

Antibiotics

PO/0096/66/000/004/0307/0314

POLAND

AUTHOR: Macierewicz, Maria -- Matserevich, M.; Kaluzewski, Stanislaw --
Kaluzhevski, S.; Tyc, Zofia -- Tyts, Z.

ORG: Department of Bacteriology/headed by Prof. Dr. E. Wojciechowski ,
PZH, Warsaw (Zaklad Bakteriologii PZH)

TITLE: Properties of Salmonella enteritidis strains isolated in Poland. I.
Sensitivity to antibiotics and nitrofuran

SOURCE: Medycyna doswiadczalna i mikrobiologia, no. 4, 1966, 307-314

TOPIC TAGS: antibiotic, streptomycin, tetracycline, microbiology, bacterial
antibiotic sensitivity, bacterial nitrofuran sensitivity, Salmonella enteritidis,
polypeptide antibiotic, nitrofuran, nitrofurantoin, Ampicillin, chloramphenicol,
colistin, paromomycin, polymyxin

ABSTRACT: The sensitivity to antibiotics and nitrofuran of 612 strains of
Salmonella enteritidis, chosen at random from 5053 strains isolated in Poland,
was tested by the filter-paper-disk method. Group I (4.4%) was sensitive to
paromomycin, chloramphenicol, tetracyclines, polymyxin B,

2/2

1. KALUZHENIN
2. USSR (600)
4. Tractors
7. Greater attention to organizing work of tractor drivers. Les. khoz., 6, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Uncl.

PROCESSING AND PROPERTIES INDEX

30

Quality of polydiene rubber. A. I. Opalev, K. P. Kaluzhennina, S. B. Gorfunkel and V. P. Mineeva. *Caoutchouc & Rubber* (U. S. S. R.) No. 4-5, 38-41(1960).-- A study was made of the quality of polydiene rubber prepd. from emulsion polymer and polydiene having η values of 0.33-32.4 centipoises. The tests included plasticity, tensile strength, total and residual elongation, behavior of the mixt. during calendaring, and the running of the tires on a roller bench. The results, given in 2 tables, indicate that polydiene rubber with high η values makes carcass mixts. with better phys.-mech. properties and better-running tires compared to polydiene rubber with low η values. The quality of the polydiene rubber can be improved by using polydienes of not less than 30 and not over 40 centipoises. The tensile strength of the vulcanizate should not be less than 120 kg. per sq. cm. (in testing a standard mixt.). B. Z. Kamich

METALLURGICAL LITERATURE CLASSIFICATION

~~Kaluzhenina, K. F.~~

FD-1801

USSR/Chemistry - Rubber

Card 1/1 Pub 50-5/19

Author : Kaluzhenina, K. F., Galil-Ogly, F. A.

Title : Production of colored rubber with the application of domestic dyestuffs

Periodical : Khim. prom., No 2, 79-82 (15-18), Mar 1955

Abstract : Thirty dyestuffs have been tested in regard to their suitability for the preparation of pigments to be used in coloring rubber. Nine have been selected as suitable. Procedures for the production of colored rubbers and white rubber are described. The effects of fillers, vulcanization accelerators, antioxidants, and other admixtures on the color are discussed. Eleven references, 3 USSR, all since 1940. Two tables.

Institution: Scientific Research Institute of the Rubber Industry

SOV/81-59-9-33450

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 9, p 562 (USSR)

AUTHORS: Kaluzhonina, K.F., Skuba, I.A., Zherbikov, S.K., Medvedeva, A.M.

TITLE: The Increase in the Adhesiveness of Rubber Mixtures and Glues Based on Synthetic Rubbers


PERIODICAL: Tr. N.-1. in-ta rezin. prom-sti, 1956, Nr 3, pp 47 - 55

ABSTRACT: The possibilities of increasing the adhesiveness of mixtures and glues based on butadiene-styrene (BS), butadiene-nitrile^b (BN) rubbers and glues based on neoprene^b (N) by means of condensation resins: rubrezina B (I), yarrezina A (II), yarrezina B (III) have been studied. The optimum dosis of these resins for raw mixtures of BS and BN is 10 weight parts per 100 weight parts of rubber. According to the capacity of increasing the adhesiveness of the raw mixtures of BN, I, II, III are equivalent. The introduction of these resins into the rubber mixture does not affect the physical-mechanical properties of the vulcanizates.

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SOV/81-59-9-33450

The Increase in the Adhesiveness of Rubber Mixtures and Glues Based on Synthetic Rubbers

I, II and corezin, being introduced into glues¹² of BS and N, increase their con-
fection adhesiveness considerably, as well as the stability of the adhesion of the
parts after vulcanization. The properties of the glues of SKB rubber do not improve
by the introduction of the resins indicated. 

B. Glagolev

Card 2/2

SOV/81-59-9-33452

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 9, p 562 (USSR)

AUTHORS: Novikov, A.S., Skuba, I.A., Kaluzhenina, K.F.

TITLE: An Investigation of the Interaction of Thermoplastic Resins With Synthetic Rubbers ✓

PERIODICAL: Tr. N.-1. in-ta rezin. prom-sti, 1956, Nr 3, pp 56 - 72

ABSTRACT: The effect of the thermoplastic resin (TR) 110 on the mechanical properties of unfilled and carbon black mixtures of SKN-26 has been studied. TR 110 combines with raw SKN-26 rubber and masticates it. In the vulcanization TR 110 interacts chemically with SKN-26 and S. The characteristic of the change of bond types in the vulcanization of an unfilled SKN-26 mixture with 20 weight parts of TR 110 has been cited. In proportion to S consumption the rubber-resin bonds accumulate in the vulcanizate. The deterioration of the physical-mechanical properties of carbon black vulcanizates with an increase in the TR 110 doses is explained by the formation of micro- and macro-

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SOV/81-59-9-33452

An Investigation of the Interaction of Thermoplastic Resins With Synthetic Rubbers
nonhomogeneous domains due to the appearance of two types of bonds, as well as due
to insufficient compatibility of rubber with resin in the resitol and resite stage.



V. Glagolev

Card 2/2

KALUZHENINA, K, and others.

"Increasing the glutinousness of rubber mixtures and glues on synthetic rubber base."

p. 29 (Leka Promishlenost, Vol. 6, no. 10, 1957, Sofia, Bulgaria.)

"Quick method for determining the content of chrome in leather."

p. 31 (Leka Promishlenost, Vol. 6, no. 10, 1957, Sofia, Bulgaria.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6, June 1958.

KALUZHENINA, K. F.

A. I. Glukhova, K. A. Andrianov, L. N. Kozlovskaya and K. F. Kalushenina,
"The Obtaining of a Rubber-Like Substance from the Polydimethylsilicoxane."

Report presented at the Second All-Union Conference on the Chemistry and
Practical Application of Silicon-Organic Compounds held in Leningrad from
25-27 September 1958.

Zhurnal prikladnoy khimii, 1959, Nr 1 pp 238-240 (USSR)

S/138/59/000/07/03/009

AUTHORS: Kaluzhenina, K. F., Zherebkov, S. K., Sukhotina, T. M.,
Sergeyicheva, V. S.

TITLE: On the Properties of Mixtures and Vulcanizates Based on Bromobutyl
Rubber

PERIODICAL: Kauchuk i Rezina, 1959, No. 7, pp. 13-18

TEXT: The authors outline the valuable properties of butyl rubber and explain its application in the production of rubber articles. The chemical and physical properties of vulcanizates made of butyl rubber are due to their low non-saturation and also to the presence of regularly distributed side methyl groups, linked with the densely packed linear chains, as described in Ref. 1, by R. Thomas and L. King. The properties of the vulcanizates made of the butyl rubber are described, and how these properties are applied in the production of various rubberized articles. However, the disadvantage of the butyl rubber mixtures is the slow vulcanization and the incompatibility of the butyl rubber with other non-saturated polymers, as well as its poor adhesion to various metals. Some of these disadvantages could be eliminated by the use of bromobutyl rubber. According to the authors, there are two methods for the production of bromobutyl

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S/138/59/000/07/03/009

On the Properties of Mixtures and Vulcanizates Based on Bromobutyl Rubber

rubber: 1) by brominating the butyl rubber on the rollers with bromine, 2) by brominating the butyl rubber with ethyl bromine in a solution of ethyl chlorine. A comparison is made of the properties of domestic bromobutyl rubber produced by the two methods with those of the imported bromobutyl rubber produced by 2202 trade mark, and the possibility of combining the bromobutyl rubber with other polymers is shown. When combining the domestic bromobutyl rubber with natural rubber, rubber is obtained with satisfactory properties. The compatibility of the bromobutyl rubber with other polymers makes it possible to cement rubber onto metal. The experimental procedure undertaken is outlined in detail and the technological and physico-mechanical properties of the vulcanizates are determined and given in Table 1. The highest stability of the adhesion is reached between the ply of natural rubber or butyl rubber and a ply of a mixture of imported bromobutyl rubber, combined with natural rubber; a somewhat lower stability is reached with a ply of a mixture based on the domestic bromobutyl rubber, combined with the natural rubber. Adhesion to metal of the rubber can be accomplished by using the ply of a mixture based on the bromobutyl rubber. The possibility of fixing the bromobutyl mixtures to metal by the hot method was studied. The results of the tests are given in Table 7. The results of the

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S/081/62/000/014/029/039
B166/B144

15.9300

AUTHORS: Novikov, A. S., Kaluzhenina, K. F., Gilinskaya, N. S.,
Kazakov, A. V.

TITLE: The manufacture of heat-resistant rubbers based on
butadiene nitrile-rubber

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 14, 1962, 646, abstract
14P332 (Tr. N.-i in-ta rezin. prom-sti, sb. 7, 1960, 25-33)

TEXT: The influence of stabilizers on the thermal oxidation ageing of
CKH (SKN) at 150°C was determined from the magnitude of the induction
period of oxidation and from the character of structural changes in the
oxidized rubber (due to the change in swelling and solubility of the
rubber when oxidized). The stabilizers tested can be arranged in the
following order according to the magnitude of the induction period:
dinaphthyl-p-phenylene diamine > Resamine C > diphenylol propane > mercapto
benzimidazole (I) and "fatty red C" > dimethylphenyl-p-cresol (II) and
Neozone D (III) > nitroso-β-naphthol. Films containing II, I and III had
the highest solubility. The smallest degree of structuration is observed
in the presence of I and II. For heat-resistant rubbers it is preferable
Card 1/2

The manufacture of...

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B166/B144

to use mineral fillers, in particular Al, Mg and Ca silicates. Heat-resistant rubbers can be got by using "silicate rubbers" filled with amorphous SiO₂ in the process of coagulation from the latex. [Abstracter's note: Complete translation.]

Card 2/2

S/661/61/000/006/050/081
D235/D302

AUTHORS: Kozlovskaya, L. N., Glukhova, A. I., Andrianov, K. A.
and Kaluzhenina, K. F.

TITLE: Thermal stability of materials based on poly-dimethyl-
siloxanes

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganiches-
kikh soyedineniy; trudy konferentsii, no. 6: Doklady,
diskussii, resheniye. II Vses. konfer. po khimii i
prakt. prim. kremneorg. soyed., Len. 1958. Leningrad,
Izd-vo AN SSSR, 1961, 216-220

TEXT: A supplement to the above paper (this publication, no. 2,
p. 95). The authors report on materials formed from polydimethyl-
siloxanes and fluoro-organic polymers. Such materials can be used
at 350°C for 300 hours and at 300°C there is practically no change
in the properties after 1,000 hours. After service at 300 - 350°C
the mechanical strength is 100 - 110 kg/cm² and the specific elon-
Card 1/3

S/661/61/000/006/050/081
D235/D302,

Thermal stability of ...

gation 80 - 100%, the resistance to breakdown after the action of oil for 200 hours at 200°C falls by 40 - 50% and swelling amounts to 20 - 25%; shrinkage after heat treatment is about 5%. The material can be used for packing, sealing, etc.; because it forms few volatile compounds it will find application in vacuum technology. The paper is discussed by the authors and A. L. Klebanskiy (VNIISK, Leningrad), A. A. Berlin (Moscow), V. I. Pakhomov (NIIPM, Moscow) and N. Nudel'man (NIIRP, Moscow). The following topics are discussed: Vulcanization of the polymers; toxicity of the material; the immediate formation at room temperature of polymer fragments on rolling; properties; the mechanism for the formation of polymer fragments by destruction of Teflon and polydimethylsiloxane; and the amount of filler for the material. Vulcanization takes place by breakdown of polymer chains, the formation of benzoyl peroxide and subsequent recombination of the macromolecules; it takes place with respect to fragments of polydimethylsiloxane and not with respect to the fluoro-polymer. The number of volatile compounds is negligible and the material does not cause metallic corrosion. The ✓


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Thermal stability of ...

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D235/D302

toxicity is lower than for fluoro-polymers, because it is a two-component system and contains ZnO. On rolling, orientation and partial breakdown of the polymers takes place, but the material with the optimum properties is obtained at 300 - 350°C when there is destruction of both polymers. There is no additional data on the formation of polymer fragments, and although Teflon forms free radicals if subjected to the short-time action of high temperatures, experiments to find their concentration have not been successful. This material can contain 87% by weight filler and only 13% by weight polymer. To elucidate the formation reaction further experiments must be carried out in an inert gas atmosphere, at high pressure, in the presence of acceptor radicals and in the absence of zinc oxide.

Card 3/3



KALUZHENINA, K.F.; ZHEVERDYAYEV, O.N.; KHRUSLOV, V.K.

Changes in rubber structure occurring during the thermal
treatment in an agressive medium. Kauch. i rez. 24 no.12:
17-18 '65. (MIRA 18:12)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.

KALUZHENKO, R.K.; NOVITSKIY, V. Ye.

Immunopathology of infectious nonspecific polyarthrits. Terap.
arkh. 35 no.5:87-89 My'63 (MIRA 16:12)

1. Iz kliniki fakul'tetskoy terapii (nachal'nik - prof.
V.A. Beyyer) Voenno-meditsinskoy ordena Lenina akademii
imeni S.M.Kirova.

KALUZHENKO, R.K.; KUDRYAVTSEV, G.V.

Diabetic osteoarthropathy. Probl. endok. i gorm. 10 no.5:25-28
S-0 '64. (MIRA 18:6)

1. Klinika fakul'tetskoy terapii (nachal'nik - prof. V.A. Beyyer)
Vyerno-meditsinskoy ordena Lenina akademii imeni Kirova, Leningrad.

KALUZHENKO, R. K.

"An Instance of Chronic Radiation Sickness," Voenno-Med. zhur., No.6,
pp. 88-90, 1955

Translation D 416276

SHURYGIN, D.Ya., podpolkovnik meditsinskoy sluzhby, kandidat meditsinskikh nauk; KALUZHNKO, R.K., leytenant meditsinskoy sluzhby; KSENOFONTOV, Yu.P., leytenant meditsinskoy sluzhby

Synthomycin for treating chronic cholecystitis and cholangitis.
Voen.-med.zhur. no.7:88 J1 '56. (MLRA 9:11)
(CHLOROMYCETIN) (BILIARY TRACT--DISEASES)

USSR / Pharmacology. Toxicology. Chemiotherapeutic Preparations. Anti-Biotics.

V

Abs Jour : Ref. Zhur - Biologiya, No. 3, 1959, 14036

Author : Kaluzhonko, R. K.

Inst : Military-Medical Academy

Title : On the Influence of Syntomycin on Hemopoiesis.

Orig Pub : Tr. Voen.-med. akad., 1957, 76, 269-271

Abstract : Patients (43) with chronic cholecystitis and cholangitis, hepatitis and anacid and hyperacid gastritis were treated with syntomycin (I) in a single dose of 0.5 g 3-4 times daily; 10-20 g per course. In the majority of patients, an improvement of general wellbeing and a decrease of the amount of leucocytes were observed, which was not only the result of the termination of

Card 1/2

KALUZHENKO, R. K.

Geometric grid for computing color index. Lab. delo 4 no. 3:12-14
My-Je '58 (MIRA 11:5)

(BLOOD, COLOR AND COLORING MATTER)

KALUZHENKO, R.K.

Homogram of hematologic indexes. Zdrav. Belor. 5 no.3:69-70 Mr '59.
(BLOOD--ANALYSIS AND CHEMISTRY) (MIRA 12:7)

KALUZHENOVA, Z.

Kaluzhenova, Z. - "Age characteristics of change in arterial pressure and respiration under the action of hydrogen sulfide solution," Sbornik nauch. rabot studentov (Rost. n/D gos. un-t im. Molotova), Issue 1, 1949, p. 93-98

SO: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 14, 1949).

MOROZOVA, I.V.; BIBIKOVA, V.A.; KALUZHENOVA, Z.P.

Fauna of gamasid mites (Parasitiformes, Gamasoidea) in the
sands of Sary-Ishikotrau. Zool. zhur. 42 no.12:1872-1876
'63 (MIRA 17:7)

1. Central Asiatic Research Anti-Plague Institute, Alma-Ata.

KALUZHENOVA, Z. P., SHMUTER, M. F., BIBIKOVA, V. A., BONDAR', E. P.,
BURDELOV, A. S., ZHURAVLEVA, V. I., MARTINEVSKIY, I. L., MOROZOVA, I. V.,
PEYSAKHIS, L. A., BOSSINSKAYA, O. B., SVIRIDOV, G. G.

"Certain laws governing the plague epizootic in the south
Balkhash area (Ili-Karatal interfluve)." p. 277

Desyatoye Soveshchaniye po parazitologicheskim problemam i
prirodnookhranovym bolezniam. 22-29 Oktyabrya 1959 g. (Tenth Conference
on Parasitological Problems and Diseases with Natural Foci 22-29
October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences
USSR and Academy of Sciences USSR, No. L 254pp.

Central Asiatic Antiplague Inst./Alma Ata

BIBIKOVA, V.A.; IL'INSKAYA, V.L.; KALUZHENOVA, Z.P.; MOROZOVA, I.V.;
SHMUTER, M.F.

Biology of fleas of the genus *Xenopsylla* in Sary-Ishik-Otrau.
Zool. zhur. 42 no.7:1045-1051 '63. (MIRA 17:2)

1. Central-Asian Research Anti-Plague Institute, Alma-Ata.

SVIRIDOV, G.G.; MOROZOVA, I.V.; KALUZHENOVA, Z.P.; IL'INSKAYA, V.L.

A model of an isolated burrow of greater gerbils. Zool. zhur. 42
no. 5:780-782 '63. (MIRA 16:7)

1. Central-Asiatic Research Anti-Plague Institute, Alma-Ata.
(Gerbils as carriers of disease)
(Epidemiological research)

SVIRIDOV, G.G.; MOROZOVA, I.V.; KALUZHENOVA, Z.P.; IL'INSKAYA, V.L.

Use of radioactive isotopes in studying some problems of flea ecology. Report No. 1: Alimentary relations of fleas of the genus *Xenopsylla* with the greater gerbil (*Rhombomys opimus* Pall.) under natural conditions. Zool. zhur. 42 no.4:546-550 '63. (MIRA 16:7)

1. Central Asiatic Research Anti-Plague Institute, Alma-Ata.
(Phosphorus isotopes)
(Sary-Ishik-Otrau--Parasites--Gerbils)
(Sary-Ishik-Otrau--Fleas)

DEREVIANCHENKO, K.I.; MOLODOVSKIY, A.V.; KALUZHENOVA, Z.P.

Contact of rodents with other wild animals through bloodsucking
arthropods on the Mangyshlak Peninsula. Zool. zhur. 42 no.6:
903-913 '63. (MIRA 16:7)

1. Astrakhan Anti-Plague Station, the State University of
Gorky, and Central-Asian Anti-Plague Institute, Alma-Ata.
(Mangyshlak Peninsula--Animals as carriers of disease)
(Fleas--Host animals) (Ticks--Host animals)

L 09856-07 JK

ACC NR: AP6035664 (AN) SOURCE CODE: PO/0096/66/000/004/0307/0314 16

AUTHOR: Macierewicz, Maria -- Matserevich, M.; Kaluzewski, Stanislaw --
Kaluzhevski, S.; Tyc, Zofia -- Tyts, Z.

ORG: Department of Bacteriology/headed by Prof. Dr. E. Wojciechowski,
PZH, Warsaw (Zaklad Bakteriologii PZH)

TITLE: Properties of Salmonella enteritidis strains isolated in Poland. I.
Sensitivity to antibiotics and nitrofuran

SOURCE: Medycyna doswiadczalna i mikrobiologia, no. 4, 1966, 307-314

TOPIC TAGS: antibiotic, streptomycin, tetracycline, microbiology, bacterial
antibiotic sensitivity, bacterial nitrofurantoin sensitivity, Salmonella enteritidis,
polypeptide antibiotic, nitrofurantoin, Ampicillin, chloramphenicol,
colistin, paromomycin, polymixin

ABSTRACT: The sensitivity to antibiotics and nitrofurantoin of 612 strains of
Salmonella enteritidis, chosen at random from 5053 strains isolated in Poland,
was tested by the filter-paper-disk method. Group I (4.4%) was sensitive to
streptomycin, paromomycin, chloramphenicol, tetracyclines, polymyxin B,

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L 09856-67

ACC NR: AP6035664

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colistin, and nitrofurantoin; group II (2.3%) to chloramphenicol, polypeptide antibiotics, and nitrofurantoin; group III (93.3%) only to polypeptide antibiotics and nitrofurantoin. Minimum inhibitory concentrations determined by the serial dilution method were 2.5—10 $\mu\text{g/ml}$ for colistin, and 12 $\mu\text{g/ml}$ for nitrofurantoin. Ampicillin (alpha-aminobenzylpenicillin) concentrations of 0.6—1.2 $\mu\text{g/ml}$ inhibited the growth of all group I strains and 2% of group II strains. The remaining strains were able to grow in 200 $\mu\text{g/ml}$ Ampicillin concentrations. The patients' age and geographic area distribution had an effect on strain sensitivity rating. Strains sensitive only to polypeptide antibiotics and nitrofurantoin, isolated from children two years old or younger, amounted to 96.3%. Orig. art. has: 5 tables. [W050]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 007/ SOV REF: 001/
OTH REF: 014/

Card: 212 ⁵⁷⁰

KALUZHEVSKIY

POLAND / Microbiology. General Microbiology

F-1

Abs Jour : Ref Zhur - Biol., No 2, 1958, No 5155

Author : Kaluzhevskiy

Inst : Not given

Title : The Study of Phosphatase Samples in Different Species of Microorganisms.

Orig Pub : Acta microbiol. polon., 1956, 5, No 1-2, 95-98

Abstract : None given.

Card : 1/1

YEPHOV, L.V. & KALUZHIN, A.A.

Stability of strip subjected to compression. Inv. AN SSSR.
Math. no. 4:152-153 JI-Ag '65.

(MIRA 18:12)

KALUZHIN, G.V., mashinist teplovoza, Geroy Sotsialisticheskogo Truda;
VISHNEVSKIY, A.N., mashinist teplovoza, Geroy Sotsialisticheskogo
Truda; ORLOVA, N.M., mashinist elektropoyezda

A word from the participants of the 20th and 21st Congresses
of the CPSU. Elek.i tepl.tiaga 5 no.9:13-15 S '61.

(MIRA 14:10)

1. Depo Debal'tsevo-Sortirovochnoye (for Kaluzhin).
2. Depo Penza III (for Vishnevskiy). 3. Depo Novosibirsk
Zapadno-Sibirskoy dorogi (for Orlova).
(Electric railroads) (Railroads---Repair shops)
(Railroads---Employees)

KALUZHIN, I., avtomekhanik

What hampers the adequate training of drivers? Avt. transp. 39
no. 5:51 My '61. (MIRA 14:5)

1. 9-ya avtobaza Gomel'skogo avtotresta.
(Automobile drivers)

KALUZHIN, I.M.; MUDRENOVA, Z.I.; LYUDSKOV, B.P., red.

[Collection of papers on labor protection and safety engineering for the automotive transportation system of the Ministry of Commerce on the U.S.S.R.] Sbornik materialov po okhrane truda i tekhnika bezopasnosti dlia avtokhoziaistv sistemy Ministerstva torgovli SSSR, Moskva, Gos. izd-vo torg. lit-ry, 1958, 138 p.
(MIRA 11:10)

1. Russia (1923- U.S.S.R.) Laws, statutes, etc.
(Transportation, Automotive)

ARTEMICHEV, M.A., kandidat veterinarnykh nauk, glavnyy veterinarnyy vrach,
KALUZHIN, I.P., veterinarnyy vrach.

The embryovaccine of the State Scientific Control Institute against
smallpox in poultry. Veterinariia 33 no.1:32-34 Ja '56. (MLRA 9:4)

1.Brattsevskaia ptitsefabrika (for Artemichev).2.Tomilinskaya ptitse-
fabrika (for Kaluzhin).

(SMALLPOX IN ANIMALS)

35545
S/O20/62/142/006/018/019
B101/B144

18.8300
AUTHORS:

Shatalov, A. Ya., Marshakov, I. K., and Kaluzhina, S. A.

TITLE:

Thermogalvanic corrosion of metals

PERIODICAL:

Akademiya nauk SSSR. Doklady, v. 142, no. 6, 1962, 1339-1341

TEXT: Thermogalvanic corrosion was investigated on a model of thermo-galvanic cells on the basis of polarization curves. To this effect, the electrodes (Armco iron, 18/8 steel, X13 (Kh13) steel, nickel, or zirconium) were inserted in plastic plugs at the ends of a quartz tube at 140 mm from each other. While the lower electrode was dipped into ice, the upper one was heated to 75°C. The advantages of this design are (1) internal resistance less than in H-shaped cells; (2) lower convection, since the hot solution is on top. The electrolyte consisted of 0.1 N H₂SO₄ + 0.9 N K₂SO₄; 1 N K₂SO₄; 0.1 N KOH + 1 N K₂SO₄; 1 N KOH + 1 N K₂SO₄. Conclusions: (a) the polarity of the corrosion pair is normal in acid and neutral solutions: the hot electrode is the anode; (b) "anomalous" polarity takes place in alkaline solution: the cold

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X

SHATALOV, A.Ya.; MARSHAKOV, I.K.; KALUZHINA, S.A.

Thermogalvanic corrosion of metals. Part 1. Zhur. fiz. khim.
37 no.12:2721-2727 D '63. (MIRA 17:1)

1. Voronezhskiy gosudarstvennyy universitet.

SHATALOV, N.Ya.; MARSHAKOV, I.K.; KALUZHINA, S.A.

Effect of temperature on the effectiveness of thermogalvanic
couples. Zhur. fiz. khim. 39 no.9:2278-2281 S '65.

(MIRA 18:10)

1. Voronezhskiy gosudarstvennyy universitet.

SHATALOV, A.Ya.; MAESHAKOV, I.K.; KALUZHINA, S.A.

Thermogalvanic corrosion of metals. Part 2. Zhur. fiz. khim.
38 no.2:380-384, 1962. (MIRA 17:8)

-1. Voronezhskiy gosudarstvennyy universitet.

L 00936-56 ENP(e)/EMT(m)/EPP(c)/EWP(1)/EPP(n)-2/EHA(d)/EWP(t)/EWP(b) IJP(c)
JD/JG/VB

ACCESSION NR: AP5019728

UR/0153/65/008/003/0411/0415

AUTHOR: Shatalov, A. Ya.; Marshakov, I. K.; Kaluzhina, S. A.

38

TITLE: Thermogalvanic corrosion of iron and steel

32

B

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 8, no. 3, 1965, 411-415

TOPIC TAGS: thermogalvanic corrosion, carbon steel, steel corrosion, iron corrosion

ABSTRACT: The cause of thermogalvanic corrosion is the difference in electrochemical potentials assumed by a metal at the boundary with a solution of a different temperature. The thermogalvanic corrosion of armco iron in solutions of various acidities with a constant total content of SO₄²⁻, NO₃⁻, Cl⁻, and Br⁻ ions was studied, and it was shown that the most effective thermogalvanic macrocouples causing a virtually complete concentration of the weight losses on the anodic areas are formed in alkaline media. The introduction of oxidizing admixtures (HNO₃) into the solution at pH 1 led to a sharp increase in the overall thermogalvanic effectiveness of the macrocouples. A study of the thermogalvanic corrosion of carbon steels in acid sulfate solutions revealed an increase in the overall thermogalvanic effectiveness with a rise in the carbon content; this corresponded to a decline in the corrosion resistance of the alloys. Other things being equal, the intensity of the thermogal-

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L 00936-66

ACCESSION NR: AP5019728

vanic couples decreased in the case of alloy steels when additional alloying components (titanium, boron, molybdenum) were introduced into the alloy, and the corrosion was substantially concentrated on the hot (80C) electrode. Orig. art. has: 5 figures and 4 tables.

ASSOCIATION: Kafedra fizicheskoy khimii, Voronezhskiy gosudarstvennyy universitet
(Department of Physical Chemistry, Voronezh State University)

SUBMITTED: 20Mar64

ENCL: 00

^{55,44}
SUB CODE: MM

NO REF SOV: 001

OTHER: 000

Card 2/2 SP

L 1660-56 EWT(l)/EWT(m)/EPP(c)/EWG(m)/EWP(t)/EWP(b) JD/WB

ACCESSION NR: AP5021414

UR/0076/65/039/008/1880/1885
620.191/.193

AUTHOR: Shatalov, A. Ya.; Marshakov, I. K.; Kaluzhina, S. A.

26
23
B

TITLE: Study of the thermogalvanic corrosion of metals. Part 3. Electrochemical principles of thermogalvanic corrosion

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 8, 1965, 1880-1885

TOPIC TAGS: thermogalvanic corrosion, thermogalvanic cell

ABSTRACT: Thermogalvanic corrosion results from the combined action of a macrocouple arising upon immersion of different areas of a metal surface having different temperatures in an electrolyte, and inherent microcells operating in the hot and cold zone. In the case of couples with reversible electrodes, the rate of transfer of a substance from the anode to the cathode, which is proportional to the current intensity of the thermogalvanic cell, is related directly to the magnitude of the exchange current and may be represented by an equation of the form

$$I_t = const [Me^{n+}]^b$$

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L 1660-66

ACCESSION NR: AP5021414

3

where I_T is the thermogalvanic current. For thermogalvanic cells with irreversible electrodes operating in acid media, the thermogalvanic current arising therein is a linear function of the product of the spontaneous dissolution rate of the isolated electrode by the shift of its potential from the initial steady-state value, a shift taking place when the couple is closed. The latter rule holds with regard to the effect of the solution composition as well as the effect of the nature of the metal itself - factors which determine the overall rate of spontaneous dissolution of isolated electrodes of a thermogalvanic cell. Orig. art. has: 5 figures and 6 formulas.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University) ^{av. 55}

SUBMITTED: 15Jan64

ENCL: 00

SUB CODE: MM

NO REF SOV: 007

OTHER: 002

Card 212 DP

MAKAREVICH, V.M.; GAR, K.A.; POSLAVSKIY, Yu.M.; KALUZHINA, T.N.

Effect of chloroorganic insecticides on the processes of
tissue respiration in the imagoes and larvae of houseflies and
in the caterpillars of the lackey moth. Dokl. AN SSSR 152
no.2:475-477 S '63. (MIRA 16:11)

1. Nauchnyy institut po udobreniyam i insektofungisidam im.
Ya. V. Samoylova. Predstavleno akademikom A.I. Oparinym.

*

3/123/62/000/007/007/016
A004/A101

1.195.

AUTHORS: Kaluzhina, I. S., Kitaygorodskiy, Yu. I.

TITLE: Investigating the factors affecting ultrasonic cleaning processes

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 7, 1962, 31, abstract 7B168 (V sb. "Primeneniye ul'trazvuka v tekhnol. mashinostr.", no.2, Moscow, 1960, 75-83)

TEXT: The authors present the results of investigating the dependence of ultrasonic cleaning duration on the distance of the specimens from the emitting surface of standard TMC (PMS) converters. The tests were carried out in the Y3B-2 (UZV-2) baths supplied by a Y3Г-10 (UZG-10) generator on flat ground specimens of stainless 1X18H9T (1Kh18N9T) grade steel, 100 x 100 mm and 100 mm in diameter, having a thickness of 0.8, 3 and 5 mm. The degreasing solution had the composition (g/l): sodiumtriphosphate, calcined soda - 3 and OP-10 (OP-10) - 3 at 45 - 50°C. It was found that the duration of cleaning grows with the distance of the specimen from the surface up to a certain magnitude (at a distance of 80 - 90 mm and more, the cleaning time remained practically unchanged). The lower the oscillation intensity of the converter (being determined by the

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S/123/62/000/007/007/016
A004/A101

Investigating the factors affecting ...

applied voltage) the shorter the distance in whose limits the position of the specimen affects the cleaning time. Increasing the specimen thickness up to 5 mm and reducing the voltage from 520 to 110 v noticeably affects the degreasing duration only if the part is placed in immediate proximity to the converter. At a short distance of the specimen from the converter surface, the cleaning duration of the specimen lower surface is considerably shorter than that of the upper one. If the specimen is removed from the bath bottom, the cleaning time of the upper and lower surfaces almost did not change. Flat plates of 30 x 80 mm were used for the cleaning from slime, the plates being cut out from 1Kh18N8T sheet steel of 0.8, 2 and 2.5 mm thickness with scale after heat treatment (water-quenching at 1,050 - 1,100°C). The scale was preliminarily pickled without ultrasonics in a solution with 100 - 120 ml/l nitric acid (density - 1.35) and 45 g/l sodium fluoride at 40 - 45°C. The specimens of 0.8 mm thickness were pickled for 10 min, those of 2 mm thickness for 15 min, and the 2.5 mm specimens were pickled for 35 min. The slime was removed immediately after holding in the pickling solution. All tests for removing the slime were carried out with slight swinging of the specimens. Tests were also carried out for cleaning blind holes 1 - 5 mm in diameter and 30 - 35 mm deep on aluminum-alloy parts of intricate configuration with the dimensions 400 x 300 x 50 and 400 x 330 x 40 mm, X

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S/123/62/000/007/007/016
A004/A101

Investigating the factors affecting ...

with projecting parts up to 120 - 130 mm high. Cleaning was effected in a solution containing sodiumtriphosphate, calcined soda and OP-10 by 3 g/l each at 50°C and in "Galosha" gasoline at 20 - 30°C using ultrasonics. The authors report on the cleaning of deep through channels in large-size parts of 500 x 300 x 200 mm, the channel diameter being 100 mm and the depth 200 mm. The parts were cleaned in an ultrasonic bath and in a 30 g/l sodiumtriphosphate solution to which 3 g/l OP-10 were added at 50°C. Cleaning of the parts in the ultrasonic bath proved to be inefficient. An analysis of the obtained results revealed that for an efficient cleaning of the outer surfaces of parts, they have to be placed as near as possible to the converter surface. For cleaning the outer surfaces of voluminous parts, they have to be revolved in the ultrasonic bath, or baths have to be used in which converters are not only placed on the bottom, but also on the side walls. A swinging of the specimens during the treatment increases the homogeneity of cleaning over its entire surfaces. The most efficient method of transmitting ultrasonic oscillations during the cleaning of deep channels in solid thick-walled parts is to introduce the tool in the aperture. Investigations of the effect of ultrasonics on the acceleration of the pickling process, which were carried out on specimens and parts from 1Kh18N9T and CH 2 20 (SN2 20) steel and OT 4 and BT 1 (VT 1) titanium alloys in the form of flat

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Investigating the factors affecting ...

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plates and nipples, showed that ultrasonic waves accelerate the pickling process by a factor of 2 - 3, and also promote the removal of secondary pickling products (slime) from the metal surface, moreover, the surface finish of the treated metal is improved. It is pointed out that, in solving the problem of expediency of using ultrasonics in the pickling process it is necessary to take into account that an acceleration of the process by a factor of 2 - 3 is an insufficient characteristic of the efficiency of using ultrasonics. Its application is necessary for improving the surface finish and the quality of the parts.

[Abstracter's note: Complete translation]

Card 4/4

KALUZHINA, M.V.

Materials on the biology and economic role of the Zeravshan pheasant.
Trudy UzGU no.110:37-42 '61. (MIRA 15:3)
(Zeravshan Valley--Pheasants)

SHATALOV, A.Ya.; MARSHAKOV, I.K.; KALUZHINA, S.A.

Thermogalvanic corrosion of metals. Dokl. AN SSSR 142
no.6:1339-1341 F '62. (MIRA 15:2)

1. Voronezhskiy gosudarstvennyy universitet. Predstavleno
akademikom A.N.Frumkinym.
(Metals--Corrosion)
(Electrochemistry)

SERGEYEVA, V.F.; RALUZHINOVA, G.P.

Effect of certain substances on the solubility of benzoic acid in ethyl alcohol and a 50% mixture of ethyl alcohol and water
Zhur.ob.khim. 31 no.8:2245-2248 Ag '61. (MIRA 14:8)

1. Kazakhskiy gosudarstvennyy universitet imeni S.M. Kirova.
(Benzoic acid) (Ethyl alcohol) (Solubility)

KALUZHINOVA, N.A.; RUSAKOV, I.G.

Acoustic measurements in water. Trudy VNIIM no.13:77-99 '53.

(MIRA 11:6)

(Underwater acoustics--Measurements)

KALUZHNINA, N.A.

24(0); 5(4); 6(2) PHASE I BOOK EXPLOITATION SOV/2215
 Vsesoyuzny nauchno-issledovatel'skiy Institut metrologii imeni
 D.I. Mendeleeva
 Referaty nauchno-issledovatel'skikh rabot; sbornik No. 2 (Scientific
 Research Abstracts; Collection of Articles, Nr 2) Moscow,
 Standartgiz, 1958. 139 p. 1,000 copies printed.
 Additional Sponsoring Agency: USSR. Komitet standartov, mer i
 izmeritel'nykh priborov.

Ed.: S. Y. Beshetina; Tech. Ed.: M. A. Kondrat'yeva.
 PURPOSE: These reports are intended for scientists, researchers,
 and engineers engaged in developing standards, measures, and
 gages for the various industries.

COVERAGE: The volume contains 128 reports on standards of measure-
 ment and control. The reports were prepared by scientists of
 institutes of the Komitet standartov, mer i izmeritel'nykh
 priborov pri Sovetskom Ministre SSSR (Commission on Standards,
 Measures, and Measuring Instruments under the USSR Council of
 Ministers). The participating institutes are: VNIIM -
 Vsesoyuzny nauchno-issledovatel'skiy metrologii imeni D.I.
 Mendeleeva (All-Union Scientific Research Institute of Met-
 rology, Leni. D.I. Mendeleev), in Leningrad; Sverdlovsk branch
 Institut Vysokogo i nizhnego dvuzharnogo izhivaniya
 (All-Union Scientific Research Institute of the Combustion
 on Standards, Measures, and Measuring Instruments), created
 from MGIMP - Moskovskiy gosudarstvennyy institut mer i
 izmeritel'nykh priborov (Moscow State Institute of Measures
 and Measuring Instruments) October 1, 1955; VNIIPRI -
 Vsesoyuzny nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh
 i radiotekhnicheskikh izmereniy (All-Union Scientific
 Research Institute of Physico-technical and Radio-engineering
 Measurements) in Moscow; MGIMP - Kharkovskiy gosudarstvennyy
 institut mer i izmeritel'nykh priborov (Kharkov State Institute
 of Measures and Measuring Instruments); and MGIMP - Novosil.
 MGIMP - Novosil branch Institut mer i izmeritel'nykh priborov
 (Novosil State Institute of Measures and Measuring Instru-
 ments). No personalities are mentioned. There are no references.

Buzinov, V.S., and L.A. Pervovtsev (VNIIPRI). Developing Methods
 Card 25/27

- and Apparatus for Checking Noise Meters in the 0.16 - 20 Megacycle Range 132
- Acoustic Measurements (Brodskiy, A.D., Editor, Candidate of Technical Sciences)
- Kaluzhnina, N.A. (VNIIM). Extending the Method of Measuring Sound Pressure up to 20 - 100 Bars at High and Low Frequencies by the Standing-wave Method 134
- Krishtalevich, A.N. (VNIIM). Developing the Calibration of Microphones in the Prec Field* by the Reciprocity Method 135
- Busekov, I.G., and A.N. Krishtalevich. (VNIIM). Developing Quality Control Methods for Microphones and Telephones 136
- *Krishtalevich, A.N. (VNIIM). Developing Methods for Determining the Frequency Characteristics of Loud-speakers and for Testing Microphones by Directivity 137
- Kaluzhnina, N.A. (VNIIM). Developing the Method of Checking

Noise Meters Under Conditions of the Noise and Speech Spectrum

KALUZHINOVA, N.A.

Acoustical measurements. Trudy.VNIIM no.33:101-104 '58.

(MIRA 11:11)

(Sound--Measurement)

42068

S/589/62/000/061/001/005
A061/A126

9.2185

AUTHOR: Kaluzhinova, N.A.

TITLE: A measuring microphone with a sensitive lithium sulfate element

SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh priborov. Trudy institutov Komiteta. No. 61 (121). 1962. Issledovaniya v oblasti akusticheskikh i gidroakusticheskikh izmereniy. 37 - 41

TEXT: The microphone described consists of a sensitive element made of five square lithium sulfate plates ($0.8 \cdot 0.8 \cdot 0.12 \cdot 10^{-6}$ m), a connecting tube, and a cathode follower. The pile of plates is suspended on two wires, which also serve for the electrical connection, in such a manner that the pile surface is exposed to acoustic action all round. The measuring range extends from 20 to 15,000 cps. The advantage offered by lithium sulfate is its response to all-round compression, and its drawback is its response to foreign vibrations. Both circumstances were taken into account in the designing stage. The unevenness of the frequency response characteristic is a maximum of 0.5 db between 20 and 3,500 cps, and does not exceed 3 db up to 20,000 cps. Compared with other

Card 1/2

A measuring microphone with a sensitive....

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A061/A126

calibration techniques the microphone under consideration has proved to be good
in calibration tests owing to its low degrees of instability and unevenness.
There are 5 figures.

SUBMITTED: July, 1959

Card 2/2

KALUZHINOVA, N.A.

Reproduction and storage of acoustical pressure units. Trudy
inst. Kom. stand., mer. i izm. prib. no.61:23-28 '62,
(MIRA 16:4)

(Acoustical engineering—Standards)
(Electroacoustics)

KALUZHINOVA, N.A.

A measuring microphone with sensitive lithium sulfate element.
Trudy inst. Kom. stand., mer. i izm. prib. no.61:37-41 '62.
(MIRA 16:4)

(Microphone) (Electroacoustics)

KALUZHNIKOV H.N.

LEVINSON, L.B., doktor tekhnicheskikh nauk, professor; KALUZHNIKOV, A.N., doktor tekhnicheskikh nauk, retsenzent; BARANOV, G.G., doktor tekhnicheskikh nauk, redaktor; POPOVA, S.M., tekhnicheskiy redaktor; MODEL', B.I., tekhnicheskiy redaktor.

[Theory of mechanisms and machines; kinematics and dynamics of mechanisms]
Teoriya mekhanizmov i mashin; kinematika i dinamika mekhanizmov. Izd. 2-e, perer. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1954. 504 p. (MLRA 7:11)
(Mechanical engineering)

KALUZHNIKOV A.N.
KALUZHNIKOV, A.N., doktor tekhn.nauk, prof.

New system of point engagement of gear wheels. Izobr.v SSSR
2 no.11:26-27 and 30-31 N '57. (MIRA 10:10)
(Gearing)

KALUZHNIKOV, A.N., doktor tekhn.nauk, prof.

Using templates in graphoanalytic design of high-module gear
wheels with large radii. Izv.vys.ucheb.zav.; mashinostr. no.1:
45-62 '60. (MIRA 14:5)

1. Moskovskiy avtomekhanicheskiy institut.
(Gearing)

KALUZHNIKOV, A.N., doktor tekhn.nauk

Analytical calculation and profiling of the pump teeth of a hydraulic
servo steering mechanism. Avt.prom. 31 no.7:30-33 J1 '65. (MIRA 18:8)

1. Moskovskiy avtomekhanicheskiy institut.

KALUZHNIKOV, A. N., doktor tekhn. nauk, prof.

Kinematic and power analysis of the double-row thrust differential. Vest. mashinostr. 42 no.10:12-17 0 '62.

(MIRA 15:10)

(Gearing)

STUPEL', Fayvel' Aronovich; VASHURA, B.F., prof., retsenzent; SUKACHEV, A.P., dots., retsenzent; KALUZHNIKOV, N.A., retsenzent; BARU, I.L., prof., otv.red.; VAYNBERG, D.A., red.; CHERNYSHENKO, Ya.T., tekhn.red.

[Electromechanical relays; principles of the theory, analysis, and design] Elektromekhanicheskie rele; osnovy teorii, proektirovaniia i rascheta. [A textbook] Uchebnoe posobie. Izd.2. Khar'kov, Izd-vo Khar'kovskogo univ., 1956. 354 p. (MIRA 12:5)
(Electric relays)

AUTHOR KALUZHNIKOV, N.A. (Khar'kov) PA - 2561
TITLE On Simplified Calculation of Magnetic Amplifiers with
Ironnickel Cores. (Ob uproshchennykh raschetakh magnitnykh
usiliteley s serdechnikami iz zhelezo-nikelevykh splavov,
Russian)
PERIODICAL Avtomatika i Telemekhanika, 1957, Vol 18, Nr 3, pp 262 - 266
(U.S.S.R.)
Received: 4 / 1957 Reviewed: 6 / 1957
ABSTRACT: The present method is based on the application of experi-
mentally found out magnetizing curves of a nuclear material
 $B = f(H_m, H_c)$ for a certain "sample" nucleus that has then
to be converted for new efficiency-, amperage-, and voltage-
values. The mode of operation of the magnetic circuit is de-
termined, after which the alternating-current circuit is cal-
culated, namely for an impedance-coupled magnetic amplifier
and for a bridge- or a differential two-cycle magnetic ampli-
fier. The process of calculating a magnetic amplifier is
briefly described. 1) The group of volt-ampere characteristics
of the magnetic amplifier is converted into relative values
of H_m , H_c , B_m , and φ_1 and φ_2 are calculated for the "sample"
magnetic amplifier. 2) The working points 1 and 2 are chosen
and k_B and k_H (calculation coefficients that characterize
the working method of the magnetic circuit) as well as

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On Simplified Calculation of Magnetic Amplifiers with
Ironnickel Cores.

H_{st} and H_v (control voltage or voltage of displacement respectively) are calculated. 3) The alternating-current circuit is calculated according to the given formulae. 4) The linear main measure of the nucleus is also calculated according to the deduced formulae. All further dimensions are determined from the conditions of similarity to the sample nucleus. 5) The windings of the magnetic amplifier are calculated. 6) The amplifying coefficient k_y is determined according to the given formula. The suggested method is simple, reliable, and can be recommended for calculations of magnetic amplifiers of an average efficiency with an iron-nickel nucleus for those cases where no optimal tasks are set for the constructor to perform. (2 illustrations and 1 citation from Slav publications)

Not given

ASSOCIATION:

PRESENTED BY:

SUBMITTED:

AVAILABLE:

10.4.1956

Library of Congress.

Card 2/2

KALUZHNIKOV, N.A.

AUTHOR Kaluzhnikov, N.A. (Khar'kov) 103-9-3/9
TITLE On the Computation of the Alternating Current Circuit of a Magnetic Amplifier.
(K raschetu tsepi peremennogo toka magnitnogo usilitelya.-Russian)
PERIODICAL Avtomatika i Telemekhanika, 1957, Vol 18, Nr 9, pp 792-801 (U.S.S.R.)
ABSTRACT The attempt is made here, on the basis of the theory of an "ideal" magnetic amplifier, to find a method of computation. By means of this theory simple relations are found, which, as shown by experiments, can be used for the computation of magnetic amplifiers with an iron-nickel alloyed core. The operation of an impedance magnetic amplifier under an A-C inductive active load is investigated, and besides, the peculiarities of the operation of two-cycle systems with inductive load are analyzed. The influence exercised by the scheme-parameters of a supplementary scheme for a real magnetic amplifier is investigated, and the results obtained by experimental checking are given. It is shown that the here suggested method of computing according to "average" values corresponds to the physical processes in the magnetic amplifier. As regards complicatedness, this method in no way lags behind the method according to "effective" values. The essential advantage offered by this method is its great reliability, whilst the somewhat too large dimensions of the magnetic amplifier, which are obtained as a result of calculation, must be described as a disadvantage. The method described here corresponds to the greatest extent to the magnetic working materials with a rec-

Card 1/2

103-19-3-6/9

AUTHOR: Kaluzhnikov, N. A. (Khar'kov)

TITLE: On the Calculation of a Choke-Coupled Amplifier, Which is Connected With a Monophase-Rectifier-Bridge (K raschetu drossel'nogo magnitnogo usilitelya, vklyuchennogo na odnofaznyy vypryamitel'nyy most)

PERIODICAL: Avtomatika i Telemekhanika, 1958, Vol. 19, Nr 3, pp. 239-256 (USSR)

ABSTRACT: The author gives a method for the calculation of the a. c. -
-circuit of a choke-coupled amplifier connected with a monophase-rectifier-bridge with inductive and capacitive load on the basis of the theory of the ideal and "linear" magnetic amplifier. Two extreme cases are investigated:
1) The "ideal" case where the magnetic amplifier is produced of a material with a rectangular curve of magnetization.
2) The linear case where the magnetic amplifier represents a linear variable inductivity.
The purpose of the calculation is the determination of the feed voltage U_g , the minimum voltage at the magnetic amplifier U_{choke} and the current flowing through the a.c.-windings of the amplifier I_{choke} . All these quantities were

Card 1/2

103-19-3-6/9

On the Calculation of a Choke-Coupled Amplifier, Which is Connected With a Monophase-Rectifier-Bridge

determined starting from the given parameters of the load and mode of operation of the magnetic circuit at the amplifier. The mode of operation is determined by the quantity $k_B = U_{\text{choke max}} / U_{\text{choke}}$ where $U_{\text{choke max}}$ is assumed as equal to U_c (in operation). The calculation is performed with average values of the voltage and current over the semi-period. All kinds of the bridge-load are subdivided into 2 groups: 1) Load with inductive reaction; here the "double short-circuit" mode of operation is characteristic. 2) Load with capacitive reaction; here the "double no-load" mode of operation is characteristic. At the end the method for the calculation of the magnetic amplifier is given. There are 15 figures and 5 references, all of which are Soviet.

SUBMITTED: April 19, 1956

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/5427

Kaluzhnikov, Nikolay Anatol'yevich

Raschet magnitnykh usiliteley (Design of Magnetic Amplifiers)
Khar'kov, Izd-vo Khar'kovskogo univ., 1960. 352 p. 10,000
copies printed.

Resp. Ed.: A. P. Sukachev, Docent; Ed.: R. M. Derevyanchenko;
Tech. Ed.: N. I. Nikulina.

PURPOSE: This book can be used as a textbook by students of electrical engineering in schools of higher education, and may also be useful to technical personnel engaged in designing magnetic amplifiers for automation and computing circuits.

COVERAGE: The book presents problems of magnetic amplifier theory, examines various magnetic amplifier circuits and constructions, and gives examples of their application in practice. Major emphasis is given to technical methods of calculating magnetic amplifier circuits for a wide range of output

Card 1/5

Design of Magnetic Amplifiers

SOV/5427

power. Basic theoretical considerations are illustrated with practical examples of calculations. The author thanks A. G. Ivakhnenko, Professor, and V. L. Benin and F. A. Supel', Docents, who reviewed the book, and Engineer N. V. Kaluzhnikova, who helped with the manuscript. There are 68 references: 43 Soviet (including 2 translations), 21 English, 2 German, and 2 Swedish.

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Design of Magnetic Amplifiers	SOV/5427
Ch. V. Calculation of Magnetic Modulators (Magnetic Voltage Amplifiers)	304
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AVAILABLE: Library of Congress	
Card 5/5	JP/dfk/ec 7-29-61

S/194/61/000/006/017/077
D201/D302

AUTHOR: Kaluzhnikov, N.A.

TITLE: Differential equations of a choke magnetic amplifier in an automatic control system

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1961, 11, abstract 6 V101 (Tr. Khar'kovsk. politekhn. in-ta, 1960, 30, no. 1, 89-96)

TEXT: Differential equations are derived of a magnetic amplifier (MA) in a form which is applied in the theory of automatic control. It is assumed that the delay of the MA is determined by the parameters of the a.c. and d.c. circuits and that the averaged value (over one half period) of alternating current follows practically without any delay the changes in the overall magnetic motive force of the d.c. windings. It was determined from the results of the analysis that a choke MA, with feedback and series connected a.c. windings, is a static network of the 1st order. Its time constant

Card 1/2

✓
1

Differential equations...

S/194/61/000/006/017/077
D201/D302

is determined by the parameters of the d.c. and a.c. circuits. A MA with parallel connected a.c. windings and a MA with several d.c. windings is a static network of the 1st order having a time constant equal to the sum of time constants of all d.c. windings. A MA with feedback and series connected a.c. windings may be either static (feedback factor < 1), astatic (feedback factor $= 1$) or a hyperstatic (feedback factor > 1) network of the 1st order.
[Abstracter's note: Complete translation]

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Card 2/2

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9,2530

AUTHOR:

Kaluzhnikov, N.A.

TITLE:

The design of a magnetic amplifier from its input side

PERIODICAL:

Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1961, 11, abstract 6 V102 (Tr. Khar'kovsk. politekhn. in-ta, 1960, 30, no. 1, 97-103)

TEXT: The detailed procedure is considered of a magnetic amplifier design from given parameters of the control circuit (P_c, U_c, I_c). Formulae are obtained for determining the geometrical dimensions, off-load power, output power and of other parameters of the a.c. circuit. The qualitative considerations are given as to the choice of the magnetic field in the core. Methods are discussed for obtaining the required gain or the maximum power at the output of a magnetic amplifier with feedback together with certain forms of

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The design of a magnetic amplifier...

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D201/D302

feedback networks. 1 figure. 5 references. [Abstracter's note:
Complete translation]

✓
B

Card 2/2

KALUZHNIKOV, N.A.

Differential equation of a choke-type magnetic amplifier in an
automatic control system. Trudy KhPI 30 no.1:89-96 '60.
(MIRA 14:9)

(Magnetic amplifiers) (Differential equations)

KALUZHNIKOV, N.A.

Design of the magnetic amplifier from the input end. Trudy KhPI
30 no.1:97-104 '60. (MIRA 14:9)
(Magnetic amplifiers)

5(1)

AUTHORS:

Granzhan, A. V., Kaluzhnikova, I. M.

SOV/64-58-8-12/19

TITLE:

The Removal of Ammonia From the Condensate of the Liquor Vapor of Neutralizers (Ochistka kondensata sokovogo para neytralizatorov ot ammiaka)

PERIODICAL:

Khimicheskaya promyshlennost', 1958, Nr 8, pp 497 - 498 (USSR)

ABSTRACT:

Three cation exchangers - sulfonated coal, wofatit P and KU-2 were tested as to their applicability for the purification of the liquor vapor condensate in the production of ammonium nitrate which is subsequently to be used for the cleansing of the acid absorption. The tests were carried out in laboratory columns (Figure). The cation exchanger was prepared according to the method of the VTI. The tests in which sulfonated coal was used (Table) showed that the capacity of sulfonated coal depends on the ammonia concentration in the condensate and, to some extent, also on the temperature. With wofatit P the temperature has much less influence, while the effect of the ammonia concentration is considerable. The cation exchanger KU -2 has a much greater capacity than the other

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The Removal of Ammonia From the Condensate of the Liquor SOV/64-58-8-12/19
Vapor of Neutralizers

exchangers under consideration. Its capacity is, moreover, practically independent of the temperature within the range of 40 - 60°. Because of its capacity (1300 - 1600 g equivalent/cu.m.) and thermostability (Ref 2) the cation exchanger KU-2 can be recommended for use in the purification of the condensate from ammonia. There are 1 figure, 1 table and 2 Soviet references.

Card 2/2

KALUZHNIKOVA, N. V.

USSR/Physics - Crystal lattice constants

FD-606

Card 1/1 : Pub 153-18/22

Author : Pines, B. Ya. and Kaluzhnikova, N. V.

Title : Problem of the accurate determination of crystal lattice constants from the x-ray analysis of polycrystals

Periodical : Zhur. tekhn. fiz. 24, 320-325, Feb 1954

Abstract : Because of controversies in the determination of the lattice constants, the authors attempt to verify experimentally the different formulas. They found that in avoiding errors it suffices to make two pictures, the second one after rotating the specimen 180° . G. V. Kurdyumov's formulas agree in the first approximation with the experiments. 4 references.

Institution :

Submitted : July 19, 1943

KALOUJNINE, Léo

- Krasner, Marc, et Kaloujnine, Léo. problème d'extension de groupes.
- Krasner, Marc, et Kaloujnine, Léo. problème d'extension de groupes.
- Krasner, Marc, et Kaloujnine, Léo. problème d'extension de groupes.

- Produit complet des groupes de permutations et I. Acta Sci. Math. Szeged 13, 208-230 (1950).
- Produit complet des groupes de permutations et II. Acta Sci. Math. Szeged 14, 39-66 (1951).
- Produit complet des groupes de permutations et III. Acta Sci. Math. Szeged 14, 69-82 (1951).

Let Γ_i be a group of permutations on a finite set M_i ($i=1, \dots, s$). The complete product $\mathcal{G}_2 = \Gamma_1 \Gamma_2$ is the group of all permutations σ on $M^2 = M_1 \times M_2$ such that $\sigma(x_1 x_2) = (\sigma_1 x_1, \sigma_2(x_1) x_2)$ where $\sigma_1 \in \Gamma_1$ and $\sigma_2(x_1) \in \Gamma_2$. Then $\mathcal{G}_i = \Gamma_1 \Gamma_2 \dots \Gamma_i$ is defined inductively as $\mathcal{G}_{i-1} \Gamma_i$ and is called the complete product of Γ_i , ($i=1, \dots, s$). The complete product is associative but not commutative. If Γ_i has degree d_i and order s_i , then $\Gamma_1 \Gamma_2$ has degree $d_1 d_2$ and order $s_1 s_2^{d_1}$. A complete product is transitive if and only if each factor is transitive. Let G be a subgroup of $\mathcal{G} = \mathcal{G}_s$, let $m = (m_1, \dots, m_s)$ be a fixed element of $M = M^s$ where $M^i = M_1 \times \dots \times M_i$ ($i=1, \dots, s$), and denote by $G_i \langle m \rangle$ the group of all $\sigma \in G$ for which

$$\sigma(m_1, \dots, m_s) = (m_1, \dots, m_i, * \dots *) \quad (i=1, \dots, s).$$

The set $G = G_0 \langle m \rangle, G_1 \langle m \rangle, \dots, G_s \langle m \rangle$ is called the canonical sequence of G associated with m ;

KALOUJNINE, Leo

this is called the canonical sequence of G if m is the identity. Every transitive subgroup G of \mathcal{G} has a series of subgroups $G = G_0 \supset G_1 \supset \dots \supset G_s$ such that (1) G_s contains no invariant subgroup of G and (2) the permutation representation of G_{i-1} given by the cosets of G_i is equivalent to a transitive subgroup $\bar{\Gamma}_i$ of Γ_i . Conversely, any abstract group H which satisfies conditions (1) and (2) is isomorphic to a transitive subgroup of \mathcal{G} . A similar result holds for complete products of abstract groups which are defined as follows: If $\Gamma_1, \dots, \Gamma_s$ are abstract groups, the complete product $\mathcal{G} = \Gamma_1 \circ \Gamma_2 \circ \dots \circ \Gamma_s$ is defined as the complete product of the regular representations of the Γ_i . Clearly \mathcal{G} is a permutation group on the elements of the cartesian product $\Gamma_1 \times \dots \times \Gamma_s$. The associative law does not hold for complete products of abstract groups. In the third of the papers the theory is applied to the problem of group extensions.

R.M. Thrall (Ann Arbor, Michigan).

SO: Mathematical Review, Vol 14, No 3, Nov 1953. PP 233-340.

KALOUSNINE, L.

Kaloujnine, L. Über eine Verallgemeinerung der p-Sylowgruppen symmetrischer Gruppen. (Russian. German summary)
Acta Math. Acad. Sci. Hungar. 2, 197-221 (1951). (Russian. German summary)

This is the full version of the author's note in C.R. Acad.Sci. Paris 224,1097-1099 (1947) [these Rev. 8, 436]. The proofs are given completely. The presentation of the topological part of the theory is improved. The survey over the characteristic subgroups of the p-Sylow groups of the symmetric groups S_p^m [see Kaloujnine,

Ann. Sci. Ecole Norm. Sup. (3) 65, 239-376 (1948); these Rev. 10, 505] can be carried over to the group B_∞ investigated by the author if one understands by the term "characteristic" a closed subgroup of B_∞ which is mapped on itself by all continuous automorphisms of B_∞ .
K.A.Hirsch (London).

SO:

GNEDENKO, B.V.; KALUZHEIN, L.A.

Mathematical activities in the German Democratic Republic.
Usp.mat.nauk 9 no.4:133-154 '54. (MLBA 8:1)
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Transactions of the Third All-union Mathematical Congress, Moscow, Jun-Jul '56,
Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.

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of the Galois Theory. 23-24

There are 4 references, 2 of which are French, and 2 English.

Kemkhadze, Sh. S. (Batumi). Second Prüfer Theorem for Regular
p-Groups. 24-25

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groups in the Group. 25-26

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Kulikov, L. Ya. (Moscow). Universal Complete Abelian Groups. 26-28

Lyu-Shao-syue (Moscow). On Splitting of Infinite Algebras. 28

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(Groups, Theory of)

KALUZHNIK, L.A. (Kiyev)

Central Γ -subextensions of a complete product of Abelian groups.
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(Groups, Theory of)

KALUZHNIN, I. A., Doc *Phys-Math Sci*—(USSR) "The Sylow subgroups of symmetric groups.

Complete group products. A generalization of the Galois theory." Kiev, 1957, 13 pp.

(Moscow State University im. Lomonosov^{M.V.}), 120 copies.

(KL, No 41, 1957, p. 106)

SEWALLE, Klod [Chevalley, Claude]; KALUZHIN, L.A. [translator]

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lit-ry, 1958. 1 v. Translated from the French. (MIRA 13:8)
(Groups, Continuous)

KALUZHININ, L.A., prof. (Kiyev); STOGNIY, A.A.; YADRENKO, M.Ya.

Mathematics clubs and contests in Kiev. Mat. pros. no.3:
229-234 '58. (MIRA 11:9)
(Kiev--Mathematics)