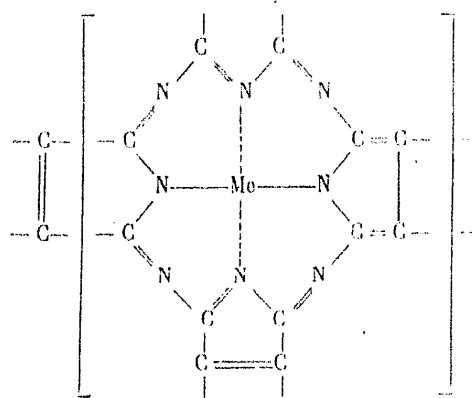


Polymers with conjugate bonds...

S/190/62/004/006/012/026
B110/B138



Polymers obtained from metals had much higher heat stability than those obtained from copper acetylacetonate, since the acetylacetonate groups bonded to a metal of different valences initiate chain decomposition into peroxide radicals. The magnetic susceptibility depends on the flux density and temperature, and is higher ($\chi = 1.03 \cdot 10^{-5}$ CGSM) (2000, 3500

Card 3/4

Polymers with conjugate bonds...

S/190/62/004/006/012/026
B110/B138

acidic substances were obtained here after 5 - 20 hr at 150 - 450°C. The black, infusible, hygroscopic polymers obtained from tetraethylene cyanide and copper acetylacetonate (2:1) were insoluble in common organic substances, variously soluble in dimethyl formamide, pyridine, triethanolamine and concentrated H₂SO₄. The IR spectra of the films obtained from tetraethylene cyanide and copper showed a background at 700 - 1800 cm⁻¹ which is typical for built-up or planar polymers with conjugate bonds. Polymers from copper acetylacetonate showed a wide asymmetric absorption band at 1700 - 1400cm⁻¹. For all polymers the absorption maximum lies at ~2210 cm⁻¹, which corresponded to the C≡N bond. The intensive background confirmed the strongly branched system of the conjugate bonds. The degree of order depends on conditions of synthesis. Polymers obtained from copper acetylacetonate showed abnormal η/c dependence on c, similar to polyphenylenes and polyazophenylenes. The presence of neighboring C≡N groups points to the formation of energetically favorable, flat azoporphin structures with or without chelate-like bonded metals.

Card 2/4

S/190/62/004/006/012/026
B110/B138

75.9756
AUTHORS: Berlin, A. A., Matveyeva, N. G., Sherle, A. I.,
Kostrova, N. D.

TITLE: Polymers with conjugate bonds and heteroatoms in the con-
jugate chains. XXI. Polymeric complexes of tetraethylene
cyanide

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 6, 1962, 860-868

TEXT: The preparation of polymers from tetraethylene cyanide and metals
or metal salts was studied because: (1) tetraethylene cyanide has a
planar structure, which permits conjugation via nitrile groups; (2) it
shows four nitrile groups on two carbon atoms, and may form cyclic
structures with and without metal atoms; (3) polymers obtained from it
and the metals have so far been the only "inorganic" macromolecular
compounds with directly bonded carbon, nitrogen and metals; and (4)
because of the high vapor tension and heat stability of the monomer
polymer complexes can be formed directly on the metal surface (Cu, Fe,
Ni, Al etc). Black films which were insoluble in organic, alkaline, and

Card 1/4

LIMANOV, V.Ye.; KOSTROVA, N.D.; MOSEKOVSKIY, Yu.Sh.; IZMAIL'SKIY, V.A.

Hydrogen bond and configuration of molecules p- and m-N-[β -
(4-nitrophenyl)-ethyl]-aminophenol. Izv.vys.ucheb.zav; khim.
i khim.tekh. 4 no.5:867-868 '61. (MIRA 14:11)

1. Institut khimicheskoy fiziki AN SSSR i Moskovskiy gosudarstvennyy
pedagogicheskiy institut imeni Lenina.
(Phenol--Spectra) (Hydrogen bonding)

27738

Polymers with conjugated bonds.

S/190/61/003/011/008/016
B110/B101

It is suggested by the parallelism between the intensity of cent wave absorption in the infrared range of the spectrum and the concentration of unpaired electrons in the polymer sample. This, however, will have to be confirmed by further investigations. There are 3 figures and 2 Soviet references

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics AS USSR)

SUBMITTED: December 23 1960

2014 5/3

15 8600 1372 2209 1234

29738
S/190/61/003/011/008/016
B110/B101

AUTHORS: Moshkovskiy, Yu Sh., Kostrova, N. D., Berlin, A. A.

TITLE: Polymers with conjugated bonds and heteroatoms in the conjugated chain. XVIII. Some peculiarities of infrared spectra of polymers with conjugated bonds

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 11, 1961, 1669 - 1672

TEXT: The authors studied the infrared spectra of linear and trimeric carbochain polymers with linear conjugated chain for peculiarities connected with the appearance of epr spectra. By means of ИК1-11 (IKS-11) and ИК1-14 (IKS-14) spectrometers, they investigated: yellow polyphenyl acetylene (PPA) thermally polymerized in Ar atmosphere at 150°C (I) ($\bar{M}_n = 1200$); PPA after additional thermal treatment at 300 (II) and 400°C (III); unmeltable and unsoluble trimeric block copolymer from PPA and p-diethynyl benzene (PDEB) (IV); polyazophenylene (PAP) (V) ($\bar{M}_n = 650$) and its trimeric block copolymer with PDEB (VI); poly-PDEB (VII). and the

Card 1/3

Country : USSR
Category : Farm Animals. Poultry. Q
Abs. Jour : Ref Zhur-Biol., No 21, 1958, 96906
Author : Pigarev, N. V.; ~~Kostroya, L. A.~~; Chavchanidze,
Institut. : All-Union Scientific Research Institute of the
Title : The Characteristics of Feather Shedding in
Laying Hens Kept in Cages.
Orig Pub. : Tr. Vses. n.-i. in-ta ptitseprom-sti, 1956, 6,
132-137
Abstract : The experiment was conducted on Leghorn hens
placed in individual cages under feeding and
keeping conditions which assure high producti-
vity indicators. The hens were exposed to
light for not less than 14 hours per day. Lay-
ing hens were examined every 10 days, the num-
ber of replaced wing feathers was counted, and
the shedding of the outer feather cover was
observed. It was found that shedding of wing
feathers is not indicative for the state of
shedding of the outer feather cover. Wing fea-

Card: 1/3

*V. L.
**Fowl Industrv.

Country : USSR
Category : Farm Animals. Poultry. 2
Abs. Jour : Ref Zhur-Biol., No 21, 1958, 96912
Author :
Institut. :
Title :

Orig Pub. :

Abstract : 10-day periods.
Hens behave quietly in individual cages, they eat calmly and rest after being fed; also, incidences of various trams are excluded. -- S. G. Petrov

Card: 5/5

Country : USSR
Category : Farm Animals. Poultry. 2
Abs. Jour : Ref Zhur-Biol., No 21, 1958, 96912
Author :
Institut. :
Title :
Orig Pub. :
Abstract : month old hens could serve as a criterium for their subsequent egg productivity. In another experiment, 30 young hens with good egg productivity were transferred at the age of 11.5 months from individual cages to group cages (with an area of 0.5 m² each) with 5-6 hens in each cage. The egg productivity dropped sharply and only at the end of the month gradually approached the level of the control group which has remained in individual cages. When in a third experiment 119 laying hens 12.5
Card: 3/5
Card: 4/5 50

Category : Farm Animals. Poultry. Q
Abstr. Jour : Ref Zhur-Biol., No 21, 1958, 96912
Author : Pigarev, N. V.; Kostrova, L. A.; Chavchanidze, *
Institut. : All-Union Scientific Research Institute of the
Title : Certain Characteristics of the Egg Laying Capacity of Hens Kept in Cages.
Orig Pub. : Tr. Vses. n.-i. In-ta ptitseprom-sti, 1956, 6, 97-107
Abstract : From the age of 5¹/₂ to 18 months 86 laying hens which were kept in separate coops of 0.14 m² each were divided into 3 groups according to their egg productivity: up to 130 eggs, 131-190 eggs, and 191 and more eggs. A comparison of monthly egg productivity demonstrated that hens with a low yearly productivity laid 36 per cent less eggs during the first 3 months than
Card: 1/5
*V. I.
**Fowl Industry.

58

secutive months on the basis of their individual egg productivity during the first few months. Only the egg productivity of 11.5-12.5

Card: 2/5

L 7689-66 EWP(t)/EWP(b) LJP(a) JD

ACC NR: AP6000911

SOURCE CODE: CZ/0043/65/000/001/0034/0040

AUTHOR: Treindl, Ludovit--Traindl, L. (Doctor; Candidate of sciences); Kostrova, Lubica (Graduate chemist) 26

ORG: Faculty of Inorganic and Physical Chemistry, Department of Natural Sciences, Comenius University, Bratislava (Katedra anorganickej a fyzikalnej chemie Prirodovedckej fakulty Univerzity Komenskeho)

TITLE: Polarographic study of kinetics of reduction of bromates by sulfocyanates

SOURCE: Chemické zvesti, no. 1, 1965, 34-40 27

TOPIC TAGS: bromate, thiocyanate, chemical reduction, chemical kinetics, polarography

ABSTRACT: The study was based on the influence of time upon the limiting currents of the bromates. Reaction velocity corresponds to a kinetic equation of the first order, even at equal concentrations of both reactants. The rate constant increases linearly with increasing sulfocyanate concentration, and with the square of the concentration of H ions. On the basis of the changes of the rate constant with temperature, the activation energy of 11.4 k cal/ mole and an activation entropy of 28.0 cal/ g mole were determined. A discussion of the partial reactions of the decomposition of the unstable compound BrO_2SCN that is formed is presented. Orig. art. has: 5 figures, 6 formulas, 1 table. [JPRS]

Card 1/2

ENIGA, N.P.; KOSTROVA, K.M.

Late results of tonsillectomy. Zdrav. Belor. 5 no.2:9,10 F '59.
(MIRA 12:7)

1. Iz kliniki bolezney ukha, gorla i nosa Minskogo med. instituta.
(TONSILS--SURGERY)

K. S. V. K. N.

K. S. V. K. N.: "Scleroma in childhood and adolescence." *Indian J. Child Health*, 1974.

(Dissertation for the degree of Candidate in Medical Science)

001 Kollinger, Joseph, Jr., 1974, 1975, 1976.

KOSTROVA, K. M.

"Temperature Reaction Following Bronchoscopy and Tracheotomy in Sclerotic Cases," Vest. Oto-rino-laringol., No. 4, 1948.

Otorhinolaryngological Clinic, Belorussian Med. Inst. Minsk.

KOSTROV, Yuriy Anatol'yevich; ZAZULINA, Z.A., kand. tekhn. nauk,
dots., nauchn. red.; ISH, N.N., red.; OSTROVA, I.M., red.

[Acetyl cellulose fibers] Proizvodstvo atsetilselliuloz-
nogo volokna. Moskva, Vysshaia shkola, 1964. 70 p.
(MIRA 18:2)

SOKOLOVA, V. A.; KOSTROV, Yu. A.

Economic profitableness of a speeded-up development of the production of acetate cellulose fibers. Khim. volok. no.6: 28-30 '62. (MIRA 16:1)

1. Serpukhovskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna.

(Cellulose acetates)
(Textile fibers, Synthetic)

KOSTROV, Yu.A.

Acetylcellulose staple fiber of new types. Khim.volok
no.4:l-3 '62. (MIRA 15:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.

(Cellulose acetate)

RYAUZOV, A.N.; GRUZDEV, V.A.; KOSTROV, Yo.A.; SIGAL, M.E.;
GERSHMAN B.G.; red.; VCHTKIRA, N.V.; red.

[Technology of the manufacture of synthetic fibers] Tekhnologiya proizvodstva khimicheskikh volokon. Moskva, Khimika, 1965. 516 p. (MIRA 18.8)

L 11446-67
ACC NR: AP6029683

same limit in air. The reduction in protection effectiveness with excess current is highest for the hard steel. The curves produced are the result of the interaction of two features: the increased protection due to the cathode effect and the reduction in fatigue strength due to absorption of hydrogen. Orig. art. has: 3 figure and 1 table.

SUB CODE: 11/ SUBM DATE: 14Dec65/ ORIG REF: 008/ OTH REF: 005

Card 2/2 im

ACCESSION NR: AR6014028

of steel in a forged state. Fatigue failure of the tested steel in air and in the NaCl solution was intercrystalline in character. Bibl, with 9 titles. L. I. Itapov.

SUB CODE: MM

ENCL: 00

Card 2/2
LPP

steel. The curve of effectiveness of protection vs current density shows a maximum. Although with the optimal cathode polarization the corrosion-fatigue resistance of the soft steels is practically the same as in air, the maximal limit of corrosion-fatigue strength of the hard steel, with optimal current density, is still 20% less than the

Card 1/2

L 62076-6 ERF(c)/ERP(k)/ERP(s)/ERT(a)/ERT(m)/ERP(h)/ERP(b)/T/ERA(a)/
ERP(l)/ERP(n)/ERP(r)/ERP(t) Pt-4 RJW/JD/NE

ACCESSION NR: AR5014023

UR/6277/65/000/003/0011/0011
069.14.018.8: 020.194.8

SOURCE: Ref. zh. Mashinostroitel'nyye materialy, konstruktii i raschet detaley mashin.
Gidropriivod. Otdel'nyy vypusk, Abs. 3, 49, 78

AUTHOR: Glikman, I. A.; Kostrov, Ye. N.

TITLE: Effect of intercrystalline corrosion susceptibility in type 18-8 stainless steel on
its corrosion fatigue strength

CITED SOURCE: Sp. Korrozion, ustalost' metallov. L'vov, Kamenyar, 1964, 96-104

TOPIC TAGS: corrosion fatigue strength, stainless steel, intercrystalline corrosion,
steel corrosion, cast steel, austenite steel, tempered steel, steel fatigue/1Kh18N9 steel

TRANSLATION: The study concerned the effects of the intercrystalline corrosion
susceptibility of stainless steel 1Kh18N9 in the cast, austenitized or tempered state on its
corrosion fatigue strength. Fatigue tests involved simple bending on an NU unit in air and
in a corrosive environment. The reduction of corrosion fatigue strength in 3% NaCl was
noticeably greater (about 22%) for cast steel after austenitizing than for the same type

Card 1/2

L 62073-05

ACCESSION NR: AR5014029

greater in this case than the theoretical magnitude ($\beta_0 > 5.5$ at $\alpha_1 = 5.2$). This decrease in corrosion fatigue strength is related to the occurrence of intensive crevice corrosion at the apex of the acute and deep notch. The effect of an increase in dimensions on the fatigue corrosion resistance of steel in 3% NaCl proved qualitative, as in the case of an atmospheric environment. The negative effect of the scale factor on the strength of steel intensifies with an increase in the number of test cycles. This is attributed to a more intensive manifestation of crevice corrosion as the corrosion fatigue fault develops in larger samples. Bibl. with 10 titles. I. Potapov.

SUB CODE: MM

ENCL: 00

App
Card 2/2

1-62075-65 EWP(s)/EWP(w)/EWP(a)/EWP(b)/T/EMA(d)/EWP(w)/EWP(t) NJW/JI/WR
ACCESSION NR: AR5014029 UR/0277/65/000/003/0011/0011
869.14.018.8: 620.194.8

SOURCE: Ref. Zh. Mashinostroitel'nye materialy, konstruktsii i raschet detaley mashin. Gidropriwod, Otel'nyy vypusk, Abs. 3,48,79

AUTHOR: Chikman, L.A., Kostrov, Ye. N.

TITLE: Characteristics of corrosion fatigue failure in stainless steel 1Kh18N9T

CITED SOURCE: Sb. Korrozion, ustoiichivost' metallov. D'vov, Kamenyar, 1964, 16-24

TOPIC TAGS: stainless steel, corrosion fatigue test, steel fatigue, stress concentration, steel corrosion, notch geometry, scale factor, crevice corrosion/1Kh18N9T steel

TRANSLATION: Smooth ($\phi=10$ and 60 mm) and notched samples were used to study the corrosion fatigue strength of stainless steel 1Kh18N9T. Tests with smooth samples of small diameter (10 mm) indicated high corrosion fatigue strength of steel 1Kh18N9T in 3% NaCl. A sharp decrease in corrosion fatigue strength was noted for samples with stress concentrators. The corrosion fatigue strength in sharply notched samples was 70 n/mm² at about $10 \cdot 10^7$ cycles. The actual value of the concentration factor proved

Card 1/2

KOSTROV, Ye.N., kand. tekhn. nauk; SHEKHROVTSSEV, Ye.D.; BAKHTEV, V.V.;
KAGANOVICH, I.S.

Effect of corrosion inhibitors on the corrosive-fatigue strength
of steel and cast iron. Trudy TSNITMF 59:51-60 1964.

The effect of the scale factor upon the...

S/137/62/000/011/034/045
A006/A101

of 2 factors: namely, the corrosion and the mechanical factor. Then the relative share of these factors, under otherwise equal conditions (material, frequency of cycles, shape and dimension of specimens, corrosion medium), depends upon the basis of the cyclic effect. There are 16 references.

N. Lukashina

[Abstracter's note: Complete translation]

Card 2/2

S/137/62/000/011/034/045
A006/A101

AUTHORS: Glikman, L. A., Kostrov, Ye. N.

TITLE: The effect of the scale factor upon the corrosion-fatigue strength of metals

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1962, 113 - 114, abstract 111741 (In collection: "Tsiklich. prochnost' metallov", Moscow, AN SSSR, 1962, 187-198)

TEXT: The authors studied the effect of the scale factor upon the corrosion-fatigue resistance in sea water of the following materials: structural carbon steel CT 40 (St 40) in annealed state, structural Cr-Ni-steel 40 ZH (4OKhN), stainless austenitic steel 1 X18H9 T (1Kh18N9T) in rolled state, brass ЛМЦК 55-3-1 (LMtsZh55-3-1) and ЛАМЦК 67-5-2-2 (LAMtsZh67-5-2-2) in cast state. Results are presented on variations of the corrosion-fatigue strength of all materials under atmospheric conditions, in 3% NaCl (imitating sea water) and fresh water, depending upon the frequency of cycles, the shape and dimension of specimens. The process of corrosion-fatigue failure is determined by the interaction

Card 1/2

GLIKMAN, L.A., doktor tekhn.nauk; BABAYEV, A.N., kand.tekhn.nauk;
KOSTROV, Ye.N., kand.tekhn.nauk; DAMASKINA, O.L., inzh.

Fatigue strength and residual stresses in steel specimens
surfaced with 1Kh13 high-chromium stainless steel. Trudy LMZ
no.9:138-151 '62. (MIRA 16:6)
(Steel-Fatigue) (Thermal stresses)

Cyclic Metal Strength (Cont.)

SOV/6025

EFFECT OF THE STRESS CONCENTRATION
AND THE SIZE FACTOR ON THE FATIGUE
STRENGTH

Oding, I. A., and S. Ye. Gurevich. Notch Sensitivity of
High-Strength Steels Under Cyclic Load 169

Oleynik, N. V., and I. S. Mezentsev. Effect of Stress
Concentration on Characteristics of the Summation of
Fatigue Damage 177

Glikman, L. A., and Ye. N. Kostrov. Effect of the Size
Factor on Resistance of Metals to Corrosion Fatigue 187

Markovets, M. P. Technological Theory of the Size Factor
in Fatigue Tests 199

CYCLIC TOUGHNESS AND INTERNAL
FRICTION

Postnikov, V. S. Internal Friction and Strength 207
Card 6/9

Cyclic Metal Strength (Cont.)

SOV/6025

and growth of fatigue cracks, the role of plastic deformation in fatigue fracture, an accelerated method of determining fatigue strength, the plotting of fatigue diagrams, and various fatigue test methods. New data are presented on the sensitivity of high-strength steel to stress concentration, the effect of stress concentration on the criterion of fatigue failure, the effect of the size factor on the strength of metal under cyclic loads, and results of endurance tests of various machine parts. Problems connected with cyclic metal toughness, internal friction, and the effect of corrosion media and temperature on the fatigue strength of metals are also discussed. No personalities are mentioned. Each article is accompanied by references, mostly Soviet.

TABLE OF CONTENTS:

NATURE OF FATIGUE FRACTURE

Oding, I. A. Diffusionless Mechanism of Formation and Growth of a Fatigue Crack
Card 2/11

3

KOSTROV, YE.N.

PHASE I BOOK EXPLOITATION *011/6025*

Soveshchaniye po ustalosti metallov. 2nd., Moscow, 1960.

Taikhicheskaya prochnost' metallov; materialy vtorogo soveshchaniya po ustalosti metallov, 24 - 27 maya 1960 g. (Cyclic Fatigue Strength; Materials of the Second Conference on the Fatigue of Metals, held May 24 - 27, 1960) Moscow, Izd-vo AN SSSR, 1962. 338 p. Errata slip inserted. 7000 copies printed.

Resp. Ed.: I. A. Odintsov, Corresponding Member of the Academy of Sciences of the USSR; Ed. of Publishing House: A. N. Chirakov; Tech. Ed.: A. P. Guseva.

PURPOSE: This collection of articles is intended for scientific research workers and metallurgists.

COVERAGE: The collection contains papers presented and discussed at the second conference on fatigue of metals, which was held at the Institute of Metallurgy in May 1960. These papers deal with the nature of fatigue fracture, the mechanism of formation

Card 1/1

SOV/32-25-4-31/71

Tests for Corrosion Fatigue in Bending and Torsion

moment (Fig 2). The working principle of the machine consists in the fact that by an eccentrically loaded, rotating vertical axis a torsional moment varying in magnitude and direction is produced on the sample. The frequency of the load cycles is determined by the speed of the electric motor driving the vertical axis, and amounted to 2300-2500 cycles/minute. The corrosion agent was a 3% NaCl solution, and parallel tests with air were made. V. V. Marugin (Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota) (Central Scientific Research Institute of the Merchant Marine) and Ye. A. Suvorova (zavod "Elektro-...") (Electro... works) took part in the experiments. The fatigue curves obtained show that the corrosion-fatigue resistance greatly depends on the number of load cycles. The test results obtained show, among other things, that the relationship between the corrosion-fatigue resistance in bending and torsion remains the same for corrosion-resistant materials. There are 4 figures and 8 references, 6 of which are Soviet.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota
Card 2/2 (Central Scientific Research Institute of the Merchant Marine)

28(5) SOV/32-25-4-31/71
AUTHORS: Glikman, L. A., Kostrov, Ye. N., Dobrer, V. K.

TITLE: Tests for Corrosion Fatigue in Bending and Torsion (Ob ispytaniyakh na korroziennuyu ustalost' pri izgibe i pri kruchenii)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 4, pp 456-460 (USSR)

ABSTRACT: The tests were carried out in common with the metal laboratory of the "Elektrosila" Works. The problem of relationship between the fatigue limits in torsion and bending under the simultaneous effect of corrosion has not been much investigated up to date, and the results (Refs 3,4) are contradictory. For this reason, special investigations of steel 35 (0.35% C, 0.32% Si, 0.77% Mn, 0.027% S and 0.022% P) were carried out in this case. The samples were made of a long bar (diameter 25 mm); they were submitted to normalizing at 850-870° and had the following characteristics: $\sigma_s = 33.1 \text{ kg/mm}^2$, $\sigma_B = 62.1 \text{ kg/mm}^2$, $\delta_5 = 27.4\%$ and $\psi = 60.1\%$. The sketch of a sample is given (Fig 1). The transverse-fatigue tests were carried out on machines of the type NU at a sample rotation speed of 3000 rpm. The torsion tests were made on an especially designed machine (according to V. K. Dobrer, Engineer) with a certain load

Card 1/2

GLIKMAN, L.A.; KOSTROV, Ye.N.; SUPRUN, L.A.; YELIN, I.A.; SHCHERBAKOV, P.S.;
ZOBACHEV, Yu.Ye.; DOBRER, V.K.; STRUMPE, P.I., kand.tekhn.nauk, otv.
red.; ARAKELOV, V.M., nauchnyy red.; BAMA, N.G., red.; KOTLYAKOVA, O.I.,
tekhn.red.

[Organization and technology of ship repair; corrosion and
mechanical strength of metals] Organizatsiia i tekhnologiya
sudoremonta; voprosy korrozionno-mekhanicheskoi prochnosti
metallov. Leningrad, Izd-vo Morskoi transport 1959. 76 p.
(Leningrad. tsentral'nyi nauchno-issledovatel'skii institut
morskogo flota. Trudy no.22) (MIRA 12:5)
(Metals--Testing) (Corrosion and anticorrosives)

GLIKMAN, L.A., doktor tekhn.nauk, prof.; KOSTROV, Ye.N., inzh., aspirant

Effect of the scale factor on the fatigue strength of steel.
Trudy LIEI no.27:27-45 '58. (MIRA 12:5)

1. Tsentral'nyy nauchno-issledovatel'skiy institut Morskogo
flota (for Kostrov).
(Steel--Fatigue)

KOSTROV, Ye.N.

GLIKMAN, L.A.; SUPRUN, L.A.; KOSTROV, Ye.N.

Method for corrosion fatigue testing of specimens 60mm in diameter.
Zav. lab. 23 no.3:343-345 '57. (MLBA 10:6)
(Corrosion and anticorrosives) (Metals--Fatigue)

Kostrov, V.N.

112-6-11762 D

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr6, p. 1 (USSR)

AUTHOR: Kostrov, V.N.

TITLE: History of the Theory and Practice of Development and Coordination of Russian Engineering Terminology (Istoriya teorii i praktiki postroyeniya i uporyadocheniya russkoy tekhnicheskoy terminologii)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Doctor of Technical Sciences, presented to the Institute of History of Natural Science and Engineering (In-t istorii yestestvoznaniya tekhniki), Academy of Sciences, USSR, Moscow, 1956.

ASSOCIATION: Institute of History of Natural Science and Engineering (In-t istorii yestestvoznaniya i tekhniki), Ac. of Sc., USSR

Card 1/1

KOSTROV, V.N., kandidat tekhnicheskikh nauk

Standardization and regulation of terminology. Standartizatsiia
no.2:11-14 Mr-Ap '55. (MIRA 8:6)
(Standardization--Terminology)

KOSTROV, V.N.

Russia--Public Works

Helping the great construction projects of socialism (open party meeting in the Section of Technological Sciences of the Academy of Sciences of the U.S.S.R.). Vest. NI SSSR 21, no. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, 1952 ~~1953~~,--Unclassified.

1. KOSTROV V.N.
 2. USSR (600)
 4. Technology--terminology
 7. Committee on Technical Terminology of the Academy of Sciences of the USSR. Izv. AN SSSR Ot1, tekhnuk no.12, 1952.
9. Monthly List of Russian Accessions, Library of Congress, April 1953 uncl.

DVORAK, Zdenek, inz., arch.; KOSTROV, Vl., inz., arch.

Use of weldless steel tubes. Zel dop tech 11 no.4:116 '63.

KOSTROW, V.I.; GORDEYEV, Ye.M., red.; SAGITOVA, S.G., tekhn. red.

[Work practice of mixed brigades on the collective farms of the
Tatar A.S.S.R.] Opyt raboty kompleksnykh brigad v kolkhozakh
Tatarskoi ASSR. Kazan', Tatarskoe knizhnoe izd-vo, 1960. 55 p.
(MIRA 14:9)

(Tatar A.S.S.R.--Collective farms)

KOSTROV, V. I.

Casting caps in combination molds. Mashinostroitel' no.11:17 N
'60. (MIRA 13:10)

(Molding (Founding))

BYALYY, L.A.; SHUR, A.B.; Prinimali uchastiye: KOTOV, A.P.;
RUSAKOV, P.G.; YEGOROV, N.D.; KOSTROV, V.A.; RYMNNOV, N.F.

Investigating the time length for the flow of gases through
powerful blast furnaces. Stal' 24 no.1:14-17 Ja '64.
(MIRA 17:2)

1. Leningradskiy politekhnicheskii institut i Cherepovetskiy
metallurgicheskiy zavod.

LEVIN, L.Ya.; VANCHIKOV, V.A.; SHUR, A.B.; KAYLOV, V.D.; BYALYY, L.A.;
Prinimali uchastiye: RUSAKOV, P.G.; ANTONOV, V.M.; KOSTROV, V.A.;
KOTOV, A.P.; YEGOROV, N.D.; BUGAYEV, K.M.; SOLODKOV, V.I.;
YASHCHENKO, B.F. KOREGIN, A.V.; SAPOZHNIKOV, N.P.; TSUKANOV, V.N.;
VITOVSKIY, V.M.

Mastering the operation of high-capacity blast furnaces. Stal'
23 no.9:773-778 S '63. (MIRA 16:10)

Synthesis of Hydrocarbons. LXX. Synthesis of Ditertiary SOV/79-29-8-32/61
Alkyl Methanes (C₁₄-C₁₇) With Three Quaternary Carbon Atoms

previously employed primary or secondary alkyl-magnesium bromides) in the first part of the Grignard-Wuertz reaction. The alkenes (II) with two adjacent quaternary carbon atoms were formed; by hydrochlorination of these alkenes, the corresponding saturated tertiary chlorides (III) were obtained, from which the ditertiary alkyl methanes (IV) with considerably branched structure and with three quaternary carbon atoms were synthesized with isopropylmagnesium bromide, in the presence of HgCl₂, according to Grignard-Wuertz (Reaction Scheme). In this way, the former universal method of synthesizing the ditertiary alkyl-methanes with two quaternary carbon atoms was extended to the ditertiary alkyl methanes with three quaternary carbon atoms. In both tables, the constants of the resultant alkenes and alkanes with the corresponding general structure formulas are given. The authors expressed their gratitude to Ye. G. Treshchova for the optical investigations which were carried out in order to characterize the compounds synthesized. There are 2 tables and 8 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)
SUBMITTED: July 4, 1958
Card 2/2

5(3)

SOV/79-29-8-32/81

AUTHORS:

Levina, R. Ya., Daukshas, V. K., Kostrov, V. A.

TITLE:

Synthesis of Hydrocarbons. LXX. Synthesis of Ditertiary Alkyl Methanes (C₁₄-C₁₇) With Three Quaternary Carbon Atoms

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2601 - 2604 (USSR)

ABSTRACT:

The authors recently described (Refs 1-3) the general method of synthesizing the paraffin hydrocarbons with two quaternary carbon atoms which are separated by a methylene group (of the ditertiary alkyl methanes): the tertiary allyl chlorides (I), the monohydrochlorides of 2,4-dimethyl pentadiene-1,3, (R=CH₃) or of 3,5-dimethyl heptadiene-2,4 (R=C₂H₅) were introduced into the reaction, i.e. into the first reaction of Grignard-Wuertz, with alkyl magnesium; the resultant alkenes were hydrochlorinated, and the tertiary saturated chlorides synthesized in this connection were converted with alkyl magnesium bromides in the presence of mercuric chloride (in the second Grignard-Wuertz reaction) into the ditertiary alkyl methanes. In the present paper the tertiary alkyl-magnesium chlorides were used (instead of the

Card 1/2

KOSTROV, V., inzh.

Rural Council for Mechanization and Efficiency Promotion.

Tekh. mol. 28 no. 12:24-25 '60.

(MIRA 13:12)

(Farm mechanization)

KOSTROV, V., inzh.

Split ray. Tekh.mol. 28 no.10:33-35 '60.
(Polarization (Light))

(MIRA 13:10)

89089
S/029/61/000/001/001/007
B117/B215

Electricity generated in ...

plifies the design of such generators. To obtain good results with the temperatures attainable so far, charged particles have to be injected into the hot plasma to increase its electric conductivity. In the development of magnetohydrodynamic generators, scientists endeavor to obtain a maximum difference in pressures to give the plasma current with the velocity of light. Aerodynamic supersonic tubes and rockets prove the possibility of a practical solution to this problem. The first three methods permit attaining a considerable increase of the maximum temperatures of motor cycles, and thus to increase their efficiency to 0.5-0.6, whereas the costs are reduced at the same time. The fourth method (2) is based on the utilization of electrochemical current sources obtained by fuel elements of comparatively high efficiency (approximately 75%). A further increase may be attained by the use of cheaper fuels, such as natural gas, gasoline vapor etc. instead of oxygen and hydrogen. There are 5 figures.

Card 2/2

89089

S/029/61/000/001/001/007
B117/B215

26.1630

AUTHOR: Kostrov, V., Engineer

TITLE: Electricity generated in the flame

PERIODICAL: Tekhnika molodezhi, no. 1, 1961, 2-4

TEXT: The author reports on four different methods of generating electricity direct from thermal and chemical energies. Colored insert sheets show the schemes of these methods. The first method of transforming thermal energy into electricity is based upon the thermoelectric effect. The material best suited for generators based upon this principle, are semiconductors. The best scheme is probably a nuclear reactor, where the fuel itself shows thermoelectric properties. In the second method, hot substances are used which emit electrons from their surfaces. In this case, a thermionic reactor with the fuel serving as cathode, is suited best. The combination of thermionic generator and a normal motor, or a thermoelectric generator permits utilization of the high temperatures of the anode. Experiments showed that such a system of high efficiency and sufficient capacity could be developed. The replacement of metallic conductors by hot plasma sim-

Card 1/2

BASISTOV, M.A., inzh.; KOSTROV, P.Ye.

Using the method of borehole charges in construction of
the Abakan - Tayshet line. Transp. stroi. 13 no.2:4-7
F '63. (MIRA 16:3)

(Blasting)
(Railroads--Construction)

BASISTOV, M.A., inzh.; KOSTROV, P.Ye., inzh.

Working weak rocky soil with rippers. Transp. stroi. 12 no.6:9-10
Je '62. (MIRA 15:6)

(Excavating machinery)

KOSTROV, P.I., inzh.

Over-all mechanization of growing and harvesting forage beans.
Zemledelie 24 no.8:54-59 Ag '62. (MIRA 15:9)

1. Altayskiy sel'skokhozyaystvennyy institut.
(Altai Territory--Beans)

CHEKANOVA, Nina Ignat'yevna, agronom Geroy Sotsialisticheskogo Truda;
KOSTROV, Petr Ivanovich; KOL'TSOV, A.D., nauchnyy red.;
CHIRKOV, A.Ya., red.; BARANOVA, N.N., tekhn. red.

[Technology of cultivating forage beans] Tekhnologiya vozdeley-
vaniya kormovykh bobov, Moskva, Proftekhizdat, 1962. 41 p.
(MIRA 16:2)

(Broad bean)

KOSTROV, F.

Active social security workers of the miners' trade union
committee. Mast. ugl. 8 no.9:15-16 S '59. (MIRA 13:2)

1. Predsedatel' shakhtkoma i soveta sotsial'nogo strakhovaniya
shakhty imeni Voykova Luganskogo sovnarkhoza.
(Coal miners) (Insurance, Social)

KOSTROV, N.Ye., inzhener.

Improving the method of salting margarine. Masl.-zhir.prom. 17
no.12:25-26 D '52. (MIRA 10:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy inzhener zhirov.
(Oleomargarine)

KOSTROV, N.N.

Mechanization of the grinding section in a woodpulp factory. Bum.
prom. 36 no.7:20 J1 '61. (MIRA 14:0)

1. Glavnyy mekhanik Balakhninskogo kombinata.
(Woodpulp industry--Equipment and supplies)

KOSTROV, N.I., kand. med. nauk

Materials on craniometric studies on persons with chronic
suppurative otitis. Zhur. ush., nos. 1 gor. bol. 24 no.1:82
Ja-F '64. (MIRA 18:3)

1. Iz kliniki bolezney ukha, gorla i nosa imeni V.I. Voyacheka
(nachal'nik - zasluzhennyy deyatel' nauki prof. K.L. Khilov)
Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.

KOSTROV, N.I.

Case of foreign bodies in the ear. Vest.otorin. 20 no.2:
116-117 Mr-Ap '58. (MIRA 12:11)

1. Iz kliniki bolezney ukha, gorla i nosa imeni prof.V.I.
Voyacheka Voenno-meditsinskoy akademii im. S.M.Kirova.
(EAR--FOREIGN BODIES)
(PARAFFINS--THERAPEUTIC USE)

KOSTROV, N.I.
KOSTROV, N.I.

Registration of nystagmus with a mechanical cardiograph. Vest.
oto-rin. 20 no.1:105-106 Ja-F '58. (MIRA 11:3)

1. Iz otolaringologicheskoy kliniki imeni V.I.Voyacheka (nach.kafedry-
zasluzhennyy deyatel' nauki prof. K.L.Khilov).

(EYE, physiol.

movements, determ. with mechanical cardiograph (Rus)

KOSTROV, N. I.

"Acute catarrhs of the upper respiratory tracts" - p. 30

Voyenno Meditsinskiy Zhurnal, No. 3, 1962

Leonid Ivanovich Sirotinskiy. On His 80-th Birthday

SOV/105-59-6-22/28

Nauchno-tekhnicheskoye obshchestvo MEI (Scientific and Technical Society of the MEI). He is at present still a member of the Scientific Councils of the MEI and VEI, member of the Technical Council of the Ministerstvo stroitel'stva elektrostantsiy (Ministry for the Construction of Power Stations). His three-volume textbook "High-Voltage Engineering" is well known. At present he is engaged in re-editing this book. He has been awarded two Lenin Prizes, is a member of the Order of the Red Banner of Labor, of the order "Medal of Distinction" and of several medals. In 1942 the title of a Merited Scientist and Engineer of the RSFSR was conferred upon him, and in 1950 he was awarded the Stalin Prize for his work on valve arresters. There is 1 figure.

Card 3/3

Leonid Ivanovich Sirotinskiy. On His 90-th Birthday

SOV/105-59-6-22/28

at the MEI and established a laboratory with this chair. In 1921 in collaboration with K. A. Krug he established the Gosudarstvennyy eksperimentalnyy institut (State Experimental Institute), which later on was transformed into the Vsesoyuznyy elektrotekhnicheskii institut imeni Lenina (All-Union Institute of Electrical Engineering imeni Lenin). Sirotinskiy was the first head of the department of high voltages of the VEI. He still is in close contact with the VEI. He was a member of the Tsentralnyy elektrotekhnicheskii soviet (Central Council for Electrical Engineering). In this function and as a consultant to the Glavenergo he collaborated in giving his expert opinion on the power stations on the Dnepr and the Swift, and on the electric grids in the Donbass. He participated in the discussion on the projects of the 400 kv a.c. line and of the d.c. line Stalingrad hydroelectric power station - Donbass. For many years he was the chairman of the committee for the elaboration of specifications for overvoltage protection. He was a member of the Presidium and deputy chairman of the Elektrotekhnicheskoye obshchestvo (Electrotechnical Society), chairman of the section for power stations at the MONITOE, and for many years he was chairman of the

Card 2/3

8(0)

AUTHORS:

SOV/105-59-6-22/23

Chilikin, M. G., Kostrov, M. F., Venikov, V. A., Biryukov, V. G.,
Glazunov, A. A., Butkevich, Yu. V., Razevig, D. V., and Others

TITLE:

Leonid Ivanovich Sirotinskiy (Leonid Ivanovich Sirotinskiy)
On His 80-th Birthday (K 80-letiyu so dnya rozhdeniya)

PERIODICAL:

Elektrichestvo, 1959, Nr 6, pp 91-92 (USSR)

ABSTRACT:

The scientist and pedagogist, Doctor of Technical Sciences Leonid Ivanovich Sirotinskiy was born in April 1879. His career in the field of science and teaching began, when in 1907 he participated in the establishment of the first junior engineers college in Russia (at present Moskovskiy energeticheskiy tekhnikum, Moscow Polytechnic of Power Engineering), where afterwards he worked for more than 25 years. In 1917 he began to work at the Moskovskoye vyssheye tekhnicheskoye uchilishche (Moscow Technical University) and later on in the Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering). He introduced courses on electrical illumination, electric traction, overvoltages and overvoltage protection at the MVTU and MEI. Later on he mainly worked in the field of high-voltage engineering. He organized the chair of high-voltage engineering.

Card 1/3

A High-Power High-Voltage Valve

105-58-5-1/28

"Izolyator" porcelain plant and by the Institute of the GIEKI. N. P. Stepanov, N. P. Savin, N. M. Maslennikov, I. D. Shkolin, A. A. Pertsev, V. S. Grigor'yev, A. A. Timofeyev, R. I. Grigor'yeva, V. V. Bazhenov, I. V. Blond, A. A. Ivanov, Ye. P. Shmarina and others directly and actively participated in the work. There are 12 figures.

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskiy institut im. Lenina (VEI)
(All-Union Institute for Electrical Engineering imeni Lenin)

SUBMITTED: November 5, 1957

AVAILABLE: Library of Congress

1. Electron tubes--Development
2. Electron tubes--USSR
3. Electron tubes--Test results
4. Electron tubes--Applications
5. Transmission lines--Equipment

Card 5/5

A High-Power High-Voltage Valve

105-58-5-1/2B

arc drops to 700 - 800 V. For the purpose of energy investigations a test stand for 120 MVA was built at the Moscow Institute for D. C. The results of the first test series showed that 900 A and a countervoltage jump of 50 kV no disturbances occurred at the valves. At 900 A and 90 kV countervoltage jump the valves do not lead to an extinction of the excitation arc. For the transmission line from the Stalingrad hydroelectric plant to Donbass (the voltage between the poles amounts to 800 kV and the amperage in the line to 900 A) the VEI proposed an eight-bridge-scheme. The voltage of each bridge amounts to 100 kV. The scheme was accepted by the expert commission. Here two valves are connected in series into the bridge arm: maximum countervoltage 61 kV, countervoltage jump 34 kV, maximum amperage 900 A. - The work for the valve was performed at the Laboratory for High-Voltage Rectifiers at the VEI under participation of the Laboratory for Gas Discharge Devices, and of the Laboratory for Physical Investigations at the institute. The samples of the valves were produced by the electromechanical test plant of the VEI. The porcelain- and ceramic products were produced by the

Card 4/5

A High-Power High-Voltage Valve

105-58-5-1/28

follows a description of such a valve of the type VR 9/3 for 900 A and 130 kV. In 1952 25 samples of different power and different types were produced. The electric strength of the valve is high. In static tests it stands 140 - 160 kV without an exterior divider. The investigations of the mercury vapor took place according to the probe methods, which had been elaborated in the Laboratory for gas discharge devices at the VEI. The electrical tests at full amperage and voltage were carried out with the equivalent scheme constructed in the VEI for maximally 1000 A and 160 kV, and valuable data were obtained. An extraordinary phenomenon was determined: At positive anode-voltage and normal operation of all excitation anodes and nets no lighting of the principal anode took place at high voltage. At low voltage this phenomenon was not observed. This fact is explained by the occurrence of negative potentials. In investigating the overload capacity it was found that also at 15 000 A within the range of working temperatures an interruption of the current does not occur when the voltage in the

Card 3/5

A High-Power High-Voltage Valve

105-59-5-1/28

test works of the VEI during the second half of 1950
1950 - 1951 12 valves of the type VR 3 for a maximum of
300 A and 130 kV were produced in the VEI. Since 1952
works were started on a valve for a maximum of 900 a and
130 kV. These works are shortly described here.

1) The problem whether the valve is to be constructed
as single-anode- or multi-anode-valve, was solved in
favor of the single-anode type. It was shown that the
difficulties in connection with the discharge concentration
on a small cross section can be overcome. 2) The number of
the insets was selected in a way that the advantages are
relatively great and the disadvantages are as small as
possible. The tests were carried out with 15 (valve by
Kesayev), 5, 4, 3, 2 and 1 insets (construction by
Andreyev). 3) The problem of size and density of these
insets is finally to be cleared in the plant. 4) The
materials were investigated, 1951 - 1952 a special vacuum-
-technological equipment was put into operation, solitary
test stands were established (up to 1000 A and 160 kV,
pulse circuit up to 350 kV). The construction of the valve
essentially differs from those used in industry. Then

Card 2/5

Kostrov, M.F.

AUTHORS: Butayev, F. I., Candidate of Technical Sciences, 105-58-5-1/28
Klimov, N. S., Candidate of Technical Sciences,
Kostrov, M. F., Candidate of Technical Sciences,
Sakovich, A. A., Candidate of Technical Sciences

TITLE: A High-Power High-Voltage Valve (Meshchnyy vysokovol'tnyy ventil')

PERIODICAL: Elektrichestvo, 1958, Nr 5, pp. 1-7 (USSR)

ABSTRACT: At first a survey of the development of the high-voltage valves abroad and at home is given. In the USSR such works were carried out in the laboratories of the VEI (A. N. Larionov, S. V. Krauz 1937, N. S. Klimov 1938 - 1939, M. I. Gal'din 1940). After the war high-voltage valves and control boxes for the first test-d-c. trunk line from the hydroelectric plant Kashira to Moscow were elaborated. These works were mainly performed in the Scientific Engineering Office of the former Ministry for Electrical Industry under participation of important German specialists, as G. Dobke, R. Knel'gers, and others. 30 valves of the type VR 1 were produced by this office and partly by the

Card 1/5

KOSTROV, M. F.

CHILIKIN, M.G.; KOSTROV, M.F.; GLAZUNOV, A.A.; MESHKOV, V.V.; SO-
LOV'YEV, I.I.; VENTKOV, V.A.

L.I. Sirotinskii, honored worker in science and engineering.
Elektrichestvo no.6:91 Je '54. (MLRA 7:7)
(Sirotinskii, Leonid Ivanovich, 1879-)

KOSTROV, M.F.; BIRYUKOV, V.G.; SIROTINSKIY, L.I.; KISLOV, A.N.; KOZHUKHOV, V.K.;
AKOPYAN, A.A.; MEL'KUMOV, A.M.; LARIONOV, V.P.

Professor G.V.Butkevich. Fiftieth anniversary of his birth. Elektrichestvo
no.10:92 0 '53. (MLRA 6:10)
(Butkevich, Georgii Vladimirovich, 1903-)

KOSTROV, M. F.

3

USSR/Electricity
Electrification

Nov 1947

"All-Union Electrotechnical Institute on the Eve of the Thirtieth Anniversary of the Great October Socialist Revolution," M. F. Kostrov, Candidate in Technical Sciences, All-Union Electrotechnical Institute imeni V. I. Lenin, 6 pp

"Vest Elektro-Prmysh" No 11

Short historical description of the development of the All-Union Electrotechnical Institute, and particularly the achievements of GEM-VEM (State Experimental Electrotechnical Institute and All-Union Electrotechnical Institute) with respect to the GEMRO plan, which appears to be a plan for the electrification of the USSR.
LC 57T13

KOSTROV, M. F.

Kostrov, M. F. Principles of relay protection Moskva, Gos. energ. izd-vo, 1944.

435 p. (50-44156) TK2861.K6

KOSTROV, M.

Let us improve the work of the counting department. Den. 1 kred.
16 no.6:59 Je '58, (MIRA 11:7)
(Banks and banking--Accounting)

KOSTROV, L.A. (Gor'kiy)

Time has come to finally solve the problem of an overall application of the unified methodology in the design of consumers clothing. Shvein.prom. no.1:22-23 Ja-F '64. (MIRA 17:3)

KOSTROV, L.A. (Gor'kiy)

Improve the workmanship in the manufacture of custom clothes.
Shvein.prom. no.5:31 3-0 '63.

(MIRA 16:12)

GARAS'KO, E.M., Inzh.; KOSTROV, L.A., Inzh.

K-2,5-2 pneumatic-tire hydraulic crane. Stroi. i der. mash.
9 no.1:9-11 Ja '64. (MIRA 18:11)