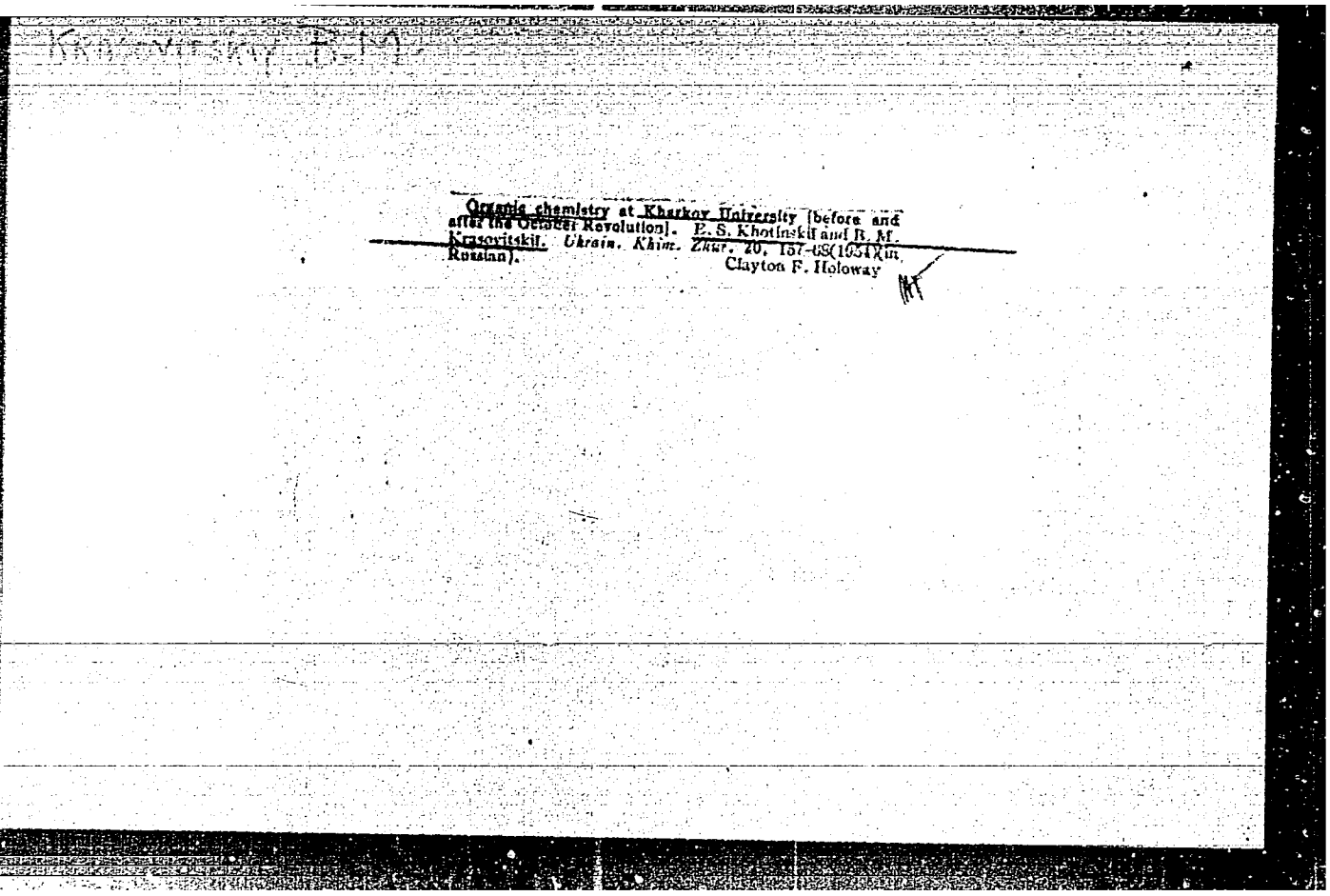
KRASOVITSKIY, B.M.; KOCHERGINA, L.A.

Use of monoacyl derivatives of o-diamines as reagents for removal of nitrites in determination of nitrates in mixtures with nitrites. Doklady Akad. Nauk S.S.S.R. 86, 1121-4 '52. (MLRA 5:11)
(CA 47 no.22:12319 '53)

1. A.M.Gor'kiy State Univ., Kharkov.

KRASOVITSKIY, B.M.; LITVINENKO, L.M.

Evgenii Semenovich Khotinskii; on the occasion of his 75th birthday.
Ukr.khim.zhur. 19 no.2:115-118 '53. (MLRA 7:4)
(Khotinskii, Evgenii Semenovich, 1877-)



Organic chemistry at Kharkov University [before and after the October Revolution]. P. S. Khotinskii and B. M. Krasovitskii. *Ukrain. Khim. Zhur.* 20, 157-68(1954)(in Russian).

Clayton F. Holoway

USSR/Chemistry - Dyes

Card : 1/1 Pub. 116 - 9/20

Authors : Krasovitskiy, B. M., Glinov, V. A., Matskevich, R. M. and Slavina, O. S.

Title : On the substantiveness of dyes - benzanilide derivatives.

Periodical : Ukr. khim. zhur. 20, Ed. 4, 392 - 395, 1954

Abstract : The effects of CO-NH grouping and amide grouping, having a non-substituted H on the substantiveness of dyes - benzanilide derivatives -, were investigated. The material, necessary for the synthesis of the dyes, is described. The sharp drop in dye selectivity, due to the absence of the H-atom at the N-amide grouping, was determined on the basis of graphs. Four references: 2-USA; 1-German and 1-Italian (1921-1949).

Institution : The A. M. Gorkiy State University and K. E. Voroshilov Scient. - Research Institute of Organ. Semi-Products and Dyes, Kharkov

Submitted : December 21, 1953

TSUKERMAN, S.V.; KRASOVITSKIY, B.M.

Condensation of phenanthrenediamine-9,10 with certain aromatic peri-di- and peri-tetracarboxylic acids. Ukr.khim.zhur. 20 no.5: 543-548 '54. (MIRA 8:1)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo, kafedra organicheskoy khimii.
(Phenanthrenediamine) (Acids, Organic)

KRASOVITSKIY, B.M.
KRASOVITSKI, B.M.

USSR

Influence of steric factors on properties of dyes containing biphenyl rings. I. Bis-azo dyes from benzidine and from its 2-mono- and 2,2'- and 3,3'-disubstituted derivatives. B. M. Krasovitskii and D. G. Pereyaslova (A. M. Gor'kii State Univ., Kharkov). *Ukrain. Khim. Zhur.* 20, 646-60(1954)(in Russian); cf. Merkel and Wiegand, *C.A.* 43, 942e.—Results of this study of the effect of various substituents on the depth of shade and substantivity of these bis-azo dyes (I) corroborate the previously made statement relating the substantivity of I with the planarity of their mols. It is postulated that in aq. solns. the mols. of dyes prepd. from benzidine and its 3,3'-disubstituted derivs. are not coplanar, but tend to become so during fixation in the fiber. I contg. in 2,2'-position F, OH, or OMe, give deep shades on the fiber, the first two being more substantive than those having bulkier substituents in *o,o'*-positions to biphenyl bond. Dyes prepd. from 2-mono- in aq. soln. give almost as deep a shade as those from 2,2'-disubstituted derivs. Dyed on cellophane, they markedly deepen the shade, thus leading to an assumption that they are planar or almost planar when on the fiber. Max. absorption spectra, mol. extinction, and substantivity are given.

Elisabeth Barabash

KRASOVITSKIY, B.M.

4
80

The process of formation of 1,8-naphthoylene-1',2'-benzimidazole and its amino derivatives. B. M. Krasovitskii and R. M. Matskevich. *J. Gen. Chem. U.S.S.R.* 24, 1993-8(1954)(Engl. translation).—See *C.A.* 49, 14743*d*.
B. M. R.

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KRASOVITSKIY, B.M.

USSR

The process of formation of 1,8-naphthoylene-1',2'-benzimidazole and its amino derivatives. B. M. Krasovitskii and Z. M. Matsegorich (State Univ., Kharkov). *Zhur. Obshchei Khim.* 24, 2147–53 (1954); cf. *C.A.* 47, 10515b.—Heating 4.7 g. 1,8-$C_{10}H_6(CO)_2O$, 3.6 g. o-$O_2NC_6H_4NH_2$, and 60 ml. EtOH to reflux, adding 25 ml. H_2O, then 7.2 g. $Na_2S_2O_4$ over 0.5 hr., heating 2 hrs., filtering, and extg. the ppt. with hot 10% Na_2CO_3 gave a residue of 4% *N-(o-aminophenyl)naphthalimide*, m. 205° (by addn. of NH_4OH to its HCl soln.). Material insol. in 3% HCl was identified as 20% *1,8-naphthoylene-1',2'-benzimidazole* [*C.A.* 7(*H*)-benzimidazo[2,1-*a*]benz[*de*]isoquinolin-7-one], m. 187–9° (from AcOH). Similar reaction with 2,1-$(O_2N)C_6H_4NH_2$ gave 20.4% *1,8-naphthoylene-5'-amino-1',2'-benzimidazole* (I), m. 245–7° (purified by ppth. with NH_4OH from HCl soln.), and 13.0% less sol. *5'-amino analog* (II), m. 275°. Some material, insol. in 6% HCl, which analyzed as $C_{24}H_{14}O_2N_2$, was not studied further. Heating 14 g. 1,8-$C_6H_4(COCl)_2$ with 11 g. 2,4-$(O_2N)_2C_6H_3NH_2$ in C_6H_6 5 hrs. on a steam bath gave 60% *N-(2,4-dinitrophenyl)naphthalimide*, yellow, m. 210°. This (5 g.) reduced with 20 g. $Na_2S_2O_4$ in 25 ml. H_2O and 50 ml. EtOH on a steam bath (5 hrs.) gave 2.8% I, m. 245–6°, along with an unstated amt. of a dark material which with BzCl in NaOH yielded a *N-(2,4-diaminophenyl)-naphthalimide di-Bz deriv.*, m. 207–9°. I and II were diazotized conventionally and coupled with 1,8,3,6-$HO(H_2N)C_6H_2(SO_3H)_2$ and 2,3,6-$HOC_6H_2(SO_3H)_3$. The resulting dyes were comparably stable to leaching and perspiration, their colors were also quite similar, and their wash-resistance was satisfactory. G. M. Kosolapoff

KRASOVITSKIY, B.M.

USSR/ Chemistry - Dyes

Card 1/1 : Pub. 22 - 18/44

Authors : Krasovitskiy, B. M., and Pereyaslova, D. G.

Title : About the effect of spatial structure on the color of benzidine bisazodyes

Periodical : Dok. AN SSSR 98/1, 71-74, Sep 1 1954

Abstract : Various 3,3'-, 2,2'- and 2-substituted benzidine dyes, were investigated to determine the effect of spatial structure on the color of these bisazo-benzidine dyes. The position of the biphenyl nucleus was replaced by different electro-donor and electro-acceptor substitutes for better estimation of the absorption maximum. Data on the non-planar structure of dyes derived from non-substituted benzidine and its 3,3'-di-substitutes with the biphenyl nucleus as a base are included. Thirteen references: 7-USSR; 3-USA; 2-German and 1-Scandinavian (1930-1953). Tables.

Institution : The A. M. Gorkiy State University, Kharkov

Presented by : Academician B. A. Kazanskiy, May 13, 1954

KRASOVITSKIY, B.M.

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61502

Author: Krasovitskiy, B. M., Pereyaslova, D. G.

Institution: None

Title: Influence of Steric Factors on Properties of Dyes Containing the Biphenyl Nucleus. 2. Investigation of Bis-Azodyes. Derivatives of Biphenyl, Fluorene, Fluorenone, Carbazole and Phenanthrene Quinone

Original Periodical: Ukr. khim. zh.,.1955, 21, No 1, 71-75

Abstract: Investigation of the influence of the structure of the third ring formed on bridging bond formation between 2,2'-positions of benzidine (I) or diphenylene (II), as concerns the color and substantive dye properties of disazo dyestuffs produced from such condensed diamines. There is presented a determination and comparison of absorption spectra and substantiveness of dyestuffs from 1,2-methylbenzidine (III), 2,7-diamino fluorene (IV), 2,7-diamino-

Card 1/2

USSR/Organic Chemistr[redacted] Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61502

Abstract: fluorenone (V), 2,7-diamino carbazole (VI), 2,7-diamino phenanthraquinone (VII) and 2,5-diamino fluorene (VIII): the azo-component is naphthal-1-sulfonic acid-[redacted] (IX), or H-acid (X). For dyes derived from X the following results were obtained (listed are the diazocomponent, λ [redacted] in water, ϵ, substantiveness in %: [redacted], 580, 55470, 67; III, 560, 39000, 57; IV, 590, 47760, 55; V, 570, 40470, 55; VI, 595, 51220, 65; VII, 560, 37500, 42; II, 515, --, 12; VIII, 535, ---, 50. It was confirmed that substantiveness of dyestuffs containing a biphenyl nucleus in the condensed system, is associated with coplanar disposition of the benzene rings. For dyes derived from IX (listing diazocomponent and λ_{max}): I, 540; II, 505; IV, 550; V, 530; VI, 555; VIII, 520. Communication I, see Referat Zhur - Khimiya, 1956, 4914.

Card 2/2

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 866

Author: Krasovitskiy, B. M., Pereyaslova, D. G., Kovalenko, O. D., and Sherbakova, L. I.

Institution: None

Title: Effect of Steric Factors on the Properties of Dyes Containing the Biphenyl Nucleus. III. Investigation of Disazo Dyes -- Derivatives of Biphenol, Phenanthrene, Phenazone, and Phenanthridone

Original Periodical: Ukr. khim. zh., 1955, Vol 21, No 5, 614-618

Abstract: A comparative study has been made of the properties of disazo dyes (DAD) obtained from 2,7-diaminophenanthrene (I), 2,7-diaminophenazone (II), and 2,7-diaminophenanthridone (III) as the disazo constituent. The products obtained were compared with previously investigated DAD produced from benzidine (IV), 2,7-diaminofluorene (V), 2,7-diaminophenanthraquinone (VI), 2,7-diaminodiphenyl ketone, and other 2,7-diamines (see Communication II, Referat Zhur - Khimiya, 1956, 61502).

Card 1/3

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 866

Abstract: I was prepared in 81% yield by the heating (5 hours at 225-230°) of 2,7-dibromophenanthreme with concentrated HNO_3 in the presence of Cu_2Cl_2 and powdered Cu in a sealed tube. II was prepared by the reduction of 2,2'-dinitrobenzidine with Na-Hg, while III was prepared by the saponification of the diacetyl derivative with 0.5 N KOH (refluxing 4 hours). The DAD were obtained by coupling the disazotized I-III with H-acid (VII), 1-naphthol-4-sulfonic acid (VIII), or 1-amino-8-naphthol-2,4-disulfonic acid (IX) in alkaline medium. DAD obtained from I or II with VII (I → VII, λ_{max} 565 mμ, directness 55%) are close in color to DAD obtained from VI → VII and are considerably more intense than those from IV or V with VII; this is apparently due to the electron-acceptor properties of the ethylenic bridge in I and of the azo-group in II. In directness the dyes from I and II occupy an intermediate position between those from IV and VI with VII. The transition from the DAD from II to those from 3,3'-diaminoazobenzene (X) is characterized by the absence of diphenyl bonds, a sharp decrease in directness, and an intensification in the color (the composition of the dye, λ_{max} in mμ, ε_{max}, and directness in percent are indicated in that order): II → VII, 560, 40,000,

Card 2/3

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 866

Abstract: 54; II → VIII, λ_{max} 525 mμ; X → VII, 525, 45,000, 31; X → VIII, λ_{max} 490 mμ. A comparison of DAD from III with the corresponding DAD from 3,3'-(XI) and 4,4'-diaminobenzanilides (XII) and from IV shows that the introduction of the CONH-group has no marked effect on the directness, whereas the appearance of the biphenyl bond sharply increases the directness (the composition of the dye, λ_{max} in mμ, and directness in percent are indicated in that order): IV → IX, 575, 59; XI → VII, 520, 13; XI → X, 520, 9; XI → VIII, λ_{max} 490 mμ; XII → VII, 550, 63; XII → IX, 550, 56; II → VII, 570, 61; III → IX, 575, 54; III → VIII, λ_{max} 540 mμ. Trisazo dyes derived from 2,4,4'-triaminobiphenyl (VIII) [sic] occupy an intermediate position in color and directness between the DAD from IV and from biphenyl (as above): XIII → VII, 560, 39; XIII → VIII, 520, --.

Card 3/3

KRASOVITSKIY, B.M.

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Analysis of direct and acid azo-dyes. B. M. Krasovitskii, B. I. Ostrovskaya and D. G. Pereyaslova (*Zhur. anal. Khim.*, 1956, II, 216—218).—The benzidine method is modified by introduction of potentiometric titration with $NaNO_2$ of the excess benzidine. The sample (0·05—0·7 g.) of dye is dissolved in 15—30 ml. of water and the solution at 50° is treated with twice the theoretical amount of 0·1 N-benzidine hydrochloride (I). The ppted. salt is filtered off and the filtrate diluted to 100 ml. An aliquot is potentiometrically titrated with 0·01 N-$NaNO_2$, using KBr as a catalyst. The method is applicable to determination of all sulpho-dyes that give water-insol. benzidine salts. Titration of excess I with NaOH in the presence of phenolphthalein is unsatisfactory because of the colour of the solution.

G. S. SMITH.

KRASOVITSKIY, B.M.; VAYL', Ye.I.; SAVCHENKO, O.M.

Interaction of butyl alcohol with certain aromatic amines.
Ukr.khim.zhur. 22 no.3:330-335 '56. (MIRA 9:9)

1.Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo.
(Butyl alcohol) (Amines)

KRASOVITSKIY, B.M.

Action of steric factors on the properties of dyes containing the biphenyl nucleus. V. Color and substantivity of disazo dyes from 2,6-dimethylbenzidine and naphthidine. B. M. Krasovitskii and T. A. Serova (A. M. Gorkii State Univ., Kharkov). *Ukrain. Khim. Zhur.* 22, 369-72(1956) (in Russian).—The following are reported (dye, $\lambda_{max.}$ in mμ in H_2O (*W*), on cellophane (*C*), and the substantivity (*S*) in %, resp., given): [2,4-Me(RN$_2$)C$_6$H$_3$]$_2$ (I), 650, 565, 24; 2,4-Me(RN$_2$)C$_6$H$_3$C$_6$H$_3$N$_2$R, 660, 605, 57; 2,6,4-Me$_2$(RN$_2$)-C$_6$H$_2$C$_6$H$_3$N$_2$R, 585, 585, 12; [4-RN$_2$C$_{10}$H$_6$]$_2$ (II), 595, 625, 31; 1-RN$_2$C$_{10}$H$_7$, 640, 650, —. Low values of *S* are due to the planes not being coplanar and so not fitting the carbohydrate structure well. The difference between *W* and *C* is interpreted as due to the rings becoming more coplanar in assocn. with the fabric. Small differences result from structures that are so sterically hindered that they can not alter much. I is more hindered than is II. A low value for *S* is a more sensitive index of non-coplanarity than is the *W-C* difference. John Howe Scott

KRASOVITSKIY, B.M.

Influence of steric factors on the properties of dyes containing the biphenyl nucleus. VI. Bisazo dyes from *p*-aminobenzoyl derivatives of diamines containing the biphenyl nucleus. B. M. Krasovitskiĭ, B. I. Ostrovskaya, and R. M. Matskevich (A. M. Gor'kiĭ State Univ., Kharkov). *Ukrain. Khim. Zhur.* 22, 754–9(1956)(in Russian); cf. *C.A.* 51, 7216e.—Substituted benzidines and *p*-$O_2NC_6H_4COCl$ form diacyl derivs. (I), reduced by Na_2S_2 or $Na_2S_2O_4$ to the di-*p*-$H_2NC_6H_4CO$ derivs. (II), which on diazotization and coupling form bisazo dyes (III). The following are reported (substituents, m.ps. of I and II, resp., substantivity on cotton, and λ in mμ of III given): H, —, —, 70%, 532; 3,3'-Me_2, —, 308–10°, 78%, 532; 3,3'-$(MeO)_2$, 325°, (HCl salt) 220°, 71%, 532; 2,2'-CH_2, 286–8°, 301–2°, 71%, 530; 2,2'-Me_2, 295°, 178°, 74%, 536; 2,2'-Cl_2, 328–30°, 360°, 78%, 540°; 2,2'-F_2, above 350°, above 350°, 83%, 538. The corresponding values for the I, II, and III from naphthidine are 335–6°, above 350°, 68%, and 530. The substantivity and λ for $RN_2C_6H_4CONHC_6H_4N_2R$ are by comparison 63% and 528 mμ. In these longer chains the interference between the 2,2'-positions of the benzidine nucleus has less effect on the color or the substantivity.

John Howe Scott

KRASOVITSKIY, B. M.

2

Effect of space factors on the properties of dyes containing the biphenylyl radical. IV. Study of monoazo dyes. B. M. Krasovitskii and T. A. Serova (A. M. Gor'kii State Univ., Kharkov). *Ukrain. Khim. Zhur.* 22, 70–5(1956)(in Russian); cf. *C.A.* 50, 9021d.—The effect of substituent X (X stands for NO_2, Br, CH_3, CH_3O, CH_3S, HO, H_2N) on the dyeing properties in mols. of the type $XC_6H_4C_6H_4N{:}NR$ was found to be less pronounced than in the corresponding dyes of the $XC_6H_4N{:}NR$ structure. Introduction of methyl groups into 2,2'-positions markedly decreased the effect of the substituent in the 4' position along the conjugated double bonds. This prevents the plane adherence of the dyeing mol. on the fiber resulting in an increased dyeability.

A. P. Kotloby

KRASOVITSKIY, B.M.; KHOTINSKAYA, Ye.Ye.

Condensation of naphthalic anhydride and its derivatives with aromatic amines. Part 3: Azo dyes derived from phenylimides of naphthalic acid. Uch.zap. KHGU 71:145-154 '56. (MLRA 10:8)
(Azo dyes)

KHOTINSKIY, Ye.S.; MATSKEVICH, R.M.; KRASOVITSKIY, P.I.

Condensation of naphthalic anhydride and its derivatives with aromatic amines. Part 4: Azo dyes from phenylimides of phthalic, naphthalic, 4-nitronaphthalic, and 4 aminonaphthalic acids. Uch. zap. KHGU 71:155-163 '56. (MLRA 10:8)

(Azo dyes)

KRASOVITSKIY, B.M.; KHOTINSKAYA, Ye.Ye.; [illegible]; ALEKICH, Ye.F.

Yellow pigments from aminophenylimides of naphthalic acid. Uch.zap. KHGU 71:253-25- '56. (MLRA 10:8)
(Pigments) (Naphthalic acid)

KRASOVITSKIY, B.N.; RUDNITSKAYA, Ye.A.; MATSKEVICH, R.M.

Vat dyeing method for methyl methacrylate polymers. Uch.zap. LHGU 71:255 '56. (MLRA 10:8)
(Dyes and dyeing) (Methacrylic acid)

MATSKEVICH, R.I.; KRUKOVITSKIY, B.I.; KOLESNIK, A.S.

Acid azo dyes from meta-aminophenylimide of naphthalic acid.
Uch.zap. KHGU 71:257-259 '56. (MLRA 10:8)
(Azo dyes) (Naphthlic acid)

KRASOVITSKIY, B.M.

Relation between color and substantivity of dyes; derivatives of benzanilide. B. M. Krasovitskii, B. I. Ostrovskaya, and D. O. Pereyaslova. *Proc. Acad. Sci. U.S.S.R., Sect. Chem.* 104, 18-16(1956)(English translation).—See *CA*. 50, 9021h.

Chem

3

B.M.R.

Krasovitskiy, B.M.

USSR/ Chemistry - Dyes

Card 1/2 Pub. 22 - 19/43

Authors : Krasovitskiy, B. M.; Ostrovskaya, B. I.; and Pereyaslova, D. G.

Title : Relation between structure, color and substantiveness of benzanilide dyes

Periodical : Dok. AN SSSR 106/1, 72-75, Jan 1, 1956

Abstract : The relation between the structure, color and substantiveness of benzanilide dyes was investigated. The increase in the color and drop in substantiveness of these dyes due to the absence of conjugated double bond chains in their molecules, are discussed. The possibility that the atructure of the dyes is less favorable for the formation of hydrogen bonds between the auxochromes of the dyes and cellulose is analyzed. It

Institution : Kharkov State University im. A. M. Gorkiy

Presented by: Academician B. A. Kazanskiy, July 15, 1955

Card 2/2 Pub. 22 - 19/43

Periodical : Dok. AN SSSR 106/1, 72-75, Jan 1, 1956

Abstract : was found that the reaction between benzanilide dyes results in formation of hydrogen bonds not only between cellulose and auxochrome but also between cellulose and the amide group of the dye. The effect of the axo-group on the substantiveness of the dye is explained. Nine references: 4 USSR, 3 Germ., 1 USA and 1 French (1914-1954). Tables.

KRASOVITSKIY, B.M.

Relation between the structure and properties of azo dyes containing amide groups. B. M. Krasovitskii, B. M. Matskevich, and T. M. Bibishova. *Proc. Acad. Sci. U.S.S.R., Sect. Chem.* 108, 215–17(1956)(English transla- tion).—See *C.A.* 50, 14231e. B.M.K.

KRASOVITSKII, B.M.

Distr: 4E2c(j)

Influence of steric factors on the properties of dyes containing the biphenyl nucleus. VIII. Bisazo dyes from m- and p-aminobenzoyl derivatives of benzidine and 3,3'-dimethylbenzidine. B. M. Krasovitskii, B. I. Ostrovskaya, and V. B. Smelyakova (A. M. Gor'kii State Univ., Kharkov). *Ukrain. Khim. Zhur.* 23, 496-500(1957)(in Russian); cf. *C.A.* 51, 8702b.—Dyes of the types ($RN_2R'CONH$)$_2R''$ (I) and $RN_2R'CONHR''N_2R$ (II) are reported: (R', R'', λ in mμ, and substantivity in % given). Type I: *p*-C_6H_4, III, 520, 70; *m*-C_6H_4, III, 520, 62; *p*-

IV, 580, 34. Type II: [illegible] C_6H_4, 540, 97; 540, 82; m-C_6H_4, III, 590, 74; m-C_6H_4, p-C_6H_4 [illegible] m-C_6H_4, m-C_6H_4, 539, 18; p-C_6H_4, IV, 590, 70. Change from p-C_6H_4 to m-C_6H_4 produces a hypsochromic shift as does that from III to IV in type II where the azo group is directly attached to the biphenyl nucleus. If the azo group is directly bound to III the absorption is at longer wave lengths than when it is sepd. by an amide linkage. Change from III to IV in type I is bathochromic. The m.ps. of the following are reported (R′, R″, and m.p. given): O_2N-R′R″NO_2: p-C_6H_4CONH (V), III, 287°; m-C_6H_4CONH (VI), III, 257°. V, IV, 167°. The m.ps. of the following (O_2NR')$_2$R″ are: VI, III, 357°; VI, IV, 223°. $H_2NR'R''$-NH_2: V, III, 299°; VI, III, 190°; V, IV, — (HCl salt, sinters 147°). (H_2NR')$_2$R″: VI, III, — (HCl salt, decomp. 303°); VI, IV, 178°. IX. Influence of steric structure on the

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B. M. KRASOVITSKII, B. I. OSTROVSKAYA ...

color of monoazo dyes —; derivatives of biphenyl, fluorene, and binaphthyl. B. M. Krasovitskiĭ, L. M. Litvinenko, and T. V. Scrova. *Ibid.* 501–4.—The λ of XRN:R' (R' = azo component) are as follows: (X and R given): 520 mμ, H or O_2N, 1,4-$C_6H_4C_6H_4$-1,4 (I); 520 mμ, H, I; 510 mμ, H or O_2N, 2,7-fluorylene; 510 mμ, H or O_2N, 3,3'-dimethyl-4,4'-biphenylene; 508 mμ, H or O_2N, 4,4'-biphenylene; 498 mμ, H or O_2N, 2,2'-dimethyl-4,4'-biphenylene; 498 mμ, Me, o-C_6H_4; 496 mμ, O_2N, p-C_6H_4; 494 mμ, Me, m-C_6H_4; 490 mμ, H, C_6H_4. A p-O_2N group is bathochromic in derivs. of $PhNH_2$, but this effect does not carry through 2 rings. The more planar derivs. of Ph_2 and fluorene have greater λ.

John Howe Scott

KRASOVITSKIY, B.M.; PEREYASLOVA, D.G.; SEROVA, T.A.

Effect of steric factors on properties of dyes containing the biphenyl nucleus. Part 10: Absorption maxima of some azo dyes. Uch. zap. KHGU 82:149-152 '57. (MIRA 12:9)
(Azo dyes)(Absorption of light)

KRASOVITSKIY, B.M.; LITVINENKO, L.M.; SEROVA, T.A.

Effect of space factors on the properties of dyes containing a biphenyl nucleus. Part 9: Effect of spatial structure on the color of monoazodyes, derivatives of biphenyl, fluorene, and binaphtyl. Ukr.khim.zhur. 23 no.4:501-504 '57. (MIRA 10:10)

1.Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
(Streochemistry) (Azo dyes)

KRASOVITSKIY, B.M.

Investigation of the perylene di- and tetra carboxylic acid series.
Uch. zap. KHGU 95:231-248 '57. (MIRA 12:10)
(Acids, Organic) (Dyes and dyeing)

AUTHORS: Krasovitskiy, B. M., Moryganov, P. V., Titarenko, N. I., Mel'nikov, B. N. 20-3-21/46

TITLE: A Comparative Study of the Affinity of Direct Azodyes - of the Diphenyl and p - Terphenyl Derivatives - to Cellulose Cotton Fibre (Sravnitel'noye issledovaniye srodstva pryamykh azokrasiteley - proizvodnykh difenila i para-terfenila - k tsellyuloznomu khlopkovomu voloknu).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 3, pp. 425-428 (USSR)

ABSTRACT: The question of the relation between the structure of the azo dyes and their affinity to cellulose fibre, attracts since long the attention of many researchers. To enable a dye to express its substantive properties, the presence of a long chain of conjugated double bonds in its molecules is required. Then the molecules become unsaturated and can easily be fixed on the celluiose fibre. An essential condition of the dye is that the substantive properties are correlated to a large extent with the planear structure of their molecules, or respectively with the assumption of such a structure in the case of an interaction with the cellulose fibre. An essential condition of the properties

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is, after all, the capacity of forming at least two hydrogen bonds between the molecules of the dye and the hydroxil groups of the cellulose. In spite of antithetical assertions, Robinson has proved that distances between the groups of molecules of dyes able to form hydrogen bonds, must not be approximated to the identity period of the cellulose (= 10.3 Å). Hydrogen bonds may occur at almost every place of the cellulose chain. After quoting further references the authors state that the investigation of the p-terphenyl derivatives allows to trace a successive agglomeration of benzene-rings. In this way the influence of the chain prolongation of the conjugated double bonds on the affinity of dyes to the cellulose fibre can be traced too. Further it can be stated in his context how far the mutual position of the groups able to form hydrogen bonds with cellulose, and the distance between them is of importance. Since this method was available to the authors, they compared some benzidine dyes with corresponding p-terphenyl derivatives. The azo-component to which very little attention is paid,

together with its influence on the activity of the dyes, should be investigated simultaneously. Properties of benzidine dyes with 8 various azo components and of p - terphenyl derivatives with 3 azo-components were investigated. The data in table 1 show that the introduction of an additional benzene-ring in the molecule of the dye increases in all cases the affinity of the dyes to cotton cellulose fibre. In the case of dyes with the azo components Chicago SS and E -acids the affinity grows more at 80° than at 100°. This difference can be well explained by a greater tendency to aggregation in the case of decline of temperature with these dyes. The affinity is thus correlated also with the great entropy changes at the transition of an individual dye molecule into aggregates since the fibre is able to absorb also the later ones. In the coloring process this phenomenon is presented by the fact that the fibre is able to absorb a larger quantity of dyes than provided by the nature of the forces acting between the dye and the fibre. Thus the prolongation of the

A Comparative Study of the Affinity of Direct Azodyes - of the Diphenyl and p - Terphenyl Derivatives - to Cellulose Cotton Fibre.

chain of the conjugated double bonds lead to an enlargement of the hydrophobic surface and to an intensification of polarization of the molecules of the dyes. By this, the affinity to the cellulose fibre increases regardless of the fact that the distance between the groups forming hydrogen compositions with cellulose, does not agree with the identity period of the cellulose. Concluding, further comparisons between the benzidine dyes with various azo components are quoted and conjectures about differences between them enounced. There are 1 table, and 21 references, 10 of which are Slavic.

ASSOCIATION: Khar'kov State University, imeni A. M. Gor'kogo. Ivanovo Chemical Technological Institute (Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo. Ivanovskiy khimiko-tekhnologicheskiy institut).

PRESENTED: May 15, 1957, by B. A. Kazanskiy, Academician

SUBMITTED: May 14, 1957.

AVAILABLE: Library of Congress

KRASOVITSKIY, B.M.; TARAKHNO, Z.N.; LEVCHENKO, N.F.

Structure of direct azo dyes, the derivatives of diphenylamine.
Ukr. khim. zhur. 24 no.3:358-363 '58. (MIRA 11:9)

1.Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
(Azo dyes) (Diphenylamine)

KRASOVITSKIY, B.M.; TITARENKO, N.I.

Effect of space factor on the properties of dyes containing a biphenyl ring. Part 11: Comparative investigation of azo dyes, the derivatives of biphenyl, n-terphenyl and n-quaterphenyl. Ukr. khim. zhur. 24 no.4:481-486 '58. (MIRA 11:10)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
(Azo dyes)

KRASOVITSKIY, B.M.; MATSKEVICH, R.M.; RADOCHINA, N.A.; RYAZANOVA, K.P.

Direct azo dyes, derivatives of 1,8-naphthoylene-1',2'-benzimidazole. Zhur.ob.khim. 28 no.9:2485-2489 S '58. (MIRA 11:11)

1. Khar'kovskiy gosudarstvennyy universitet.
(Benzimidazole) (Azo dyes)

5(3)

SOV/63-4-2-32/39

AUTHORS: Krasovitskiy, B.M., Pirogova, I.N., Tsarenko, S.V.

TITLE: Vat Dyes Made From Pyrenic Acid

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 2, pp 282-283 (USSR)

ABSTRACT: The vat dyes were prepared by the condensation of pyrenic acid with ortho-phenylene-diamine and 1,8-naphthylene-diamine. The separation of the dyes into cis- and trans-isomers is not possible, which shows their homogeneity. One dye is an orange powder soluble in concentrated sulfuric acid, pyridine and aniline, the other a dark-green powder soluble in the same media.
There are 2 non-Soviet references.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet imeni A.M. Gor'kogo (Khar'kov State University imeni A.M. Gor'kiy)

SUBMITTED: September 15, 1958

Card 1/1

5(3)

SOV/63-4-2-36/39

AUTHORS: Blinov, V.A., Krasovitskiy, B.M., Khotinskaya, Ye.Ye.

TITLE: On the Light Resistance of Some Monoazo-Dyes Which are Derivatives of Benzanilide and I-Acid

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 2, pp 285-286 (USSR)

ABSTRACT: The tested azo-dyes were used in dyeing cellophane. The azo-component of the dyes was I-acid. The resistance to light and light-weather was studied in the usual way employed by colorists. All dyes showed considerable resistance to light. In the light-weather test the dyes without substitutes in the benzanilide grouping had the lowest resistance. The dimethylamino-group and the carbethoxy-group increase the resistance. The introduction of a second benzene ring increases also the light resistance of the dye.
There is 1 table and 1 Soviet reference.

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SOV/63-4-2-36/39

On the Light Resistance of Some Monoazo-Dyes Which are Derivatives of Benzanilide and I-Acid

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet imeni A.M. Gor'kogo (Khar'kov State University imeni A.M. Gor'kiy)

SUBMITTED: September 15, 1958

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(3)

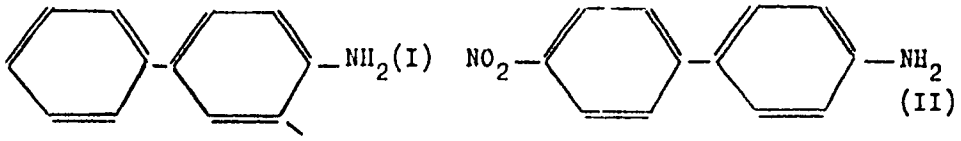
SOV/79-29-8-62/81

AUTHORS: Litvinenko, L. M., Levchenko, N. F., Krasovitskiy, B. M., Titarenko, N. I.

TITLE: Spatial Structure and Reactivity. XIV. On the Interaction of the Atom Groups Separated by One, Two, or Three Benzene Nuclei According to the Investigation Data of the Reaction Kinetics of Aromatic Amines With Picrylchloride

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2724-2729 (USSR)

ABSTRACT: Recently Litvinenko and collaborators succeeded in determining, during the investigation of the acylation kinetics of 4-amino-biphenyl (I) and 4-amino-4-nitrobiphenyl (II) as well as aniline and p-nitroaniline, that the effect of the nitro group upon the reactivity of the aromatic amino group in the molecular system of biphenyl is many hundreds of times weaker than it is in the benzene system (Ref 1).



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Spatial Structure and Reactivity. XIV. On the Interaction of the Atom Groups Separated by One, Two, or Three Benzene Nuclei According to the Investigation Data of the Reaction Kinetics of Aromatic Amines With Picrylchloride

SOV/79-29-8-62/81

The ratio of the rate constants for the reactions of the amino and aminonitro derivatives may serve the quantitative evaluation of this effect, e.g. $\frac{K_I}{K_{II}}$ (factor f)(Refs 2-5). In the present paper the authors dealt with the problem of how the effect of the NO_2 group upon the reactivity of the NH_2 group occurs when the same kinetic method is used in the case that these groups are separated from one another by a system of three benzene nuclei. The reaction of the aromatic amines with picryl chloride in a benzene solution was taken as an example, since it proved to be highly sensitive to structural changes in the amine molecule (Ref 6) and can therefore be successfully used for the quantitative characterization of the influence of the slightest differences in the structures of the named compounds upon the reactivity of the aromatically bound amino group. On the basis

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Spatial Structure and Reactivity. XIV. On the Interaction of the Atom Groups Separated by One, Two, or Three Benzene Nuclei According to the Investigation Data of the Reaction Kinetics of Aromatic Amines With Picrylchloride

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of these considerations the kinetics of the reaction of compounds (III) and (IV) with picryl chloride in benzene was investigated and compared to the data of the kinetics previously obtained for the reaction of picryl chloride with aniline-4-amino-biphenyl and 4-amino-4-nitrobiphenyl (Ref 7). It was shown that the nitro group has a very strong effect upon the reactivity of the amino group which occupies the para-position in the same benzene nucleus. This effect is reduced in the binuclear molecular system of biphenyl and disappears almost completely in the system of n-triphenyl. These phenomena are due to a specific structural spatial arrangement. There are 4 tables and 16 references, 14 of which are Soviet.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet (Khar'kov State University)

SUBMITTED: July 10, 1958

Card 3/3

5(3) SOV/80-3[illegible]-3-35/4[illegible]

AUTHORS: Pokhunikhin, M.S., Kr[illegible]ovit[illegible], [illegible], Matskevich, [illegible].M., Blinov, V.A., Vi[illegible]khina, [illegible].Ya.

TITLE: Linear Di[illegible]-Azo Dyes Which are Derivati[illegible] of Oxadiazol and Thiodiazol ([illegible]nye disazokrasiteli - proi[illegible]vodnye [illegible]diazola i tiodiazola)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 3, pp 664-667 (USSR)

ABSTRACT: Linear [illegible] dyes containing heterocyclic nuclei connected with the chain by conjugated double bonds are investigated here. The auxochromes are also connected by conjugated double bonds to the chain. An oxadiazol and thiodiazol ring is introduced to the same chain. The dyes prepared are: 2,5-bis-(4-nitrophenyl)-1,3,4-oxadiazol, 2,5-bis-(4-aminophenyl)-1,3,4-oxadiazol, 2,5-bis-(4-nitrophenyl)-1,3,4-thiodiazol, and 2,5-bis-(4-aminophenyl)-1,3,4-thiodiazol. The dyes are resistant to water, soap solution and sweat.

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SOV/80-32-3-35/43

Linear Dis-[illegible] Dyes Which are Derivatives of Oxadiazol and Thiodiazol

There are 17 references, 8 of which are Soviet, 6 German, 2 French and 1 Italian.

SUBMITTED: July 26, 1957

Card 2/2

KRASOVITSKIY, B. M., Doc Chem Sci -- (diss) "Research into a number of azo-dyes, derivatives of bis-diazotized amines." Khar'kov, 1960. 26 pp; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, Khar'kov Order of Labor Red Banner State Univ im A. M. Gor'kiy); 200 copies; free; list of author's work on pp 27-28; (KL, 21-60, 118)

MEL'NIKOV, B.N.; KRASOVITSKIY, B.M.; MORYGANOV, P.V.

Relationship of the structure of the direct dye series, the size of their particles in solution, and the speed of diffusion in cellulose fibers. Izv.vys.ucheb.zav.; tekh. tekst.prom. no.1:110-120 '60. (MIRA 13:6)

1. Ivanovskiy khimiko-tekhnologicheskiy institut Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo.
(Dyes and dyeing--Cellulose)

MEL'NIKOV, B.N.; KRASNOVITSKIY, B.M.; MORYGANOV, P.V.; ZAKHAROVA, T.D.

Relation between the structure of azo dyes (oxa- and thiodiazol derivatives) and the rate of their diffusion in copper rayon fibers. Izv.vys.ucheb.zav.; tekh.tekst.prom. no.6:120-124 '60. (MIRA 14:1)

1. Ivanovskiy khimiko-tekhnologicheskiy institut i Khar'kovskiy gosudarstvennyy universitet imeni A.M. Gor'kogo.
(Dyes and dyeing--Rayon) (Azo dyes)

S/073/60/026/001/011/021
B004/B054

AUTHORS: Krasovitskiy, B. M., Pereyaslova, D. G., and Titarenko, N.I.

TITLE: Effect of Steric Factors on Properties of Dyes Containing a Biphenyl Ring. XIV. Comparative Study of Color and Affinity to Cotton of Some Azo Dyes Which Are Derivatives of Biphenyl, Dibenzyl, Trans-stilbene, Tolan, and Azobenzene

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, 1960, Vol. 26, No. 1, pp. 73-77

TEXT: The authors studied the effect of conjugated double bonds on the affinity of dyes to cotton. Аш(Ash) acid in alkaline medium was used as azo component [Abstracter's note: This acid is not defined in the present paper]. The following were used as diazo components: benzidine (I); 4,4'-diamino-dibenzyl (V); 4,4'-diamino-trans-stilbene (VI); 4,4'-diamino-tolan (VII); 4,4'-diamino-azobenzene (VIII); 4,4'-diamino-p-terphenyl (IX); and 3,3'-diamino-azobenzene (X). The absorption spectra were taken by an СФ-2М(SF-2M) spectrophotometer. The affinity to cotton was determined at 80° and 100°C by measuring the decrease in dye concentration of the solution

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Effect of Steric Factors on Properties of Dyes Containing a Biphenyl Ring. XIV. Comparative Study of Color and Affinity to Cotton of Some Azo Dyes Which Are Derivatives of Biphenyl, Dibenzyl, Trans-stilbene, Tolan, and Azobenzene

S/073/60/026/001/011/021
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by an ФЭК-М (FEK-M) photocolorimeter. The following data are given in Tables 1-3:

Diazo component	λ_{max}, mμ	Affinity kcal/mole 80°C	100°C
I	595	4.45	3.73
V	556	2.97	1.45
VI	600	5.75	4.70
VII	580	4.83	3.97
VIII	609	5.12	4.19
IX	566	6.00	5.26
X	540	3.18	2.74

In all compounds in which the conjunction of double bonds is interrupted (V, X), the affinity to cotton decreases. A replacement of the ethylene bridge of VI by the acetylene bridge of VII also reduces the affinity. Z. V. Oloynikova assisted in the experiments. There are 5 tables and 26 references: 12 Soviet, 6 British, 1 French, 4 German, 1 Italian, and 1 Swiss.

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Effect of Steric Factors on Properties of Dyes Containing a Biphenyl Ring. XIV. Comparative Study of Color and Affinity to Cotton of Some Azo Dyes Which Are Derivatives of Biphenyl, Dibenzyl, Trans-stilbene, Tolan, and Azobenzene

S/073/60/026/001/011/021
B004/B054

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo (Khar'kov State University imeni A. M. Gor'kiy); Khar'kovskiy institut Sovetskoy torgovli (Khar'kov Institute of Soviet Commerce)

SUBMITTED: July 9, 1958

Card 3/3

YAGUPOL'SKIY, L.M.; KRASOVITSKIY, B.M.; BLINOV, V.A.; SIDNEVA, K.M.; PEREYASLOVA, D.G.

Properties of some fluorine-containing azo dyes. Zhur.prikl. khim. 33 no.7:389-392 Jl '60. (MIRA 13:7)

1. Institut organicheskoy khimii AN USSR. Khar'kovskiy gosudarstvennyy universitet. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley.
(Azo dyes)

KRASOVITSKIY, B.M.; MATSKEVICH, R.M.; DOKUNIKHIN, N.S.; TRUBITSYNA, N.A.

Direct disazo dyes derived from oxadiazole and thiodiazole. Part 2: Comparative study of isomeric disazo dyes derived from thiodiazole. Zhur.ob.khim. 30 no.8:2608-2613 Ag '60. (MIRA 13:8)

1. Khar'kovskiy gosudarstvennyy universitet i Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley.
(Dyes and dyeing)
(Thiadiazole)

KRASOVITSKIY, B.M.; PEREYASLOVA, D.G.

Synthesis of 2, 2'-substituted benzidine. Zhur.VKHO 6 no.4:466 '61.
(MIRA 14:7)

1. Khar'kovskiy gosudarstvennyy universitet.
(Benzidine)

KRASOVITSKIY, B.M.; SMELYAKOVA, V.B.

Partial reduction of 4, 4'-dinitrobenzanilide. Zhur.VKHO 6 no.5:588 '61. (MIRA 14:10)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo.
(Benzanilide)

KRASOVITSKIY, B.M.; LITVINENKO, L.M.; TITARENKO, N.I.; LEVCHENKO, V.F.

Influence of steric factors on the properties of dyes containing a biphenyl nucleus. Part 15: Comparative study of the color of monoazo dyes, biphenyl derivatives, and certain dyes containing various bridge groups in the diazo constituent. Ukr. khim. zhur. 27 no. 1:94-97 '61. (MIRA 14:2)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
(Dyes and dyeing)

KRASOVITSKIY, B.M.; OSTROVSKAYA, B.I.; TITARENKO, N.I.

Effect of spatial factors on the properties of dyes containing a biphenyl nucleus. Part 16: Monoazo dyes, dirivatives of benzene, biphenyl, and *p*-terphenyl, containing amide groups. Ukr. khim. zhur. 27 no.2:226-230 '61. (MIRA 14:3)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
(Azo dyes)

KRASOVITSKIY, B.M.; TITARENKO, N.I.

Effect of spatial factors on the properties of dyes containing a biphenyl nucleus. Part 17: Monoazo dyes from some 4''-substituted derivatives of 4-amino -*p*-terphenyl. Ukr. khim. zhur. 27 no.2:230-234 '61. (MIRA 14:3)

1. Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo
(Azo dyes)

KRASOVITSKIY, B.M.; TITARENKO, N.I.

Effect of steric factors on the properties of dyes containing a biphenyl ring. Part 18: Asymmetric bisazo dyes from 4,4 -diamino-p-terphenyl. Ukr.khim.zhur. 27 no.3:390-395 '61. (MIRA 14:11)

1. Khar'kovskiy gosudarstvenyy universitet im. A.M.Gor'kogo.
(Azo dyes)
(Terphenyl)

KRASOVITSKIY, B.M.; SMELYAKOVA, V.B.

Relationship between the structure and properties of dyes, derivatives of benzanilide. Part 3: Disazo dyes from 4,4'-diamino derivatives of phenylacet anilide and of benzoic benzylamide. Zhur.ob.khim. 31 no.7:2256-2259 Jl '61. (MIRA 14:7)

1. Khar'kovskiy gosudarstvennyy iniversitet imeni A.M. Gor'kogo.
(Benzanilide) (Azo dyes) (Acetanilide)

KRASOVITSKIY, B.M.; MATSKEVICH, R.M.; MAL'TSEVA, N.I.

Direct disazo dyes, derivatives of oxadiazole and thiodiazole. Part 3: X Comparative study of isomeric disazo dyes, derivatives of 2,5-diphenyl-1,3,4-oxadiazole. Zhur.ob.khim. 31 no.7:2259-2263 Jl '61. (MIRA 14:7)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M. Gor'kogo.
(Azo dyes) (Oxadiazole)

KRASOVITSKIY, B.M.; KRAVCHENKO, E.F.

Benzoylene-, naphthoylenebenzimidazoles, and perinones and their use in bulk dyeing of capron. Zhur.prikl.khim. 35 Jl '62. (MIRA 15:8)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo.
(Nylon--Dyeing)

KRASOVITSKIY, B.M.; PLAKIDIN, V.L.; KHOTINSKAYA, Ye.Ye.; KRAVCHENKO, E.F.; GOLOMB, L.M.; ROMANOVA, M.G.

Vat dyes, derivatives of 1,8-naphthoylene-1',2'-benzimidazole-4,5-dicarboxylic acid imide. Zhur.prikl.khim. 36 no.6:1330-1335 Je '63. (MIRA 16:8)

1. Khar'kovskiy gosudarstvennyy universitet i Rubezhanskiy filial Nauchno-issledovatel'skogo instituta organicheskikh poluproduktov i krasiteley.
(Dyes and dyeing) (Benzimidazolecarboxylic acid)

KRASOVITSKIY, B.M.; KRAVCHENKO, E.F.; SHEVCHENKO, E.A.

Aceperinones, dyes for capron dyeing in the mass. Zhur.prikl.khim. 36 no.6:1370-1372 Je '63. (MIRA 16:8)
(Dyes and dyeing--Nylon)

KRASOVSKIY, B.M.

Using the theory of probabilities in calculating the internal gas pipelines of residences. Gaz. prom. 9 no.6:25-27 '64.
(MIRA 17:8)

L 12908-65 EWT(m)/EPF(c)/T/EWP(j) Pc-4/Pr-4 RPL/AFWL/APGC(b)/AS(mp)-2/ ASD(a)-5/BSD/ESD(gs)/ESD(t) RM/JW

ACCESSION NR: AP4047177 S/0051/64/017/004/0558/0564

AUTHORS: Krasovitskiy, B. M.; Smelyakova, V. B.; Nurmukhametov, R. N.

TITLE: Absorption and fluorescence spectra of certain azomethine derivatives of benzidine and its 2,2' and 3,3' dichlorosubstitutes

SOURCE: Optika i spektroskopiya, v. 17, no. 4, 1964, 558-564

TOPIC TAGS: absorption spectrum, fluorescence spectrum, benzidine

ABSTRACT: For comparison with similar tests on salicylal aniline and its derivatives (DAN SSSR v. 143, 1145, 1962; ZhFKh v. 37, 2432, 1963), the authors investigated the absorption spectra of the condensation products of aniline, ortho-, meta-chloranilines, benzidine, and its 2,2' and 2,2' dichloroderivatives with salicylic and 2-oxy-1-naphthoic aldehydes in dimethylformamide, and the fluorescence spectra of frozen solutions (77K) of these substances in the same solvent. The doubling of the salicylal aniline molecule causes

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a bathochromic shift of the absorption and fluorescence bands, evidencing appreciable conjugation between the two halves of the disalicylal benzidine molecule. Disalicylal benzidine and its 3,3' dichloroderivative differ very little in their absorption spectra; their fluorescence spectra are also of like character, but the fluorescence intensity of the latter is much larger than that of the former. At the same time, the absorption and fluorescence bands of 2,2' dichloroderivative of disalicylal benzidine are less intense, owing to the spatial difficulties in the grouping of the biphenyl, and are shifted towards the short-wave end of the spectrum compared with the disalicylal-benzidine and disalicylal-3,3'-dichlorobenzidine. The rules characteristic of the derivative of salicylic aldehyde hold true also for the absorption and fluorescence spectra of the products of condensation of the foregoing amines with 2-oxy-1-naphthaldehyde. Plots of the various spectra and of the time variation of the fluorescence intensity are presented. The azomethine derivatives of the diamines of the benzidine series are

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ACCESSION NR: AP4047177

shown to be more immune to radiation and exhibit stronger light absorption and fluorescence than their "halves" with shorter chains of conjugated double bonds. A table of the melting temperatures, analyses, and yields of the various substances is presented. Orig. art. has: 10 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 23Sep63 ENCL: 00

SUB CODE: OP NR REF SOV: 004 OTHER: 007

Card 3/3

KRASOVITSKIY, B.M.; BOLOTIN, B.M. NURMUKHAMETOV, R.N.

Azomethine bases. Part 1: Structure and absorption spectra of salicylalanilines. Zhur. ob. khim. 34 no.11:3786-3791 N '64
(MIRA 18:1)

L 62828-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4/Ps-4/Peb DIAAP WW/JAJ/RM
ACCESSION NR: AP5019048 UR/0286/65/000/012/0075/0075
621.039
678.746.22

AUTHOR: Chernobay, A. V.; Gunder, O. A.; Dmitriyevskaya, L. I.; Krasovitskiy, B. M.; Mil'ner, R. S.; Dovgosheya, M. I.

TITLE: A method for producing plastic scintillators. Class 39, No. 172040

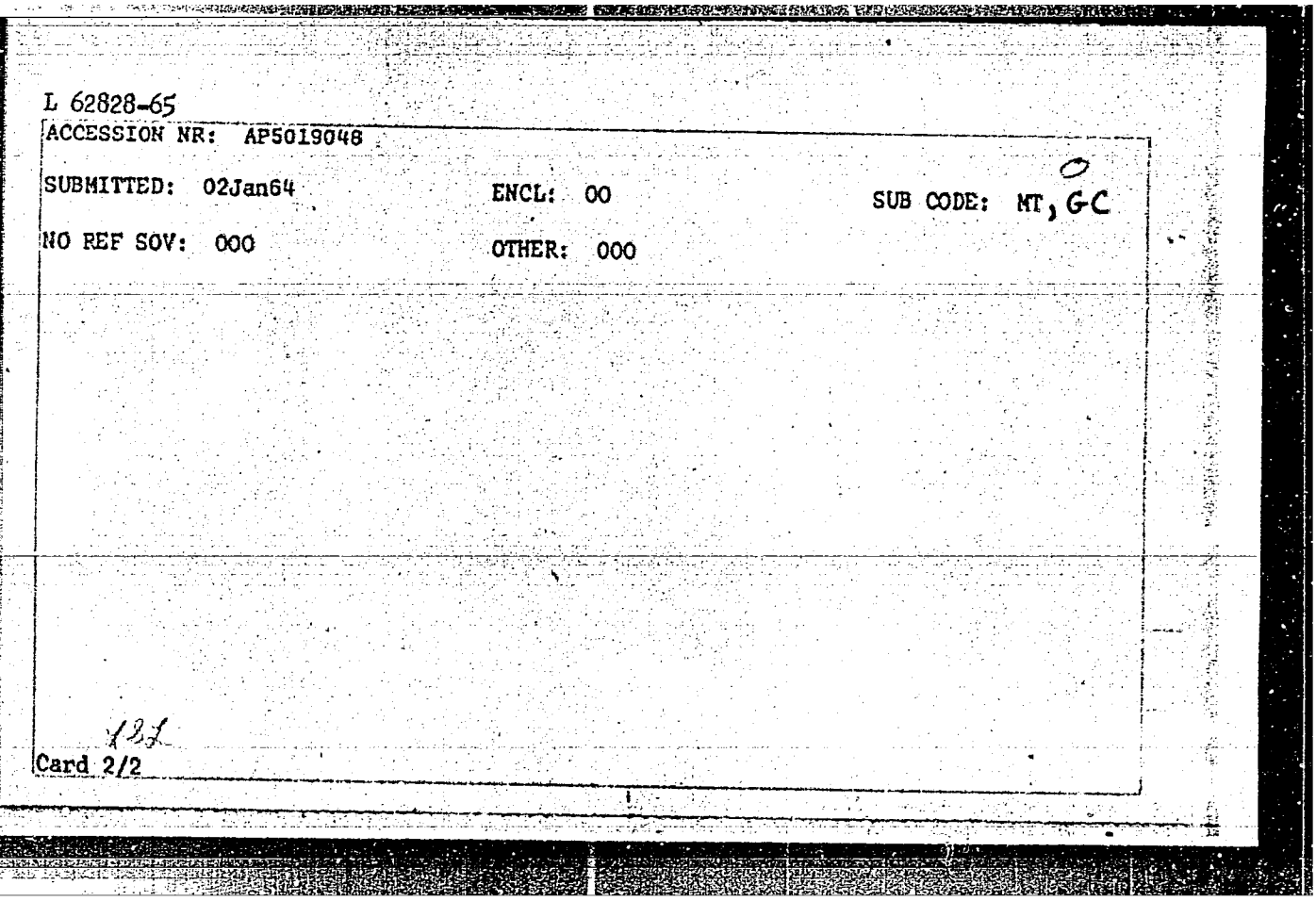
SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 75

TOPIC TAGS: scintillator, block polymerization, plastic

ABSTRACT: This Author's Certificate introduces a method for producing plastic scintillators by thermal block polymerization of styrene in the presence of scintillating additives which are capable of copolymerization with styrene. The light output of the scintillators is increased by using *n*-vinylterphenyl as the scintillating additive.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov (All-Union Scientific Research Institute of Single Crystals)

Card 1/2



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ACCESSION NR: AP5019048

SUBMITTED: 02Jan64 ENCL: 00 SUB CODE: MT, GC

NO REF SOV: 000 OTHER: 000

Card 2/2

DYKHANOVA, A.S.; MIL'NER, R.S.; KRASOVITSKIY, B.M.

Syntheses in the tetralin series. Zhur.VKHO 10 no.4:464-465 '65. (MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov.

L 1851-66 EWT(m)/EPF(c)/EWP(j)/EWA(c) RM

ACCESSION NR: AP5021556 UR/0286/65/000/013/0021/0021
547.652.1.787.002.2

AUTHOR: Krasovitskiy, B. M.; Poduzhaylo, V. F.; Podgornaya, L. M.

TITLE: Liquid scintillators. Class 12, No. 172331

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 21

TOPIC TAGS: scintillator, cosmic radiation

ABSTRACT: An Author Certificate has been issued for a preparative method for liquid scintillators for studying cosmic radiation. The scintillators are based on vaseline oil with added naphthalene or 1-methylnaphthalene and 2,5-diphenyloxazole. [BO]

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov (All-Union Scientific Research Institute of Single Crystals)

SUBMITTED: 04Feb63 ENCL: 00 SUB CODE: OP, AA

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4087

Card 1/1

L 5294-66 EWT(m)/EWP(j)/EWG(v) RM
ACC NR: AP5024998 SOURCE CODE: UR/0286/65/000/016/0061/0062

AUTHORS: Krasovitskiy, B. M.; Pereyaslova, D. G.; Fodiman, I. V.; Tatsiy, G. V.

ORG: none

18
B

TITLE: A method for obtaining daylight fluorescent pigments. Class 22, No. 173867 announced by All-Union Scientific Research Institute of Single Crystals (Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov)

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 61-62

TOPIC TAGS: pigment, dye, resin, single crystal, n toluolsulfamide, melamine, formaldehyde

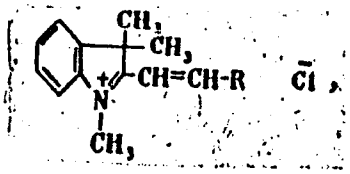
ABSTRACT: This Author Certificate presents a method for obtaining daylight fluorescent pigments based on a resin of n-toluolsulfamide, melamine, and formaldehyde, to which a dye is added. To increase the fastness of colors in daylight, cation pigments are used as dyes. Their general formula is:

Card 1/2

UDC: 666.291.3:668.819.45

0901054

L 5294-66
ACC NR: AP5024998



where R is an aromatic or a heterocyclic radical. A luminophor may be added to the dye.

SUB CODE: MT, GC/ SUBM DATE: 07Sep64/ ORIG REF: 000/ OTH REF: 000

PC
Card 2/2

L 63957-65 EWT(1)/EWT(m)/EPF(c)/EWP(j)/T/EWA(c) IJP(c)/RPL JW/RM

ACCESSION NR: AP5020955 UR/0073/65/031/008/0828/0834
547.97

AUTHOR: Krasovitskiy, B. M.; Mal'tseva, N. I.; Nurmukhametov, R. N.

TITLE: Investigation of azomethine bases. II. The effect of conjugation on color and fluorescence of bisazomethine derivatives of some aromatic diamines

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 31, no. 8, 1965, 828-834

TOPIC TAGS: azomethine, conjugation, fluorescence, spectroscopy, hydrogen bond, aromatic diamine, restricted rotation

ABSTRACT: The purpose of this work was to investigate the optical properties of a number of bis-azomethines with continuous or interrupted chains of conjugation between the nitrogen atoms. The compounds under investigation were obtained by condensation of benzidine, p-phenylenediamine, 4,4"-diamino-p-terphenyl and similar diamines with benzaldehyde, salicylaldehyde, α-naphthaldehyde, and β-hydroxy-α-naphthaldehyde in dimethylformamide. It was found that inter-

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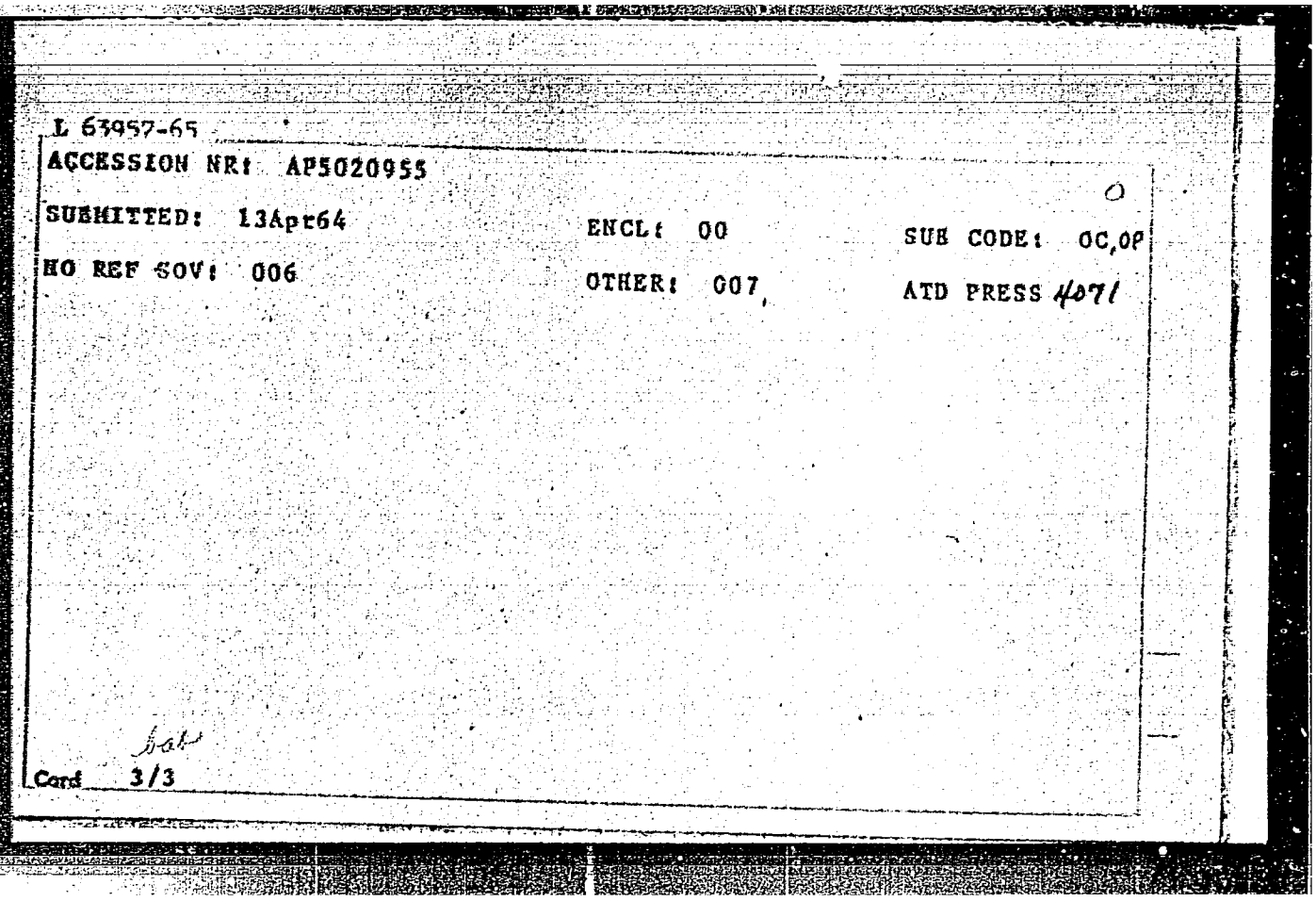
ruption of the chain of conjugation, e.g., by one or more methylene groups separating two benzene rings, results in a hypsochromic shift in absorption and fluorescence spectra. Introduction of additional benzene rings between the nitrogen atoms produced no noticeable changes, as compared to the parent compounds, except in the case of β-hydroxy-α-naphthaldehyde derivatives of diamines, when a hypsochromic shift is observed. Some spectrophotometric evidence was found that there exists some hydrogen bonding in salicylal derivatives; their fluorescence spectra may be determined by the restricted rotation of the benzene rings. The relatively high stability of β-hydroxy-α-naphthaldehyde derivatives may be explained by the prevalence of the keto form, making proton transfer less probable. Compounds prepared for the first time are tabulated together with their yields, melting points, and nitrogen content. Orig. art. has: 5 figures and 1 table.

[VS]

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov (All-Union Scientific Research Institute of Monocrystals); Fiziko-khimicheskiy institut im. Karpova (Physical Chemistry Institute)



L 63957-65

ACCESSION NR: AP5020955

SUBMITTED: 13Apr64 ENCL: 00 SUB CODE: OC,OP

NO REF SOV: 006 OTHER: 007 ATD PRESS 4071

Card 3/3

FRUZOVITSKIY, B.M.; KAZARENKO, A.I.

Study in the series of azomethine bases. [illegible] bis-azomethine derivatives of 2,7-diaminofluorene and their absorption spectra. Ukr. khim. zhur. 31 no.9 [illegible] '65.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov, stsintillyatsionnykh materialov i osobo chistykh khimicheskikh veshchestv.

L 52124-65 EWG(j)/EWT(m)/EWP(j)/EWA(h)/EWA(l) Pc-4/Peb RM

ACCESSION NR: AP5015280 UR/0286/65/000/009/0064/0064

34
B

AUTHORS: Grachev, N. M.; Dykhanova, A. S.; Gunder, O. A.; Bezuglyy, V. D.; Krasovitskiy, B. M.

TITLE: A method for obtaining film scintillators. Class 39, No. 170650

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 64

TOPIC TAGS: scintillator, thermal stability, light emission, polymer, polymerization, tetramethylstyrene

ABSTRACT: This Author Certificate presents a method for obtaining film scintillators based on polystyrene. To increase the heat resistance and the light emission of a scintillator, a polymer obtained during the polymerization of 2,3,5,6-tetramethylstyrene is used as the styrene polymer.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov (All-Union Scientific Research Institute of Single Crystals)

SUBMITTED: 22Apr63 ENCL: 00 SUB CODE: OC, OP

NO REF SOV: 000 OTHER: 000

Card 1/1 mlb

L 60266-65 EPF(c)/EWP(j)/EWA(c)/EWT(m) Pc-4/Pr-4 RPL JAJ/RM
ACCESSION NR: AP5018600 UR/0079/65/035/007/1243/1246
547.553.1 : 543.426

35
B

AUTHOR: Pereyaslova, D. G.; Bondarenko, V. Ye.; Krasovitskiy, B. M.

TITLE: Influence of conjugation on optical properties of alkaline solutions of N,N'-di'(2,3-oxynaphthoyl) derivatives of certain aromatic diamines

SOURCE: Zhurnal obshchey khimii, v. 35, no. 7, 1965, 1243-1246

TOPIC TAGS: conjugation, aromatic, diamine, N,N'-di-(2,3-oxynaphthoyl) derivative

ABSTRACT: Optical properties of N,N'-di-(2,3-oxynaphthoyl) derivatives of meta- and para- phenylenediamine, benzidine, and 2,2'- and 3,3'-disubstituted benzidine derivatives were investigated by UV- spectroscopy. For comparison UV- spectra of an anilide and ortho-aniside of 2,3-oxynaphthoic acid were taken. Absorption and fluorescence maxima (in mμ) were measured in a 5% NaOH solution. Absorption and fluorescence spectra of anilide of 2,3-oxynaphthoic acid and of N,N'-di-(2,3-oxynaphthoyl)-benzidine are shown in fig. 1 of the Enclosure. Out of the three bands only the middle one (~320 mμ) is affected by conjugation within the molecule. Doubling of the molecule of anilide of 2,3-oxynaphthoic acid results in a bathochromal

Card 1/3

L 60266-65

ACCESSION NR: AP5018600

O

intensification of the middle absorption band. A decline in conjugation between the amide groups of the di-oxynaphthoyl diamide derivatives always results in a shift of the middle absorption band toward the short wave length region. Maxima of fluorescence of the doubled molecules occur in a shorter wave region than those of the "Half-molecules". The effect of conjugation on displacement of the fluorescence maxima is greater for the single than for the doubled molecules. Maxima of fluorescence of ortho-oxybenzoyl derivatives of benzidine occur in a shorter wave length region than those of the corresponding 2,3-oxynaphthoyl derivatives of benzidine. The effect of conjugation on displacement of fluorescence maxima is greater in the former case. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 08May64 ENCL: 01 SUB CODE: OC, OP

NO REF SOV: 007 OTHER: 004

Card 2/3

L 60266-65

ACCESSION NR: AP5018600

ENCLOSURE: 01

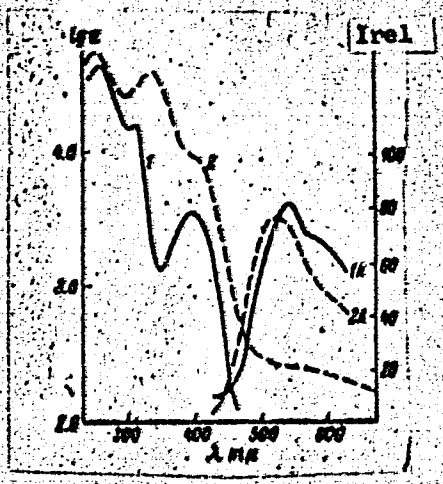


Fig. 1. Curves for absorption and fluorescence spectra of anilided 2,3-oxynaphthoic acid (1, 1A) and N,N'-di-(2,3-oxynaphthoyl)-benzidine (2, 2A).

Card 3/3

KRASOVITSKIY, B.M.; [illegible]

Certain optical properties of 4-chloro-2-sulfobenzalacetophenone. Dokl. AN SSSR 160 no.1:123-124 Ja '65.

(MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov, stsintillyatsionnykh materialov i osobo chistykh khimicheskikh veshchestv. Submitted July 3, 1964.

KRASNITSKIY, B.M.; SHEVCHENKO, L.A.

Syntheses in the series of derivatives of 4,5-diaminonaphthalic acid. Zhur. org. khim. 1 no. 12:2157-2159 D '65 (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov, stsintillyatsionnykh materialov i osobo chistykh khimicheskikh veshchestv. Khar'kov. Submitted September 14, 1964.

KRASOVITSKIY, B.M.; TEREYASLOVA, T.G.

Fluorescence method of determining small [illegible] in organic media. Zhur. VKHO 10 no. 6:704 '65 (publ. 1965)

1. Vsesoyuznyy nauchno-issledovatel'skiy [illegible].
Submitted March 9, 1965.

L 15321-66 EWT(m)/EWP(j) RM

ACC NR: AP6000944 SOURCE CODE: UR/0286/65/000/022/0029/0029

AUTHORS: Krasovitskiy, B. M.; Shevchenko, E. A.; Pereyaslova, D. G.

ORG: none

TITLE: A method for obtaining phosphorogen. Class 12, No. 176299 [announced by All-Union Scientific Research Institute for Single Crystals (Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 29

TOPIC TAGS: crystal phosphor, phosphorescent material, phosphorescence, luminophor

ABSTRACT: This Author Certificate presents a method for obtaining a phosphorogen derived from 1,8 naphthoylene-1',2' benzimidazol. To increase the variety of phosphorogens with fluorescence in the yellow-green spectral region, naphthalene anhydride or its derivatives are condensed with corresponding phenylenediamine derivatives.

SUB CODE: 07/ SUBM DATE: 02Jan65

Card 1/1

UDC: 547.785.5.07.:621.3.032.35

ACC NR: AP6021423 SOURCE CODE: UR/0413/66/000/011/0022/0022

INVENTOR: Grigor'yeva, V. I.; Krasovitskiy, B. M.; Mil'ner, R. S.

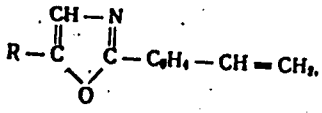
ORG: None

TITLE: A method for producing luminescent monomers, Class 12, No. 182162 [announced by the All-Union Scientific Research Institute of Single Crystals (Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 22

TOPIC TAGS: monomer, luminescent material

ABSTRACT: This Author's Certificate introduces a method for producing luminescent monomers of the general formula



where R is an aromatic radical. 2-[bromomethylphenyl]-5-aryloxazole is interacted with triphenylphosphine, paraform and lithium methylate.

SUB CODE: 07, 11/ SUBM DATE: 15Mar65

Card 1/1

UDC: 547.787.1'53.024.07

ACC NR: AP6021424 SOURCE CODE: UR/0413/66/000/011/0022/0022

INVENTOR: Krasovitskiy, B. M.; Podzhaylo, V. F.; Derevyanko, L. N.

ORG: None

TITLE: A method for producing liquid scintillators. Class 12, No. 182164 [announced by the All-Union Scientific Research Institute of Single Crystals (Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 22

TOPIC TAGS: scintillator, luminescent material

ABSTRACT: This Author's Certificate introduces a method for producing liquid scintillators by using a base and activators -- diaryl derivatives of 1,3,4-oxadiazole and 1,3-oxazole. The luminescence yield is increased and a wider selection of liquid scintillators is produced by using dicumylmethane as the base.

SUB CODE: 11, 07, 18/ SUBM DATE: 12Apr65

Card 1/1

UDC: 547.787.2.07

KRASOVITSKIY, Ivan Konstantinovich; D'YACHENKO, I., red.; SYCHUGOV, V., tekhn. red.

[Concise mining engineers' handbook] Kratkii spravochnik shakhtostroitelia. Kiev, Gos. izd-vo tekhn. lit-ry USSR, 1961. 647 p. (MIRA 14:11)

(Mining engineering)

KRASOVITSKIY, Ivan Konstantinovich; LITVINENKO, Mikhail Petrovich; AFONINA, G.P., red.; GORKAVENKO, L.I., tekhn. red.

[Operator of an electric mine locomotive] Mashinist shakhtnogo elektrovoza. Kiev, Gostekhizdat USSR, 1962. 145 p. (MIRA 15:6)

(Mine railroads) (Electric locomotives)

KRASOVITSKIY, M., inzhener.

Link-gear tool for making hollow blocks. Stroitel' no.1: 17 Ja '57. (MLRA 10:2)

(Concrete blocks)

SOV/84-58-11-50/58

AUTHORS: Arzhanov, Yu., Krasovitskiy, M.

TITLE: Difficult Road (Trudnyy put')

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 11, pp 36-37 (USSR)

ABSTRACT: The authors describe the arrival of two Super Aero planes at Vnukovo airfield from Czechoslovakia on their way to the Mongolian Peoples Republic. Of the two Soviet navigators on board serving as guides, one Rotislav Gatovskiy spoke Czech which he had learned while confined in prison camps during World War II. Vadim Margorin was the second navigator. There is one photograph of Rotislav Gatovskiy.

Card 1/1

KRASOVITSKIY, M.G.; PECHERAK, L.I.

Pump for pumping out ground water filled with mud. Mekh. stroi. 18 no.11:27 N '61. (MIRA 16:7)

1. Kudinovskiy zavod keramicheskikh blokov.
(Centrifugal pumps)

KRASOVITSKIY, V.B.; STEPANOV, K.N.

Excitation of electromagnetic waves in a plasma by an ion beam.
Izv. vys. uchob. zav.; radiofiz. 6 no.5:1056-1059 '63.
(MIRA 16:12)

1. Khar'kovskiy gosudarstvennyy universitet.

ACCESSION NR: AP4024470 S/0141/64/007/001/0083/0093

AUTHORS: Krasovitskiy, V. B.; Stepanov, K. N.

TITLE: Passage of ion beams through a plasma

SOURCE: IVUZ. Radiofizika, v. 7, no. 1, 1964, 83-93

TOPIC TAGS: plasma, electromagnetic waves in plasma, ion beam in plasma, electron gyrofrequency, ion gyrofrequency, thermal velocity, dielectric tensor, longitudinal propagation, quasilongitudinal propagation, quasitransverse propagation, injection angle

ABSTRACT: This is a continuation of earlier work (Izv. VUZov, Radiofizika, v. 6, 1056, 1963) on the excitation of electromagnetic waves in a plasma by an ion beam of low density and large thermal velocity scatter, in the range between the electron and ion gyrofrequencies, with the ions moving parallel to the magnetic field. In the present work the ions are assumed injected at a large angle to

Card 1/3