CA

Oxidation of pinene and of carene by molecular oxygen. M. M. Pavlyuchenko and M. M. Sokolov. *Zhur. Prikład. Khim.* (J. Applied Chem.) 21, 1168-73(1948).—In expts. under const. pressure of O_2 = 510 mm. Hg, with 0.65 g. pinene, at 35°, the rate v of consumption of O_2 increased with time, e.g., 4, 8, 12, 18 hrs., v = 0.15, 0.22, 0.28, 0.34 ml./hr. If the run is interrupted, the O_2 evacuated, and the expt. resumed, v again starts at zero and increases as previously. Oxidation of Δ^3-carene proceeds in the same way, only somewhat faster. With H_2O vapor admitted at the start, v decreases during the 1st 4–5 hrs., passes through a min., then increases; the same behavior is found when the H_2O pressure is kept const. during the run. Oxidation of carene is accelerated by S, EtOH, MeI, is unchanged in the presence of KI, KBr, $PhCH_2OH$, $Na_2S_2O_3$, PhOH, and is inhibited by *p*-$C_6H_4(OH)_2$, $C_6H_3(OH)_3$, and Ph_2NH. Oxidation of pinene is strongly inhibited by $(CO_2H)_2$, $Na_2S_2O_3$, and $PhCH_2OH$, although the latter two have hardly any effect on carene. In the case of pinene, 0.01% $PhCH_2OH$ or $(CO_2H)_2$ slows down the reaction 15–20 times. After a 24-hr. interruption, the same effects are observed on resumption. Turpentine oil with 0.05–0.1% $(CO_2H)_2$ or *p*-$C_6H_4(OH)_2$ remained colorless 3–4 months in the dark, but became yellow, owing to oxidation, in the absence of an antioxidant. The effect of antioxidants proves that the reaction takes place in the liquid, not in the gaseous phase. In the presence of $(CO_2H)_2$, the activation energy for the oxidation of pinene is 9950 cal./mol. By rough estn., the no. of effective collisions in the gas phase would be 500,000 times the no. of mols. reacted, 7.2×10^{14} mols. O_2/sec.; hence, a reaction in the gas phase would require a considerably higher activation energy, and, consequently, the reaction takes place in the liquid phase only. Under identical conditions, and at const. surface area of the liquid, v increases with the initial amt. of carene, e.g., with 0.3, 0.9, and 1.8 g. carene, v = 0.12, 0.24, and 0.33 ml./hr. On the other hand, the increase of v with increasing surface area of the liquid is much slower. Consequently, the reaction takes place both at the interface and in the bulk of the liquid.

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The increase of v with increasing O_2 pressure is illustrated by the data: const. amt. of carene, pressure of air 100, 300, and 500 mm. Hg, v = 0.035, 0.085, 0.12 ml./hr. In the presence of strong inhibitors, e.g. $(CO_2H)_2$, v is independent of the pressure of O_2. Between 35 and 45°, v (after 8 hrs.) increases more than 4 times, consequently, diffusion is not rate-determining; the same follows from the increase of v with time. With A designating a mol. of either pinene or carene, the mechanism of the reaction can be represented by the scheme $A \rightarrow A^\circ$; $A^\circ + O_2 \rightarrow AO_2^\circ$; $AO_2^\circ + A \rightarrow AO_2 + A^\circ$; $AO_2 \rightarrow AO + O$; $A + O \rightarrow AO^\circ$; $AO^\circ + A \rightarrow A^\circ + AO$, and $A^\circ + O_2 \rightarrow AO_2^\circ$. Formation of AO_2 occurs predominantly at the phase boundary, whereas the subsequent reactions take place in the liquid. The total rate is the sum of 2 rates, $v = n_1 j_1 + n_2 j_2$, where n = no. of active mols., j = length of chain, subscripts 1 and 2 referring to the primary (phase-boundary) and the secondary (bulk) reaction. In the presence of inhibitors, there is one single st.., $v = nj$. If the reaction took place only at the phase boundary, the no. of effective collisions of O_2 with surface (0.65 sq. cm.) would be 1.8×10^{15}/sec., whereas the rate corresponds to 7.2×10^{14} mols./sec., in other words, over half of the activated mols. are deactivated by the inhibitor. The effectiveness of small amts. of inhibitors over prolonged periods of time would indicate that the chains are energy chains. This is borne out by the observation that pinene and carene to which some of their oxidation products have been added undergo further oxidation on illumination with a glass Hg-vapor lamp (i.e. in visible light), whereas in the absence of such products the photochem. oxidation is considerably slower, and is zero at the initial stages. The oxidation products evidently *sensitize* the *photochem. oxidation*. N. Thon

Chem. Inst., Belorussian SSR Acad. Sci.

SOKOLOV, Mikhail Maksimovich; TARASOV, A.F., otv. red.; POLYAKOVA, N., red.; KLIMOVA, T., tekhn. red.

[Economics of socialist agriculture]Ekonomika sotsialisticheskogo sel'skogo khoziaistva. Moskva, Gospolitizdat, 1962. 254 p. (MIRA 15:8)

(Agriculture--Economic aspects)

GR[illegible], B.F.; [illegible], D.V.; SOLODYANKIN, M.A.; SOKOLOV, M.M.

Lowering the trapping γ-radiation from the construction materials of a reactor by shielding them with boron-containing screens. Atom. energ. 18 no.1:69-70 Ja '65. (MIRA 18:2)

SOKOLOV, M.M., inzh.

Automation of feed processing operations. Trakt. i sel'khozmash. 32 no.1:21-23 Ja '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystvennogo mashinostroyeniya.
(Automatic control) (Feeding and feeding stuffs)

SOKOLOV, M.M.

3

621.313.325 : 621.3.016.35

19. CONCERNING THE USE OF COMPENSATED SYNCHRONOUS CONDENSERS. M.M.Sokolov and V.M.Terekhov. Elektrichestvo, 1957, No. 9, 10-13. In Russian.

The use of compensated synchronous condensers for improving static stability in long-distance electrical transmission is discussed. The means of suppressing self-oscillation and self-excitation are examined, special mention being made of the damping windings and automatic excitation regulation. Good results are obtained by placing the damping windings in the transverse axes of machines, and by increasing their time constants. The use of compensated synchronous condensers and automatic excitation regulation for improving dynamic stability is also considered.

Metropolitan-Vickers

SOKOLOV, M.M.

89-3-8/30

AUTHORS: Sokolov, M. M., Ochkur, A. P., Fedorov, A. A., Karabanov, N. I.

TITLE: The Photo-Electric Absorption of Scattered γ-Rays (Foto-elektricheskoye pogloshcheniye rasseyannogo γ-izlucheniya)

PERIODICAL: Atomnaya Energiya, 1958, Vol. 4, Nr 3, pp. 284 - 285 (USSR)

ABSTRACT: The measurement of the γ-spectrum was carried out by means of a scintillation spectrometer to which a multichannel pulse analyzer was connected. As γ-radiator Tl-204, Hg-203, Cr-51, Cs-137 and Zn-65 were used, and the distance between the detector and the radiator was varied between 5 and 15 cm. For the case Cr-51, D = 10 cm, and with sand as scattering material, which once contained 0,5 %, then 2 %, 5 % of lead and 10 % of copper the measured scattering spectrum is graphically represented.

At about 100 KeV a minimum can be observed in the γ-spectrum which coincides with theoretical calculations. Within the range of about 150 KeV a more marked decrease is to be seen which corresponds to the single scattering of γ-quanta

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The Photo-Electric Absorption of Scattered γ-Rays

with minimum energy. In theoretical calculation this energy turns out to be 145 KeV.
The admixtures of lead considerably change the spectrum, not only decreasing the number of pulses but causing a depression which is to be seen within the range of 100 KeV, being dependent on the greatly increased photo-electric absorption coefficient for the γ-radiation, the energy of which approaches that of the K-binding energy of lead (88,2 KeV). Analogous pictures are given by all radiators investigated. There is 1 figure.

SUBMITTED: July 22, 1957

AVAILABLE: Library of Congress

1. Scattered γ-Rays--Photoelectric absorption 2. γ-Spectrum--Measurement 3. Scintillation spectrometers-Applications

Card 2/2

AUTHORS: Sokolov, L. M., Karabanov, N. I. 43-1-13/20

TITLE: The Field γ-Radiometer SG-42 (Polevoy γ-Radiometr -SG-42)

PERIODICAL: Izvestiya AN SSSR Seriya Fizicheskaya, 1953, Vol. 22, Nr 1, pp. 88 - 89 (USSR)

ABSTRACT: The authors worked out a portable apparatus with a scintillation counter for measuring γ-rays with an energy of from 30 keV and more. The apparatus is produced by the industry under the name "Field-γ-Radiometer CГ-42". A NaJ-Tl-crystal with d=30 and l=25 mm, as well as a photomultiplier ФЭУ-19 M are used in the apparatus. Optical contact between the crystal and the photomultiplier is brought about by means of an organosilicon liquid. The device has 3 scales: 1) 0 ÷ 50μ hour^{-1}, 2) 0 ÷ 150μ hour^{-1}, 3) 0 ÷ 700 - 800μ hour^{-1}. The first two are linear, the third is nonlinear. The sensitivity-threshold of the device at a natural bachground of 6 ÷ 7μ hour^{-1} amounts to 2μ hour^{-1}. The sensitivity of the device for the radium-source amounts to about 180 ÷ 200 pulses / min^{-1} per 1μ hour^{-1}. The time constants of the device for the 3 scales are 4,2 sec, 2,2 sec and 1,2 sec respectively. The relative error can be determined according to the fluctuation of the device-indications or according to the formula

Card 1/2

The Field of Radiometer SG-42. 48-1-18/20

given here. The device weighs 5 kg. The stability of indication is sufficiently high in the temperature range of -10 ÷ +40°. The device is mainly determined for geological prospecting. When the NaJ-Tl-crystal is replaced by suitable phorphors the device can be used for the recording of rapid and slow neutrons. There are 1 table and 1 figure.

AVAILABLE: Library of Congress

1. Crystals 2. Neutron counters

Card 2/2

So Ko Lov, M.M.

21(4) PHASE I BOOK EXPLOITATION SOV/2714

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958

Doklady sovetskikh uchenykh; yadernoye goryucheye i reaktornyye metally. (Reports of Soviet Scientists; Nuclear Fuel and Reactor Metals) Moscow, Atomizdat, 1959. 670 p. (Series: Its: Trudy, vol. 3, 8,000 copies printed.

Ed. (Title page): A.A. Bochvar, Academician, A.P. Vinogradov, Academician, V.S. Yemel'yanov, Corresponding Member, USSR Academy of Sciences, and A.P. Zefirov, Doctor of Technical Sciences; Ed. (Inside book): V.V. Pereversev and G.M. Pchelintseva; Tech. Ed.: E.I. Mazel'.

PURPOSE: This volume is intended for scientists, engineers, physicians, and biologists working in the production and peaceful application of atomic energy; for professors and students of schools of higher technical education where the subject is taught; and for people interested in atomic science and technology.

COVERAGE: This is volume 3 of a 6-volume set of reports on atomic energy, presented by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy, held in Geneva from September 1 to 13, 1958. Volume 3 consists of two parts. The first part, edited by A.I. Zubov, is devoted to geology, prospecting, concentration and processing of nuclear source material. The second part, edited by G.L. Zverev, includes 27 reports on metallurgy, metallography, processing technology of nuclear fuels and reactor metals, and neutron irradiation effects on metals. The titles of the individual papers in most cases correspond word for word with those in the official English language edition on the Conference proceedings. See SOV/2081 for the titles of the other volumes of the set.

Card 4/11

SOV/132-59-8-13/18

3(5)

AUTHORS: Ochkur, A.P., Sokolov, M.M., and Fedorov, A.A.

TITLE: On the Interpretation of Diagrams of Gamma-Gamma Core Sampling

PERIODICAL: Razvedka i okhrana nedr, 1959, Nr 8, pp 52-53 (USSR)

AESTRACT: In the diagram obtained from gamma-gamma core sampling, anomalies caused by caverns in the borehole are similar to those caused by rocks and minerals of low density. A correct interpretation of such a diagram can be made, according to the authors, by comparing the diagrams obtained with sounds of a different length. If the thus obtained values of density coincide on a graduated graph of a gamma-gamma survey, the anomaly is caused by the change in density of a rock or mineral. The variation

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SOV/132-59-8-13/18

On the Interpretation of Diagrams of Gamma-Gamma Core Sampling

of the compared curves indicates that the bore-hole crosses a cavity. There are 2 graphs and 1 table.

ASSOCIATION: VITR

Card 2/2

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SOV/89-8-3-23/32

AUTHOR: Sokolov, M.

TITLE: Development of Nuclear Energy in Sweden

PERIODICAL: Atomnaya energiya, 1960, Vol 8, Nr 3, pp 270-273 (USSR)

ABSTRACT: The low-grade uranium deposits of central Sweden, the metal reserves of one of which exceeds 1,000,000 metric tons, their mining operations, uranium extraction mills, and seven experimental nuclear reactors, operating or under construction, are briefly described according to Swedish sources. Since the further increase of the country's hydroelectric power output is expected to reach its limit within 2 to 3 decades, and the electricity from power stations working with imported mineral fuels is 4 times more expensive than that from nuclear power stations, the latter's future is believed to be very bright. There is 1 figure; 1 table; and 20 references, Swedish, or Russian and German translations from Swedish.

Card 1/1

S/089/60/008/06/10/021
B006/B063 82311

5.5500

AUTHORS: Fedorov, A. A., Sokolov, M. M., Ochkur, A. P.

TITLE: Measurement of the γ-Emission Spectra of Radiative Neutron Capture in Certain Rocks

PERIODICAL: Atomnaya energiya, 1960, Vol. 8, No. 6, pp. 555-556

TEXT: The gamma lines emitted by various nuclei as a result of their absorption of thermal neutrons are characteristic of these nuclei. An examination of this gamma spectrum makes it possible to analyze complex chemical compositions. The authors used this method for the first time in 1956 when they detected certain chemical elements in rock specimens. (Po+Be) with 2.10^6n/sec served as neutron source, and the gamma radiation was recorded by a scintillation spectrometer whose resolution was 12% for the gamma line of Cs^{137} (0.66 Mev). The experimental arrangement is briefly described. Fig. 1 shows a pulse-height spectrum corresponding to the gamma radiation that occurs in neutron bombardment

Card 1/2

of hornstone (Curve 1) and diorite (Curve 2). The former is mainly composed of silicon and oxygen, the latter of oxygen, silicon, sodium, calcium, aluminum, and iron. The capture cross sections of the thermal neutrons and the main gamma lines ($E_\gamma > 4.5$ Mev) of these elements are listed in a Table. As practically no neutrons are absorbed by oxygen, only the Si line (4.95 Mev) occurs in the 5-Mev region. Diorite exhibits additional maxima at 6.4 Mev (Na, Ca) and 7.6 Mev (Al, Fe). The elements may be distinguished by continuous recording of the intensity of γ-radiation. Fig. 2 shows core sampling diagrams which are briefly described. There are 2 figures, 1 table, and 3 references: 1 Soviet and 1 Canadian.

SUBMITTED: December 12, 1958

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SOKOLOV, N. N.

PHASE I BOOK EXPLOITATION SOV/5592

Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheniy v narodnom khozyaystve SSSR. Riga, 1960.

Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR; trudy Vsesoyuznogo soveshchaniya 12 - 16 aprelya 1960 g. g. Riga, v 4 tomakh. t. 4: Poiski, razvedka i razrabotka poleznykh iskopayemykh (Radioactive Isotopes and Nuclear Radiation in the National Economy of the USSR; Transactions on the Symposium Held in Riga, April 12 - 16, 1960, in 4 volumes. v. 4: Prospecting, Surveying, and Mining of Mineral Deposits) Moscow, Gostoptekhizdat, 1961. 284 p. 3,640 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR. Gosudarstvennyy komitet Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii

Eds. (Title page): N. A. Petrov, L. I. Petrenko, and P. S. Savitskiy; ed. of this volume: M. A. Speranskiy; Scientific ed.: M. A. Speranskiy; Executive Eds.: N. N. Kuz'mina and A. G. Ionel';

Card 1/11

Radioactive Isotopes and Nuclear (Cont.) SOV/5592

Tech. Ed.: A. S. Polosina.

PURPOSE : The book is intended for engineers and technicians dealing with the problems involved in the application of radioactive isotopes and nuclear radiation.

COVERAGE: This collection of 39 articles is Vol. 4 of the Transactions of the All-Union Conference of the Introduction of Radioactive Isotopes and Nuclear Reactions in the National Economy of the USSR. The Conference was called by the Gosudarstvennyy nauchno-tekhnicheskiy komitet Sovet Ministrov SSSR (State Scientific-Technical Committee of the Council of Ministers of the USSR), Academy of Sciences USSR, Gosplan SSSR (State Planning Committee of the Council of Ministers of the USSR), Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee of the Council of Ministers of the USSR for Automation and Machine Building), and the Council of Ministers of the Latvian SSR. The reports summarized in this publication deal with the advantages, prospects, and

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Radioactive Isotopes and Nuclear (Cont.) SOV/5592

development of radioactive methods used in prospecting, surveying, and mining of ores. Individual reports present the results of the latest scientific research on the development and improvement of the theory, methodology, and technology of radiometric investigations. Application of radioactive methods in the field of engineering geology, hydrology, and the control of ore enrichment processes is analyzed. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

(1)

SOKOLOV, M. M.

"Quick Analysis of Rocks and ores by means of diffuse beta-ray scattering."

SOKOLOV, M. M., and SCHABSKAYA, E. E.
"Gamma-ray spectrometry in boreholes for quantitative determination of heavy elements."

reports to be submitted for the Conference on Nuclear Geophysics, Krakow, Poland, 24-30 Sept 1962.

SOKOLOV, M.M.

Study of the chemical composition of rocks and ores on the basis of using radioactive isotopes and atomic reactions. Uch. zap. SAIGIMSa no.8:27-31 '62. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut razvedochnoy geofiziki.

FEDOROV, A.A.; BOL'SHAKOV, A.Yu.; SOKOLOV, M.M.; NATSVIN, A.N.; PAVLYUKOVICH, Ye.A.

Principal results of work on using the gamma-ray scattering method in a Central Asian mercury mine. Uch. zap. SAIGIMSa no.8:53-58 '62. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut razvedochnoy geofiziki i Yuzhnyy gornometallurgicheskiy kombinat im. Frunze.

OCHKUR, A.P.; SOKOLOV, M.M.; BOL'SHAKOV, A.Yu.; KHITEV, P.P.

Possibility of determining the nature of selective logging anomalies. Uch.zap.LGU no.303:274-277 '62. (MIRA 15:11)
(Radioactive prospecting)

SOKOLOV, M.M.; KLEVTSOV, P.P.; FEDOROV, A.A.; KHITEYEV, P.P.

Separate determination of uranium, thorium, and potassium in natural occurrence using a scintillation gamma-spectrometer. Vop.rud.geofiz. no.48:48-57 '64. (MIRA 18:1)

L 26914-65 EWP(e)/EWT(m)/EPF(n)-2/EWG(m)/EWP(t)/EWP(b) Pu-4 IJP(c) JD/DM

ACCESSION NR: AP5004010 S/0089/65/018/001/0069/0070

AUTHORS: Gromov, B. F.; Pankratov, D. V.; Solodyankin, M. A.; Sokolov, M. M. 25 21 B

TITLE: Reduction of the capture gamma radiation from structural reactor materials by screening the materials with boron-containing screens 27

SOURCE: Atomnaya energiya, v. 18, no. 1, 1965, 69-70

TOPIC TAGS: reactor shielding, 19 capture gamma radiation, boron shielding

ABSTRACT: The authors point out that earlier experimentally determined coefficients expressing the decrease in the intensity of capture gamma rays from reactor construction materials were obtained for only one particular case, where the gamma detector was located at approximately half the mean free path from the surface of the

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source, whereas the coefficient of reduction of the capture gamma dose (blocking coefficient) was really a function of the thickness between the source and detector. They have calculated with an electronic computer the spatial and energy distributions in steel screens and in the reactor shell using an 18-group method in the P_2 approximation, for the case of a reactor with and without a boron-containing screen. It has been shown earlier that leakage of neutrons gives rise to capture gammas in the reactor shell, which increases the gamma level outside the reactor. The calculations show that the decrease in the capture gamma radiation is quite rapid until a value of 4 mean free paths is reached, after which the coefficient becomes independent of the thickness. "The authors thank S. G. Tsykin and Yu. A. Kazanskiy for interest in the work and for critical remarks."
Orig. art. has: 2 figures and 1 formula.

ASSOCIATION: None

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ACCESSION NR: AP5004010

SUBMITTED: 02Jan64 ENCL: 00 SUB CODE: NP

NR REF SOV: 003 OTHER: 000

Card 3/3

SOKOLOV, M. N.

Sokolov, M. N. "On the problem of the development of microbes", Vrachеb. delo, 1948, No. 12, paragraphs 1037-42.

SO: U-3042, 11 March 53, (Letopis 'zhurnal 'nykh Statey, No. 10, 1949).

SOKOLOV, M.N.

Power Engineering in Island. Energokhoz. za rub. no.5:44-45 S-O '59. (MIRA 13:2)
(Island--Power engineering)

SCKOLOV, M.N.

Development of nuclear energy in Sweden. Energokhoz. za. rub. no.2:38-41 Mr-Ap '60. (MIRA 13:6)
(Sweden--Nuclear engineering)

SOKOLOV, M.N.; SEGAL, Ya.Ye., doktor ekonomicheskikh nauk, redaktor.

[Sweden] Shvetsiia. Moskva, Gos. izd-vo geogr.lit-ry, 1953. 85 p.
(MLRA 7:1)
(Sweden)

[illegible]

[illegible] - [illegible]
[illegible] Tatar ASSR." Kazan' [illegible] of [illegible]
[illegible] Kazan', 1955.
(Dissertation for the Degree of Candidate of [illegible] Sciences)

So; [illegible], No 3, 1956

15-57-4-4122

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4, pp 11 (USSR)

AUTHORS: Tikhvinskaya, Ye. I., Krupin, V. I., Sokolov, M. N., Vinokurov, V. M., Veryasova, M. P., Mal'kovskiy, F. S., Grigor'yeva, T. Ye.

TITLE: Stratigraphy and Facies Relations in the Permian Deposits of the Tatarskaya ASSR (Osnovy stratigrafii i fatsial'nogo slozheniya permskikh otlozheniy Tatarskoy ASSR)

PERIODICAL: Uch. zap. Kazansk. gos. un-ta, 1955, Vol 115, Nr 10, pp 113-117

ABSTRACT: The Permian deposits of Tatariya are divided into the Lower Permian (250 m to 300 m thick), represented by the Schwagerina, Tastuba and Sterlitamak horizons of the Sakmara stage, and also by the Artinskian and Kungurian stages. The authors point out the limited distribution of the Artinskian series, completely developed (80 m) only at the extreme eastern edge of Tatariya, where it

Card 1/2

SOKOLOV, Mark Nikolayevich; POPOVA, V.I., red.; VILENSKAYA, E.N., tekhn.red.

[Liberia; geographical study] Liberiia; geograficheskii ocherk. Moskva, Gos.izd-vo geogr.lit-ry, 1959. 28 p. (MIRA 12:10)
(Liberia--Economic conditions)

SOKOLOV, M. N.

"Different Stages of Scandinavian Glaciation as Reflected in the Relief of the Russian Plain"

report to be submitted for the Intl. Geographical Union, 10th General Assembly and 19th Intl. Geographical Congres, Stockholm, Sweden, 6-13 August 1960.

ANDREYEV, Boris Ivanovich; LEDOVSKIKH, Stepan Ivanovich; RABINOVICH, Isaak Yevgen'yevich; SOKOLOV, M.N., retsenzent; SHIBANOVA, A.A., red.; PODOL'SKAYA, M.Ya., red.kart; KREYS, I.G., tekhn. red.

[Essays on economic geography: Austria, the German Federal Republic, and Switzerland] Ocherki ekonomicheskoi geografii: Avstriia, Federativnaia Respublika Germanii, Shveitsariia. Moskva, Uchpedgiz, 1963. 229 p. (MIRA 17:2)

SOKOLOV, M.N., kand. tekhn. nauk, dotsent; TEREKHOV, V.M., inzh.

Expedient regions of the utilization of reactor control for induction meters. Trudy MEI no.30:287-293 '58. (MIRA 12:5)

1.Moskovskiy ordena Lenina energeticheskiy institut, Kafedra elektrooborudovaniya promyshlennykh predpriyatiy.
(Electric meters, Induction)

SOKOLOV, A. N.

Linear Measurements in Polygonometry Carried Out With Accuracy of 1:25,000
Sb. Statev po geodezii, No 8, pp 69-76, 1954

Results of investigations concerned with accuracy of measurements of linear lengths in polygonometry carried out by the Central Scientific Research Institute of Geodesy, Aerial Survey, and Mapping are presented. The most stringent requirements of accuracy have to be satisfied in polygonometric shains 3 km long. For securing the accuracy of linear measurements of 1:25,000, discrepancies between separate measurements should not exceed 1.0 mm. The tension of wires may be provided by dynamometers and the wires should be of invar. (RZhAstr, No 11, 1955)

SO: Sum 812, 6 Feb 1956

SOKOLOV, M.N., kandidat tekhnicheskikh nauk.

Geodetic basis of a topographic survey on a scale of 1:10,000.
Trudy TSNIIGAIK no.100:19-55 '54. (MLRA 8:2)
(Topographical surveying)

SUDAKOV, S.G.; VIROVETS, A.M.; KURYTSIN, S.V.; PAVLOV, V.F.; PODOBEDOV, N.S.; POPOV, V.A.; RYTOV, A.V.; SOKOLOVA, N.A.; SOKOLOV, M.N.; TROITSKIY, B.V.; SHNEYDERMAN, E.S.

[Instructions for topographical surveying; scale 1:5000 and 1:2000] Instruktsiia po topograficheskoi s"emke v masshtabakh 1:5000 i 1:2000. Moskva, Izd-vo geodezicheskoi lit-ry, 1955. 87 p. [Microfilm]
(MLRA 8:2)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii.
(Topographical surveying)

SOKOLOV, Mikhail Nikolayevich; YELISEYEV, S.V., kandidat tekhnicheskikh nauk, redaktor; KHROMCHENKO, F.I., redaktor; KUZ'MIN, G.M., tekhnicheskiy redaktor.

[Theodolites of medium accuracy and less] Teodolity maloi i sredneĭ tochnosti. Pod obshchei red. S.V.Eliseeva. Moskva, Izd-vo geodezicheskoi lit-ry, 1956. 96 p. (MIRA 9:6)
(Theodolites)

SOKOLOV, M.N., kandidat tekhnicheskikh nauk.

Tables of coordinate increments. Geod. i kart. no.3:16-20 Mr '57.
(Geodesy--Tables, etc.) (MLRA 10:8)

I BOOK · EXPLOITATION SOV/4011
SOV/42-M-118

Sokolov, M. N.

Trebovaniya k tochnosti topograficheskikh kart i topograficheskikh s"yemok v masshtabakh 1:2,000, 1:5,000, i 1:10,000 (Standards of Accuracy of Topographic Maps and Surveys at Scales 1:2,000, 1:5,000 and 1: 10,000) Moscow, Geodezizdat, 1958. 167 p. (Series: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut geodezii, aeros"yemki i kartografii, Trudy, vyp. 118) 1,000 copies printed.

Sponsoring Agency: USSR. Glavnoye upravleniye geodezii i kartografii.

Ed.: A. V. Maslov; Tech. Ed.: V. V. Romanova; Ed. of Publishing House: A. I. Inozemtseva.

PURPOSE: The book is intended for topographers and surveyors. It may also be used by students of topography and cartography.

Card 1/6

SOV/6-58-7-8/17

AUTHORS: Sokolov, M. N., Candidate of Technical Sciences,
Fedosov, F. P.

TITLE: Tachymetric Tables (Takheometricheskiye tablitsy)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 7, pp. 41-50 (USSR)

ABSTRACT: By recommendation of the Central Bureau of Surveying and Cartography an investigation was carried out in the Central Scientific Research Institute of Surveying, Aerial Photography, and Cartography of the different tachymetric tables in order to select the most economic and best utilizable ones amongst them. All tables which have been published during the last 25 years were examined. The investigation yielded the following results: 1) The most useful computations were obtained with the tables 1, 2 and 3. 2) The qualification of the calculator and his ability to adapt himself to the use of the table have a more pronounced influence than the type of table used. 3) The most universal table is table 1. It is, however, too copious. 4) Table 2 is on a smaller range, it is, however, more convenient for drawing terrain

Card 1/2

Tachymetric Tables SOV/6-58-7-5/19

in a mosaic. 5) Table 3 is portable and it offers a sufficient performance in computations. 6) For surveying at a large scale and in mountainous regions no special tables must be published. 7) The tables must be supplemented by auxiliary tables. 8) Table 1 is to be considered the standard table. There are 4 tables.

1. Mapping 2. Geophysical surveying—Tables

Card 2/2

S/006/60/000/05/10/024
B007/B123

AUTHOR: Sokolov, M. N., Candidate of Technical Sciences

TITLE: On the Contour Interval of the Relief of Topographic Maps

PERIODICAL: Geodeziya i kartografiya, 1960, No. 5, pp. 40-45

TEXT: This article describes the way of selecting contour intervals adopted in the USSR, In Germany (principally in Western Germany) and in the USA. In 1935 standards were set up in the USSR for the contour interval, considering the demands of engineering projects. The possibility of a maximum and, at the same time, expedient utilization of the graphical possibilities of a map on the respective scale is taken into account. This interval was designated in Soviet geodetic publications as normal cross section. It is calculated from formula (2). In Table 1 these values are given for topographic maps on scales of 1 : 5000 to 1 : 1000000 as well as the contour intervals fixed by the Glavnoye upravleniye geodezii i kartografii (Main Administration of Geodesy and Cartography), that are used also in practice. Formula (2) can be used for determining the contour interval of topographic maps, but not of special maps. For special maps

Card 1/2

On the Contour Interval of the Relief of Topographic Maps

S/006/60/000/05/10/024
B007/B123

first of all a contour interval is chosen, which guarantees the necessary accuracy of engineering calculations, and then the scale for the survey is fixed. In the USSR additional contour lines are plotted at a distance which is a fraction of the interval (1/2, 1/4), or at any distance. Based on a comparison of the methods commonly used in Germany and the USA, the author believes that procedures used in the USSR are more efficient. There are 3 tables and 5 references, 1 of which is Soviet.

Card 2/2

SOKOLOV, M.N., dotsent, kand.tekhn.nauk

Torsion of geodetic steel signals. Trudy MIIGAIK no.41:3-14 '60.
(MIRA 13:11)

1. Kafedra geodezii Moskovskogo instituta inzhenerov geodezii, aerofotos"yemki i kartografii.
(Triangulation signal towers)

CHEBOTAREV, Aleksandr Stepanovich, prof.; SELIKHANOVICH, Valeriya Georgiyevna, dots.; SOKOLOV, Mikhail Nikolayevich, dots.; KHROMCHENKO, F.I., red.izd-va; SUNGUROV, V.S., tekhn. red.

[Surveying]Geodeziia. Pod obshchei red. A.S.Chebotareva. Moskva, Geodezizdat. Pt.2. 1962. 613 p. (MIRA 16:3)
(Surveying)

L 23010-66 EWP(e)/EWT(m)/EWP(v)/T/EWP(t) JD/HM
ACC NR: AP6007667 SOURCE CODE: UR/0413/66/000/003/0039/0039

AUTHOR: Butomo, D. G.; Zedin, N. I.; Sliozberg, S. K.; Sokolov, M. P.

59
B

ORG: none

TITLE: Alloy for electrodes of resistance welders. Class 21, No. 178426 [announced by the All-Union Scientific Research Institute of Welding Equipment (Vsesoyuznyy nauchno-issledovatel'skiy institut elektrosvarochnogo oborudovaniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 39

TOPIC TAGS: alloy, electrode, welding electrode, resistance welding

ABSTRACT: An Author Certificate has been issued describing an alloy for electrodes containing copper and magnesium for resistance welders. In order to increase the strength of the electrode in resistance welding of aluminum and its alloys; the electrode alloy is supplemented with ~0.1% boron, the other compounds are magnesium (up to 0.30%), and the balance is copper. [LD]

SUB CODE: 11, 13/ SUBM DATE: 04Jan65/

Card 1/1 pla UDC: 621.791.763.037.2

SOKOLOV, M.P. (Odessa); YASYUCHENYA, V.L. (Odessa)

Water solution of blood for fattening pigs. Veterinariia 39 no.10:71-72 O '62. (MIRA 16:6)

(Blood as food or medicine)
(Swine—Feeding and feeds)

38044. SOKOLOV, M. P. and ROZENBERG, L. YE.

Voprosy planirovki dendrariya. [Gav. botan. sad]. Byulleten' Glav. botan. sada, vyp. 4, 1949, s. 13-19

L 13377-63 EWT(m)/EDS AFFTC/ASD

ACCESSION NR: AP3002721 S/0120/63/000/003/0066/0071

AUTHOR: Sokolov, M. P. 19

TITLE: Automatic apparatus for measuring radiactivity of a wire

SOURCE: Pribory* i tekhnika eksperimenta, no. 3, 1963, 66-71

TOPIC TAGS: wire radioactivity measurement, reactor neutron flux

ABSTRACT: An automatic apparatus is described for determining distribution of the neutron flux along the reactor channel. Irradiated wire (up to 5-m long) passes a radiation detector and is wound by a wire-transport mechanism; the wire length under study is adjustable within 5-200 mm. Radiation-detector pulses are amplified, discriminated, and fed into a counter unit whose second channel serves for timing (100-cps pulses). Upon terminating the exposure (10 to 10,000 sec), the stored information is fed into a printer. A standardized counter-timer unit may be operated in several modes and is suitable for various physical investigations. A photograph and simplified connection diagrams are submitted. The apparatus was exhibited at the Soviet Industry Fairs in London and Paris in 1961. "I.P.Yeremeyev, I. V. Naumov, and N. S. Ipatova took part in the development of the apparatus. The printer design documentation was carried out by V. N. Kartsev and N. A. Abakov."

Card 1/2

ACCESSION NR: AR4020782 S/0271/64/000/002/B040/B040

SOURCE: RZh. Avtomat., telemekh. i vy*chislitel. tekhnika, Abs. 2B253

AUTHOR: Sokolov, M. P.

TITLE: Output units for a general-purpose memory

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. radio-elektron. T. 4. M., Gosatomizdat, 1963, 125-139

TOPIC TAGS: general purpose memory, pulse analyzer, time selector, charge storage tube, histogram transcriber, computer

TRANSLATION: A general-purpose memory has been developed for various types of analyzers: 1-and 3-dimensional amplitude analyzers, time analyzers, time selectors, etc. A charge-storage tube type LN8 is used in the memory. As basic parameters the device has 1024 memory channels, a binary counting system, 16 places, 20-microsec mean input pulse recording time, and a raster regeneration time of 170 msec for the entire charge-storage tube. A set of output units consisting of a high-speed printer, a histogram transcriber, and magnetic recorder

Card 1/2

ACCESSION NR: AR4020782

are provided for information output from the memory. In addition, it is planned to provide a magnetic tape unit as an input to the computer. The operating modes of the memory system during output of information on the units described are examined. Orig. art. has 8 figs. and 3 refs. O. B.

DATE ACQ: 03Mar64 SUB CODE: SD, CP ENCL: 00

Card 2/2

BORISOV, A.A., doktor geogr. nauk, prof.; ZNAMENSKAYA, O.M., kand. geogr. nauk; BLAGOVIDOV, N.L., kand. sel'khoz. nauk; MINYAYEV, N.A., kand. biol. nauk; SHUL'TS, G.E., kand. biol. nauk; RODIONOV, M.A., kand. biol. nauk; MAL'CHEVSKIY, A.S., prof., doktor biol. nauk; TOMSON, N., doktor med. nauk, prof., akademik; VERESHCHAGIN, N.K., doktor biol. nauk; NEYELOV, A.V., aspirant; TYUL'PANOV, N.M., inzh. lesnogo khoz.; KUROVSKIY, G.I., inzh.-parkostroitel'; SOKOLOV, M.P., arkhitektor; SOKOLOV, S.Ya., doktor biol. nauk, prof., nauchn. red.; MAL'CHIKOVA, V.K., red.

[Nature of Leningrad and environs] Priroda Leningrada i okrestnostei. Leningrad, Lenizdat, 1964. 249 p.
(MIRA 17:7)

1. Akademiya nauk Estonskoy SSR (for Tomson). 2. Zoologicheskiy institut AN SSSR (for Neyelov).

SOKOLOV, M.P.

22406. SOKOLOV, M.P. Arkhitekturnaya Strurtura Polyarno- Al'piyskogo Botanicheskogo Sada. (Khibinskiye Gory). Byulleten' Glav. Botan. Sada, VYP. 2, 1949, S. 40-45

SO: Letopis' No. 30, 1949

26480
S/125/61/000/009/004/014
D040/D113

1.2300 2808, 2208, 2708, 1573

AUTHORS: Sliozberg, S.K.; Ginzburg, S.K.; Sokolov, M.P.

TITLE: The effect of heat on the properties of copper-aluminum welded joints

PERIODICAL: Avtomaticheskaya svarka, 14 no. 9, 1961, 20-23

TEXT: Results are presented of an experimental investigation carried out with cold-welded copper and aluminum wire joints prepared at the cold-welding laboratory of VNIIESO. It was noticed that a thin light strip, about 1.5 micron deep, formed in unetched specimens, after a brief heating to 300°C, and that it grew upon increasing the temperature and heating time. Finally, the light strip reached a depth of 40-45 microns at 500°C and a dark strip appeared adjacent to it on the copper side. This dark portion of the transition layer was heterogeneous in structure and very brittle. Ruptures of the joints in tests always occurred in this dark strip, or on the boundary between it and the light strip. Failures across the light strip were only observed when the dark strip was absent. M.A.Basalayeva revealed by

Card 1/2

KALOSHIN, S.G.; SOKOLOV, M.P.

Testing new types of bits for rock drilling under working conditions. Trudy Inst. gor. dela AN Kazakh. SSR 11:73-77 '63. (MIRA 16:8)

(Rock drills--Testing)

KALOSHIN, S.G.; SOKOLOV, M.P.

New bits for air-and-percussion drilling. Trudy Inst.gor.dela AN Kazakh.SSR 8:92-101 '61. (MIRA 15:4)
(Boring machinery)

24.5300

66369

AUTHOR: Sokolov, M.P. SOV/120-59-5-12/46

TITLE: Automatic Single-change Amplitude Analyser with a Spectrum Recorder

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 5, pp 54 - 60 (USSR)

ABSTRACT: The analyser operates on the following principle. The required discrimination level is set and the pulses which pass through the differential "window" of the discriminator are counted over a known time interval. After the terminatio of the count, the number of pulses is automatically printed by a digit printing typewriter. Simultaneously, the various units of the device are prepared for the registration at the next discrimination level and the cycle is then repeated at the next level. Another type of operation is possible. Now, a pre-set number of pulses is registered at each level and the time taken for obtaining the number of pulses is registered. This type of operation is employed when it is necessary to take a spectrum having an identical statistical error at all points. The analyser consists of a number of

Card1/6

4

Automatic Single-change Amplitude Analyser with a Spectrum Recorder

discrete units (Figure 1). The first item is a differential amplitude discriminator followed by an amplifier; a detailed circuit diagram of this is given in Figure 2. The unit comprises a linear pulse amplifier containing a 3-tube feedback circuit and a set of diode discriminators furnished with capacity compensators. The switch setting the discrimination levels is provided by a uniselector. The successive contacts of the uniselector form a uniform potential divider. Two standard voltages taken from two brushes of the uniselector provide a given discrimination "window"; the voltages are applied to the discrimination diodes of the circuit of Figure 2. The level-switching is controlled by suitable signals from the so-called relay system.(Figure 4). The counting device consists of one vacuum-tube decade and four dekatrons (Figure 3). The counter is therefore capable of recording 10^5 - 1 pulses. The counter is furnished with an auxiliary relay which permits the reading of the count and the printing of the

Automatic Single-change Amplitude Analyser with a Spectrum Recorder

information. The next unit of the analyser is similar to the counting system of Figure 3, except that the count which can be recorded is adjustable between 40 and 100 000. This unit is employed to determine the "exposure time", while counting a pre-set number of pulses. The time markers are provided by an oscillator operating at 100 c.p.s. The equipment also comprises a system of relays and a digit printing typewritier; a detailed diagram of this device is given in Figure 4. This unit is controlled by the signals from the control counter and it serves to read and print the information stored in the pulse counter. As soon as the unit comes into operation, the inputs of both counters are blocked. After the termination of the reading process, both the counters are unblocked and the system is ready to accept another cycle. The equipment is furnished with a suitable system

Automatic Single-change Amplitude Analyser with a Spectrum Recorder

of power supply which was defined by Ukhin; some of the items in this unit are based on semiconductor elements (Figure 5). The analyser is also provided with a high-voltage power supply for the scintillation detector. When the analyser operates over fixed time intervals, the pulses from the output of the discriminator are applied to the main counter, while the control counter accepts the pulses from the 100 c.p.s. generator. By changing the counting capacity of the control counter, the counting time can be varied from 0.4 to 1 000 sec. On the termination of a count or "exposure", the output relay of the control counter is operated and this results in the operation of the relay system and the typewriter. When the measurements are conducted under the conditions of equal statistical errors, the output pulses from the discriminator are applied to the control counter, while the pulses from the 100 c.p.s. generator are applied to the main counter. When the counting (by the control counter) is completed, its output relay is operated and

 the number of pulses recorded by the main counter is printed

4

Automatic Single-change Amplitude Analyser with a Spectrum Recorder

by the typewriter; this gives a direct indication of the duration of an exposure. Several models of the equipment have been constructed, the latest and the most advanced analyser being the type AZA-Ts2. In this, the amplitude of the input pulses can be from 5mV to 40 V; the width of the differential window can be 2, 4 or 10% of the maximum input amplitude, the total number of levels ranging from 10-50. The maximum operating speed at the input is 10 000 random pulses per sec. The time for the recording at a given level is of the order of 8 - 12 sec. The analyser contains 56 tubes, 17 of which are gas-discharge devices. The total power consumed by the device is about 210 W. This equipment was demonstrated at the Brussels International Exhibition in 1958 and at the Soviet Exhibition in New York, 1959. Additional modifications and improvements to the equipment are contemplated in the near future. The author makes acknowledgment to A.A. Markov, G.N. Sofiyev and O.A. Ogurtsov for valuable advice and help in the design of the analyser.

Card5/6

66369

SOV/120-59-5-12/46

Automatic Single-change Amplitude Analyser with a Spectrum Recorder

There are 7 figures and 2 references, 1 of which is English and 1 Soviet.

SUBMITTED: August 16, 1958

4

Card 6/6

SOKOLOV, M.P.

Equipment for the disinfection of sea water. Voen. - med. zhur. no.1:91-92 1963. (MIRA 17:8)

USSR/Microbiology. Hemoglobinophillic Bacteria. Brucellae F-5

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 62463

Author : Tul'chinskaya V.P., Sokolov M.P.
Inst : Odessa University
Title : Cultivation of Vaccine and Virulent Strains of Brucella.

Ori. Pub : Nauch. yezhegodnik. Odessk. un-t, 1956. Odessa, 1957, 216-218

Abstract : No abstract

Card : 1/1

SOKOLOV, M.P.

Cage for keeping small laboratory animals. Veterinariia 36 no.11: 85-86 N '59 (MIRA 13:3)
(Laboratory animals--Equipment and supplies)

L 38809-66 EWT(d)/EWT(1)/EWP(1) IJP(c) GG/BB

ACC NR: AR6021025 SOURCE CODE: UR/0058/66/000/002/A050/A050

AUTHOR: Sokolov, M. P.

56 B

TITLE: System for the readout of information stored in the memory of a multichannel pulse analyzer or in a counter with parallel binary-decimal code

15

SOURCE: Ref zh. Fiz, Abs. 2A409

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 2. M., Atomizdat, 1965, 102-108

TOPIC TAGS: multichannel analyzer, data readout, arithmetic unit, computer coding, computer design/ AI-100-1 multichannel analyzer

160

ABSTRACT: In the proposed data-readout (DR) system, connected to the AI-100-1 analyzer, the external recorders used are type PL perforator, a type EPP-09 automatic chart recorder, and an EUM-23 or EUM-23P electrically controlled typewriter. The analyzer operates in the "question-answer" mode, except when the information is fed to the chart recorder only. The code call-in pulses are fed from a shaping network to the analyzer control unit and cause a change of address in the distribution unit and of the code in the arithmetic-unit (AU) register, to which information from the memory unit is fed. From the AU register the information is fed to the transistor-relay

Card 1/2

SOKOLOV, Mikhail Petrovich; TSITSIN, N.V., akademik, otv.red.; KARPEKINA, L.S., red.izd-va; ZENDEL', M.Ye., tekhn.red.

[Botanical gardens, principles of their organization and planning] Botanicheskie sady, osnova ikh ustroistva i planirovka. Moskva, Izd-vo Akad.nauk SSSR, 1959. 198 p. (MIRA 12:11)

(Botanical gardens)

C. A. SOKOLOV, M. A.

9.

Causes of copper loses during concentration of Dzhezkazgan ore on the Balkhash ore-dressing plant. S. M. Dal'nov and M. A. Sokolov (Acad. Sci. Kazakh. S.S.R.). *Vestnik Akad. Nauk Kazakh. S.S.R.* 4, No. 9, 16-24(1947).—The ore treated at this plant is a mixt. of sulfides and oxides, and comprises: bornite, chalcocite, chalcopyrite, malachite, azurite, some ehlite, and very little chrysocolla. At best only 60–75% of Cu was collected in the concentrate, at times only 26.6%. In experimenting first with individual minerals, then with mixts. of sulfidic and oxidized minerals, and finally with a mixt. of all minerals it was found that Na_2S acts as depressor at least temporarily for sulfidic minerals. Addn. of H_2SO_4 increased the extn. of Cu greatly so that 94.5% of Cu was extd. Further expts. are continued to det. the exact dosage of the flotation reagents.

M. Hoseh

SOKOLOV, M.A.; SKORMINA, R.A.

Obtaining an alumina concentrate from Boshchekul' ores. Izv. AN Kazakh.SSR.Ser.met., obog.i ogneup. no.2:3-6 '58.
(MIRA 16:2)

(Boshchekul'--Nonferrous metals) (Aluminum oxide)

SOKOLOV, M.A.; SKORMINA, R.A.; KORABLINA, M.P.; BAYSHULAKOV, A.A.

Prospects for the complete treatment of poor molybdenum-tungsten ores of central Kazakhstan. Trudy Inst. met. i obogashch. AN Kazakh. SSR 2:3-6 '60. (MIRA 13:10)

(Kazakhstan--Nonferrous metals)
(Ore dressing)

SOKOLOV, M.A.; BORODINA, V.A.; ROMANENKO, V.T.

Investigations on the recovery of thallium from complex ores.
Izv.AN Kazakh.SSR.Ser.met.obog.i ogneup. no.2:3-7 '60.
(MIRA 13:8)

(Thallium) (Flotation)

SOKOLOV, M.A.

Main results of research and trends in the field of mineral ore dressing. Trudy Inst. met. i obogashch. AN Kazakh. SSR 3:16-23 '60. (MIRA 14:6)

(Ore dressing)

GUTSALYUK, T.G.; SOKOLOV, M.A.; KORABLINA, M.P.

Flotation of chrysocolla. Izv.AN Kazakh.SSR.Ser.met., obog.i ogneup. no.1:3-7 '61. (MIRA 14:6)
(Flotation) (Chrysocolia)

SKORMINA, R.A.; BAYSHULAKOV, A.A.; SOKOLOV, M.A.

Collective flotation of complex metal ores. Trudy Inst. met. i obogashch. AN Kazakh. SSR 4:3-7 '62. (MIRA 15:8)
(Flotation)

BAYSHULAKOV, A.A.; GLEMBOTSKIY, V.A.; SOKOLOV, M.A.

Emulsification of reagents in the presence of stabilizers.
Vest.AN Kazakh.SSR 18 no.11:47-54 N '62. (MIRA 15:12)
(Surface-active agents) (Ore-dressing)

GUTSALYUK, T.G.; KORABLINA, M.P.; SOKOLOV, M.A.

Dressing oxidized Dzhezkazgan copper ore. Trudy Inst. met. i obog. AN Kazakh. SSR 6:3-10 '63. (MIRA 16:10)

L 18417-63 BDS

ACCESSION NR: AP3005803 S/0136/63/000/008/0083/0084

AUTHORS: Mitin, I. I.; Sokolov, M. A.

TITLE: Hydrodynamic ultrasonic emulsifier

SOURCE: Tsvetnyye metally, no. 8, 1963, 83-84

TOPIC TAGS: metallurgy, emulsifier, hydrodynamic emulsifier

ABSTRACT: Authors describe a new type of hydrodynamic, ultrasonic emulsifier which was developed at the Institute of metallurgy and ore beneficiation, Academy of sciences, Kuz SSR. It employs a multiple-unit whistle. Diagram is shown in the Enclosure. Orig. art. has: 1 figure

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 06Sep63 ENCL: 01

SUB CODE: ML NO REF SOV: 000 OTHER: 000

1/2

Card

GLEMBOTSKIY, V.A.; KONOBEYEV, I.T.; [illegible] V. N.I.

Increasing the efficiency of the interaction between collector reagents in the flotation of sulfides. Trudy Inst. met. i obog. AN Kazakh. SSR 8:131-138 '63 (MIRA 17:8)

GUTSALYUK, T.G.; KORABLINA, M.F.; SOKOLOV, M.A.

New reagents for the flotation of mixed ores from the Dzhezkazgan deposit. Trudy Inst. met. i obog. AN Kazakh. SSR 9:3-7 '64.
(MIRA 17:9)

ACC NR: AR6018979 SOURCE CODE: UR/0271/66/000/002/B058/B058

AUTHOR: Sokolov, M. P.

TITLE: Access to a system for data stored in the memory of a multichannel pulse analyzer or in a parallel binary-decimal code counter

SOURCE: Ref. zh. Avtomat telemekh i vychisl tekhn, Abs. 2B417

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 2., M., Atomizdat, 1965, 102-108

TOPIC TAGS: pulse height analyzer, punched paper tape, memory access technique

TRANSLATION: In the proposed system for data access, attached to the analyzer AI-100, the following output devices are used: PL tape punch, EPP-09 recorder, and EUM-23 and EUM-23P electric typewriters. The analyzer operates in the query-answer mode, except when feeding the recorder. A coded query signal is fed into the control unit of the analyzer and causes an address change in the distributor unit and transfer of the word into the register which accepts information from the memory. From the register, the data is transferred into a transistor-relay unit, where all relays assume a state which corresponds to the word being processed. Serial scanning of the decoding logic by a stepping scanner follows and the information is fed into the printing register and the punch. The wiper of the scanner serially connects the outputs of the decoder

UDC: 681.142.343

Card 1/2

ACC NR: AR6018979

to the signal forming unit which drives the printer and the electric magnets of the punch. The digital-to-analog converter for the recorder is designed using weighted resistors and current summation at the output resistor. When data are fed into the recorder alone, the analyzer operates in the "automatic recording-slower output rate" mode; the rate of information shift in the register corresponds to the recording speed of the EPP-09 recorder. 2 figures. V. L.

SUB CODE: 09

Card 2/2

L 04674-67 EWT(m)

ACC NR: AP6018360 SOURCE CODE: UR/0089/66/020/005/0437/0438

AUTHOR: Yefanov, A. I.; Konstantinov, L. V.; Postnikov, V. V.; Sadikov, I. P.; Sokolov, M. P.

ORG: none

TITLE: Installation for oscillator measurements on a nuclear reactor

SOURCE: Atomnaya energiya, v. 20, no. 5, 1966, 437-438

TOPIC TAGS: nuclear reactor control equipment, reactor transient, nuclear reactor characteristic

ABSTRACT: The authors report an oscillator installation, intended for physical reactivity measurements in the reactor of the first block of the Baloyarsk Atomic Energy Station im. I. V. Kurchatov. This installation, used in conjunction with the permanent manual-control system and with an ionization chamber, was employed to measure the differential and integral efficiencies of manual-control rods, under different operating conditions, and also to determine the frequency characteristics of the reactor. The installation could be joined by means of the relay system to the drive of any of the manual-control rods, so that it was very useful for large scale measurements of the efficiency of a large number of rods within 1 - 1.5 hours without disturbing the normal operation of the reactor. The apparatus consists of an oscillation generator and a harmonic analyzer (Fig. 1). The oscillation generator contains a frequency divider and a two-position relay controlled by the output pulse of the frequency di-

Card 1/2 UDC: 621.039.5 16.2: 621.039.564

L 04674-67

ACC NR: AP6018360

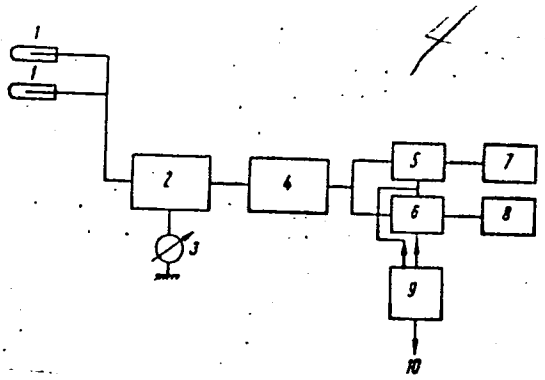

Fig. 1. Diagram of oscillator installation. 1 - Ionization chamber, 2 - block of band filters, 3 - dc microhmmeter, 4 - dc amplifier, 5 - u(t) multiplier, 6 - v(t) multiplier, 7 - integrator I_1, 8 - integrator I_2, 9 - master oscillator, 10 - signal for control of manual regulators.

vider. The operation of the apparatus is briefly described. The authors thank B. I. Bazunov, V. Ya. Mizik, V. Yu. Kammerer, and V. K. Gladkov for constructing and adjusting the installation. Orig. art. has: 1 figure and 5 formulas.

SUB CODE: 18/ SUBM DATE: 07Jul65/ ORIG REF: 002

kh

Card 2/2

SOKOLOV, M. S. Cand. Med. Sci.

Dissertation: "Phlegmons in the Vicinity of the Jaws." Moscow Stomatological Inst., Ministry of Health, RSFSR, 19 May 47.

SO: Vechernyaya Moskva, May, 1947, (Project #17836)

SOKOLOV, M.S., dotsent; ENDER, L.A.

Characteristics of surgery of the stomach and duodenum in severe kyphosis of the thoracic portion of the spine. Vest.khir. 77 no.5: 80-82 My '56. (MLRA 9:8)

1. Iz 1-go khirurgicheskogo otdeleniya (zav. prof. B.E.Linberg) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta (dir. P.M.Leonenko)

(KYPHOSIS, complications,
duodenal & stomach dis., surg. (Rus))
(STOMACH, surgery,
in kyphosis (Rus))
(DUODENUM, surgery
in kyphosis (Rus))

130-8-9/20

AUTHOR: Sokolov, M.S., Candidate of Technical Sciences and Semenenko, P.P., Engineer.

TITLE: New Method of Lining the Bottoms of Basic Open-hearth Furnaces (Novyy metod kladki podin osnovnykh martenovskikh pechey)

PERIODICAL: Metallurg, 1957, No.8, pp. 23 - 26 (USSR)

ABSTRACT: After a brief account of the properties of melted-on and brick parts of the lining of basic open-hearth furnaces and of some attempts at improving brick joints the authors describe work at the imeni Serov (imeni Serova) Works where a "welding" composition was used. This consisted of magnesite with a proportion of mill scale which depended on the location in the furnace bottom of the joint to be made. They mention that a bottom laid in this way lasted for 7 years and 2 months melting a wide variety of steels. Later (1955) tests at the same works confirmed the advantages of this technique, which reduced metal penetration and gave an economy of about 0.2-0.3 kg of magnesite per ton of steel melted. A diagram of temperature distribution in the bottom of this furnace (found from electical analogues) is shown (Fig.4). The authors go on to give extracts from an American article describing a similar type of bottom construction and suggest that on the basis of experience at

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SOKOLOV, M. S.

"Some ways and means to increase the professional pedagogic training of teachers of physical culture for the fifth through seventh classes. Based on material from work done at the Leningrad Pedagogical School of Physical Culture between autumn 1948 and spring 1953." State Order of Lenin and Order of Labor Red Banner Inst of Physical Culture imeni P. F. Lesgaft. Leningard, 1956. (DISSERTATION For the Degree of Canidate in PEDAGOGICAL SCIENCE.)

Knizhnaya letopis'
No 33, 1956, Moscow

SOKOLOV, M.S. (Odessa)

A friction system with natural vibrations. Izv.AN SSSR.Otd.tekh. nauk.Mekh.i mashinostr. no.4:99-104 Jl-Ag '60. (MIRA 13:8)

1. Odesskiy institut inzhenerov morskogo flota.
(Friction) (Vibration)

SOKOLOV, M. V PROF

PA47T6

USSR/Academy of Sciences
Illumination

Mar 1948

"Commission for Illuminating Engineering under Department of Technical Sciences, Academy of Sciences, USSR," Prof M. V. Sokolov, Dr Tech Sci, Sci Sec of Commission, 1 p

"Elektrichestvo" No 3

Commission formed by Presidium of Academy of Sciences. Gives membership of Commission, and brief account of 25 Nov 1947 meeting. Also mentions several meetings during Dec 1947 when the Moscow and Leningrad Commissions held joint sessions.

47T6

[redacted]

PA 52/49T6

USSR/Academy of Sciences Jun 49
Lighting

"In the Commission of Illumination Engineering at the Department of Technical Sciences, Academy of Sciences USSR," M. V. Sokolov, 5 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 6

Six plenary sessions of commission (three in Moscow, three in Leningrad), 13 sessions of Moscow division, and ten sessions of Leningrad division have been held since Dec 47. Participants discussed results of scientific research work carried out in various institutes and laboratories (Moscow, Leningrad, and Khar'kov), measures to

52/49T6

SOKOLOV, M. V.

[redacted]

USSR/Academy of Sciences (Contd) Jun 49

coordinate this work, and a number of organizational problems. Reports were submitted under: theoretical principles of illumination engineering, measurements of radiation energy, and illumination and radiation units.

52/49T6

SOKOLOV, M. V.

Academy of Sciences of the USSR

Activity of the commission on lighting engineering at the Department of Technology of the Academy of Sciences of the USSR in 1951. Izv. AN SSSR Otd. Tekh. nauk No. 5, 1952.

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

KULEBAKIN, V. S., MILENDER, R. A., MAYZEL', S. O., GERSHUN, A. A., MESHKOV, V. V., SOKOLOV, M. V., KARYAKIN, N. A., SAMSONOVA, V.

Fedorov, Boris Fedorovich, 1892.

Professor B. F. Fedorov. Sixtieth anniversary of his birth, and thirtieth anniversary of his teaching and engineering activity. Elektrichestvo. no. 6, 1952.

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

SOKOLOV, M. V., Prof. PA 237T21

USSR/Electricity - Illuminating Engineering Jun 52
Hydroelectric Stations

"Problems of Illuminating Engineering in the Great Construction Projects of Communism," Prof M. V. Sokolov, Sci Secretary, Commission on Illuminating Eng, Dept Tech Sci, Acad Sci USSR

"Elektrichestvo" No 6, pp 88-89

Discusses problems of illuminating power construction projects. Devotes most space to account of meeting of Commission on Illuminating Eng in Dec 1951, treating illumination of Volga-Don Canal and Kuybyshev and Stalingrad Hydroelectric Power Stations, both during construction and in finished form, and lists meeting's recommendations.

237T21

1. LAZAREV, D. N., SOKOLOV, M. V.

2. USSR (600)

4. Moscow - Electric Lighting

7. Problems of illuminating engineering in the reconstruction of Moscow's outdoor lighting system. Izv AN SSSR Otd tekh nauk No 11 1952.

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

SOKOLOV, MIKHAIL VASIL'YEVICH

YEPANESHNIKOV, Mikhail Mikhaylovich; SOKOLOV, Mikhail Vasil'yevich; ASHKENAZI, G.I., redaktor; LARIONOV, G.Ye., tekhnicheskiy redaktor

[Electric lighting] Elektricheskoe osveshchenie. Pod red. V.V. Meshkova. Izd. 2-e, dop. i perer. Moskva, Gos. energ. izd-vo, 1955. 224 p. (MLRA 8:7)
(Electric lighting)

SOKOLOV, M.V., koktor tekhnicheskikh nauk, professor.

Splendid anniversary; Mikhail Andreevich Shatelen's 90th birthday. (MLRA 9:3)
Svetotekhnika 2 no.1:1-3 Ja '56.
(Shatelen, Mikhail Andreevich, 1866-)