

SAVOST'YANOV, V.

Successes of the Bulgarian people in the development of their industry ("Industry of the Bulgarian People's Republic" [in Bulgarian]). Reviewed by V. Savost'ianov). Sots.trud 4 no.1:153-157 Ja '59. (MIRA 12:2)

(Bulgaria--Industries)

SAVOST'YANOV, V.V.

Construction of hydroelectric power stations in Bulgaria.
Biul. tekh. ekon. inform. no.9:76-77 '59. (MIRA 13:3)
(Bulgaria--Hydroelectric power stations)

SAVOST'YANOV, V.

Students' wages during study and industrial training in Bulgaria.
Biul.nauch.inform.: trud i zar.plata 3 m.9:54-55 '60.

(MIRA 13:9)

(Bulgaria--Wages) (Bulgaria--Education, Cooperative)

MATEYEV, Ye.; NIKOL'SKIY, A.S. [translator]; PAVPEROV, V.P. [translator];
TSUKANOV, V.I. [translator]; SAVOST'YANOV, V.V. [translator]; PU-
ZIS, G.B. [translator]; STEPANOV, S.M. [translator]; VIKENT'YEV, A.I.,
red.; OL'SEVICH, Yu.Ya., red.; PRIDANTSEVA, S.V., tekhn. red.

[Labor productivity and the reproduction of the means of produc-
tion under socialism] Proizvoditel'nost' truda i vosproizvodstvo
pri sotsializme. Pod red. A.I. Vikent'eva. Predisl. V.S. Nemchinova.
Moskva, Izd-vo inostr. lit-ry, 1961. 269 p. (MIRA 14:10)

1. Client-correspondent AN Narodnoy Respubliki Bolgarii (for Mateyev).
(Labor productivity) (Economics)

SAVOST'YAKOV, V.

"Development of socialist agriculture in Bulgaria" by A.B.
Stupov. Reviewed by V.Savost'ianov. Vop. ekon. no. 2:118-121
P' 61. (CIA 14:2)

(Bulgaria--Agriculture)
(Stupov, A.B.)

SAVGST'YANOV, V.

Improving distribution forms and systems in the Bulgarian
People's Republic. Sots. trud 6 no. 2:155-159 F '61.

(MIRA 14:2)

(Bulgaria--Wage payment systems--Periodicals)

(Bulgaria--Prices--Periodicals)

KHESIN, G., kand. tekhn. nauk; SAVOST'YANOV, V., kand. tekhn. nauk.;
TIMOFEYEV, S., inzh.

Study by the photoelastic method of the static performance of
pile grating under a panel. Zhil. stroi. no. 11:9-13 '64
(MIRA 18:2)

SAVOST'YANOV, V.V.

Device for determining the rotation of the parts of trawling
equipment. Ryb. prom. no.51:17-19 '59. (MIRA 15:9)

1. Starshiy inzh. Tralovogo flota.
(Trawls and trawling)

MERKUR'YEV, Gennadiy Sergeevich; SAVOST'YANOV, Yevgeniy Ivanovich;
MERIN, B.M., red.; MAKAROVA, N.F., ~~red.~~ red.

[Brigades and the shock workers of communist labor] Brigady i
udarniki kommunisticheskogo truda. Moskva, Uchpedgiz, 1962.
123 p. (MIRA 16:3)
(Socialist competition) (Communist youth league)

VEREMEYEVA, A.A., inzh.; DUL'ZON, N.A., inzh.; KOBERNIK, Ye.D., inzh.;
PANASYUK, N.G., inzh.; SAVOST'YANOV, Yu.Ye., inzh.

Protection of generators from various stator windings damages by
means of differential current transformers. Elek. sta. 36 no.2:
40-45 F '65. (MIRA 18:4)

TARTAKOVSKIY, V.A.; SAVOST'YANOVA, I.A.; GRIBOV, B.G.; NOVIKOV, S.S.

Synthesis of γ -mercuridinitrohydrocarbons. Izv. AN SSSR. Ser.khim.
no.7:1328-1329 J1 '63. (MIRA 16:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Mercury organic compounds) (Hydrocarbons)

TARTAKOVSKIY, V.A.; SAVOST'YANOVA, I.A.; NOVIKOV, S.S.

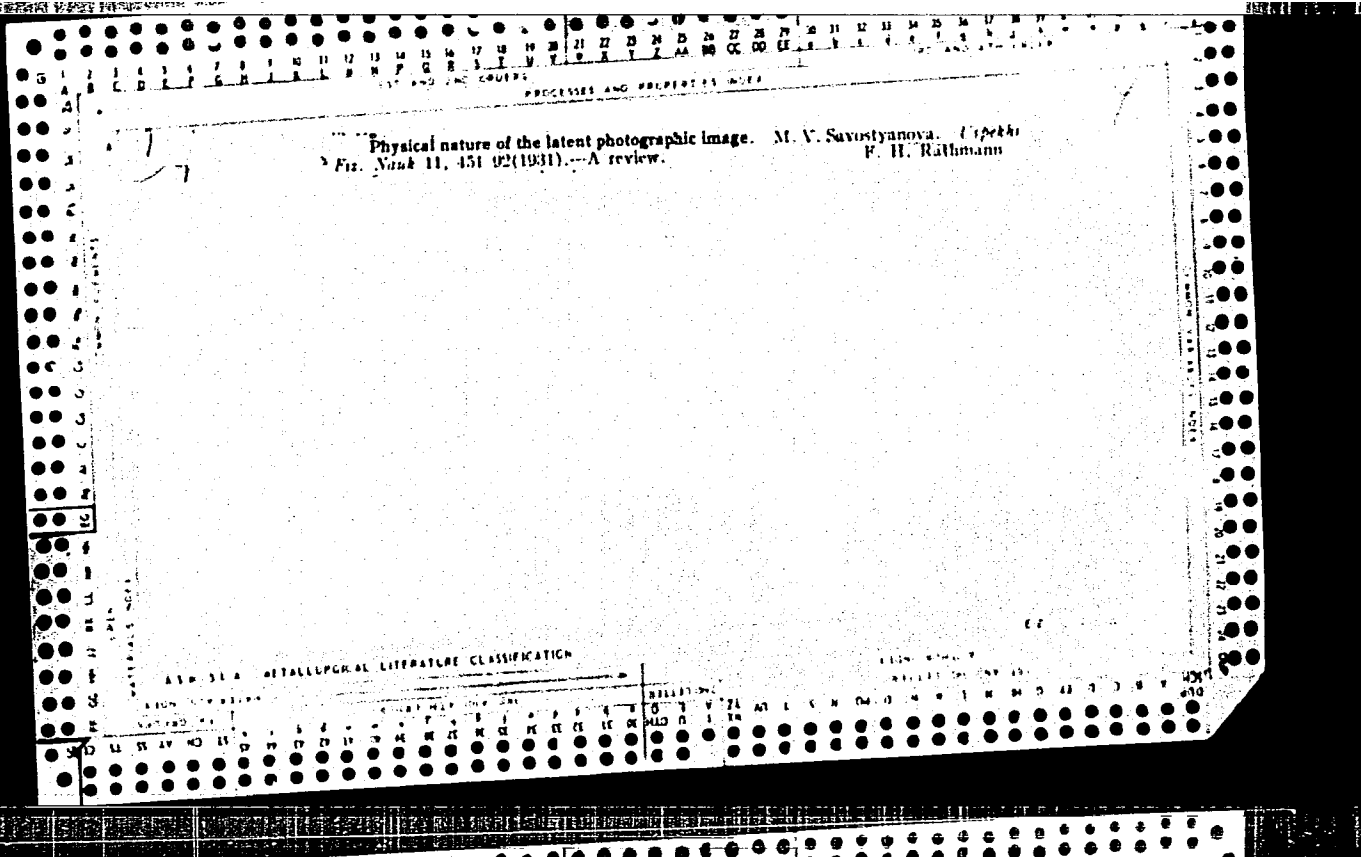
Addition of a mercury salt of 1,1,3,3-tetranitrobutane to ethylene.
Izv. AN SSSR. Ser.khim. no.7:1330-1331 J1 '63. (MIRA 16:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Butane) (Mercury organic compounds) (Ethylene)

TARTAKOVSKIY, V.A.; GRIBOV, B.G.; SAVOST'YANOVA, I.A.; NOVIKOV, S.S.

Reaction of intramolecular O-alkylation in the series of gem-dinitro compounds. Izv. AN SSSR. Ser. khim. no.9:1644-1648 '65.
(MIRA 18:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.



CA

3

The excitation of alkali halide crystals. M. V. Savost'-yanova. *Compt. rend. acad. sci. U. R. S. S. (N. S.)*, 1, 113-15 (in German 115-18) (1934).—Absorption curves are given for KCl, KBr and KI crystals colored by atomically dispersed K metal before and after excitation (decrease of absorption curve caused by exposure to light). There is no direct connection between excitation and luminescence of such crystals. C. D. West

BC

A-1

PROCESSES AND PROPERTIES INDEX

Examination of alkali halide crystals. M. V. GYRMANOVA, *Dokl. Akad. Sci. U.R.S.S.*, 1964, 116-119, 104, 105, and 11 were eliminated and the phosphorescence was eliminated. W. R. A.

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED	INDEXED	SERIALIZED	FILED	DATE	CLASSIFICATION	AUTHORITY	REMARKS

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... PROCESSES AND PROPERTIES ...

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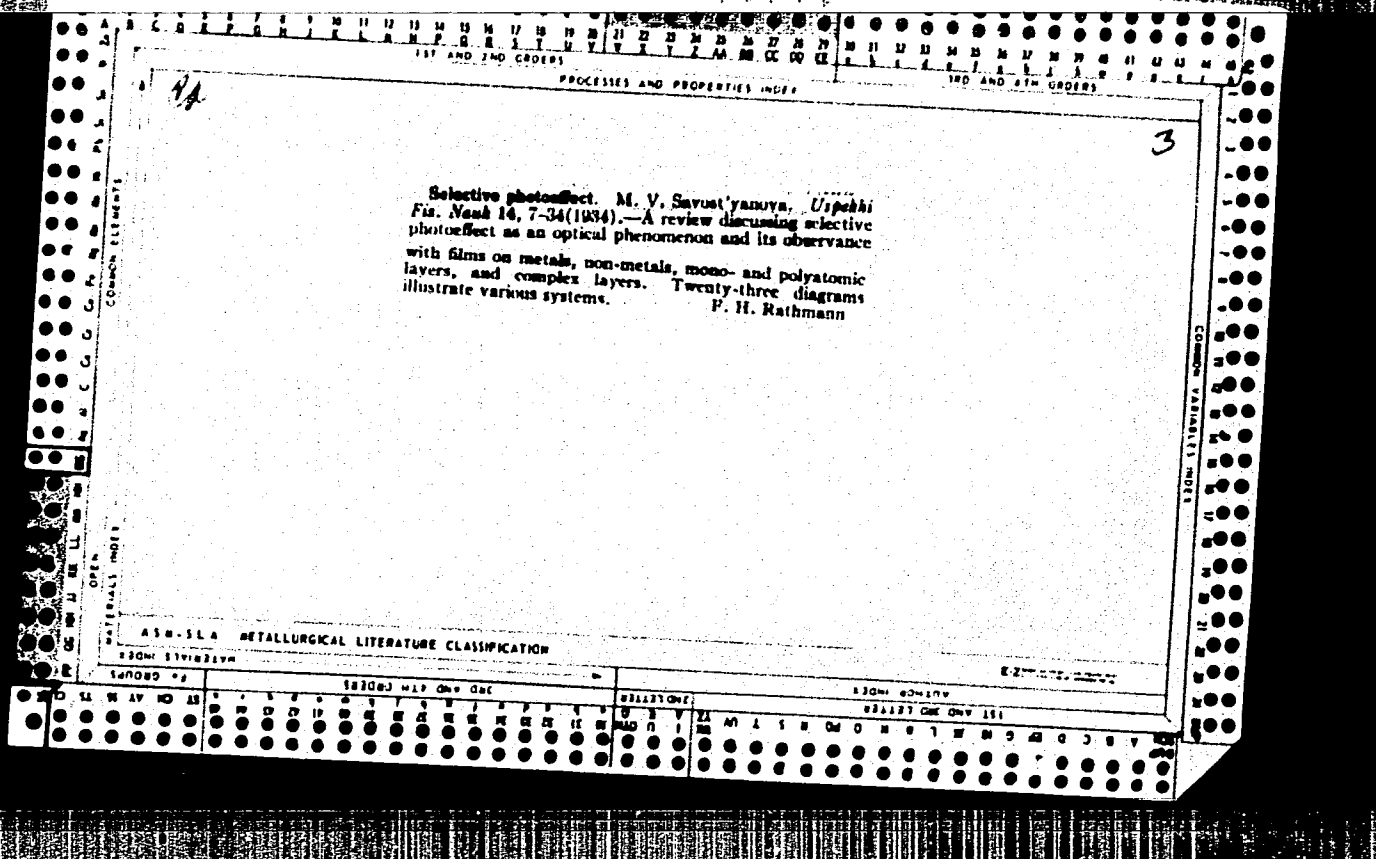
ca 3

Nucleus formation in silver halide crystals. M. V. Navin'yamova and A. Popovets. *Compt. rend. acad. sci. (U.S.S.R.)* 2, 226-8 (in German 228-31) (1934). Ag halides were prepd. in the form of thin plates by melting the salt between 2 glass or quartz plates and slowly cooling. On treatment with light of proper wave length, the Ag halide underwent a discoloration. Spectrophotometric measurements produced a series of absorption maxima that were in good agreement as to form and position with those calcd. from Mie's theory. Don Brouse

ASB 51.8 METALLURGICAL LITERATURE CLASSIFICATION

... METALS AND ALLOYS ...

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FACTILES AND PROPERTIES INDEX

AS4
C

626. Photochemistry of Crystals. M. Savoatjanova. *Acta Physicochimica*, 3, 2-3, pp. 345-354; *Disc.*, 354, 1955. --A review of the subject under the sections: (1) Atomic and colloidal distribution, in which the light effect is correlated with the nature of the photochemical products. (2) Products of the primary photochemical reaction, in which the alkali and silver halides are discussed. It is concluded that colloidal particles, of dia. $> 300\mu$ (for AgCl), are formed under the influence of light, and that the particle size depends on the intensity of the active light. (3) Secondary photochemical reactions, such as the fading which occurs in these crystals. (4) The photochemistry of silver salts. In the *Discussion*, E. Schupsky dealt with the dependence of the quantum yield on temperature in the case of the alkali halide crystals and the electron transition from the anion to an adjacent kation. E. Zehavitzner considered "metal fog."

H. H. Ho.

METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND ORDERS 3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

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23

The Present Position of the Problem of the Optical Constants of Metals.
M. V. Savostjanova (*Uspëhi Fizich. Nauk (Progress Phys. Sci.)*, 1937, 18, (4),
479-491).—[In Russian.] A review.—N. A.

COMMON ELEMENTS

COMMON VARIABLES INDEX

WATERMILL INDEX

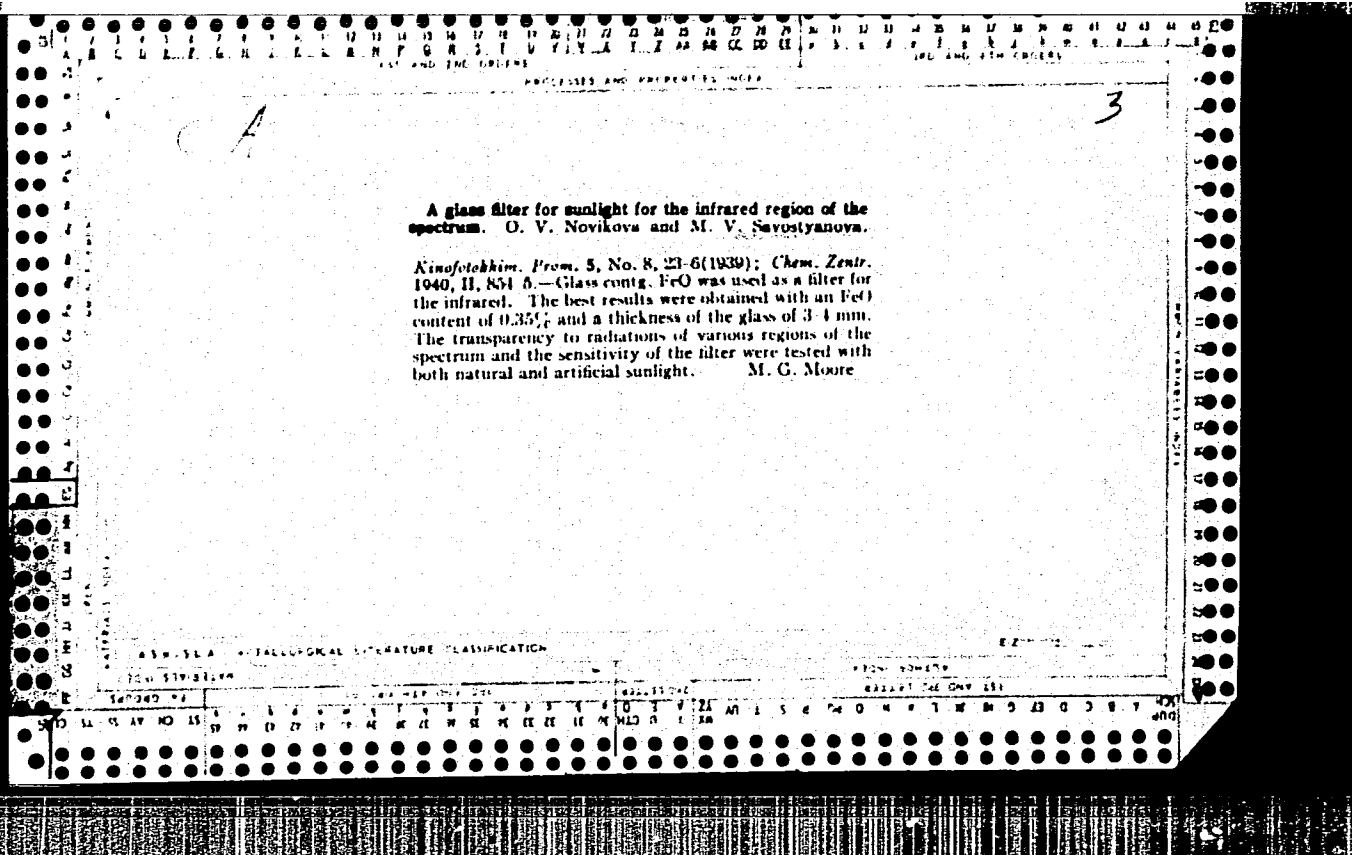
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

WATERMILL INDEX

GROUPS

ALPHABETIC

ALPHABETIC



Smallest Metal Particles in Crystal Lattices. M. V. Savostyanova
Dokl. Akad. Nauk (Progress Phys. Sci.), 1939, 22, 1-31, 168-216; *Chem. Abstr.*, 1940, 111, (1), 3371.---[In Russian.] A summing up with special consideration of: the distribution of metallic ions and atoms in the lattice; introduction of metallic ions into the lattice; atomic distribution and optical properties (*F*-centres); colloidal distribution of metals (optical properties and colour centres); mechanism of the formation of metal particles in the lattice; and the transformation from one state to another.

SAVOST'YANOV, M. V.

"Special Composition of the Day Light in the Photographic Surveying."

Tr. Ak. Nauk SSSR, Ser. Geograf. i geofiz., Nos 1 - 6, 1942.

RESEARCH AND PROPERTIES INDEX

7

Exactness and correctness of spectrophotometric measurements. M. V. Savost'yanova. *Bull. acad. sci. U.R.S.S., Ser. phys.* 11, 424-35(1947).—After setting up a table of nomenclature, symbols, and defining equations in spectral photometry, S. discusses the sources and magnitude of errors occurring in different methods of application of phototubes. The results given in 17 papers describing methods of measuring optical d , $D = kx$ ($k =$ extinction coeff.), are tabulated with their relative exactness $\Delta D/D\%$. According to S. the best method consists in optical compensation of the readings of a single phototube. Differential methods with 2 phototubes can be recommended in the case of small optical d s. S. P.

METALLURGICAL LITERATURE CLASSIFICATION

SAUN: YC: BZLN	SAUN: YC: BZLN	SAUN: YC: BZLN	SAUN: YC: BZLN
SAUN: YC: BZLN	SAUN: YC: BZLN	SAUN: YC: BZLN	SAUN: YC: BZLN

ANDRONNIKOV, K.S.; BALAKOV, V.V.; BUZHINSKIY, A.N.; BURAGO, A.N.; VENTMAN, L.A.; VISHNEVSKIY, A.A.; VOLOSOV, D.S.; GASSOVSKIY, L.N., professor; GERSHUN, A.A., professor; YEL'YASHEVICH, M.A.; YEVSTROP'YEV, K.S.; GUREVICH, M.M., professor; KOLYADIN, A.I.; KORYAKIN, B.M.; KURITSKIY, A.L.; PAPIYANTS, K.A.; PROKOF'YEV, V.K., professor; PUTS'NYKO, Ye.K.; REZUNOV, M.A.; RITYN', N.E.; SAVOST'YANOVA, M.V., professor; SEVCHENKO, A.N.; SENNOV, N.I.; STOZHAROV, A.I.; FAYERMAN, G.P., professor; FEOFILOV, P.P.; TSAREVSKIY, Ye.N., professor; CHEKHMATAYEV, D.P.; YUDIN, Ye.F.; KAVRAYSKIY, V.V., professor; VAVILOV, S.I., akademik, redaktor

[Optics in military science] Optika v voennom dele; sbornik statei. Pod red. S.I.Vavilova i M.V.Savost'ianovoi. Izd. 3-e, zanovo perer. i dop. Moskva. Vol.2. 1948. 387 p. (MLRA 9:9)

1. Akademiya nauk SSSR. 2. Sostaviteli - sotrudniki Gosudarstvennogo Opticheskogo instituta (for all except Vavilov and Kavrayskiy)
3. Voenno-morskaya akademiya (for Kavrayskiy)
(Optics)

SAVOST'YANOVA, M. V.

42091. SAVOST'YANOVA, M. V., PEREKALIN, V.V. Issledovaniye spektrov pogloshcheniya nekotorykh promezhutochnykh produktov i azokrasiteley naftalinovogo ryada. (Doklad i preniya na VI Soveshchaniy po spektroskopii). Izvestiya Akad. Nauk SSSR, Seriya fiz., 1948, No 5, s. 586-93.- Bibliogr: 10 nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 36, 1948

SAVOST'YANOVA, M. V.

PA 10/49T104

USSR/Physics
Luminescence

Jul 48

"Review of 'Luminescence Analysis' by M. A. Konstantinova-Shlezinger," M. V. Savost'yanova, 2 pp

"Vest Ak Nauk SSSR" No 7

Favorable review of work, published by Acad Sci USSR.
(Pop Sci Series) M. - L. 1948, 286 pp, 3,000 copies,
price 14 rubles.

10/49T104

CA

Investigation of absorption spectra of some intermediate products and azo dyes of the naphthalene group. V. V. Perekalin and M. V. Sivost'yanova. *Izvest. Akad. Nauk. S.S.S.R., Ser. Fiz.* 12, 685-68(1948). — Absorption spectra of 23 naphthalene compds. (of which 15 azo dyes are new synthetic products) were measured with a Beckman spectrophotometer. The dyes indicated in the paper are: 4-phenylazo-1-naphthylamine; 2- and 4-phenylazo-1-naphthol; 2-, 6-, and 8-phenylazo-1,5-aminonaphthol; 2- and 6-phenylazo-1,5-aminonaphthol-4-sulfonic acid; 2- and 8-phenylazo-1,5-aminonaphthol-6-sulfonic acid; 2,8-diphenyl-1,6-aminonaphthol-6-sulfonic acid. All the products show the short-wave maxima of the naphthalene mol. One short-wave max. is const.; another shifts as a function of substitution groups. There is a "main" max. in the visible region in the dyes, shifting its position with the group. The position of this max. is independent of pH in orthohydroxy compds. This "main" max. is not characteristic for the azo group but is due to an interaction of the azo group with the naphthalene nucleus and side groups. In the above azo dyes a H bond may exist. S. Pakswar

CA

Relation between molecular structure and absorption bands of some compounds in the di- and triphenylmethane series. V. V. Perekalin, M. V. Savost'yanova, and R. I. Morozova. *Izv. Akad. Nauk S.S.S.R., Ser. Fiz.* 14, 627-35 (1950).—In the absorption spectra of diphenylmethane, triphenylmethane, diphenylcarbinol and triphenylcarbinol in Et alc. soln. the fine structure of the band at 280 m μ , comprising the max. ν = 40,900, 40,100, 39,290, 38,570, 38,160, 37,700, and 37,150 is practically identical. In dimethylaminotriphenylmethane; dimethylaminodiphenyl and triphenylcarbinol and in trimethylaminotriphenylcarbinol a new weak band at 300 m μ appears next to the 280-m μ band; the fine structure of the 280-m μ band is more or less pronounced. In tetramethyldiaminodiphenylmethane 2 new bands appear at 340 and 595 m μ . In malachite green and in crystal violet the 2 short-wave bands are conserved (with λ_{max} at 249 m μ and at 318.5, 303 m μ , resp.). There is no fine structure in the 249-m μ band; the relative intensities are modified, 2 new bands (one very intense) appear at 425 and 620 m μ and at 360 and 589 m μ , resp. S. P.

1951

SAVOST'IANOVA, M. V.

Braun, A. D., Savost'ianova, M. V. and Morozova, R. I. The spectro-photometric study of decolorization of tri - phenyl - methane dyes in an alkaline medium and in the presence of albumen. Pages 536 - 541.

SO: Bulletin of the Academy of Sciences, Izvestia, (USSR) Vol. 14, No. 4.
(1950) Series on Physics.

CA

3

Azo dyes from 1,5-aminonaphthol and some of its derivatives. VIII. The absorption spectra of some intermediates and azo dyes of the naphthalene series. V. V. Perekain and M. V. Savost'yanova. (Leningrad Technol. Inst., Leningrad); *Zh. Obshch. Khim.* (J. Gen. Chem.) 21, 1329-40 (1951); cf. C.A. 45, 10006c.—The spectra of the naphthalene comple. studied here show, with a few deviations, the bands of the naphthalene mol., while the dyes display new specific bands. The ortho-OH and para-OH compds. exhibit intramol. H-bonding. 1,5-Aminonaphthol shows max. at 227 m μ , and 315 m μ . Its 2-sulfonic acid shows a max. at 233 and 340 m μ . The 4-sulfonic acid has max. at 233 and 337 m μ , while the 6-sulfonic acid has max. at 232 and 340 m μ . 1,5-Aminonaphthol-7-sulfonic acid has max. at 232, 325, and 342 m μ . 1-Benzeneazonnaphthalene has max. at 223, 270, and 370 m μ ; its HCl salt has max. at 230, 290, 390, and 540 m μ . 4-Benzeneazo-1-naphthylamine has max. at 223, 250, 290, and 435 m μ , and its HCl salt at 223, 250, 270, 390, and 530 m μ . 2-Benzeneazo-1-naphthol has max. at 335, 295, 365, and 490 m μ . Its 4-benzeneazo analog has max. at 208, 290, and 490 m μ . 2-Benzeneazo-1,5-aminonaphthol has max. at 231, 300, and

505 m μ , while its 6-benzeneazo analog has max. at 208, 290, 350, and 530 m μ . The absorption max. of the following in EtOH and EtOH-NaOH, resp., are: 2-(*o*-hydroxybenzeneazo)-1-naphthol: 490 and 490; 4-(*p*-hydroxy analog: 470 and 530; 2-(*o*-aminobenzeneazo)-1,5-aminonaphthol: 480 and 505; 8-(*p*-hydroxybenzeneazo)-1,5-aminonaphthol: 510 and 590; 1-(*p*-hydroxybenzeneazo)-2,8-aminonaphthol: 508 and 590; 5-(*p*-hydroxybenzeneazo)-2,8-aminonaphthol: 508 and 530; 1,5-bis(benzeneazo)-2,8-aminonaphthol: 550 and 540 m μ . 4-Benzeneazo-1,5-aminonaphthol-2-sulfonic acid has abs. max. 220, 270, and 300; 8-benzeneazo analog: 220, 290, 380, and 520; 2-benzeneazo-1,5-aminonaphthol-4-sulfonic acid: 235, 310, and 460; 8-benzeneazo-1,5-aminonaphthol-4-sulfonic acid: 255, 310, 345, and 690; 2-benzeneazo-1,5-aminonaphthol-7-sulfonic acid: 230, 310, and 510; 6-benzeneazo analog: 227, 320, 370, and 515; 2-benzeneazo-1,5-aminonaphthol-6-sulfonic acid: 219, 350, 390, and 520; 8-benzeneazo analog: 222, 290, 390, and 530; 2,8-bis(benzeneazo)-1,5-aminonaphthol-6-sulfonic acid: 215, 300, 390, and 540; 2-benzeneazo-1,5-aminonaphthol-8-sulfonic acid: 208, 325, and 520; 6-benzeneazo-1,5-aminonaphthol-8-sulfonic acid: 234, 320, and 590; and 2,8-bis(benzeneazo)-1,5-aminonaphthol-8-sulfonic acid: 240, 325, and 540 m μ , resp. G. M. Kosolapoff

SAVOST'YANOVA, M. V.

USSR/Physics - Stalin Prizes

Jun 51

SAVOST'IANOVA, M. V.

Gorokhovskii, Iu. N., Meikliar, P. V., Savost'ianova, M. V., Toporets, A. S.
75 years since the birth of T. P. Kravets. P. 301.

SO: Progress in the Physical Sciences, Vol. XLIV, No. 2, June 1951, (Uspekhi)

CA

Absorption spectra of some derivatives of di- and triphenylmethane series. V. V. Perkalin, M. V. Savost'yasova, and R. I. Morozova. *Zhur. Obshchei Khim.* (J. Gen. Chem.) 32, 821-4(1962).—Spectra of numerous derivs. of di- and triphenylmethane series indicate the presence in the spectra of the derived dyes of abs. bands of the starting materials, with a shift of the position of the shorter-wave bands and with a redistribution of their intensities. EtOH was used as solvent and the pH of solns. was 8.0. The following abs. bands ($m\mu$) and extinction coeffs. ($\times 10^{-4}$) were observed: PhNMe_2 , 251(1.34), 290(0.25); ($p\text{-Me}_2\text{NC}_6\text{H}_4$) $_2\text{CH}_2$, 255(2.8), 262(3), 300(0.42); $p\text{-Me}_2\text{NC}_6\text{H}_4\text{CHPh}$, 260(0.73), 300(0.094); ($p\text{-Me}_2\text{N-C}_6\text{H}_4$) $_2\text{CHPh}$, 260(3.47), 262(3.52), 268(3.2), 300(0.53); ($p\text{-Me}_2\text{NC}_6\text{H}_4$) $_2\text{CH}$, 240(3.32), 260(3.78), 262.5(3.84), 265(3.82), 266(0.74); $p\text{-Me}_2\text{NC}_6\text{H}_4\text{CH(OH)NMe}_2$, 267(2.48), 300(0.33); ($p\text{-Me}_2\text{NC}_6\text{H}_4$) $_2\text{C(OH)Ph}$, 260(1.4), 264(1.58), 300(0.2); ($p\text{-Me}_2\text{NC}_6\text{H}_4$) $_2\text{COH}$, 260(0.24), 300(0.11). The pos. ion of the colored salts of bis(p -dimethylaminophenyl)methane (from the respective carbinol) gives in EtOH, at pH 8, abs. max. at 265(1.14), 300(6.2), 340(0.058), and 505(0.03); Malachite Green (in buffer soln. pH 4.2) gave 240(0.36), 316.5(0.82), 425(0.86), and 620(3.44), while

crystal violet gave (in buffer pH 5.67) 250(1.09), 303(1.37), 360(0.13), and 598(6.97). In concd. HCl Malachite Green shows the disappearance of only the longer-wave band, while the other 3 remain unchanged; crystal violet behaves similarly and also loses the 360 band, with appearance of a new band at 435 $m\mu$. Univalent pos. ion of Malachite Green gives 240(0.35), 316.5(0.82), 425(0.86), and 620(3.44); bivalent ion gives 262(0.25), 323(0.12), and 448(0.275); while trivalent pos. ion of crystal violet gives 250(0.99), 290(0.7), 314(0.375), 436(0.98) (the latter 2 in 30% HCl), while the univalent pos. ion of p -dimethylaminotriphenylmethane (from the carbinol; run in dil. HCl), gave 250(—), 265(—), 333(—), and 480(—). Phenylmethylpyrazolone has one band at 246 $m\mu$ and its colored derivs. retain this band, with addn. of longer-wave bands.

G. M. Kosolapoff

Savost'yanova, M. V.

USSR/Optics - Physical Optics, K-5

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35711

Author: Savost'yanova, M. V.

Institution: None

Title: Optical Properties of Colloidal Solutions of Dyes

Original

Periodical: Izv. AN SSSR, ser. fiz., 1953, 17, No 6, 747-755

Abstract: Clarification of the problem of the applicability of the well-worked-out laws of optics of colloidal metals in the case of dyes, which in solid state have optical properties that are close to those of metals; It is shown that for substances for which $n \geq \lambda$ (dyes), the well-known Rayleigh-Mie equations can be simplified somewhat by expanding in series; an analysis of these expressions makes it possible to investigate the effect of the dimensions of particles and of their optical constants individually. It was established that: (1) the dependence of the position of the maximum of coefficient of attenuation on the size of the particle for colloidal suspensions

Card 1/2

USSR/Optics - Physical Optics, K-5

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35711

Abstract: of dyes is weakly pronounced, and therefore one cannot expect such a variety of hues, as is observed for colloidal suspensions of certain metals (sodium, silver); (2) the position of the maximum of the coefficient of attenuation of a colloidal solution of a dye in the case of the "smallest" particles approximates the position of the maximum of the index of absorption (χ) of a solid layer of dye and that furthermore the smaller χ the higher the extent of approximation, and therefore the color of such solutions is nearly equal to the color of solid films. By way of an object of investigation colloidal solutions of fuchsin in benzol were chosen, obtained by diluting with benzol concentrated solutions of the dye in alcohol or acetone; depending on the method of preparation, one obtains sols with particles of various magnitudes, having absorption bands with maxima at wavelengths from 500 to 640 μ . The calculation of the spectral behavior of the coefficient of attenuation of light in a fuchsin-benzol system for particles of various diameters yields curves that are in satisfactory agreement with the experimental ones.

Card 2/2

SAVOET'YANINA
p. 2

PHASE I BOOK EXPLOITATION

SOV/3000

(A.V.)

SOV/9-M-8(11)

Akademiya nauk SSSR. Institut geokhimi i analiticheskoy khimii imeni V. I. Vernadskogo. Komissiya po analiticheskoy khimii

Spektrofotometricheskiye i kolorimetricheskiye metody analiza (Spectrophotometric and Colorimetric Methods of Analysis) Moscow, 1958. 286 p. (Series: Its: Trudy, tom. 8 (11) Errata slip inserted. 3,000 copies printed.

Resp. Ed.: I. P. Alimarin, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: V. M. Peshkova; Tech. Ed.: N. I. Moskvicheva.

PURPOSE: The publication is intended for chemists, particularly analytical chemists and geochemists.

COVERAGE: This collection of 29 articles is published as Volume VIII (XI) of the Transactions of the Committee on Analytical Chemistry at the Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy, Academy of

Card 1/6

SPECTROPHOTOMETRIC AND COLORIMETRIC (Cont.)

SOV/3850

Sciences USSR. The general subject of the volume is the investigation of spectrophotometric and colorimetric analysis. Individual articles on the following topics may deserve special attention: the present state of light absorption analysis, the sensitivity of the colorimetric methods of inorganic analysis, the basic variations of the kinetic method of analysis, spectrophotometric investigation of heteropolyacids of germanium, a new colorimetric method of determining small quantities of thallium, a fluorimetric method of determining uranium, spectro-photometric investigation of the behavior of oxidation-reduction indicators, a photometric optical-acoustical method of gas analysis, and a description of an automatic spectrophotometric gas analyser. No personalities are mentioned. References are given at the end of each article.

TABLE OF CONTENTS:

Savost'yanova, M. V. The State of Light Absorption Analysis Today	3
Komar', N. P. Characteristics and Possibilities of Colorimetric and Spectrophotometric Analysis	21
Kuznetsov, V. I. Increasing the Sensitivity of Colorimetric Methods of Inorganic Analysis and Color Reactions	52
Peshkova, V. M. Effect of the Structure of the Molecule of an Organic Reagent on the Absorption Spectra of Metallic Oxime Compounds Card 2/6	75

SOV/51-5-4-16/21

AUTHOR: Savost'yanova, M.V.

TITLE: On the Optical Constants of Copper and Gold (Ob opticheskikh postoyannykh medi i zolota)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol 5, Nr 4, pp 469-472 (USSR)

ABSTRACT: In 1942 Givens (Ref 1) published values of the optical constants of copper films produced in vacuum. In contrast to all other workers, (Refs 2-5) Givens's curves do not exhibit a sharp peak in the region 500-600 m μ , which was earlier observed for copper and gold. Studies of the optical properties of colloidal solutions of metals give an independent method for verification of the wavelength dependences of the optical constants. The attenuation constant ϵ_{λ} is a function of the coefficients n_{λ} and k_{λ} and of the particle diameter 2μ . By comparing the experimental values of ϵ_{λ} with those calculated from n_{λ} and k_{λ} , the values of n_{λ} and k_{λ} and their wavelength dependences may be checked. For particle sizes up to 30 m μ the position of the maximum in the attenuation spectrum remains constant both in copper and gold; only the magnitude of the attenuation intensity is affected by the particle size. This means that colloidal solutions of copper and gold may be used within this range of particle size to check the wavelength dependences of n and k . Fig 1 gives the wavelength dependence of

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SOV/51-5-4-16/21

On the Optical Constants of Copper and Gold

the attenuation constant ϵ_{λ} for several particle sizes. Fig 2, curve 1 gives ϵ_{λ} for a NaCl crystal coloured with colloidal copper particles (Ref 17). Curve 2 in Fig 1 gives ϵ_{λ} for colloidal copper in glass (the results are taken from Ref 11). Both curve 1 and curve 2 show a maximum at about 570 m μ , a minimum and then a further increase at lower wavelengths. Similar curves are obtained also for colloidal solutions of gold (Refs 11, 14-16). Curve 3 in Fig 2 gives the calculated values using Givens's data (Refs 1, 6). Tables 1 and 2 give the wavelengths at which maxima and minima occur in the wavelength dependence of the attenuation coefficient ϵ of colloidal solutions of copper and gold in various media. These tables give also the values of ϵ_{\max} and $\epsilon_{\max}/\epsilon_{\min}$ for the same colloidal solutions. The results of Fig 2 and Tables 1 and 2 show that the peak in the wavelength dependence of n and k' of copper and gold does in fact exist in the region 500-600 m μ and that Givens's results must be in error. The

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On the Optical Constants of Copper and Gold

SOV/51-5-4-16/21

author thanks M.M. Noskov for his advice. There are 2 figures and 2 tables and 24 references, 9 of which are German, 6 Soviet, 7 American, 1 French and 1 English.

ASSOCIATION: Gosudarstvennyy opticheskiy institut im. S.I. Vavilova (State Optical Institute imeni S.I. Vavilov).

SUBMITTED: January 6, 1957

Card 3/3

1. Copper--Optical properties
2. Gold--Optical properties
3. Copper films--Optical properties
4. Metals--Colloids

SAVOST'YANOVA, M.V.

State of absorption analysis. Trudy kom. anal.khim. 8:3-20
'58. (MIRA 11:8)

1.Gosudarstvennyy opticheskiy institut im. S.I. Vavilova.
(Absorption spectra)

KARYAKIN, A.V.; SAVOST'YANOVA, M.V., prof., doktor fiz.-mat.nauk, red.;
SVESHNIKOV, B.Ya., doktor fiz.-mat.nauk; red.; KHRUSTALEVA,
A.A., izdat.red.; ORESHKINA, V.I., tekhn.red.

[Luminescent testing] Luminestsentnaia defektoskopia. Pod
red. M.V.Savost'ianovoi i B.IA. Sveshnikova. Moskva, Gos.izd-vo
obor.promyshl., 1959. 49 p. (MIRA 12:11)
(Luminescence) (Testing)

KRAVETS, Torichan Pavlovich [deceased]; SMIRNOV, V.I., akademik, red.;
TERENIN, A.N., akademik, red.; GOROKHOVSKIY, Yu.N., red.;
NEPONENT, B.S., red.; SAVOST'YANOVA, M.V., red.; TOPORETS, A.S.,
red.; FAYERMAN, G.P., red.; SAZONOV, L.S., red. izd-va; ZENDEL',
M.Ye., tekhn. red.

[Works in physics] Trudy po fizike. Moskva, Izd-vo Akad. nauk
SSSR, 1959. 339 p. (MIRA 12:8)

1. Chlen-korrespondent AN SSSR (for Kravets).
(Kravets, Torichan Pavlovich, 1876-1955) (Physics)

5 (4)

AUTHORS:

Savost'yanova, M. V., Matsinova, L. G. SOV/20-125-6-34/61

TITLE:

The Colloidal State of Dyes and Metachromatic Properties
(Kolloidnoye sostoyaniye krasiteley i metakhromaziya)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 6,
pp 1294-1297 (USSR)

ABSTRACT:

The nature of the change of color (metachromasis) in the presence of highly polymeric substances (chromotropes) is of importance in histochemistry. The new absorption maximum M forming in the presence of chromotropes is caused by the aggregating centers of the dyes (Refs 1, 2). On the other hand, highly aggregated structures occur also in colloiddally distributed dyes, which also have a characteristic absorption maximum (Ref 3). For the purpose of investigating the connection between these two phenomena, the spectral properties (in benzene, acetone, etc) of colloiddally distributed methylene blue, fuchsin, crystal violet, and cyanine (3,3-diethyl-9-methylthia-carbocyanine-iodide), and, in addition, the properties of the aqueous solutions of these dyes were investigated with an addition of agar-agar. The maximum M is in both cases caused by centers of colloidal

Card 1/2

The Colloidal State of Dyes and Metachromatic
Properties

SOV/20-125-6-34/61

nature. These aggregates are characterized by optical constants which the dyes have when in the solid state, and are of the magnitude of some dozens of millimicrons. This amount, however, changes according to experimental conditions. The experimental results obtained are given by tables 1 and 2 and are shown by figures 1, 2, and 3. There are 3 figures, 2 tables, and 14 references, 10 of which are Soviet.

PRESENTED: January 24, 1959, by Terenin, A.H., Academician

SUBMITTED: October 15, 1958

Card 2/2

SAVOST'YANOVA, M.V.

Luminescent metachromasia. Izv. AN SSSR. Ser. fiz. 26
no.1:100-102 Ja '62. (MIRA 15:2)
(Metachromasia)

ACCESSION NR: AP3003604

S/0077/63/008/004/0249/0252

AUTHORS: Savost'yanova, M. V.; Agayeva, G. A.

TITLE: The influence of high-molecular substances on the absorption spectra of pigment solutions. (On the problem of the nature of H centers)

SOURCE: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 8, no. 4, 1963, 249-252

TOPIC TAGS: spectral analysis, pigment, absorption spectra, pigment solution, toluidine blue, methylene blue, pinachrome dark blue, high molecular compounds, carboxymethylcellulose, sodium bisilicate, sodium silicate, gelatin, H-lines, M-lines

ABSTRACT: Experiments were performed to provide data for substantiating the hypothesis of M. V. Savost'yanova (Dokl. AN SSSR, 1959, 125, 1294). According to her view there exists a similarity between the H-lines appearing in the absorption spectrum of carbocyanic pigment solutions and the M-lines produced by the cation pigments in the presence of ionic high-molecular substances. The pigments tested were: toluidine blue, methylene blue, pinachrome blue, 3,1'-diethyl-5,6-dimethyl-8-chlorthio-4'-quinocarbocyanide, 3,3'-diethyl-4,5,4',5'-dibenzooxycarbocyanide-

Card 1/1.2

ACCESSION NR: AP3003604

p-tolusulfonate, 3,3'-dimethyl-9-ethyl-4,5,4',5'-dibenzothiocarbocyanochloride, and 3,3',9-triethyl-4,5,4',5'-dibenzothiocarbocyanobromide. The high-molecular compounds tested were: agar-agar, carboxymethylcellulose, sodium bisilicate, sodium silicate, gelatin 2221, and gelatin 12350. The results of these tests are presented graphically in Figs. 1 and 2 of the Enclosures. It was experimentally determined that the short-wave absorption maxima of all pigments (tested in the presence of every high-molecular substance listed above) lay in the same narrow spectral interval. The authors take this as a proof that M-lines and H-lines are identical. Their view is further sustained by the identical course of M intensity curves under the influence of varying concentrations of the high-molecular substances. Orig. art. has: 1 table and 2 graphs.

ASSOCIATION: Gosudarstvennyy opticheskiy institut im. S. I. Vavilova (State Optical Institute)

SUBMITTED: 13Jul60

DATE ACQ: 02Aug63

ENCL: 02

SUB CODE: PH

NO REF SOV: 006

OTHER: 006

Card 2/42

14943

S/048/63/027/001/022/043
B106/B101

58810

AUTHORS: Savost'yanova, M. V., and Chernyshev, V. A.

TITLE: A spectrum analytical method of studying high-molecular substances and its applicability

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 27, no. 1, 1963, 62-64

TEXT: Factors are discussed that influence the practical application of the spectrum analysis of dyes for the examination of high-molecular compounds (HMC). In this method, HMC containing ionic groups is added to an ionic organic dye of opposite charge whose absorption or luminescence spectrum changes continuously with the concentration of the HMC. An essential point is the formation of K centers at the "optimum concentration" where the corresponding short-wave absorption band A is strongest. The formation of such centers is subject to the following factors which limit the applicability of the method: (1) The centers form at a stoichiometric ratio between dye and HMC; the optimum concentration therefore depends on the dye concentration. (2) The K centers change

Card 1/2

A spectrum analytical method of ...

S/048/63/027/001/022/043
B106/B101

considerably when solutions of dye containing HMC are left standing for a longer period. This is due to the gradual precipitation of complexes having the absorption band A. Their solubility considerably decreased owing to the mutual saturation of the hydrophilic groups of various components. (3) A twofold or threefold increase in HMC concentration above the "optimum concentration" causes a small shift of band A. This effect can be clearly seen in polymethine dyes. Hence, constant dye concentrations must be used in order to ensure reproducible results when applying this method to the practical examination of HMC. Measurements have to be made at a certain time after the solutions have been obtained, and the "optimum concentration" must be determined from the position of the maximum A (at its smallest wavelength), not from its intensity. There are 3 figures. The most important English-language reference is: P. Mukherji, R. Mysels. J. Amer. Chem. Soc., 77, 2937 (1955). ✓

Card 2/2

SAVOST'YANOVA, M.V.

Interaction of dyes with high molecular weight substances.
Usp.khim. 32 no.10:1233-1269 0 '63. (MIRA 16:12)

1. Gosudarstvennyy opticheskiy institut imeni S.I.Vavilova.

L 30080-66 EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP6012210

SOURCE CODE: UR/0237/66/000/004/0009/0017

AUTHOR: Savost'yanova, M. V.; Vorob'yev, A. G.; Polyakov, Yu. N.; Shakhverdov, T. A.

56
55
B

ORG: none

TITLE: Characteristics of processes of coloring and discoloring of photochromic substances such as spiropyranes in polymer films

SOURCE: Optiko-mekhnicheskaya promyshlennost', no. 4, 1966, 9-17

TOPIC TAGS: luminescence, quantum yield, organic solvent, polymer chain, color, PHOTOCHROMIC MATERIAL, LIGHT RADIATION EFFECT

ABSTRACT: The authors investigate the photochromic effect (reversible change in the color of a substance under the influence of absorbed radiation), and derive certain quantitative characteristics of polymer films containing spiropyranes, the photochromic characteristics of which were disclosed in a patent by C. A. Carlson (USA Patent 3,085,469, class 88-74, 1963). The spiropyranes together with the polymer (polymethyl metacrylate, polystyrene, polyvinyl butyral, ethyl cellulose, and LP26 polymerization lacquer) were dissolved in a solvent (chloroform, dichloroethane, acetone, dioxane, benzene, alcohol) and the film left after

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L 30080-66

ACC NR: AP6012210

evaporation had the required photochromic properties. The spectral properties of the films (absorption, luminescence, spectral sensitivity of coloring and discoloring) were measured. Tests were also made of the reproducibility and sensitivity (quantum yield) of the products. The apparatus used for the tests is described and the results are presented in the form of a summary table and a number of spectral curves. The authors thank A. N. Terenin for interest in the work. Orig. art has: 6 figures, 3 formulas, and 2 tables.

SUB CODE: 20, 07/ SUBM DATE: 18Dec65/ ORIG REF: 007/ OTH REF: 011

Card 2/2

50

L 05703-57 EWP(/EWP(m)/T IJP(c) RM/DS

ACC NR: AP6026356

SOURCE CODE: UR/0237/66/000/005/0031/0041

AUTHOR: Savost'yanova, M. V.

23
22
B

ORG: none

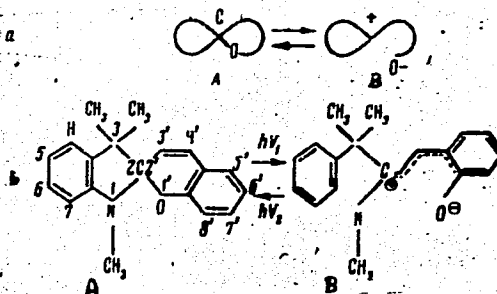
TITLE: Photochromic conversions of spiropyran molecules and their applications

SOURCE: Optiko-mekhanicheskaya promyshlennost', no. 5, 1966, 31-41

TOPIC TAGS: spiropyran, photochromy, internal photoeffect

ABSTRACT: The article reviews the photochromic properties of one class of photochromic organic compounds, the spiropyrans, which are of interest from the standpoint of both the mechanism of photoconversions and their practical applications. The structural changes taking place in the spiropyran molecule are shown in Fig. 1.

Fig. 1. Schematic representation of structural changes of spiropyran molecules under the influence of ultraviolet ($h\nu_1$) and visible ($h\nu_2$) radiation: a - general diagram, b - diagram of the molecule of 1,3,3-trimethylspiro(2' H 1'-benzopyran-2',2'-indoline).



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UDC: 541.14

I 05783-07

ACC NR: AP6026356

The spectral properties (absorption, luminescence, spectral sensitivity of coloration and decolorization and their kinetic aspects) of spiropyrans in solutions and polymer films and the reproducibility and mechanism of the photochromic reactions are discussed. The advantages and limitations of the applications of photochromic systems (light modulation, information recording and storage systems) are indicated. Orig. art. has: 7 figures and 3 formulas.

SUB CODE: 07,20/ SUBM DATE: 17Nov65/ ORIG REF: 016/ OTH REF: 051

me
Card 2/2

SAVISTILYANO, A. N. H.

18-72
On the Ordering Mechanism of the Alloy Ni₃Al with
Various
Mechanism

holds by the ordering process, increases the magnetic permeability. However, the effect of Mo on the magnetic permeability cannot be satisfactorily explained by assuming that the Mo simply produces local disorder of an amount proportional to its concentration. At the same time, within the range tested, the Mo did not produce regions of non-uniform solid solution similar to those observed in Fe-Ni alloys. (Doklady Akad. Nauk S.S.R., 1953, 93, 1011 for the system Ni₂Fe + 0-1% Mo. 1126) - A. F. B.

RS conf

Moscow Steel Inst.

SAVOST'YANOVA, N.A.; SHVARTSMAN, L.A.

Solubility of vanadium carbide in gamma iron. Fiz. met. i metalloved.
9 no. 4:515-519 Ap '60. (MIRA 14:5)

1. Institut metallovedeniya i fiziki metallov Tsentral'nogo
nauchno-issledovatel'skogo instituta chernoy metallurgii.
(Vanadium carbide) (Solutions, Solid)

TOMILIN, I.A.; SAVOST'YANOVA, N.A.

Determination of the solubility of nitrogen in solid chromium.
Zav.lab. 28 no.8:959-961 '62. (MIRA 15:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii imeni I.P.Bardina.
(Chromium nitrides)

ACCESSION NR: AT4013966

S/2659/63/010/000/0283/0289

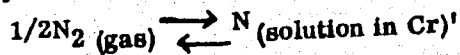
AUTHOR: Tomilin, I. A.; Savost'yanova, N. A.

TITLE: Determination of the solubility of nitrogen in chromium

SOURCE: AN SSSR. Institut metallurgii. Issledovaniya po zharoprochny^m splavam, v. 10, 1963, 283-289

TOPIC TAGS: chromium, nitrogen, nitrogen solubility, solubility, chromium alloy

ABSTRACT: The detailed investigation of chromium-nitrogen alloys was started not long ago, when chromium and its alloys began to be used as structural materials at high temperatures. Numerous investigations led to the conclusion that the brittleness of chromium at low temperatures is caused by the presence of impurities, especially carbon or nitrogen. Nitrogen, present as a solid solution, has a strong influence on the mechanical properties of chromium, a property which has now been used as an expedient way of determining its solubility in solid chromium. The solubility of nitrogen in chromium is determined by an investigation of the following equilibrium reactions.



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ACCESSION NR: AT4013966

at different pressures and temperatures. Then, these equations were used to determine the thermodynamic characteristics of solutions of nitrogen in chromium and of chromium nitride (Cr_2N). Several graphs illustrate the findings. The dependence of the nitrogen concentration in chromium on the pressure was determined, and it was shown that solid solutions of nitrogen in chromium are ideal dilute solutions. Figure 1 of the Enclosure shows the results of the determination of the solubility of nitrogen in chromium in relation to the pressure at temperatures of 1250 and 1340C. Figure 2 of the Enclosure shows the solubility of nitrogen in solid chromium in relation to temperature. Finally, the dependence of the dissociation pressure of chromium nitride on the temperature is shown in Figure 3 of the Enclosure. Orig. art. has: 5 figures and 14 formulas.

ASSOCIATION: Institut metallurgii AN SSSR (Institute of Metallurgy AN SSSR)

SUBMITTED: 00

DATE ACQ: 27Feb64

ENCL: 03

SUB CODE: MM

NO REF SOV: 004

OTHER: 018

Card 2/5

L 51992-65 EPF(c)/EPR/EWA(c)/EWT(m)/T/EWP(b)/EWA(d)/EWP(w)/EWP(t) Pr-4/
Ps-4 IJP(c) JW/JD/JG

ACCESSION NR: AT5011210 UR/2717/64/000/008/0423/0435

AUTHOR: Savost'yanova, N. A.; Tomilin, I. A.

36
35
B+1

TITLE: Equilibrium in the system chromium-nitrogen

SOURCE: Dnepropetrovsk. Institut metallovedeniya i fiziki metallov.
Problemy metallovedeniya i fiziki metallov, no. 8, 1964, 423-435

TOPIC TAGS: equilibrium condition, chromium, nitrogen, metal ductility, metal brittleness, solubility, solid solution, chromium nitride, thermodynamic property, dissociation

ABSTRACT: Nitrogen has been found to have more effect than oxygen in the transition of chromium from the ductile to the brittle state. The object of the present investigation was to determine the solubility of nitrogen in chromium, the solubility limits of the nitride Cr₂N in chromium, and the free energy of formation of solid solutions in the system nitrogen-chromium and in chromium nitrides. The heating chamber used was made either of quartz glass or stainless steel. The heater was of molybdenum 0.4 mm thick with a diameter about 30 mm and a length about 300 mm. The temperature gradient was 1.5°C/cm in the interval 1,100-1,485°C. Gas pressure in the reaction chamber was

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L 51992-65

ACCESSION NR: AT5011210

measured with a mercury manometer. A weighed amount of chromium (20-30 g) in a corundum crucible was put into the furnace and the system was evacuated and heated to 300-400°C. Nitrogen was introduced into the constant temperature system and its pressure was measured. Argon was then added up to a pressure of about 150-200 mm Hg. At 5-10 min intervals the pressure was measured to determine the rate of solution of nitrogen and the attainment of equilibrium. Determinations were made of the thermodynamic properties of a solid solution of nitrogen in chromium, the solubility limit of nitrogen in chromium, and the dissociation pressure of chromium nitride in equilibrium with the solid solution. The temperature dependence of the change in the free energy of formation of the solid solution, the solubility of nitrogen in chromium, and the dissociation pressure of chromium nitride in equilibrium with the saturated solid solution are respectively described by the following equations: $\Delta G^{\circ} = 25,800 - 7.8 T$ (at $P_{N_2} = 1$ atm and 1% wt. N_2); $\lg(\%N) = 10,300/T + 5.69$; and, $\lg P_{N_2}(\text{atm}) = 9,600/T + 4.42$. Orig. art. has: 9 formulas, 9 figures, and 1 table.

ASSOCIATION: Institut metallovedeniya i fiziki metallov, Dnepropetrovsk
(Institute of Physical Metallurgy and Physics of Metals)

Card 2/3

L 51992-65

ACCESSION NR: AT5011210

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NR REF SOV: 007

OTHER: 027

BJB
Card 3/3.

L 24720-66 EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP6009511

SOURCE CODE: UR/0413/66/000/005/0020/0021

AUTHOR: Ivanova, V. A.; Genkin, N. D.; Vorob'yev, V. D. Ginzburg, B.G.; Zharavin, K. N.; Korchilava, Ye. Ya.; Savost'yanova, N. G.

ORG: none

23
15

TITLE: Preparation of Captax-2-mercaptobenzothiazole. Class 12, No. 179306 announced by the Scientific Research Institute of Organic Semifinished Products and Dyes and the Berezniki Plant of Aniline Dyes (Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley i Bereznikovskiy anilinokrasochnyy zavod)

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5, 1966, 20-21

TOPIC TAGS: captax, mercaptobenzothiazole, aniline, aniline dye

ABSTRACT: An Author Certificate has been issued describing a method for preparing Captax-2-mercaptobenzothiazole by melting aniline, sulfur, nitrobenzene, carbon bisulfide at elevated temperatures and pressure, followed by dissolving the melt in a water solution of alkali hydroxide or milk of lime, purifying the solution obtained and separating the product. To improve the quality of Captax, decontaminate the waste water and make it possible to use the solution

Card 1/2

UDC: 547.789.6'2.07

2

L 24720-66

ACC NR: AP6009511

of the alkali Captax melt for the production of sulfuramides, the purification is conducted by extraction with benzene polychlorides, chlorobenzene, benzene, or their water emulsions, followed by removal of the residue of the solvent by conventional methods. [LD]

SUB CODE: 11/

SUBM DATE: 08 Aug 64/

Card 2/2 *fv*

5(2)

SOV/78-4-3-10/34

AUTHORS: Turova, N. Ya., Novoselova, A. V., Semenenko, K. N.,
Savost'yanova, R. I.

TITLE: On the Phenolates of Beryllium (O fenolyatakh berilliya)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 3,
pp 549-552 (USSR)

ABSTRACT: The interaction between beryllium chloride and β -naphthol and p- and m-cresols has been investigated and the properties of the resulting phenolates have been described. The reaction of beryllium chloride with o-, p-, m-cresol takes place at 90-100°C. The interaction of p- and m-cresol with BeCl_2 takes place under a strong development of HCl. The phenolates of beryllium are white, amorphous, hygroscopic substances, which slowly hydrolyze in air. Thermographic and radiographic investigations were carried out. The following phenolates have been prepared: β -naphthol beryllium ($\text{Be}(\text{OC}_{10}\text{H}_7)_2$) and $\text{Be}(\text{p-OC}_7\text{H}_7)_2$ and $\text{Be}(\text{m-OC}_7\text{H}_7)_2$. The phenolates of beryllium are slightly soluble in benzene and xylene, stable in ether. Decomposition occurs under the action of methyl alcohol.

Card 1/2

SOV/78-4-3-10/34

On the Phenolates of Beryllium

There are 1 figure and 7 references, 2 of which are Soviet.

SUBMITTED: January 4, 1958

Card 2/2

SAVOST'YANOVA, S.I.; ZIATKIS, L.S.; ZOLOTKO, Ye.A.; BORKOVSKAYA, G.R.

Result of therapeutic and pedagogic work in a children's home for infants sequelae of organic lesions of the central nervous system. *Pediatrics* 39 no.6:72-78 N-D '56. (MIRA 10:2)

1. Iz Oblastnogo doma rebenka No.7 Khar'kovskogo oblazdravotdela (zav. D.F.Shevchenko, glavnyy vrach S.I.Savost'yanova)
(CENTRAL NERVOUS SYSTEM, diseases, in inf. & child., ther. (Rus))

ZLTKIS, L.S.; SAVOST'YANOVA, S.I.; ZOLOT'KO, Ye.A.

Treating birth injuries of the central nervous system at a specialized children's home. *Pediatrics* 36 no.2:89-90 F '59. (MIRA 12:4)

1. Iz oblastnogo doma rebenka No.7 Khar'kovskogo oblzdravotdela, glavnyy vrach S.I. Savost'yanova.

(NERVOUS SYSTEM--WOUNDS AND INJURIES)

STULIY, L.A.; SAFRONOVA, O.N.; BUTS'KA, L.K., kand. med. nauk; KRIVOBOKOV, S.A. [Kryvobokov]; VOLOSHINOV, B.M. [Voloshynov, B.M.], dotsent BICHKOVSKIY, V.N. [Byshkovs'kyi, V.N.] dotsent; POKOTILOVA, V.Yu. [Pokotylova, V. IU]; KOLESNIKOV, G.F. [Kolesnykov, H.F.]; ZLATKIS, L.S.; SAVOST'YANOVA, S.I.; BRIN, D.D. [Bryn, D.D.]; MATVEYENKO, Ye.A. [Matviienko, Ye.A.]; BRONZ, L.M.; YEPSHTEYN, L.G. [Epshtein, L.H.], kand. med. nauk; SHAKHNOVICH, L.A. [Shakhnovych, L.A.]

Annotations and authors' abstracts. Pediat. akush. ginek. no.3:
31-34 '63 (MIRA 17:1)

1. Khar'kovskiy nauchno-issledovatel'skiy institut okhrany materinstva i detstva (for Stuliy). 2. Kafedra detskikh bolezney Odesskogo meditsinskogo instituta (for Safronova). 3. Ukrainskiy institut okhrany materinstva i detstva (for Buts'ka). 4. Detskiy sanatoriy dlya rekonvalescentov ot tuberkuleznogo meningita, Kiyev, Pushcha-Voditsa (for Krivobokov). 5. Detskaya klinika Ivano-Frankovskogo meditsinskogo instituta (for Voloshinov). 6. Kafedra detskikh infektsionnykh bolezney Krymskogo meditsinskogo instituta (for Bichkovskiy, Pokotilova). 7. Institut infektsionnykh bolezney Kiyev (for Kolesnikov). 8. Khar'kovskiy oblastnoy detskiy dom No.1 (for Zlatkis, Savost'yanova, Brin, Matveyenko). 9. Kafedra pediatrii Kiyevskogo med. instituta (for Bronz) 10. Kafedra fakul'tetskoy pediatrii Gor'kovskogo med. instituta (for Yepshteyn). 11. 2-ya detskaya bol'nitsa Shevchenkivskogo rayona g. Kiyeva (for Shakhnovich).

GORSHKOV, V.I.; PANCHENKOV, G.H.; SAVENKOVA, N.P.; SAVOST'YANOVA, S.N.

Continuous countercurrent ion exchange method for separation of rubidium and cesium on the cation exchanger KU-1. Zhur. neorg. khim. 8 no.12:2800-2805 D '63. (MIRA 17:9)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, kafedra fizicheskoy khimii.

KURYSHEV, V.I.; SAVOST'YANOVA, T.A.; GUSEV, Ye.B.

Observations of lunar occultations of stars in Ryazan. Astron.-
tsir. no.223:27-29 J1 '61. (MIRA 15:3)

1. Ryazanskiy pedagogicheskiy institut, Ryazanskoye otdeleniye
Vsesoyuznogo astronomo-geodezicheskogo obshchestva.
(Occultations)

KURYSHEV, V.I.; GUSEV, Ye.B.; SAVOST'YANOVA, T.A.; GUL'KIN, A.V.

Observations of lunar occultations of stars in Iqazan in 1962. Biul.
Inst.teor.astron. 9 no.8:578 '64. (MIRA 17:12)

1. Ryazanskiy pedagogicheskiy institut i Ryazanskoye otdeleniye
Vsesoyuznogo astronomo-geodezicheskogo obshchestva.

SAVCEI'YANOVA, I. I.

PHASE I BOOK EXPLOITATION SOV/4350
Soveshchaniye po khimii, tekhnologii i primeneniyu prozvodnykh pirdina i khimolima. Riga, 1957

Khimlya, tekhnologiya i primeneniye prozvodnykh pirdina i khimolima: materialy nauchnykh konferentsiy, khimicheskoy i biologicheskoy komissii po pirdinam i khimolimam i ikh primeneniyu. Materialy otchetov i dokladov nauchnykh i spetsialnykh komissiy. Seriya "Khimiya". M., 1956. 229 p. Karta slip inserted. 1,000 copies printed.

Sponsoring Agencies: Akademiya nauk Latvyskoy SSR. Institut Khimii Vsesoyuznoye khimicheskoye obshchestvo.
Ed. I. S. Bashanova, Tech. Ed.: A. Kiyavina; Editorial Board: Yu. A. Bakhovskiy, Candidate of Chemistry, S. V. Yansha, Candidate of Chemistry (Resp. Ed.), L. P. Zaludnyev, Doctor of Chemistry, and M. K. Kalynin.

PURPOSE: This book is intended for organic chemists and chemical engineers.

COVERAGE: The collection contains 33 articles on methods of synthesizing or producing pyridine, quinoline, and their derivatives from natural sources. No personalities are mentioned. Figures, tables, and references accompany the articles.

TABLE OF CONTENTS:

I. PYRIDINE AND QUINOLINE DERIVATIVES OBTAINED FROM THE THERMAL CRACKING PRODUCTS OF PEAT

Portukhin, M. M. [Nizhny-Tselitskiy Savoyuznyy pol'nochnykh i sredi vostochnykh raionov SSSR]. Pyridine Bases Obtained from Coal Tar 25

Dobson, A. D. [Vsesoyuznoy nauchnoy akademii nauk SSSR]. The Reaction of the Acidity of Sciences USSR. Ex-Smeloking of Chromadon Coal 25

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Matrova, L. A., and G. Ya. Vraga. [Institut khimii Akademi nauk Latvyskoy SSR (Chemical Institute of the Academy of Sciences Latvyskaya SSR)]. Pyridine Bases from Suboxidative Tar 43

Silvestrova, N. O., D. Galperin, and T. G. Gerasimova. [Vsesoyuznyy nauchnyy tsentr po khimii i biologii Akademi nauk SSSR (USSR Center for Chemistry and Biology of the Academy of Sciences USSR)]. Methods of Determination and Characterization of Total Nitrogen and Nitrogenous Bases in Peat-Tars 55

Kozlov, V. A. [Institut goruyshchikh i koksnykh akademii nauk SSSR (Institute for Mineral Products of the Academy of Sciences USSR)]. Separation of the β -Picoline Fraction of Tar by the Selective Extraction Method 69

Politskiy, A., and S. Naljanovskiy. [Fizicheskaya khimicheskaya laboratoriya Akademi nauk SSSR (Physical Chemistry Institute of the Polish Academy of Sciences)]. Physicochemical Studies in Certain Bases from Products of the Chemical Processing of Coal 75

T. I. SAVOST'YANOVA

11(A)
 PHASE I BOOK EXPLOSTATOR 80V/2075
 Akademiyas nauk SSSR, Mashinostroyeniye Priblud, Ufa

Dizayn sverkhmolekulyarnykh soedyneniy, sodrazhazhivayemykh v nepyrakh i
 neftepromyshlennosti [sostavlyayemykh iz petrolyumnykh i neftepromyshlennostnykh
 organicheskikh soedyneniy] (Khimiya organicheskikh soedyneniy v petrolyumnoy i
 neftepromyshlennosti) Moscow, Izdatel'stvo AN SSSR, 1979. 376 p.
 2,000 copies printed. Errata slip inserted.

Material Board: R.D. Odojarkov (Resp. Ed.) Doctor of Chemical Sciences;
 G.N. Odojarkov, Doctor of Chemical Sciences; Ya. B. Gerkov, Doctor of Technical
 Sciences; V.V. Kuvshinov, Candidate of Technical Sciences; and V.P. Podolskiy, Candidate
 of Chemical Sciences; Ed. of Publishing House: I.I. Brudnyy
 Tech. Ed.: I.I. Podolskiy

PREFACE: This book is intended for chemists, chemical engineers, and technicians
 specializing in the chemistry of petroleum.
 CONTENTS: The book is a collection of papers presented at the Third Scientific
 Session on the Chemistry of Organic Sulfur Compounds (held in Moscow, U.S.S.R.,
 June 3-8, 1971). The book consists of six sections: 1) General principles of
 variation, and analysis of organic sulfur compounds; 2) Separation and
 composition of organic sulfur compounds contained in petroleum and petroleum
 products; 3) Transformation of organic sulfur compounds by thermal catalysis;
 4) Corrosive properties of and tar formation in sulfur-containing petroleum
 and petroleum products; 5) Uses of organic sulfur compounds and hydrogen
 sulfide; 6) Physiological properties of organic sulfur compounds. 56 personali-
 ties are mentioned. There are 315 references, of which 179 are Soviet,
 128 English, 5 French, 12 German, and 1 Czech.

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PART II. SEPARATION AND COMPOSITION OF ORGANIC SULFUR COMPOUNDS CONTAINED IN PETROLEUM AND PETROLEUM PRODUCTS	
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ACC NR: AP700214

(N)

SOURCE CODE: UR/0153/66/009/015/0791/0793

AUTHOR: Kudryavtsev, N. T.; Golovchanskaya, R. G.; Savost'yanova, V. M.

ORG: Moscow Chemico-technological Institute im. D. I. Mendeleev (Moskovskiy khimiko-tekhnologicheskiy institut)

TITLE: Cathodic process in electrodeposition of cobalt-titanium alloys in hydrofluoboric electrolytes

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 9, no. 5, 1966, 791-793

TOPIC TAGS: metal electrodeposition, cobalt^{alloy} titanium alloy, electrodeposition, cobalt titanium alloy, electrolyte, cathode, corrosion resistance, metal coating

ABSTRACT: The effect of pH, temperature, and current density on the composition and quality of deposits and the yield of cobalt-titanium alloy obtained by electrolysis in a hydrofluoboric electrolyte has been investigated. It was found that at an electrolyte temperature of about 20C and a pH of 1.7, a current density increase from 1.5 to 20 a/dm² resulted in the increase of titanium content in the alloy from 4 to 10%. However, the quality of deposits was poorer and the yield of alloy dropped. Temperature increase to 50C resulted in a decrease of titanium content to 2% and poorer deposit quality. An increase in pH from 1.7 to 3.1 brought about an increase of titanium content and yield of alloy but the deposits were spongy and contained titanium hydroxide. The best quality of deposits, containing

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UDC: 66.062.662:542.97

ACC NR: AP7002146

from 5 to 10% titanium, was obtained in an electrolyte with a pH of 1.7—2.0 and a current density of 1.5—10 a/dm². Cobalt-titanium coating has a higher corrosion resistance than that of pure cobalt coating. The structure of the cobalt-titanium alloy consists of a substitution-type solid solution of titanium in cobalt. Orig. art. has: 4 figures.

SUB CODE: 13, 07/ SUBM DATE: 06Jul64/ ORIG REF: 004

Card 2/2

SAVOST'YANOVSKAYA, Zh. N.

"The Biological Characteristics of the Vegetative Reproduction of
Kek-Saghyz." Cand Biol Sci, Inst of Genetics, Acad Sci USSR, 29 Sep 54.
(VI, 15 Sep 54)

SO: Sum 432, 29 Mar 55

SAVOST'YEV, F.A. (g. Stolbtsy Minskoy oblasti)

Agricultural accidents as the cause of purulent diseases requiring
surgery. Fel'd. i akush. 23 no.3:35-38 Mr '58. (MIRA 11:4)
(AGRICULTURE--ACCIDENTS)

SIGAL, A.B., inzh.; SAVOSTYUK, A.S., inzh.; IL'IN, G.I., inzh.

Condensate treatment. Energetik 12 no.11:17-20 H '64
(MIRA 18:2)

SAVOTIN, G.A.

Machine for digging ditches. Suggested by G.I.Savotin. Rats.1
izobr.predl.v stroi. no.16:38-39 '60. (MIRA 13:9)

1. Po materialam proyektno-konstruktorskogo byuro Glavstroy-
mekhanizatsii Ministerstva transportnogo stroitel'stva SSSR.
(Excavating machinery)

SAVOTIN, G.I., inzh.

Self-propelled BTS-2 boring machine. Transp.stroi. 9
no.10:58 0 '59. (MIRA 13:2)
(Boring machinery)

SAVOTIN, G.I., inzh.

The BTS-2 self-propelled boring machine. Mekh. stroi.
17 no.6:17-21 Je '60. (MIRA 13:6)
(Boring machinery)

TARAKANOV, G.P., inzh.; SAVOTIN, G.I., inzh.

New mounted attachment for the ETU-353 trench excavator. Transp.
stroi. ll no.4:50 Ap '61. (MIRA 14:5)
(Excavators—Equipment and supplies)

SAVOTIN, G.I., inzh.

New tractor-drawn sectional pneumatic roller. Mekh. stroi.
18 no.2:23 F '61. (MIRA 14:3)

1. Proyektno-tehnicheskoye byuro Glavstroymekhanizatsii Mintrasstroya.
(Rollers (Earthwork))

SAVOTIN, G.I.

Mounted equipment for digging mountain and water-diversion ditches.
Biul.tekh.-ekon.inform. no.5:77-78 '61. (MIRA 14:6)
(Excavating machinery)

SAVOTIN, G.I.

Machine for cutting ditches. Mekh. stroi. 18 no.5:24 My '61.
(MIRA 14:7)

1. Proyektno-konstruktorskoye byuro Glavstroyemkhanizatsii
Mintransstroya.

(Excavating machinery)

SAVOTIN, G.I., inzh.

The DCK-1 attached pneumatic roller with reinforced concrete sections. Stroi. i dor. mash. 7 no.8:12-14 Ag '62.
(MIRA 15:9)

(Rollers (Earthwork))

SAVOTIN, G.I., inzh.; KHAZAN, S.M., inzh.

The DSK-1 hitched pneumatic roller. Mezh. stroi. 19 no.9:
23-25 S '62. (MIRA 15:9)

(Rollers (Earthwork))

1000/020/0152/0152

ACC NR: A L 10214-66
AP5028542

SOURCE CODE: UR/02007

AUTHORS: Stramous, M. F.; Savotin, G. I.; Porokhnya, G. A.; Perelyayev, Yu. N.;
Lysov, N. I.

23
B

ORG: none

TITLE: A machine for building levees along alluvial plains and for forming land slopes
Class 84, No. 175897 [announced by Design and Construction Bureau of
Glavstroymekhanizatsiya of the State Production Committee on the Transport Construction
SSSR (Proyektno-konstruktorskoye byuro glavstroymekhnizatsii gosudarstvennogo
proizvodstvennogo komiteta po transportnomu stroitel'stvu SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 152

TOPIC TAGS: excavating machinery, construction machinery

ABSTRACT: This Author Certificate presents a machine for building levees on alluvial
plains and for forming land slopes. The machine contains a working member with
numerous buckets for transverse excavations (see Fig. 1). This member is supported by
a bearing-turning platform. To assure the possibility of levee building and slope
forming, as well as trench excavating, the working member is placed on the turning
platform eccentrically in respect to its axis of rotation. The rear part of the
machine contains a transverse carrier and a demountable stopping baffle fixed to the
frame of the working member. The body of each bucket may be open at the bottom, while

UDC: 621.879.443.6

Card 1/2

L 10214-66

ACC NR: AP5028542

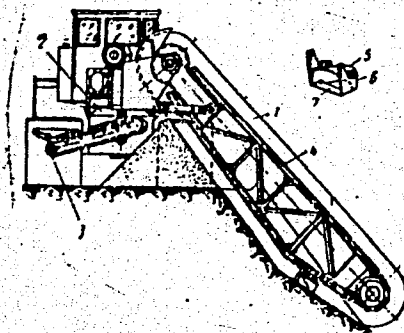


Fig. 1. 1 - Working member with numerous buckets, for transverse excavation; 2 - supporting-turning platform; 3 - carrier; 4 - frame of the working member; 5 - bucket; 6 - open body; 7 - blade.

a blade is fixed in its foremost part. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 02Mar64

Card 2/2

SAVOV, A.

"The Radio in the Georgi Dimitrov Government Printing Office." p.1
(RADIO PREGLED Vol. 7, no. 40, Sept. 1952 Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 9,
Oct. 1953, Uncl.

SAVOV, A.

BULGARIA / Farm Animals. General Problems

Q-1

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12045

Author : Savov Atanas

Inst :

Title : Comparative Laboratory Experiments Aimed at the Study of Toxicodynamics of Silaged Wild Chestnuts (Sravnitel'nyye laboratornyye opyty po izucheniyu toksikodinamiki silosovannykh dikikh kashtanov)

Orig Pub: Nauchn. tr. Vyssh. veterinarnomed. in-t, 1956, 4, 481-491 (in Bulgarian)

Abstract: The chestnuts were ensilaged both after drying and after boiling, as well as after soaking, etc. 5% infusion, prepared from the silaged wild chestnuts without previous processing, showed a lower hemolytic number, as compared with the infusion obtained from fresh and from boiled chestnuts. Nevertheless,

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SAVOV, B.

SAVOV, B. Blessed land. p. 36.

Vol. 11, no. 7, July 1956
KOOPERATIVNO ZEMEDELIE
AGRICULTURE
Sofia, Bulgaria

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

SAVOV, B.

SAVOV, B. A dam and a small hydroelectric plant. p.33.

Vol. 11, no. 10, Oct. 1956

KOOPERATIVNO ZEMEDELIE

AGRICULTURE

Sofia, Bulgaria

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

SAVOV, B.

SAVOV, B. The new cooperative farm is being built. p. 34. Vol. 11, no. 11,
Nov. 1956. KOOPERATIVNO ZEMEDELIE. Sofia, Bulgaria

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

SAVOV, B.

Svetlov's modified viscosimeter.

P. 23, (Lika Promishlenost) Vol. 6, no. 1, 1957, Sofia, Bulgaria

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

SAVOV, B.

AGRICULTURE

Periodical KOOPERATIVNO ZEMEDELIE. No. 10, Oct. 1958.

SAVOV, B. Experiences of front-rankers; 612 kilograms of maize from a decare. p. 24.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 3, March, 1959. Uncl.

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- Soviet, Zhivoizobrazheniye, Vol 16, No 2, February 1962 (12)
1. "Production in hog raising and grasses," governmentation on farm SAVOV, Chief Zoologist at the cooperative farm in the village of Koliouy (Vratska okrug); pp 3-6.
 2. "New Organization of Labor in Livestock Raising at the State Farm in Starva Zagora," VALKO KIMKOV and HRADOST SVINOV; pp 7-11.
 3. "The Advantages of Various Types of Concentrated Feeds" Todor DIMITROV, Chief Zoologist at the cooperative farm in Dulovo; pp 12-13.
 4. "Specialization and concentration on hog raising in State Farms," Velko KIMKOV of the "9. MAY 1904" (Agricultural Scientific Institute); pp 14-20.
 5. "Joint Raising Farm of the Cooperative Farms in 'Joint Raising' SAVOV," pp 21-24.
 6. "The possibilities for producing more lamb," Stefko KIMKOV of the State Livestock Breeding Improvement Institute, Plovdiv; pp 25-27.
 7. "Hay Flour--a substitute for concentrated fodder," K. KATSEVA, Senior Zoologist, Okrug People's Council, Kairali; pp 30-31.
 8. "Possibilities for strengthening the fodder base, Kostadin KIMKOV (Zoologist with the Blagovest Okrug Council) and Stefan KIMKOV (Zoologist with the Okrug Council); pp 32-34.
 9. "The Way for Using Fodder Crops," Stefan DIMITROV, Junior Scientific Collaborator at the Regional Livestock Scientific Research Institute in Starva Zagora; pp 35-40.