

BEGIN
REEL # 78
BUTSEVA, YE. M.

BUTSEVA, Ye.M.

Growth of staphylococcal diseases and the resistance of their
causative agents to some antibiotics. Zhur.mikrobiol., epid. i
immun. 32 no.10:137 0 '61. (MIRA 14:10)

1. Iz lipetskoy sanitarno-epidemiologicheskoy stantsii.
(STAPHYLOCOCCAL DISEASE) (ANTIBIOTICS)

BUTSEVICH, L. A.

Butsevich, L. A. "Certain Virus Characteristics of Chlorosis in the Top Leaves of Makhorka (Aztec Tobacco)," Tabak, no. 4, 1952 pp. 55-57. 69.8 T112

So: SIRA SI - 90-53, 15 Dec. 1953

BUTSEVICH, L. A.,

"Infectious Chlorosis of the Upper Parts of the Makhorka Plant." (Dissertation for
Degree of Candidate of Biological Sciences) Moscow Order of Lenin State U imeni
M. V. Lomonosov, Moscow, 1955

SO: M-1036 28 Mar 56

VORONKOVICH, I.V.; AFANAS'YEVA, Z.P.; BUTSEVICH, L.A.; LIPILINA, N.I.

Effect of fertilizer on soil population of actinomycetes antagonistic to phytopathogenic bacteria [with summary in English].
Mikrobiologiya 27 no.6:720-723 N-D '58. (MIRA 12:1)

1. Moskovskaya stantsiya Vsesoyuznogo nauchno-issledovatel'skogo instituta zashchity rasteniy.

(ACTINOMYCES,

in soil, eff. of fertilizers on strains antag. to phytopathogens (Rus))

(FERTILIZERS, effects,

on Actinomyces antagonistic to phytopathogens in soil (Rus))

(SOIL, microbiology,

Actinomyces, eff. of fertilizers on strains antagonistic to phytopathogens (Rus))

BUTSIK, M.G.

GERTSIKEN, S.D.: BUTSIK, M.G.: ALBERT, M.D.

Investigating mercury diffusion coefficients in mercury-cadmium alloys in the 90--180° C temperature range. Nauk. zap. Kiev. un. 9 no.2:49-52 '50. (MLRA 9:12)

(Cadmium-mercury alloys) (Diffusion)

YUSHCHENKO, N.G.; BUTSIK, M.G.

Aeroion counter and generator. Uch.zap. KRROI 7:157-163'61.
(MIRA 16:8)

(AIR. IONIZED—EQUIPMENT AND SUPPLIES)

BUTSIK, M.G.; OVOSHCHNIKOV, M.S.

An electronic apparatus, the Logetron, for copying roentgenograms to improve image distinctness. Vestn. rentgen. i radiol. 38 no.4:59-63 J1-Ag'63 (MIRA 17:2)

1. Iz fiziko-tekhicheskogo otdela (rukovoditel' - laureat Gosudarstvennoy premii M.S.Ovoshchnikov) Kiyevskogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta (dir. - prof. I.T. Shevchenko).

BUTSIK, YU V.

AUTHOR: Butsik, Yu.V.

132-12-11/12

TITLE: Concerning G. M. Kostamanov's Article "The Errors in Determining the Thickness of Coal Bed in a Drill Hole"
(O stat'ye G.M. Kostamanoва "O pogreshnosti pri opredelenii moshchnosti plasta uglia po skvazhine")

PERIODICAL: Razvedka i okhrana neдр, 1957, # 12, p 60 (USSR)

ABSTRACT: The author questions the correctness of the formula proposed by G.M. Kostamanov in the periodical "Razvedka i okhrana neдр", # 8, 1956. The author points out that Kostamanov did not take the coefficient k into consideration, without which the proposed correction of the magnitude of the coal layer according to the axis of the drill hole can not be carried out. The article contains one diagram.

ASSOCIATION: Voroshilovgrad Coal-Geology Trust (Trest Voroshilovgraduglegeologiya)

AVAILABLE: Library of Congress

Card 1/1

Butsik, Yu. V.
EPSHTEYN, Ye. F.; KORCHAGIN, L. V.; BUTSIK, Yu. V.

Silicate and silicate-humic clayless solutions for flushing
boreholes during prospecting. Izv. DGI 30 no.1:85-90 '57. (MIRA 11:3)

1. Dnepropetrovskiy gornyy institut (for Epshteyn, Korchagin).
2. Treat
"Voroshilovgraduglegeologiya" (for Butsik)
(Boring) (Prospecting)

BUTSIK, Yu.V.; TEMNIKOV, V.F.

Certain problems in the prospecting of deep horizons in the
Donets Basin. Razved. i okh. nedr. 30 no.5:17-22 My '64.
(MIRA 17:10)

1. Trest "Artemgeologiya."

BUTSIS, Ya. Ya. In Latvian

BUTSIS, Ya. Ya. -- "Meat Yield of Latvian Brown Cattle and Possibilities of Increasing It." Latvian Agricultural Academy, 1952. In Latvian (Dissertation for the Degree of Candidate of Agricultural Sciences)

SO: Izvestiya Ak. Nauk Latvyskoy. SSR. No. 9, Sept., 1955

STUDENTSOV, N.N.; BUTSISHKO, Ye.E.; GOBUNDVA, V., redaktor; LUKASHEVICH, V.,
tekhnicheskij redaktor.

[General science instruction in schools; from the work practice of
teachers] Politeknicheskoe obuchenie v shkole; iz opyta raboty
uchitelei. Saratov, Saratovskoe kn-vo, 1955. 134 p. (MIRA 9:6)
(Science--Study and teaching)

BUTSIY , A.I., inzh; GAYDUKOV, E.E., inzh.

Using short-delay blasting in limestone quarries. Sbor. trud.
NIIZHalezobetona no.8:79-89 '63 (MIRA 18:1)

BUTSIY, A.I., inzh.; GAYDUKOV, E.E., inzh.

Effective means of lowering the oversize yield in limestone
quarries. Stroi. mat. 9 no.10:14-17 0 '63. (MIRA 16:11)

BUTS'KA, L.K., kand.med.nauk

Use of general ultraviolet irradiation on infants from the powerful PRK 7 mercury-quartz lamp. Ped., akush. i gin. 22 no.5:30-31 '60. (MIRA 15:6)

1. Otdel profilaktiki i terapii detskikh bolezney (rukovoditel', -kand.med.nauk O.S. Mishchenko) Ukrainского nauchno-issledovatel'skiy institut okhrany materinstva i detstva im. Geroya Sovetskogo Soyuza prof. P.M. Buyka (direktor - zasluzhennyy vrach USSR M.D. Burova).

(PEDIATRIC RADIOLOGY)
(ULTRAVIOLET RAYS--THERAPEUTIC USE)

RUTSKAYA, L. K.

"The Functional Condition of the Cardiovascular System During Acute Digestive and Nutritional Disorders of Young Children." Cand Med Sci, Kiev Order of Labor Red Banner Medical Inst Ineni A. A. Bogomolets, Kiev, 1954. (KL, No 12, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

Butskaya, I. K., Kostenko, O. R., Nishchaya, S. YA., Filosofova, T. G.,
Shep'hter, A. B., Milovanova, L. P., and Beranitskaya, S. A.

Study of the effectiveness of active immunization in whoopin cough.

Materialy nauchnykh knoferenykh, Kiev, 1959. 200pp
(Kievskiy Nauchno-issledovatel'skiy Institut Epidemiologii i Mikrobiologii)

STULIY, L.A.; SAFRONOVA, O.N.; BUTS'KA, L.K., kand. med. nauk; KRIVOBOKOV, S.A. [Kryvobokov]; VOLOSHINOV, B.M. [Vóloshynov, B.M.], dotsent BICHKOVSKIY, V.N. [Byshkovs'kyi, V.N.] dotsent; POKOTILOVA, V.Yu. [Pokotylova, V. IU]; KOLESNIKOV, G.F. [Kolesnykov, H.F.]; ZLTKIS, L.S.; SAVOST'YANOVA, S.I.; BRIN, D.D. [Bryn, D.D.]; MATVEYENKO, Ye.A. [Matviionko, IE.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 meditsinskogo instituta (for Bronz) 10. Kafedra fakul'tetskoy pediatrii Gor'kovskogo meditsinskogo instituta (for Yepshteyn). 11. 2-ya detskaya bol'nitsa Shevchenkivskogo rayona g. Kiyeva (for Shakhnovich).

BUTSKAYA, N. A.

Parasites - Fish

Parasitic fauna of Black Sea commercial fish in the estuarine course of the Danube. Trudy
Len. ob-va. est. 71, No. 4, 1952.

SO: Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

BUTSKAYA, N.A.

Processes of the formation of ovocytes in amphibians in connection
with criticism of the germ theory. Vest. Len. un. 9 no.4:77-89
Ap '54. (MIRA 8:6)

(Amphibia) (Ovum)

BUTSKAYA, N.A.

USSR/ Biology - Ichthyology

Card 1/1 Pub. 22 - 53/60

Author : Butskaya, N. A.

Title : ~~Butskaya, N. A.~~
The sperm functions of fish with different spawning types

Periodical : Dok. AN SSSR 100/4, 809-812, Feb 1, 1955

Abstract : Ichthyological data are presented regarding the sperm functions of fish with different spawning characteristics. Eight USSR references (1927-1951). Diagram.

Institution : Ichthyological Institute, Laboratory of Pisciculture, Leningrad

Presented by: Academician E. N. Pavlovskiy, November 5, 1954

BUTSKAYA, N.A.

Follicular epithelium of testicles and specific features of its function as related to the type of spawning (exemplified in perches). Zool.zhur. 38 no.12:1844-1849 D '59. (MIRA 13:5)

1. Laboratoriya osnov rybovodstva Rosglavgosrybvoda, Leningrad.
(Testicle) (Epithelium) (Perch)

SAKUN, Ol'ga Fedorovna; BUŤSKAYA, Nataliya Anatol'yevna;
KOSOVA, K.D., red.

[Determination of the stage of maturity and the study of
sex cycles in fishes] Opredelenie stadii zrelosti i izu-
chenie polovykh tsiklov ryb. Moskva, TSentr. laborateriia
po vosproizvodstvu rybnykh zapasov, 1963. 34 p.
(MIRA 17:9)

BUTSKAYA, N.A.

Cytochemical study of the testes in fishes. Report No.1: Nucleic acids, proteins and polysaccharides. Arkh. anat. gist. i embr. 48 no.4:17-23 Ap '65. (MIRA 18:6)

1. Kafedra anatomii i gistologii (zav. -- chlen-korrespondent AMN SSSR prof. P.V. Makarov) Leningradskogo gosudarstvennogo ordena Lenina universiteta imeni Zhdanova.

BUTSKAYA, V. D.

USSR /Microbiology. Antibiosis and Symbiosis. AntibioticB-2
Antibiotics.

Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 355~~02~~

Author : Nikitin, V.N.; Butskaia, V.D.; Vorobeva, T.M.;
Ermakov, P.P.; Kovtun, N.E.

Title : The Influence of Acidophil Milk (Acidophilin)
and Streptomycin on the Growth of Laboratory
Animals

Orig Pub: Uch. zap. Kharkovskogo un-ta, 1956, 68, 275-279

Abstract: In 2 series of experiments with mature white rats
(55 animals) and 4 series of experiments with
white rats at the age of 1 month (45 animals),
an increase in the weight of the body was noted
when there was added to a rich ration 10 milli-
liters of acidophilin and 20 units of streptomycin

Card 1/2

USSR /Microbiology. Antibiosis and Symbiosis.
Antibiotics.

F-2

Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35582

for every gram of body weight. The greatest effect was obtained in the younger rats with the addition of streptomycin.

Card 2/2

USSR/Soil Science. Soil Genesis and Geography

J-2

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 91365

Author : Butskov N.A.

Inst

Title : The Soils of Zeravshansk basin

Orig Pub : Materialy po proizvod. silam Uzbekistana, 1957, vyp. 9,
145-155

Abstract : The soils of the Zeravshansk basin of Uzbekistan are developed in conditions of landscape varying from high-mountain subalpine to pronounced desert terrain. Five soil districts were divided: (1) the light brown soils of high-mountain meadow-steppes and the brown (turf-burozen) soils of the brushwood steppes and the juniper rare-forest zone of the mid-mountains; (2) the dark, typical and light sierozems (low mountains, foothills and mountain-foot plains); (3) irrigated dark, typical and light sierozems, irrigated and non-irrigated meadow and marsh-meadow and marshy soils of

Card : 1/2

S/153/60/003/003/021/036/XX
B016/B058

AUTHORS: Butskus, P. F., Denis, G. I., Butskene, A. I.
TITLE: Cyanoethylation of Some Amino Acids and Proteins
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i
khimicheskaya tekhnologiya, 1960, Vol. 3, No. 3,
pp. 469 - 475

TEXT: The authors report on the cyanoethylation of amino acids and proteins by means of acrylonitrile (AN) and β -chloro propionitrile (CPN). The substances used were: β -amino ethanesulfonic acid (taurine), δ -aminovaleric acid and ξ -aminocaproic acid. Products of the N-mono and N,N-dicyano ethylation were obtained thereby; γ -aminobutyric acid was treated with CPN alone. The following substances were also cyanoethy-
lated with AN and CPN: gramicidin C, peptone and proteins (insulin, casein, blood albumin, gelatin, animal gluten, edestin, pea globulin, pepsin and nuclein). Peptone and proteins were cyanoethylated in the aqueous alkaline medium, gramicidin C, however, by means of AN in alcoholic solution. All substances treated are cyanoethylated at the amine

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Cyanoethylation of Some Amino Acids and
Proteins

S/153/60/003/003/021/036/XX
B016/B058

group (see scheme). The authors presume that under the given conditions proteins may also be cyanoethylated at the sulfhydryl- or hydroxyl group, while the dicyano-ethylation takes place at the amine groups. They don't think it impossible that the two substances AN and CPN may to a certain degree react with other groups of the protein molecule. The authors proved that the initial substances (Table 2) showed an intensive ninhydrin reaction with blue-violet coloring and contained amino nitrogen. Neither that was the case after cyanoethylation. In the solid state, the products of the cyano-ethylation of most proteins, peptone and gramicidin C form an almost white powder. The authors presume that the cyano-ethylation of amino acids, proteins and peptone by means of CPN proceeds over the phase of AN formation (Ref.2). When heating the products of the N-monoc- and N,N-dicyano-ethylation of amino acids with 10% aqueous ammonia solution, these products are decyano-ethylated and produce the initial amino acids. The N-cyano-ethylated amino acids are also decyano-ethylated through the influence of ammonia, but besides, the product of trans cyano-ethylation: β -phenylamino-propionitrile:

Card 2/3

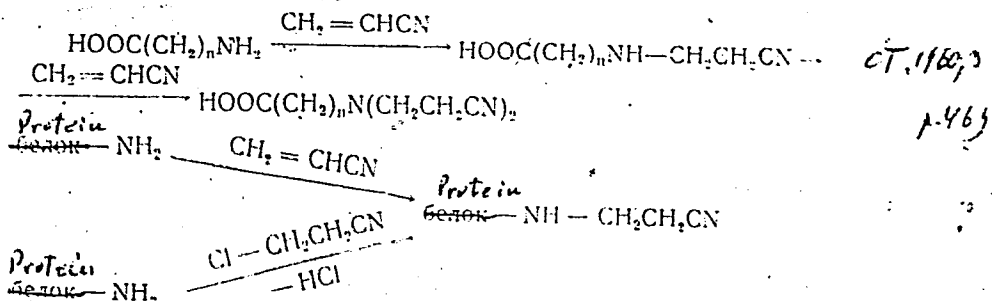
Cyanoethylation of Some Amino Acids and Proteins

S/155/60/005/005/021/036/XX
3015/3058

$\text{HOOC}(\text{CH}_2)_n\text{NH}-\text{CH}_2\text{CH}_2\text{CN} + \text{C}_6\text{H}_5\text{NH}_2 \longrightarrow \text{HOOC}(\text{CH}_2)_n\text{NH}_2 + \text{C}_6\text{H}_5\text{NH}-\text{CH}_2\text{CH}_2\text{CN}$ is formed in this case. This compound also develops at the influence of aniline on cyanoethylated proteins and peptones (Ref.11). There are 2 tables and 16 references: 10 Soviet, 3 US, 1 German, and 2 British.

ASSOCIATION: Vil'nyusskiy gosudarstvennyy universitet; Kafedra organicheskoy khimii (Vil'nyus State University; Chair of Organic Chemistry)

SUBMITTED: September 11, 1958



BUTSKUS, P.F. [Buckus, P.]; RAGUOTENE, N.V. [Raguotiene, N.]; DENIS, G.I.;
BUTSKENE, A.I. [Butakiene, A.]

Decyanoethylation and recyanoethylation of products of N-cyano-
ethylation of amino acids, their derivatives, peptides, diketo-
piperazines, and proteins. Zhur.ob.khim. 32 no.3:738-741 Mr
'62. (MIRA 15:3)

1. Vil'nyusskiy gosudarstvennyy universitet.
(Amino acids) (Cyanoethylation)

BUTSKUS, P.F. [Buckus, P.]; STONITE, R.Yu.; DENIS, G.I.; BUTSKENE, A.I.
[Buckene, A.]

Cyanoethylation of p-toluidine by β -substituted propionitriles.
Zhur.ob.khim. 32 no.3:820-823 Mr '62. (MIRA 15:3)

1. Vil'nyuskiy gosudarstvennyy universitet.
(Toluidine) (Propionitrile)

L 52605-65 EWA(j)/EWT(m)/EPP(c)/EWP(j)/EWA(b)-2/EWA(c) Pc-4/Pr-4 RM

ACCESSION NR: AP5015859

UR/0063/64/009/006/0699/0700

AUTHOR: Vitorskiy, A. P.; Butskene, A. I.; Butskus, P. F.

TITLE: Relationship of the chemical structure of beta-substituted propionitriles and their toxicological properties

SOURCE: Vsesoyuznoye khimicheskoye obshchestvo. Zhurnal, v. 9, no. 6, 1964, 699-700

TOPIC TAGS: toxicology, organic nitrile compound, biochemistry

Abstract: The toxicology of various beta-substituted propionitriles is summarized. These derivatives are generally relatively nontoxic, propionitrile is more toxic than its beta-substituted derivatives (with the exception of beta-halopropionitriles). The toxic effect of beta-substituted propionitriles is manifested in the form of general toxicity, with a background of histotoxicity. The degree of toxicity is most pronounced in the beta-cyanoethylated compounds, weaker in other N-cyanoethylated amines, and still weaker in other beta-substituted propionitriles. The toxicity of O- and N-cyanoethylated compounds increases with increasing length of the aliphatic radical, but the degree

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ACCESSION NR: AP5015859

of increase in toxicity drops in compounds with high-molecular weights. The toxicity increases upon transition from beta-propoxy- to beta-allyloxypropionitrile; beta-ethoxypropionitrile is less toxic than beta-(ethylmercapto)-propionitrile. In the series of N-monocyanoethylated amines, the toxicity increases upon formation of their methanides and upon transition from secondary to tertiary amines. There is an increase in the toxicity from mono- to dicyanoethylated compounds only among the products of N-cyanoethylation of amines and amino acids. The introduction of the carboxyl group into the molecules of beta-alkylamino- and beta-allylamino-propionitriles leads to a sharp reduction of the toxicity. No consistent pattern was obtained for beta-substituted propionitriles as compared with beta-substituted butyronitriles. Propionitrile is 18 times as toxic as acetonitrile and twice as toxic as isopropionitrile. The antidotes and antagonists generally used for cyanides and CN ions (sodium nitrite and sodium thiosulfate) do not exert a protective action with respect to beta-substituted propionitriles. The authors hypothesize that the biological activity of beta-substituted propionitriles may be related to the possibility of the process of transcyanoethylation, since the beta-substituted propionitriles in which the beta-cyanoethyl group is labile are the most toxic.

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1. 52606-65

ACCESSION NR: AP5015859

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ASSOCIATION: Minskiy gosudarstvennyy meditsinskiy institut (Minsk State Medical Institute); Vil'nyusskiy gosudarstvennyy universitet (Vil'nyus State University); Vil'nyusskiy gosudarstvennyy pedagogicheskii institut (Vil'nyus State Pedagogical Institute)

SUBMITTED: 28Feb64

ENCL: 00

SUB CODE: OC LS

NO REF SOV: 003

OTHER: 000

JPRS

802
Card 3/3

BUTSKUS, P.F. [Buckus, P.]; BUTSKENE, A.I. [Bucklens, A.]

Reaction of α -amino acids with acrylamide. Zhur. ob. khim.
34 no. 5:1407-1409 My '64. (MIRA 17:7)

1. Vil'nyusskiy gosudarstvennyy universitet.

BUTSKUS, P.F. [Buckus, P.]; RAGUOTENE, N.V. [Raguotiene, N.]; BUTSKENE, A.I.
[Buckiene, A.]

Alkylation of 4-methyl-2-aminopyridine. Zhur. ob. khim. 34 no.11:
3847-3848 N '64 (MIRA 18:1)

1. Vil'nyusskiy gosudarstvennyy universitet i Vil'nyusskiy
gosudarstvennyy pedagogicheskiy institut.

BUTSKUS, P.F. [Buckus, P.]; DENIS, G.I.; BUTSENE, A.I. [Buckienc, A.]

Cyanoethylation of aromatic amines with β -chloropropionitrile.
Zhur. ob. khim. 34 no.12:4119 D '64 (MIRA 18:1)

1. Vil'nyusskiy gosudarstvennyy universitet i Vil'nyusskiy gosudarstvennyy pedagogicheskiy institut.

BITSKUS, P.F. [Buckus, P.]; BITSKENE, A.I. [Buckiene, A.]

Reaction of β -alanine with acrylamide, allyl cyanide, and crotononitrile. Zhur. VKHG 10 no. 6:706-707 '65 (MIRA 1961)

1. Vil'nyusskiy gosudarstvennyy pedagogicheskiy institut i Vil'nyusskiy gosudarstvennyy universitet. Submitted May 6, 1965.

BUZSKY, A.I.; DVERLY, V.P.; PANKOV, F.A.

Calculating some parameters of fluid performance of jet bits. Vest.
k. gaz. prov. no. 1s23-24. Ma-Mrt. '66. (MIRA 18:8)

BUTSKIY, A.L.; DVERIY, V.P.; PANKOV, K.A.; PUZENKO, N.N.

Jet bits as a potential for increasing the footage of oil and
gas wells in the Dnieper-Donets Lowland. Neft. i gaz. prom.
no.4:18-19 O-D '64 (MIRA 18:2)

KOGAN, Liber Ayzikovich, kand. tekhn. nauk; GOKHSON, Yevgeniy Naumovich;
VEKSLER, Vladimir, Markovich; KHOFIN, Boris Mikhaylovich;
Prinimali uchastiye: PETROVA, T.I., ANAN'YEVA, S.A.; TAL', K.K.;
BUTSKIY, A.M.; LOBOV, A.A. BOBROVA, Ye.N., tekhn. red.

[Containers] Konteinery. Pod obshchei red. L.A. Kogana. Moskva,
Vses. izdatel'sko-poligr. ob'edinenie M-va putei soobshchaniya,
1960. 318 p. (MIRA 14:3)
(Railroads--Freight) (Containers)

I. 21525-66 EWP(j)/EWP(k)/EWT(d)/EWT(m)/T/EWA(d)/EWP(w)/EWP(v)/EWP(t) IJP(c)

ACC NR. AP6007976

SOURCE CODE: UR/0191/66/000/003/0071/0073

EM/RM/WW/JD/HM

AUTHOR: Gruin, I. (Warsaw); Krukovskiy, Z.; Butskiy, L.

ORG: none

TITLE: Properties and applications of ME-1 adhesive

SOURCE: Plasticheskiye massy, no. 3, 1966, 71-73

TOPIC TAGS: epoxy resin, epoxy adhesive, modified epoxy adhesive, polyvinyl butyral, adhesion strength

ABSTRACT: Hot-cure epoxy adhesives, which otherwise exhibit good properties, are rigid and have a low adhesion strength to metals in stripping tests. Modification of these epoxy adhesives with poly(vinyl butyral) resulted in the development of a new adhesive, designated ME-1, which exhibits high strength in stripping tests. The ME-1 adhesive consists of epoxy resin and poly(vinyl butyral) (optimum ratio 1/1), and cyanoguanidine curing agent. The shelf life of the adhesive is not less than 1 year. The adhesive can be cured at 151 to 175C for 4 to 1.5 hr under a pressure of 2-3 kg/cm². It can be used in solution or in film form. The adhesive exhibits the following properties: fatigue strength when sandwiched between sheet metal 2 and 3 mm thick, 53.5 and 73.0 kg/cm², respectively; shearing strength at 20 and 80C, 360-400 and 260 kg/cm², respectively; and adhesive strength in stripping tests at 20 and 80C, 5-7 and 8-10 kg/cm², respectively. The main areas of application of ME-1 adhesive in solution form are aluminum foil-plastic honeycombs, and in film

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UDC: 638.395.6

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ACC NR: AP6007976

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form, in continuous glue lines and for metal facing of metal-plastic honeycombs. The bonding strength in such cases exceeds that of the honeycomb material⁶ proper. The strength of the adhesive is governed by the choice of the epoxy resin, the quality of the poly(vinyl butyral), and by the use of the materials in the proper ratio. The ME-1 adhesive can find application in aviation technology. Orig. art. has: 6 figures. [B0]

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 002/ SOV REF: 001
ATD PRESS: 4222

Metal glueing 18

Card 2/2 PB

BUTSKIY, S.A.

Checking thread gauges. Izv.tekh. 20 no.1:12 Ja '59.
(MIRA 11:12)
(Gauges--Testing)

BUTSKIY, V. D.

Panel for checking the potential of track relays. Avtom., telem.
i sviaz' 7 no.4:40 Ap '63. (MIRA 16:4)

1. Starshiy elektromekhanik posta elektricheskoy tsentrali-
zatsii stantsii Ilovayskoye Donetskoy dorogi.

(Electric relays—Testing)
(Railroads—Electric equipment)

53916

S/066/62/000/001/003/004

D041/D113

26.2181

AUTHORS: Semilet, Z.V., Candidate of Technical Sciences, and Butskiy,
N.D., Engineer

TITLE: Investigation of the heat emission and resistance of a
corrugated fin in a longitudinal flow

PERIODICAL: Kholodil'naya tekhnika, no. 1, 1962, 13-16

TEXT: The authors investigated the heat emission and resistance of a
corrugated fin in order to determine the best version of such a fin. A
compact steel fin was cut to its base, and the obtained elements bent so
that the opening angle had a maximum value at the summit and was zero at the
base. The tests were carried out in an open-type wind tunnel 33 x 13 mm in
cross-section, 3.5 m long. The air flow was generated by a ventilator with
a capacity of 50 kg/hour. The following results were obtained: (1) A corru-
gated fin with an opening angle of 5° has a 45% larger heat emission than a
smooth fin; an increase in the opening angle from 5 to 45° has no practical
effect on the heat-emission intensity; (2) the boundary layer became turbu- ✓

Card 1/2

33916

S/066/62/000/001/003/004
D041/D113

Investigation of the heat ...

lent when flowing from one element of the fin to the other; at an opening angle of 45° , an additional flowing-over of the air was observed; (3) a corrugated fin with an opening angle of 5° has, on the average, a 14% larger resistance than a smooth fin; an increase in the angle results in a sharp increase in the resistance, i.e. at 45° by 75 to 225%. It is recommended not to use an opening angle of more than 5° , since this does not essentially increase the heat emission coefficient but considerably increases the resistance. There are 3 figures and 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc. The English-language reference is: W.M. Kays, A.L. London, Compact Heat Exchangers, 1955. ✓

ASSOCIATION: Institut teploenergetiki Akademii nauk USSR (Institute of Heat and Power Engineering of the Academy of Sciences of the UkrSSR).

Card 2/2

10.3400

33753

S/021/62/000/002/008/010
D299/D304

26.5200

AUTHORS: Kremn'ov, O.O., Semylet, Z. V. and Buts'kyi, M. D.

TITLE: Study of heat transfer and resistance of elements of plate-fin heat-exchangers with perforated and corrugated fins

PERIODICAL: Akademiya nauk UkrRSR. Dopovidi. no. 2, 1962, 196-200

TEXT: The experimental setup was described by the authors in an earlier work. The characteristics of the elements under investigation are listed in a table. Two of the corrugated elements had fins of the same dimensions (length 1 mm and height 0.5 mm), but the channels through which the air passed differed in shape: In element A, the channels had the same cross-section over the entire length, whereas in element B the cross-section was narrowed and widened alternately. The resistance curves for the corrugated elements have a shape characteristic of rigid surfaces. The resistance of the element with variable cross-section was twice that with constant cross-section. In the third specimen (with constant cross-

Card 1/3

Study of heat transfer ...

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S/021/62/000/002/008/010
D299/D304

section) the distance between the fins was 2 mm. The heat transfer of all 3 corrugated elements was practically the same. In the elements with perforated fins, the heat transfer is largely dependent on the distance between the perforations. In reducing the distance between the perforations, the heat transfer increases and the resistance too. It was found that perforated surfaces with 1 mm distance between perforations were most advantageous. Although in theory perforations at small intervals are more convenient, they are not always feasible in practice. Therefore, in some cases it is more expedient to use surfaces with more widely spaced perforations. In plate-fin heat-exchangers with perforated and corrugated fins, the heat exchange increases 2 - 3 times compared to smooth fins. By analyzing the curves $Nu = f(Re)$ it was found that in the range $Re = 500-2200$, a transition zone exists between laminar and turbulent flow. The numerical dependence between the Nu - and Re criteria, obtained in the investigation, can be expressed by the formula $Nu = cRe^n$, where c and n depend on the value of Re (listed in a table). There are 4 figures, 2 tables and 1 Soviet-bloc reference.

Card 2/3

X

Study of heat transfer ...

33753

S/021/62/000/002/008/010
D299/D304

ASSOCIATION: Instytut teploenerhetyky AN UkrRSR (Institute of Heat and Power Engineering of the AS UkrRSR)

PRESENTED: by Academician I. T. Shvets' of the AS UkrRSR

SUBMITTED: September 8, 1961

Card 3/3

X

KREMNEV, O.A. [Kremn'ov, O.O.]; SEMILET, Z.V.; BUTSKIY, N.D. [Buts'kyi, M.D.]

Study of heat emission and resistance of finned lamellar heat exchangers
with grid-type perforated caps having recurved rims. Zbir. prats' Inst.
tepl. AN URSS no.24:14-23 '62. (MIRA 16:3)
(Heat exchangers)

AUTHOR: Butskiy, S.A. SOV/115-58-1-13/50

TITLE: A Device for Checking the Parallelism of the Work Surfaces of Micrometers Larger Than 100 mm (Prisposobleniye dlya poverki parallel'nosti rabochikh poverkhnostey mikrometrov svyshe 100 mm)

PERIODICAL: Izmeritel'naya Tekhnika, 1958, Nr 1, p 23 (USSR)

ABSTRACT: The author's unidentified plant introduced this device, which was described in "Izmeritel'naya tekhnika", 1957, Nr 3. This article describes modifications made in the device. There is 1 diagram.

1. Micrometers--Inspection 2. Surfaces--Calibration

Card 1/1

AUTHOR: Butskiy, S.A. SOV-115-58-3-18/41

TITLE: Measuring Devices (Izmeritel'nyye prisposobleniya)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 3, p 52 (USSR)

ABSTRACT: The design of two new devices is described and illustrated. 1) A holding device for checking micrometers of over 100 mm nominal size (Fig. 1) consisting of an aluminum body and screws. The device will be fixed on the micrometer head, after which the micrometer will be checked in the usual way by gage blocks. It is used at the Khar'kov Plant imeni V.I. Lenin. 2) A stopping device ("arrester") for use on a "IZM-10" measuring machine, consisting of a steel wire spring, a screw and a nut (Fig. 2). There are 4 diagrams.

1. Gages--Desig. 2. Gages--Inspection

Card 1/1

BUTS'KO, I.S.

Overhead pusher conveyor at the Gorkiy Automobile Plant. Avt.-
prom. 28 no.5:40 My '62. (MIRA 15:5)

1. Nauchno-issledovatel'skiy tekhnologicheskii institut
avtomobil'noy promyshlennosti.
(Gorkiy--Conveying machinery)

BABKO, I.M., kand.med.nauk; ~~BUTS'KO, L.K.~~ [Buts'ka, L.K.], kand.med.nauk

Importance of auxiliary methods for studying the etiological characteristics of acute digestion disorders in younger children. Ped., akush. in gin. 19 no.3:30-31 '57. (MIRA 13:1)

1. Otdel profilaktiki i terapii detskikh bolezney (rukovoditel' - A.M. Khvil') Ukrainского nauchno-issledovatel'skogo instituta okhrany materinstva i detstva im. Geroya Sovetskogo Soyuza prof. F.M. Buyko (direktor - zasluzh. vrach USSR M.D. Burova).
(METABOLISM, DISORDERS OF)

Butsko, M. I.

24(4) PHASE I BOOK REPLICATION SOV/3140

Akademiya nauk Ukrain'skoy SSR. Instytut fiziki

Fotoelektricheskiye i opticheskiye yavleniya v poluprovodnikakh: trudy pervogo vostochnogo iev-zhichnogo simpoziuma po fotoelektricheskim i opticheskim yavleniyam v poluprovodnikakh, 8. Kiyev, 20-26 noyabrya 1957 g. (Photoelectric and Optical Phenomena in Semiconductors: Transactions of the First Conference on Photoelectric and Optical Phenomena in Semiconductors...) Kiyev, 1959. 403 p. 4,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSR, Prezidium. Komissiya po poluprovodnikam. Ed. of Publishing House: I. V. Kisina; Tech. Ed.: A. A. Katveychuk; Resp. Ed.: V. Ye. Lashkarov, Academician, Ukrainian SSR, Academy of Sciences.

PURPOSE: This book is intended for scientists in the field of semiconductor physics, solid state spectroscopy, and semiconductor devices. The collection will be useful to advanced students in universities and institutes of higher technical training specializing in the physics and technical application of semiconductors.

COVERAGE: The collection contains reports and information bulletins (the latter are indicated by asterisks) read at the First All-Union Conference on Optical and Photoelectric Phenomena in Semiconductors. A wide scope of problems in semiconductor physics and technology are considered: photoconductivity, photoelectric motive forces, optical properties, photoelectric cells and photoresistors, the actions of hard and corpuscular radiations, the properties of thin films and complex semiconductor systems. The reports were prepared for publication by E. I. M. K. Kabanov, V. I. Kabanov, V. I. Kabanov, M. I. Butsko, and M. K. Shyrbukan. References and discussion follow each article.

Photoelectric and Optical Phenomena (Cont.)	SOV/3140
Yevsfatov, V. G., and L. M. Kurbatov. Recording the Photoconductivity of Lead Sulfide According to the Absorption of Microwaves	213
Butsko, M. I. Some Peculiarities of the Photoconductivity of Mercuric Sulfide (Thesis)	219
5. Properties of Semiconductors in Thin Films	
Koramskiy, M. I., M. I. Butsko, S. L. Ivanova, G. D. Kozlov, and M. B. Zhukovskiy. Hetero-Photoconductivity in Layers of Selenium Treated With Mercury	220
Lisitsa, M. P., V. M. Kuzarskiy, and M. G. Tsvirikhin. Optical Properties of Thin Films of Some Semiconductors	227
Khallikov, A. Kh., M. I. Alizay, A. A. Bashaaliyev, G. Aliyev, and E. Salayev. Investigation of the Optical Properties of Selenium with Mixtures of Iodine, Bromine,	

Card 10/46

BUTSKO, N.I. (L'vov)

~~Preparation of pure sulfur.~~ Khim. v shkole. no.2:48-49 Mr-Ap '58.
(Sulfur) (MIRA 11:3)

AUTHORS: Butsko, N. I., Shneyder, A. D. 57-28-6-9/34

TITLE: The Influence Exercised by X-Rays Upon the
Properties of Mercuric Sulfide (Vliyaniye
rentgenovskikh luchey na elektricheskiye
svoystva sernistoy rtuti)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 6,
pp. 1188-1189 (USSR)

ABSTRACT: The high sensitivity of photoresistances of cadmium
sulfides to visible α -, β -, and γ -rays gave rise to
an intensive study of the electrical properties of
substances resembling cadmium sulfides with respect to
their structure. Considerable interest is aroused in this
respect by mercuric sulfide. In the course of the present
work smaller, artificially produced polycrystalline samples
of mercuric sulfide of the red variety were investigated.
The volt-ampere characteristic at the beginning of the
coordinate axes deviated from the straight line in the
direction of the current axis, so that the dependence of the
dark current on voltage can be represented by $i = kU$

Card 1/3

The Influence Exercised by X-Rays Upon the
Properties of Mercuric Sulfide

57-28-6-9/34

with the index $\gamma > 1$. The further course of the
volt-ampère characteristic continues to be influenced
by visible light and by X-rays. If the ratio between the
additional current i_f and the anode current of the tube i_r
is taken as a measure of sensitivity, the sensitivity of
the samples, the dosimetrical characteristics of which are
shown by a figure, will be of the order of magnitude 0,12
microampères/milliampères (with $U_r = 100$ kV and $U_f = 70$ v).
Individual samples are marked by higher sensitivity. In spite
of the nonlinearity of the dosimetrical characteristics
mercuric sulfide, thanks to its great sensitivity, is a
promising material for the production of dosimeters.
Measurements also showed a close connection in HgS between
sensitivity to visible light and to X-rays. The highest
sensitivity to X-rays was shown by samples with high
sensitivity in the visible range. Samples without
photoconductivity were found to be insensitive also to
X-rays. The course taken by the characteristics of

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The Influence Exercised by X-Rays Upon the
Properties of Mercuric Sulfide

57-28-6-9/34

sensitivity to temperature to X-rays also accurately reproduces temperature sensitivity to visible light. In the dynamic characteristics certain differences are observed: The increase of current during irradiation by means of X-rays is determined by a duration that is shorter by one order of magnitude than in the case of visible light. There are 1 figure and 2 references, 2 of which are Soviet.

ASSOCIATION: L'vovskiy gosudarstvennyy pedagogicheskiy institut
(L'rov State Pedagogical Institute)

SUBMITTED: July 11, 1957

1. Mercury sulfides—Electrical properties 2. Mercury sulfides—Effects of radiation 3. Mercury sulfides—Temperature factors 4. X-rays—Electrical effects

Card 3/3

66390

SOV/58-59-10-22931

24.7600

Translation from: Referativnyy Zhurnal, Fizika, 1959, Nr 10, p 160 (USSR)

AUTHOR: Butsko, N.I.

TITLE: Effect of Molecular Adsorption on the Conductivity and Photoconductivity of Mercuric Sulfide and Its Thermoelectric Properties

PERIODICAL: Nauchn. zap. L'vovsk. politekhn. in-t, 1958, Nr 57, pp 155 - 159

ABSTRACT: The author studied the effect of the adsorption of molecules of ethanol, acetone, benzene, and water on the electrical conductivity (σ) and photoconductivity (I_p) of α -HgS. Crystals of α -HgS were obtained from the gaseous phase by the method of sublimation of stoichiometric batches of the components. The author studied crystals 0.1 to 1 mm thick with an interelectrode area of 3 to 6 mm². He employed vapor pressures of 10⁻⁴ mm Hg to some tens of mm Hg. He found that σ and I_p increase during the adsorption of ethanol, acetone, and water. The adsorption of benzene does not affect σ and I_p . A study of the kinetics of photoconductivity showed that the relaxation time decreases during the

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4

66390

SOV/58-59-10-22931

Effect of Molecular Adsorption on the Conductivity and Photoconductivity of Mercuric Sulfide and Its Thermoelectric Properties

adsorption of water, acetone, and benzene. The thermo-emf (α), measured on polycrystalline samples, corresponds to n-conductivity and is equal to 0.910 mV/deg in magnitude. α decreases with a rise in temperature. The author determined the α of β -HgS samples which turned out to be n-conductors. X-ray analysis showed that the structure of α -HgS is hexagonal, while that of β -HgS is cubic.

V.B.S. ✓

Card 2/2

BUTSKO, N. I., Cand Phys-Math Sci -- (diss) "Several electrical and photoelectrical characteristics of mercury sulfide." L'vov, 1960. 7 pp; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, L'vov State Univ im Ivan Franko); 150 copies; price not given; (KL, 30-60, 135)

*Butsko, N.I.*81953
S/181/60/002/04/12/034
B002/B063

24.3900

AUTHOR:

Butsko, N. I.

TITLE:

Some Characteristics of the Photoelectric Conductivity ²¹
of Mercurio Sulfide ₁₁

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 4, pp 629-632

TEXT: Mercurio sulfide was prepared by reacting the purified components in the gaseous phase; on cooling, hexagonal α -HgS forms via the cubic β -HgS. The electric and photoelectric properties of α -HgS were investigated by means of an M/21 (M/21) mirror galvanometer. The dependence of steady photoelectric conductivity ($\Delta\sigma_0$) on illumination (E) is not linear:

$\Delta\sigma_0 = E^\gamma$ for $\gamma = 0.4$ to 0.6 . A sensitivity of up to $200 \mu\text{a/lumen}$ is attained. The maximum spectral distribution of photoelectric conductivity is found at $605 \mu\text{m}$ (Fig. 1), and a sample containing 0.4% Sn showed an additional maximum at about $705 \mu\text{m}$. Further, the temperature dependence of photoelectric and dark conductivity was studied (Fig. 2). Between -180°C and $+350^\circ\text{C}$ photoelectric conductivity has a maximum at about $+250^\circ\text{C}$. At

Card 1/2 X

Some Characteristics of the Photoelectric
Conductivity of Mercuric Sulfide

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B002/B063

low temperatures, a hysteresis loop appears, i.e., at a given temperature, photoelectric conductivity is higher on cooling than on heating. Between 320°C and 330°C it vanishes, presumably due to transition from α - to β -HgS. At -150°C , dark conductivity is not measurable any more, and from this point it increases up to a maximum at 310°C . A small minimum is found at 325°C . After the light has been switched off, the crystal remains excited for some minutes. An examination of the increase and decrease of the photoelectric current showed that α -HgS crystals belong to the hyperbolic photoelectric resistors such as Se, InSe, Tl_2S , Bi_2S_3 , and CdS at low temperatures. The author thanks M. M. Gol'dberg for the suggestion of this subject, and A. D. Shneyder and S. A. Bilinkevich for their advice. There are 2 figures and 6 references: 5 Soviet and 1 German.

ASSOCIATION: L'vovskiy pedagogicheskiy institut
(L'vov Pedagogical Institute)

SUBMITTED: July 16, 1959

Card 2/2

BUTSKO, N.I. [Butsko, M.I.]; ANDRIYEVSKIY, A.I. [Andriievs'kyi, O.I.]

Effect of impurities on certain physical properties of mercury sulfide. Ukr. fiz. zhur. 8 no.9:975-978 S '63.

(MIRA 17:8)

1. L'vovskiy politekhnicheskij institut.

BUTSKO, N.I. [Butsko, M.I.]

Study of certain properties of antimony sulfide of silver. Ukr.
fiz. zhur. 9 no.6:686-688 Je '64.

(MIRA 17:11)

1. L'vovskiy politekhnicheskij institut.

VYSOTSKIY, Z.Z.; DIVNICH, L.F.; BUTSKO, S.S.

Method for recording absorption spectra of dyes in transmitted
light on plate-shaped silica and aluminosilicate gels. Opt.
i spektr. 12 no.2:327-328 F '62. (MIRA 15:2)

(Dyes and dyeing)

(Silica)

(Aluminosilicates)

BUTS'KO, S. S.

USSR/Agriculture
Soil Science
Literature

Sep 48

"Bibliography on Factors of Soil Formation, Genesis, and Geography of Soils" 1½ pp

"Pochvoved" No 9

Lists various books on the study of soils, among them T. P. Afanas'yev's "Basic Hydrology of the Middle Reaches of the Volga," S. S. Buts'o's "Geomorphology of Landslips," and B. F. Petropv's "Atlas Loess."

61/49T10

BUTS'KO, S.S.

Earth creeps in clays with brecciated structure. *Biul.MOIP.*
Otd.geol. 29 no.6:105-107 N=D '54. (MLRA 8:2)
(Earth movements)

BUTS'KO, S. S. Cand Geog. Sci -- (dis.) "Geomorphological Analysis
of Sliding Landscape and Its Effect^{up} on the Development of Slide-
Prevention ~~MEASURES~~ Measures." Mos, 1957. 14 pp, 21 cm.

(Min of Education RSFSR, Mos Oblast Pedagogical Inst), 100 copies

(KL, 16-57, 100)

Buts'ko, S S .

SUBJECT: USSR/Geology 5-2-17/35

AUTHOR: None

TITLE: On the Activities of the Geographic Section of the Moskva Society of Investigators of Nature (O deyatel'nosti geograficheskoy sekti-sii Moskovskogo obshchestva ispytateley prirody)

PERIODICAL: Byulleten' Moskovskogo Obshchestva Ispytateley Prirody, Otdel Geologicheskii, 1957, # 2, pp 149-151 (USSR)

ABSTRACT: During the period from December 1956 to January 1957, the following reports were delivered to the Geographical Section of the Society:

"On the Problem of Investigation the Energy of Relief" - by N.P. Matveyev;

"Landslides and Erosion Process" - by S.S. Buts'ko and V.A. Fedorevskiy;

"Seismic Tectonics and Neotectonics of China" by G.P. Gershkov, and "New Data on Modern Volcanism in Eastern Tuva" - by M.G. Grosval'd.

ASSOCIATION: Moskva Society of Investigators of Nature.

PRESENTED BY:

SUBMITTED: No date indicated

AVAILABLE: At the Library of Congress.

Card 1/1

BUTS'KO, S.S., inzhener.

Using calcination in hydraulic construction. Gidr. stroi. 26 no.3:
39-40 Mr '57. (MIRA 10:4)

(Soil stabilization)

AUTHORS: Butsko, S.S. and Dain, B.Ya. SOV/21-58-11-16/28

TITLE: Photochemical Reaction of a-Chlorophyll Oxidation by Ferric Chloride (Fotokhimicheskaya reaktsiya okisleniya khlorofilla a khlornym zhelezom)

PERIODICAL: Dopovidi Akademii nauk Ukrain's'koi RSR, 1958, Nr 11, pp 1221-1224 (USSR)

ABSTRACT: The irradiation with light of 400 to 370 m wavelength of acetone solutions of the mixtures of a-chlorophyll with $FeCl_3$, with an excess of the latter, leads to the formation of a red-colored photoproduct. This product is stable under vacuum conditions and preserves its characteristic spectrum for a long time. However, its contact with the air results in a sharp change of the spectrum. The spectrum of the final product is characteristic for ferric porphyrins (the position of peaks at 640; 580; 510 and 420 m). The rate of photo-reaction decreases with an increase in ferric salt concentration. A dark after-effect of the light is observed in the reaction. This indicates the formation in the course of the photochemical reaction of stable products which act as catalyzers during the subsequent process in darkness.

Card 1/2 The authors assume that the red photoproduct is a chlorophyll

SOV/21-58-11-16/28

Photochemical Reaction of α -Chlorophyll Oxidation by Ferric Chloride

semi-oxidized in the 7 - 8 position of the IV ring.
There are 2 graphs and 3 references, 2 of which are Soviet
and 1 American.

ASSOCIATION: Institut fizicheskoy khimii imeni L.V. Pisarzhevskogo AN
UkrSSR (Institute of Physical Chemistry imeni L.V. Pisar-
zhevskiy of the AS UkrSSR)

PRESENTED: By Member of the AS UkrSSR, A.I. Brodskiy

SUBMITTED: June 13, 1958

Note: Russian title and Russian names of individuals and institu-
tions appearing in this article have been used in the trans-
literation.

Card 2/2

BUTSKO, S.S.; DAIN, B.Ya.

Spectrophotometric analysis of chlorophyll interactions with iron.
Zhur.ob.khim. 28 no.9:2603-2611 S '58. (MIRA 11:11)

1. Institut fizicheskoy khimii AN USSR.
(Chlorophyll) (Iron)

BUTSKO, S.S.; DAIN, B.Ya.

Photochemical interaction of chlorophyll with iron salts in
acetone solution. Ukr.khim.zhur. 27 no.3:314-322 '61.

(MIRA 14:11)

1. Institut fizicheskoy khimii im. L.V. Pisarzhevskogo AN USSR.
(Chlorophyll)
(Iron salts)

BUTS'KO, S.S.

Geographical universality of the landslide process. Biul.
MOIP Otd. geol. 37 no.6:139-140 N-D '62. (MIRA 16:8)

BOIS'KO, Z.N., (Moskva)

Determining the filling pressure on steep bulkheads. Inzh.
sbor. 23:132-137 '56. (MLRA 9:10)

(Retaining walls) (Soil mechanics)

But'sko, Z. N.

PLATE I BOOK EXHIBITION 807/1931

Abel's book SERB. Institut matematiki
Zemljinica Beograd, tom 26 (Dobrovoljci izdavaoci, Vol. 26) Moscow, 1958.
256 p. 2,4x0 copies printed.

Sponsoring Agency: Abkhazian and SERB. Otdel'nyi khimicheskii nauk.
Institut matematiki.

Mrp. Kh. I. A. A. II'pashkoj, M. I. G. Z. Pshenitskoj, Zhd. M. I. E. L. Lerman.

REPORT: This book is intended for engineers.

CONTENTS: The book contains 59 articles dealing with professional work performed by mechanical engineers, such as the calculations of shells, rods, and plates, and solutions of problems in stress distribution and equilibrium. Oscillations (including plates), and deformation of shells, equilibrium of shell joints, rods and solids, stability of rods, plates, frames and other members, stress concentration, and bending are discussed. Oscillations of aluminum wings are mentioned. In Appendixes accompany each article.

Plavov, B. P. [Moscow]. Compression of an Elastic Plate Layer [Received on 6/14/1958] 188

Dudkin, E. G. [Moscow]. Bending of a Rectangular Plate Under a Local Point Load With Various Boundary Conditions [Received on 2/2/1955] 199

Plavov, B. P. [Moscow]. Certain Problems Associated With the Calculation of Stresses in Elastic Members [Received on 11/20/1954] 205

Plavov, B. P. [Moscow]. Parametric Resonance of Supporting Power of Shell Foundations [Received on 11/20/1954] 216

Kolomojts, L. A. [Frankfurt]. Numerical Method of Successive Approximation for Investigating Finite Displacements of Elastic Elastic Rods Under a Complex Load [Received on 10/2/1956] 228

Aliev, V. E., and V. E. Kuznetsov [Moscow]. Stability and Calculation of Frames for Deformation [Received on 4/11/1957] 236

Kuznetsov, V. E. [Moscow]. Stability Calculation of Elastic Systems [Received on 7/2/1954] 232

Plavov, B. P. [Moscow]. Transverse Bending of a Prismatic Cantilever Beam With a Nonlinear Elastic Rod Under a Load in a Plane Perpendicular to the Plane of Symmetry [Received on 2/9/1956] 270

Dzhelezov, A. A. [Petrozavodsk]. Certain Generalized "rigid" Plates' Calculation Theory of Thin-Shell Rods [Received on 2/4/1955] 275

Plavov, B. P. [Moscow]. Orthogonal Polynomials With Arbitrary Powers [Received on 1/2/1955] 280

Plavov, B. P. [Moscow]. On Approximate Computing Integral Equations of Oscillations of Elastic Systems [Received on 3/24/1958] 285

AMERICAN Library of Congress

BUTSKOV, N.

Coordinating conference on pedological problems. Uzb. biol. zhur.
no.4:101-102 '58. (MIRA 11:12)
(Uzbekistan--Soil research)

BUTSKOV, N.A.; NASYROV, Ya.M.; PANKOV, M.A., doktor sel'khoz. nauk,
otv. red.; KURANOVA, L.I., red.; KRIVONOSOVA, N.A., red.;
SOROKINA, Z.I., tekhn. red.

[Soils in the southwestern Kyzyl Kum] Pochvy Iugo-Zapadnykh
Kyzylkumov. Tashkent, In-t pochvovedeniia, 1961. 198 p.
(MIRA 15:7)

(Kyzyl Kum--Soils)

BUTSKIS, P.E. [Buckus, P.]; RAGUOTENE, N.V. [Raguotiene, N.]

Amides of aryloxypropionic acids. Zhur.ob.khim. 33 no.2:622-
624 F '63. (MIRA 16:2)

1. Vil'nyusskiy gosudarstvennyy universitet.
(Propionamide)

BUTSKUS, P.F. [~~Buckus, P.~~]; STONITE, R.Yu. [Stonyte, R.]

Some transformations of N,N-di (β -cyanoethyl)-p-toluenesulfamide.
Zhur.ob.khim. 33 no.2:624-628 F '63. (MIRA 16:2)

1. Vil'nyusskiy gosudarstvennyy universitet.
(Toluenesulfonamide)

BUTSKINS, P. P.

Syntheses with acrylonitrile. XX. Cyanoethylation of esters of α -amino acids. A. P. Terent'ev and P. P. Butskins (M. V. Lomonosov State Univ., Moscow). *Dokl. Akad. Nauk SSSR*, 23, 1230-4 (1959); cf. *ibid.* 763-5; *C.A.* 47, 8603h. $\text{H}_2\text{NCH}_2\text{CO}_2\text{Me}$ (5 g.) and 6 g. $\text{Cl}_2\text{C}=\text{CHCN}$ (I) in Et_2O at 5 days, then refluxed 5 hrs. gave a ppt. of di-*tert*-butylamine, while the soln. gave 65.2% $\text{MeO}_2\text{CCH}_2\text{NHCH}_2\text{CH}_2\text{CN}$, *b*_p 142-3°, *n*_D²⁰ 1.4630, *d*₄²⁰ 1.0933; *HCl* salt, *m.* 137° (from EtOH). To 10 g. $\text{MeO}_2\text{CCH}_2\text{NH}_2\text{HCl}$, 5 ml. H_2O , and 12.6 g. I was added over 15 min. at 60° 4.4 g. KOH in 15 ml. H_2O ; after 1 hr. at 70-5°, extrn. with Et_2O and distn. of the ext. gave 51.3% of the same product as above, *b*_p 142-3°. If the heating to 75° is extended for 10 hrs. only 17.8% of the above nitrile is obtained, along with 21.9% $\text{MeO}_2\text{CCH}_2\text{N}(\text{CH}_2\text{CH}_2\text{CN})_2$, *b*_p 218-19°, *m.* 59.5-60° (from H_2O); *HCl* salt, *m.* 121-1.5° (from EtOH). Reaction of 5 g. $\text{EtO}_2\text{CCH}_2\text{NH}_2$ with 5.1 g. I in EtOH after 3 days standing and 5 hrs. refluxing, gave 70.5% $\text{EtO}_2\text{CCH}_2\text{NHCH}_2\text{CH}_2\text{CN}$, *b*_p 148-9°, *n*_D²⁰ 1.4498, *d*₄²⁰ 1.0615; *HCl* salt, *m.* 113° (from EtOH); a yield of 67.8% is obtained if the reaction is run with 3 fold quantity of I in the presence of an EtOH solution. The authors also describe the synthesis of $\text{EtO}_2\text{CCH}_2\text{N}(\text{CH}_2\text{CH}_2\text{CN})_2$ and $\text{EtO}_2\text{CCH}_2\text{N}(\text{CH}_2\text{CH}_2\text{CN})_3$. *Acetylation* of $\text{EtO}_2\text{CCH}_2\text{NHCH}_2\text{CH}_2\text{CN}$ with I at 75° is extended to 10 hrs. only a 2% monoacetylation product is formed, along with 22.6% $\text{EtO}_2\text{CCH}_2\text{N}(\text{CH}_2\text{CH}_2\text{CN})_2$, *b*_p 218-19°, *m.* 59.5-60° (from EtOH); this with MeOH-NH_3 gave 81.4% $\text{H}_2\text{NCOCH}_2\text{N}(\text{CH}_2\text{CH}_2\text{CN})_2$, *m.* 103.5° (from EtOH). *Chromatography* was used to separate 5 g. H_2O , 0.8 g. I and 2.4 g. KOH in 15 ml. H_2O and the mixt. kept 5 hrs. at 70-5°, yielding 78.5% $\text{EtO}_2\text{CCH}_2\text{N}(\text{CH}_2\text{CH}_2\text{CN})_2$, *b*_p 191-2°, *n*_D²⁰ 1.5111, *d*₄²⁰ 1.0742; *HCl* salt, *m.* 168° (from EtOH). With alc. NH_3 this gave $\text{H}_2\text{NCOCH}_2\text{N}(\text{CH}_2\text{CH}_2\text{CN})_2$, 83.3%, *m.* 103.5° (from EtOH). G. M. K.

BUTSKUS, F. F.

Dissertation: "Cyanethylation of Alpha-Amino Acids and Their Derivatives." Cand
Chem Sci, Moscow Order of Lenin State U imeni M. V. Lomonosov, 5 Jun 54. *Vechnyyaga*
Moskva, Moscow, 27 May 54.

SO: SUM 284, 26 Nov 1954

BUTSKUS, P. F.

USSR/ Chemistry - Analysis

Card : 1/1

Authors : Terentyev, A. P., Butskus, P. F., and Yashunskiy, V. G.

Title : Determination of acrylonitrile with the aid of the cyanethylation reaction

Periodical : Zhur. Anal. Khim., 9, Ed. 3, 162 - 165, May-June 1954

Abstract : Investigations conducted on the cyanethylation of alpha-amino acid derivatives led to the development of a new method for the determination of acrylonitriles, based on the reaction of the latter with glycol. The apparatus employed in connection with this new analysis method is described. The new analysis method makes it possible to determine acrylonitrile in colored mixtures containing water and ethylenecyanohydrin with an accuracy of up to $\pm 1\%$. Eleven references: 3-USSR, 6-USA, 2-English. Table; drawing.

Institution : The M. V. Lomonosov State University, Moscow

Submitted : Jan. 13, 1954

BUTSKUS, P. F.

USSR/Chemistry - Reaction products

Card 1/1 : Pub. 22 - 25/48

Authors : Terentyev, A. P., Memb. Corresp. of Acad. of Sc. USSR., and Butskus, P. F.

Title : Cyanethylation of glycyI glycine and diketopiperazines

Periodical : Dok. AN SSSR 97/5, 851-853, August 11, 1954

Abstract : The reaction of cyanethylation of a simple dipeptide - glycyI glycine- and certain 2,5-diketopiperazines, was investigated. The reaction products obtained and their characteristics, are described. Three references: 2-USSR and 1-USA (1948-1953).

Institution : The M. V. Lomonosov State University, Mosccw

Submitted : May 29, 1954

DOT 2 205/PA

cyanobenzamide, decomp. 248-51; N-cyanosulfo-
butyric acid, decomp. 203-5; N-his(2-cyano-
ethyl)cystine, decomp. 207-8^o (KOH used in place of Et₃N
in the reaction); N-cyanomethylphenylamine, decomp.

10073205 P.F.
TERENT'YEV, A.P.; BUTSKUS, P.F.

Synthesis with aid of acrylonitril. Part 32: Some derivatives of
cyanoethylated α -amino acids. Zhur.ob.khim. 27 no.10:2884-2888
0 '57. (MIRA 11:4)

1.Moskovskiy gosudarstvennyy universitet i Vil'nyusskiy gosudarstvennyy
universitet.
(Amino acids) (Ethylation)

AUTHORS: Butskus, P. F., Denis, G. I.

SOV/156-58-1-31/46

TITLE: The Reaction of the Aromatic Amines With N-Cyanogen-Ethylated α - and β - Amino Acids (Reaktsiya aromaticheskikh aminov s N-tsiyanetilirovannymi α - i β -aminokislotami)

PERIODICAL: Nauchnyye doklady vyshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 1, pp. 130 - 132 (USSR)

ABSTRACT: In connection with the action of ammonia, hydrazine, and piperidine on the amino acids referred to in the title, the de-cyano-ethylation of the latter takes place (Ref 1). The action of aromatic amines (aniline, p-nitro-aniline, p-toluidine, β -naphthylamine) on N-monocyano-ethylated and N,N-dicyano-ethylated α - and β -amino acids leads to the formation of de-cyano-ethylation products of the latter and to cyano-ethylation products of the aromatic amines - of the β -aryl-amino-propyl-nitriles. Consequently, a transition of the cyanogen-ethyl-group from one compound into another one, i.e. a trans-cyano-ethylation-process (peretsianetilirovaniye) takes place. The reaction of the aromatic amines with N-monocyanogen-ethyl- α -amino acids, with N-monocyanoethyl- β -amino-acids and with N,N-dicyano-ethyl- β -amino-acids takes place analogously. The

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The Reaction of the Aromatic Amines With N-Cyanoethyl-
Ethylated α - and β - Amino Acids

SOV/156-58-1-31/46

reaction of aniline with N-cyanoethyl-glycyl glycine and N,N-dicyanoethyl-glycyl glycine leads to the formation of glycyl glycine and an aniline-cyanoethylation-product. All above reactions were carried out in an aqueous solution at 100°. The dicyanoethylated α -amino acids without solvent split off only one cyanoethyl group with aromatic amines at from 130 to 140° and form mono-cyano-ethyl derivatives. At higher temperatures, the second cyano-ethyl-group is also split off. Resinification takes place, however. There are 1 table and 7 references, 4 of which are Soviet.

ASSOCIATION: Kafedra organicheskoy khimii Vil'nyusskogo gosudarstvennogo universiteta im.V.Kapsukasa (Chair of Organic Chemistry at the Vil'nyus State University imeni V.Kapsukas)

SUBMITTED: September 16, 1957

Card 2/2

AUTHORS: Butskus, P. F., Denis, G. I. SOV/156-58-4-33/49

TITLE: Cyano-Ethylation of the Aromatic Amines by Acrylonitrile and β -Substituted Propionitriles (Tsianetilirovaniye aromaticheskikh aminov akrilonitrilom i β -zameshchennymi propionitrilami)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 4, pp 743-745 (USSR)

ABSTRACT: The interaction of the aromatic amines with acrylonitrile and β -substituted propionitrile in the aqueous phase was investigated. N-cyano-ethylized aromatic amines are formed in this interaction. The cyano-ethylized compounds, their yield and the melting points were investigated. The cyano-ethylation by β -substituted propionitriles was carried out in the following manner: aniline in aqueous phase is added to the β -substituted propionitriles and in the course of 10 hours is treated with a reflux condenser. The reaction mixture is vaporized in vacuum on the water bath. The dry residue is dissolved in hot alcohol under addition of water and it is left to stand for several days. During this time the β -phenyl amine propionitrile formed precipitates. The reaction of the aniline with N-cyano-ethylized compounds under addition of concentrated hydrochloric acid is

Card 1/2

Cyano-Ethylation of the Aromatic Amines by Acrylonitrile and β -Substituted Propionitriles

SOV/156-58-4-33/49

carried out with ethylene cyanhydrin, β -alkoxy propionitrile, and β -dicyano-ethylene-ester with small amounts of soda lye or triethyl-amine. The influence of hydrochloric acid and soda lye in this reaction is of catalytic character. The reaction of aniline with β -phenoxy-propionitrile, β -cyano-ethyl-ethyl-mercaptan and β -chloro-propionitrile is carried out without catalyst. The cyano-ethylation of acrylonitrile in the aqueous phase leads to the formation of β -phenyl amine propionitrile. The cyano-ethylation of p-anisidine and p-toluidine is carried out in a similar manner. There are 1 table and 14 references, 6 of which are Soviet.

ASSOCIATION: Kafedra organicheskoy khimii Vil'nyusskogo gosudarstvennogo universiteta im. V. Kapsukasa (Chair of Organic Chemistry at the VIL'nyus State University imeni V. Kapsukas)

SUBMITTED: April 16, 1958

Card 2/2

BUTSKUS, P.F.

O-cyanethyltriphenylcarbinol and N-cyanethyltriphenyl-methylamine.
Izv.vys.ucheb.zav.; khim.i khim.tekh. 2 no.1:51-53 '59.

(MIRA 12:7)

1. Vil'nyusskiy gosudarstvennyy universitet, kafedra organicheskoy
khimii.

(Methanol) (Cyanoethylation)

AUTHOR: Butskus, P. F.

S/153/60/003/01/032/058
B011/B005

TITLE: Cyano-ethylation of β -Amino Acids

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1960, Vol 3, Nr 1, pp 122-123 (USSR)

TEXT: The author reports on the action of acrylonitrile and β -chloropropionitrile on β -aminopropionic acid and on β -phenyl- β -aminopropionic acid. He obtained monocyano-ethylation products of β -alanine and of β -phenyl- β -alanine, as well as the dicyano-ethylation product of β -alanine (see Scheme). The compounds formed were: N-ethyl-cyanide- β -alanine, N,N,-di-ethyl-cyanide- β -alanine, and N-ethyl-cyanide- β -phenyl- β -alanine. By heating the N-cyano-ethylated β -amino acids with aqueous ammonia- or hydrazine solution, a complete de-cyano-ethylation takes place, and the β -amino acids are formed. The N-ethyl-cyanide- β -amino acids give no ninhydrin reaction, and contain no amino nitrogen. No depression of the melting point occurred in the melting of mixed samples from original amino acids, and from amino acids obtained by de-cyano-ethylation. There are 2 references.

ASSOCIATION: Vil'nyuskiy gosudarstvennyy universitet im. Kapsukasa; Kafedra organicheskoy khimii (Vil'nyus State University imeni Kapsukas; Chair of Organic Chemistry)

Card 1/2

AUTHOR: Butskus, P. F. S/153/60/003/01/033/C58
B011/B005

TITLE: Cyclization of N-Cyano-ethylated α -Amino Acids and Their Derivatives

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1960, Vol 3, Nr 1, pp 124-126 (USSR)

TEXT: The author states that the N-mono- and N,N-di-ethyl-cyanide- α -amino acids are subject to de-cyano-ethylation and simultaneous cyclization. 2,5-diketopiperazines are formed here. Thus, N-ethyl-cyanide-2,5-diketopiperazine is formed from N-mono- and N,N-di-ethyl-cyanide-glycyl-glycine (see Schemes). The temperature was 160-170°, the reaction time 4-5 h. The author was able to prove that the de-cyano-ethylation is an intermediate stage of the reaction, for he succeeded in stopping the reaction at the stage at which substances are formed which give the ninhydrin reaction but not a picric reaction. Cyclization of the N-ethyl-cyanide-glycyl-glycine proceeds without separation of the ethyl-cyanide group. When N,N-di-ethyl-cyanide-glycyl-glycine is heated in ethylene glycol, only one ethyl-cyanide group is separated. The result is the same in both cases: N-ethyl-cyanide-2,5-diketopiperazine. Further, the author cyclized N-ethyl-cyanide-glycine-methyl ester as well as the ethyl esters of N-cyano-

Card 1/2

Cyclization of N-Cyano-ethylated α -Amino Acids and
Their Derivatives

S/153/60/003/01/033/C58
B011/B005

ethylated glycine and alanine. The former was cyclized most easily. The mentioned methyl ester stored for several years at room temperature cyclizes in part, and forms N,N'-di-ethyl-cyanide-2,5-diketopiperazine. At 110-120° this reaction occurs already after 80 hours. The yield is 25.8%. The mentioned ethyl esters may cyclize within 10 days at 110-120°. Small amounts of a substance, the melting point of which corresponds to that of N,N'-di-ethyl-cyanide-3,6-dimethyl-2,5-diketopiperazine, are precipitated. N-ethyl-cyanide-glycine is formed by heating the aqueous solution of N-ethyl-cyanide-glycine-methyl ester. Table 1 shows the ninhydrin- and picrin reaction of the mentioned amino acids after various heating times at 100-160°. Tables 2 and 3 list the products obtained together with constants and yields. There are 2 tables and 7 references, 2 of which are Soviet.

ASSOCIATION: Vil'nyusskiy gosudarstvennyy universitet im. Kapsukasa; Kafedra organicheskoy khimii (Vil'nyus State University imeni Kapsukas; Chair of Organic Chemistry)

SUBMITTED: April 20, 1959

Card 2/2