

VINOGRADOVA, A.N.

Heat resistance of succinic dehydrogenase in the muscles of
grass and lake frogs and the change in enzyme activity during
acclimatization. TSitologiya 3 no.5:595-598 S-0 '61. (MIRA 14:10)

1. Laboratoriya sravnitel'noy tsitologii Instituta tsitologii
AN SSSR, Leningrad.

(DEHYDROGENASE)

(MUSCLE)

(TEMPERATURE--PHYSIOLOGICAL EFFECT)

VINOGRADOVA, A.N.

Heat resistance of actomyosin in the steppe tortoise *Testudo horsfieldi* Gray and the pond tortoise *Emys orbicularis* (L.) as related to the problem of the adaptation of animals to life in the desert. Sbor. rab. Inst.tsit. no.6:195-198'63.
(ACTOMYOSINS) (HEAT--PHYSIOLOGICAL EFFECT) (MIRA 16:8)
(TORTOISES)

VINOGRADOVA, A.N.; KUSAKINA, A.A.

Heat resistance of protoplasmic proteins in the representatives
of various populations of *Rana ridibunda* Pall. Sber.rab. Inst.
tsit. no.6:158-162'63. (MIRA 16:8)
(FROGS) (HEAT--PHYSIOLOGICAL EFFECT) (MUSCLE)

TUROVTSKVA, Zinaida Mikhaylovna; KUNIN, Lev Lazarevich; VINOGRADOVA,
A.P., akademik, red.; TRAVIN, N.V., red.izd-va; ZENDEL', R.Ye.,
tekhn.red.

[Analysis of gases in metals] Analiz gazov v metallakh.
Moskva, Izd-vo Akad.nauk SSSR, 1959. 390 p. (MIRA 13:1)
(Gases in metals) (Gases--Analysis)

GULYAYEVA, L.I.; VINOGRADOVA, A.P.

Determination of sulfur in organic compounds by the pyrolytic
tube method. Zav. lab. 29 no.10:1180 '63. (MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh
protssessov.

VINOGRADOVA, A. P., Candidate Agric Sci (diss) -- "The effect of the duration and methods of fattening on the meat productivity of poultry". Moscow, 1959. 16 pp (Moscow Vet Acad of the Min Agric USSR), 140 copies (KL, No 24, 1959, 145)

GULYAYEVA, L.I.; VINOGRADOVA, A.P.; KHYANINA, A.P.; KARPOVSKAYA, R.R.

Determination of the trace amounts of sulfur in the products of
petrochemical synthesis. *Neftekhimia* 3 no.2:296-302 Mr-Ap
'63. (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh
protssessov.
(Sugar--Analysis) (Petroleum chemicals)

KATCHENKOV, S.M.; VINOGRADOVA, A.P.

Correlation of red deposition in western Turkmenia by means of
spectrum analysis. VNIGRI no.105:174-180 '57. (MIRA 11:9)
(Turkmenistan--Rocks--Analysis)

VINOGRADOVA, A. P.

✓ The effect of weight-increasing and fat-accumulating biostimulants on the growth of young roosters. A. P. Vinogradova and A. A. Prevo. *Trudy Vsesoyuz. Nauch. Issledov. Inst. Ptilseprom.* 5, 12-18(1964); *Referat. Zhur. Khim., Biol. Khim.* 1955, No. 4162.—Pancreatin and scrapings of the mucosa of small intestines and wt.-increasing biogenic stimulators were added to the daily ration of young roosters. Under controlled lab. conditions a 10% wt. increase was observed. Under practical production conditions it was 8%.
B. S. Levine

①

VINOGRADOVA, A. P.

MD The effect of biogenic stimuli and some mineral salts on the fattening of young fowl. M. V. Plakhotin, D. I. Nikardo, K. M. Vasil'ev, A. P. Vinogradova, and A. A. Prevo. *Trudy Moskov. Tekhnol. Inst. Myasnoi i Molochnoi Prom.* 1954, No. 3, 34-8; *Referat. Zhur. Khim., Biol. Khim.* 1955, 4171.—To the ration of leghorn roosters 1-3 months old was added 0.5-1.0 ml. protein pyrolysin, 0.03 g. LiCl, FeSO₄, 14-21 mg. pancreatin and simultaneously a subcutaneous implantation of this supplement was made. Wt. increase and fat accumulation were attained.

B. S. Levine

VINOGRADOVA, A.P.

Determination of potassium, lithium, and rubidium in waters by
spectrum analysis. Trudy VNIGRI no. 174:229-237 '61.
(MIRA 14:12)

(Water Analysis)

(Alkali metals Spectra)

PATRIK, I.A., kand. sel'skokhoz. nauk; VINOGRADOVA, A.P., kand.
sel'skokhoz. nauk; YERMOLAYEVA, A.L., mladshiy nauchnyy sotrudnik

Raising meat chicken in cages. Trudy TSNIIPa 9:46-53 '62.
(MIRA 16:6)

(Poultry industry)

POYEMNYY, F.A.; VINOGRADOVA, A.S.

Early symptoms of acute poliomyelitis. Vop.diag.i patomorf.zab.
no.2:200-207 '59. (MIRA 15:8)

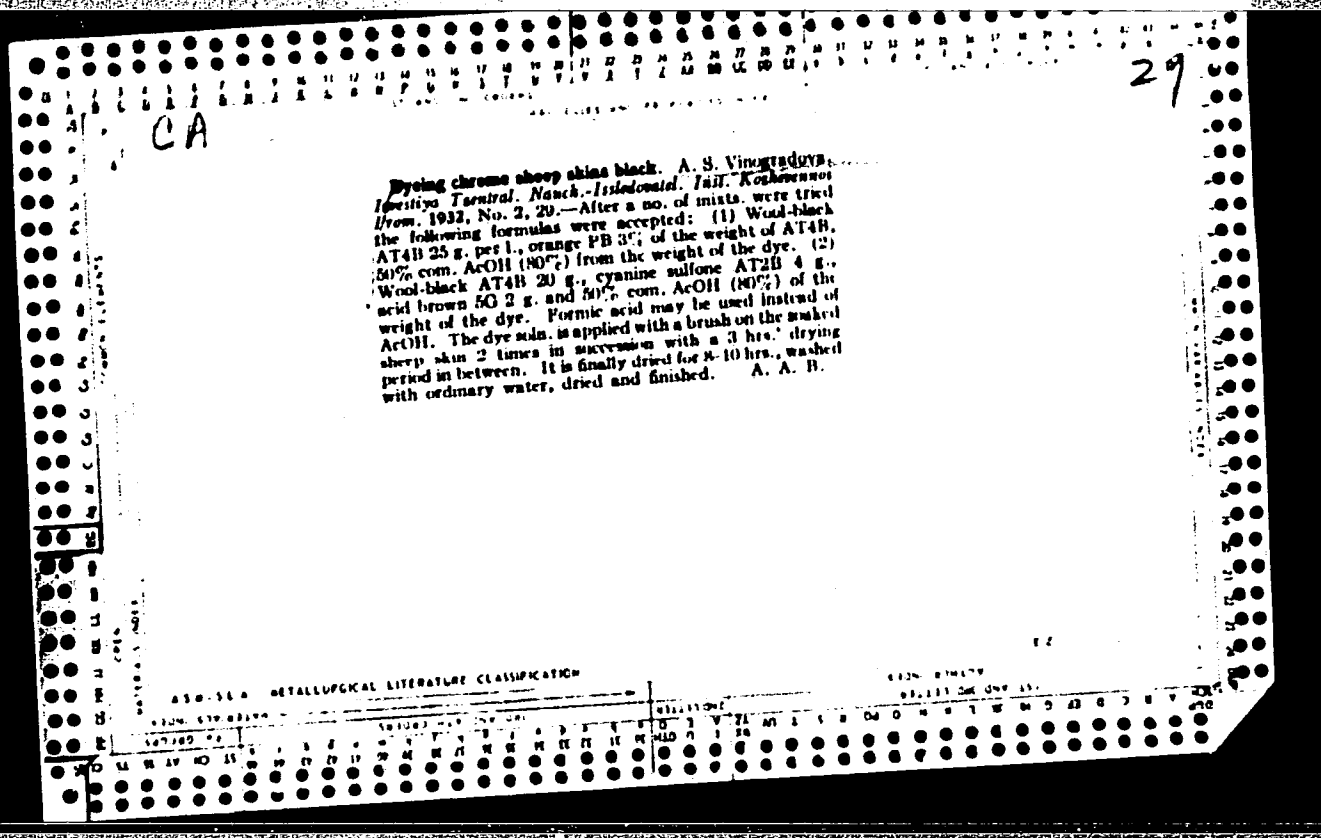
(POLIOMYELITIS—DIAGNOSIS)

CP

9

Cold dyeing of chrome leather. M. A. IL'INSKII and A. S. VINGRADOVA. Russ. Zh. Khim., Oct. 31, 1971. Leather is treated with a cold or lukewarm acidified soln. of cotton dyes which do not belong to the basic type, but have an azo component. There is then applied to the solution or the suspension a diazo compound or a mixt. of a few diazo compds.

AND SEE METALLURGICAL LITERATURE CLASSIFICATION



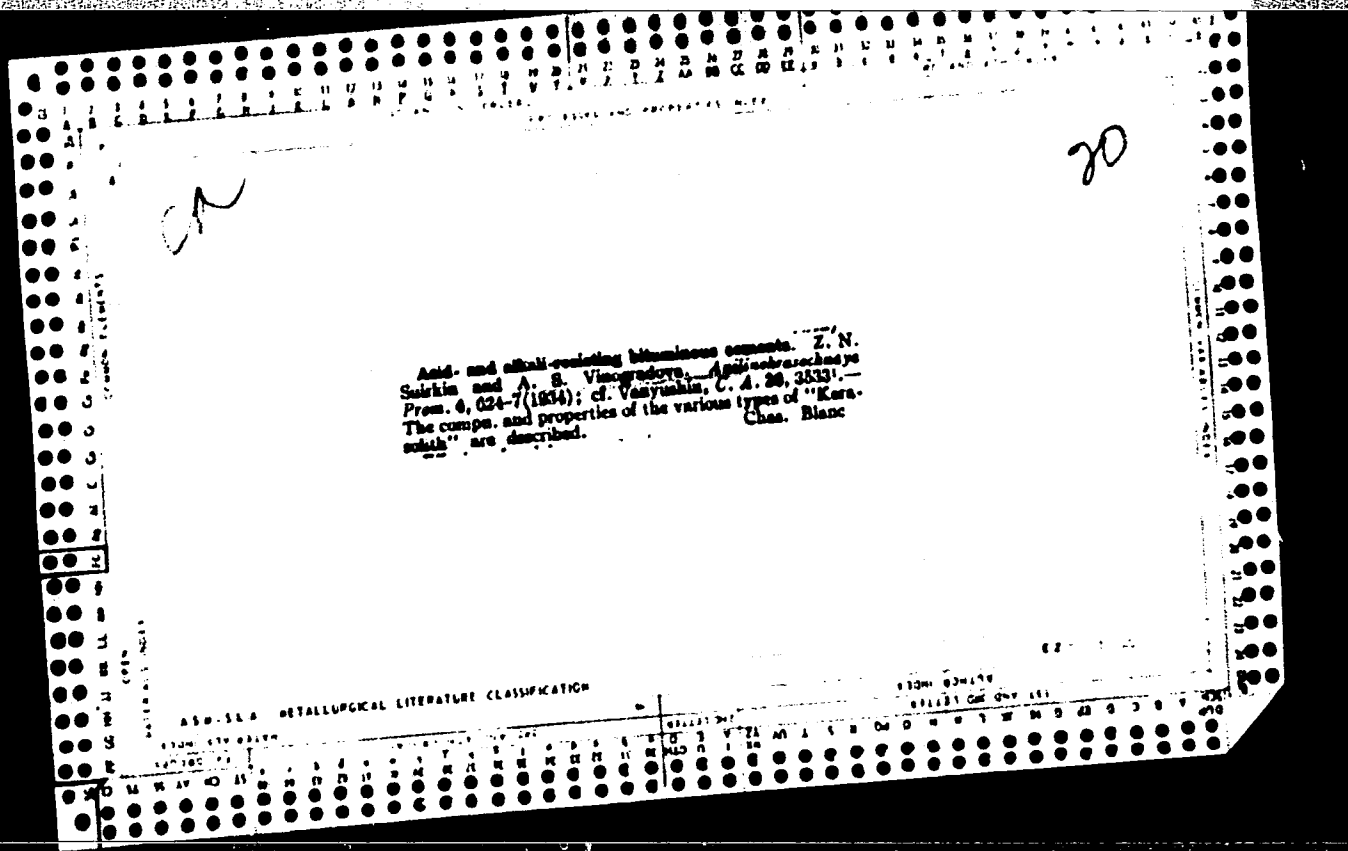
29

1ST AND 2ND GROUPS PROCESSES AND PROPERTIES INDEX

Methods for the testing of the color fastness of leathers.
B. I. Zuckermann and A. S. Vinogradova. *Izvestiya
Tsentr. Nauch.-Issledovatel. Karkhannoi Prom.*
1932, No. 6/7, 80-3; *Chem. Zentr.* 1933, I, 3857.—Dye

finishing processes using various dyes are described. The
dyed samples of leather were investigated as to color
fastness to light, fastness to rubbing in both the wet and
dry condition, and fastness toward cold water, alkalis,
org. acids, fats and perspiration. The tests are described
and data presented in tabular form. M. G. Moore

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NATIONAL INDEX
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PROCESSING AND PREPARATION

4

M

Influence of Organic Compounds on the Corrosion of Metals by Inorganic Agents. V. K. Perahke and A. S. Vinogradova (*Protskhlennost' (Organicheskaya Kkimiya (Org. Chem. Ind.)), 1936, 2, 419-423; C. Abn., 1937, 31, 1750).*—[In Russian.] A physico-chemical interpretation of the inhibiting action of stable organic compounds and accelerating action of easily reducible organic compounds on the destruction of metals by corroding agents in the process of PhNH_2 production, based on the literature and some experimental data (cf. Jenckel and Braucker, *Z. anorg. Chem.*, 1936, 221, 249; Jimeno and Grifol, *Met. Abs.*, 1936, 2, 276).—S. G.

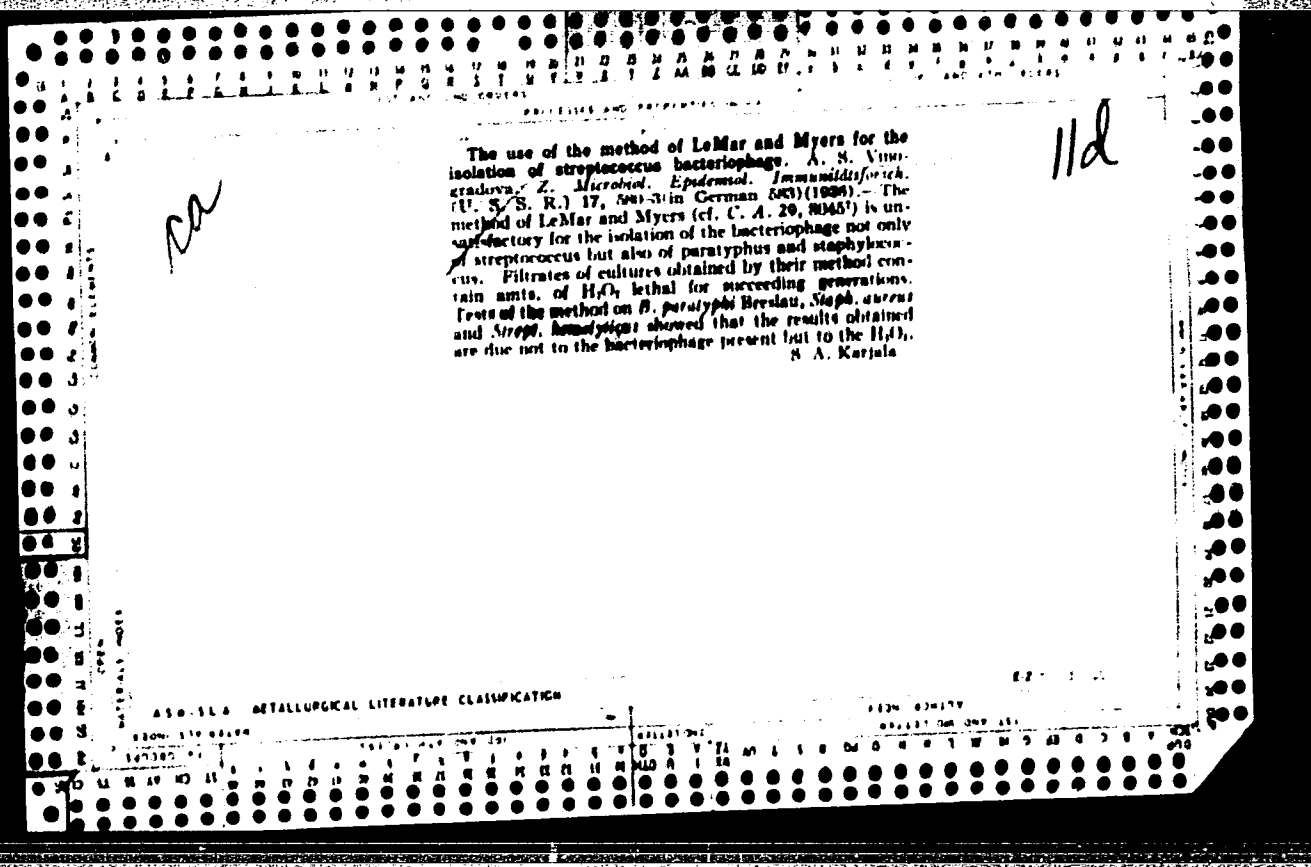
ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM STIRLING

TO: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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VINOGRADOVA, A. S.

Central Inst. Epidemiology and Microbiology, (-1944-)

"Comparative Evaluation of the Methods for Obtaining of
Antigrippous Serum."

Zhur. Mikrobiol., Epidemiol., i Immunobiol., No. 10-11, 1944

VINOGRADOVA, A. S., Cand of Tech Sci -- (diss) "Study of the
Grass Drying Process," Khar'kov, 1959, 19 pp (Moscow Institute
of Mechanization and Electrification of Agriculture) (KL 4-60, 118)

VINOGRADOVA, A.V.; SKOBEYEV, I.K.

Investigating Buryat A.S.S.R. fluorites for their ability to
undergo ore dressing. Trudy IPI no.20:129-136 '63. (MIRA 12:2)

VINOGRADOVA, A. V., Candidate of Tech Sci (diss) -- "Investigation of the operating conditions of filtration fabrics as applied to the filtration of cyanide pulps". Irkutsk, 1959. 22 pp (Min Higher Educ USSR, Irkutsk Mining and Metallurgical Inst, Chair of the Metallurgy of Noble Metals), 160 copies (KL, No 20, 1959, 112)

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859920017-9

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859920017-9"

VINOGRADOVA, A.Yu., inzh.

Reefs. Opyt zarub. stroi. no.8:31-60 '63.

(MIRA 16:9)

VINOGRADOVA, A.Yu., inzh.

Transportation in the textile industry. Opyt stroi. no 33.
47-62 '61.

Problems in lighting the production plant of textile mills.
Ibid.:63-69 (MIRA 16:8)

VINOGRADOVA, A.Yu., inzh.

Lighting of enterprises of the machinery industry. Opyt zarub.
stroil. no.4:69-89 '62. (MIRA 16:7)

(Machinery industry)
(Factories—Lighting)

VINOGRADOVA, A.Yu., inzh.

Noise prevention in enterprises of the machinery industry.
Opyt zarub. stroi. no.4:89-106 '62. (MIRA 16:7)

(Machinery industry)
(Acoustical engineering)

VINOGRADOVA, B.

Il'ich was here. Na stroi.Ros. no.4:2 of cover Ap '61.

(MIRA 14:6)

(Oktyabrskii--Construction industry)

[illegible]

USHAKOVA, M.T.; YEFIMOV, A.Z.; KOZLOVA, Ye.D.; VINOGRADOVA, D.A.

Studying the biological activity of different vitamin B₁₂ preparations.
Vit. res. i ikh isp. no.5:157-163 '61. (MIRA 15:1)

1. Laboratoriya biologicheskikh ispytaniy i novykh form vitaminnykh
preparatov Vsesoyuznogo nauchno-issledovatel'skogo vitaminного
instituta, Moskva.

(CYANOCOBALAMINE)

SUKHANOV, A.F. (Kemerovo, Initsiativnaya ul., 10-a, kv.4):

VINOGRADOVA, D.V. (Kemerovo, ul. Ushakova, 5, kv.13)

Histochemical characteristics of postembryonal histogenesis
in the heart of the white rat. Arkh. anat. gist. i embr. 45
no.11:62-65 N '63. (MIRA 17:8)

1. Kafedra gistologii i embriologii (zav. - dotsent A.F.
Sukhanov) Kemerovskogo meditsinskogo instituta.

SOV/24-58-9-4/31

AUTHORS: Al'tman, M.B., Vinogradova, D.V., Slotin, V.I. and Eskin, G.I.

TITLE: The Effect of Elastic Ultrasonic-frequency Vibrations on the Processes of De-gassing Aluminium Alloys
(O vozdeystvii uprugikh kolebaniy ul'trazvukovoy chastoty na protsess degazatsii alyuminiyevykh splavov)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, nr 9, pp 25 - 30 (USSR)

ABSTRACT: When elastic vibrations of ultrasonic frequency are induced in a molten metal, the resulting excitation phenomena lead to breaks in the continuity of the liquid phase and to the formation of voids which tend to be filled with the gas dissolved in the melt. Thus, the elastic vibrations of sonic and particularly ultrasonic frequency promote the nucleation of gas bubbles, their subsequent growth and coalescence into bubbles large enough to rise up spontaneously to the surface of the liquid phase. The present paper describes the results of experiments in which this effect of ultrasonic vibrations was utilised for removing hydrogen from an aluminium alloy (AL20) containing 2% Cu, 0.8% Mg, 2.5% Si, 1% Ni, 1% Fe and 0.1% Ti. A 10 kW self-exciting

Card1/3

SOV/24-58-9-4/31

The Effect of Elastic Ultrasonic-frequency Vibrations on the
Processes of De-gassing Aluminium Alloys

generator was used as the source of the high-frequency electromagnetic (20 kc/s) vibrations. These were converted into mechanical vibrations by means of a magnetostrictive converter which is described in detail and shown schematically in Figure 1. Finding a suitable material for the probe (the part transmitting the mechanical vibrations to the melt) presented the main difficulty in the construction of the converter. The cavitation effects in the liquid surrounding the probe resulted in sudden changes of the pressure causing micro-explosions which in a very short time led to a failure of the probe due to erosion. Fused quartz, steel, steel with copper and a titanium alloy end plates and a titanium alloy VT1 were tried. The VT1 alloy was found to be most durable, although this alloy was also eroded to some extent, as shown by the fact that the Ti content of the melt subjected to ultrasonic vibrations for 23 min increased from 0.1 to 0.3%. The degree of de-gassing was determined qualitatively by watching the number and size of the gas bubbles given off in the moment of its solidification by a small sample of the molten metal ladled from the melt with an iron

Card2/3

SOV/24-58-9-4/31

The Effect of Elastic Ultrasonic-frequency Vibrations on the
Processes of De-gassing Aluminium Alloys

spoon and placed under an evacuated glass bell (residual pressure - approx. 0.5 mm Hg). In addition the macro-structure of the solidified samples was examined and the effect of the ultrasonic vibrations treatment of various durations on the gas porosity of the investigated alloy is shown in Figures 2 - 4. Increasing the energy of the ultrasonic vibrations did not affect the results of the experiments. With the average energy output of 1 kW, 5 min treatment of the melt at 720-730 °C was sufficient to obtain an alloy free from gas porosity. There are 4 figures, 1 table and 10 references, 2 of which are Soviet, 7 German and 1 English.

SUBMITTED: May 15, 1958

Card 3/3

10

RESEARCH AND PROPERTIES

Synthesis of phenylalanine from benzylmalonic an-
benzylcyanosuccinic esters through the phenylhydrazones of
phenylpyruvic acid. II. V. V. Fedulakov and E.
V. Vinogradova. *Compt. rend. acad. sci. U. R. S. S.* 24,
758-60 (1939) (in English).—Expts. were carried out with
a view to simplifying the method of the practical prepn.
of the phenylhydrazones and the alkylpyruvic acids, start-
ing from alkylmalonic and alkylcyanosuccinic esters. Ac-
cordingly, the following scheme is recommended for the
synthesis:

$$RCH(CO_2Et)_2 \rightarrow RC(:NNHPh)CO_2H \rightarrow RCH(NH_2)CO_2H$$

Thus through the coupling of PhN:NOK with benzyl-
malonic ester the phenylhydrazone of phenylpyruvic
acid was obtained with a yield of about 60% of the theo-
retical amt.:

$$PhCH_2CH(CO_2Et)_2 \rightarrow [PhCH_2C(N:NPh)(CO_2Et)] \rightarrow PhCH_2C(:NNHPh)CO_2H$$

Benzylmalonic ester, used as the initial product, had the
following properties: b. p. 162° 19.5 mm.; $n_D^{20} = 1.4871$;
 $d_4^{20} = 1.0763$; $M/R = 66.85$ (calculated 66.60). Simi-
larly, through the coupling of K diazotate with benzyl-
cyanosuccinic ester the same phenylhydrazone of phenyl-
pyruvic acid was obtained, the yield being 30% of the
theoretical amt. 3 references. A. H. Krappe

ASB-SLA DETAILURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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1ST AND 2ND COPIES		3RD AND 4TH COPIES	
PROCESSING AND PROPERTIES INDEX			
COMMON SUBJECTS	BC A-3 Synthesis of phenyl isocyanate from benzylmalonic and benzylcyanomalonate esters through the phenyl- hydrazones of phosphoguanic acid. V. FROVILAK- TOV and E. V. VASSILAKOVA (Comm. Acad. Sci. U.S.S.R., 1964, No. 1, 109. CH₂Ph-CH(COOEt)₂ and PhN=N-CH(COOEt)-CH(COOEt)₂ in benzene- and PhN=N-CH(COOEt)-CH(COOEt)₂ in benzene- benzylnitrile, treated by aq. KOH-ethyl into NHPh-NHCH(COOEt)-CH(COOEt)₂ (60%), also obtained (30%) similarly from Et benzylcyanomalonate. A. T. P.	COMMON UNCLASSIFIED INDEX	
ASAC-SEA METALLURGICAL LITERATURE CLASSIFICATION		EX-100 INDEX	
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VINOGRADOVA, E.
V.V. FEOFILAKTOV, ZhOKh, 10, 260-2, 1940

VINOGRADOVA, E.
V.V. PECTILAKTOV, ZhOKh, 10, 255-7, 1940

1ST AND 2ND ORDERS

PROCESSING AND PROPERTY NOTES

22

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Determination of bromine number in hydrocarbons with bromine solutions in chloroform according to MacNissey, G. Gal'pern and E. Vinogradova. *Neftekhim*, 1930, No. 1, 60-63. Br reacts with CHCl_3 according to $5\text{Br}_2 + 2\text{CHCl}_3 = \text{HBr} + \text{HBr}_3 + 2\text{C}$, thus giving a soln. almost deprived of free Br. Br_2 , thus giving a soln. almost deprived of free Br. Simple olefins and cyclohexes consume almost theoretical amts. of Br from "stabilized" CHCl_3 solns. Bromination is accompanied by the sepn. of HBr which is not a reaction product. Gasolines and $\text{C}_6\text{H}_5\text{CH}_3$ which are free from unsatd. compds. react noticeably with a CHCl_3 soln. of Br. The Melliheney (*J. Am. Chem. Soc.* 1904, 275; 1909, 1094) method is not suitable for the detn. of unsatd. compds. in petroleum products. Fifteen references. A. A. Boetlingk

ASB-SEA DETALLURGICAL LITERATURE CLASSIFICATION

INTERNAL NO. 11

EXTERNAL NO. 11

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

COMMON ELEMENTS		LIST AND THE SERIAL		PROCESSES AND PROPERTIES INDEX		LIST AND THE SERIAL	
BC						0-4	
/ Pathogenesis of pernicious anemia. E. A. VINOGRADOVA (J. Med. Ukrain., 1936, 8, 1131—1138). — Chronic pernicious angiocholitis preceded or appeared together with pernicious anemia in a no. of cases described. R. T.							
A 50-514 METALLURGICAL LITERATURE CLASSIFICATION							
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VINOGRADOVA, E. I.

5.3400,5.3500,5.3510

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SOV/62-59-12-21/83

AUTHORS:

Shemyakin, M. M., Ravdel', G. A., Chaman, E. S.,
Shvetsov, Yu. R., Vinogradova, E. I., Vdovina, R. G.,
Yermolayev, K. M., ~~RUSSIA~~, ~~E. I.~~

TITLE:

Studies in the Field of Sarcosine and Its Analogs.
Communication 4. Study of Synthetic Routes to Sar-
cosine and Its Analogs

PERIODICAL:

Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh
nauk, 1959, Nr 12, pp 2177-2187 (USSR)

ABSTRACT:

2-Methylcyclopentan-3-one-1,1-dicarboxylic acid (III)
was used for the preparation of (sarcosine) 2-oxo-
ene-cyclopentanone-3-carboxylic acid (I). (III) was
assumed to be converted into (I) by bromination. It
seemed possible to synthesize (I) from (V) by removal
of HBr and by decarboxylation. Diacid (V) could not
be obtained because elimination of HBr from (IV) and
simultaneous decarboxylation formed (VI) with an
endocyclic double bond.

Card 1/10

ASSOCIATION:

Institute of Biological and Medical Chemistry, Academy
of Medical Sciences (Institut biologicheskoy i meditsi-
natskoy khimii Akademii meditsinskikh nauk)

SUBMITTED:

April 12, 1958; Additions made, December 28, 1958

Card 10/10

VINOGRADOVA, E.I

77078
SSN/42-59-12-22/43

AUTHORS:

Shemyakin, M. M., Ravidel', G. A. Chaman, E. S., Shvet-
Vinnogradova, E. I.

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SOV, Yu. B., Vinogradov, E.
Investigation in the Field of Sarcosine and Its
Analog. Communication 5. Synthesis of Racemic Sar-
cosine

PERIODICAL:

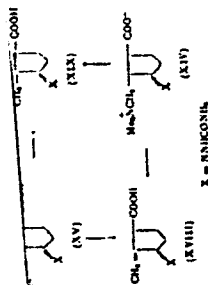
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Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk. 1959, Nr 12, pp 2187-2194 (USSR)
nauk. 1959, Nr 12, pp 2187-2194 in the form

ABSTRACT:

Racemic sarcomycine (XII) was of its semicarbazone (XVIII).



card 1/A



The ethyl ester of 2-dimethylaminoethyl cyclopentanone-3-carboxylic acid (XI) was used as starting material for the preparation of (iii). (VII) can be obtained for the form of its semicarbazide of acid (XV) or from the same starting material. The semicarbazide of 2-betaine (XIV) together with the semicarbazone of 2-betaine (XIV) together with the semicarbazone of 2-

Card 2/A

for this purpose (XV) or (XIV) is heated on a water bath for 5 minutes with 2 moles [for beta-(α -methyl-10% HCl was used)] of NaOH. The solution was cooled to initiate wax reprecipitation, and after 30 minutes the precipitate was removed by filtration and washed with cold water. The mixture of (XIII) and (XIV) was obtained in 95% yield. A sample of (XIII) was recrystallized from benzene and melted at 87°C. mp. 87°C; N_D²⁰ 1.4628; C₁₀H₁₀N₂. Calculated: C 78.87%; H 5.63%. From the above mixture the semi-carbazone of racemic alloxan (XVIII) was isolated by crystallization from 1:10 benzene:petroleum ether. There are 3 isomers of XVIII, one from each enantiomer of XIII. The U.S. and U.K. reference are: Chen, *J. Amer. Chem. Soc.*, 1957, 79, 500; G. Buchi, R. O. Yezzer, and others, *Chem. and Indust.*, 1953, 1603; J. McInward, S. L. Eberman and others., *J. Amer. Chem. Soc.*, 77, 4340 (1955); E. E. Van Tamelen, S. R. Bach, *J. Amer. Chem. Soc.*, 77, 4633 (1955).

Case 3/24

ASSOCIATION

Author's address: Institute of Biological and Medical Chemistry, Academy of Medical Sciences (Institut biologicheskoy i meditsinskoy khimii, Akademiya meditsinskikh nauk)

SUBMITTED:

April 12, 1958; Additions made, December 23, 1958

1/3

Chemistry of chloromycetin (levomycetin). II. Study of the paths of synthesis and synthesis of optically active analogs of chloromycetin. M. M. Shargakina, E. M. Barmdas, E. I. Vinogradova, M. G. Karapetyan, M. N. Kolosov, A. G. Khokhlov, Yu. B. Shvetsov, and L. A. Shchukina (Inst. Biol. and Med. Chem., Acad. Med. Sci. U.S.S.R., Moscow). *Zhur. Obshchei Khim.* 23, 1854-67 (1953); cf. *Doklady Akad. Nauk S.S.S.R.* 79, 601 (1951); C.A. 48, 640c. — Two general paths of synthesis of optically active analogs of chloromycetin of type $p\text{-XC}_6\text{H}_4\text{CH(OH)CH}_2\text{NHCOC(CH}_3)_2\text{CH}_2\text{OH}$ with various groups X are described; both methods start with substances of known spatial structure which is unchanged during the synthesis. It was shown that the method of Long and Troutman (C.A. 44, 568i) in a number of instances can yield analogs of chloromycetin that belong to the *threo* series. Benzoylation of *p*- (I), *L*- (II), and *D*-forms (III) of *threo*-1-(*p*-nitrophenyl)-2-amino-1,3-propanediol with BzCl in 0.5*N* KOH gave 70-85% yields of the *N*-Bz derivs. of: I, m. 171-2°, $[\alpha]_D^{25} -121.5^\circ$; II, m. 171-2°, $[\alpha]_D^{25} -120.5^\circ$ (MeOH); III, m. 162-3°. Hydrogenation of these in EtOH over Raney Ni at 76-80° and 40-50 atm. H initially gave 91-95% corresponding *p*-amino analogs of the *N*-Bz derivs. of: I, m. 170-1°, $[\alpha]_D^{25} -109.5^\circ$; II (IV), m. 170-1°, $[\alpha]_D^{25} -99.5^\circ$; III, m. 151-2°. IV (6 g.) in 60 ml. 5% H_2SO_4 was diazotized with 20% NaNO_2 at 0-5° (excess HNO_2 being destroyed by urea), the soln. treated with 60 ml. EtOH and 6 ml. concd. H_2SO_4 and followed at 0-5° by 0.75 g. Cu bronze; after the reaction subsided, the mixt. was heated to 55-60° until the reaction was complete (0.5 hr.) and the filtrate was adjusted to pH 5.5-6.0 with 20% NaOH; EtOH was removed *in vacuo*, the residue extd. with EtOAc, the ext. washed with dil. NaOH and H_2O , dried, clarified with C

coad., and cooled yielding 55% *threo*-1-(*p*-amino-2-hydroxy-2-phenyl-1,3-propanediol, m. 151-2°, $[\alpha]_D^{25} -109.5^\circ$ (MeOH); the *threo* deriv. with H_2PO_4 gave a product identical with the above but which required more extensive purification. The diol warmed with Ac_2O -pyridine gave the *threo*-1-(*p*-amino-2-hydroxy-2-phenyl-1,3-propanediol, m. 140-3° (from 50% EtOH). When IV was diazotized in m. 140-3° at 0-5° and treated at 0° with CuCl , there was obtained 75% *L*-*threo*-1-(*p*-amino-2-hydroxy-2-phenyl-1,3-propanediol, m. 171-2°, $[\alpha]_D^{25} -102.5^\circ$; similarly the *threo*-1-(*p*-amino-2-hydroxy-2-phenyl-1,3-propanediol, m. 171-2°, $[\alpha]_D^{25} -102.5^\circ$ was obtained from compd. (m. 171-2°, $[\alpha]_D^{25} -102.5^\circ$) in a few instances the *p*- and *L*-*threo* analogs of IV, but showed the same derivs. were obtained which m. 150°, but showed the same optical activity as the specimens described above and gave the same aminodiols on hydrolysis of the Bz groups. Diazotization in dil. H_2SO_4 and treatment with KI gave the *p*-threo analog: *p*-*threo*, m. 178-9°, $[\alpha]_D^{25} -87.5^\circ$; *L*-*threo*, m. 178-9°, $[\alpha]_D^{25} -88.2^\circ$; *D*-*threo*, m. 173.5-4.5°. If the diazotized *L*-*threo* compd. in dil. H_2SO_4 was neutralized with NaHCO_3 to pH 6 and heated to 70-80°, there was obtained 49% *L*-*threo* *p*-HO analog, m. 190-8° (decompn.), $[\alpha]_D^{25} -103^\circ$. Treatment of the diazotized soln. after adjustment to pH 5.5-6, with $\text{Cu}(\text{CN})_2$ soln. under MePh gave the corresponding *p*-cyano analog: *p*-*threo*, m. 139-40°, $[\alpha]_D^{25} -130.4^\circ$; *L*-*threo*, m. 139-40°, $[\alpha]_D^{25} -129.8^\circ$. IV (2.8 g.) in 14 ml. 10% H_2SO_4 was diazotized at 0-5° with 20% NaNO_2 , neutralized with CaCO_3 to Congo red, and cooled to 0-5°; taste treated with 1.5 g. Na_2CO_3 and cooled to 0-5°; after 15 min. the soln. was decanted from the ppt. and this was treated with cooling with 0.4 g. CaO suspended in 1 ml. NaNO_2 and 1 g. $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ in 6 ml. H_2O ; after 10-12 hrs. the mixt. was extd. with EtOAc and the washed and dried ext. gave after evapn. and extn. with H_2O , the *p*-*threo* analog of IV: this was identical with II. Treatment of *L*-

2/3 M. M. SHEMYAKIN, et al.
 (III) diazotized and neutralized (pH 6.5) soln. of IV with As_2O_3 , then CaSO_4 similarly gave *p*-arsono analog of IV: *L*-threo, m. 145-5° (decolor.), $[\alpha]_D^{25} 88.5^\circ$. Treatment of diazotized IV with $2\text{-C}_6\text{H}_4\text{OH}$ in cold NaOH - CH_3CO_2 gave the red 2-(2-hydroxyphenyl)threo deriv.: *L*-threo, decomp. 224-5° (from MeOH), $[\alpha]_D^{25} 180^\circ$. Hydrolysis of the corresponding benzoyl derivs. by heating 4 hrs. with 20% HCl gave 56% *D*-threo-1-(*p*-chlorophenyl)-2-amino-1,3-propanediol (V), m. 145-7°, $[\alpha]_D^{25} -33.0^\circ$; *L*-threo analog, m. 145-7°, $[\alpha]_D^{25}$

55.0° ; *D*-threo analog, m. 122-3°, was obtained by mixing the 2 forms. The *p*-iodo derivs. were hydrolyzed by refluxing with 10% HCl 10 hrs.: *D*-threo-1-(*p*-iodophenyl)-2-amino-1,3-propanediol (VI), m. 163-4°, $[\alpha]_D^{25} 24.6^\circ$; *D*-threo-1-(*p*-iodophenyl)-2-amino-1,3-propanediol (VII), decomp. 318-9°, $[\alpha]_D^{25} -32.4^\circ$; *L*-threo analog, decomp. 318-9°, $[\alpha]_D^{25} 83.0^\circ$. These are inner salts and are insol. in org. solvents, but are sol. in alk. solns. or in acids; they are not dichloroacylated with $\text{CH}_2\text{ClCO}_2\text{Me}$, but are acylated by the acyl chloride in presence of K_2CO_3 . Heating 2.0 g. $\text{CH}_2\text{ClCO}_2\text{Me}$ with 2.7 g. *D*-threo-V to 90° 5 min., rubbing the mixt. 3 times with 5-ml. portions of heptane, dissolving the residue in 2-3 ml. $(\text{CH}_3\text{CH}_2)_2$, adding 3 ml. heptane and allowing the mixt. to stand overnight gave 47% *D*-threo-2-(dichloroacetamido) analog of V, m. 92-3°, $[\alpha]_D^{25} 8.2^\circ$; similarly was obtained the *L*-threo analog, m. 92-3°, $[\alpha]_D^{25} -9^\circ$; mixing these gave the *D*-threo analog, m. 119-20°. Similarly was obtained 2-(dichloroacetamido) analog of VI: *D*-threo form, m. 102-4°, $[\alpha]_D^{25} 9.7^\circ$; *L*-threo form (VIII), m. 103-4°, $[\alpha]_D^{25} -10.8^\circ$; *D*-threo form was obtained by mixing the *D*- and

L-forms, m. 122-3°. VII treated with $\text{CH}_2\text{ClCO}_2\text{Me}$ in the presence of aq. K_2CO_3 and Et_2O gave 71% 2-(dichloroacetamido) analog, m. 103-1°, $[\alpha]_D^{25} 13.0^\circ$; *L*-threo form, m. 103-1°, $[\alpha]_D^{25} -13.9^\circ$; mixing these gave the *D*-form, m. 103-1°, $[\alpha]_D^{25} 13.9^\circ$; mixing these gave the *D*-form, m. 103-1°, $[\alpha]_D^{25} 13.9^\circ$. Hydrogenation of *D*- or *L*-threo forms of II in EtOH over Raney Ni at 75-80° and 49-50 atm. II gave 84% *D*-threo-1-(*p*-aminophenyl)-2-amino-1,3-propanediol (IX), m. 135-6°, $[\alpha]_D^{25} 27.5^\circ$. Treatment of *D*-threo-1-(*p*-aminophenyl)-2-amino-1,3-propanediol (IX) with $\text{CH}_2\text{ClCO}_2\text{Me}$ in abs. MeOH 24 hrs. at 15-20° gave *L*-threo-1-(*p*-aminophenyl)-2-(dichloroacetamido)-1,3-propanediol, isolated as HCl salt (from MeOH - Et_2O): *D*-threo form, m. 135-6°, $[\alpha]_D^{25} 27.5^\circ$; *L*-threo form, m. 135-6°, $[\alpha]_D^{25} -8.6^\circ$; these do not melt, but slowly decomp. on heating. Hydrogenation over Raney Ni at atm. pressure of *D*- and *L*-threo-1-(*p*-aminophenyl)-2-(dichloroacetamido)-1,3-propanediols and treatment of the products with alc. HCl gave 33-9% HCl salts of the *D*- or *L*-threo-1-(*p*-amino) recovered. Diazotization of *D*- or *L*-threo-1-(*p*-aminophenyl)-2-(dichloroacetamido)-1,3-propanediols (IX) in 5% HCl with aq. NaNO_2 gave ppt. of the corresponding diazonium chlorides: *D*-threo, 44%, $[\alpha]_D^{25} 0.6^\circ$; *L*-threo, $[\alpha]_D^{25} -0.8^\circ$; these decomp. on heating, but do not melt. Treatment of the diazotized soln. with Cu_2Cl_2 gave 45% VIII (from CH_2Cl_2 and heptane), identical with the previous preps. If the diazotized soln. in dil. H_2SO_4 is heated to 70-80° after adjustment to pH 5.5, there is formed *p*-HO analog: *D*-threo form, decomp. 160-1.0°, $[\alpha]_D^{25} -8.1^\circ$; *L*-threo form, decomp. 160-1.0°, $[\alpha]_D^{25} 7.50^\circ$; mixing these gave the *D*-form, m. 138-40°. Treatment of the diazotized soln. with $(\text{CuCN})_2$ as described above gave the *p*-cyano-*D*-threo form, m. 135.3-6.5°, $[\alpha]_D^{25} -17.0^\circ$; mixing these gave the

3/3 *M.M. SHERMAN, et al.*
nt-form, m. 152.5-3.5°. Hydrolysis with HCl gave the
p-carboxy deriv. Treatment of the diazotized and neu-
 tralized soln. with As_2O_3 and CuSO_4 similarly gave the
p-arsazobenzoyl deriv. in 35% yield: *n-threo form*, $[\alpha]_D^{25}$ 8.4°;
L-threo form, $[\alpha]_D^{25}$ -7.5°; neither shows a definite de-
 compn. temp. IX.HCl (*n-* or *L-threo forms*) diazotized at
 usual in dil. HCl and treated with $\text{o-O}_2\text{NC}_6\text{H}_4\text{OH}$ in the
 presence of NaOH and Na_2CO_3 at 15-20° 2 hrs. gave on
 acidification the 3-nitro-1-hydroxyphenylazo deriv., purified
 by pptn. from $(\text{CH}_2\text{Cl})_2$ with heptane, followed by crystn.
 from 30% AcOH: *n-threo form*, m. 157-3°. $[\alpha]_D^{25}$ 21.3°;
L-threo form, m. 157-9°. $[\alpha]_D^{25}$ -20°; mixing these gave the
nt-form, m. 157-5°. IX.HCl (*p-* or *L-threo forms*) (2.5 g.)
 in 15 ml. MeOH was treated with 0.8 g. AcON_3 in 10 ml.
 MeOH and filtered; at 5° the soln. was treated with 0.95 g.
 $\text{p-ONC}_6\text{H}_4\text{NO}_2$ in 15 ml. AcOH; after 10-12 hrs. there was
 obtained 55% *p-nitrophenylazo deriv.* *n-form*, m. 172-1°;
 $[\alpha]_D^{25}$ -82.2°; *L-threo form*, m. 173-4°. $[\alpha]_D^{25}$ 64.9°; mixing
 these gave the *nt-threo form*, m. 171-2°. A small amt. of
p,p'-bisnitroazobenzene, m. 191-2° was isolated from
 the reaction mixt. Condensation of IX with $\text{p-O}_2\text{NC}_6\text{H}_4\text{CHO}$
 in the presence of KOAc in MeOH gave the *p-*
nitrobenzylidene deriv.: *n-threo form*, m. 164-6° (decompn.);
 from EtOH, $[\alpha]_D^{25}$ -18.5°; *L-threo form*, decomp. 165-7°;
 $[\alpha]_D^{25}$ 19.7°; mixing these gave the *nt-form*, m. 155-7°
 (decompn.).
 G. M. Kosolapoff

VINOGRADOVA, E. I.

1100

Chemistry of chloromycetin (levomycetin). V. Racemization of 1-threo-1-(p-nitrophenyl)-2-dichloroacetamido-1,3-propanediol with subsequent transformation of the racemate into chloromycetin (levomycetin). M. M. Shemyakhi, E. M. Baidas, E. I. Vinogradova, D. P. Vitkovskii, M. A. Guletskii, V. N. Oshakovskii, A. S. Khokhlov, Yu. H. Shvetsov, and L. A. Shchukina. *J. Gen. Chem. U.S.S.R.* 24, 2045-53 (1974) (Engl. translation).--See *C.A.* 49, 14674a.

9

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YANAGISAWA, E. K.

4

2892 A study of the process of crystallization of silicate glasses by annealing. M. Y. YANAGISAWA, R. S. LARSEN, and L. K. YANAGISAWA. *Glass & Ceramics*, Moscow, 11, No. 5, 1970, 2892-2894, 28 figs. (English translation of Japanese original, 1970, 2892-2894, 28 figs.)

1970 11 5 2892-2894 28 figs. (English translation of Japanese original, 1970, 2892-2894, 28 figs.)

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and the crystallization of silicate glasses in a range of temper-

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12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 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534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 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Vinogradova, E. K.

USSR

Study of crystallization of alkali glasses by means of tempering. M. V. Okhotin, B. S. Levin, and E. K. Vinogradova. *Stekla i Keram.* 11, No. 6, 8-11 (1954). A total of 48 alkali-made glasses were investigated. Seventeen of the glasses contained 80-95% SiO_2 , up to 5% CaO 0-8%, MgO 0-10%, and Na_2O 1-15%. The remaining 31 glasses analyzed contained 60-80% SiO_2 , up to 10% CaO , 0-10% MgO , and 10-20% Na_2O . The glasses were crystallized at 400-500°C for 1-10 hours. Two groups were distinguished: the first group of glasses contained 80-95% SiO_2 and 0-5% CaO , 0-8% MgO , and 1-15% Na_2O ; the second group contained 60-80% SiO_2 and 10-20% Na_2O . The glasses of the first group were characterized by the formation of crystals, centers and fractal growth of formation, and over glass surfaces, small, star-like accumulations of crystals. In the group belonging glasses containing 60-80% SiO_2 and 10-20% Na_2O , 10% CaO and 0-10% MgO , the glasses contained very weak crystallization of crystals, centers with predominance of small, needle-like crystals. The glasses containing 60-80% SiO_2 was the chief compound in practically all glasses except those containing 60-80% SiO_2 and more than 10% MgO and Al_2O_3 . The rate of crystallization was somewhat higher than that of the first group. Crystals of α - and β -wollastonite were also widely distributed. In glasses containing over 70% SiO_2 , cristobalite and tridymite crystals were widely distributed. Crystals of pseudobrookite and pseudobrookite were also widely distributed. Crystals of pseudobrookite and pseudobrookite were also widely distributed. Crystals of pseudobrookite and pseudobrookite were also widely distributed.

VINOGRADOVA, E. K.

USSR/Miscellaneous Glass Industry

Card : 1/1

Authors : Okhotin, M. V., Dr. of Chem. Sc. Prof; Levina, R. S. and Vinogradova, E.K.

Title : Crystallization of silicate glass investigated by the hardening method

Periodical : Stek. i Ker., No. 6, 8 - 11, June 1954

Abstract : The process of crystallization of silicate glass was investigated by the hardening method. The linear rate of crystallization of each tested sample was determined at temperatures ranging from 800° and higher. In the temperature range approaching the maximum limit of crystallization the determinations were made every 25°. The test arrangement and results obtained are described. Table, drawings, graphs.

Institution :

Submitted :

VINOGRADOVA, E.K.

4
1/11

15250* (Study of Process of Crystallization of Silicate
Glasses by Quenching.) Izuchenie protsessov kristallizatsii
silikatnykh stekol metodom zakalki. M. V. Okhotin, B. S.
Lavina, and E. K. Vinogradova. Steklo i Keramika, v. 11, no.
6, June 1934, p. 8-14.
Chemical composition; speeds of crystallization; microstructures.
Table, micrographs, graphs.

(2)

1/22

Vinciguadeva, L. R.

Use of diethyl dithiophosphoric acid in determination of
traces of copper, cadmium, lead and bismuth in soil and in
potentiometric determination of arsenic in soil. Journal of
Analytical Chemistry, 1964, 19, 1, 1-4.

1-4E48

"APPROVED FOR RELEASE: 09/01/2001

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APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859920017-9"

CAIAO RANITA E M

Paragraphs 1 to 400 of outline

RM p2

VINOGRADOVA, E. N.

Methods of determining the hydrogen-ion concentration Moskva Izd-vo Moskovskogo
univ. 1950. 119 p. (51-15292)

QD 561. V5

10

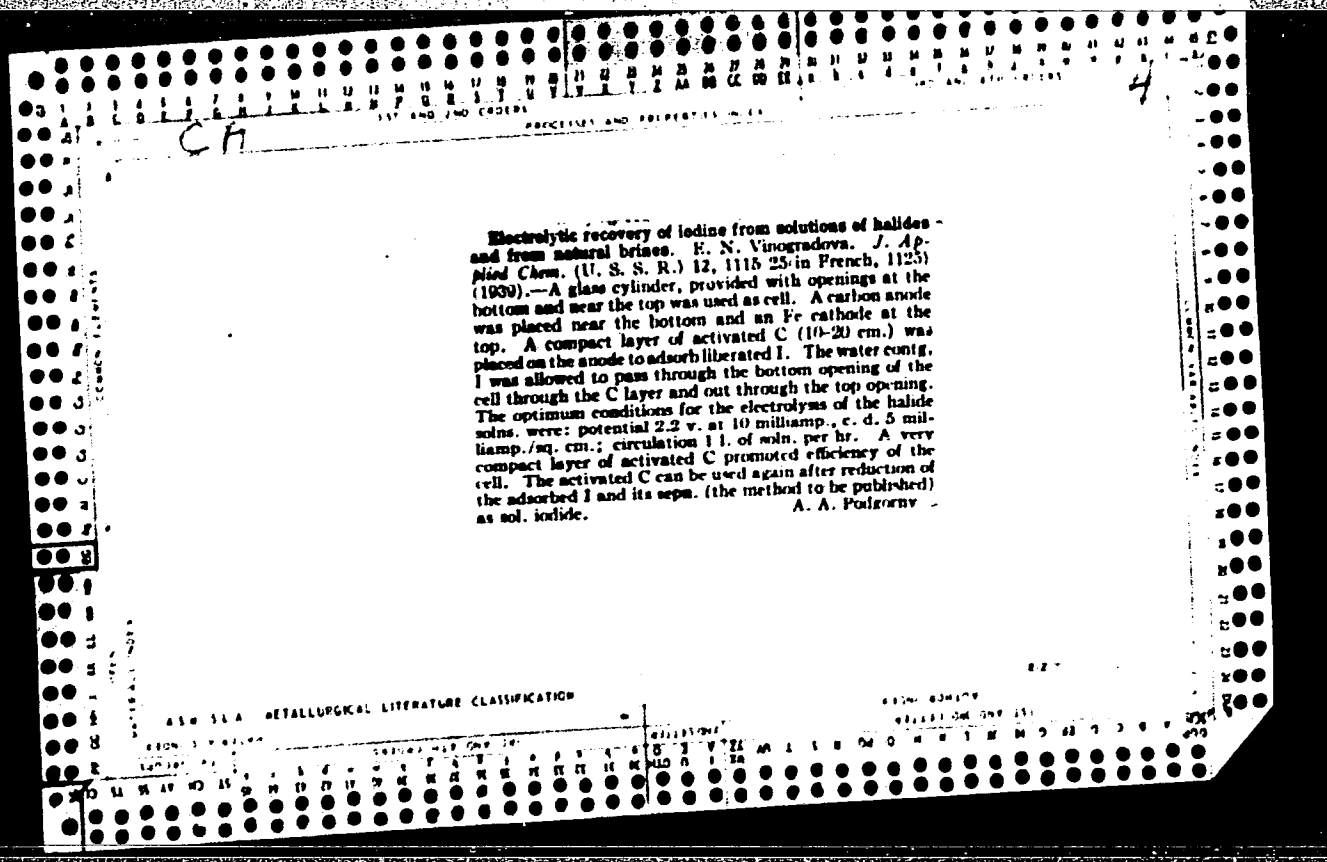
ca

2,1 - Anthraquinonylene - 1,2 - naphthylsuccinide.
 N. N. Vozvashnikov and K. K. Vinogradova. Russ. 46,314.
 March 31, 1966. 1,2-Naphthylsuccinanthraquinone-2-
 carboxylic acid, dissolved or suspended in an org. solvent
 which is not miscible with water, is treated with phosgene.
 12% in thionyl chloride

ASAC-56A METALLURGICAL LITERATURE CLASSIFICATION

31 14.

Liberation of iodine from dilute iodine solutions by electrolysis on a nonmetallic porous carbon electrode. M. K. N. Vologodina (U. Appl. Chem. Russ., 1960, 33, 300-300).—A solution containing per l. 100 g. of NaCl, 0.00 g. of I₂, and small amounts of other ions is filtered through an electrode made of active C, towards an Fe cathode. The voltage applied is 5 v. at the beginning, and 2 v. in the steady state of the electrolysis; if it is too high, IO₃ is formed, and at <1.5 v. I₂ is not completely discharged. I₂ formed is adsorbed by the C. Through 10 sq. cm. of the electrode surface 500 c.c. per hr. can be passed without losing >1% of I. The method is recommended for recovery of I from oil well H₂O. J. J. B.



1ST AND 2ND COLUMNS												3RD AND 4TH COLUMNS											
PROCESSES AND PROPERTIES INDEX																							
<i>BC</i> <i>B-1-9</i> Electrolytic separation of iodine from halide solutions and base-salt water. E. N. VINOGRADOVA (J. Appl. Chem. Russ., 1959, 12, 1115-1125).—The solution is passed through a column containing an Fe cathode and a graphite anode surrounded by active C, with a current of 0.1 amp./3.2–4.6 v. Traces of I present are liberated at the anode and adsorbed by the C. After saturation of the C it is treated with a reducing agent, to yield a conc. solution of iodine. The extracted C may be used repeatedly. R. T.																							
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION FROM SYNDICATE												8-1-12-12-12 FROM SYNDICATE											
SYNOPSIS 1 2 3 4 5 6 7 8 9 10 11 12												SYNOPSIS 13 14 15 16 17 18 19 20 21 22 23 24											

4

PROCESSING AND PROPERTIES UNIT

Handwritten: A

Separation of iodine by electrolysis of weak iodide solutions with a monolithic, porous carbon electrode. II. E. N. Vinogradova. *J. Applied Chem. (U. S. S. R.)* 13, 3041-3 (in French, 303) (1940); cf. *C. A.* 34, 3508. The electrolysis and absorption of I proceeded in the presence of monolithic porous carbon electrode just as well as with the Atcheson carbon electrode filled with an active carbon. The porous electrode does not require so high a current. Data are tabulated. A. A. Podgorny

ASM-31A METALLURGICAL LITERATURE CLASSIFICATION

SECTION	SUBSECTION	CLASSIFICATION
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100	100	100

16

Conductometric method for determining weak solutions of alkaloids and morphine in commercial opium. R. N. Vinogradova. *J. Applied Chem. (U. S. S. R.)* 6, 150-6 (1933).—The conductometric detns. were carried out in solns. of about 0.000,001 N concns. permitting the detn. of 1 mg. of the alkaloid. The titration is carried out with alkali hydroxide, the concn. of which exceeds that of the alkaloid soln. 5-10 times. The alkaloid is present in a soln. of alc. (2) and water (3). In detg. the morphine, content of opium the total acidity is titrated with BaO and by titrating back with 0.1 N HCl the total of alkaloids present in the opium is detd. Thereafter a new portion of the prepn. is titrated with Ba(OH)₂ in a thermostat at about 60° and the contents of morphine are detd. according to the phenol group detd. by titrating back. Characteristic curves obtained in the above analytical procedure are given. A. A. B.

10

Can

Determination of the degree of unsaturation of hydrocarbons by the Kaufmann method. G. D. Gal'pern and B. V. Khuytdoyev. *Chem. Tsvetok. Teplov. 8, 351 (1961)*. The Kaufmann method was investigated, for individual olefins and cyclohexes. The use of pure MeOH is essential, because the stability of inter of the Kaufmann soln. is about 10 times higher than in CHCl_3 soln. of Br . Simple unsatd. hydrocarbons reacted with the Kaufmann soln. completely, while terpenes gave an increased and sterols a decreased amt. of used Br . The optimal conditions are a 60% excess over theoretical of Br , time for the reaction with hydrocarbons 10-15 min., and wt. of sample about 0.005 mol. of the unsatd. hydrocarbon. Data are tabulated. Fourteen references. A. A. P.

450.33.4 METALLURGICAL LITERATURE CLASSIFICATION

STANDARD FORM NO. 64																											
1st AND 2ND COPIES													3RD AND 4TH COPIES														
PROCESSED AND PROPERTY INDEX																											
<i>CC</i> <i>A-3</i> Synthesis involves the use of cyanogen. Cyanogen and potassium cyanide are mixed in a 1:1 ratio and heated to 100°C. The mixture is added to concentrated sulfuric acid, followed by CH₃I, and the cooled mixture is shaken for 2 hr. and then left for 12 hr., when it is made neutral with H₂O, and poured from the sulphates crystallizing out. The filtrate is evaporated until thick, the solvent is removed, and the residue is fractionally distilled, giving CH₃(CH₂)₃CN in 50-60% yield. This when distilled from its dimer (prepared by heating with an excess of Ag₂O) affords CH₃(CH₂)₃CN in 70-80% yield. R. T.																											
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION																											
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BC

DIASOMETRIC DETERMINATION OF DIBINE HYDROCARBONS. II.
DETERMINATION OF INDIVIDUAL DIBINE HYDROCARBONS. IIIL
DETERMINATION OF DIBINE HYDROCARBONS IN PYROBENZINES.
Ap. B. T erentiev, E. V. Vlasovskaya, and G. D. Galpern
(Sci. Rep. Moscow State Univ., 1936, No. 6, 243-247,
249-255).

II. $(C_{12}H_{16})_2$ or Δ -cyclohexadiene, in presence
of $C_{12}H_{16}$, $C_{16}H_{20}$, $C_{16}H_{16}$, cyclo-hexene and -hexene are
determined by the Method of Terentiev et al. (A., 1936,
744).

III. Conjugated dibenes in cracking benzines are
determined by the above method.

R.T.

VINOGRADOVA, E. V.

"Syntheses with the Use of Acrylonitrile. I. A laboratory Method of preparation and the Properties of Acrylonitrile." Terentiev, A. P. and Vinogradova, E. V. (p. 1044)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1944, Volume 11, no. 11-12.

BC

A-3

Distillation method for the determination of diene hydrocarbons. A. P. TERNETSKY, E. V. VORONKOV, and G. D. GALTSHOV (Compt. rend. Acad. Sci. U.S.S.R., 1955, 4, 257-273).—Dissolved β -NO₂-C₁₀H₁₆-NH₂ (I) reacts quantitatively with $\Delta^{1,2}$ -dienes, but not at all with aromatic hydrocarbons or compounds with conjugated hydrocarbons (cf. lit.); one mol. of (I) reacts with one mol. of diene. Excess of (I) is used, and the excess determined with β -C₁₀H₁₆-OH. The method is suitable for the determination of dienes in mixtures of hydrocarbons of various types.

H. G. M.

10

ca

Syntheses with acrylonitrile. I. A laboratory method of preparation and the properties of acrylonitrile. A. P. Terent'ev and R. V. Vinogradova (Moscow State Univ.). *J. Gen. Chem.* (U.S.S.R.) 14, 1047-8 (1944); cf. C.A. 37, 3995. Acrylonitrile (I) is prepd. conveniently in the lab. as follows. First a soln. of 600 g. KCN in 700 cc. water is added during 15-20 min. with cooling to a soln. of 1140 g. $MgSO_4 \cdot 7H_2O$ in 2 l. of water in a 5-l. thick-walled flask. Cooled ethylene oxide is then added in a thin stream with shaking and continued cooling. After stoppering tightly, the flask is shaken at intervals and cooling is continued. After 15-30 min., the reaction begins, as is indicated by pptn. of $Mg(OH)_2$. If necessary, cracked ice may be added to the mixt. to keep the reaction under control. After standing 10-12 hrs., the mixt. is neutralized with 50% H_2SO_4 under the hood. Pptd. sulfates are filtered off and washed with $EtOAc$. The filtrate is concd. by evapn. on the water bath, the cryst. ppt. filtered off and washed with $EtOAc$. Next the aq. filtrate is extd. several times (7-10) with $EtOAc$ and the combined $EtOAc$ exts. distil., first under atm. and finally under reduced pressure, to obtain β -hydroxypropionitrile (II) in 85-90% yield based on the KCN. Dehydration of II to I is effected by heating 50-100-g. portions of II with 10% by wt. of powd. Sn , which is prepd. by first treating a concd. aq. soln. of $SnCl_4$ with Zn dust, then treating the pptd. Sn with $AcOH$ to dissolve unreacted Zn , filtering, washing with alc., and drying. The dehydration is carried out simultaneously with distn. of the water and I formed thereby in 75-85% yield. Crude I is dried with potash and redistd. to obtain pure I, b. 78° , d_4^{20} 0.811, n_D^{20} 1.393. J. W. Perry

ASD-51A METALLURGICAL LITERATURE CLASSIFICATION

ca

7

Diazometric methods of determining diene hydrocarbons. A. P. Tsvet'ev, M. V. Yegorovich and G. D. Halpern. *Soviet Chem.*, 1968, No. 10, p. 10, 207-73 (1968). — By titrating the unreacted β -D.N.C.H.₂. N₂Cl (I) with β -C.H₂I₂, it was possible to det. the amt. of diene hydrocarbon in a mixt. I reacted with only 1,3-diene ethylenic hydrocarbons. Aromatic hydrocarbons or compounds with conjugated heteroatoms did not react. 2,3-Dimethylbutadiene-1,3, cyclohexadiene-1,3 and cyclopentadiene reacted mol. for mol. with I. This method is applicable to the detn. of divinyls in cracked and pyrolyzed products. Julius White

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

STILLSTONE

[illegible]

VINOGRADOVA, G., agronom

Fresh cabbage the year round. Nauka i pered.op. v sel'khoz. 8
no.11:46-48 N '58. (MIRA 11:12)
(Cabbage)

SOV-107-58-8-7/53
AUTHORS: Pozharova, I (UA3-10243), Grishakov, B. (UA3-10258), Members
of the Radio Club's Council; Vinogradova, G. (UA3-10276)
Civic-minded instructor.

TITLE: Assemblies of Civic-minded Instructors (Sbory instruktorov-
obshchestvennikov)

PERIODICAL: Radio, 1958, Nr 8, pp 8 (USSR)

ABSTRACT: The author describes the activities of the Pavlovskiy Posad
(Moscow oblast) Amateur Radio Club. The club held 5-day
assemblies for club instructors of the town and surrounding
district. Reports were read and discussed on: "The Types
of Teaching Work and Methods of Instruction", "The Organi-
zation and Means of Carrying out Mass Measures in the DOSAAF
Primary Organizations", etc. Lectures were held on: "The
Modern Achievements in Radio Engineering and Electronics"
and "The Use of Transistors in Radio Apparatus".

1. Radio--USSR

Card 1/1

VINOGRADOVA, G.N.

Effect of fertilisers on the yield and quality of lettuce. Vest.
Mosk. un. Ser. 6: Biol., poohv. 19 no.5:70-79 9-0 '64.
(MIRA 17:12)

1. Kafedra agrokhimii Moskovskogo universiteta.

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859920017-9"

Around the world. Za bezop.dvizh. 3 no.10:6-7 0 '60. (MIRA 13:10)

1. Obshchestvennyy inspektor 10 otdeleniya Otdela regulirovaniya
ulichnogo dvizheniya (for Klyukachev). 2. Redaktor radioveshchaniya
fabriki "Dukat" (for Vinogradova).
(Traffic engineering)

VINOGRADOVA, G.A.; VINOGRADOV, B.V.

In memory of V.L. Leontiev. Izv.Vses.geog.ob-va 88 no.2:196-198
Mr-Apr '56. (MIRA 9:8)

(Leont'ev, Vladimir Leonidovich, 1904-1955)

VINOGRADOVA, G.A.
APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859920017-9"

Materials on the anatomy and histology of some gamasid mites.
Nauch. trudy Kal. otd. MOIP no.2:63-73 '60. (MIRA 14:10)
(MITES) (INSECTS--ANATOMY)

KOTEL'NIKOVA, A.S.; VINOGRADOVA, G.A.

Preparation of rhenium dichloromonacetate and its derivatives with
pyridine and thiourea. Dokl. AN SSSR 152 no.3:621-623 S '63.
(MIRA 16:12)

1. Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova
AN SSSR. Predstavleno akademikom I.I.Chernyayevym.

KOTEL'NIKOVA, A.S.; VINOGRADOVA, G.A.

Rhenium monochlorodiacetate, its preparation and properties.
Zhur. neorg. khim. 9 no.2:307-311 F'64. (MIRA 17:2)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova
AN SSSR.

VINOGRADOVA, G.A.

Effect of hepatic reparative regeneration on the mitotic activity
of the corneal epithelium and epidermis in mice. Biul. eksp.
biol. i med. 50 no. 11:105-108 N '60. (MIRA 13:12)

1. Iz laboratorii gistofiziologii (zav. - kandidat biologicheskikh
nauk V.N. Dobrokhotov) Instituta eksperimental'noy biologii (dir. -
prof. I.N. Mayskiy) AMN SSSR, Moskva.
(CELL DIVISION (BIOLOGY)) (CORNEA) (SKIN) (LIVER)

MORGANOV, P.V.; MEL'NIKOV, B.N.; TRACUMANOVA, G.I.

Possibility to intensify the dyeing of capron with the formation
of insoluble hydroxazo dyes on the fiber. Izv. vys. ucheb. zav.;
tekh. tekst. prom. no.3:107-114 '62.

(MIRA 17:10)

1. Ivanovskiy khimiko-tekhnologicheskii institut.

VINOGRADOVA, G.I.; MEL'NIKOV, B.N.

Studying the mechanism of the reaction of coupled hydroxy azo dye development on polyamide fibers. Izv. vys. ucheb. zav.; tekhn. teks. prom. no.6:81-85 '65. (MIRA 19:1)

1. Ivanovskiy khimiko-tehnologicheskoy institut. Submitted February 20, 1965.

VINOGRADOVA, G.I.; MEL'NIKOV, B.N.; MORYGANOV, P.V.

Investigating the sorption of azoamines by capron fibers. Izv.vys.
ucheb.zav.; tekhn.takst.prom. no.5:88-94 '64.

(MIRA 18:1)

1. Ivanovskiy khimiko-tekhnologicheskii institut.

SHEVELEV, F.A., doktor tekhn. nauk; MOSHIN, L.F., prof., doktor tekhn. nauk, nauchnyy red.; VINOGRADOVA, G.M., red.; MOCHALINA, Z.S., tekhn. red.

[Tables for hydraulic calculations for steel, cast-iron and asbestos-cement water pipes] Tablitsy dlia gidravlicheskogo rascheta stal'nykh, chugunnykh i asbestotsementnykh vodoprovodnykh trub. Izd.3. Moskva, Gosstroizdat, 1962. 140 p. (MIRA 15:12)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Shevelev).

(Water pipes)

BELOUSOV, Vladimir Vladimirovich, inzh.; MIKHAYLOV, Fedor Semenovich,
inzh.; VINOGRADOVA, G.M., red.; GOL'BERG, T.M., tekhn.red.

[Installing heating boilers] Montazh otopitel'nykh kotel'-
nykh ustanovok. Izd.2., ispr. i dop. Moskva, Stroiizdat,
1964. 295 p. (MIRA 17:3)

BREZHNEV, Viktor Ivanovich; BORODIN, I.V., prof., nauchr.red.;
VINOGRADOVA, G.M., red.

[Assembling and repairing water supply equipment] Mon-
tazh i remont vodoprovodnykh ustroystv. Moskva, Stroi-
izdat, 1964. 127 p. (MIRA 18:1)

SLAVYANOV, V.N.; VINOGRADOVA, G.M., red.

[Forecasting the stability of slopes from the viewpoint of
engineering geology] Inzhenerno-geologicheskie prognozy
ustoichivosti otkosov. Moskva, Stroiizdat, 1964. 153 p.
(MIRA 17:5)

BARKALOV, B.V., kand. tekhn. nauk, nauchn. red.; KARPIS, Ye.Ye.,
kand. tekhn. nauk, nauchn. red.; VINOGRADOVA, G.M., red.

[Air conditioning in industrial public, and residential
buildings] Konditsionirovanie vozdukha v promyshlennykh,
obshchestvennykh i zhilykh zdaniyakh. Moskva, Stroiiz-
dat, 1964. 159 p. (MIRA 17:11)

1. Vsesoyuznoye soveshchaniye po konditsionirovaniyu vozdukha
v promyshlennykh, obshchestvennykh i zhilykh zdaniyakh. 1962,
Moscow. 2. Nauchno-issledovatel'skiy institut sanitarnoy
tekhniki Gosstroya SSSR (for Karpis). 3. Gosudarstvennyy pro-
yektnyy institut stroitel'noy promyshlennosti (for Barkalov).

PESTOV, Georgiy Nikolayevich; SHCHUKH, I.V., nauchn. red.;
VINOGRADOVA, G.M., red.

[Closed pipe laying] Zakrytaia prokladka truboprovodov.
Moskva, Stroizdat, 1964. 187 p. (MIRA 17:11)

SENKOV, Fedor Vasil'yevich; SMIRDINA, Nina Pavlovna; LOBANOVA,
Lyudmila Nikolayevna; VINOGRADOVA, G.M., red.; TARKEOVA,
K.Ye., tekhn. red.

[Heating and heat supply of farm buildings and installations]
Otoplenie i teplosnabzhenie sel'skikh zdani i sooruzhenii.
Moskva, Gosstroizdat, 1963. 146 p. (MIRA 16:12)
(Farm buildings—Heating and ventilation)

GAVRILKO, Vladimir Matveyevich; ABRAMOV, S.K., kand. tekhn. nauk,
nauchnyy red.; VINOGRADOVA, G.M., red. izdava; MIKHEYEVA,
A.A., tekhn. red.

[Screens for intake, drainage and hydrogeological wells]
Fil'try vodozabornyykh, vodoponizitel'nykh i gidrogeologi-
cheskikh skvazhin. 2. izd. ispr. i dop. Moskva, Gosstro-
izdat, 1962. 399 p. (MIRA 16:4)

(Wells--Equipment and supplies)
(Water, Underground)

L 22364-66 EWT(1) RO

ACC NR: AP6005098 (A,N) SOURCE CODE: UR/0325/65/000/004/0154/0158

AUTHOR: Vinogradova, G. N. 28

ORG: none B

TITLE: Effect of fertilizers on Brussels sprout productivity and quality

SOURCE: Nauchnyye doklady vysshey shkoly. Biologicheskiye nauki, no. 4, 1965, 154-158

TOPIC TAGS: horticulture, fertilizer, nitrogen compound, phosphorus compound, potassium compound, agriculture crop

ABSTRACT: The effects of nitrogen, nitrogen-potassium, nitrogen-phosphorus, phosphorus-potassium and completely mineral fertilizers on Brussels sprout productivity were investigated in the sod-podzolic soils of the Agrobiological Station of Moscow University and the Gribovsk Vegetable Breeding Experimental Station in Moscow Oblast. Findings show that nitrogen fertilizers play an important role in increasing the productivity of Brussels sprouts and improving their nutritional value. Phosphate and particularly potassium fertilizers should also be

Card 1/2 2

L 22364-66

ACC NR: AP6005098

introduced, but in smaller doses and always in the presence of nitrogen fertilizers. In this way Brussels sprout productivity is increased without affecting the quality, and nutritional values are improved. Large doses of nitrogen-potassium fertilizers promote botrytis rot in plants; phosphate fertilizers reduce the harmful effect of nitrogen-potassium fertilizers. Orig. art. has: 5 tables.

SUB CODE: 06/ SUBM DATE: 27Apr64.

Card 2/2 *dda*

VINOGRADOVA, G.N.

Effect of fertilizers on the yield and quality of Brussels sprouts.
Nauch.dokl.vys.shkoly; biol.nauki no.4:154-158 '65.

(MIRA 18:10)

1. Rekomendovana kafedroy agrokhimii Moskovskogo gosudarstvennogo
universiteta im. M.V.Lomonosova.

VINOGRADOVA, G.N.

Effect of fertilizers on the riboflavin content of lettuce, radish
and brussels sprouts. Nauch. dokl. vys. shkoly; biol. nauki no.1:
151-155 '64. (MIRA 17:4)

1. Rekomendovana kafedroy agrokhimii Moskovskogo gosudarstvennogo
universiteta im. M.V.Lomonosova.

GURICH, N.A.; RAKITINA, M.A.; VINOGRADOVA, G.P.

Use of oleoresins and colophony obtained from hardwoods in the various branches of the industry. Gidroliz. i lesokhim. 18
no.2:15-16 '65. (MIRA 18:5)

1. Tsentral'nyy nauchno-issledovatel'skiy i proyektnyy institut lesokhimicheskoy promyshlennosti.

[Mining pitching seams in the Kuznetsk Basin] Razrabotka
krutopadaniushchikh plastov Kuzbassa. Pod obshelei red. L.D.
Sheviakova. Moskva, Ugletekhizdat, 1956. 691 p. (MLRA 10:4)

1. Akademiya nauk SSSR. Institut gornogo dela.
(Kuznetsk Basin--Coal mines and mining)

VINOGRADOVA, G. V.

USSR / Soil Science. Organic Fertilizers.

J-3

Abs Jour : Ref Zhur - Biologiya, No 16, 1958, No. 72721

Author : Vinogradova, G. V.

Inst : Not given

Title : Use of Green Fertilizer

Orig Pub : Sad i ogorod, 1958, No 1, 18-20

Abstract : No abstract given

Card 1/1

27

LIDIN, G.D., prof., doktor tekhn. nauk, red.; AYRUNI, A.T., kand.
tekhn. nauk, otv. red.; VINOGRADOVA, G.V., red. izd-va;
IL'INSKAYA, G.M., tekhn. red.

[Problems in the theory of degassing coal seams] Voprosy
teorii degazatsii ugol'nykh plastov; trudy. Pod obshchei
red. G.D.Lidina. Moskva, Gosgortekhzdat, 1963. 205 p.
(MIRA 16:4)

1. Vsesoyuznoye nauchno-tekhnicheskoye soveshchaniye po
teorii degazatsii, Moscow, 1961. 2. Institut gornogo dela
im. A.A.Skochinskogo (for Ayruni).
(Mine gases)

VINOGRADOVA, G.V.

COUNTRY : USSR

SUBJECT : Cultivated plants. Potatoes. Vegetables.
Cucurbits.

REF. CODE : Bot. Zhurn.-Fiziologiya, No. 5, 1959, No. 20325

AUTHOR : Vinogradova, G.V.

INSTIT. : Sci. Res. Inst. of Vegetable Raising

TITLE : The Effectiveness of Green Manure in Vegetable Raising in the Subtropical Zone of Krasnodarskiy Krai.

ORIG. RES. : Byul. nauchno-tekhn. inform. N.-1. In-ta ovoshchn. kh-va, 1958, No.4, 58-59

ABSTRACT : No abstract

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1/1