KUZNETSOV, Yu.N.

Device for preparing powder samples for spectral analysis.
Zav.lab. 26 no.5:623 '60. (MIRA 13:7)

1. Irkutskiy nauchno-issledovatel'skiy institut redkikh metallov.
(Spectrum analysis)

S/032/61/027/007/011/012
B110/B203

AUTHOR: Kuznetsov, Yu. N.

TITLE: Automatic plant for spectrum analysis of ores

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 7, 1961, 910-913

TEXT: Since the methods for pneumatic introduction of samples in the electric arc suggested by N. N. Semenov (Ref. 4: Zavodskaya laboratoriya, XXII, 4, 457 (1956)), and G. I. Kibisov (Ref. 5: Inzhenerno-fizicheskiy zhurnal, 2, 3, 68 (1959)) are difficult to automatize, the author developed a chamber for the atomization (Fig. 1) as well as an automatic device for photographing the spectra. The horizontal disk 1 with chambers on its periphery is used as magazine. 1 is fixed by nut 6 to shaft 3 with flange 4 and screws 5 for horizontal adjustment of the disk. The inner boring of the movable shaft 8 centers the latter with respect to pin 9. The bearing ball 10 facilitates rotation. Nut 11 permits elevation adjustment of the magazine by ± 6 mm. The conical nozzles 12 forming air jets are fixed on the ring disk 14 by means of rubber sleeves 13; 14 closes the chamber lid with a rubber gasket. Wing nuts on the pins 16 tighten the

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disk. The rotation mechanism consits of a d-c magnet 18, a ratchet wheel 22, and a locator. Plunger 17 of the magnet is withdrawn to the initial position after switching off spring 19 attached to guide 20. 20 prevents horizontal rotation of 21. 22 has 30 teeth. The steel ball of locator 23 situated in tube 24 is pressed by a cylindrical steel spring adjustable by stop 25. When the ball enters the indentation of the gear wheel, it locks chamber exactly below the arc space. The magnetic system of an electric shaver or bell serves as vibrator. The operation is controlled by elevation adjustment. The arc tripod stands on an asbestos cement plate 26 which is connected with the rider by means of the vertical textolite board 27 (with window for the arc light) and steel pin 28. The electrodes 29 are placed in the guide tubes 30, and are pressed by the springs 31 against the fixing guide tube openings. For the electrode adjustment, plunger 32(with the upper arm of the lever frame) of magnet 33 responds when the current is switched on. Template 34 is introduced in the electrode gap. On further rotation, the frame of stop 35 lifts the springs 31 and releases the electrodes. They are led from the guides to the template stop by means of the springs 36. The analysis samples are filled into the cylindrical, 25 mm high chambers (diameter = 20 mm) with 0.2-0.5 mm thick elastic rubber

Automatic plant for spectrum analysis ...

diaphragm bottom. On top, the lid is provided with guide cone and nozzle 12. Under the action of the vibrator, the chamber diaphragm form particle suspensions blown out of the nozzles. The jet velocity is controlled by the vibration number and nozzle diameter. The constant weight of samples (± 5-10%) guarantees a regular supply of substance during the exposure time of 20-30 sec. For samples with different physical properties (weight difference ≤ 20-25%), mixtures with finely ground fillers (buffer mixtures) are examined which do not separate according to the specific gravity with sufficient degree of fineness. The grain size must be 300 mesh (particle size ≤ 0.04-0.05 mm) since otherwise analytical errors occur according to Ya. D. Raykhbaum and M. A. Luzhnova (Ref. 6: Zavodskaya laboratoriya, XXV, 12, 1449 (1959)). The automatic plant (Fig. 2) consists of: assembly 1 for introduction of samples in the discharge space; arc tripod 2; optical shutter 3; magazine transport mechanism 4; control program relay 5; and arc generator 6. Operation is controlled by a КЭП-12 (KEP-12) control apparatus. The construction of the other assemblies was taken from papers by B. G. Voronov (Ref. 7: Materialy X soveshchaniya po spektroskopii, 2, 395 Izd. L'vovskogo universiteta (1958)) and D. M. Shvarts, Yu. V. Fisher (Ref. 8: Zavodskaya laboratoriya, XXIII, 2, 246, (1957)). In semiquantitative

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material analyses (geological prospecting) examined previously with an ABP-2 (AVR-2) apparatus, the divergence was normal, in quantitative lithium and beryllium analyses, well reproducible band intensities (mean arithmetic deviation from the mean value = 2-3%) and satisfactory agreement with control analyses were obtained. There are 2 figures and 8 Soviet-bloc references.

ASSOCIATION: Irkutskiy gosudarstvennyy nauchno-issledovatel'skiy institut redkikh metallov (Irkutsk State Scientific Research Institute of Rare Metals)

Fig. 1. Apparatus for introducing samples in the discharge and arc tripod.

Kuznetsov, Yu. N.

SOKOLOV, V.F., inzh.; KOVALENKO, G.A., inzh.; KUZNETSOV, Yu.N., inzh.

Maneuvering properties of vessels equipped with turning gear.
Rech. transp. 17 no.4:20-23 Ap '57. (MIRA 11:4)
(Steering gear)

KUZNETSOV, Yu.N.

Characteristics, principles, and categories of analytical chemistry.
Zav.lab. 30 no.12:1521-1522 '64. (MIRA 18:1)

KUZNETSOV, Yu.N.

Applicability of elements of the theory of games in analytic work. Zav. lab. 30 no.10:1245-1248 '64. (MIRA 18:4)

1. Tsentral'nyy nauchno-issledovatel'skiy institut olovyannoy promyshlennosti.

ISAKOVA, Rufina Afanas'yevna; PONOMAREV, V.D., prof., doktor tekhn. nauk, otv. red.; KUZNETSOV, Yu.N., red.; KHUDYAKOV, A.G., tekhn. red.

[Vapor pressure of nonferrous metal sulfides] Davlenie para sul'fidov tsvetnykh metallov. Alma-Ata, Izd-vo Akad. nauk Kazakhskoi SSR, 1963. 128 p. (MIRA 16:5)

1. Deystvitel'nyy chlen Akademii nauk Kazakhskoy SSR (for Ponomarev).
(Nonferrous metals—Metallurgy) (Vapor pressure)

SERGEYEV, Petr Vasil'yevich; SISOYAN, G.A., prof., otv. red.; KUZNETSOV, Yu.N., red.; KHUDYAKOV, A.G., tekhn. red.

[Power regularities in electric charge resistance furnaces, electrolysis, and the electric arc] Energeticheskie zakonomernosti rudnotermicheskikh elektropechei, elektroliza i elektricheskoi dugi. Alma-Ata, Izd-vo AN KazSSR, 1963. 249 p. (MIRA 16:8)
(Electric furnaces)

KEKIN, A.A., otv. red.; SHEPELEV, S.F., red.; RADCHENKO, G.A., red.; POLZIK, V.A., red.; KUZNETSOV, Yu.N., red.; RORORKINA, Z.P., tekhn. red.

[Transactions of the All-Union Conference on Mine Ventilation and Dust Removal] Trudy Vsesoiuznogo soveshchaniia po provetrivaniiu rudnikov i obespylivaniiu rudnichnogo vozdukha, Dzhezkazgan, 1960. Alma-Ata, Izd-vo AN Kaz.SSR, 1962. 267 p. (MIRA 16:9)

1. Vsesoyuznoye soveshchaniye po provetrivaniyu rudnikov i obespylivaniyu rudnichnogo vozdukha, Dzhezkazgan, 1960. 2. Komitet po koordinatsii nauchno-issledovatel'skikh rabot pri Sovete Ministrov Kaz.SSR (for Polzik). 3. Institut gornogo dela AN Kaz.SSR (for Radchenko, Shepelev, Kekin).
(Mine ventilation)

CHULANOV, G.Ch., doktor ekon. na.k, prof.; KISELEVA, L.I.; ZHUBANOVA, Z.G.; TAYBEKOV, I.Ye.; DZHAKSALIYEV, B.M.; ISHMUKHAMEDOV, B.M.; CHECHELEVA, T.V.; KUZNETSOV, Yu.N., red.; POGOZHEV, A.S., red.; RORORKINA, Z.P., tekhn. red.

[Essays on the history of the national economy of the Kazakh S.S.R.] Ocherki istorii narodnogo khoziaistva Kazakhskoi SSR. Alma-Ata, Izd-vo AN Kaz.SSR. Vol.3. [June 1941 to 1945] Iiun' 1941 goda - 1945 god. 1963. 299 p. (MIRA 17:1)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut ekonomiki.
2. Chlen-korrespondent AN Kaz.SSR (for Chulanov).

26459
S/140/61/000/003/005/009
C111/C333

16.45.00

AUTHORS: Rybin, P. P., Kuznetsov, Yu. N.

TITLE: On a nonlinear singular integral equation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, no. 3, 1961, 99-102

TEXT: The nonlinear singular equation

$$\varphi(x) = \lambda \int_{-\infty}^{+\infty} K(|x-y|)\, f(y) \sum_{i,j=0}^{\infty} a_{ij} \lambda^i \varphi^j(y)\, dy \qquad (1)$$

is considered, where $f(y)$ is the polynomial

$$f(y) = \sum_{n=0}^{q} b_n y^n \qquad (2)$$

and the series

$$s \equiv \sum a_{ij} \lambda^i \varphi^j \qquad (3)$$

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converges absolutely for sufficiently small λ and all φ; the a_{ij} are constants. The solution is sought with the set up

$$\varphi(x,\lambda) = \lambda\varphi_1(x) + \lambda^2\varphi_2(x) + \dots \qquad (4)$$

For determining the φ_i one obtains the system

$$\varphi_1(x) = \int_{-\infty}^{+\infty} K(|x-y|)\, f(y)\, a_{oo}\, dy$$

$$\varphi_2(x) = \int_{-\infty}^{+\infty} K(|x-y|)\, f(y)\, \psi_1(y)\, dy \qquad (6)$$

$$\varphi_3(x) = \int_{-\infty}^{+\infty} K(|x-y|)\, f(y)\, \psi_2(y)\, dy$$

etc. where the Ψ_i are formed from the a_{ij} and the $\varphi_1,\dots,\varphi_i$ by addition and multiplication. Since Ψ_n depends only on $\varphi_1,\dots,\varphi_n$, one can successively determine the φ_i from (6).

Let denote

$$K_n = 2\int_0^\infty K(\xi)\,\xi^n\,d\xi\,,\quad K_{2m+1} = 0 \qquad (n=2m)\ . \qquad (7)$$

The series

$$K + \delta^2 K_2 + \delta^4 K_4 + \dots\,, \qquad (12)$$

is assumed to converge for $|\delta| < \delta_0$.

Theorem: If in the equation (1) the kernel $K(|x-y|)$ is so that the series (12) converges, then (1) possesses a solution in the form of the series (4), where this series converges for sufficiently small λ and arbitrary x.

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S/140/61/000/003/005/009
On a nonlinear singular integral ... 0111/0333

There are 5 Soviet-bloc-references.

ASSOCIATION: Irkutskiy gornometallurgicheskiy institut (Irkutsk Mining and Metallurgical Institute)

SUBMITTED: February 10, 1959

Card 4/4

L 11225-67 EWT(d)/FSS-2 GD

ACC NR: AT6022373 SOURCE CODE: UR/0000/66/000/000/0020/0024

42

AUTHOR: Kuznetsov, Yu. P.

ORG: none

TITLE: Bayesian binary systems for signal reception, invariant with respect to noise power

SOURCE: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio. 22d, 1966. Sektsiya kibernetiki. Doklady. Moscow, 1966, 20-24

TOPIC TAGS: signal reception, noise, decision theory, binary logic, statistic analysis

ABSTRACT: Generally speaking Bayesian signal reception systems can be constructed only if complete information is available on noise and useful signals, which clearly is inconvenient in practice. The article deals with the construction of systems of this kind in the event that their decision-making rules are independent of noise power, assuming that noise power is an unknown variable. Such systems are termed invariant with respect to noise power. The reception of two signals with the random amplitudes

$$S'_1(t, A_1) = A_1 S_1(t) \text{ and } S'_2(t, A_2) = A_2 S_2(t) \qquad (1)$$

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is considered, where $S_1(t)$ and $S_2(t)$ are known time functions while A_1 and A_2 are random amplitude factors having normal distributions with zero means and variances σ_1^2 and σ_2^2, respectively, against the background of normal correlation noise n(t), with noise power $R(0) = N$ being considered an unknown. We denote the input signal by v(t) and assume that, during the time of observation (0, T), h samplings are performed at the time instants $t_i = i\,\Delta t$, $\Delta t = T/h$, $\Delta th = T$. Then the input data will correspondingly be $\vec{V} = \vec{S}'_n + \vec{n}$ if we have the signal $S'(t, A_1)$ and noise (hypothesis H_1), and $\vec{V} = \vec{S}'_2 + \vec{n}$ if we have signal $S'(t, A_1)$ and noise (hypothesis H_2). The decision-making rule of the Bayesian binary system for the reception with random amplitudes is then readily defined: 1. We adopt the decision that hypothesis H_2 is true if

$$z = \frac{\sigma_2^2 \varphi_2^2}{2(1+\sigma_2^2 \mu_2} - \frac{\sigma_1^2 \varphi_1^2}{2(1+\sigma_1^2 \mu_1)} > \ln \frac{kp_1}{p_2} - \frac{1}{2} \ln \frac{1+\sigma_1^2 \mu_1}{1+\sigma_2^2 \mu_2} \qquad (2a)$$

2. We adopt the decision that hypothesis H_1 is true if

$$z = \frac{\sigma_2^2 \varphi_2^2}{2(1+\sigma_2^2 \mu_2} - \frac{\sigma_1^2 \varphi_1^2}{2(1+\sigma_1^2 \mu_1} < \ln \frac{kp_1}{p_2} - \frac{1}{2} \ln \frac{1+\sigma_1^2 \mu_1}{1+\sigma_2^2 \mu_2} \quad (2b)$$

where

$$\varphi_1 = (V, QS_1), \quad \varphi_2 = (V, QS_2), \quad \mu_1 = (\vec{S}_1, Q\vec{S}_1), \quad \mu_2 = (\vec{S}_2, Q\vec{S}_2), \quad Q = R^{-1},$$

with p_1 and $p_2 = 1 - p_1$ being the a priori probabilities of reception of the first and second signals, respectively and $k > 0$ being a quantity which depends on the specified value of the correct and incorrect decisions. It is shown that decision-making rule (2) will be independent of noise power if the following conditions are satisfied:

$$\ln \frac{kp_1}{p_2} = 0, \quad (3)$$

$$\sigma_1^2 \mu_1 = \sigma_2^2 \mu_2 \quad (4)$$

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ACC NR: AT6022373

This procedure also applies, more or less, to other signal classes, and particularly to signals with random phases as well as to signals with random amplitudes and phases. Orig. art. has: 14 formulas.

SUB CODE: 17, 12/ SUBM DATE: 05Mar66/ ORIG REF: 001

Card 4/4

ACC NR: AP6021943 (A) SOURCE CODE: UR/0188/66/000/002/0044/0051

AUTHOR: Kuznetsov, Yu. P.

ORG: Department of Oscillation Physics (Kafedra fiziki kolebaniy)

TITLE: Investigation of a combinational parametric oscillation excitement

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no.2, 1966, 45-51

TOPIC TAGS: parametric oscillation, parametric resonance, parametric equation

ABSTRACT: The author discusses combinational parametric excitation at a frequency equal to half the sum of the two non-commensurable simultaneous frequencies of the driving voltage $u(t) = p_1 \cos \omega_1 t + p_2 \cos \omega_2 t$ (1). The system behaviour is found to be analogous to that having one parameter oscillating at a frequency equal to the sum of the exciting frequencies. The analysis was substantiated by circuit experimentation over a wide range of the ratio of the two simultaneous exciting frequencies, ω_1/ω_2. Resonance curves, amplitude characteristics and excitation domains were determined. The excitation areas had closed boundaries in the (p_1, p_2) plane. Author thanks prof. V.V. Migulin for the suggestion of the topic and valuable discussion. Orig. art. has 6 figures, 7 formulas and 1 table.

SUB CODE: 09/ SUBM DATE: 22Oct64/ ORIG REF: 003/ OTH REF: 002

UDC 621.372.061.310

Card 1/1

KUZNETSOV, Yu.P., inzh.

Carrying out preparatory operations on the building site of an industrial plant in Moscow. Prom. stroi. 38 no.11:43-45 '60. (MIRA 13:10)

(Moscow--Factories--Design and construction)
(Foundations)

KUZNETSOV, Yu.P., inzh.; RIKHTER, V.A., inzh.

Compactness indicator of a rolled layer. Stroi. i dor. mash. 8 no.11:23-25 N '63. (MIRA 17:1)

KUZNETSOV, Yu.P.; LEKAYE, V.M.; VILESOV, N.G.

Production of carbon disulfide from methane and sulfur in the high-temperature zone. Khim. volok. no.5:38-41 '65. (MIRA 18:10)

1. Moskovskiy ordena Lenina khimiko-tekhnologicheskiy institut im. D.I. Mendeleyeva.

CHERNOV, T.P., prof.; KUZNETSOV, Yu.P., inzh.

Automatic control of the quality of the compaction of soils, gravel, slags, and asphalt concrete. Prom. stroi. 41 no.11: 38-42 N '63. (MIRA 17:2)

1. Moskovskiy inzhenerno-stroitel'nyy institut im. Kuybysheva.

VIDINEYEV, Yu.D.; ZALIVADNYY, B.S.; KUZNETSOV, Yu.P.

Design of toothed rotary dynamometers. Priborostroenie no.12:7-8 D'63. (MIRA 17:5)

VILESOV, N.G. [Viliesov, N.H.]; LEKAYE, V.M. [Lekae, V.M.]; KUZNETSOV, Yu.P. [Kuznietsov, IU.P.]

Carbon disulfide content of sulfur dioxide and methane. Khim.prom. [Ukr.] no.1:5-6 Ja-Mr '64. (MIRA 17:3)

TRUNKOVSKIY, Lazar' Yemel'yanovich; KUZNETSOV, Yuriy Petrovich;
PODGUZOV, M.I., red.; MEDNIKOVA, A.N., tekhn. red.

[Automatic control cables, manual on the installation and use of control and special cables] Kabeli avtomatiki; spravochnik po montazhu i ekspluatatsii kontrol'nykh i spetsial'nykh kabelei. Moskva, Voenizdat, 1962. 365 p. (MIRA 15:6)
(Electric cables) (Automatic control)

KUZNETSOV, Yuriy Petrovich; BELOTSERKOVETS, V.V., nauchn. red.; MUPKINA, V.G., red.; BARANOVA, N.N., tekhn. red.

[Mechanization of electrical equipment installation] Mekhanizatsiia elektromontazhnykh rabot. Moskva, Proftekhizdat, 1963. 119 p. (MIRA 16:8)
(Electric power distribution)

KUZNETSOV, Yu.P.; KASATKIN, A.G.; LEKAYE, V.M.; YELKIN, L.N.; VILESOV, N.G.

Thermodynamics of the high-temperature conversion of methane by sulfur. Trudy MKHTI no.47:80-85 '64. (MIRA 18:9)

FILESOV, N.G.; KASATKIN, A.G.; LEKAYE, V.M.; KUZNETSOV, Yu.P.

Mechanism of the formation of carbon disulfide during the incomplete reduction of sulfurous anhydride by methane. Trudy MKHTI no.47:86-89 '64. (MIRA 18:9)

STEPANOV, V.M.; VAGANOVA, T.I.; KUZNETSOV, Yu.S.

Determination of N-terminal amino acids in hog pepsin. Biokhimiia 29 no.3:529-533 My-Je '64. (MIRA 18:4)

1. Institut khimii prirodnykh soyedineniy AN SSSR, Moskva.

KUZNETSOV, Yu. V., Cand Chem Sci -- (diss) "Study of the Distribution of Radioelements in Marine Sediments." Len, 1958, 24 pp with graphs (Radium Inst im V.G. Khlopin, Acad Sci USSR), 120 copies. (KL, 41-58, 119)

24 pp

Bibliography at end of text

Kuznetsov, Yu. V.

AUTHORS: Starik, I. Ye., Kuznetsov, Yu. V., Grashchenko, S. M., Frenklikh, M. S.

7-1-1/12

TITLE: On the Ionium Method of Determining the Age of Marine Sediments
(K voprosu ob ioniyevom metode opredeleniya vozrasta morskikh osadkov)

PERIODICAL: Geokhimiya, 1958, Nr 1, pp. 3-13 (USSR).

ABSTRACT: First the authors report on the research results which have hitherto been obtained in this field. Then they describe their own research methods and the process of analysis. Seven cores from the marine bottom of the Indian and Pacific Ocean were investigated. The content of Mn, Fe, CaO, Ra, Jo, Th and U, and its alteration with increasing depth were represented graphically. For most of the cores the obtained values for Ra, Th, Jo and U are given another time in tables. According to the distribution of the elements it can be distinguished between:
1) Nearshore sediments (cores 2 and 3). The distribution of ionium and radium is difficult to be explained, they are not in the

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radioactive equilibrium. This is due to external influences.
2) Sediments if average kind (core 1). The distribution of the two elements remains unclear, there is, however, already a connection in distribution.
3) Deep sea sediments (cores 4, 5, and 7). The radium concentration is reduced with increasing depth; several maxima and minima are explained by the changing conditions during sedimentation. Zhe vertical distribution of ionium corresponds completely to that of radium.
Hence it can furthermore be concluded:
A migration of radium in sediments does not take place. The sedimentation velocity in the marine regions of cores 4 and 5 changed only to a little extent with the time. In all cores investigated the concentration of uranium and thorium remains constant along the core. In a series of cores there was an obvious connection between the distribution of radium and ionium on the one hand and calcium on the other hand.
There are 8 figures, 5 tables, and 13 references, 3 of which are Slavic.

On the Ionium Method of Determining the Age of Marine Sediments 7-1-1/12

ASSOCIATION: Radium Institute imeni V. G. Khlopin, AN USSR, Leningrad (Radiyevyy institut im. V. G. Khlopina AN SSSR, Leningrad).

SUBMITTED: July 22, 1957.

AVAILABLE: Library of Congress.

1. Sedimentation analysis 2. Ionium-Application

Card 3/3

STARIK, I.Ye.; KUZNETSOV, Yu.V.; LEGIN, V.K.

Forms in which uranium and thorium are found in bottom deposits of the Antarctic Ocean. Radiokhimiia 1 no.3:321-324 '59. (MIRA 12:10)

(Uranium) (Thorium) (Antarctic Ocean--Deep sea deposits)

SOV/20-129-5-50/64

~~5(0)~~

AUTHORS: Starik, I. Ye., Corresponding Member, AS USSR, Kuznetsov, Yu. V., Nikolayev, D. S., Legin, V. K., Lazarev, K. F., Grashchenko, S. M., Kolyadin, L. B.

TITLE: Distribution of Radio Elements in the Sediments of the Black Sea

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 5, pp 1142-1145 (USSR)

ABSTRACT: The radioactivity of the sediments in the enclosed seas is almost uninvestigated. The Black Sea shows characteristic hydrological and hydrochemical conditions. It is also intensively fed with sedimentary material. For this reason its sedimentation strongly differs from that in large oceanic waters (Ref 5). In this connection the authors wanted to explain the influence of these specific conditions on the sedimentation and on the type of distribution of the radio elements in the Black Sea bottom sediments. The results achieved are not sufficient to draw final conclusions. For this reason only some assumptions are expressed. The authors studied the vertical distribution of uranium, radium, ionium, thorium, iron, and calcium in a sediment core which was taken from the central part of the Black Sea from a depth of 2137 m. It was 227 cm long and consisted mainly of gray homogeneous clay with 5 intermediate sand strata. The upper 18 cm

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consisted of extremely fine-disperse mud with thin sapropel intermediate strata. Figure 1 shows the vertical distribution of the above-mentioned elements in the core. Table 1 gives the corresponding figures. From these data it may be concluded that in the upper horizons of the core the radioactive equilibrium in the uranium series is widely disturbed: the ionium content is almost 4 times higher than the amount corresponding to the equilibrium with uranium; the radium content, however, constitutes only 1/4 of this amount. The radium content in the water of the Black Sea is only 15% of the equilibrium value of uranium dissolved in the water. Thus the radium content in the sediment is hardly one fourth of the amount which should be measured if 85% of the radium were sedimentated from the water. Assuming that no radium migration takes place in the cores of marine sediments (Ref 1) the discrepancy in the radium balance in the water and in the sediment of the Black Sea may be explained by radium leaching from the sediment in its upper layers. On the other hand, the upper horizons are considerably enriched with ionium and uranium. Their content decreases downwards to 42-48 cm rapidly and then practically remains constant. According to N. M. Strakhov more than 50% of $CaCO_3$ were sedimentated by chemical

methods. The main bulk of iron, however, is transported into the deep-seated sediments with the river water. The authors conclude therefrom that the vertical $CaCO_3$-distribution reflects the change of the chemical conditions in the course of time. Since the vertical distribution of ionium and uranium agrees with that of $CaCO_3$ it indicates that the main amount of ionium and uranium was separated from the solution. On the other hand it may be concluded from the parallel change in the thorium content with that of iron that the major part of thorium is of terrigenous origin. The authors calculated the rate of sedimentation in the Black Sea from the data from table 1. It is 12-13 cm within a thousand years. If it is however assumed that in the horizon 100-106 cm the equilibrium between ionium and uranium is still attained (Fig 2) the rate of sedimentation is only 0.4-0.5 cm per 1000 years. The problem as to which of the two values is correct has hitherto not been definitely solved. There are 2 figures, 1 table, and 6 references, 4 of which are Soviet.

SUBMITTED: August 22, 1959

Card 3/3

KOLYADIN, L.B.; NIKOLAYEV, D.S.; GRASHCHENKO, S.M.; KUZNETSOV, Yu.V.; Lazarev, K.F.

Forms of the occurrence of uranium in waters of the Black Sea. Dokl.AN SSSR 132 no.4:915-917 Je '60. (MIRA 13:5)

1. Predstavleno akademikom N.M.Strakhovym.
(Black Sea--Uranium)

GRASHCHENKO, S.M.; NIKOLAYEV, D.S.; KOLYADIN, L.B.; KUZNETSOV, Yu.V.; LAZAREV, L.F.

Radium concentration in waters of the Black Sea. Dokl.AN SSSR 132 no.5:1171-1172 Je '60. (MIRA 13:6)
(Black Sea--Radium)

81418

S/020/60/132/06/52/068
B011/B126

21.3000

AUTHORS: Nikolayev, D. S., Korn, O. P., Lazarev, K. F., Kolyadin, L. B., Kuznetsov, Yu. V., Grashchenko, S. M.

TITLE: The Concentration of Uranium in the Waters of the Black Sea

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 6, pp. 1411 - 1412

TEXT: It follows from an introductory survey publication that a fairly equal distribution is to be found in the oceans, an average of $2.7 \cdot 10^{-6}$ g/l. Strong deviations from this concentration can occur in coastal waters and inland seas. The Black Sea has a special position among those that are related to the ocean. The exchange of water with the ocean is limited, mineralization is diminished, and the water is contaminated with H_2S up to the upper 125-175 m. It is to be assumed that under these conditions, hexavalent uranium is reduced to a state of pentavalency. This should lead to active uranium sedimentation and

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The Concentration of Uranium in the Waters of the Black Sea

S/020/60/132/06/52/068
B011/B126

a change in concentration in the depths. Table 1 correlates data from 1951 and 1958 (central and western parts of the Sea). Uranium was determined by a luminescence method from 0.3 - 1 l samples with an accuracy of ± 20%. The authors draw the following conclusions from Table 1: 1) the uranium concentration fluctuates in the samples examined between $1.5 \cdot 10^{-6}$ and $2.8 \cdot 10^{-6}$ g/l. 2) These variations occur on the surface as well as in the depths. No regularity in these concentration changes could be detected. Thus the specific reductive milieu of the Black Sea from 125-175 m upwards remains without influence on the distribution of the uranium concentration. According to approximate calculations, the average concentration of uranium in the part of the Black Sea examined is $(2.0 \pm 0.3) \cdot 10^{-6}$ g/l, which approaches the average value in the ocean. The decline in concentration in the Black Sea does not exceed 30-35%, while the mineralization is lowered by 54% in comparison to the ocean. The authors thank I. Ye. Starik, Corresponding Member AS USSR, in whose laboratory the work was carried out. There are 1 table and 16 references: 2 Soviet, 7 American, 1 Swedish, 1 Japanese, and 3 Austrian.

81418

The Concentration of Uranium in the Waters of the Black Sea

S/020/60/132/06/52/068
B011/B126

PRESENTED: February 16, 1960, by N. M. Strakhov, Academician

SUBMITTED: August 22, 1959

Card 3/3

Kuznetsov, Yu. V.

STARIK, I.Ye.; KULIKOV, Yu.V.; LEGIN, V.K.; SIMONYAN, T.K.

Certain characteristics of radioionium dating. Radiokhimiia 3 no.4:490-497 '61. (MIRA 14:7)
(Thorium--Isotopes)

STARIK, I.Ye.; NIKOLAYEV, D.S.; KUZNETSOV, Yu.V.; LEGIN, V.K.

Relationship between the radioactivity of sediments in the Sea of Azov and the Black Sea. Dokl. AN SSSR 139 no.2:456-459 Jl '61. (MIRA 14:7)

1. Chlen-korrespondent AN SSSR (for Starik).
(Azov, Sea of--Radioactive substances)
(Black Sea--Radioactive substances)
(Deep-sea deposits)

STARIK, I.Ye.; NIKOLAYEV, D.S.; KUZNETSOV, Yu.V.; LEGIN, V.K.

Radioactivity of sediments in the Black Sea. Dokl. AN SSSR 139 no.6:1456-1459 Ag '61. (MIRA 14:8)

1. Chlen-korrespondent AN SSSR (for Starik).
(Black Sea—Sedimentation and deposition)
(Radioactive substances)

STARIK, I.Ye.; YELIZAROVA, A.N.; KUZNETSOV, Yu.V.

Determination of the age of oceanic deposits by the ionium-protactinium method. Radiokhimiia 5 no.2:154-157 '63.
(MIRA 16:10)

KUZNETSOV, Yu.V.; LEGIN, V.K.; SIMONYAK, Z.N.

Determination of ultrasmall quantities of uranium, radium, and thorium isotopes in silicate materials taken from the same batch. Radiokhimiia 5 no.2:189-197 '63. (MIRA 16:10)

KUZNETSOV, Yu.V.; LEQIN, V.K.; LISITSYN, A.P.; SIMONYAK, Z.N.

Radioactivity of ocean suspensions. Part 1: Thorium isotopes in ocean suspensions. Radiokhimiia 6 no.2:242-254 '64. (MIRA 17:6)

YELIZAROVA, A.N.; KUZNETSOV, Yu.V.

Determination of protactinium in weakly radioactive silicate materials. Radiokhimiia 6 no.3:375-376 '64. (MIRA 18:3)

ACC NR: AT6022228 SOURCE CODE: UR/0000/66/000/000/0003/0007

AUTHOR: Kuznetsov, Yu. V.

ORG: none

TITLE: A new waveguide line measuring method for determining the dielectric constants of isolating film or sheet materials

SOURCE: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio, 22d, 1966. Sektsiya radioizmereniy. Doklady. Moscow, 1966, 3-7

TOPIC TAGS: dielectric property, dielectric constant, electric measurement

ABSTRACT: The proposed method for measuring dielectric properties of thin samples consists of placing them along the rectangular waveguide axis on one of its wider sides. The dielectric constant may be found if the dimensions of the waveguide are known. However, the following values must be measured: the wavelength in the waveguide containing the sample, the wavelength when the sample is not there, and the attenuation factor of the wave when the waveguide contains the sample. The latter quantities may be measured by means of standing waves. This method also determines the thickness of the dielectric materials as well as the dielectric constants of constituent materials if the film or sheet is made from two materials with very different dielectric constants. Orig. art. has: 5 formulas and 2 figures.

SUB CODE: 09/ SUBM DATE: 19Mar66/ ORIG REF: 006/ OTH REF: 001

Card 1/1

KUZNETSOV, Yu.V., inzh.; TARKHANOV, V.A., inzh.; OSIPOV, Yu.A., inzh.

Role of weakening of the coal massif strength under the effect of water injection into the seam, in an increased labor productivity. Ugol' 40 no.11:56-57 '65. (MIRA 18:11)

1. Permskiy nauchno-issledovatel'skiy ugol'nyy institut.

KUZNETSOV, Yu.V.; RAPOPORT, S.R.

Programmed unit of a temperature regulator. Priborostroenie no.6:27-28 Je '57. (MLRA 10:7)

(Thermostat)

AID Nr. 992-6 18 June

MEASUREMENT OF THE PHASE VELOCITY OF A SURFACE WAVE (USSR)

Kuznetsov, Yu. V. Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 6, no. 2, 1963, 3-8. S/146/63/006/002/001/010

A method for the measurement of the delay of so-called "flat" and single harmonic delay systems and associated test equipment has been developed by the Leningrad Institute of Precision Mechanics and Optics. It is shown that the delay factor can be determined if the phase velocity or phase wavelength of electromagnetic oscillations propagating along the delay-system, and their velocity and wavelength in free space are known. The method presented is based on the utilization of the phase sensitivity properties of hybrid Tee and consists in measuring the phase velocity of a delayed wave by means of a movable load. In the test setup described the shf amplitude modulated carrier is applied through a waveguide to the H-arm of a hybrid Tee and then, through the side arms, is transmitted to the short-circuited waveguide and to the delay system, which is terminated in a variable load. In order to determine phase velocity, changes in the linear displacement of the variable load, which correspond to a certain phase shift of a delayed wave reflected from the load, are measured. The phase shift is

Card 1/2

MEASUREMENT OF THE PHASE VELOCITY [Cont'd] S/146/63/006/002/001/010

measured by successive comparison of a measured phase of the delayed wave, which is propagated twice along the system investigated, with the reference phase of the wave propagating in a short-circuited waveguide. If the phases of reflected waves are coincident, then the basic portion of the reflected waves of energy appear in the H-arm, but if the reflected wave phases are shifted in respect to each other, the basic portion of the energy appears in the E arm of the Tee and consequently on the detector which terminates this arm. By taking readings of a distance corresponding to two adjacent maxima or minima, the phase wavelength and, as a result, the rate of the phase velocity of electromagnetic oscillations in a delay system can be determined. Using the device described, several delay systems were investigated. A graph is included, which compares the predicted value of the dependence of the delay factor on the thickness of the dielectric layer with experimental results. This curve indicates that the deviation of experimental points from a theoretical curve does not exceed $\pm$ 1.5% and total error of the device is less than $\pm$ 4-5%. [GS]

Card 2/2

KUZNETSOV, Yu.V.

Measuring devices for the determination of dielectric permittivity of insulation layers on metal surfaces. Izv.vys.ucheb.zav.; prib. 6 no.6:10-14 '63. (MIRA 17:3)

1. Leningradskiy institut tochnoy mekhaniki i optiki. Rekomendovana kafedroy radiotekhniki.

KUZNETSOV, Yu. V.

I. Ye. STARIK, Yu. V. KUZNETSOV, Ye.P. PETRYAYEV, V.K. LEGIN (USSR)

"Some problems of the geochemistry of radioactive isotopes."

Report presented at the Conference on Chemistry of the Earth's Crust, Moscow, 14-19 Mar 63.

BREGADZE, I.L., professor; MORGUNOV, G.A., aspirant; KUZNETSOV, Yu.V., aspirant

Late results of palliative resections of the liver in alveolar echinococcosis. Vest.khir. no.5:45-50 '62. (MIRA 15:11)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - prof. I.L. Bregadze) Novosibirskogo meditsinskogo instituta. Adres avtorov: Novosibirsk, Krasnyy pr., d.3, gospital'naya khirurgicheskaya klinika.

(LIVER--SURGERY) (LIVER--HYDATIDS)

9,1700

S/058/60/000/006/029/040
A005/A001

Translation from: Referativnyy zhurnal, Fizika, 1960, No. 6, p. 294, # 14920

AUTHOR: Kuznetsov, Yu.V.

TITLE: Controllable Funnel Directivity Diagram of the Rod Antenna

PERIODICAL: Nauchn. tr. Leningr. in-t tochnoy mekhan. i optiki, 1959, No. 29, pp. 86-90

TEXT: The problem is considered of using a single conductor for forming funnel directivity diagrams. An approximate formula is given for calculating the directivity characteristics. Two possibilities of diagram control are mentioned: by varying the conductor length or by varying the wavelength of the electromagnetic oscillations. The operational principle and the design are described of the wide-band transformer - the transition from the rectangular waveguide to the coaxial waveguide exciting the single conductor. The experimental diagrams of a cylindric rod of various length are presented. The high transmission factor of the transition is noted in connection with small transformation losses.

N.N. Filippov

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

KUZNETSOV, Yu.V., inzh.

Preliminary impregation of coal in mines during blasting. Bezop. tuda v prom. 2 no.2:4-5 F '58. (MIRA 11:2)

1. Vostochnyy nauchno-issledovatel'skiy institut po bezopasnosti rabot v gornoy promyshlennosti.
(Coal mines and mining--Safety measures) (Blasting)

KUZNETSOV, Yu.V.

Blasting holes with water as means of increasing the efficiency and safety of blasting operations. Ugol' 34 no.3:48-49 Mr '59. (MIRA 12:5)

1. Vostochnyy nauchno-issledovatel'skiy institut po bezopasnosti rabot v gornoy promyshlennosti.
(Mining engineering--Safety measures)

KUZNETSOV, Yuriy Vladimirovich; ARKHIPOV, N.A., otv. red.; ZHUKOV, V.V., red. izd-va; IL'INSKAYA, G.M., tekhn.red.

[Preliminary wetting of coal seams] Predvaritel'noe uvlazhnenie ugol'nykh plastov. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 56 p. (MIRA 14:5)
(Mine dusts)

KUZNETSOV, Yu.V. (Novosibirsk)

Preliminary moistening of coal in the block as a means for increasing labor productivity. Ugol' 35 no. 4:17-20 Ap '60. (MIRA 14:4)
(Coal mines and mining--Labor productivity) (Mine dust)

KUZNETSOV, Yu.V.

Laboratory investigation of the pulse method of injecting water into a coal seam. Nauch. trudy PermNIUI no.6:203-214 '64. (MIRA 18:2)

KUZNETSOV, Yu.V.; OSIPOV, Yu.A.; TARKHANOV, V.A.

Efficiency of injecting water into a seam. Biul. tekh.-ekon. inform. Gos nauch.-issl. nauch. i tekh. inform. 17 no.9:10-12 S '64 (MIRA 18:1)

KUZNETSOV, Yu.Ya.

Principles for compiling geomorphological maps of mountainous regions. Geol.sbor.[Lvov] no.2/3:294-304 '56. (MLRA 10:3)

1. Vsesoyuznyy aerogeologicheskiy trest, Moskva.
(Physical geography) (Surfaces, Representation of)

KUZNETSOV, YU.A.

13

3(5) PHASE I BOOK EXPLOITATION SOV/1796

Moskovskoye obshchestvo ispytateley prirody. Geograficheskaya sektsiya.

Regional'noye karstovedeniye; trudy soveshchaniya po regional'nomu karstovedeniyu (Regional Study of Karst Phenomena; Papers of the Meeting on the Regional Study of Karst Phenomena) Moscow, 1958. 79 p. 600 copies printed.

Additional Sponsoring Agency: Moskovskoye obshchestvo ispytateley prirody. Redaktsionno-izdatel'skiy sovet.

Ed.: (Title page): N.A. Gvozdetskiy, Professor; Ed. (Inside book): G.N. Endel'man

PURPOSE: This book is intended for geologists, hydrologists, specialists in engineering geology, and speleologists.

COVERAGE: This collection of articles is based mainly on reports presented at a Conference on Regional Studies of Karst organized by the Geographical Section of the Moscow Society of Naturalists

Card 1/3

which took place on April 16, 1958. The extensive karst phenomena within the USSR, and their possible influence on climate and hydrology, has merited extensive study by Soviet scientists. The influence of biochemical processes on the formation of karst is noted. Each article is accompanied by photographs, diagrams and bibliographic references.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress (GB601.M6)

MM/lsb

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KUZNETSOV, Yu.Ya.

Modern glaciation of the southern Fergana Range. Trudy VAGT no.4:66-78 '58. (MIRA 12:6)
(Fergana--Glacial epoch)

KUZNETSOV, Yu.Ya.

Note on the recent and old glaciation of the Turugart Pass.
Geol. sbor. [Lvov] no.5/6:579-581 '58. (MIRA 12:10)

1.Vsesoyuznyy aerogeologicheskiy trest, Moskva.
(Turugart Pass--Glaciers)

KUZNETSOV - IV - 48

PHASE I BOOK EXPLOITATION SOV/3852
SOV/7-M-8

Akademiya nauk SSSR. Laboratoriya aerometodov

Trudy, tom 8: Materialy VII Vsesoyuznogo mezhvedomstvennogo soveshchaniya po aeros"yemke 25 noyabrya - 1 dekabrya 1956 g. (Materials of the 7th All-Union Interdepartmental Conference on Aerial Surveying, 25 November-1 December 1956) Moscow, Gosgeoltekhizdat, 1959. 300 p. 5,000 copies printed.

Ed. of Publishing House: V. G. Filatov; Tech. Ed.: O. A. Gurova; Editorial Commission: N. G. Kell', Corresponding Member, Academy of Sciences USSR; A. A. Logachev, V. P. Miroshnichenko (Resp. Ed.), and N. N. Sokolov.

PURPOSE: This publication is intended for photogrammetrists, geologists, geographers, and other scientific and technical personnel concerned with aerial photography.

COVERAGE: This issue of the Transactions of the Laboratory of Aerial Survey Methods contains the second part of materials presented at the 7th All-Union Interdepartmental Conference on Aerial Surveying which took place in Leningrad, November 25 through December 1, 1956.

Card 1/10

Materials of the 7th All-Union (Cont.) SOV/3852

Articles treat problems dealing with the execution and application of aerial survey methods in geological, geomorphological, and geophysical investigations. Special attention is directed to aerial survey methods in geological and geomorphological mapping and geophysical work under different conditions. The techniques of joint airborne magnetic prospecting and aerial photography are described. References accompany individual articles.

TABLE OF CONTENTS:

Card 2/10

KUZNETSOV, Yu.Ya.

Geology and origin of the relief in southeastern Fergana. Vop.geol. Tian'-Shania 2:3-182 '60. (MIRA 15:3)
(Fergana—Physical geography)

KUZNETSOV, Yu.Ya.

Content of geological maps of closed territories. Sov.geol. 5 no.4:127-129 Ap '62. (MIRA 15:4)

1. Aerogeologicheskaya ekspeditsiya.
(Geology--Maps)

KUZNETSOV, Yu.Ya.; PRUSOV, V.V.

Age of metamorphic and eruptive rocks in the nucleus of the Tuar-Kyr anticline. Dokl. AN SSSR 142 no.3:647-649 Ja '62. (MIRA 15:1)

1. Aerogeologicheskaya ekspeditsiya No.11 Vsesoyuznogo aerogeologicheskogo tresta. Predstavleno akademikom A.L.Yanshinym.
(Tuar-Kyr region--Petrology)

KUZNETSOV, Yu.Ya.

Shrinkage of glaciers in the Fergana Range. Izv. vys. ucheb. zav.; geol. i razv. 6 no.4:145-147 Ap '63. (MIRA 16:6)

1. Trest "Aerogeologiya".
(Fergana—Glaciers)

KUZNETSOV, Yu.Ya.; PRUSOV, V.V.; TUGOLESOV, D.A.

Tectonics and prospects for finding oil and gas in the Usturt.
Sov. geol. 6 no.10:24-31 O '63. (MIRA 17:1)

1. Aerogeologicheskaya ekspeditsiya Geologicheskogo instituta AN SSSR.

KUZNETSOV, Yu.Ya.

Ustyurt as an example of a karst region in the desert.
Trudy MOIP 15:56-61 '65. (MIRA 18:9)

KLEYNER, Yu.M.; KUZNETSOV, Yu.Ya.; SHOLOKHOV, V.V.

Methods for detailed structural and geological studies in Ustyurt. Sov. geol. 8 no.3:107-110 '65. (MIRA 18:5)

1. Vsesoyuznyy aerogeologicheskiy trest i Nauchno-issledovatel'skaya laboratoriya geologicheskikh driteriyev otsenki perspektiv neftegazonosnosti.

ARKHIPOV, A.Ya.; ALTAYEVA, N.V.; BAYBULATOVA, Z.K.; VISKOVSKIY, Yu.A.; GOLENKOVA, N.P.; KRAVCHENKO, M.F.; KUPRIN, P.N.; LEVIN, A.I.; POL'STER, L.A.; SEMOV, V.N.; SYRNEV, I.P.; USHKO, K.A.; SHOLOKHOV, V.V.; Prinimali uchastiye: RODIONOVA, M.K.; CHEL'TSOV, Yu.G.; KUZNETSOV, Yu.Ya., kand. geograf. nauk, nauchnyy red.

[Geology and oil and gas potentials of the south of the U.S.S.R.; Kara-Bogaz-Gol (Gulf) region (eastern part of the Middle Caspian oil- and gas-bearing basin).] Geologiia i neftegazonosnost' iuga SSSR; Prikarabozaz'e (vostochnaia chast' Srednekaspiiskogo neftegazonosnogo basseina). Leningrad, Nedra, 1964. 300 p. (Trudy Nauchno-issledovatel'skoy laboratorii geologicheskikh kriteriyev otsenki perspektiv neftegazonosnosti no.12).

L 32180-66 EWT(1) IJP(c)

ACC NR: AP6013922 SOURCE CODE: UR/0207/66/000/002/0041/0045

AUTHOR: Kuznetsov, Yu. Ye.; Syrovoy, V. A. (Moscow)

ORG: none (Moscow)

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B

TITLE: The solution of equations for a regular electrostatic beam, assuming emission from an arbitrary surface

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 2, 1966, 41-45

TOPIC TAGS: electrostatics, dimensional flow, current density

ABSTRACT: An analytical solution is given for the equations for a regular electrostatic beam emitting from an arbitrary surface under conditions of full space charge. A regular beam is defined as one in which the generalized particle momentum is a potential vector. It is assumed that the emitter is the coordinate surface $x^1 =$ const in the orthoganal system x^i ($i = 1,2,3$) and that the density of the emission current J is a fixed function $J(x^2, x^3)$. The solution is given as series in x^1 with coefficient functions of x^2, x^3. The first correction to the Child-Langmuir 3/2 law is determined by the sum of principal curvatures of the emitting surface with

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L 32180-66

ACC NR: AP6013922

respect to the expansion of an arc along the length of the x^1 axis which is orthogonal to the emitter. This solution can be used to determine the shape of a collector which will provide a given emission current density distribution at a given surface.

SUB CODE: 20/ SUBM DATE: 25Jul65/ ORIG REF: 000/ OTH REF: 008

Card 2/2

GRODZOVSKIY, G.L. (Moskva); KUZNETSOV, Yu.Ye.

Gas-flow vortex-cooling chamber theory. Izv. AN SSSR Otd.tekh. nauk no.10:112-118 O '54. (MIRA 8:3)
(Gas flow)(Vortex motion)(Refrigeration and refrigerating machinery)

GRODZOVSKIY, G.L.; KUZNETSOV, Yu.Ye.; TOKAREV, M.V.

Approximate calculation of axisymmetric supersonic flows under internal problem conditions. Prom.aerodin. no.24:152-157 '62. (MIRA 16:7)

(Aerodynamics, Supersonic)

GRODZOVSKY, G.L.; KUZNETSOV, Yu.Ye.; KHUDYAKOV, G.Ye. (Moscow):

"The gas dynamic theory of the flow of a fluid with varying phases."

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

MATVEYEV, Yu.M., doktor tekhn. nauk; RUZHINSKIY, M.B., inzh.; ZOLOTNITSKIY, V.Ye., inzh.; KUZNETSOV, Yu.Ye., inzh.

Mastering the production of pipe by induction welding at the Novosibirsk metallurgical plant. Stal' 25 no.3:245-251 Mr '65. (MIRA 18:4)

DZHAVADOV, Ismail Ali ogly; SADYKHOV, Ibad Sadykh ogly; GUSEYNOV, Mamed Gasan ogly; KUZNETSOV, Z.A., inzh.

Best foreman of the Azerbaijan Railroad. Put' i put.khoz. no.10:26-27 O '59. (MIRA 13:2)

1. Nachal'nik Kirovobadskoy distantsii Azerbaydzhanskoy dorogi (for Dzhavadov). 2. Sekretar' partorganizatsii Kirovobadskoy distantsii Azerbaydzhanskoy dorogi(for Sadykhov). 3. Predsedatel' mestkoma Kirovobadskoy distantsii Azerbaydzhanskoy dorogi (for Guseynov). 4. Kirovobadskaya distanskoy dorogi (for Kuznetsov).

(Azerbaijan--Railroads--Employees)

27171 KUZNETSOV, Z. I. Odnobarabannyye Lebedni na pogruzke lesa. les. prom-st', 1949, No.8, s.9-10.

SO: Letopis' Zhurnal'nykh Statey, Vol. 36,1949

KUZNETSOV-FETISOV, L.I., dotsent

Production of silicon tetrachloride under laboratory conditions. Trudy KKHTI no.14:107-110 '49. (MIRA 12:11)

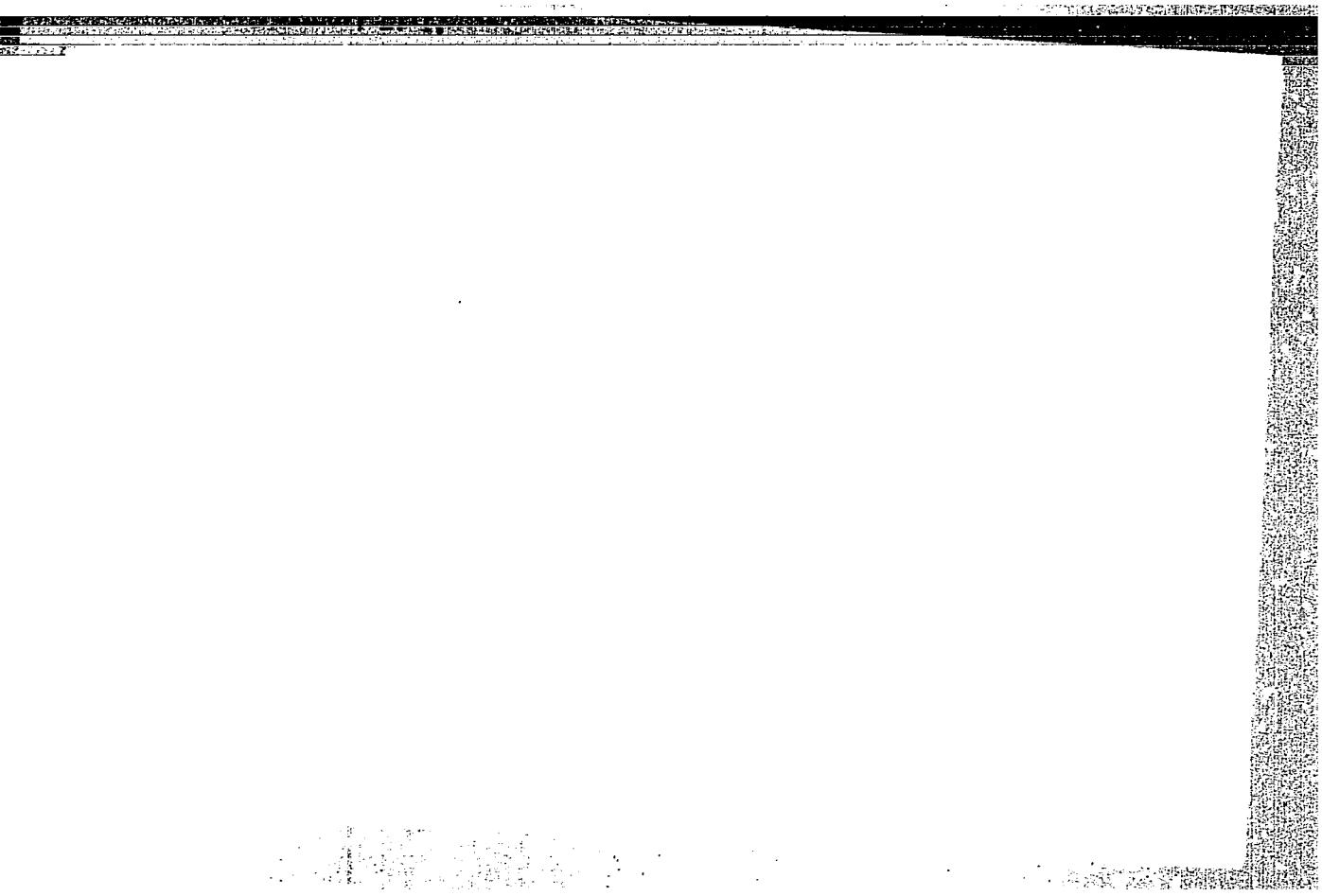
1.Kafedra tekhnologii neorganicheskikh veshchestv Kazanskogo khimiko-tekhnologicheskogo instituta im. S.M. Kirova.
(Silicon chlorides)

KUZNETSOV-FETISOV, L.I.; KRASNYY, N.B.

Producing magnesium perchlorate under laboratory conditions.
Trudy KKHTI no.15:62-64 '50. [publ. '51] (MIRA 12:12)
(Magnesium perchlorate)

KUZNETSOV-FETISOV, L.I.; TERPILOVSKIY, N.N.

Laboratory ultrasonic unit for physicochemical investigations. Trudy KKHTI no.17:63-68 '52 [publ. '53]. (MIRA 12:11)
(Ultrasonic testing)



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928210020-7"

KUZ'NETSOV-FEDOSEV, L. I.

Heats of formation for mixtures in the system sulfuric acid-nitric acid-sulfuric anhydrides. P. V. Kuznetsov and L. I. Kuznetsov-Fedosev (S. M. Kirov Inst. Chem. Tech., Kazan'). *J. Appl. Chem. U.S.S.R.* 25, 1305-7 (1952) (English translation); *Zhur. Prikład. Khim.* 25, 1311-13 (1952).—The method, app., and interpretation of expt. results used by Gelfman (*C.A.* 42, 4830d), are criticized. The max. miscibility heat in the ternary system H_2SO_4-HNO_3-SO_3 corresponds to the compn. $3HNO_3.4SO_3$ instead of $HNO_3.2SO_3$ as previously reported. Its value, according to detns. by K. and K.-F., is equal to 137 cal. per g. of mixt. instead of the 64 cal. as previously reported.

Herbert Lieberkind

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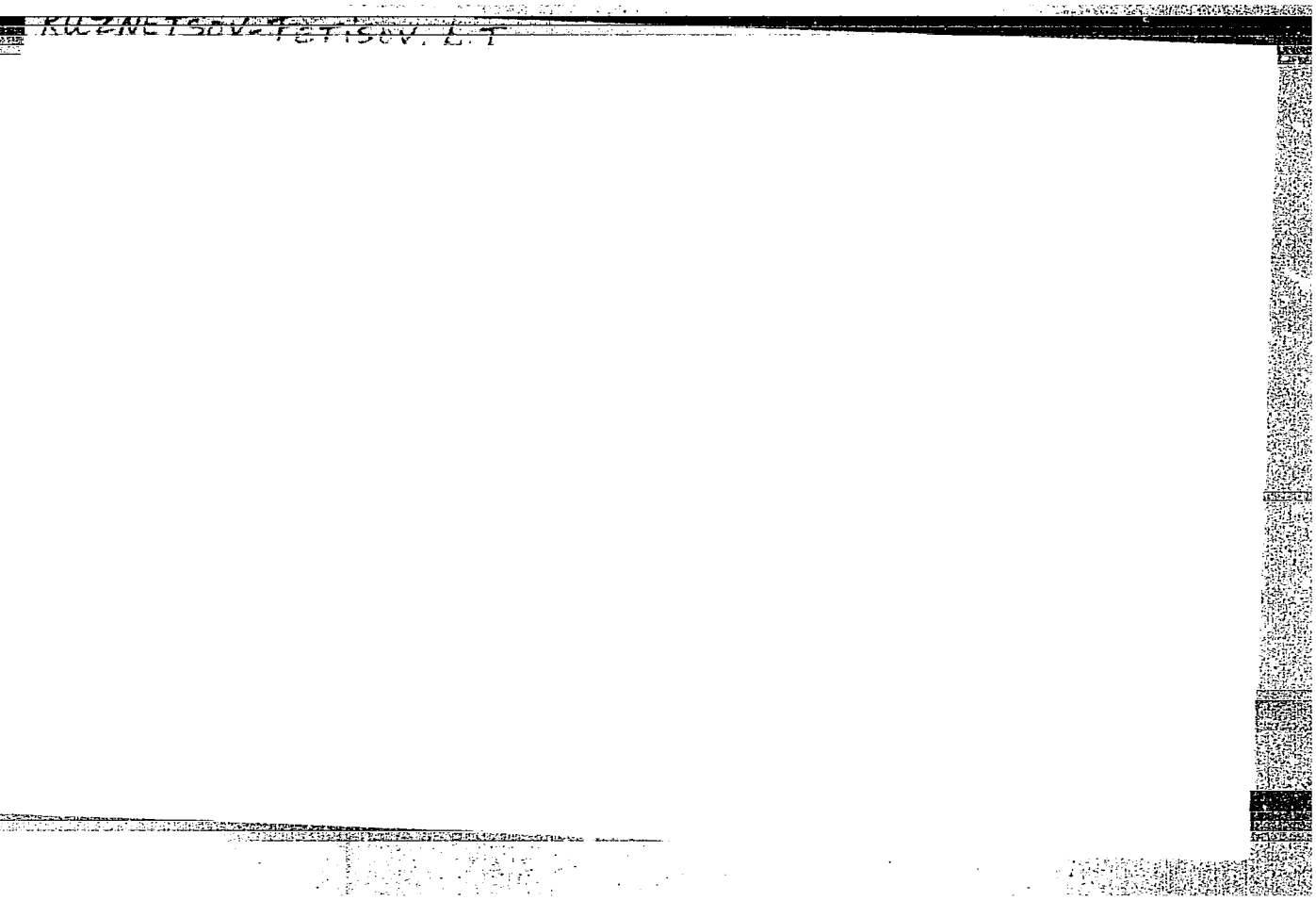

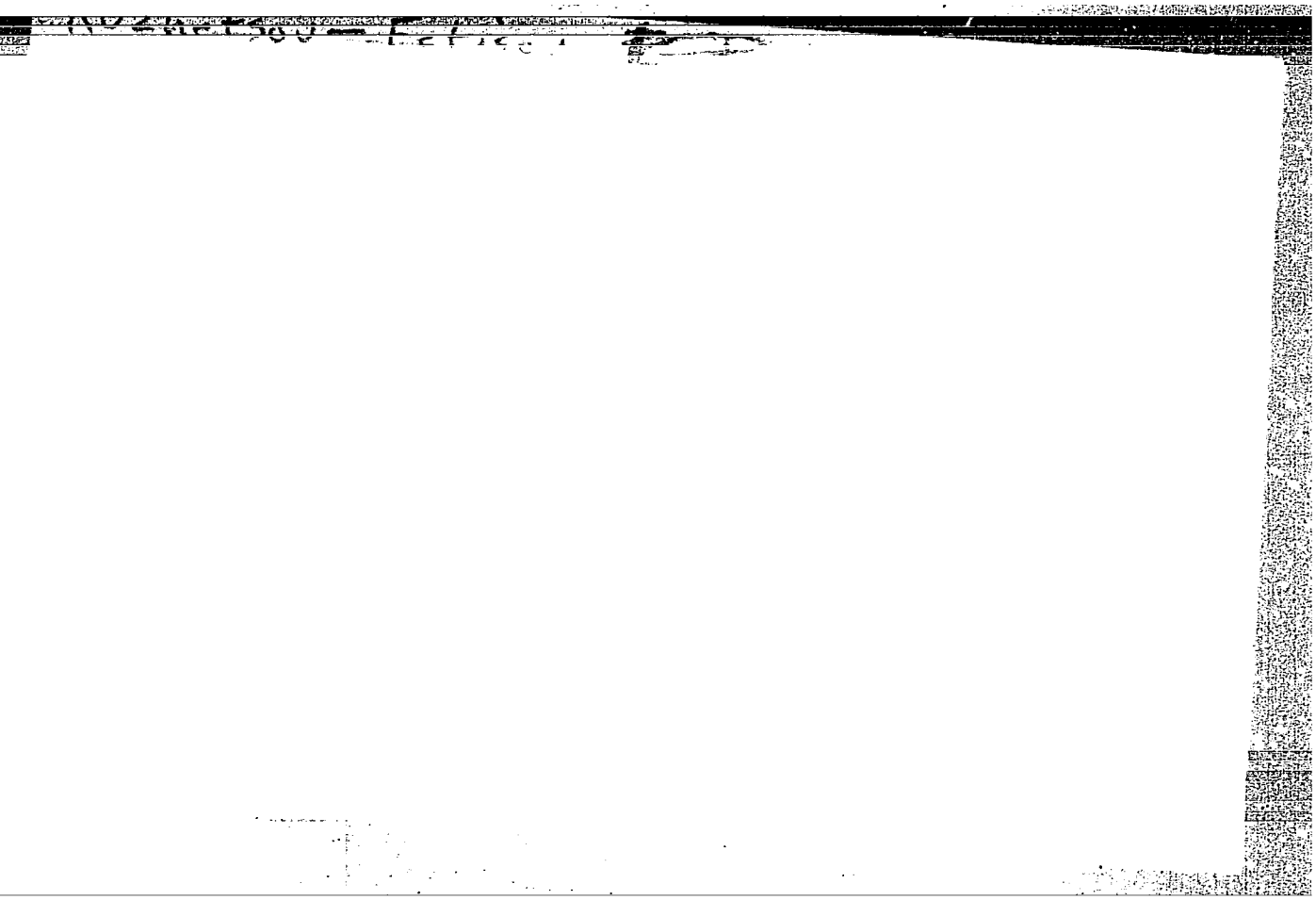

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928210020-7"

KUZNETSOV-FETISOV, L. I.

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PHASE I BOOK EXPLOITATION SOV/2019

Kazan. Khimiko-tekhnologicheskiy institut imeni S.M. Kirova

Trudy, vyp. 22, khimicheskiye nauki (Transactions of the Chemical and Technological Institute imeni S.M. Kirov, Kazan. Nr 22, Chemical Sciences) Kazan', 1958. 173 p. Errata slip inserted. 300 copies printed.

Editorial Board: K.N. Mochalov (Resp. Ed.) Professor; A.A. Trufanov, (Resp. Ed.) Professor, I. Ye. Moysak (Deputy Resp. Ed.) Professor, G.S. Vozdvizhenskiy, Professor, A. Ye. Arbuzov, Academician, Kh. M. Mushtari, Professor, S.M. Kochergin, Professor, A.M. Grigor'yev, Professor, E.A. Kholevo, Professor, Bsh. A. Tarzimanov (Resp. Secretary) Docent; Ed.: Yu. Karev; Tech. Ed.: I. Kh. Zaynullin.

PURPOSE: This book is intended for industrial chemists, technologists, scientists, teachers, and research students in applied chemistry.

COVERAGE: The collection contains reports by faculty members of the sponsoring institute and also commemorates the 75th year of the birth and first anniversary of the death of Professor Aleksey Mikhaylovich Vasil'yev, Doctor of Chemical Sciences and Head of the Faculty. A review of Vasil'yev's scientific activities is given along with a chronological bibliography of his published works and that of members of the institute under his leadership. Articles of the collection deal mainly with electro-chemistry and the analysis of electrochemical processes, chemical analyses, and investigations of the prospective application of physicochemical phenomena in industrial processes, e.g., cleansing with ultrasound, enhancing the properties of building materials with additives, etc. References are given at the end of each article.

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Transactions of the Chemical (Cont.) SOV/2019

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AUTHORS: Kondrat'yev, S. N., Kuznetsov-Fetisov, L. I. SOV/78-3-10-4/35

TITLE: On the Production of Anhydrous Liquid Sulfur Trioxide in the Laboratory (O poluchenii bezvodnoy zhidkoy trekhokisi sery v laboratornykh usloviyakh)

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ABSTRACT: A simple method was described by which SO_3 can be produced under laboratory conditions. Impurities due to polymerized products are avoided by this method. Moist SO_3 is produced by distillation of sulfuric acid of 60%, while potassium dichromate is added (for the oxidation of SO_2), followed by distillation at 80-100°C. An apparatus was described (Fig 1) by means of which anhydrous SO_3 can be produced. The melting point of anhydrous SO_3 is $16,79 \pm 0,02^{\circ}$ which compares well with the value mentioned in the references ($16,8^{\circ}$). The method described makes it possible to produce 400-500 g of chemically pure sulfur trioxide in the

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laboratory, which polymerizes on standing at a temperature not lower than 17°C. The dehydration of SO_3 by means of phosphorus pentoxide does not lead to a uniform product. The preparations obtained have different melting points. The temperature range of the melting point depends on the method of dehydration and the drying time. There are 1 figure and 11 references, 3 of which are Soviet.

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