

SOV/79-29-1-31/74

Investigation in the Field of the Oxy-Derivatives of Anthracene. II. The Bisulfite Compound of the 1-Nitroso-2-Anthrol

5 references, 2 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley (Scientific Research Inst. of Organic Intermediate Products and Dyes)

SUBMITTED: November 25, 1957

Card 3/3

AUTHORS: Bogdanov, S. V., Gorelik, M. V. SOV/79-29-1-32/74

TITLE: Investigation in the Field of the Oxy-Derivatives of Anthracene (Issledovaniye v oblasti oksiproizvodnykh antratsena)
III. Transformations of the Bisulfite Compounds of 1,2-Anthra-(3',4')-Furoxane (III. Prevrashcheniya bisul'fitnogo soyedineniya 1,2-antra-(3',4')-furoksana)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 146-153 (USSR)

ABSTRACT: The investigations in the series of 1,2-naphtho-(3',4')-furoxane (Ref 1) had proved that in alkaline medium a rearrangement of the bisulfite compound of 1,2-naphtho-(3',4')-furoxane into the 2-nitro-1-naphthylamine-4-sulfonic acid and 1,2-naphthoquinone dioxime-4-sulfonic acid takes place. The similarity of the chemical properties of the bisulfite compounds of the oxy-derivatives of anthracene and naphthalene (Refs 2,3) permits the assumption that the bisulfite compound of 1,2-anthra-(3',4')-furoxane would behave in a similar manner. The experiments really proved that the bisulfite compound of 1,2-anthra-(3',4')-furoxane (I) is transformed in alkaline medium into the 2-nitro-1-anthramine-4-sulfonic acid (II), 1,2-anthraquinone dioxime-4-sulfonic acid (III) and 1,2-anthra-(3',4')-furoxane (IV).

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Investigation in the Field of the Oxy-Derivatives of Anthracene. III. Transformations of the Bisulfite Compounds of 1,2-Anthra-(3',4')-Furoxane

Compound (II) is the main product in the soda medium, (III) in caustic lye medium. Compound (II) is converted on heating with 50% H_2SO_4 into the 2-nitro-1-anthramine, on the action of alkali liquors into the 2-nitro-1-anthrol-4-sulfonic acid (V), on reduction with tin chloride into the 1,2-anthradiamine-4-sulfonic acid. The 1,2-anthraquinone-dioxime-4-sulfonic acid (III) is transformed on oxidation with nitric acid into the 1,2-anthra-(3',4')-furoxane-4-sulfonic acid, with alkaline liquors into the 1,2-anthra-(3',4')-furazan-4-sulfonic acid (VI), and on reduction with tin chloride into the 1,2-anthradiamine-4-sulfonic acid. The scheme illustrates the transformations of the bisulfite compounds of 1,2-anthra-(3',4')-furoxane in alkaline medium. There are 2 figures and 5 references, 3 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley imeni Voroshilova (Scientific Research Institute of Organic Intermediate Products and Dyes imeni Voroshilov)

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SOV/79-29-1-32/74

Investigation in the Field of the Oxy-Derivatives of Anthracene. III. Transformations of the Bisulfite Compounds of 1,2-Anthra-(3',4')-Furoxane

SUBMITTED: November 25, 1957

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SOV/79-29-4-40/77

5(3)

AUTHORS:

Bogdanov, S. V., Gorelik, M. V.

TITLE:

Investigation in the Field of Oxy Derivatives of Anthracene
(Issledovaniye v oblasti oksiproizvodnykh antratsena).
IV. 1-Nitroso-2-anthrol-4-sulpho Acid and 2-Nitroso-1-anthrol-
4-sulpho Acid (IV. 1-Nitroso-2-anthrol-4-sul'fokislota i
2-nitroso-1-anthrol-4-sul'fokislota)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 4, pp 1225-1229 (USSR)

ABSTRACT:

1-nitroso-2-naphthol-4-sulpho acid differs greatly from the iso-
meric 2-nitroso-1-naphthol-4-sulpho acid due to the mobility of
the sulpho group (Ref 1). It was interesting in this connection
to synthesize and examine also the corresponding nitrosoanthrol-
sulpho acids. 2-nitroso-1-anthrol-4-sulpho acid (I) was obtained
by the authors in different ways: by treating the bisulphite
compound of the 1,2-anthraquinonedioxime with hydrochloric acid;
through the effect of hydroxylamine and hydrochloric acid on the
bisulphite compound of 1-nitroso-2-anthrol; by acid hydrolysis
of 1,2-anthraquinonedioxime-4-sulpho acid and by the reaction of
1,2-anthraquinone-4-sulpho acid with hydroxylamine hydrochloride.
1-nitroso-2-anthrol-4-sulpho acid (II) was synthesized by di-

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Investigation in the Field of Oxy Derivatives of Anthracene. IV. 1-Nitroso-2-anthrol-4-sulpho Acid and 2-Nitroso-1-anthrol-4-sulpho Acid

azotization of 1-amino-2-anthrol-4-sulpho acid, subsequent elimination of the diazo group and introduction of the nitroso group into 2-anthrol-4-sulpho acid. The structure of the nitroso-anthrolsulpho acids was proved by reduction to the amino compounds and further treatment: nitrosoanthrolsulpho acids form colored complexes with heavy metals and differ greatly from each other with respect to the degree of mobility of the sulpho group. Compound (I) is completely stable in an alkaline medium, does not react with aromatic amines in aqueous solutions, and changes in diluted nitric acid into 2,4-dinitro-1-anthrol. Compound (II) loses the sulpho group when reacting with alkali lye and aromatic amines, and is accordingly transformed into 1-nitroso-2,4-dioxyanthracene or 4-aryl-1-nitroso-2-anthrol. These properties of the nitrosoanthrolsulpho acids are similar to those of the corresponding compounds of the naphthalene series. There are 1 figure and 4 references, 3 of which are Soviet.

ASSOCIATION:
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Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley (Scientific Research Institute of Organic Inter-

SOV/79-29-4-40/77

Investigation in the Field of Oxy Derivatives of Anthracene. IV. 1-Nitroso-2-anthrol-4-sulpho Acid and 2-Nitroso-1-anthrol-4-sulpho Acid

mediate Products and Dyes)

SUBMITTED: March 3, 1958

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5(3)

SOV/79-29-9-9/76

AUTHORS: Gorelik, M. V., Rodionov, A. N., Bogdanov, S. V.

TITLE: Investigation in the Field of Anthracene Oxy Derivatives. V.
On the Problem of the Structure of Bisulfite Compounds of Nitroso Anthrols

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 9,
pp 2852 - 2854 (USSR)

ABSTRACT: In previous reports (Refs 1,2) the bisulfite compounds of 1-nitroso-2-anthrol and 4-nitroso-1-anthrol were ascribed the structural formulas (I) and (II). The complementary data confirming the two formulas were obtained by spectral analysis. Already earlier, the difference shown by the ultraviolet spectra of 1-nitroso-2-anthrol, 1,2-anthraquinone dioxime, 1,2-anthra-(3',4')-furazan, 1,2-anthra-(3',4')furoxan, as compared with the spectra of their bisulfite compounds, had been pointed out (Ref 2). A not lower change in the absorption spectra occurs with the formation of bisulfite compounds of 4-nitroso-1-anthrol (II) and of 1,4-anthraquinone dioxime (III) (Fig 1, Curves 2 and 3; Fig 2, Curves 2 and 3). Formulas (II) and (III) explain the

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Investigation in the Field of Anthracene Oxy Derivatives. SOV/79-29-9-9/76
V. On the Problem of the Structure of Bisulfite Compounds of Nitrose Anthrols

spectral change as being due to the saturation of the C-C bond of the quinoid ring in consequence of bisulfite affiliation. To prove this, it was necessary to compare the absorption spectra of 1,4-anthraquinone and 2,3-dihydro-1,4-anthraquinone (IV). The passage of 1,4-anthraquinone (Fig 1, Curve 1) to compound (IV) (Fig 2, Curve 1) was found to be concomitant with an equal change in the absorption curve, the same applying to the formation of bisulfite compounds (II) and (III). The maximum at 265-270 $m\mu$ is typical of the system of bonds (IV), wherein two carbonyl groups are conjugate with the aromatic molecular part. In the derivatives of 3,4-dihydro-1,2-anthraquinone, in which a carbonyl group does not participate in the conjugation process, the maximum shifts by 35-40 $m\mu$ to the shorter wave range. The infrared spectra of compounds (I) and (II) point to the valency oscillations C-H in the groups CH_2 . The same bands are also present in the spectra of the other bisulfite compounds (I-III and V-VII) (Table). The presence of the CH_2 groups in the bisulfite compounds

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Investigation in the Field of Anthracene Oxy Derivatives. SOV/79-29-9-9/76
V. On the Problem of the Structure of Bisulfite Compounds of Nitroso
Anthrols

of nitroso anthrols is satisfactorily explained by formulas (I) and (II). Thus, the ultraviolet and infrared spectra of bisulfite compounds confirm the structure that had been earlier suggested for them. There are 2 figures, 1 table, and 5 references, 2 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley imeni Voroshilova (Scientific Research Institute of Organic Intermediates and Dyestuffs imeni Voroshilov). Fiziko-khimicheskiy institut imeni Karpova (Physicochemical Institute imeni Karpov)

SUBMITTED: July 25, 1958

Card 3/3

RODNIKOV, S.V.; SHIMANEVA, L.S.

Some derivatives of phenanthrene. Part 2. Zhur. VMO 5
no. 3:345 '60. (BIRA 14:2)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley imeni K.Ye. Voroshilova.
(Phenanthrene)

BOGDANOV, S.V.; MAROCHKO, S.V.

Action of diethylphosphorous acid on 1,2-naphthoquinone. Zhur. VKHO
5 no.6:713 '60. (MIRA 13:12)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley im. K.Ye.Voroshilova.
(Phosphorous acid) (Naphthoquinone)

BOGDANOV, S.V.; SHIBRYAYEVA, L.S.

Hydroxy derivatives of phenanthrene. Part 1: 1-Nitroso-
2-phenanthrol and its bisulfite compound. Zhur.ob.khim. 30
no.7:2229-2235 J1 '60. (MIRA 13:7)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley imeni K.Ye. Voroshilova.
(Phenanthrol)

GORELIK, M.V.; BOGDANOV, S.V.

Anthracene derivatives. Part 7: Reactivity of 1,2-anthrafurazan
and 1,2-anthraselenodiazole. Zhur. ob. khim. 30 no.9:2949-2954 S '60.
(MIRA 13:9)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley.
(Furazan) (Selenium compounds) (Anthracene)

GORELIK, M.V.; BOGDANOV, S.V.

Anthracene derivatives. Part 8: Bisulfite compound 1,4-anthraquinone.
Zhur. ob. khim. 30 no.9:2954-2958 S 160. (MIRA 13:9)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley. (Anthraquinone)

GORELIK, M.V.; BOGDANOV, S.V.; RODIONOV, A.N.

Interaction of 1,4-naphthoquinone with sodium bisulfite. Zhur. ob.
khim. 30 no.9:2959-2964 S '60. (MIRA 13:9)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley i Fiziko-khimicheskiy institut imeni Karpova.
(Naphthoquinone) (Sodium sulfite)

BOGDANOV, S.V.

Investigation in the series of hydroxy compounds of the naphthalene series and their products (reaction of the oxidizing sulfonation). Org. poluprod. 1 kras. no.2:5-12 '61. (MIRA 14:11)
(Hydroxy compounds) (Naphthalene)

BOGDANOV, S.V.; TODRES-SELEKTOR, Z.V.

Bisulfite compound of 1-nitroso-2, 7-dihydroxynaphthalene.
Zhur.VKHO 6 no.5:584-585 '61. (MIRA 14:10)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley imeni K.Ye.Voroshilova.
(Naphthalenediol)

BOIGANOV, S.V.; TODRES-SELEKTOR, Z.V.

2-Nitroso-1, 7-dihydroxynaphthalene-4-sulfonic acid. Zhur.VKHO 6
no.5:585 '61. (MIRA 14:10)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley imeni K.Ye.Voroshilova.
(Naphthalenediosulfonic acid)

BOGDANOV, S.V.; SHIBRYAYEVA, L.S.

Hydroxy derivatives of phenanthrene. Part 2: Some products of the conversions of the bisulfite compounds of 1,2-phenanthro-(3',4')-furoxan. Zhur. ob. khim. 31 no. 2:522-528 F '61.
(MIRA 14:2)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley imeni K.Ye. Voroshilova.
(Furoxan) (Phenanthrene)

BOGDANOV, S.V.; TABACHNIKOVA, N.I.

1-Chloro- and 1-methoxy-2-nitronaphthalene-4-sulfonic acids. Zhur.
ob.khim. 31 no.6:1912-1916 Je '61. (MIRA 14:6)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley imeni K.Ye.Voroshilova.
(Naphthalenesulfonic acid)

BOGDANOV, S.V.; TODRES-SELEKTOR, Z.V.

Bisulfite compound of 1-nitroso-2, 6-dihydroxynaphthalene. Zhur.
VKHO 7 no.1:118-119 '62. (MIRA 15:3)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley.

(Naphthalenediol)

BOGDANOV, S.Ye.

Mechanization of precision investment molding and ways for its
automation. Avt.prom. no.1:36-38 Ja '60.
(MIRA 13:5)

1. Giproavtoprom.
(Molding(Founding))

BOGDANOV, S. Ye., inzh.

Automatic control of molding processes in small-lot and serial
production. Mekh.i avtom.proizv. 14 no.8:31-32 Ag '60.
(MIRA 13:8)

(Molding (Founding)) (Automatic control)

6.9200

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S/108/61/016/008/005/006
D280/D304

AUTHOR: Bogdanov, S. Ye.

TITLE: Certain particular cases of measurement of mean values of homogeneous and isotropic random fields in a two-dimensional plane

PERIODICAL: Radiotekhnika, v. 16, no.8, 1961, 67-74

TEXT: The problem of mean values of random processes is often encountered in radio applications. If the problem of determining the accuracy of measurement of given RMS errors [CKO(SKO)] is confined to the correlation theory, then in general the magnitude of this error is determined from the formula (for homogeneous processes and fields)

$$\sigma = \frac{\sigma_0}{n} \sqrt{n + \sum_{\substack{l, \kappa=1 \\ (l \neq \kappa)}}^{l, \kappa=n} \rho_{l\kappa}}$$

(1) in which n - number of the averaging points; σ_0 - cky (sku) - standard deviation of the random field from its average value; σ - RMS error

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of the measurement of average value of this field; ρ_{ik} - the values of normalized correlation function for points No. i and No. k. In the present article the author proceeds to determine the distribution function for a few paths of integration in an isotropic and homogeneous field. First the differential distribution function

of distances along a section of a straight line a. From $f(l) = \frac{2}{a} \left(1 - \frac{l}{a}\right)$, при $0 \leq l \leq a$, (9) it the RMS error value of measurement of this random process is given by

When the integration contour is a circle the corresponding equation for the standard deviation is derived as

(Eq. 18) and the graph of the differential distribution function is then given.

$$\sigma = \sigma_0 \sqrt{\frac{2}{a} \int_0^a \rho(r) \left(1 - \frac{r}{a}\right) dr}, \quad (10)$$

$$\sigma = \sigma_0 \sqrt{\frac{2}{\pi} \int_0^a \frac{\rho(r) dr}{\sqrt{a^2 - r^2}}}. \quad (18)$$

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Next the distribution of distances between points of a square and the integration of an isotropic random field over this square is analyzed (Figs. 3 and 4).

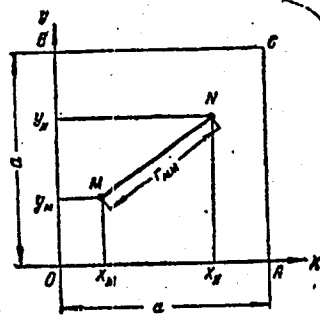


Fig. 3

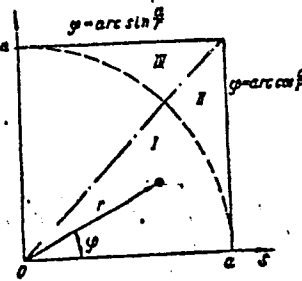


Fig. 4

Fig. 4
Eq. (22)

$$f(s, t) = \frac{4}{a^2} \left(1 - \frac{s}{a}\right) \left(1 - \frac{t}{a}\right)$$

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Fig. 3

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is obtained and hence, since $r = \sqrt{s^2 + t^2}$, (Eq. 23) follows. It is seen

$$f(r) = \int_0^{2\pi} r f_{s,t}(r \cos \varphi, r \sin \varphi) d\varphi.$$

(23)

that the value of the standard deviation of a two-dimensional homogeneous and isotropic field for finite intervals of integration

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depends on the integration contour. In approximation, this deviation can be determined from the following procedure: 1) The correlative dependence of the random field over the interval $0, r_{\max}$ is approximated

by the series

$$\rho(r) \approx C_0 + C_1 r + C_2 r^2 + \dots + C_n r^n.$$

(28)

2) the contour of integration L is chosen and function $f_2(r)$

$$\int_0^{r_{\max}} r^n f(r) dr$$

(30)

is determined; 3) a series of integrals is evaluated; 4) using (Eq. 31 see next card)

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$$\sigma = \sigma_0 \left[\sum_{k=0}^m C_k M_k^{(L)}(r) \right]^{\frac{1}{2}}$$

(31)

the value of σ is determined.
In Eq. (31) $M_k^{(L)}(r)$ is the
k-th distribution moment of
distance r on the integration

contour L. The above method is applied to compare all methods of integration given above, for typical correlation functions as found in radio applications. This is done under the assumption that in approximation, this function can be represented by the first and second distribution movements of distances. The author makes the following conclusions:

1) The standard deviation of the integral of a two-dimensional homogeneous isotropic random field depends for finite limits of integration on the integration path; 2) The usefulness of a given integration contour can be judged from the distance distribution of its integration points; 3) The integration over a circle inscribed into a square produces in general more accurate determination of standard deviation than integration over the square itself or over its diagonal; 4) If the normalized correlation function of the isotropic homogeneous random

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field is approximated by a power series containing K terms, then the approximate value of standard deviation of the integral of the random field from its mathematical expectation when integrated over a curve L , can be determined from the first K moments of distribution of distances between points of curve L . There are 5 figures, 1 table and 3 references: 2 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: Ref. 2: Davenport, Middleton, Johnson, Journ. appl. phys. v. 23, No. 4 (1952).

SUBMITTED: January 5, 1959 (initially)
March 3, 1959 (after revision)

Card 6/6

L 00740-66 EWT(m)/EPT(c)/T EW/DJ

ACCESSION NR: AP5021990

UR/0286/65/000/014/0065/0065
665.4/.5

AUTHOR: Garzanov, G. Ye.; Vinner, G. G.; Maloletkov, Ye. K.; Bogdanov, Sh. K.;
Sergiyenko, V. G.; Petyakina, Ye. I.; Selivanchik, Ya. V.; Vertlib, Ya. Ye.;
Gusman, M. Ye.; Shames, F. Ya.; Smirnov, M. I.; Granat, A. M.; Bulantseva, T. P.;
Krylova, T. A.

TITLE: A method for producing hydraulic fluid. Class 23, No. 172947

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 65

TOPIC TAGS: hydraulic fluid, petroleum product

ABSTRACT: This Author's Certificate introduces a method for producing hydraulic fluid based on petroleum products. The efficiency of the fluid at low temperatures is improved by using a velosite distillate with a flash point of 115-120°C and a viscosity of less than 2200 centistokes at -40°C.

ASSOCIATION: Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi (Scientific Research Institute for Organization, Mechanization and Technical Assistance)

Card 1/2

L 00740-66

ACCESSION NR: AP5021990

SUBMITTED: 14Aug64

ENCL: 00

SUB CODE: FP

NO REF SOV: 000

OTHER: 000

BP
Card 2/2

BOGDANOV, Todor, ing.

Characteristics and starting of a synchronous motor. Elektroprivreda
14 no.7/8:346-356 J1-Ag '61.

1. "Rade Koncar", Zagreb.

Bogdanov, T.G.

137-58-5-11150

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 321 (USSR)

AUTHORS: Tarasov, N. Ya., Bogdanov, T.G., Slyusareva, F.G.

TITLE: A High-speed Photocolorimetric Method Determines Phosphorus Content of Steel by Employing Isoamyl Alcohol for Extraction of the Phosphorus-molybdenum Complex (Ob ekspresnom fotokolorimetricheskom metode opredeleniya scderzhaniya fosfora v stali s izvlecheniyem izoamilovym spirtom fosforno-molibdenovogo kompleksa)

PERIODICAL: Tr. Nauchno-tekhn. o-va chernoy metallurgii. Ukr. resp. pravl., 1956, Vol 4, pp 104-106. Comments, p 107

ABSTRACT: A high-speed photocolorimetric method was developed whereby the P content of steel is determined by means of extraction of the P-Mo complex with the aid of isoamyl alcohol. 0.5 g of steel is dissolved in 20 cc of HNO₃ (1:1); after adding 5 cc of a 1.5% KMnO₄ solution, the mixture is boiled until the precipitation of MnO₂; the latter is subsequently decomposed by heating in 5 cc of a 5% solution of H₂C₂O₄. After cooling, the solution is transferred into a 100-cc flask, and H₂O is added to a predetermined level. 2 cc of the solution being analyzed and 3 cc of isoamyl

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137-58-5-11150

A High-speed Photocolorimetric (cont.)

alcohol are placed into a separating funnel containing 1 cc of ammonium molybdate; 1 cc of SnCl_2 is deposited drop by drop on the internal wall of the funnel; the solution is stirred slightly, and the lower layer of the sediment is poured off. (The SnCl_2 , mentioned above, is obtained in the following manner: 12.5 g of metallic Sn are dissolved under heating in 300 cc of HCl; the solution is diluted with H_2O to a volume of 1 liter and is then filtered; a stream of CO_2 is passed through it for a period of 10 minutes. The solution is preserved under CO_2 . Before using, the solution is diluted (1:1) with water and placed into a buret, where it is preserved under a layer of transformer oil 1-2 cm thick.) The alcohol extract is analyzed photometrically with a light yellow or red light filter.

K. K.

1. Phosphorus--Determination
2. Steel--Analysis
3. Alcohols--Applications
4. Colorimetry--Applications

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BOGDANOV, T. M., jt. au.

Reinforcement of bridges Moskva? Gos. transp. zhel-dor. izd-vo, 1941 (mic 55-3895)
Collation of the original: 439 p. Microfilm Slavic 330D

1. Bridges, Iron and steel. 2. Railroad bridges

LYALIN, N.B., kandidat tekhnicheskikh nauk; BOGDANOV, T.M., kandidat tekhnicheskikh nauk; ZHEZEVICH, P.M., inzhener, redaktor.

[Railroad structures; construction and maintenance] Iskusstvennye sooruzhenia na zheleznykh dorogakh; ustroistvo i sodershanie. Moskva, Gos. transp.zhel-dor. izd-vo, 1953. 398 p. (MIRA 7:6)
(Railroads--Buildings and structures)

BOGIANOV, T.M., kand.tekhn.nauk

Railroad bridge with high-strength assembling bolts. Transp.
stroi. 10 no.11:17-20 N '60. (MIRA 13:11)
(Taza River--Railroad bridges)
(Bolts and nuts)

BOGDANOV, Trifon Mikhaylovich; PARAMONOV, N.G., inzh., retsenzent;
NEKLEPAYEVA, Z.A., inzh., red.; BOBROVA, Ye.N., tekhn. red.

[Metal structure joints with high strength bolts] Soedinenia
metallicheskih konstruksii na vysokoprechnykh boltakh. Mo-
skva, Transzheldorizdat, 1963. 109 p. (MIRA 16:6)
(Bolts and nuts) (Railroad bridges)

Bogdanov, V.

~~Bogdanov, V.~~

85-58-3-15/26

AUTHOR: Bogdanov, V. and Stepanov, B.

TITLE: Tu-114 (Tu-114)

PERIODICAL: Kryl'ya rodiny, 1958, Nr 3, pp 16-17 (USSR)

ABSTRACT: The authors describe in detail the new Tu-114 four-turboprop passenger monoplane constructed under the supervision of Academician Andrey Nikolayevich Tupolev. The Tu-114 represents the result of a prolonged effort to design and construct a plane capable of carrying 170-180 passengers almost as economically as a railroad train. A mock-up was discussed and revised by specialists from many fields, including doctors. Each of the 4 turboprop engines has almost twice the power of any non-Soviet turboprop engine. They were built by a group led by N.D. Kuznetsov, Hero of Socialist Labor. The Tu-114 is manned by a crew of five. The test flight was made by Aleksey Petrovich Yakimov, his assistant Yuriy Timofeyevich Alasheyev; flight engineer Leonid Alekseyevich Zaboluyev, air navigator Konstantin Ivanovich Malkhasyan, and Nikolay Fedorovich Mayorov. There are 21 photographs on an insert between pp. 16 and 17, showing the

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Tu-114

85-58-3-15/26

Tu-114, its interior, and its designers. On page following p. 16, upper photo from left to right, D.S. Markov, Hero of Socialist Labor; A.M. Cheremukhin; A.N. Tupolev, twice Hero of Socialist Labor; A.A. Arkhangel'skiy, Hero of Socialist Labor; and S.M. Yeger, all Lenin laureates. Center photo shows: B.M. Kondorskiy, Lenin laureate; I.B. Eabin, engineer designer; and V.V. Yeremin, shop foreman. Three photographs on page preceding page 17, show - top: Captain A.P. Yakimov, test pilot 1st class, at the controls; center: navigator 1st class K.I. Malkhasyan, seated at the navigator's panel; bottom - stewardess at the lighting panel. Photographs by M. Red'kin, V. Yegorov (TASS) and N. Men'shov.

AVAILABLE: Library of Congress

Card 2/2

1
BOGDANOV, V.

Socialist Competition

Trade-union of road and railroad workers does not direct competition. V pomprofaktivu 13, No. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified.

BOGDANOV, V.

Improve the technology of cast iron heating radiators. Stroi.mat.
izdel.i konstr. 1 no.11:16-17 N '55. (MLRA 9:5)

1. Zamestitel' glavnogo inzhenera instituta "Giprosteklo".
(Radiators)

BOGDANOV, V.

Changes of transpiration and photosynthesis in the growth of
beans under the action of insecticidal Ekatin and Parathion.
Izv Inst zasht rast 3:175-182 '62

DASKALOV, Khr., akad.; STOEV, Kun'ov; BOGDANOV, Vasil, st. n. sutr.;
KHRISTOV, Metodi, st. n. sutr.; KHADZHIOLOV, Asen A., st. nauchen
sutrudnik; DECHEV, Georgi, ml. n. sutr.; BLIZNAKOV, Georgi, prof.;
PENKOV, Boian, ml. n. sutr.; POPOV, Rumon

Science on the offensive for progress. Nauka i tekhn. mladezh 15
no.7/8:6-10, 56-57. JI-Ag '63.

1. Zam. predsedatel na ASN (for Daskalov). 2. Glaven nauchen
sekreter na ASN (for Stoev). 3. Nauchen sekretar na ASN (for
Bogdanov). 4. Institut za mekhanizatsiia na selskogo stopanstvo
(for Khristov). 5. Direktor na Instituta po neorganicheska i obshta
khimija pri BAN (for Bliznakov). 6. Predsedatel na Komisiata za
nauka i tekhnicheski progres pri TsK na DKMS (for Popov).

BOGDANOV, V.

The beet leafhopper and the fight against it. p.22.
KOOPERATIVNO ZEMED:ELIE, Sofya, Vol. 11, no. 3, Mar. 1956.

SO: Monthly List of East European Accessions, (EEAK), LC, Vol. 5, No. 6 June 1956, Uncl.

BOGDANOV, V.

BOGDANOV, V. New chemicals for plant protection. p. 14. Vol. 11, no. 11,
Nov. 1956. KOOPERATIVNO ZEMEDELIE. Sofia, Bulgaria

SOURCE: East European Accessions List (EEAL) Vol. 6 No. 4 April 1957

BOGDANOV, V.

BOGDANOV, V. Wheat beetles and the fight against them. p.19.

Vol. 11, no. 10, Oct. 1956
KOOPERATIVNO ZEMEDELIE
AGRICULTURE
Sofia, Bulgaria

SO: East European Accession, Vol. 6, No. 3, March 1957

COUNTRY : BULGARIA H
CATEGORY : Chemical Technology. Chemical Products and Their
Application. Pesticides.
ABS. JOUR. : RZhKhim., No 17, 1959, No. 61980
AUTHOR : Bogdanov V.
INSTITUTE : -
TITLE : "Agria-Gas" - New Preparation for the Fumigation
of Empty Storage Dwellings.
ORIG. PUB. : Bul. rastit. zashchita, 1957, 6, No 4, 29-45
ABSTRACT : This preparation contains 40% S and forms SO₂ in
the combustion.

Card: 1/1

H - 80

USSR/Microbiology - Industrial Microbiology.

F-3

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67173

Author : Bogdanov, V., Bannikova, L.

Inst : -

Title : The Selection of Lactobacilli for the Preparation of Sour-Milk Products.

Orig Pub : Molochn. prom-st', 1957, No 10, 31-32

Abstract : Certain strains of Bacterium bulgaricum and Bact. acidophilum and lactic streptococci possess equal antibiotic activity in respect to gram-positive test organisms. In respect to gram-negative bacteria, the streptococci are, as a rule, less active. Similar results were obtained when streptococci were tested for resistance to phenol. The authors criticize a present concept as to an application for therapeutic purposes the acidophylic rods only and suggest to use instead a combination of acidophylic rods and antibiotically active strains of acidophylic streptococci.

Card 1/1

BOGDANOV, V.

Mesh-reinforced silicate floor slabs. Na stroi. Ros. no.3:23-24
D '60. (MIRA 14:6)

1. Glavnyy inzh. Kalininskogo zavoda zhelezobetonnykh izdeliy.
(Concrete slabs)
(Silicates)

BOGDANOV, V.

Guarding the health. Okhr.truda i sots.strakh. 4 no.7:4 JI '61.
(MIRA 14:7)

1. Instruktor oblsoprofa, g. Sverdlovsk.
(Sverdlovsk—Cement industries—Hygienic aspects)

BOGDANOV, V., inzh.

Economic efficiency of using plastic sanitary engineering products.
Na stroi. Ros. 4 no.5:13-14 My '63. (MIRA 16:5)
(Sanitary engineering--Equipment and supplies)
(Plastics)

BOGDANOV, V. (Novosibirsk)

Should you raise the antenna. Grazhd.av. 19 no.10:21 0 '62.
(MIRA 16:2)

1. Starshiy inzhener slushby radiolokatsii i radionavigatsii
Zapadnosibirskogo territorial'nogo upravleniya Grazhdanskogo
vozdushnogo flota.

(Airplanes--Radio equipment)

BOGDANOV, V.

Safeguarding their health. Okhr. truda i sots. strakh. 7 no.2:13-14
F '64. (MIRA 17:2)

1. Instruktor Sverdlovskogo promyshlennogo oblastnogo soveta profes-
sional'nykh soyuzov.

BOGDANOV, V.A.; KOKHNO, Yu.A.; RYABOKLYACH, V.A.

Making furniture by molding thermoplastic synthetic resins. Der.prom.
8 no.3:13-14 Mr '59. (MIRA 12:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut mekhanicheskoy obra-
botki dereva.

(Plastics--Molding)

(Furniture industry)

BOGDANOV, V.A.

Polyvinyl chloride grain-pattern film for furniture facing. Der.prom.
9 no.10:22-23 0 '60. (MIRA 13:10)
(Wood finishing) (Plastics)

BOGDANOV, V.A.

Thorough staining of deciduous woods. Der.prom. 10 no.2:16 F
'61. (MIRA 14:3)

1. Kazakhskiy nauchno-issledovatel'skiy institut lesnogo khozyaystva.
(Stains and staining)

BOGDANOV, V.A.

Thermal resistance of printed colors in imitation finishing of
sheet materials by the hot method. Der. prom. 12 no.4:10
Ap '63. (MIRA 16:16)

1. Primorskiy sel'skokhozyaystvennyy institut.

BOGDANOV, V.A.

Coating of wood by polyvinyl chloride films with a foil sublayer.
Der. prom. 13 no.8:19 Ag '64. (MIRA 17:11)

27640-36 EWP(g)/EWP(k)/EWT(d)/EWT(m)/EWP(h)/ETC(m)-6/EWA(d)/EWP(l)/EWP(v)/EWP(t)/
 ACC NR: AP6018520 ETI LJP(c) JD SOURCE CODE: UR/0381/65/000/006/0035/0040 6A
 AUTHOR: Bogdanov, V. A.; Krasnyuk, S. V.; Medvedev, V. S.; Sokolinskaya, I. G. B

ORG: Base Isotope Laboratory, Donetsk Sovnarkhoz (Bazovaya izotopnaya laboratoriya Donetskogo sovnarkhoza)

TITLE: Automatic device for the hardness inspection of cast-iron nipples

SOURCE: Defektoskopiya, no. 6, 1965, 35-40

TOPIC TAGS: cast iron, hardness, pig iron, magnetic property, magnetization, nondestructive test/KCI-36 pig iron

ABSTRACT: A study of the relationship of magnetic properties of cast iron nipples made of pig iron KCh-36 to hardness is described. A description of the design and electrical circuit of the device is presented. Cast nipples made of pig iron KCh-36, made by the Lugan Foundry and Machinery Plant, for connecting radiator sections of a heating system, are usually obtained with differing hardness (Bhn 100-500). During subsequent machining, considerable wear, putting the cutting instrument out of action, and sometimes breakdown of the lathes occur. Experience of the plant has shown that a nipple hardness over Bhn 170-180 should not be machined. However there are no methods which would permit the complete processing of the great quantity (50,000 pieces/day).

Card 1/2

UDC: 620.179.14

L 27648-66

ACC NR: AP6018520

An automatic device has been developed for the hardness testing of 3,000 nipples/hour at the Nondestructive Testing Division of the Base Isotope Laboratory, Donetsk Sovmarkhoz.

The study has shown that there is a well-defined relationship between magnetic properties and hardness of cast-iron nipples.

The most suitable characteristic for testing nipple hardness is residual magnetization since it is averaged over the entire nipple.

Magnetometry is the most suitable method of measuring residual magnetization. Orig. art. has 6 figures and 1 table. /JPRS/

SUB CODE: 13, 11, 20 / SUBM DATE: 01Sep65/ ORIG REF: 002/ OTH REF: 001

Card 2/2 CC

BOGDANOV, V.A., inzh.

Approach to an optimum alternative in the distribution of power and electric energy in a closed-loop power system using an electronic computer. Izv. vys. ucheb. zav.; energ. 8 no.8:1-6 Ag '65. (MIRA 18:9)

1. Moskovskiy ordena Lenina energeticheskiy institut.
Predstavlena kafedroy elektricheskikh sistem.

L. 22171-66

ACC NIG AP6013609

SOURCE CODE: UR/0143/65/000/008/0001/0006

AUTHOR: Bogdanov, V. A. (Engineer) 45/3

ORG: Moscow "Order of Lenin" Power Engineering Institute (Moskovskiy ordena Lenina energeticheskii institut)

TITLE: Approach to the selection of the optimal variant of distribution of current and electric power in a closed power system using computers

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 8, 1965, 1-6

TOPIC TAGS: transmission line, electronic circuit, computer

ABSTRACT: . An analysis of the case when regional planners know the location of power stations and their parameters, the location and size of loads and the paths of future power lines. It is assumed that the distances between units in the circuit (transmission line length) is not great. The problem is to select network voltages, power quantities and directions in sections of the circuit, with the criterion of minimal expenditure. A formula is developed for the energy balance of the circuit, expressing the energy generated and used at each point on the circuit, transmitted through each line section and the excess or shortage of energy at each phase of operation of the power users and generators of the system. A block diagram is presented for a program

Card 1/2

UDC: 621.316.13:518.5

L 22471-66

ACC NR: AP6013609

to perform the necessary calculations to determine the most effective of all possible variants, taking into consideration capital and maintenance costs of constructing and operating the possible systems represented by the various variants. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 09 / SUBM DATE: 06Aug64

Cord

2/2 BK

BOGDANOV, V. A., CAND MED SCI, "SUBNARCOTIC GASTROSCOPY
WITH ^{administration} ~~THE APPLICATION~~ OF MUSCLE RELAXANTS." MOSCOW, 1961.
(FIRST MOSCOW ORDER OF LENIN MED INST IM I. M. SECHENOV).
(KL, 3-61, 230).

394

BOGDANOV, V.A.

Experience with gastroscopy performed under anesthesia in the
diagnosis of gastric cancer, Vop. onk. 6 no. 11:12-17 N '60.
(MIRA 14:1)

(STOMACH-CANCER) (GASTROSCOPY)

BOGDANOV, V.A.

Gastroscopy under intravenous anesthesia and muscle relaxants.
Khirurgia 36 no.7:79-82 Je '60. (MIRA 13:12)
(STOMACH SURGERY) (INTRAVENOUS ANESTHESIA)

LAKHTIN, G.A.; TIL'GA, V.A.; ROZLOVSKIY, A.A.; BOGDANOV, V.A.;
AFASHAGOV, Yu.A.

Mercury vapor condensation in apparatuses with internal water
cooling. TSvet. met. 35 no.9:44-50 S '62. (MIRA 16:1)
(Mercury--Metallurgy) (Distillation apparatus)

BOGDANOV, V.A.; BASHILOV, A.A.; BONDARENKO, O.A.

Possibility of obtaining a motor oil from paraffin-production filtrate. Izv.vys.ucheb.zav.; neft' i gaz 6 no.9:61-64 '63.
(MIRA 17:2)

1. Groznenskiy neftyanoy institut.

AUTHORS: ~~Bogdanov, V. P.~~, Sushchinskiy, M. M. SOV/48-22-9-14/40

TITLE: Coefficients of the ~~Inharmonic~~ Oscillations and the Resonance Interaction of Internal Oscillations of the CH-Groups (Koeffitsiyenty angarmonichnosti i rezonansnoye vzaimodeystviye vnutrennikh kolebaniy grupp CH)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya fizicheskaya, 1958, Vol 22, Nr 9, pp 1067 - 1067 (USSR)

ABSTRACT: The additivity of the vibration spectra of the hydrocarbons with regard to the CH_3 , CH_2 , and CH-groups contained in their molecules not only occurs in the range of the fundamental oscillations (Ref 1) but also in the range of the higher harmonics. The authors used this effect for the determination of the coefficients of the anharmonic oscillations. They investigated infrared spectra of several normal and widely branched paraffins in the range of the fundamental oscillations, of the valence oscillations of CH ($\sim 2900\text{ cm}^{-1}$), of the second and third harmonic (~ 5800 and $\sim 8700\text{ cm}^{-1}$), and of the composed oscillations (4200 cm^{-1}) as well as the spectra of

Card 1/2

Coefficients of the Anharmonic Oscillations and the Resonance Interaction of Internal Oscillations of the CH-Groups SOV/48-22-9-14/40

combination scattering in the range of the second harmonic ($\sim 5800 \text{ cm}^{-1}$). By contrasting the process of intensity variation of certain lines in the spectra of various hydrocarbons with the number of the contained CH_2 - and CH_3 -groups the lines can be identified as belonging to the one or the other group. The frequencies, determined experimentally, as well as the coefficients of the anharmonic oscillations x are listed in the table. The comparatively small magnitude of these coefficients is conspicuous. With respect to the difficult measurement of the lines which partly overlap and considering the fairly exact computation their agreement can be regarded to be satisfactory. There are 1 table and 4 references, 3 of which are Soviet.

Card 2/2

BOGDANOV, V.F., inzh.; PROTOPOPOV, I.I., tekhnik

Slit-type distribution device of ion-exchange filters. Energetik
12 no.8:9-10 Ag '64. (MIRA 17:9)

BOROVSKIY, I.B.; DITSMAN, S.A.; BOGDANOV, V.G.

New microfocal X-ray spectrograph. Trudy Inst. met. no.15:18-23
'63. (MIRA 16:9)
(X-ray spectroscopy)

BOGDANOV, V. G.

PART I BOOK EXPLANATIONS 807/5084

International Conference on the Peaceful Uses of Atomic Energy, 24, Geneva, 1958. Bibliy sovetskikh vobzornykh. (S.S.) Zhukovskiy radioelementov i radiatsionnykh yevremenchykh (Reports of Soviet Scientists. V. 4.: Chemistry of Radioelements and Radiation Transformations.) Moscow, Atomizdat, 1959. 323 p. 6,000 copies printed. (Series: Itsi; Izdaty)

38. (Title page): A. P. Vinogradov, Academician; Ed.: V. I. Labazov; Tech. Ed.: N. L. Masal'.
PURPOSE: This collection of articles is intended for scientists and engineers interested in the applications of radioactive materials in science and industry.
CONTENTS: The book contains 26 separate studies concerning various aspects of the chemistry of certain radioactive elements and the processes of radiation effect on matter. These reports discuss present-day methods of reprocessing irradiated nuclear fuel, research in the chemistry of uranium, thorium, uranium, plutonium, and americium, problems related to the separation and burying of radioactive wastes, the radiolysis of aqueous solutions and of organic compounds, the mechanism of polymer chain grafting, and the effect of radiation on natural and synthetic rubbers. V. F. Pruzhkov edited the present volume. Most of the reports are accompanied by references. Contributions to individual investigations are mentioned in annotations. Contents: The Table of Contents.

INDEX OF AUTHORS

L. V. Iklits, V. Y. Pruzhkov, and N. A. Kuznetsov. 1. E. Iklits, V. Y. Pruzhkov, and N. A. Kuznetsov. Mechanism of Polymer Chain Grafting Under the Effect of Radiation (Report No. 2294) 241

Zimbar, P. V., A. V. Pridin, M. V. Volkova, V. Y. Klichukhin, S. I. Kuchukhin, V. G. Kravchenko, and A. G. Bykov. Prospects for the Utilization of Phosphor Light Indicators in Radiation Chemistry Processes (Report No. 2295) 247

Polik, L. S., A. V. Trepalov, and L. Ya. Chernyak. Radiolysis of the Alkanes (Report No. 2296) 254

Reshetnikov, A. S., Y. S. Nikitina, M. V. Zhuravskaya, L. A. Gerasimov, M. L. Samarin, and N. I. Vitvitskiy. Effect of Ionizing Radiation on Natural and Synthetic Rubbers (Report No. 2053) 266
 [The following are mentioned for their part in certain phases of the investigation: L. E. Lyubchanskaya, N. N. Lezhnev, P. A. Galilayev, Z. P. Byrampayeva, and A. S. Kovalev.]

Dalovoy, Yu. V., A. I. Iklits, V. A. Ryabukhin, and N. S. Rybakov. Determination by the Radioactive Analysis Method of Small Quantities of Excesses in Pure Substances (Report No. 2052) 280
 [The following are mentioned as having participated in the development of analysis methods in connection with the present study: M. N. Subalopnikov, I. P. Alimarin, V. Z. Romanov, and Professor D. I. Ryabukhin.]

Yuritskaya, Z. M., and N. F. Litvinova. Determination of Gaseous Impurities in Hydrocarbons and Other Materials (Report No. 2205) 297
 [The following are mentioned as having developed experimental techniques and analysis methods relative to this investigation: Yu. A. Kuznetsov, L. L. Ruzitskiy, and M. M. Chistyakova (VSEIEM) - Tsentrallyy nauchno-issledovatel'skiy institut dolybnogo metallurgii - Central Scientific Research Institute of Ferrous Metallurgy] N. M. Kostovskaya and E. O. Shanyuk (GOCCHI - Zentrallyy nauchno-issledovatel'skiy institut khimii i fiziki - Fizicheskii institut AN SSSR - Institute of Physics AS USSR)]. 16

Korovin, Yu. L., and L. V. Lipina. Determination by the Spectral Method of Impurities in Zirconium and Its Compounds (Report No. 2137) 316
 [The following are mentioned as having made a study of the method of assay from liquid masses: V. D. Greshkov, A. A. Zaslavskaya, L. S. Maslennik, T. V. Zhuravskaya, and M. Ya. Etkinskaaya.]

Iklits, E. A., V. I. Medvedevskiy, and V. V. Zhuravskaya. Radiolysis and Radiation Oxidation of Organic Compounds (Report No. 2291) 289
 [The following are mentioned: N. S. Kolesova and V. F. Tsurilov.]

BOGDANOV, V.G.

The EM-161 excavator is a useful machine in drainage construction work. Gidr.i mel. 12 no.2:54-55 F '60. (MIRA 13:6)

1. Glavnyy inzhener Kaliningradskogo tresta "Vodstroy."
(Excavating machinery)

24.3430 1227, 1345, 9901

26328
S/048/61/025/008/001/009
B104/B202

AUTHORS: Borovskiy, I. B., Ditsman, S. A., Bogdanov, V. G.

TITLE: Microfocus X-ray spectrograph

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 25,
no. 8, 1961, 919-922

TEXT: The present paper was the subject of a lecture delivered at the 5th Conference on X-ray Spectroscopy at Khar'kov, January 30 to February 4, 1961. The authors describe the construction of a new microfocus X-ray spectrograph for studying the fine structure of X-ray emission spectra. In this spectrograph a method described by Kapitea and Iogann is used for focusing the radiation with a bent crystal. The radius of curvature of the crystal is 500 mm and the instrument permits operation in a range of Bragg angles of 25-60°. When using the (1340), (1010) and (1011) faces of quartz as reflecting surfaces, the design of the instrument makes it possible to record the radiation in a range of from 1 to 7 Å. When studying the shape of the emission lines a fine adjustment of the angle of reflection from the crystal in a range of from 0.5 to 1° is possible

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24.3430

26331
S/048/61/025/008/004/009
B104/B202

AUTHORS:

Batyrev, V. A., Bogdanov, V. G.

TITLE:

Vacuum X-ray spectrometer with ionization recording

PERIODICAL:

Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya,
v. 25, no. 8, 1961, 933-935

TEXT: The present paper was the subject of a lecture delivered at the 5th Conference on X-ray Spectroscopy at Khar'kov from January 30 to February 4, 1961. The authors describe the mechanical part of the X-ray spectrometer with ionization recording which is suitable for the studies of the fine structure of X-ray lines. This mechanical device was developed at the Institut metallurgii AN SSSR (Institute of Metallurgy AS USSR) upon suggestion of I. B. Borovskiy. Figs. 1 and 2 show schemes of this device. By means of a thread the crystal and the counter slit can be moved on one axis along the straight line AA'. The mounting of the crystal is fastened to a table which can be rotated around an axis passing through the center of the crystal. This table is rigidly connected with the rod OK which lies in perpendicular to the tangent drawn

Card 1/3

Vacuum X-ray spectrometer with ...

26331

S/048/61/025/008/004/009

B104/B202

X

to the center of the crystal. This rod is the radius of the Rowland circle and ends in the ball bearing \mathcal{W} . The axis of the ball bearing leads through the center of the Rowland circle. The rod OK is fastened to the rod by a spring. Thus, the counter slit and the crystal are moved along the chord of the Rowland circle while still remaining on the Rowland circle. In the case of such a shift the rod OK rotates the crystal. The instrument can be used for measurements in an angular interval of $20-70^\circ$. The greatest advantage of the device described consists in the fact that the counter always lies in the straight line AA' and hence, in the immobile crystal, always the intensity of one and the same wavelength is recorded. The measurement accuracy thus only depends on the accuracy of the determination of the angle of rotation of the crystal with respect to the straight line AA' . This rotation is measured from the amount of the shift of the crystal on the straight line AA' . In studies of the fine structure the shift of the crystal is determined by means of the micrometer \mathcal{V} . The X-ray tube and the part of the mechanical device of this instrument with which the crystal is shifted are housed in a vacuum chamber. The correct position of the focus of the X-ray tube with respect to AA' is of great importance. The use of a

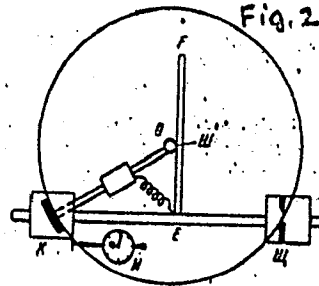
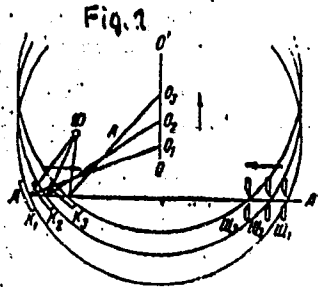
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" S/048/61/025/008/004/009,
B104/B202

Vacuum X-ray spectrometer with ...

monitor scheme permits operation with non-regulated current supply. The mechanism described here has the following advantage over other constructions: 1) high measurement accuracy of the wavelengths in the spectra studied; 2) simple adjustment which consists in the determination of the exact radius of curvature of the crystal and in the adjustment of the rod (K); 3) possibility of operation with non-regulated current supply; 4) the small dimensions of the instrument. The authors thank I.B. Borovskiy for valuable advice and assistance in the studies. There are 5 figures and 3 references; 1 Soviet-bloc and 2 non-Soviet-bloc.



Card 3/3

BOGDANOV, V.G., inzh.

Chemistry in Berezniki. Khim. v shkole 18 no.1:8-16 Jan '63.
(MIRA 16:4)

1. Bereznikovskiy anilino-krasochnyy zavod.
(Berezniki--Chemical plants)

S/048/63/027/003/022/025
B106/B238AUTHORS: Ditsman, S. A., and Bogdanov, V. G.

TITLE: A two-channel X-ray microscope

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya,
v. 27, no. 3, 1963, 427-429

TEXT: The design of a new two-channel X-ray microanalyzer which comprises two X-ray spectrometers with linear crystal displacement is described. The instrument makes it possible to investigate the fine structure of X-ray emission spectra, and also to analyze two elements simultaneously. Focusing is carried out in both spectrometers by the Kapitsa - Johann method. The radius of curvature of the crystal is 500 mm. The vacuum spectrometer is intended for use at Bragg angles of 25 to 45°, and the non-vacuum spectrometer for angles between 25 and 60°. The vacuum spectrometer and the specimen chamber can be pumped down to $1-5 \cdot 10^{-5}$ mm Hg, either simultaneously or independently. The direction of the radiation to be analysed is constant throughout the total range of reflection angles,

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S/048/63/027/003/022/025
B106/B238

A two-channel ...

because the displacement of the crystal is linear. This makes it possible to let the radiation issue from the specimen chamber through small windows (6 x 6 mm). The angle between the bundles of rays to be analyzed is 60°.

Both spectrometers are designed along lines described previously (Borovskiy I. B., Ditsan S. A., Bogdanov V. G., Izv. AN SSR, Ser. fiz., 25, no. 8 (1961)). The table in the specimen chamber, the electron-optical system furnishing a probe 1-3 μ in diameter, and the system for observing the objects visually are similar to those used in the PCAW-2 (RSASh-2) (Borovskiy I. B., Il'in N. P., Zavodsk. laboratoriya, no. 10 (1957)). The displacement mechanism of the table makes it possible to change the mechanism continuously by 1 μ to 250 μ , corresponding to an object displacement of 20 μ to 5 mm. There are 3 figures.

ASSOCIATION: Institut metallurgii im. A. A. Baykova (Institute of Metallurgy imeni A. A. Baykov)

Card 2/2

BOGDANOV, V.G.

Use of scaling radiometers. Trudy GGO no.158:109-113 '64.
(MIRA 17:9)

DILSMAN, S.A.; BOGDANOV, V.G.

Simplified X-ray spectrograph for a microanalyzer. Zav. lab.
51 no.4:507-508 '65. (MIRA 18:12)

1. Institut metallurgii im. A.A.Baykova, Moskva.

KATKOV, Yu.D.; PODCHESOV, E.N.; STROYNOVSKIY, V.V.; ZOZULYA, S.Ya.; mashinist-instruktor; KURAPOV, V.P., mashinist; BOGDANOV, V.I., mashinist; PORTYANKO, V.G., mashinist.

One more circuit for the antislippage protection of VL23 electric locomotives. Elek. i tepl. tiaga 4 no.11:19-21 N '60.
(MIRA 13:12)

1. Mashinist-instruktor lokomotivnogo depo "Oktyabr'" Yuzhnoy dorogi (for Katkov). 2. Nachal'nik sluzhby lokomotivnogo khozyaystva Yuzhnoy dorogi (for Podchesov). 3. Glavnyy inzhener depo "Oktyabr'" Yuzhnoy dorogi (for Stroynovskiy).
(Electric locomotives)

BOGDANOV, V. I.

25(6) PHASE I BOOK EXPLOITATION .SOV/2555

Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti. Ukrainskoye respublikanskoye pravleniye

Novyye metody kontrolya i defektoskopiy v mashinostroyeni i priboystroyeni [Novyye Respublikanskiy konferentsii] (New Methods of Inspection [Confederation of the Machinery and Instrument-Making Industry] (Reports of the Conference Held at Kiev, 1956)) Kiev, Gosobshchidat USSR, 1956. 284 p. 4,700 copies printed

Sponsoring Agency: Akademiya nauk USSR.

Ed.: A. Aselin; Tech. Ed.: F. Patsalyuk; Editorial Board: I. I. Greben', B.D. Grozin, A.Z. Zhamudskiy, G.M. Savin (Resp. Ed.), I.D. Faynman (Dep. Resp. Ed.), and A.A. Shishlovskiy.

PURPOSE: This book is intended for engineers, scientific workers, and technicians dealing with problems of inspection and flaw detection.

COVERAGE: This is a collection of scientific papers presented at a conference sponsored by the Academy of Sciences, UkrSSR, and the Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti, Ukrainskoye pravleniye (Ukrainian branch, Scientific and Technical Society of the Instrument-making Industry). The papers deal with modern methods of inspecting manufacturing industry. The subjects discussed include the use of electrical devices in the investigation of metal surfaces; X-ray, gamma-ray, ultrasonic, and ultrasonic methods of flaw detection; use of radioactive isotopes; X-ray diffraction methods of metal analysis; and the use of instruments for measuring length and thickness, and determining the coefficient of linear thermal expansion. No personalities are mentioned. References follow several of the papers.

Bogdanov, V. I., Candidate of Technical Sciences, Novocherkasskiy Politekhnikeskii Institut (Novocherkassk Polytechnical Institute). Selection of Radioactive Sources for Measuring Equipment. 25

Novichan, B.J., Candidate of Technical Sciences, Institut elektrotexniky imeni Ye.O. Patona, Kiev (Kiev Electric Welding Institute imeni Ye.O. Paton). Use of Radioactive Isotopes in the Detection of Flaws in Welds. 41

Zhamudskiy, A.Z., Doctor of Technical Sciences, Professor, Odeskii Universitet imeni Shevchenko, Kiev (Kiev State University imeni Shevchenko). X-ray Diffraction Method of Inspecting Finished Parts. 50

Card 3/9

BOGDANOV, V. I.

Bogdanov, V. I. "On calculating the drop in voltage in a rotary electric arch," Trudy Novocherkas politekhn. in-ta im. Ordshonikidze, Vol. XVIII, 1948, pp. 71-75

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1949).

Bogdanov, V.I.

Szhiganiye Kuskovogo Kashpirskogo Slantsa Na Mekhanicheskikh Reshetskakh,
Goryuchiye Slantsy, 1943, No. 4, 35

SO: Goryuchiye Slantsy No. 1934-35 TN .871
.674

KONSTANTINOV, Vadim Pavlovich; SKVORTSOV, D.R., retsenzent; BOGDANOV,
V.I., retsenzent; [deceased]; KAN, P.M., red.izd-va; HUBROVA,
V.A., tekhn.red.

[Ship radio operator's manual] Posobie sudovomu radistu.
Moskva, Izd-vo "Rasnoi transport," 1959. 332 p. (MIRA 12:9)
(Radio in navigation)

L 43893-66 EWT(1) GW
ACC NR: AT6011166 SOURCE CODE: UR/3197/65/000/002/0396/0400

AUTHOR: Bogdanov, V. I.

ORG: Geological Institute, Kola Branch, AN SSSR (Geologicheskii institut Kol'skogo filiala AN SSSR)

TITLE: The most recent movements and the regional gravitational field of Fennoscandia

SOURCE: AN EstSSR. Institut fiziki i astronomii. Sovremennyye dvizheniya zemnoy kory. Recent crustal movements, no. 2, 1965, 396-400

TOPIC TAGS: epeirogeny, isostasy, geophysical polygon, gravity field, crustal deformation, *GRAVITY FIELD, TECTONICS*

ABSTRACT: This article discusses the possible relationship of the regional gravitational field of Fennoscandia to the deep-seated structure of the area and attempts to establish the relationship of that deep-seated structure to the most recent movements of the crust. It is concluded that the character of the regional gravitational field in Fennoscandia is caused by differential deep-seated movements. The author suggests that in order to study the relationship of the regional gravitational field to recent and contemporary crustal movements, it would be desirable to establish a permanent geophysical polygon [test

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KHAYNMAN, V.Ya.; BOGDANOV, V.I.

Investigating the mechanism of the interaction of flotation reagents and minerals by means of infrared spectroscopy. Obog. rud 5
no.6:27-31 '60. (MIRA 14:8)

(Flotation) (Spectrum, Infrared)

15(2)

AUTHORS:

Dobrin, Z. Ye., Bogdanov, V. I.

SOV/131-59-3-1/18

TITLE:

The Use of a Rotating Furnace for the Burning of Chamotte in the Borovichi Kombinat of Refractories (Osvoeniye vrashchayushcheysya pechi dlya obzhiga shamota na Borovichskom kombinats ogneuporov)

PERIODICAL:

Ogneupory, 1959, Nr 3, pp 97-100 (USSR)

ABSTRACT:

Until 1958 the chamotte briquets were burnt in this Kombinat in annular kilns at a temperature of 1350^o, which had a negative influence upon their water absorption. The working capacity of the department was small. According to the design by the Vsesoyuznyy institut ogneuporov (All-Union Institute of Refractories) a new department in the plant was established and put into operation. It consists of raw material and fuel stores, departments where coal is crushed and ground, where clay is crushed, a rotating furnace, a compressor department, a chamotte bunker and a boiler-house. The scheme of a rotating furnace can be seen on the figure. Its length amounts to 60 m, the internal diameter to 3 and 2.58 m and the revolutions can be regulated in a range between 0.65 and 1.7 rev/min. The furnace lining consists of chamotte bricks. As fuel a mixture of low-grade Donez coal T and common gas coal GR is used in a ratio of 1:1. The temperature of burning is about

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1500°, the duration of burning about 1.5 hours. Then the operation of this plant is described in detail. The working process is mechanized and work as to the automation of production is carried out. In 1958 more than 80,000 tons of chamotte with a water absorption of an average of 3 % were burnt. The operation costs are smaller than those of the old plant. The prime costs are given in detail on a table. On the basis of the working experience hitherto made the following shortcomings of the new plant are mentioned: the fuel store must be covered in order to reduce the moisture of coal; bunker and supply of the furnaces had to be dismantled as they were clogged by the moist clay. The lining of the furnace is little heat resistant; it was found that coal ash increased the content of iron oxides in the chamotte by 0.3 to 0.5 %, and the content of Al_2O_3 is reduced by 0.8 to 1.5 %. Finally it is said that the rotating chamotte furnace facilitates a high degree of mechanization and automation of the working process. The use of natural gas will reduce the Fe_2O_3 content in the chamotte. For the purpose of an increase in the operation efficiency and a reduction of costs

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The Use of a Rotating Furnace for the Burning of Chamotte in the Borovichi
Kombinat of Refractories

in the department a second rotating furnace should be established.
There are 3 figures and 1 table.

ASSOCIATION: Borovichskiy kombinat ogneporov
(Borovichi Kombinat of Refractories)

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