

KUL'NEVICH, V.G.; KARDALIOVA, K.M.; OMEL'CHENKO, F.S.

Polarographic method for determining the furfural in products of the hydrolysis industry. Izv.vys.ucheb.zav.; pishch. tekhn. no.6: 145-149 '61. (MIRA 15:2)

1. Krasnodarskiy institut pishchevoy promyshlennosti, kafedra organicheskoy khimii.

(Furaldehyde) (Hydrolysis) (Polarography)

OMEL'CHENKO, F.S.

Thermal capacity of furfurool. *Izv.vys.ucheb.zav.; pishch.tekh.*
2:151-152 '62. (MIRA 15:5)

1. Krasnodarskiy institut pishchevoy promyshlennosti, kafedra
fizicheskoy i kolloidnoy khimii.
(Furaldehyde--Thermal properties)

OMEL'CHENKO, P.S.

Heat capacity of glycerin. Izv.vys.ucheb.zav.; pishch,tekhn.
no.3:97-98 '62. (MIRA 15:7)

1. Krasnodarskiy institut pishchevoy promyshlennosti, kafedra
fizicheskoy i kolloidnoy khimii.
(Glycerol—Thermal properties)

OMEL'CHENKO, F.S., kand. tekhn. nauk; KAMYSHAN, M.A., inzh.

Determining saponifiable matter content of industrial mono-
ethanolamides. Masl.-zhir. prom. 29 no.5:19-21 My '63.

(MIRA 16:7)

1. Krasnodarskiy institut pishchevoy promyshlennosti.
(Acids, Fatty) (Cleaning compounds)

KRAVCHENKO, V.D., inzh.; OMEL'CHENKO, F.S., kand. tekhn. nauk

Viscosity of the micelles of sunflower seed oil in hexane.
Masi.-zhir. prom. 29 no.8:13-14 Ag '63. (MIRA 16:10)

1. Krasnodarskiy institut pishchevoy promyshlennosti.

OMEL'CHENKO, F.S., kand.tekhn.nauk; KAMYSHAN, M.A., inzh.

Kinetics of the amidation of fatty acids with monoethanolamine.
Masl.-zhir.prom. 29 no.11:26-28 N '63. (MIRA 16:12)

1. Krasnodarskiy institut pishchevoy promyshlennosti.

OMEL'CHENKO, G.F., glavnyy veterinarnyy vrach.

Veterinary work in our district. Veterinariia 34 no.5:10-12 My '57.
(MIRA 10:6)

1. Kotovskiy rayon, Dnepropetrovskoy oblasti.
(Kotovka District--Veterinary medicine)

ACC NR: AP7002574

SOURCE CODE: UR/0413/66/000/023/0068/0068

INVENTOR: Demkina, L. I.; Polukhin, V. N.; Zimina, M. V.; Omel'chenko, G. A.

ORG: none

TITLE: Optical glass. Class 32, No. 189133

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 68

TOPIC TAGS: optic glass, refractive index, crystallization, chemical stability

ABSTRACT: This Author Certificate introduces optical glass with a high index of refraction of the order of 1.75—1.81 made with B_2O_3 , La_2O_3 , SiO_2 , CdO , Al_2O_3 , ZrO_2 , TiO_2 , and WO_3 . To increase the chemical stability of the optical glass and reduce its crystallization capacity, the above components are introduced in following amounts (%): 6—25 B_2O_3 , 13—28 La_2O_3 , 5—20 SiO_2 , 30—46 CdO , 1—3 Al_2O_3 , 1—4 ZrO_2 , not more than 6 TiO_2 , and not more than 3 WO_3 ; in addition, not more than 11 ZnO and not more than 5 Ga. [Translation] [NT]
SUB CODE: 11/SUBM DATE: 15May65/

Card 1/1

UDC: 666.113.831'.681'.654'.621'.82'.78'.48'.47'.28'.27

S/263/62/000/003/006/015
1004/1204

941100
AUTHOR: Adakhovskiy, A. P., Gordov, A. N., Lapp, G. B., Lebedeva, Z. S., Maksimova, V. L., Omelchenko, G. F., Prokopyev, P. N. and Erhardt, N. N.
TITLE: Investigation of new types of thermocouples for measurement of temperatures up to 1800 C
PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. Izmeritel'naya tekhnika, no. 3, 1962, 38, abstract 32.3.229. "Tr. in-tov Kom-ta standartov, mer i izmerit. priborov, pri Sov. Min. SSSR", 1960, no. 42 (102), 29-38

TEXT: The authors studied thermocouples, both electrodes of which were made of platinum-rhodium alloys of varying composition. Sverdlov sovnrarkhoz (district economic council) produced platinum-rhodium wires with different rhodium contents, 0.3, 0.5, 0.8 and 1.0 mm in diameter and studied their thermoelectric uniformity. The latter was determined on a semi-automatic industrial set-up consisting of an oven for heating the junction of the investigated wire with a comparison electrode, a rewinding unit and a laboratory potentiometer. The degree of uniformity of the thermoelectric material was determined by the value of the thermoelectric emf created at the junction of the investigated wire with a comparison electrode. The comparison electrode was formed by a piece of wire cut from an end of the investigated bundle. The oven of the set-up was built

Card 1/.

Investigation of new types of..

S/263/62/000/003/006/015
1004/1204

of porcelain tube 15 mm diameter and 90 mm long, a platinum heater, thermal insulation, an outer mantle and a stand. The temperature inside the cavity of the oven was determined by means of a Pt-Rh thermocouple. The Sverdlov branch of ВНИИМ (VNIIM) collected and analyzed the data in order to establish deviation limits from the average calibration for the thermoelectric emf of the couples. VNIIM developed a method of calibration of thermocouples, studied their calibration characteristics and analyzed the variation of these properties for thermocouples stemming from different melts. The influence of the contact between the thermoelectrodes and the supporting ceramic of different composition under high temperature conditions and the stability of the thermocouples under various operating conditions were studied. As a result of these comprehensive studies it is concluded that the ИП 30/6 (PR 30/6) type are the most accurate for measurement of temperatures of molten metals and of temperatures above 1400 C for several hundred hours. For operation under actual working conditions the fixtures and the protective caps should be made of aluminum oxide with titanium oxide added. There are 5 figures, 4 tables and 6 references.

[Abstracter's note: Complete translation.]

Card 2/2

OMEL'CHENKO, G. K.

OMEL'CHENKO, G. K. - "Morphological and Biological Characteristics of Filterable Forms of Flexner Dysentery Bacteria." Sub 13 Oct 52, Second Moscow State Medical Inst imeni I. V. Stalin. (Dissertation for the Degree of Candidate in Medical Sciences).

SO: Vechernaya Moskva January-December 1952

OMEL'CHENKO, I.; MAKARINSKIY, A. [Makaryns'kyi, A.], tekhnik

Pay more attention to the construction of barns for raising young cattle. Sil'.bud. 7 no.7:24 J1 '57. (MIRA 12:11)

1. Zaveduyushchiy Lebedinskim rayonnym otdelom po stroitel'stvu v kolkhozakh.

(Farm buildings)

OMEL'CHENKO, I.S.

MERKHILEVICH, V.P., inzhener; OMEL'CHENKO, I.S.

Insulation of the hearth pipes of continuous furnaces. Stal' 15
no.2:183-184 F '55. (MIRA 8:5)

1. Stalinskiy metallurgicheskiy zavod.
(Metallurgical furnaces)

DEM'YANOV, Yu.A. (Moskva); OMEL'CHENKO, X.G. (Moskva)

Solving certain heat conduction problems with the aid of dimensional analysis. PMTF no.3:107 S-O '61. (MIRA 14:8)
(Boundary value problems) (Heat--Conduction) (Dimensional analysis)

OMEL'CHENKO, K.G. (Moskva)

Problems of the experimental determination of thermal and physical coefficients using self-simulating techniques. Izv. AN SSSR. Energ. i transp no.2:244-247 Mr. Ap'64. (MIRA 17:5)

ACCESSION NR: AP4031619

5/0281/64/000/002/0244/0247

AUTHOR: Omel'chenko, K.G. (Moscow)

TITLE: Some problems in the experimental determination of thermophysical coefficients by the method of self-simulating conditions

SOURCE: AN SSSR. Izvestiya. Energetika i transport, no. 2, 1964, 244-247

TOPIC TAGS: thermocouple placement, thermal conductivity measurement, thermo-physical coefficient, self-simulating condition

ABSTRACT: A correcting method is proposed which makes it possible to eliminate possible errors when determining the depth for seating a thermocouple, as well as to reduce the spread of experimental curves caused by inaccurate fulfillment of boundary conditions. A method is proposed for finding the thermal conductivity factor in temperature intervals in which the thermophysical coefficients are constant. A method for determining the constant thermal conductivity factor is described which is based on the use of a self-simulating solution of the thermal conductivity equation for a class of boundary conditions of special form. This method, based as it is on an auto-simulating heating condition, makes it possible to obtain the dependence of the thermal conductivity factor on tempera-
Card 1/2

ACCESSION NR: AP4031619

ture in a single experiment. During the experimental implementation of this method, the temperature of the heated surface of the sample must be kept constant. The case considered in the article, by way of illustrating method, is one in which the sample is heated through instantaneous contact with a flat graphite plate, through which an electric current flows. Orig. art. has: 2 tables, 3 figures and 17 formulas.

ASSOCIATION: none

SUBMITTED: 23Dec62

DATE ACQ: 07May64

ENCL: 00

SUB CODE: TD, GP

NO REF SOV: 005

OTHER: 000

Card 2/2

OMEL'CHENKO, I.A. [Omel'chenko, I. A.]

Nature of pigmented cells of the peritoneum. Dop. AN URSSR no. 6:797-
802 '65. (MIRA 18:7)

1. Belotserkovskiy sel'skokhozyaystvennyy Institut,

OMEL'CHENKO, L.A., aspirant

Histological study of infectious atrophic rhinitis of swine.
Veterinariia 42 no.10:36 0 '65.

(MIRA 18:10)

1. Belotserkovskiy sel'skokhozyaystvennyy institut.

OMEL'CHENKO, M.

Let's organize a strong supply base for interfarm construction. Sil'.
bud. 10 no.3:16-17 Mr '60. (MIRA 13:6)

1. Predsedatel' soveta Dnepropetrovskogo oblmezhholkhozstroya.
(Dnepropetrovsk Province--Building materials industry)

CMEL'CHENKO, M.M., inzhener.

Operating experience burning natural gas from the Dashava source
in the boilers of Kiev Thermal Power Station No. 3. *Teplotsergetika*
4 no.9:26-32 S '57. (MIRA 10:8)

1. Kiyevskaya teplovaya elektricheskaya tsentral'naya stantsiya 3.
(Boilers)

OMEL'CHENKO, M.V.

Development of cotton embryos and their viability when isolated
from the organism. Izv. AN Uz. SSR no. 9:23-29 '56.

(Cotton)

(MIRA 14:5)

OMEL'CHENKO, M.V.

Effect of light conditions on the development of the cotton plant.
Uzb. biol. zhur. no.2:33-40 '58.

(MIRA 11:10)

1. Institut genetikki i fiziologii rasteniy.

(Cotton growing) (Plants, Effect of light on)

OMEL'CHENKO, M.V.

Nature of the development of various forms by interspecific
hybridization of cotton. Uzb. biol. zhur. 8 no.5:79-84 '64
(MIRA 18:2)

1. Institut genetiki i fiziologii rasteniy AN UzSSR.

OMEL'CHENKO, M. V.

Cand Biol Sci - (diss) "Dynamics of the growth of seedcases and the growing of immature seed buds of the cotton plant under artificial conditions." Tashkent, 1961. 22 pp; (Academy of Sciences Uzbek SSR, Inst of Genetics and Physiology of Plants); 250 copies; price not given; (KL, 5-61 sup, 185)

OMEL'CHENKO, N.A.

Speech defects and stuttering among school children. Pediatrics
no. 6. 53-58 Je '57 (MIRA 10:10)

1. Iz Instituta ucha, gorla i nosa Ministerstva zdravookhraneniya
ESPER (dir. - zasluzhennyy deyatel' nauki prof. V.K.Trutnov)
(SPEECH, DISORDERS OF) (STAMMERING)

GMEI' CHEMIKO, N.A., Cand Med Sci--(Miss) ^{Tonguetie} "~~Tongue-tied condition and the~~
significance of the anomalies of the maxillary-dental systems in its origin."
Mos, 1958. 16 pp (Min of Health USSR. Central Inst for the Advanced
Training of Physicians), 200 copies (KL,30-58,133)

OMEL'CHENKO, N.A.

OMEL'CHENKO, N.A.

Condition of the maxillo-dental system in school children with
speech disorders. Stomatologiya 37 no.1:63-66 Jan '58.

(MIRA 11:3)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo instituta ukha,
gorla i nosa Ministerstva zdravookhraneniya RSFSR (dir. - prof.
V.K.Trutnev)

(MOUTH--ABNORMALITIES AND DEFORMITIES)

OMEL'CHENKO, Nikolay Andreyevich, kand. med. nauk; IL'INA-MARKOSYAN,
L.V., red.; LYUDKOVSKAYA, N.I., tekhn. red.

[Stammering and its connection with anomalies of the maxil-
lodental system and with hearing] Kosnoiazychie i ego sv'яз' s
anomalijami zubocheiustnoi sistemy i slukhom. Moskva, Medgiz,
1961. 119 p. (MIRA 15:1)

(STAMMERING)

OMEL'CHENKO, N.A., kand.med.nauk

Tongue-tie in childhood. Zdrav. Bel. 7 no.10:28-31 0 '61.

(MIRA 14:11)

(SPEECH, DISORDERS OF)

OMEL' CHENKO, N.A. (kolkhoz imeni Chkalova, Stalinskoy oblasti)

Prevention and therapy of lumbosacral radiculitis. Fel'd. i akush.
no.12:39-41 D '54. (MIRA 8:2)

(NERVES, SPINAL, diseases
radiculitis, lumbosacral, prev. & ther.)

OMEL'CHENKO, H.A., fel'dsher (Soykhoz imeni Chkalova Stalinskoy oblasti)

Treatment of migraine. Fel'd.i akush no.8: 45-47 Ag '55.

(MIGRAINE, ther.

(MLBA 8:10)

procaine)

(PROCAINE, ther.use

migraine)

OMEL'CHENKO, N.A. fel'dsher

Treatment of acute suppurative processes. Fel'd i akush. no.9:
35-36 S '55. (MLBA 8:11)

1. Sovkhoz imeni Chkalova Stalinskoy oblasti.

(ABSCESS, ther.

penicillin & procaine)

(PENICILLIN, ther. use

abscess, with procaine)

(PROCAINE, ther. use

abscess, with penicillin)

OMEL'CHENKO, N.A., fel'dsher

Prevention of necrosis following subcutaneous injection of calcium chloride. Fel'd. i akush. 21 no.3:40-41 Mr '56. (MIRA 9:7)

1. Sovkhoz imeni Chkalova, Stalinskoy oblasti.
(NECROSIS) (CALCIUM CHLORIDE)

OMEL'CHENKO, N.A., fel'dsher

Treating eczema. Fel'd. i akush. 22 no.1:34-36 Ja '57
(MLRA 10:4)

1. Sovkhoz imeni Chkalova Stalinskoy oblasti.
(ECZEMA) (NOVOCAINE)

OMEL'CHENKO, N.I. (L'vov)

Use of an electric vacuum cleaner for medical purposes and the
adaptation of certain drugs for use with it. Vrach.delo no. 73
743-745 J1'58 (MIRA 11:9)
(MEDICAL INSTRUMENTS AND APPARATUS)
(VACUUM CLEANERS)

PREMET, G.K.; Primal uchastiye: LAGOSHA, T.F.; OMELICHENKO, N.I.;
SEMENOVA, R.A.; SPINOV, R.I.; VASILINETS, I.M.; RADIONOVA, I.A.;
KOZULIN, N.A., prof.

Entrapping of harmful volatile substances in the manufacture
of drying oils. Lakokras.mat.i ikh prim. no.1:65-67 '63.
(MIRA 16:2)

(Drying oils)

SOV/140-58-4-20/30

AUTHOR: Omsel'chenko, O.K.

TITLE: ~~The Problem of the Separation of Zeros of the Eigenfunctions of~~
 a Second Order Selfadjoint Operator of Elliptic Type (O zadache
 razdeleniya nuley sobstvennykh funktsiy samosopryazhennogo
 operatora vtorogo poryadka ellipticheskogo tipa)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1958, Nr 4,
 pp 184-190 (USSR)

ABSTRACT: In the finite domain D with the boundary the problem

$$\sum_{k,l=1}^2 \frac{\partial}{\partial x_k} (a_{kl} \frac{\partial u}{\partial x_l}) + c(x_1, x_2, \lambda)u = 0 \quad u|_{\Gamma} = 0$$

is considered. Let the eigenvalues be $\lambda_1 \leq \lambda_2 \leq \dots \leq \lambda_n \leq \dots$.
 Let the corresponding eigenfunctions be $\varphi_1, \varphi_2, \dots, \varphi_n$. Let
 $c(x_1, x_2, \lambda) > 0$ for $\lambda \geq \lambda_1$ and besides monotonely increasing
 in λ . It is shown that the zeros of φ_k C-separate (in the sense
 of Boboc [Ref 2]) the zeros of φ_s , if $s < k$. Furthermore, two
 arbitrary eigenfunctions corresponding to the same eigenvalue,
 have zeros which C-separate mutually.

Card 1/2

The Problem of the Separation of Zeros of the Eigenfunctions of a Second Order Selfadjoint Operator of Elliptic Type SOV/140-58-4-20/30

There are 5 references, 3 of which are Soviet, 1 Italian, and 1 Roumanian.

ASSOCIATION: L'vovskiy gosudarstvennyy universitet imeni Ivan Franko
(L'vov State University imeni Ivan Franko)

SUBMITTED: January 22, 1958

Card 2/2

OMEL'CHENKO, O.K.; NAGORNIY, N.M., otv. red.; ORLOVA, I.A., red.; KORIKINA,
A.I., tekhn. red.

[Standard programs for the BESM-2 computer of the Computer Center of
the Academy of Sciences of the U.S.S.R.] Standartnye programmy
BESM-2 Vychislitel'nogo tsentra AN SSSR. Moskva. No.4. Omel'chenko, O.K.
1961. 18 p. (MIRA 14:11)

1. Akademiya nauk SSSR. Vychislitel'nyy tsentr.
(Programming (Electronic computers))

VAN'YAN, L.L.; ZHIGUN'SKAYA, T.A.; OMEL'CHENKO, D.K.

Tables for calculating the theoretical curves of frequency
sounding in a distant zone. Trudy inst. geol. i geofiz. Sib.
otd. AN SSSR no. 30:76-175 '64. (MIRA 1974)

OMEL'CHENKO, O.T.

Effect of different concentrations of horse-radish juice on bile secretion. Medych. zhur. 23 no.4:74-81 '53. (MIRA 8:2)

1. Kiivs'kiy medichniy institut, gospiatal'na terapevtichna klinika.
(HORSE-RADISH) (BILE)

Omel'chenko, O.T.
OMEL'CHENKO, O.T.

Effect of black radish, beet juice, and magnesium sulfate on bile secretion in patients with drainage of the common bile duct [with summary in English]. Fiziol.zhur. [Ukr] 3 no.4:45-53 J1-Ag '57.
(MLHA 10-9)

1. Kiivs'kiy medichnyi institut im. akad. O.O.Bogomol'tsya, gospi'tal'na terapevtichna klinika. 2. Institut fiziologii im. O.O.Bogomol'tsya AN URSR, viddil klinichnoy fiziologii.

(BILIARY TRACT--DISEASES)

(MAGNESIUM SULPHATE--PHYSIOLOGICAL EFFECT)

(VEGETABLE JUICES)

OMEL'CHENKO, P. kand. sel'skokhozyaystvennykh nauk; MOROZOVA, A.,
laborantka

Determining fat in pork on the basis of moisture. Stanka 1
pered.op.v sel'khoz. 9 no.11:52-53 N '59. (MIRA 13:3)
(Pork--Analysis)

OMEL'CHENKO, P.

Educational equipment and facilities at a plant. Prof.-tekh.
obr. 19 no.1:28-29 Ja '62. (MIRA 15:1)

1. Nachal'nik otдела tekhnicheskogo obucheniya turbomotornogo zavoda, Sverdlovsk.
(Sverdlovsk--Education, Cooperative)

OMEL'CHENKO, P.

Let's strengthen the connection between plants and schools.
Prof.-tekh. obr. 22 no.1:2 Ja '65. (MIRA 18:4)

1. Nachal'nik otdela tekhnicheskogo obucheniya Sverdlovskogo
turbomotornogo zavoda.

GOLUBEV, T.M., doktor tekhn. nauk; NIZKOV, A.A.; OMEL'CHENKO, P.P.;
MOROZOV, L.V.

Unit pressure during rolling with continuously increasing
reductions. Met. i gornorud. prom. no.6:27-29 N-D '65.
(MIRA 18:12)

CHAVCHICH, T.A.; LEVIT, G.M.; SAPRONOV, V.A.; BORODUSHKINA, Kh.N.;
BOGUSLAVSKIY, D.B.; OMEL'CHENKO, R.Ya.

Some characteristics of the vulcanization of butyl rubber with
alkylphenol formaldehyde resins. Kauch. i rez. 23 no.10:12-16
0 '64. (MIRA 18:2)

1. Dnepropetrovskiy shinnyy zavod.

OMEL'CHENKO, S.I.; PRIZ, M.N.; SINITSIN, V.I.; SHAMRAYEV, G.M.; USTINOVA, A.M.;
PANCHENKO, N.A.; ZHADAN, N.S.

Production of polyglycol maleate resins modified with cyclopentadiene
and their properties. Plast.massy no.12:14-16 '63. (MIRA 17:2)

OMEL'CHENKO, S. I.

AID P - 265

Subject : USSR/Chemistry
Card : 1/1
Authors : Postovskiy, I. Ya., and Omel'chenko, S. I. (Sverdlovsk)
Title : Advances in the synthesis of antitubercular compounds
Periodical : Usp. khim. 23, No. 2, 199-222, 1954
Abstract : The chemistry of some synthetic antitubercular compounds is discussed, namely: p-aminosalicylic acid, thiosemi-carbazones, amides and hydrazides of carboxylic acids. Three tables. 113 references (23 Russian): 1886-1953.
Institution : None
Submitted : No date

CHER'CHENKO, S. I.

CHER'CHENKO, S. I. - "Investigation of the Structure and Chemical Transformations of Carbazole and Certain of Its Derivatives." Min Higher Education USSR. Ural Polytechnic Institute S. M. Kirov. Sverdlovsk, 1955. (Dissertation for the Degree of Candidate of Chemical Sciences)

So: Knizhnyy Letopis', No 3, 1956

AUTHORS: Omel'chenko, S. I., Pushkareva, Z. V., 79-12-12/43
Bogomolov, S. G.

TITLE: Investigation of the Structural Peculiarities and Chemical Transpositions of Carbazole and its Derivatives
(Issledovaniye osobennostey stroyeniya i khimicheskikh prevrashcheniy karbazola i nekotorykh yego proizvodnykh)
The Absorption Spectra in the Ultra-Violet Part of Carbazole and some of its Derivatives
(Spektry pogloshcheniya v ultrafiolete karbazola i nekotorykh yego proizvodnykh)

PERIODICAL: Zhurnal Obshchey Khimii 1957, Vol. 27, Nr 12, pp. 3220-3226 (USSR)

ABSTRACT: In spite of many possibilities, to gain carbazole in important quantities in the big coking plants, up to now stone coal carbazole was exploited only very little. One of the reasons is the peculiarity of its chemical properties. Its chemistry elaborated already as to the most important points still lacks explanation as to practically most appropriate reactions. The work of the authors is dedicated to the investigation of the structural peculiarities of the chemical transpositions and to the practical applicability of some carbazole derivatives. As it is known the characteristic properties of a molecule

Card 1/3

Investigation of the Structural Peculiarities and Chemical Transpositions of Carbazole and its Derivatives. The Absorption Spectra in the Ultra-Violet Part of Carbazole and some of its Derivatives. 79-12-12/43

are mainly based on the position of the electrons and on the type of the compound. Therefore, in order to investigate the properties of the carbazole molecule, special attention was paid to its absorption centres in the ultra violet and partly also in the visible part. 10 derivatives of carbazole and of diphenylamine were synthesized and the absorption spectra of 13 compounds were put up. It was demonstrated that in the occasion of the transition from the diphenylamine derivatives to those of carbazole the occurrence of the diphenyl compound causes a considerable change in the ultraviolet absorption spectra. The substituents at the nitrogen atom in the case of carbazole as well as in the case of diphenylamine produce different effects according to their electronic character. The fixation of the unseparated electron couple in nitrogen by the formation of the N - oxides practically leads to the elimination of nitrogen from the compound and to an abrupt change of the optic molecular properties.

There are 6 figures, 1 table, and 13 references, 5 of which are Slavic.

Card 2/3

Investigation of the Structural Peculiarities and Chemical
• Transpositions of Carbazole and its Derivatives. The Absorption Spectra in the
Ultra-Violet Part of Carbazole and some of its Derivatives. 79-12-12/43

ASSOCIATION: Ural Polytechnical Institute
(Ural'skiy politekhnicheskiy institut)

SUBMITTED: October 25, 1956

AVAILABLE: Library of Congress

1. Carbazole - Synthesis
2. Carbazole - Spectra
3. Carbazole - Structural analysis

Card 3/3

AUTHORS: ~~Omsl'chenko, S. I., Pushkareva, Z. V.~~ SOV/79-28-10-16/60

TITLE: Investigations of the Structural Characteristic Features and the Chemical Reactions of Carbazole and Some of Its Derivatives (Issledovaniye osobennostey stroyeniya i khimicheskikh prevrashcheniy karbazola i nekotorykh yego proizvodnykh)
II. On Some Properties of the 3-Amino Carbazole and Its Derivatives (II.0 nekotorykh svoystvakh 3-aminokarbazola i yego proizvodnykh)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 10, pp 2706-2710 (USSR)

ABSTRACT: With few exceptions detailed investigations have not yet been made of the 3-amino carbazole, the syntheses of which are often carried out in different ways (Refs 1-6). For this reason the authors investigated the alkylation, acylation and carboxy methylation reactions of this compound as well as the absorption spectra in the ultraviolet of all derivatives obtained. The methylation with dimethyl sulfate takes place at room temperature in alkaline medium forming 3-dimethyl amino carbazole (I). The acetylation with acetic anhydride can lead to the formation of the mono, di, and triacetyl derivatives. The monobenzoyl derivative (II) can be obtained

Card 1/3

Investigations of the Structural Characteristic Features and the Chemical Reactions of Carbazole and Some of Its Derivatives. SOV/79-28-10-16/60

II. On Some Properties of the 3-Amino Carbazole and Its Derivatives

by the reaction with benzoyl chloride in the presence of sodium alcoholate. The carboxy methylation reaction was only carried out to obtain the 3-carbazyl glycine (III), the analog of phenyl glycine, which is the source product of indigoid dyes. Compound (III) could, however, only be methylated with bromo acetic acid. The closure of the oxindole cycle (Scheme 2-(III)→(IV)) failed. All reactions carried out show the considerable difference between the amino group of 3-amino carbazole and the amino groups of ordinary aromatic amines. The comparison of the spectral curves in the ultra-violet range of the 3-amino carbazole derivatives showed that their chemical characteristic features come from the reciprocal effect of the electron systems of the hetero atoms and the nitrogen of the amino group. There are 5 figures and 7 references, 1 of which is Soviet.

ASSOCIATION: Ural'skiy politekhnicheskiy institut
(Ural Polytechnical Institute)

Card 2/3

Investigations of the Structural Characteristic SOV/79-28-10-16/60
Features and the Chemical Reactions of Carbazole and Some of Its Derivatives.
II. On Some Properties of the 3-Amino Carbazole and Its Derivatives

SUBMITTED: August 7, 1957

Card 3/3

AUTHORS: Pushkareva, Z.V., Omel'chenko, S.I. SOV/80-32-2-55/56

TITLE: Investigation of the Peculiarities of the Structure and of Chemical Transformations of Carbazole and Some of Its Derivatives (Issledovaniye osobennostey stroyeniya i khimicheskikh prevrashcheniy karbazola i nekotorykh yego proizvodnykh)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 2, pp 467-469 (USSR)

ABSTRACT: The derivatives of carbazole are dyes which are resistant to light and washing. Several dyes have been synthesized here on the base of 3-diazocarbazole with 1,8-acetylaminoanthol-3,6-disulfoacid, 1,8-aminanthol-3,6-disulfoacid, etc. The color of the dyes ranges from black to golden-yellow. They may be used for several fabrics, like natural and artificial silk, cotton, etc. There are 2 tables and 6 references, 1 of which is Soviet, 3 German, 1 Swiss and 1 American.

Card 1/2

SOV/80-32-2-55/56

Investigation of the Peculiarities of the Structure and of Chemical Transformations of Carbazole and Some of Its Derivatives

ASSOCIATION: Ural'skiy politekhnicheskiy institut imeni S.M. Kirova (Ural Polytechnical Institute imeni S.M. Kirov)

SUBMITTED: August 6, 1957

Card 2/2

OMEL'CHENKO, S.I.; PUSHKAREVA, Z.V.; SHISHKINA, V.I.

Investigation of the formation peculiarities and chemical changes
of carbazole and some derivatives. Report No.6: Dyes of the
triarylmethane type from carbazole. Trudy Ural. politekh. inst.
no.94:45-47 '60. (MIRA 15:6)

(Carbazole) (Dyes and dyeing)

SHISHKINA, V.I.; OMEL'CHENKO, S.I.; SOSHIN, V.A.

Characteristics of the structure and chemical transformations of
carbazole and some of its derivatives. Report No.6: Nitration
reaction of carbazole and its N-derivatives. Trudy Ural.politekh.
inst. no.96:19-23 '60. (MIRA 14:3)
(Carbazole) (Nitration)

PHASE I BOOK EXPLOITATION

SOV/6178

Omel'chenko, Svetlana Ivanovna

Epoksidnyye smoly (Epoxy Resins) Kiyev, Gostekhizdat UkrSSR, 1962.
102 p. 3100 copies printed.

Ed.: L. A. Tsyba; Tech. Ed.: V. N. Berezovyy.

PURPOSE: This book is intended for technical personnel engaged
in the study or use of epoxy resins.

COVERAGE: The text deals with raw materials, synthesis, manufacture,
and use of epoxy resins. Curing agents, properties, and chemical
modifications of epoxy resins and methods for determining the
amount of epoxy and hydroxyl groups, chloride ions, and volatiles
in epoxy resins are discussed. Epoxy-resin production technology
and uses for epoxy resins are also studied. There are 46 refer-
ences: 27 Soviet (including 3 translations), 10 English,
4 German, 3 French, 1 Finnish, and 1 Polish. No personalities are
mentioned

Card 1/2

Epoxy Resins	SOV/6178
TABLE OF CONTENTS [Abridged]:	
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Synthesis and Properties of Epoxy Resins	5
Production of Epoxy Resins	36
Analysis of Epoxy Resins	45
Utilization of Epoxy Resins	54
References	101

AVAILABLE: Library of Congress

SUBJECT: Chemical Engineering
Nonmetallic Materials

Card 2/2

BN/clb/tem
1-18-63

OMEL'CHENKO, S.I.; VIDENINA, N.G.; BELAYA, E.S.; LINDK, S.V.; KGVAN'KO, S.K.;
NEPOMNYASHCHAYA, I.R.

Obtaining epoxy resins with the method of direct epoxidation of
unsaturated polymers and their use as film-forming agents.

Lakokras.mat.i ikh prim. no.6:15-19 '62. (MIRA 16:1)

(Epoxy resins)

ACCESSION NR: AP4012185

S/0191/64/000/002/0017/0019

AUTHORS: Omel'chenko, S. I.; Sorokin, V. P.; Tkachuk, B. M.;
Belet'skaya, T. V.; Zubkova, Z. A.; Piotrkovskaya, V. G.;
Safonov, A. I.

TITLE: Unsaturated polyglycol maleinate resins modified by anthracene

SOURCE: Plasticheskiye massy*, no. 2, 1964, 17-19

TOPIC TAGS: unsaturated polyglycol maleinate resin, anthracene,
unsaturated polyester resin, glass-reinforced plastic, maleic an-
hydride, contact method, filler, binder, heat resistance

ABSTRACT: Effort directed toward broadening the raw material base
for synthesis of unsaturated polyester resins is acquiring great
value in connection with the expansion of glass-reinforced plastic
production. Unsaturated polyester resins were synthesized by two
methods: (1) joint polycondensation of maleic anhydride with additive
of anthracene and glycol (ethylene glycol or diethylene glycol).
(2) introduction of anthracene during condensation polymerization of
glycols and maleic anhydride. Two problems were simultaneously

Card 1/2

ACCESSION NR: AP4012185

solved: obtaining unsaturated polyester bonds with improved properties and the expansion of the raw material base for their production. Optimum conditions for the process were studied and it was established that stable resins can be obtained by synthesis in one stage (22-23 hrs.) and in a two-stage process (16-27 hrs.). Glass-reinforced plastic was prepared on the basis of resins derived by the contact method; glass cloth of brand T and ACTT (b) C with paraffin lubricant were used as filler. Physical-mechanical testing indicates that the resins modified by additive or anthracene can be used as binders. Glass-reinforced plastic based on resin of certain brands (PNA-D-2, PNAD-E-3, PNAD-2.5) possess increased heat resistance and the best physical-mechanical properties.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: CH, MA

NR REF SOV: 001

OTHER: 003

Card 2/2

OMEL'CHENKO, S.I.; PRIZ, M.N.; SHAMRAYEV, G.M. [Shamrayev, H.M.]; ZHADAN, M.S.

Effect of cross-linking polymers on the characteristics of poly-
glycolmaleate bonding agents for glass plastics. Khim. prom. [Ukr.]
no.3:30-33 J1-S '64. (MIRA 17:12)

TROYNIKOVA, Ye.I. [Troinykova, IE.I.]; SADOVSKAYA, Z.M. [Sadovs'ka, Z.M.];
KOMASHKO, A.M.; OMEL'CHENKO, S.I.

Initiating systems for the copolymerization of polyglycidalate
resins modified with cyclopentadiene. Khim. prom. [Ukr.] no.3:
33-35 J1-S '64. (MIRA 17:12)

BELETSKAYA, T.V. [Bilets'ka, T.V.]; ZUBKOVA, Z.A.; (KEL'CHENKO, S.I.);
PIOTRKOVSKAYA, V.G. [Piotrkovs'ka, V.H.]; TEACHUK, B.M.

Unsaturated polyester resins with increased heat resistance and
improved dielectric properties for the manufacture of glass
plastics. Khim. prom. [Ukr.] no.1:5-8 Ja-Mr '65. (MIRA 19:4)

]

L 22600-66 EWT(m)/LWP(j)/T/ETC(m)-6 IJP(c) WW/GS/RM
 ACC NR: AT6006244 (A) SOURCE CODE: UR/0000/65/000/000/0048/0055

AUTHOR: Omel'chenko, S. I.; Troynikova, Ye. I.; Sadovskaya, Z. M.; Komashko, A. H.

ORG: Ukrainian Scientific Research of Plastics, Donetsk (UkrNIIPlastmass)

TITLE: Initiation systems for the copolymerization of polyglycolmaleinate resin modified with cyclopentadiene

SOURCE: AN UkrSSR. Modifikatsiya svoystv polimerov i polimernykh materialov (Modification of the properties of polymers and polymeric materials). Kiev, Naukova dumka, 1965, 48-55

TOPIC TAGS: copolymerization, polymerization catalyst, polymerization initiator, synthetic material, catalytic polymerization

ABSTRACT: The effectiveness of isopropylbenzohydroperoxide (IPBHP)-, methylethylketone peroxide (MEKP)- and cyclohexanone peroxide (CHP) supplemented with U-100 accelerator, $(\text{NH}_4)_2[\text{Co}(\text{CNS})]$, on the copolymerization of PNTs-2E-6⁶ polyglycolmaleinate resin with cyclopentadiene was investigated. The copolymer samples were prepared by mixing a resin-styrene solution (100:400 styrene to resin ratio) with an initiator-accelerator system followed by pouring into molds and setting at $20 \pm 1^\circ\text{C}$. The concentration of IPBHP in styrene was 3-5%. The concentration of MEKP was 0.2-0.7% and concentration of CHP was 0.2-0.8%. The copolymerization duration was 95-230 minutes.

Cord 1/2

L 22600-66

ACC NR: AT6006244

The copolymers were held for 1-4 hours at 60-120°C. The concentration of U-100 was 0.01-0.03% based on Co⁺⁺ ion content. In the case of IPBHP, a copolymer with the best physicommechanical properties was obtained using 3% IPBHP, 0.02% Co⁺⁺, and thermal treatment at 100-120°C. After 30 days of aging, the copolymer contained 94% non-extractible matter. The properties of the styrene-PNTs-2E-6 resin copolymers obtained with various initiation systems are presented in a table. Orig. art. has: 9 figures, 4 tables.

SUB CODE: 07/

SUBM DATE: 06Oct65/

ORIG REF: 002/

OTH REF: 000

Card 2/2/W

L 21822-66 EWP(j)/EWT(m)/ETC(m)-6/T IJP(c) RM/WW/GS
ACC NR: AT6005253 (A) SOURCE CODE: UR/0000/65/000/090/0132/0136

AUTHOR: Omel'chenko, S. I.; Priz, M. N.; Shamrayev, G. M.; Zhadan, N. S.; Kovalenko, V. D.; Shantgay, T. G.

ORG: none

TITLE: Changes in physicommechanical properties of PNTs resins and glass textolites based on PNTs due to the influence of the atmosphere

SOURCE: AN UkrSSR. Modifikatsiya svoystv polimerov i polimernykh materialov (Modification of the properties of polymers and polymeric materials). Kiev, Naukova dumka, 1965, 132-136

TOPIC TAGS: glass textolite, polymer, solid mechanical property, synthetic material, structural plastic

ABSTRACT: The changes in physicommechanical properties of unsaturated polyester PNTs-2E-6- and PNTs-2ED-6¹² resins and glass textolites based on these resins were investigated during their aging in natural and artificial atmospheres. The PNTs-2E-6 resin is based on ethylene glycol and the PNTs-2ED-6 resin is a mixture of

Card 1/2

L 21822-66

ACC NR: AT6006253

3

ethylene and diethylene glycol with maleic anhydride. The tests were conducted on samples composed of 100 parts of resin with 40 parts of styrene. They were set at room temperature from a mixture containing 3% isopropylbenzene hydroperoxide and 5% of 8% styrene solution of cobalt naphthenate. These samples were next held for 4 hours at 100°C. The aging tests were conducted by exposure to atmosphere from April to September 1964. The aged samples were then examined for Brinell hardness (GOST-4670-62), compression resistance (GOST 4651-63), twisting resistance (GOST-4648-53), and thermal stability according to Vik (GOST 9551-60). It was found that exposure to atmospheric conditions for 3.5 months resulted in very small changes in physico-mechanical properties. The most loss (28%) in twisting resistance incurred the PNTs-2E-6 resin. The glass textolites also suffered small losses in physicomechanical indices after six months exposure to atmospheric aging conditions. The artificial aging conditions had an effect on the resin properties similar to that of the natural atmospheric conditions. Orig. art. has: 3 tables.

SUB CODE: 11/ SUBM DATE: 06Oct65/ ORIG REF: 003/ OTH REF: 000

Card 2/2 nst

ACC NR: AP7001487 SOURCE CODE: UR/0436/66/000/006/0001/0007
AUTHOR: Omel'chenko, S. I.; Videnina, N. G.; Shchepetkina, N. I.; Chervetsova, I. N.
ORG: Institute of High-Molecular Compounds (Institut vysokomolekulyarnykh soyedineniy)
TITLE: Radiation polymerization of unsaturated polyester resins without monomers
SOURCE: Khimicheskaya promyshlennost' Ukrainy, no. 6, 1966, 107
TOPIC TAGS: radiation polymerization, resin, polyester plastic, polymer cross linking, thermal stability, hardness

ABSTRACT: The authors study the possibility of polymerizing unsaturated polyesters under the effect of high-energy radiation and compare their radiation and thermo-chemical cross-linking. Several structurally different polyesters were investigated: polyglycolmaleinate adipinate (PNAD), polyglycolmaleinate phthalate (PNP) and polyglycolmaleinates modified by cyclopentadiene (PNC) and anthracene (PNA-2). The specimens were poured into ampules at 90-100°C with evacuation to remove air bubbles, after which the ampules were sealed. The specimens were irradiated on a UKP-30,000 installation with a Co⁶⁰ radiation source. Exposure was done at a rate of 2020-2400 rad/sec with total doses ranging from 1 to 140 mrad at a temperature of 18-25°C. A ferrosulfate radiation monitor was used with an error of ±2%. As the radiation dosage is increased, the specimens are gradually converted from rubber-like pale yellow products to completely transparent uniformly hard brown blocks. The hardest cross-linked speci-

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UDC: 541.15

ACC NR: AP7001487

men was PNP followed by PNC, PNAD and PNA-2. The hardened polyester resin with the highest thermal stability was PNC followed by PNAD, PNP and PNA-2. The experimental data indicate significant advantages in the radiation method of cross-linking for these types of polyesters in comparison with thermochemical methods. Orig. art. has: 4 figures, 3 tables.

SUB CODE: C/11/ SUBM DATE: None/ ORIG REF: 002/ OTH REF: 002

Card 2/2

OMEL'CHENKO, T. M.

Gastric Juice

Analysis of gastric juice in the blue fox. *Kar. i Zher.*, 5, No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 195², Uncl.

OMEL'CHENKO, T.I., ^{Genl Bio Sci--(disc)} "Age-related anatomy of the <sup>of silver-black foxes and ~~the~~ blue polar foxes." *Ann.*, 1952. 14 pp.
(*Ann.* Vet Acad of the Fin of Agr USSR), 150 series (P, 24-27, 101)</sup>

VASIL'YEV, V.G., kand. geogr. nauk, otv. red.; POGULYAYEV, D.I.,
doktor geol.-miner. nauk, red.; PERLIN, B.N., kand.
geogr. nauk, red.; OMEL'CHENKO, T.M., kand. sel'khoz. nauk,
red.; BUDAYEV, D.I., kand. ist. nauk, red.

[Atlas of Smolensk Province; dedicated to the 1100th anni-
versary of Smolensk] Atlas Smolenskoi oblasti; posviashchaetsia
1100-letiiu Smolenska. Moskva, 1964. 31 p. (MIRA 18:3)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i
kartografii.

KOCHO, V.S.; VARZILOVICH, V.S.; LYADOV, K.P. Primalni uchastiye:
MRYKHINA, V.I., inzh.; OMEL'CHENKO, T.Ye., tehnik; SHAKARIMOV, Yu.,
student; YASTOCHKIN, A.I., student; ULANOVSKAYA, L.V., student

Investigating the operation of continuous furnaces with a rolling
hearth. Stal' 24 no.2: 177-179 F '64. (MIRA 17:9)

1. Kiyevskiy politekhnicheskii institut i Kommunariskiy metallurgicheskii
zavod.

OMEL'CHENKO, V., mayor

This is how we build an underwater bridge. Voen. vest. 42
no.6:96-97 Je '62. (MIRA 15:6)

(Military bridges)

OMEL'CHENKO, V., kalandrovozhataya, delegat XIII s"yezda professional'nykh
soyuzov

Fight for the man! Sov. profsoiuzy 19 no.15:1-3 Ag '63.

(MIRA 16:8)

1. Predsedatel' tsekhovogo komiteta zavoda "Krasnyy rezinshchik,"
Kiyev.

(Kiev--Rubber industry workers--Education and training)

(Trade unions)

L 09123-67 EWT(m)/EWP(f) FDN/WW/DJ/WE
ACC NR: AP6031769 (A) SOURCE CODE: UR/0094/66/000/007/0048/0050

AUTHOR: Omel'chenko, V. I. (Engineer); Krasnikov, A. S. (Engineer); Voronin, V. L. (Engineer); Konstantinovskiy, V. A. (Engineer); Uvarov, S. N. (Candidate of technical sciences) 51
47

ORG: None

TITLE: Industrial electric power generators using aviation turbine engines 3

SOURCE: Promyshlennaya energetika, no. 7, 1966, 48-50

TOPIC TAGS: electric power engineering, electric power plant, turboprop engine

ABSTRACT: The authors discuss the advantages of using discarded aviation turbine engines for generating power in industrial plants, transport and in various branches of the petroleum industry. Units using aviation turbine engines could be made for various power requirements varying from several hundred to several thousand kilowatt output. The authors describe a successful attempt to set up such a unit in the Soviet Union in 1965. This unit utilized an AI-20 turboprop engine in conjunction with an SGN-14-49-6 26
1000 kw synchronous generator. This generating plant was equipped with an automatic control which ensured its starting, controlled its fuel and oil supply and handled emergencies. The AI-20 turboprop engine is capable of running on various fuels. It was found that it could be operated on diesel fuel and natural gas if the natural gas
||

Card 1/2 UDC: 621.311.23+629.13.02/.07

L 09123-67

ACC NR: AP6031769

4

was compressed to 10 atm. The lubrication mixture used for operating this engine consisted of 75% transformer oil or MK-8 and 25% MS-20 or MK-22 oil. The engine consumed 0.8 liters of oil per hour. Since a 1600 kilowatt generator could not be found, the engine was set to function at 50% capacity. The weight to power ratio of this unit was 12.3. The unit functioned normally throughout the test period. One of the advantages of using such a unit is that it does not require water for cooling and the exhaust gases of the turbine can be used for heating purposes. Orig. art. has: 4 figures.

SUB CODE: 10, 13 / SUPM DATE: None

Cord 2/2 not

OMEL'CHENKO, V.M.

Development of cotton grown from uneven-aged seed material. Agro-
biologiya no.2:136-139 Mr-Apr '58. (MIRA 11:4)

1. Institut genetiki i fiziologii rasteniy AN Uzbekskoy SSR, Tashkent.
(Cotton growing)

BYSTREVSKIY, L.M.; GMELECHENKO, V.M.; SHTEYNTSAYG, K.Kh.

Inspired work of Nosenko shipyard workers. Sudostroenie 27
no.10:14-17 O '61. (MIRA 14:12)
(Kherson--Shipbuilding)

OMEL'CHENKO, V. M.

OMEL'CHENKO, V. M.: "The surgical anatomy of the large blood vessels and nerves of the lower portion of the neck". L'vov, 1955. L'vov State Medical Inst. (Dissertation for the Degree of Candidate of Science of Medical Sciences)

SO: Knizhnaya Letopis', No. 41, 8 Oct 55

OMEL'CHENKO, V.M., kand.med.nauk

Features of surgical anatomy of the innominate artery. Khirurgiia
34 no.8:110-119 Ag '58 (MIRA 11:9)

1. Iz kafedry topograficheskoy anatomii i operativnoy khirurgii
(zav. - prof. I.V. Studzinskiy) L'vovskogo meditsinskogo instituta.
(ARTERIES, INNOMINATE, anat. & histol.
surg., anat. (Rus))

USSR/Cultivated Plants - Commercial. Oil-Bearing. Sugar-Bearing. M-5

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29869

Author : Omel'chenko, V.S.

Inst :

Title : The Role of the Cotton Leaves which Accompany the Fruit-Bearing Organs.

Orig Pub : Izv. AN UzSSR, 1956, No 10, 19-23 (Resume in Uzbek)

Abstract : It was shown in tests with the cotton plant (Shreder 1306 variety and Kanash C-460) that a reduction in the area of the leaf which accompanies the cotton fruit-bearing organ, or its removal, causes a large-scale falling off of the fruit organs and lowers the weight of the raw wool and the bolls. This occurs most strongly on unfertilized ground. The application of N and P considerably reduces these adverse phenomena.

Card 1/1

COUNTRY : USSR
CATEGORY : Cultivated Plants - Industrial, Oleiferous, Sugar. M
APPL. NO. : KhBiol., No. 11, 1958, No. 63435
AUTHOR : Usul' Gannov, V. S.,
INST. : Institute of Agriculture, AS Uzbek SSR
TITLE : Effect of the Main Mineral Nutrient on the Longevity in
Leaves and on the Assimilation Area of Cotton Plant.
ORIG. PUB. : Sots. s.-kh. Uzbekistana, 1957, No. 10, 53-54
ABSTRACT : On the basis of the data of the field experiment carried
out in 1955 at the Institute of Agriculture, AS Uzbek SSR
on four main mineral nutrients (N, P, K, NP) with three
subsequent dressings of NP, it was determined that the
greatest leaf surface at all stages of development was ob-
served with the background of NP and the smallest with the
background of no fertilization. The greatest decrease in
the leaf surface toward the end of the vegetative period
was with the background of no fertilization, then with the
background of P and to a lesser degree with the backgrounds
of NP and N. Considerable influence on the longevity of

Card: 1/2

OMEL'CHENKO, V.S.

Growth and development of the cotton flower as affected by the conditions of mineral nutrition. Uzb.biol.zhur. no.3:13-18 '58. (MIRA 11:12)

1. Institut genetiki i fiziologii rasteniy AN UzSSR, (Cotton--Fertilizers and manures) (Flowers)

OMEL'CHENKO, V.S.

Effect of the conditions of nutrition on the dynamics of growth and accumulation of dry matter by the main stem and branches of cotton. Uzb. biol. zhur. 6 no.3:17-21 '62. (MIRA 15:6)

1. Institut genetiki i fiziologii rasteniy AN UzSSR.
(COTTON--FERTILIZERS AND MANURES)

OMEL'CHENKO, V.S., inzh.; NOVIKOV, A.A., inzh.

Reducing the consumption of arc furnace electrodes.
Lit. proizv. no.11:10-12 N '65. (MIRA 18:12)

ACC NR: AP7004188

SOURCE CODE: UR/0369/66/002/006/0689/0692

AUTHOR: Gavranek, V. V.; Veselyanskiy, Yu. S.; Omel'chenko, V. S.

ORG: Khar'kov Polytechnic Institute im. V. I. Lenin (Khar'kovskiy politekhnicheskiy institut)

TITLE: Electronmicroscopic examination of 1Kh18N9T steel as a function of its condition and time of exposure to cavitation

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 2, no. 6, 1966, 689-692

TOPIC TAGS: ^{STEEL,} cavitation, electron microscope, metal heat treatment, metal deformation/
1Kh18N9T steel, UEMB-100 electron microscope

ABSTRACT: It has been observed (Gavranek, V. V., et al., same issue, p 686) that cold deformation (degree of deformation 80%) of 1Kh18N9T steel combined with its pre-recrystallization annealing quadruples its cavitation resistance (compared with austenitic state). In this connection, using an UEMB-100 electron microscope, the authors investigate the pattern of variation in the microrelief of 1Kh18N9T steel as a function of its heat treatment (quenching from 1080°C; quenching + 80% cold deformation at room temperature; quenching + 80% cold deformation + pre-recrystallization annealing at 550°C for 2 hr) and time of its exposure to cavitation (5, 30, 60 and 180 min) simulated with the aid of a magnetostriction vibrator (vibration amplitude 0.05,

Card 1/2

ACC NR: AP7004188

frequency 7500 cps). Findings: for the quenched specimens subjected to cavitation for 5 and 30 min the degree of differentiation of relief monotonically increases from the periphery to the center ; the same pattern is observed for the specimens subjected to both quenching and cold deformation, but only after 30 min of cavitation. For the specimens that also were annealed, on the other hand, the degree of relief differentiation reaches its peak only after 60 minutes of cavitation and they begin to display fragmentation following the first 5 and 30 minutes, and hence they are more resistant to erosive fracture during cavitation. Orig. art. has: 3 tables.

SUB CODE: 13, 11, 20/ SUBM DATE: 12May66/ ORIG REF: 005

Card 2/2

ACC NR: AP7005398

(A, H)

SOURCE CODE: UR/0148/67/000/001/0146/0148

AUTHOR: Gavranek, V. V.; Omel'chenko, V. S.

ORG: Khar'kov Polytechnic Institute (Khar'kovskiy politekhnicheskiy institut)

TITLE: Effect of annealing at below recrystallization temperatures on the structure and mechanical properties of cold deformed lKh18N9T steel

SOURCE: IVUZ. Chernaya metallurgiya, no. 1, 1967, 146-148

TOPIC TAGS: chromium ~~nickel~~ steel, austenitic steel, ~~cold deformed steel~~, annealing, steel structure, solid mechanical property, recrystallization temperature, ductility, impact strength, metal deformation, nickel containing steel/

^{1Kh18N9T steel}
ABSTRACT: The mechanical properties and structure of hot-rolled lKh18N9T[AISI 321] steel containing (%): 0.12 C, 17.6 Cr, 10.60 Ni, 0.57 Ti, 0.67 Si, and 1.30 Mn, cold-deformed with compression and a reduction of up to 80% at a rate of 2-8 mm/min, and then annealed at temperatures up to 800°C, have been investigated. At 40% reduction the steel had one hardness maximum after annealing at 400°C, while steel at 50-80% reduction had two hardness maxima: the first after annealing at 400°C and the second after annealing in the 550-600°C range. Steel strengthening resulting from annealing at 400°C was accompanied by a decrease in ductility explained by aging with deformation. Annealing at temperatures up to 550 brought about further increases in all mechanical characteristics including ductility and impact toughness. With annealing at 550°C, the tensile strength of lKh18N9T steel, cold-deformed with 80% reduction, increased from 158 to 166 kg/mm², the yield strength from 156 to 164 kg/mm², the Cord 1/2

UDC: 669.26'24'295-12:621.785.3:620.17

ACC NR: AP7005398

reduction of area from 33 to 40%, the elongation from 4 to 7% and the impact toughness from 2 to 2.6 kg·m/cm². Warm-deformed (at 650—550°C) steel had a lower strength and higher ductility than cold-deformed steel, but subsequent annealing at 550°C also increased all the mechanical characteristics of the warm-deformed steel, although the amount of the α-phase did not exceed 1.0%. Thus, the strengthening of deformed 1Kh18N9T steel resulting from annealing at below-recrystallization temperatures (500—750°C) is not associated with martensitic transformation, but appears to be caused by structural changes which occur in the low-temperature annealing process, e.g., redistribution of dislocations, formation of various segregations, and restoration of the near and local far order. Orig. art. has: 3 figures and 1 table. [MS]

SUB CODE: 11/ SUBM DATE: 29Mar66/ ORIG REF: 008/

Card 2/2

ACC NR: AP7004187

(N)

SOURCE CODE: UR/0369/66/002/006/0686/0688

AUTHOR: Gavranek, V. V.; Omel'chenko, V. S.

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TITLE: Effect of deformation and subsequent near-recrystallization annealing on the cavitation resistance of 1Kh18N9T steel

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 2, no. 6, 1966, 686-688

TOPIC TAGS: ^{NICKEL STEEL,} chromium ~~nickel~~ steel, ~~steel~~ cavitation ~~resistance~~, METAL deformation, wear resistant metal, steel structure, metal recrystallization, annealing, tensile strength, yield strength, elongation / 1Kh18N9T steel

ABSTRACT: Specimens of 1Kh18N9T [AISI 321] steel, 35 mm in diameter and 55 mm long, annealed at 1080°C and water quenched, were subjected to cold and warm (at 650 to 400°C) deformation with a reduction of 40—80%, annealed at 650—400°C for 2 hr, and tested for mechanical properties and wear resistance under cavitation conditions. The cavitation resistance of cold-deformed steel (measured by the weight loss of the specimens in 3-hr test) was found to increase continuously, but nonuniformly, with increasing reduction. The highest rate of increase was in the 50—80% range of reduction. Annealing at below-recrystallization temperatures promoted further increases in the cavitation resistance of cold-deformed steel. After a cold reduction of 80% and subsequent annealing at 550°C, the weight losses of 1Kh18N9T steel decreased by more than 300 and 150% compared with the losses of quenched and unannealed

Cord 1/2 UDC: none

ACC NR. AP7004187

cold-deformed steel, respectively. Steel annealed at below-recrystallization temperatures and deformed in the 650—400°C range with a reduction of 80% had a tensile strength 112 kg/mm², a yield strength of 108 kg/mm², an elongation of 6%, a reduction of area of 45%, an impact toughness of 5.5 kg·m/cm², and a weight loss of 21 mg. The corresponding figures after annealing at 550°C for 2 hr were: 120 kg/mm², 117 kg/mm², 8%, 45%, 6.8 kg·m/cm² and 15 mg. It is believed that the higher strength and cavitation resistance of deformed 1Kh18N9T steel can be attributed to the structural changes caused by annealing at below-recrystallization temperature, which are associated with the redistribution of dislocations and with diffusion processes resulting in the formation of various segregations. Orig. art. has: 2 figures and 2 tables. [MS]

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S/196/61/000/011/032/042
E194/E155

AUTHORS: Dolinskiy, Yu.M., and Omeli'chenko, V.T.

TITLE: Selection of parameters of inductive shunt and demagnetising turn of high-speed automatic circuit breaker

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no.11, 1961, 47, abstract III 326. (Vestn. elektroprom-sti, no.3, 1961, 56-59)

TEXT: By appropriate selection of the parameters of the shunt and the demagnetising turn the current may be constricted within the latter. It then reaches the set value earlier than in an ordinary circuit, i.e. there is a reduction in the current setting. Specimen calculations show that the rate of change of current in the demagnetising turn during short-circuit is little affected by the ratio of ohmic resistance of the inductive shunt to that of the demagnetising turn. The difference between current distribution under dynamic and under static conditions is characterised by the current constriction coefficient. ✓

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From the analysis it is concluded that the coefficient of
constriction increases with the ratio of resistance of
demagnetising turn to shunt resistance. Thus, in high-speed
circuit breakers with an inductive shunt, the proportion of the
total current which passes through the demagnetising turn under
normal conditions should be reduced in order to reduce the total
current setting during short-circuit.

[Abstractor's note: Complete translation.]

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