhn.red.

[Use of the characteristics method in the numerical solution of one dimensional gas dynamics problems] Primenenie metoda kharakteristik k chislennomu resheniiu odnomernykh zadach gazovoi dinamiki. Moskva, Izd-vo Akad.nauk SSSR. k960. 149 p.(Akademiia nauk SSSR. Matematicheskii institut. Trudy, vol. 58) (MIRA 14:3)
(Aerodynamics)



Filtration fields as a method for the treatment of phenol waste waters. A. I. Zhukov. *Vodosnabzhenie Sanit. Tekh.* 1939, No. 4 5, 8(1-9); *Khim. Referat. Zhur.* 1939, No. 9, 81. Results of 2-year expts. on phenol waste waters from gas-generating plants are described. It is possible to purify these waters on filtration fields together with other phenol-containg. waste waters, or without other waste waters but with an addn. of pure water for dilution. In the 1st case satisfactory results were obtained with a content of phenols up to 150 mg. l. and with a daily vol. of 50 cu. m. per hectare, and in the 2nd case with a content of phenols of 250 mg. l. with the same daily vol. With greater vols. and contents. of phenols the filtration fields do not destroy the phenol completely. No fatigue of the filtration fields was observed.

W. R. Horn

ZHUKOV, Aleksandr Ivanovich, 1899-

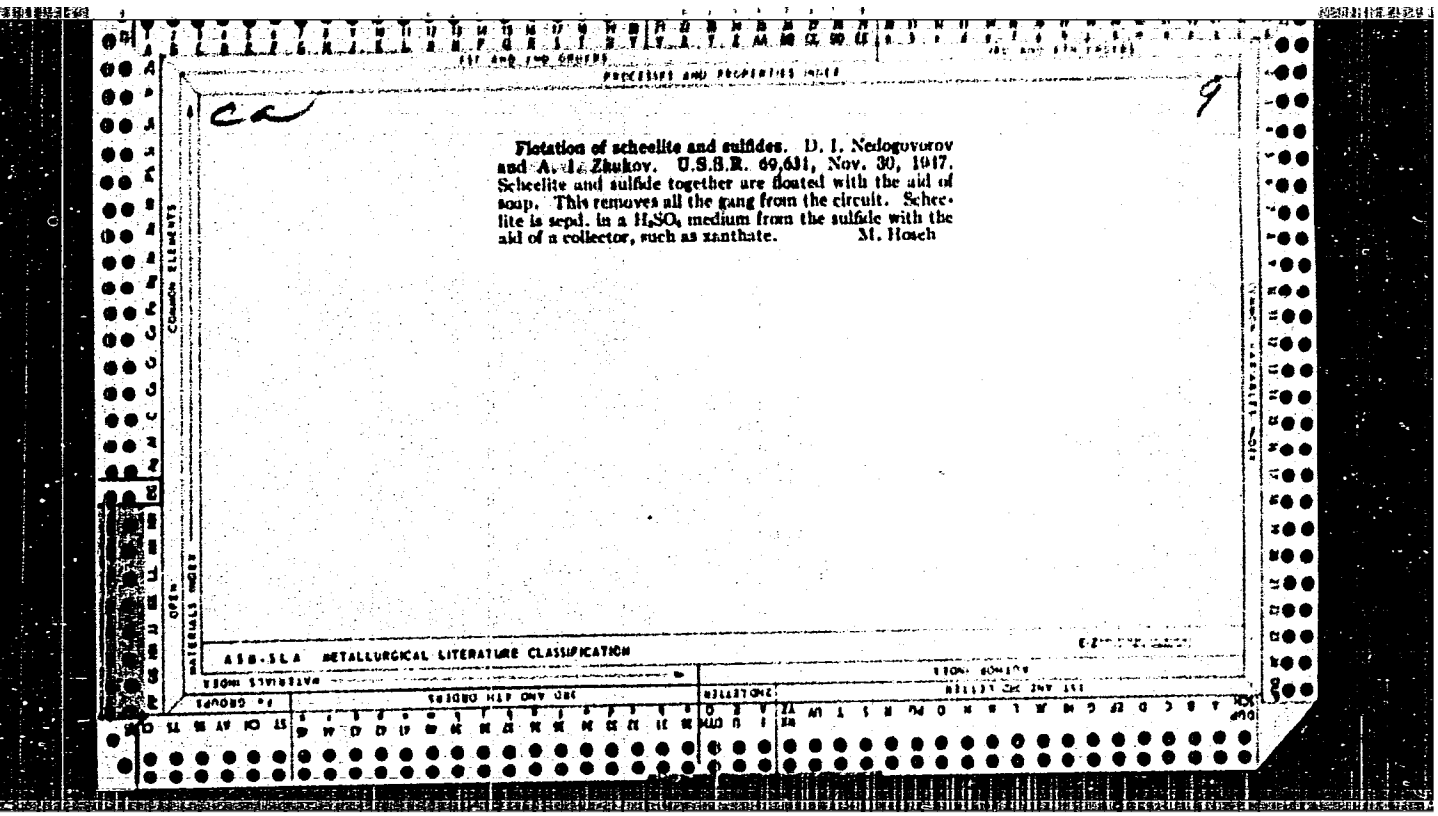
The operator and assistant operator of underground repair brigades. Izd. 2. Moskva. Gostoptekhizdat, 1946. 43 p. (V pomoshch' novym kadram neftianoi promyshlennosti. (50-40613)

TN871.Z5 1946

ZHUKOV, Aleksandr Ivanovich, 1899-

The operation of oil wells; textbook. Moskva, Gos. nauch.-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1946. 651 p. (50-25579).

TN870.Z57



Flotation of scheelite and sulfides. D. I. Nedogovorov and A. I. Zhukov. U.S.S.R. 69,631, Nov. 30, 1947. Scheelite and sulfide together are floated with the aid of soap. This removes all the gang from the circuit. Scheelite is sepd. in a H_2SO_4 medium from the sulfide with the aid of a collector, such as xanthate. M. Hosch

ZHUKOV, Aleksandr Ivanovich, 1899- ed.

The planning of installations for the purification of industrial waste water. Moskva, Gos. izd-vo stroit. lit-ry, 1949. 262 p. (50-26833).

TD897.Z48

ZHUKOV, A. I., YAMPOL'SKIY, T. S.

Technology

Podzemnaia fil'tratsiia stochnykh vod (Underground filtration of sewage). Moskva, Stroiizdat, 1951. 176 p.

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

ZHUKOV, A. I.

Zhukov, A. I.

"The use of pyridine in separating the alkali-earth elements using the method of ion exchange." Min Higher Education USSR. Ural Polytechnic Inst imeni S. M. Kirov Sverdlovsk, 1956. (Dissertation for the Degree of Candidate in Chemical Sciences).

Knizhnaya letopis'
No. 21, 1956. Moscow.

ZHUKOV, N.I.

DUBROVSKIY, V.V., redaktor; KONYUSHKOV, A.M., redaktor; BELITSKIY, A.S., redaktor; BOGOLYUBOVA, B.P., redaktor; DUBROVSKIY, V.V., redaktor; ZHUKOV, A.I., redaktor; KORPICHNIKOV, A.A., redaktor; KONYUSHOV, A.M., redaktor; KULICHIKHIN, N.I., redaktor; SEMIKHOV, M.P., redaktor; TURK, V.I., redaktor; TURCHINOV, V.T., redaktor; ROSSOVA, S.M., redaktor; GUROVA, O.A., tekhnicheskiy redaktor.

[Sinking, equipping and operating wells for the rural water supply; proceedings of the conference of May 18-22, 1954] Sooruzhenie, oborudovanie i ekspluatatsiia skvazhin dlia sel'skogo vodosnabzheniia; trudy Soveshchaniia 18-22 maia, 1954.goda. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr.1955. 220 p. (MLRA 8:11)

1. Soveshchaniye po voprosam sooruzheniya i oborudovaniya burovykh skvazhin dlya sel'skogo khozyaystva, 1954.
(Wells) (Water supply, Rural)

ZHUKOV, A.I.

KASTAL'SKIY, A.V. [deceased]; ZHUKOV, A.I., professor, doktor tekhnicheskikh nauk, redaktor; RACHEVSKAYA, M.I., redaktor izdatel'stva; KONYASHINA, A.D., tekhnicheskiy redaktor.

[City water supply and sewer systems] Gorodskoe vodoprovodno-kanalizatsionnoe khoziaistvo. Pod red. A.I.Zhukova. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1957. 292 p. (MLRA 10:4)
(Sewerage) (Water supply engineering)

ZHUKOV, A.I.

ZHUKOV, A.I., professor; KALABINA, M.M., professor; ROGOVSKAYA, TS.I., starshiy nauchnyy sotrudnik.

Purification of phenol polluted sewage. Gig. i san. 22 no.5:69-72 My '57. (MIRA 10:10)

1. Iz Vsesoyuznogo nauchno-issledovatel'skogo instituta vodosnabzheniya, kanalizatsii, gidrotekhnicheskikh sooruzheniy i inzhenernoy gidrogeologii
(SEWAGE,
purification from phenols (Rus))
(PHENOLS,
purification of sewage (Rus))

ZHUKOV, A.I., professor

Protecting natural waters from pollution. Gig. i san. 22 no.6:66-69 Je '57. (MIRA 10:10)

(WATER POLLUTION, prevention and control, (Rus))

ZHUKOV, A.I.; MONGAYT, I.L.

Purification of industrial waste waters is the most important measure for protecting reservoirs from pollution. Vod. i san. tekh. no.12:1-3 D '58. (MIRA 11:12)
(Sewage--Purification)

SOSYANTS, V.G., dotsent, obshchiy red.; IVANOV, I.T., kand.tekhn.nauk, red.; KLOPATOV, K.K., inzh., red.; ZHUKOV, A.I., prof., doktor tekhn.nauk, red.; GULYAYEV, N.F., kand.tekhn.nauk, red.; DUBOV, Yu.B., inzh., red.; ANTONOV, I.K., kand.tekhn.nauk, red.; YEFREMOV, I.S., prof., doktor tekhn.nauk, red.; DYUSKIN, V.K., doktor tekhn.nauk, red.; VINOGRADOV, K.A., kand.sel'skokhoz.nauk, red.; BOTOVA, Yu.P., red. izd-va; SALAZKOV, N.P., tekhn.red.

[Materials of the Scientific and Technical Conference on Problems in Introducing Achievements of Science and Technology in Municipal Economy] Materialy Nauchno-tekhnicheskogo soveshchaniia po voprosam vnedreniia dostizhenii nauki i tekhniki v gorodskoe khoziaistvo. Moskva, Izd-vo kommun.khoz.RSFSR. No.6. [Roads and municipal electric transportation] Gorodskoi transport i dorogi. Pod obshchei red. V.G. Sosiantsa. 1959. 197 p. (MIRA 13:2)

1. Nauchno-tekhnicheskoye soveshchaniye po voprosam vnedreniya dostizheniy nauki i tekhniki v gorodskoye khozyaystvo. 2. Rukovoditel' sektora gorodskogo transporta Akademii kommunal'nogo khozyaystva (for Sosyants).

(Local transit) (Road construction)

ZHUKOV, A.I., prof., red.; SMIRNOVA, A.P., red.izd-va; OSENKO, L.M., tekhn.red.

[Purification of industrial sewage; transactions of the joint conference] Ochistka promyshlennykh stochnykh vod; trudy sovmestnogo soveshchaniia. Pod obshchei red. A.I.Zhukova. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 285 p. (MIRA 14:4)

1. Nauchno-tekhnicheskoye soveshchaniye po ochistke promyshlennykh stochnykh vod. Moscow, 1958.
(Sewage--Purification)

SHISHKIN, Zakhar Nesterovich; KARELIN, Yakov Aleksandrovich, dotsent; KOLOBANOV, Sergey Konstantinovich, dotsent, kand.tekhn.nauk; YAKOVLEV, Sergey Vasil'yevich, doktor tekhn.nauk; ZHUKOV, A.I., prof.; GULYAYEV, N.F., kand.tekhn.nauk; SUKHIY, P.A., inzh., retsenzent; POPOVA, N.M., kand.tekhn.nauk, retsenzent; SMIRNOVA, A.P., red.izd-va; GILENSON, P.G., tekhn.red.; TEMKINA, Ye.L., tekhn.red.

[Sewerage] Kanalizatsiia. Izd.2., ispr. Pod red. A.I.Zhukova. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 592 p. (MIRA 14:4)

(Sewerage)

SIDOROV, A.A., otv. red.; ZHUKOV, A.I., red.; KALABINA, M.M., red.; LUR'YE, Yu.Yu., red.; MONGAYT, I.L., red.; ROGOVSKAYA, Ts.I., red.; RYBNIKOVA, A.I., red.; SKVORTSOVA, I.P., red.izd-va; SMIRNOVA, A.P., red.izd-va; MOCHALINA, Z.S., tekhn. red.

[Purification of industrial sewage]Ochistka promyshlennykh stochnykh vod; trudy sovmestnoi konferentsii Instituta Vodgeo ASiA SSSR i Instituta vodnogo khoziaistva Ministerstva zemledeliia, lesnogo i vodnogo khoziaistva ChSSR. Moskva, Gosstroiizdat, 1962. 448 p. (MIRA 16:2)

1. Konferentsiya po ochistke fenol'nykh stochnykh vod, Moscow, 1960.

(Phenols) (Sewage--Purification)

ZHUKOV, Aleksandr Ivanovich, doktor tekhn. nauk; MONGAYT, Isaak L'vovich, kand. tekhn. nauk; RODZILLER, Iosif Davydovich, kand. tekhn. nauk; ORLOVSKIY, Z.A., kand. tekhn. nauk, nauchnyy red.; SMIRNOVA, A.P., red.izd-va; SKVORTSOVA, I.P., red. izd-va; KOMAROVSKAYA, L.A., tekhn. red.

[Sewerage at industrial enterprises; purification of industrial sewage]Kanalizatsiia promyshlennykh predpriiatii; ochistka promyshlennykh stochnykh vod. Moskva, Gosstroiizdat, 1962. 602 p. (MIRA 16:3)

(Sewage--Purification)

ZHUKOV, A.I., prof.

Taking engineering measures to lower the pollution of reservoirs.
Vod.i san.tekh. no.4:1-4 Ap '62. (MIRA 15:8)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR.
(Water--Pollution)

ZHUKOV, Aleksandr Ivanovich, prof., doktor tekhn. nauk; KARELIN, Yakov Aleksandrovich, prof.; KOLOBANOV, Sergey Konstantinovich, dots., kand. tekhn. nauk; YAKOVLEV, Sergey Vasil'yevich, prof.; LUKINYKH, N.A., kand. tekhn. nauk, retsenzent; MONGAYT, I.L., kand. tekhn. nauk, retsenzent; SHKUNDIN, R.F., inzh., retsenzent; SKVORTSOVA, I.F., red.

[Sewerage] Kanalizatsiia. Izd.3., ispr. i dop. Moskva, Stroiizdat, 1964. 641 p. (MIRA 18:2)

ZHUKOV, A.I.; MARKOV, I.V.

Sorption of hydrolyzed ions on cation exchange resins. Part 1: Washing of the ions of sodium, barium, lanthanum uranium(VI), thorium, and uranium(IV) from columns with KU-1 and Ku-2 resins by means of hydrochloric acid and an ammonium chloride solution. Izv. vys. ucheb. zav.; khim. i khim. tekh. 4 no. 2:247-252 '61. (MIRA 14:5)

1. Ural'skiy politekhnicheskiy institut im. S.M. Kirova.
(Ion exchange resins) (Metals)

ZHUKOV, A.I.; KAZANTSEV, Ye.I.; ONOSOV, V.N.

Sorption of thorium by cation exchangers. Zhur.neorg.khim. 7 no.4:915-920 Ap '62. (MIRA 15:4)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova.
(Thorium) (Ion exchange resins)

ZHUKOV, A.I.; ONOSOV, V.N.; KAZANTSEV, Ye.I.

Composition of thorium ions sorbed by cation exchangers. Zhur.-neorg.khim. 7 no.4:921-925 Ap '62. (MIRA 15:4)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova.
(Thorium compounds) (Ion exchange resins)

S/078/62/007/004/013/016
B107/B101

AUTHORS: Zhukov, A. I., Onosov, V. N., Shevtsov, N. A.

TITLE: Separation of thorium and rare-earth elements on KU-1 (KU-1) resin

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 4, 1962, 926 - 929

TEXT: The separation of thorium and rare earths (RE) on KU-1 (KU-1) resin was described in a previous paper (Izv. vyssh. uchebn. zavedeniy. Khimiya i khim. tekhnologiya, VI, 247 (1961)). The present paper tries to answer the question as to whether the separation can be improved by making better use of the sorption capacity and by using lower amounts of solutions for elution. The experiments were made with chloride solutions. KU-1 resin in H form had an exchange capacity of 2.20 mg-equ/g as to sulfo groups. The column cross section was 1 cm^2, the rate of filtration 1 $ml/cm^2 \cdot sec$, and the experimental temperature 18°C. At first, the pH dependence of the dynamic exchange capacity was measured. It increases linearly with the pH value for Th, and drops sharply at pH = 2.8. This effect is attributed to the increasing ionic radius of Th and the decreasing diffusion rate.

Card 1/3

S/078/62/007/004/013/016
B107/B101

Separation of thorium and...

The effect of the ammonium-chloride concentration on the elution of RE was examined next. Elution is considerably more intense with a solution of 2 N NH_4Cl than with a 1 N solution. Further increase of concentration has only a slight influence. Thorium is eluted with 3 N H_2SO_4. The optimum result is given: 1.3105 g Th and 10.4431 g RE (ratio ~1:8) were separated in 13.5 g resin. This corresponds to a loading the exchange capacity with 69.4% Th and 696.9% RE. 9.3200 g RE (exempt from Th) goes in the filtrate. 1.1816 g RE (exempt from Th) was eluted with 2 N NH_4Cl solution, and 1.3156 Th, not containing RE, was eluted with 3 N H_2SO_4. The relative consumption of eluants decreases markedly with increasing quantity of resin and may be further reduced in greater columns. Since preponderant part of the NH_4Cl solution is consumed for elution of relative small amounts of RE, the consumption of this solution can be intensively reduced, if a small content of RE in Th is permissible. There are 3 figures and 2 tables.

Card 2/3

Separation of thorium and... S/078/62/007/004/013/016
B107/B101

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova
(Ural Polytechnic Institute imeni S. M. Kirov)

SUBMITTED: December 20, 1960

Card 3/3

ZHUKOV, A.I.; ONOSOV, V.N.; KRASIL'NIKOV, M.T.

Effect of temperature on the sorption and elution of hydrolyzed thorium ions. Zhur.neorg.khim. 7 no.6:1448-1451 Je '62.
(MIRA 15:6)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova.
(Thorium) (Isotope separation)

S/078/62/007/006/017/024
B119/B138

AUTHORS: Zhukov, A. I., Baranov, G. P., Plyasunov, P. V.

TITLE: Sorption of hydrolyzed ions of elements of groups I and II by cation exchange resins

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 6, 1962, 1452-1457

TEXT: The authors studied the sorption of Be, Mg, Ca, Sr, Ba, and Zn (as chlorides dissolved in water), and Cs, Ag, Cd, Hg(II) and Cu (as nitrates dissolved in water) to the cation exchangers KU-1 (KU-1) (exchange capacity 2.20 mg-eq/g) and Ky-2 (KU-2) (exchange capacity 4.92 mg-eq/g), as well as the possibility of washing these ions out of the resins with 1N NH_4Cl solution (pH 5.0), or 1N NH_4NO_3 solution. The ions of all the elements mentioned can be quantitatively removed from the resin, with the exception of Hg(II) which is partly reduced to the metal. The maximum amount of washing solution is required for beryllium (4.8 mg-eq of Be to 6.50 g of KU-1 or KU-2 need 180 and 540 ml of 1N NH_4Cl, respectively, for removal from the resin). This is due to its presence as $Be[(OH)_2Be]_n^{2+}$, n

Sorption of hydrolyzed ions of...

being dependent on pH. 4.8 mg-eq of Ag require 240 ml of 1N NH_4NO_3 for removal from KU-1, and 180 ml for removal from KU-2. It is assumed that Ag and Hg(II) form inner complexes with the resins. The minimum quantity of washing solution is required for Na and Cd (50 and 70 ml for 4.8 mg-eq from KU-1). The authors succeeded in separating thorium from zinc and strontium by the KU-1 resin with 1N ammonium chloride solution. There are 4 figures and 1 table. The most important English-language reference is: G. Mattock, J. Amer. Chem. Soc., 76, 4835 (1954).

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova (Ural Polytechnic Institute imeni S. M. Kirov)

SUBMITTED: July 6, 1960

Card 2/2

S/078/62/007/006/018/024
B119/B138

AUTHORS: Zhukov, A. I., Shakurov, V. G., Plyasunov, P. V.

TITLE: Sorption of hydrolyzed ions of some elements of groups III and IV to cation exchange resins

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 6, 1962, 1458-1463

TEXT: The authors studied the sorption of aluminum, lead(II) (introduced as nitrates), titanium(IV) (introduced as chloride) to the cation exchange resins КУ-1 (KU-1) and КУ-2 (KU-2), and zirconium (as chloride) to KU-1, as well as the possibility of washing them out by 1N solutions of NH_4Cl and NH_4NO_3. The washing solutions were used in stoichiometrically neutral state, and acidified with the corresponding acid (up to 0.5 N). On any kind of ion the acid solutions have a much stronger washing effect than the neutral ones: 4.8 mg-eq of metal ion to 6.50 g of resin require the following amounts of neutral and 0.025 N acid washing solution: Al, KU-1, 475 ml, 150 ml, KU-2, 1200 ml, 500 ml; Pb(II), KU-1, not completely washable, 92 ml. Titanium could not be removed from the resins with neutral washing solution.

Card 1/2

Sorption of hydrolyzed ions of...

Small amounts of Zr can only be separated from the resin with washing solution containing 0.5 N acid. Aluminum at pH 2 is bound to the resin in the form of 3-fold positively charged hydroxy complexes ($Al[(OH)_3Al]_n^{3+}$, $Al_6(OH)_{15}^{3+}$ with Al^{3+}). At pH 3.85, the number of Al atoms per complex ion is $\sim$5. Thorium was separated from Al, and zirconium from Al and U, by KU-1 and NH_4Cl washing solution. There are 5 figures and 2 tables.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova (Ural Polytechnic Institute imeni S. M. Kirov)

SUBMITTED: July 6, 1960

ZHUKOV, A.I.; MUZGIN, V.N.

Sorption of hydrolyzed ions of the elements of the groups VII and VIII by cation-exchanging resins. Zhur.neorg.khim. 7 no.7:1730-1735 Jl '62. (MIRA 16:3)

1. Ural'skiy politekhnicheskiy institut.
(Sorption) (Ion exchange resins)

ZHUKOV, A.I.; GAREYEV, V.N.; MARKOVA, V.M.

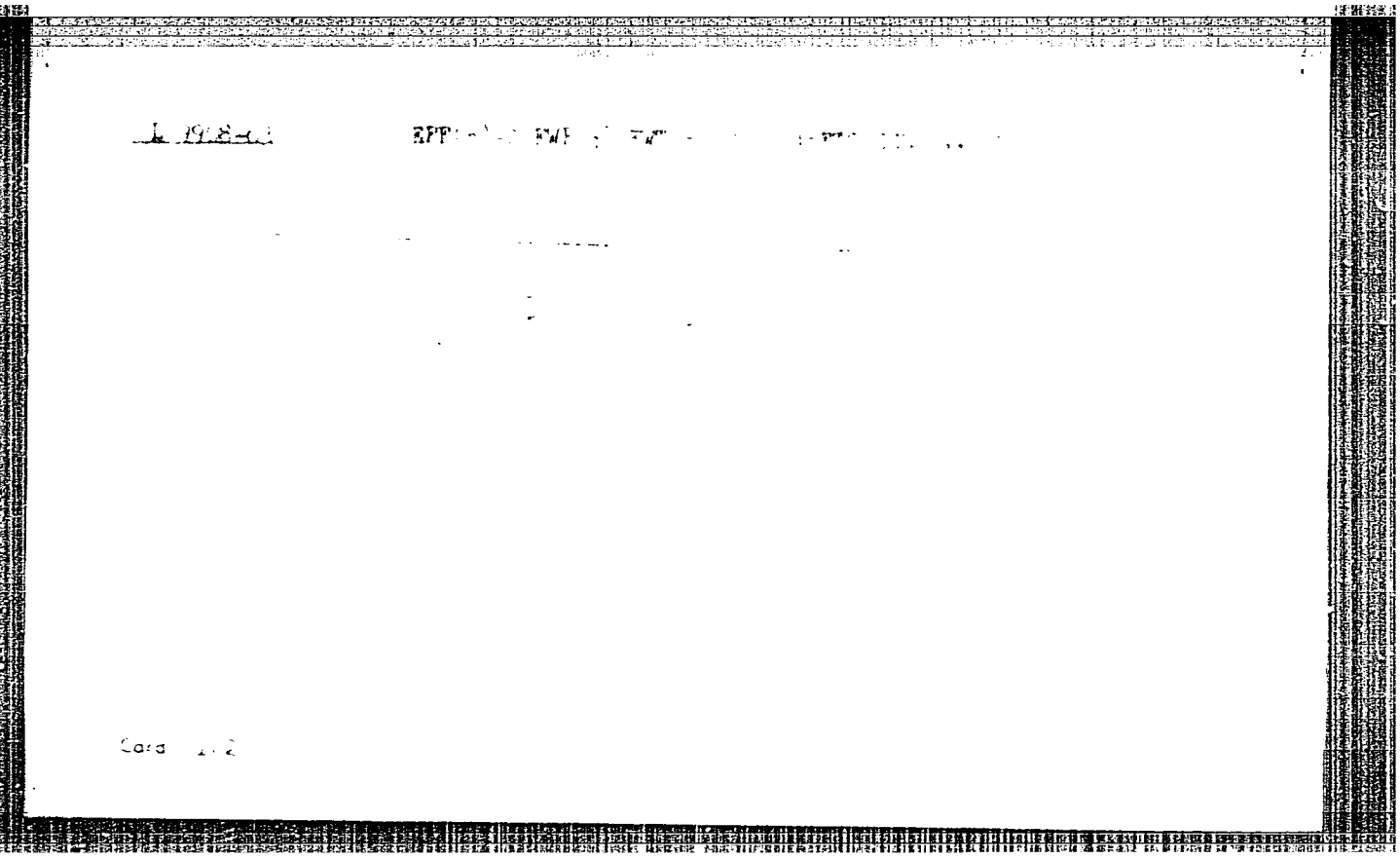
Sorption of hydrolyzed ions of the elements of the group V and VI by cation-exchanging resins. Zhur.neorg.khim. 7 no.7 1724-1729 Jl '62. (MIRA 16:3)

1. Ural'skiy politekhnicheskiy institut.
(Sorption) (Ion exchange resins)

ZHUKOV, A.I.; ONOSOV, V.N.; KUDYAKOV, V.Ya.; SERGEYEV, B.M.

On the formation of $Th[(OH)_4Th]_n^{4+}$ ions. Zhur.neorg.khim. 8 no.4:871-875 Ap '63. (MIRA 16:3)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova.
(Thorium compounds)



L 9908-63
ACCESSION NR: AP[illegible]

SUBMITTED: 10Jun61 DATE ACQ: 12Jun63 ENCL: 0
SUB CODE: 00 NO REF SOV: 006 OTHER: 000
Card 2/2

ZHUKOV, A.I.; MARKOVA, V.M.; ZHUKOV, Yu.P.

Sorption of pyridine by the resins KU-1 and KU-2 in the H-form. Zhur. prikl. khim. 37 no.2:300-304 F '64.

1. Ural'skiy politekhnicheskiy institut imeni Kirova.

ZHUKOV, A.I.; SLUTSKIY, M.S., redaktor; POLOSINA, A.S., tekhnicheskiy redaktor.

[Measurer of oil in wells] Zamershchik (uchetchik) nefti po skvazhinam. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1946. 34 p. (MLRA 8:4)
(Petroleum engineering)

ZHUKOV, A.I.

ZHUKOV, A.I.; CHERNOV, B.S.; BAZLOV, M.N.; ZHUKOVA, M.A.; SAVINA, Z.A., redakotr; POLOSINA, A.S., tekhnicheskiy redaktor.

[Exploitation of oil fields] Ekspluatatsiia neftianykh mestorozhdenii. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1954. 603 p. (MIRA 8:4)
(Petroleum engineering)

ZHUKOV, A.I.

APEL'TSYN, I.E., doktor tekhn.nauk; BARS, Ye.A., kand.geol.-min.nauk; BORISOV, Yu.P., kand.tekhn.nauk; VELIKOVSKIY, A.S., prof.; VYSOTSKIY, I.V., kand.geol.min.nauk; GOVOROVA, G.L., dots.; DAKHNOV, V.N., prof. ZHDANOV, M.A., prof.; ZHUKOV, A.I., dots.; KOTYAKHOV, F.I., prof.; KREMS, A.Ya., doktor geol.-min.nauk; MURAV'YEV, I.M., prof.; MUSHIN, A.Z., inzh.; NAMIOT, A.Kh., kand.tekhn.nauk; KHODANOVICH, I.Ye., kand.tekhnnauk; KHLYSTOV, V.T., inzh.; CHERNOV, B.G., kand. tekhn.nauk; SHUROV, V.I., dots.; SAVINA, Z.A., vedushchiy red.; POLOSINA, A.S., tekhn.red.

[Manual fo petroleum extraction] Spravochnik po dobyche nefti. Pod obshchei red. I.M.Murav'eva. Moskva, Gos. anuchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry. Vol. 1. 1958. 540 p. (MIRA 11:4) (Petroleum industry)

CHERNOV, Bronislav Semenovich; BAZLOV, Mikhail Nikolayevich; ZHUKOV, Anatoliy Ivanovich; SAVINA, Z.A., vedushchiy red.; POLOSINA, A.S., tekhn.red.

[Hydrodynamic methods for studying wells and layers] Gidrodinamicheskie metody issledovaniia skvazhin i plastov. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 318 p. (MIRA 13:10)
(Oil reservoir engineering)

MURAV'YEV, I.M., prof.; ARZUMANOV, Sh.K., inzh.; ARKHANGEL'SKIY, N.K., inzh.; BAZLOV, M.N., inzh.; GROBSHTEYN, S.R., kand.tekhn.nauk; ZHUKOV, A.I., dotsent, MAKHMUDBEKOV, M.A., inzh.; MOVSESOV, N.S., inzh.; MURAV'YEV, V.M., inzh.; NEGREYEV, V.F., kand.tekhn. nauk; PLOTEL', S.G., kand.tekhn.nauk; PODGORNOV, M.I., inzh.; RUBACHEV, G.N., kand.ekon.nauk; SULTANOV, D.K., inzh.; SHTER, B.O., inzh.; SAVINA, Z.A., vedushchiy red.; POLOSINA, A.S., tekhn.red.

[Reference book on petroleum production] Spravochnik po dobyche nefti. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry. Vol.3. 1960. 712 p. (MIRA 13:5)
(Oil fields--Production methods)

ZHUKOV, Anatoliy Ivanovich; CHERNOV, Bronislav Semenovich; BAZLOV, Mikhail Nikolayevich; MURAV'YEV, V.M., red.; LUKHOVINA, N.D., ved. red.; BASHMAKOV, G.M., tekhn. red.

[Exploitation of oil fields] Ekspluatatsiia neftianykh mestorozhdenii. Izd.3. Moskva, Gostoptekhizdat, 1961. 493 p. (MIRA 15:3)

(Oil fields--Production methods)

ZHUKOV, A.I., doktor tekhn.nauk, prof.

Calculating horizontal and radial sedimentation tanks for waste water. Nov.tekh.zhil.-kom.khoz.: Vod. i kan. no.2:63-84 '63. (MIRA 17:9)

ZHUKOV, A.I.

FEDOROV, G.I.; ZHUKOV, A.I.

We discuss the article "Possibilities for mechanizing the work on communication lines." Avtom., telem. i sviaz' no.4:37 Ap '57. (MIRA 11:4)

1. Starshiy elektromekhanik Liskinskoy distantsii signalizatsii i svyazi Yugo-Vostochnoy dorogi (for Fedorov). 2. Zamestitel' nachal'nika slushby signalizatsii i svyazi Odesskoy dorogi (for Zhukov). (Railroads--Communication systems)

ZHUKOV, A.I.

Problems needing fast decisions. Avtom., telem. i sviaz' 2 no.7: 14-15 Jl '58. (MIRA 11:6)

1. Zamestitel' nachal'nika sluzhby signalizatsii i svyazi Odesskoy dorogi.
(Railroads--Signaling--Maintenance and repair)

ZHUKOV, A.I.

Communist attitude toward labor. Avtom., telem. i sviaz' 4 no. 12:19-20 D 160. (MIRA 14:1)

1. Zamestitel' nachal'nika sluzhby signalizatsii i svyazi Odesskoy dorogi.
(Railroads--Employees)

ZHUKOV, A. I.

Tishchenko, S. I., Neustroyev, L. S. and Zhukov, A. I. "The improvement of the blooming operation at the Makeyev metallurgical plant imeni Kirov," Trudy Stalinskogo obl, otdniya VNITOM, No 1, 1949, p. 60-68

SO: U-5241, 17 December 1953, (Letopis 'Zhurnal 'nykh Statey, No. 26, 1949)

ZHUKOV, A.I., inzh.; KHIL'KO, M.M., inzh.; MERSHCHIY, N.P.; SHKLYAR, M.S.; SLEZ, L.G.

Practice of firing open-hearth furnaces with natural gas by the method of self-carburation. Stal' 21 no. 4:307-311 Ap '61. (MIRA 14:4)
(Open-hearth furnaces--Combustion) (Gas, Natural)

ZHUKOV, A.I.; KHIL'KO, M.M.; SHKLYAR, M.S.; KAZANTSEV, Ye.I. Prinimali uchastiye: BLASHCHUK, N.M., inzh.; YARMYSH, V.A., inzh.; PARKHOMENKO, D.M., inzh.; BULI, V.G., inzh.; BIDENKO, R.V., inzh.; PASIKOV, N.V., inzh.; ZEMLYANOY, N.G., inzh.; TARASENKO, A.A., inzh.

Firing open-hearth furnaces with a mixture of cold coke and natural gases. Stal' 21 no.12:1068-1070 D '61. (MIRA 14:12)

(Open-hearth furnaces—Equipment and supplies)
(Gas as fuel)

ZHUKOV, A.K., fel'dsher (Stantsiya Kaakhka Ashkhabadskoy oblasti)

Oxygen for treating ascariasis at a feldsher-midwife station.
Fel'd. i akush. 22 no.3:44-45 Mr '57 (MLRA 10:5)
(OXYGEN--THERAPEUTIC USE) (ASCARIDS AND ASCARIASIS)

ZHUKOV, Aleksandr Konstantinovich; ANTRUSHIN, B.D., inzh., red.; OSIPOVA, L.A., red.izd-va; MODEL', B.I., tekhn.red.

[Assembling electrical equipment of hoisting cranes] Montazh elektricheskoi chasti pod"emnykh kranov. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 243 p. (MIRA 12:4)
(Cranes, derricks, etc.--Electric equipment)

ZHUKOV, A K

N/5
741.71
.Z6

Montazh Vtorichnoy Kommutatsii (Installation of a Secondary Commutation)
Moskva, Gosenergoizdat, 1954.
183 P. Illus., Diagrs., Tables. "Literatura": P. (184)

ZHUKOV, Aleksandr Konstantinovich; BRANDENBURGSKAYA, E.Ya., red.; VORONIN, K.P., tekhn. red.

[Installation and electric equipment of secondary networks] Elektrooborudovanie vtorichnykh tsepei i ikh montazh. Izd.3., dop. Moskva, Gos. energ. izd-vo, 1961. 263 p. (MIRA 14:11)
(Electric apparatus and appliances) (Electric networks)

ZHUKOV, Aleksandr Konstantinovich; VORONTSOV, F.F., redaktor; LARIONOV, G.Ye., tekhnicheskiy redaktor.

[Installation of secondary commutation] Montazh vtorichnoi kommutatsii. Moskva, Gos. energ. izd-vo, 1954. 183 p. (MLRA 7:12)
Commutation (Electricity)

8(2) PHASE I BOOK EXPLOITATION SOV/3804

Zhukov, Aleksandr Konstantinovich

Elektrooborudovaniye vtorichnoy kommutatsii i yeye montazh (Control System Equipment and Its Installation) 2nd ed., rev. Moscow, Gosenergoizdat, 1958. 255 p. 25,000 copies printed.

Ed.: M. P. Leplinskiy; Tech. Ed.: K. P. Voronin.

PURPOSE: The book is intended for students of technical schools specializing in the installation of control-system equipment. It may also be useful to technicians installing electrical equipment. The book was approved as a textbook by the Scientific Council on Professional and Technical Education of the Main Administration of Manpower Resources, Council of Ministers, USSR.

COVERAGE: The author analyzes basic principles of the control of high-voltage equipment. He describes the sources of operating current and its supply to such equipment as relays, governor motors, recording meters, and signaling devices. Various methods of installing switchboards, conductors and cables

Card 1/9

are treated in detail. Diagrams of electrical connections are also analyzed. The author has made use of field experience and also material from his book, Montazh vtorichnoy kommutatsii ("Control System Installation"), published in 1954. No personalities are mentioned. There are 23 references, all Soviet.

TABLE OF CONTENTS:

ZHUKOV, A.K., fel'dsher (poselok Dushak Turkmenskoy SSR)

Treatment of muscular diseases. Fel'd. i akush. 25 no.5:43-44 My '60. (MIRA 13:7)

(MUSCLES--DISEASES)

ZHUKOV, A. L.

Galiaberov, N. Z. and Zhukov, A. L. "Experiment on types of co[illegible] and on the kolkhoz imeni Komintern Kaskelensk[illegible]y rayon," Trudy Otd. kormleniya (Kazakh. filial / Vsesoyuz. akad. s.-kh. nauk im Lenina, In-t zhivotnovodstva), Issue 1, 1948, p. 109-16

SO: U-3264, 10 April 53 (Letopis 'Zhurnal 'nykh Statey, No. 4, 1949).

ZHUKOV, Aleksandr Mikhaylovich; LIKHOVIDOV, N.K., red.; POLTEVA, B.Kh., red. izd-va; BRATISHKO, L.V., tekhn.red.

[Production standards for lumbering and log floating operations] Tekhnicheskoe normirovanie na lesosplave. Izd. 2-e, ispr. i dop. Moskva, Goslesbumizdat, 1957. 186 p. (MIRA 11:4)
(Lumbering--Production standards)

ZHUKOV, Aleksandr Mikhaylovich; LIKHOVIDOV, N.K., redaktor; AGRANOVSKAYA, N.D., redaktor; KOLESHIKOVA, A.P., tekhnicheskiy redaktor.

[Technical norms for lumbering and log-floating operations] Tekhnicheskoe normirovanie na lesozagotovkakh i lesosplave. Moskva, Goslesbumizdat, 1955. 171 p. (MLRA 9:6)
(Lumbering)

ZHUKOV, A.M., inzh.

Eccentric limiter of weight-lifting capacity for bridge cranes. Bezop.truda v prom. 4 no.7:32 Jl '60.
(MIRA 13:8)

1. Sinarskiy trubnyy zavod.
(Cranes, derricks, etc.--Safety appliances)

ZHUKOV, A.M., inzh.; KUCHUGURENKO, A.P., dotsent, kand. tekhn. nauk;
MURAV'YEV, V.D., inzh.; UVAROV, G.A., dotsent, kand. tekhn. nauk;
FEDOROV, V.N., inzh.; SHESTAKOV, B.I., dotsent

Investigating combusting pulsations during burning of Kashpir shale in furnaces with shaft-type impact mills. Izv. vys. ucheb. zav.; energ. 2. no.10:53-59 O '59. (MIRA 13:3)

1.Kuybyshevskiy industrial'nyy institut imeni V.V. Kuybysheva. Predstavlena sektsiyey prikladnoy teplotekhniki.
(Oil shales)

ZHUKOV, A. M. Cand. Physicomath. Sci.

Dissertation: "Formation of the Neck in a Specimen During a Tensile Test." Inst. of Mechanics, Acad. Sci. USSR, 21 Nov. 1947.

SO: Vechernyaya Moskva, Nov. 1947 (Project #17836)

ZHUKOV, A.M. KORNILOV, I.I. MIKHEYEV, V.S. NOVOKRESHCHENOV, P.D.
MARKOVA, N. YE. ; PIEBINDYER, PA.

29676

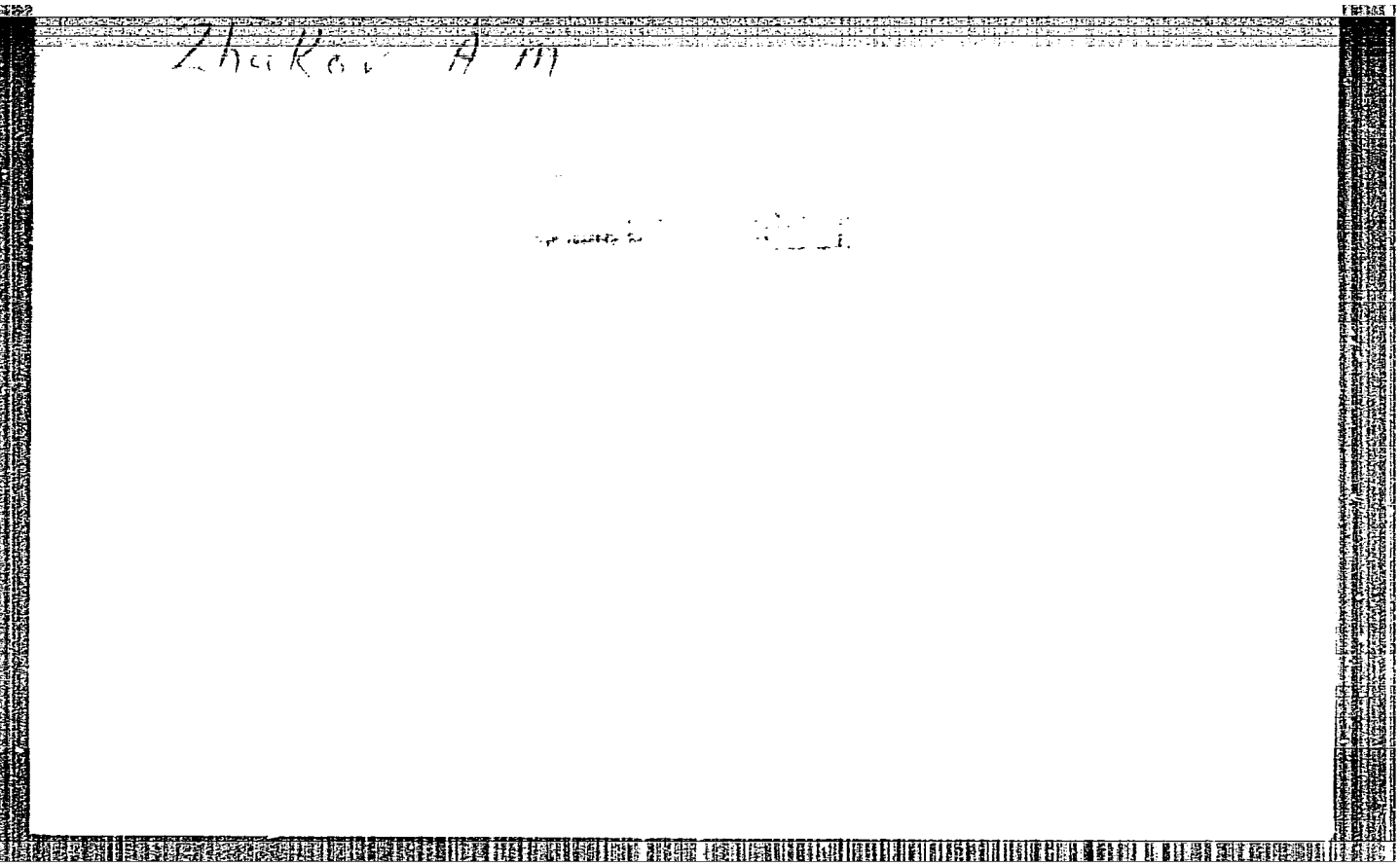
K voprosy Voenikiovyeniya shyeyki v (myetallichyeskom) obraetaye pri kastyazhyenii. Inzh sbornik (Akad. Nauk SSSR. In-t myekhaniki), t. V. vrp. 2, 1949, s. 34-51. Bibliogr: 6 naev

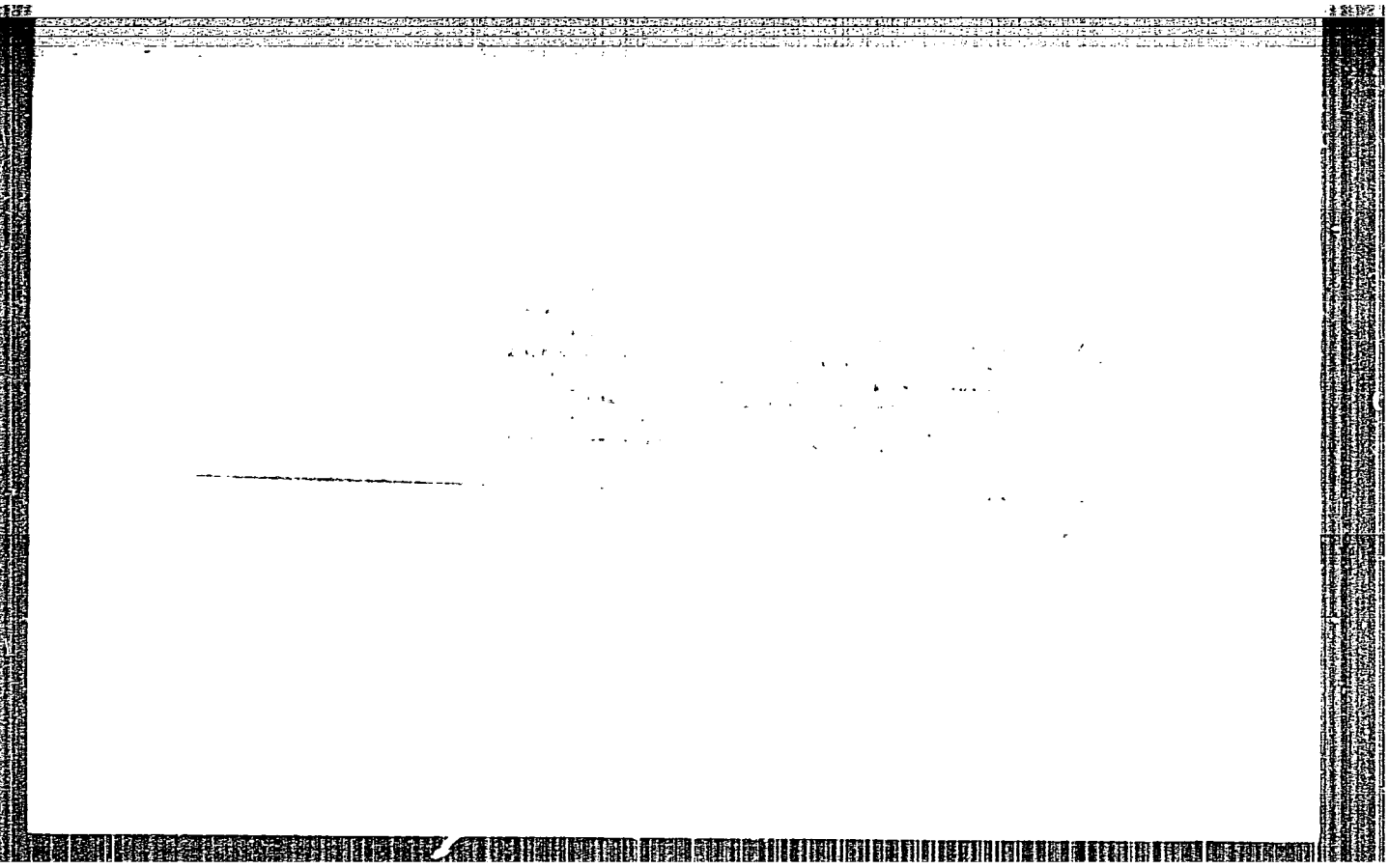
Ieushyeniye pryevrashchyeniya a-tvyerdogo Rastvora sistyemy Shyeeo-Khrom myetodom skorosti pryevrashcheniya.- sm. 29551

Adorbtsionnyy effrekt pri enakopyeryemyennom kruchygnii v svyaei s problyemoy ustalosti myetallov.-s.M. 29558

SO: LETOPIS' NO. 40

v. Chyernaya Myetallurgiya





ZHUKOV, A.M., dotsent, kandidat tekhnicheskikh nauk.

Analysis of factors affecting the contact area of shavings, the front face of the tool and the mean specific normal pressure. Vest.mash. 33 no.9:52-56 S '53. (MLRA 6:10)

1. Khar'kovskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva. (Metal cutting)

USSR/Engineering - Metallurgy FD-1093

Card 1/1 Pub. 41-5/17

Author : Zhukov, A. M.

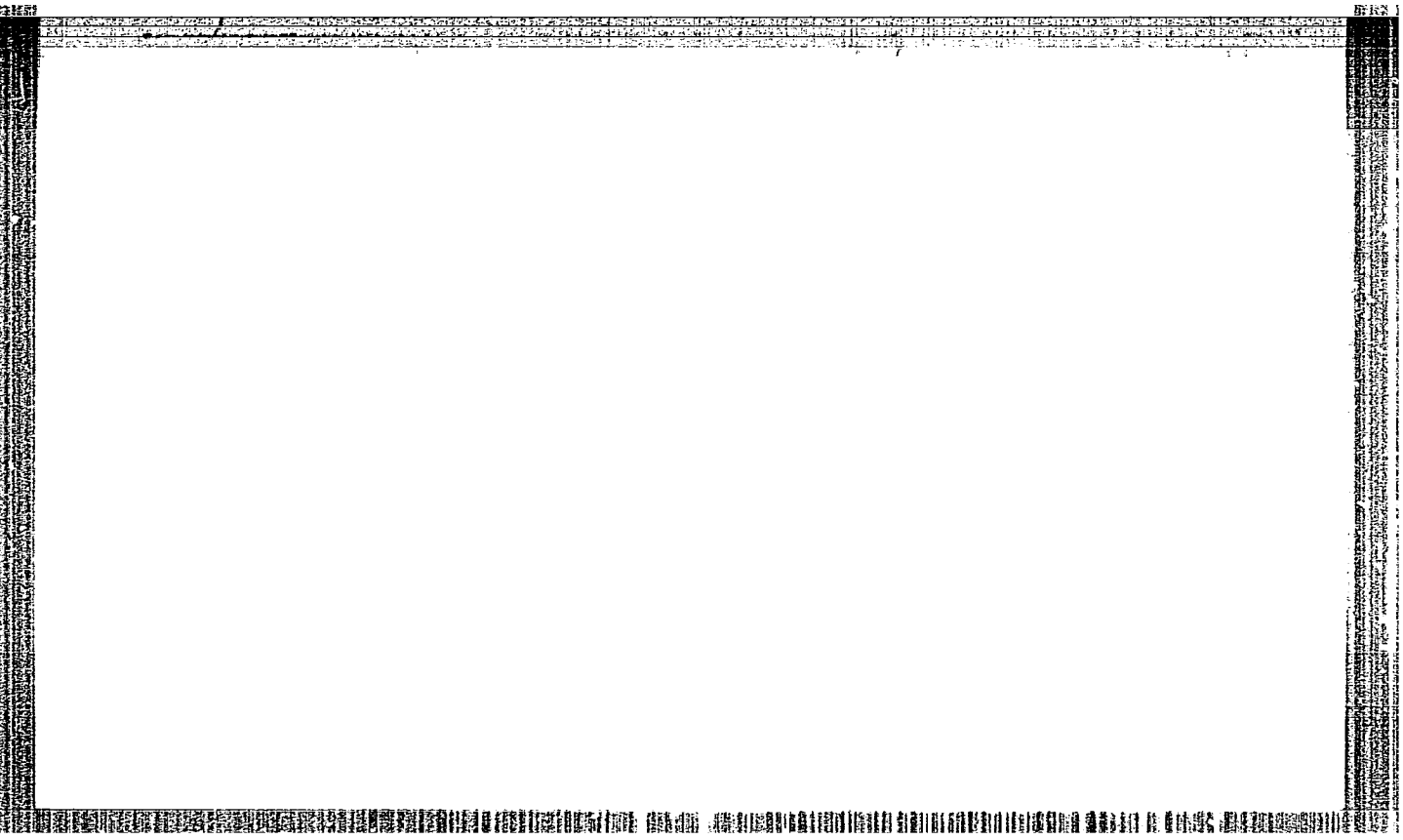
Title : Strength and plasticity of brass in an ammonia medium

Periodical : Izv. AN SSSR. Otd. tekh. nauk 4, 67-72, Apr. 1954

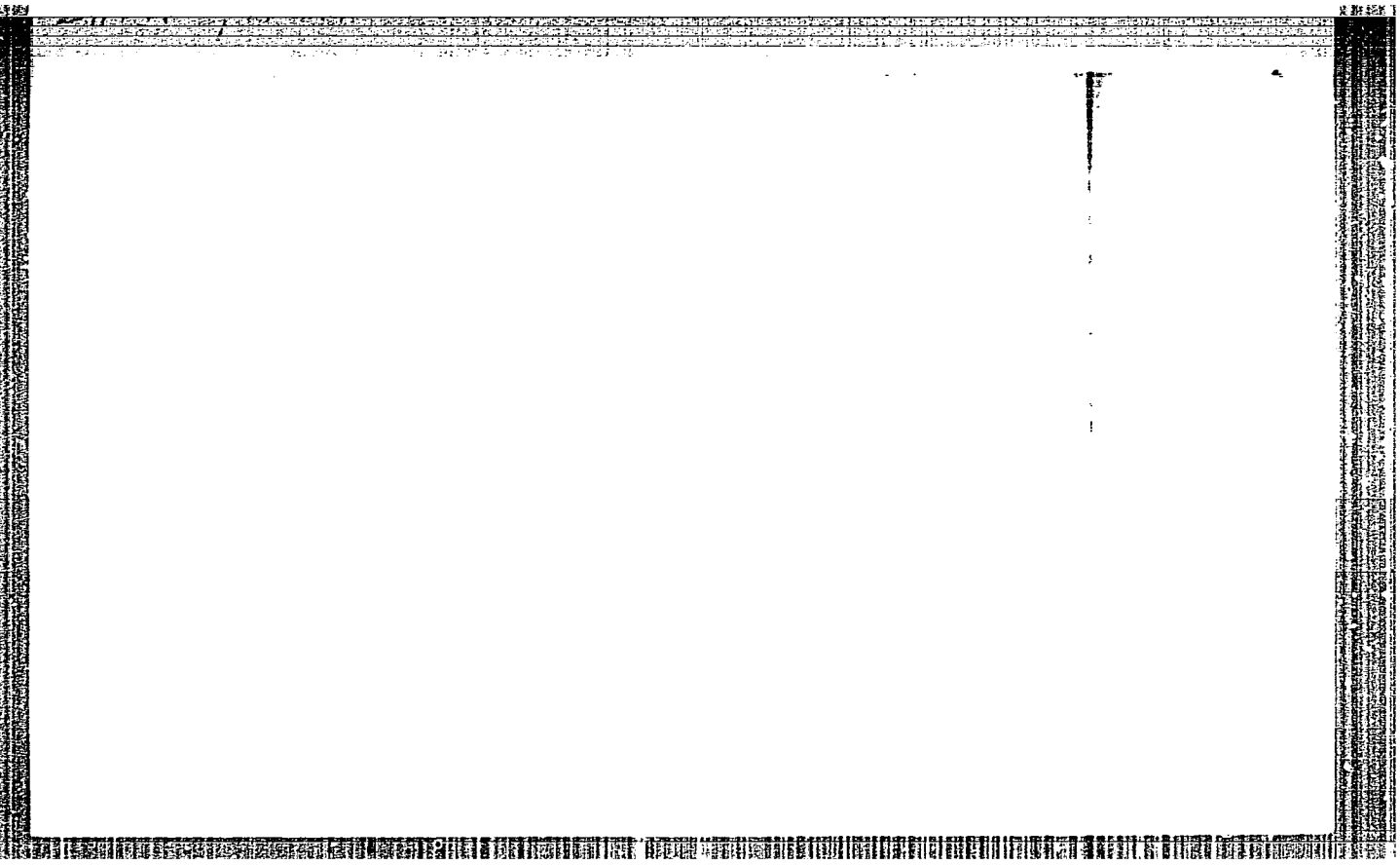
Abstract : Studies character of metal failure in corrosive medium under complex stressing. Discusses results of testing flat and round specimens of L-68 brass in vapors of ammonium hydroxide under pulling and torsional loading. Diagrams, Illustrations. Four references.

Institution :

Submitted : May 5, 1954



APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R002064920007-1"



APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R002064920007-1"

ZHUKOV, A.M.; RABOTNOV, Yu.N. (Moscow)

Investigation of plastic deformations in steel in complex loading. Inzh.sbor. 18:105-112 '54. (MLRA 7:5)
(Deformations (Mechanics))

ZHUKOV, A.M. (Moscow)

Plastic properties and failure of steel subjected to biaxial stresses. Inzh.sbor. 20:37-48 '54. (MLRA 8:7)
(Strains and stresses) (Steel--Testing)

ZHUKOV, A. M.

ZHUKOV, A. M. -- "Principles of the Ventilation of Production Rooms of the Chemical Sections of Coke-Chemical Plants." Min Higher Education USSR. Belorussian Polytechnic Inst imeni I.V. Stalin. Minsk 1956 (Dissertation for the Degree of Candidate in Technical Sciences.)

SO: Knizhnaya Letopis', No. 9, 1956