YEROFEYEV, B.V.; NAUMOVA, S.F.; MAKSIMOV, T.P.

Kinetics of $TiCl_4$ - induced polymerization of 1,3-cyclohexadiene in benzene solution. Vysokom. soed. 6 no.4:716-721 Ap '64. (MIRA 17:6)

1. Institut fiziko-organicheskoy chimii AN BSSR.

NAUMOVA, S.F.; MAKOVETSKIY, M.I.; YEROFEYEV, B.V.

Sulfoacid cation exchanger based on 1,3-polycyclohexadiene. Dokl. AN BSSR 8 no. 3:161-164 Mr '64. (MIRA 17:5)

1. Institut fiziko-organicheskoy khimii AN BSSR.

YEROFEYEV, B.V. [Erofeev, B.V.]; [illegible], S.F. [Pavlova, S.F.]; [illegible]TSKIY, N.I. [Bakhavetski, M.I.]

Study of the thermal stability of the IF-Kh-1 sulfonated cation exchanger. Vestsi AN BSSR. Ser. fiz.-tekh. nav. no.4:47-52 '64. (MIRA 18:3)

NAUMOVA, S.F. [Naumova, S.F.]; SLOBODCHIKOVA, L.K. [Slobodchikova, L.K.]; YEROFEYEV, B.V. [Erofeev, B.V.]

Epoxy resin based on poly-1,3-cyclohexadiene. Vestsi AN BSSR. Ser.khim.nav. no.2:10-15 '65. (MIRA 18:12)

L 61512-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 WW/RM

ACCESSION NR: AP5015780 UR/0250/65/009/005/0312/0314

AUTHORS: Naumova, S. F.; Kovaleva, V. N.

31
29
B

TITLE: Production of epoxy resin IFOKh-1, and some of its properties

SOURCE: AN BSSR, Doklady, v. 9, no. 5, 1965, 312-314

TOPIC TAGS: epoxy resin, benzene, organic synthesis, solubility/ IFOKh epoxy resin

ABSTRACT: An epoxy resin, IFOKh-1, was synthesized and some of its properties determined. Polycyclohexadiene-1,3 is dissolved in benzene; 40% peracetic acid and sodium acetate are added during constant agitation. The reaction temperature is 25-30C. The mixture is then held at 35C for one hour with constant stirring. Benzene (three times the weight of the polycyclohexadiene used) is added, and the mixture is stirred until the epoxy is completely dissolved. The solution is filtered and the epoxy is precipitated with methyl alcohol (four times the volume of the solution). A white tenacious precipitate is separated by decantation and then dried at 30-40C and 5-10 mm pressure. A further soluble fraction is obtained by distilling the alcohol-benzene solution at 35-40C and 10 mm pressure. The final product is a [illegible] white powder, soluble in aromatic and chlorinated

Card 1/2

L 61512-65

ACCESSION NR: AP5015780

2

hydrocarbons. It has some double bonds in addition to epoxy oxygen. The yield of epoxy is not substantially changed by the concentration of sodium acetate within the limits of 1 and 3.5%, nor is it changed with variation in the ratio of peracetic acid to polycyclohexadiene of 0.75 to 2. But when this ratio goes up (from 2 to 6 in experiments by the authors) the yield of epoxy declines appreciably (115 to 55%). The yield increases with decrease in molecular weight of the polymer. When epoxy IFOKh-1 is heated for 24 hours at 200C in a vacuum or when it is pressed at 500 kg/cm^2 at 200-220C, it becomes insoluble. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Institut fiziko-organicheskoy khimii AN BSSR (Institute of Physical and Organic Chemistry, AN BSSR)

SUBMITTED: 30Apr64 ENCL: 00 SUB CODE: MT, GC

NO REF SOV: 003 OTHER: 004

Card 2/2

YEROFEYEV, B.V., akademik; NAUMOVA, S.F.; TSYKALO, L.G.

Chromatographic separation of 1,3-cyclohexadiene oligomers. Dokl. AN SSSR 163 no.4:884-886 Ag '65. (MIRA 18:8)

1. Institut fiziko-organicheskoy khimii AN BSSR. 2. AN BSSR (for Yerofeyev).

L 46992-66 EWP(j)/EWT(m)/T/EWP(v) IJP(c) RM/WW

ACC NR: AP6022869 (N) SOURCE CODE: UR/0303/66/000/002/0030/0034

AUTHOR: Naumova, S. F.; Mikhaylovskiy, Yu. N.; Zubov, P. I.

ORG: none

TITLE: Effect of the vapor and gas permeability of polymer films on their properties

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 2, 1966, 30-34

TOPIC TAGS: protective coating, polymer film, hydrogen chloride, metal oxidation, polyethylene, teflon, polyvinyl chloride, magnesium, ADHESIVE BONDING

ABSTRACT: The effect of the permeability of loose polymer film coatings on the oxidation rate of a metal in a moist atmosphere in the absence of an adhesive bond between the film and the metal was studied. The polymer films were PE-500 high-pressure polyethylene (70 μ thick), polytetrafluoroethylene (teflon) (55 μ), and V-118 polyvinyl chloride (180 μ). A new method of measuring slow oxidation rates of metals was used which involved the recording of changes in the electronic conductivity during oxidation of a thin metal film (~10^{-5} cm) under the polymer film. In order to increase the sensitivity of the method, the metal employed was magnesium, because of its high reactivity. It is shown that in a pure moist atmosphere the oxidation rate of the metal is practically independent of the nature of the polymer film (in the case of a nonadhering film). This is because the rate-determining step in the oxidation is the inhibition of the anodic process of metal ionization (hydration), not the diffusion of moisture

Card 1/2 UDC: 667.613.4

L 46992-66

ACC NR: AP6022869 O

through the coating. In a moist atmosphere containing HCl vapor, which easily penetrates through the film and activates the anodic process, the protective properties of polymer films are completely determined by their moisture permeability. In this case, the chemical nature of the polymer material and its structure are the basic factors determining the protective properties of the films. A quantitative description of the protective effect of polymer films is given. Depending upon the nature of the film, moisture content of the atmosphere, and content of HCl, the protective effect changes by 2 to 3 orders of magnitude. Orig. art. has: 6 figures and 3 formulas.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 014/ OTH REF: 003

Card 2/2

L 04964-67 EWT(m)/EWP(j)/EWP(t)/ETI LJP(c) JD/WB/RH

ACC NR: AP6006723 SOURCE CODE: UR/0303/66/000/001/0053/0055

AUTHOR: Sokolova, Yo. M.; Naumova, S. F.; Mikhaylovskiy, Yu. N.; Zaber, P. I.

ORG: none

TITLE: New rapid method of evaluating the protective properties of polymer coatings on metals in corrosive media

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 1, 1966, 53-55

TOPIC TAGS: protective coating, corrosion

ABSTRACT: A rapid method is proposed for evaluating the protective properties of coatings on metals in any corrosive media (i. e., liquid electrolytes, nonelectrolytes or gaseous media). It involves the recording of the change in the resistance of the metal base during the testing. PE-500 polyethylene, PVKh-990 polyvinyl chloride and Teflon were thus tested (in the form of films 90, 190 and 60 μ thick respectively) in HCl and HNO_3 vapors. The polymer films were bonded with polyisobutylene adhesive to magnesium films evaporated onto glass (magnesium was chosen as the metal base because of its high corrosion activity). In the HCl atmosphere, magnesium begins to dissolve immediately after the sample comes in contact with the HCl vapor. The protective properties of the polymer films studied increase in the series polyvinyl chloride - Teflon - polyethylene for both HCl and HNO_3. The results lead the authors to recommend this method as a means of evaluating the protective properties of paint and

Card 1/2 UDC: 667.61

L 04964-67

ACC NR: AP6006723

varnish and insulation coatings on metals. Orig. art. has: 4 figures and 1 formula.

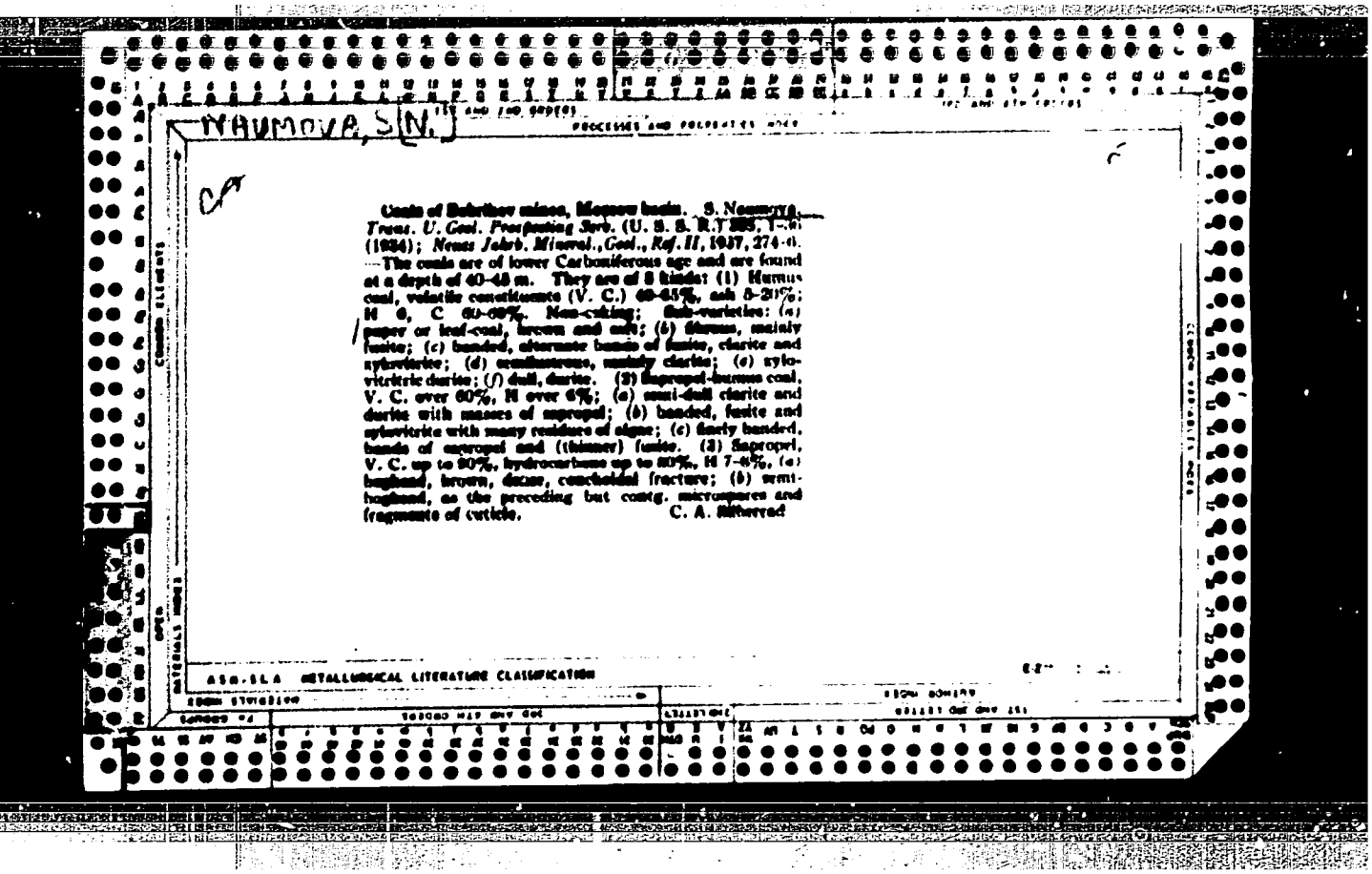
SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 008/ OTH REF: 004

Card 2/2

NAUMOVA, S.N., student V kursa; UTKIN, V.S., student V kursa

Incidence of gonorrhea in the Bashkir Autonomous Soviet Socialist Republic from 1953-1959. Vest.derm.i ven. no.9:71-72 '61.
(MIRA 15:5)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - prof. G.S. Maksimov) Bashkirskogo meditsinskogo instituta (dir. - dotsent N.F. Vorob'yev).
(BASHKIRIA--GONORRHEA)



NAUMOVA, S. N.

Coals of Bukachacy mines, Moscow basin. S. Naumova. *Trans. U. Geol. Prospecting Serv.* (U. S. S. R.) 285, 1-[illegible] (1934); *Neues Jahrb. Mineral., Geol., Ref. II*, 1937, 274-6.—The coals are of lower Carboniferous age and are found at a depth of 40-45 m. They are of 3 kinds: (1) Humus coal, volatile constituents (V. C.) 40-45%, ash 5-20%; H 6, C 60-68%. Non-caking; sub-varieties: (a) paper or leaf-coal, brown and soft; (b) fibrous, mainly fusite; (c) banded, alternate bands of fusite, clarite and splentarite; (d) semifusterous, mainly clarite; (e) xylo-vitritic durite; (f) dull, durite. (2) Sapropel-humus coal, V. C. over 60%, H over 6%; (a) semi-dull clarite and durite with masses of sapropel; (b) banded, fusite and splentarite with many residues of algae; (c) finely banded, bands of sapropel and (thinner) fusite. (3) Sapropel, V. C. up to 90%, hydrocarbons up to 80%, H 7-8%, (a) highband, brown, dense, conchoidal fracture; (b) semi-highband, as the preceding but contg. microspores and fragments of cuticle. C. A. 31[illegible]

A50-51A METALLURGICAL LITERATURE CLASSIFICATION

NAUMOVA, S. N.

ca

21

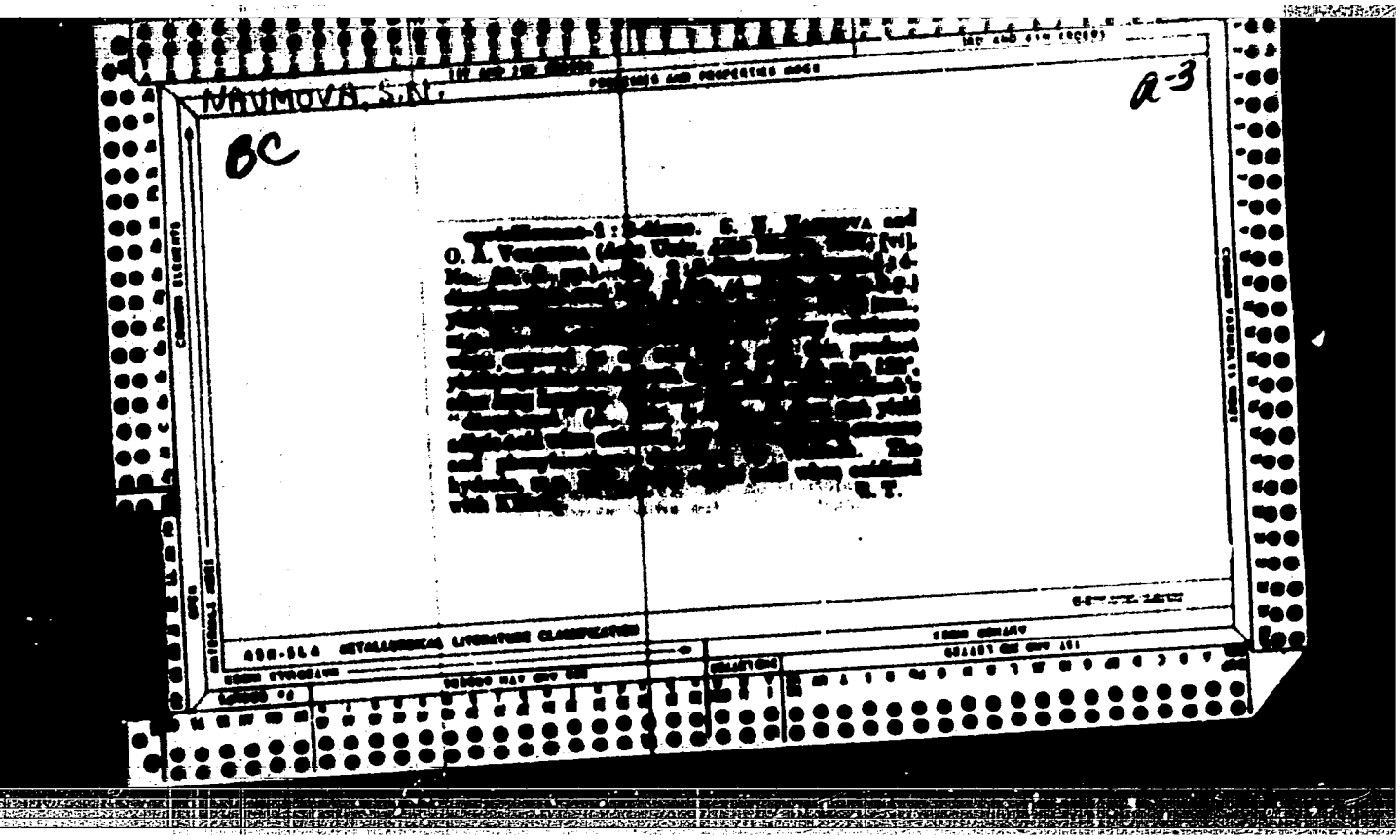
Petrographic characteristics of the Kamchatka (shaly) coal from the [illegible] point deposit. S. N. Naumova. Khim. Tverdogo Topliva 7, 7[illegible]-6(19[illegible]).— This coal contains moisture 2-5, ash 16-40, volatile substances 38-43 (on org. substance) and C 78-81%; it has a heating capacity of [illegible]-6800 cal., and caking properties. According to its burning ability it belongs to a class between gas and bituminous coals. The main ingredient of coal is clarain with a small admixt. of fusain. Macroscopically the coal is black in color and is a striped coal of various gloss with layers filled with calcite.

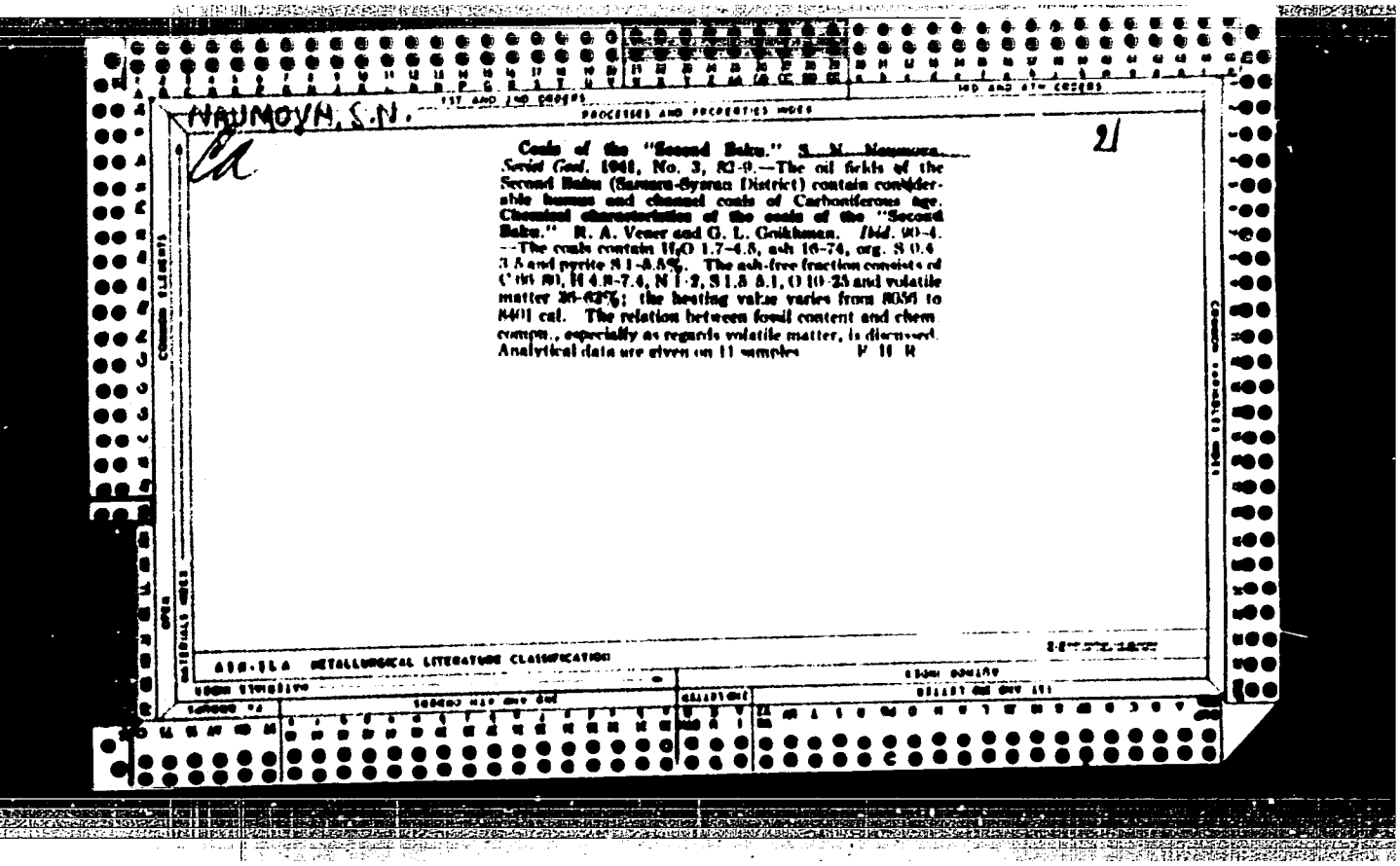
A. A. Podgorny

Petrographic characteristics of the Kamchatka Tertiary (Miocene) coal in the [illegible] Bay. S. N. Naumova. Khim. Tverdogo Topliva 7, [illegible]-[illegible](19[illegible]).—This coal contains moisture 2-3, ash 10-15, S 0.[illegible], volatile matter 3[illegible]-47 and C 78-80% (the last two values for org. substance); it is a caking coal and has a calorific value of 8100 cal. [illegible]-fusain and fusain-clarain coals are found in the deposit. Durain and fusain are absent in both varieties. Seven references.

A. A. Podgorny

ASO-SLA METALLURGICAL LITERATURE CLASSIFICATION





NAUMOVA, S.N.

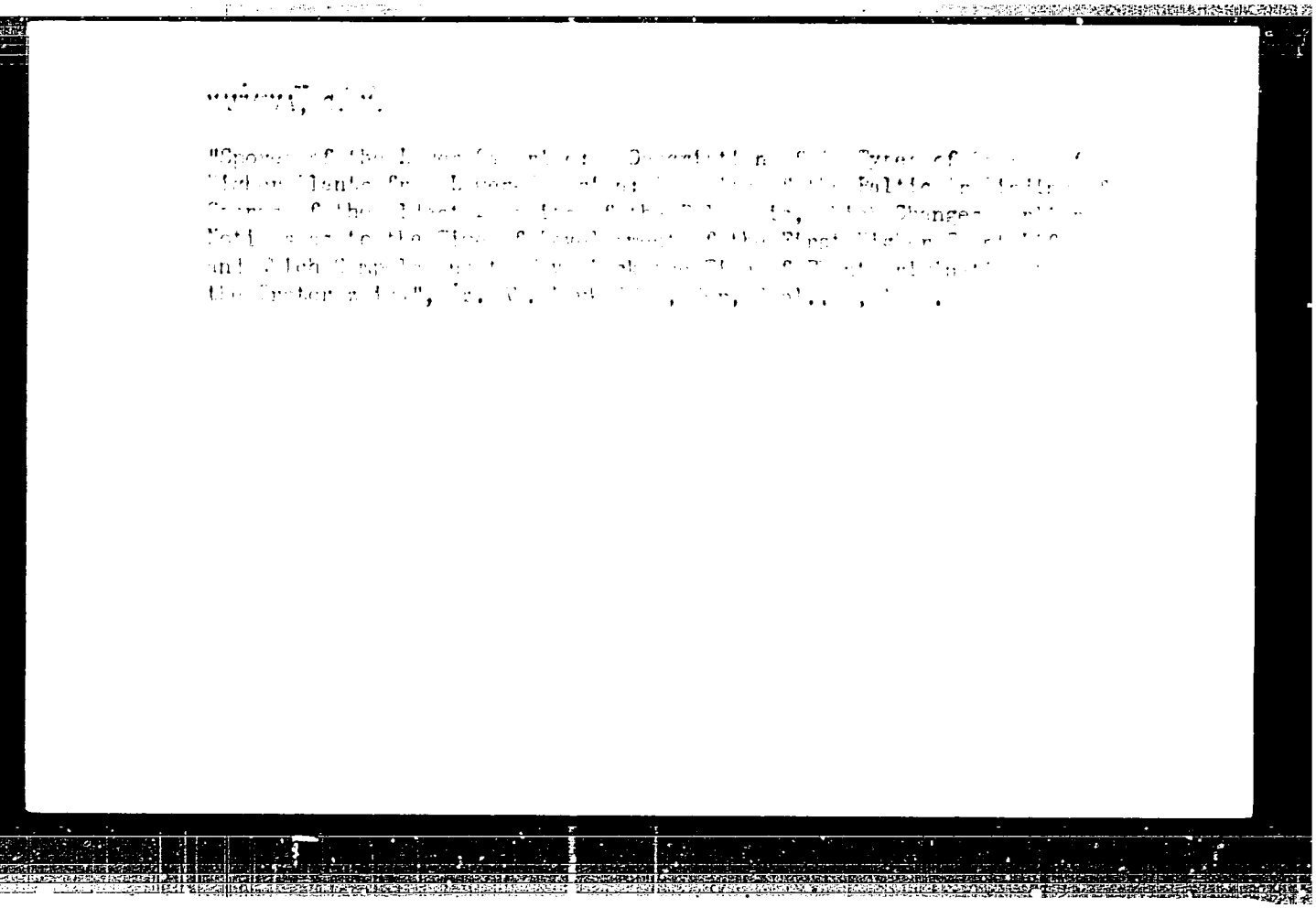
21

Coals of the "Second Baku." S. N. Naumova. *Soviet Geol.* 1941, No. 3, 82-9.—The oil fields of the Second Baku (Samara-Syzran District) contain considerable humus and channel coals of Carboniferous age. Chemical characteristics of the coals of the "Second Baku." R. A. Veber and G. L. Gritchman. *Ibid.* 90-4.—The coals contain H_2O 1.7–4.8, ash 16–74, org. S 0.4–3.8 and pyrite S 1–8.8%. The ash-free fraction consists of C 81, H 4.8–7.4, N 1–2, S 1.8–8.1, O 10–25 and volatile matter 36–62%; the heating value varies from 8056 to 8491 cal. The relation between fossil content and chem. compn., especially as regards volatile matter, is discussed. Analytical data are given on 11 samples. P. H. R.

[redacted], S.N.

KOIFMAN, B.Ye.; NAUMOVA, S.N.

Testing the hardness of coal by the damping oscillation method. Sov.geol. no.21:114-123 '47. (MLRA 8:8)
(Coal--Testing)



NAUMOVA, S. N.

Paleobotany - Ural Mountain Region

Spores of ancient formations in the western slope of the southern Urals. Trudy MOIP. Otd. geol., 1, 1951.

Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified.

NAUMOVA, S. N.

USSR/Geology - Devonian 11 Jul 53

"The Age of the Pyarnus Layers," S. N. Naumova and S. V. Tikhomirov

DAN SSSR, Vol 91, No 2, pp 379-381

Studied the sub salt-bearing terrigenous deposits of the middle Devonian which belongs to the Moscow syneclase. Also studied sandy layers which underlie the Narovskiy layers on the Glavnoy field. State that these layers were formerly compared with the Pyarnus layers near the Pyarnus River. Presented by Acad D. V. Nalivkin.

276T50

NAUMOVA, S.N.

NAUMOVA, S.N.; OBRUCHEV, V.A., akademik, glavnyy redaktor; KRISHTOFOVICH, A.N., otvetstvennyy redaktor; LADYCHUK, L.P., redaktor; KISELEVA, A.A., tekhnicheskiy redaktor.

Spore and pollen complexes of the upper Devonian of the Russian Platform and their significance in stratigraphy. Trudy Inst. geol.nauk no.143:3-198 '53. (MLRA 8:2)

1. Deystvitel'nyy chlen Akademii nauk USSR (for Krishtofovich).
(Russian Platform--Pollen,Fossil)
(Russian Platform--Spores (Botany), Fossil)

ABRAMOV, S.K., kand.tekhn.nauk; AVERSHIN, S.G., prof., doktor tekhn.nauk; AMMOSOV, I.I., doktor geol.-min.nauk; ANDRIYEVSKIY, V.D., inzh.; ANTROPOV, A.N., inzh.; AFANAS'YEV, B.L., inzh.; BERGMAN, Ye.V., inzh.; BLOKHA, Ye.Ye., inzh.; BOGACHEVA, Ye.N., inzh.; BUKRINSKIY,V.A., kand.tekhn.nauk; VASIL'YEV, P.V., doktor geol.-min.nauk; VINOGRADOV, B.G., inzh.; GOLUBEV, S.A., inzh.; GORDIYENKO, P.D., inzh.; GUSEV, N.A., kand.tekhn.nauk; DOROKHIN, I.V., kand.geol.-min.nauk; KALMYKOV, G.S., inzh.; KASATOCHKIN, V.I., doktor khim.nauk; KOROLEV, I.V., inzh.; KOSTLIVTSEV, A.A., inzh.; KRATKOVSKIY, L.F., inzh.; KRASHENINNIKOV, G.F., prof. doktor geol.-min.nauk; KRIKUNOV, L.A., inzh.; LEVIT, D.Ye., inzh.; LISITSA, I.G., kand.tekhn.nauk; LUSHNIKOV, V.A., inzh.; MATVEYEV, A.K., dots., kand.geol.-min.nauk; MEPURISHVILI, G.Ye., iznh.; MIRONOV, K.V., inzh.; MOLCHANOV, I.I., iznh.; NAUMOVA, S.N., starshiy nauchnyy sotrudnik; NEKIPELOV, V.Ye., inzh., PAVLOV, F.F., doktor tekhn.nauk; PANYUKOV, P.N., doktor geol.-min.nauk; POPOV, V.S., inzh.; PYATLIN, M.P., kand.tekhn. nauk; RASHKOVSKIY, Ye.E., inzh.; ROMANOV, V.A., prof., doktor tekhn. nauk; RYZHOV, P.A., prof., doktor tekhn.nauk; SELYATITSKIY, G.A., inzh.; SPERANSKIY, M.A., inzh.; TERENT'YEV, Ye.V., inzh.; TITOV, N.G.,doktor khim.nauk; GOKAREV, I.F., inzh.; TROYANSKIY, S.V., prof., doktor geol.-min.nauk; FEDOROV, B.D., dots., kand.tekhn.nauk;FEDOROV, V.S., inzh. [deceased]; KHOMENTOVSKIY, A.S., prof., doktor geol.-min.nauk; TROYANOVSKIY, S.V., otvetstvennyy red.; TERPIGOREV, A.M., red.; KRIKUNOV, L.A., red.; KUZNETSOV, I.A., red.; MIRONOV, K.V., red.; AVERSHIN, S.G., red.; BURTSEV, M.P., red.; VASIL'YEV, P.V., red.; MOLCHANOV, I.I., red.; RYZHOV, P.A., red.; BALANDIN, V.V., inzh., red.; BLOKH, I.M., kand. tekhn.nauk, red.; BUKRINSKIY, V.A., kand.tekhn.nauk, red.; VOLKOV, K.Yu., inzh., red.; VOROB'YEV, A.A., inzh., red.; ZVONAREV, K.A., prof. doktor tekhn.nauk, red.

(Continued on next card)

ABRAMOV, S.K.--- (continued) Card 2.
ZDANOVICH, V.G., prof., doktor tekhn.nauk, red.; IVANOV, G.A., doktor geol.-min.nauk, red.; KARAVAYEV, N.M., red.; KOROTKOV, G.V., kand.geol.-min.nauk, red.; KOROTKOV, M.V., kand.tekhn.nauk, red.; MAKKAVEYEV, A.A., doktor geol.-min.nauk, red.; OMEL'CHENKO, A.N., kand.tekhn.nauk, red.; SEMERZON, E.M., kand.geol.-min.nauk, red.; USHAKOV, I.N., dots., kand. tekhn.nauk, red.; YABLOKOV, V.S., kand.geol.-min.nauk, red.; KOROLEVA, T.I., red.izd-va; KACHALKINA, Z.I., red.izd-va; PROZOROVSKAYA, F.L., tekhn.red.; NADEINSKAYA, A.A., tekhn.red.

[Mining; an encyclopedic handbook] Gornoe delo; entsiklopedicheskii spravochnik. Glav. red. A.M.Terpigorev. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po ugol'noi promyshl. Vol.2. [Geology of coal deposits and surveying] Geologiia ugol'nykh mestorozhdenii i marksheiderskoe delo. Redkolegiia toma S.V.Troianskiy. 1957. 646 p. (MIRA 11:5)

1. Chlen-korrespondent AN SSSR (for Karavayev)
(Coal geology--Dictionaries)

YANSHIN, A.L.; GARETSKIY, R.G.; NAUMOVA, S.N.; SHLEZINGER, A.Ye.

Position of the border of the Russian Platform east of the Caspian Sea. Biul.MOIP. Otd.geol. 36 no.4:76-96 Jl-Ag '61. (MIRA 14:9)

(Russian Platform)

GARETSKIY, R.G.; YEGOROV, I.P.; NAUMOVA, S.N.; SHLEZINGER, A. Ye.

Lower Carboniferous and upper Devonian deposits in the Zhanasu region (the South-Emba gravity maximum). Dokl. AN SSSR 136 no.6:1418-1421 F '61. (MIRA 14:3)

1. Geologicheskiy institut AN SSSR. Predstavleno akademikom A.L. Yanshinym.
(Emba Valley--- Geology, Stratigraphic)

NAUMOVA, S.N.; PAVLOVSKIY, Ye.V.

Find of plant remains (spores) in Torridonian schists of Scotland. Dokl. AN SSSR 141 no.1:181-182 N '61.
(MIRA 14:11)

1. Geologicheskiy institut AN SSSR. Predstavleno akademikom N.M.Strakhovym.

(Scotland--Spores(Botany), Fossil)

GARETSKIY, R.G.; NAUMOVA, S.N.; SHLEZINGER, A.Ye.

Stratigraphy and formational nature of upper Devonian deposits in the region of the Southern-Emba gravity maximum. Dokl. AN SSSR 141 no.4:931-933 D '61. (MIRA 14:11)

1. Geologicheskiy institut AN SSSR. Predstavleno akademikom A.L. Yanshinym.
(Emba Valley--Geology, Stratigraphic)

NAUMOVA, S.N.

"The most ancient flora of the earth of the Lower Paleozoic and of the Pre-Cambrium."

"Morphological classification of the Holocene in the USSR."

Reports to be submitted for the Intl. Conf. on Palynology Tucson, Arizona. 23-27 Apr '62.

Geological Inst. AS USSR, Moscow

BOLKHOVITINA, N.A.; ZAKLINSKAYA, Ye.D.; KARA-MURZA, E.N.; LIUBER, A.A.; MARKOVA, L.G.; NAUMOVA, S.N.; POKROVSKAYA, I.M.; SAMOYLOVICH, S.R.

Preparation of the Interdepartmental Conference on the Taxonomy and Nomenclature of Fossil Spores and Pollen. Paleont. zhur. no.3:130-135 '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut.
(Palynology—Congresses)

NAUMOVA, Sofia Nikolaeva; DESSILA-CODARCEA, Marcela; ILIESCU, Violeta

About the presence of riff in certain crystallophyllian formations in the central Meridional Carpathian Mountains. Comunicarile AR 12 no.11:1235-1237 N '62.

1. Comunicare prezentata de M.Savul, membru corespondent al Academiei R.P.R.

GARETSKIY, R.G.; DAL'YAN, I.B.; NAUMOVA, S.N.; SHLEZINGER, A.Ye.

Relationship between the lower and upper structural stages of the platform mantel in the Turan Platform. Izv. AN SSSR. Ser. geol. 28 no.3:83-92 Mr '63. (MIRA 16:2)

1. Geologicheskiy institut AN SSSR, Moskva.
(Turan Lowland--Geology, Structural)

NAUMOVA, Sofia Nikolaevna; DESSILA-CODARCEA, Marcela; ILIESCU, Violeta

Remains of plants in the complexes of crystalline shales in the central Transylvanian Alps. Studii cerc geol 9 no.1:127-132 '64.

1. Geological Institute of the Geological Committee.

NAUMOVA, T. I.

DEMENT'YEVA, M.I.; NAUMOVA, T.I.

Laboratory column for analysis of α-butenes. Trudy Inst. "Khimgas" no.6:275-282 '51. (MLRA 7:8)
(Butene)

ACCESSION NR: AR3010385 S/0081/63/000/015/0143/0143

SOURCE: RZh. Khimiya, Abs. 15G203

AUTHOR: Naumova, T. I.; Vasilevskaya, M. V.

TITLE: Analysis of the products of oxo synthesis

CITED SOURCE: Sb. Metody* issled. produktov neftepererabotki i neftekhim. sinteza. L., Gostoptekhizdat, 1962, 196-198

TOPIC TAGS: Oxo synthesis, gas chromatography, adsorption chromatography, liquid chromatography, hydrocarbon, chromatographic analysis

TRANSLATION: Techniques were developed for analyzing gaseous (GP) and liquid products of oxo synthesis by gas-adsorption and gas-liquid chromatography. H_2, O_2, N_2, CH_4, and CO are determined in GP by chromatographing a 1.5 ml sample at 30° with a column (200.0 x 0.4 cm) filled with molecular sieve 13X of particle size 0.025 to 0.050 cm, at a flow rate of the developer gas He or Ar of 40 ml/min. In determining C_2--C_8 hydrocarbons, a 1.5 ml sample is chromatographed at 30° with a two-section column (200.0 + 400.0 x 0.4 cm) filled (30:100 and 15:100, respectively) with triethylene gylcol n-butyrate on brick of particle size 0.025 to

Card 1/2

ACCESSION NR: AR3010385

0.050 cm, at a flow rate of the developer gas He of 60 ml/min. In determining the aldehydes, a 1.5 ml sample is chromatographed at 30° with a column (400.0 x 0.4 cm) filled with the triester of pentaerythritol monochlorohydrin and valeric acid on brick (5:100), at a flow rate of the developer gas He of 40 ml/min. The liquid products are analyzed at 50° with a two-section column (200.0 +200.0 x 0.4 cm) filled with polyethylene glycol adipate on brick (25:100 and 15:100, respectively) at a flow rate of the developer gas H_2 of 30 ml/min, and with detection by means of thermal conductivity. B. Kolokolov

DATE ACQ: 23Sep63 SUB CODE: CH ENCL: 00

Card 2/2

DENLNT'YeVA, M.I.; NAUMOVA, T.I.; [illegible], N.A.

Using chromatographic analysis in the process of obtaining isobutylene. Neftekhimiia 2 no.6: [illegible] N-D '62. (MIRA 17:1)

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

L 47[illegible]-65 EWT(m)/EPF(n) Pr-4 RM

ACCESSION NR: AP5006824 S/0065/65/000/002/0052/0055

AUTHOR: Dement'yeva, M. I.; Naumova, T. I.; Yefimenkova, I. M. 19 18 B

TITLE: Determination of aromatic hydrocarbons by gas-liquid chromatography

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 2, 1965, 52-55

TOPIC TAGS: aromatic hydrocarbon, chromatography, chromatographic analysis

ABSTRACT: The products of catalytic reforming, aromatization, and extraction which consist of paraffin, napthene, and aromatic hydrocarbons (60-140°C) are normally analyzed through gas-liquid chromatography. However, the direct determination of aromatic hydrocarbons in the presence of hydrocarbons of other classes is difficult in that the time of their retention coincides with the time of retention of certain paraffin and napthene hydrocarbons. In such cases it is necessary to separate the aromatic hydrocarbons on silica gel and then divide them using gas-liquid chromatography. The enters of glycol and succinic or adipic acids are very selective toward aromatic hydrocarbons. The experimental data which were obtained with respect to the coefficients of selectivity of esters indicate that their use as an

Card 1/2

L 47990-65

ACCESSION NR: AP5006824

immobile liquid phase would make it possible to determine arcmatic hydrocarbons in some hydrocarbon products. The method provides satisfactory accuracy and good productivity. The maximum error is 0.7% abs. and the sensitivity is 0.05% abs. The quantitative composition of the products was based on the areas of the peaks from the chromatography without considering correction coefficients. It was not possible to use the correction coefficients since the composition of the paraffin-napthene part was determined by totals. Orig. art. has: 3 figures, 4 tables.

ASSOCIATION: VNIIneftekhim

SUBMITTED: 00 ENCL: 00 SUB CODE: FP, OC

NO REF SOV: 000 OTHER: 000

Card 2/2

69047

5.3700(B)

AUTHORS: Maksimov, V. N., Semenenko, K. N., Naumova, T. N., Novoselova, A. V.

S/078/60/005/03/009/048
B004/B002

TITLE: Aluminum Acetates

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 3, pp 558 - 564 (USSR)

ABSTRACT: After a brief survey of publications, the authors report on their investigation of aluminum acetates. They produced aluminumtriacetate from aluminum ethylate and acetic anhydride. $Al(CH_3COO)_3$ is easily soluble in liquid ammonia under the development of $Al(CH_3COO)_3 \cdot 3NH_3$. During thermal decomposition, the triacetate gradually passes over into di- and monoacetate (Figs 1,2). The data of the radioanalysis taken by means of an RKD camera and Fe radiation of the BSV tube are given by table 2. The authors also investigated basic aluminum acetates. From $Al(OH)_3$ plus acetic acid and also from $AlCl_3$ plus acetic acid they obtained the same compound $Al(OH)(CH_3COO)_2$ whose radioanalysis is given in table 1. The basic diacetate has a rhombic, face-centred lattice with the lattice constants being $a = 13.62 \pm 0.01$ Å, $b = 14.40 \pm 0.01$ Å, $c = 12.60 \pm 0.01$ Å. On the basis

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Aluminum Acetates

of the density being 1.67, a lattice cell contains 16 molecules. The basic diacetate is little soluble in water, chloroform and liquid SO_2, and insoluble in alcohol, acetone, ether, and liquid ammonia. On the basis of the thermogram (Fig 3) taken by means of the Kurnakov pyrometer type PK-42, the formula $Al(OH)(CH_3COO)_2$ was found to be right, not $Al_2O(CH_3COO)_4 \cdot H_2O$. During the reaction of sodium acetate (or barium acetate) and aqueous solutions of $AlCl_3$, a basic salt was obtained whose composition is between $Al(OH)(CH_3COO)_2 \cdot 2H_2O$ and $Al(OH)(CH_3COO)_2 \cdot 2.5H_2O$, and whose radiogram (Table 2) differs from that of $Al(OH)(CH_3COO)_2$. The thermogram of figure 4 shows the water separation of this salt during heating. The nonaqueous salt thus developing, however, radiographically differs from the salt produced by means of free acetic acid, despite the same stoichiometric composition. By the influence of sodium acetate on aluminum sulphate, the compound $Al(OH)(CH_3COO)_2 \cdot 2.5H_2O$ was obtained, and during the reaction of sodium acetate and aluminum nitrate, $Al(OH)(CH_3COO)_2$ developed; both were radiographically identified. Aluminum nitrate with acetic anhydride developed a

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Aluminum Acetates

S/078/60/005/03/009/048
B004/B002

compound of varying composition which always contained up to 3% NO_3^-, and whose radiogram was identical with that of aluminum triacetate. There are 2 figures, 4 tables, and 22 references, 4 of which are Soviet.

SUBMITTED: November 22, 1958

Card 3/3

SEMENENKO, K.N.; NAUMOVA, T.N.

Polymorphism of beryllium bromide and iodide. Zhur.strukt.khim. 4 no.1:67-72 Ja-F '63. (MIRA 16:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Beryllium bromide) (Beryllium iodide)
(Polymorphism)

SEMENENKO, K.N.; NAUMOVA, T.N.

Structure and some properties of aluminum halides. Zhur. neorg. khim. 9 no.6:1316-1322 Je '63 (MIRA 17:8)

SEMENENKO, K.N.; NAUMOVA, T.N.; GOROKHOV, L.N.; SEMENOVA, G.A.; NOVOSELOVA, A.V.

Interaction between the chlorides of Al and Fe. Dokl. AN SSSR 154 no.1:169-170 Ja'64. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Novoselova).

SEMENENKO, K.N.; NAUMOVA, T.N.; GOROKHOV, L.N.; NOVOSELOVA, A.V.

Interaction between the chlorides of aluminum and beryllium.
Dokl. AN SSSR 154 no. 3:648-649 Ja '64. (MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet im.M.V.Lomonosova.
2. Chlen-korrespondent AN SSSR (for Novoselova).

NAUMOVA, T.S.

USSR/Human and Animal Physiology - The Nervous System. 1-3

Abs Jour : Ref Zhur - Biol., No 5, 1958, 18551

Author : T.S. Naumova

Inst :

Title : Movement in Nervous Processes in Connection with the Complement of a Temporary Association.

Orig Pub : Fiziol. zh. SSSR, 1956, 42 No 8, 695-703

Abstract : Following the cessation of auditory stimulation applied at definite intervals, in the parietal and temporal areas of 13 out of 33 rabbits similar changes were observed in electrical activity, changes which followed the stimulation pattern. When the cortex was polarized at the motor site representing an anterior extremity with a steady current of 10 to 100 a, the electrical activity in the parietal and temporal areas was unchanged, while with a stronger polarization (100 to 2000 a) either a reduction in electrical activity was observed or the appearance of fluctuations in

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Abs Jour : Ref Zhur - Biol., No 4, 1958, 18559

it numbering 5 to 7 per second. The sound which was applied during polarization produced changes in electrical activity close to those which were observed before polarization and in a number of cases also gave rise to movement fo the paw, a fact which attests to the creation of a dominant focus in the polarized area. Upon auditory stimulation an increase in the rhythm and amplitude of potentials could be observed in the motor area, while in the parietal and temporal areas there was seen to be a depression of electrical activity and the appearance or intensification of a rhythm of 5 to 7 per second. The latter, in the author's opinion, indicates the emergence of an inhibitory state in the areas surrounding the dominant focus. With a sharp change in electrical activity in the polarized region (the appearance of sinusoidal fluctuations with a frequency of 20 to 22 per second) reinforcement of the dominant focus may be accompanied by irradiation through the

NAUMOVA, T.S.

Diffusion component of conditioned reactions. Zhur. vys. nerv. deiat. 12 no.4:686-694 Jl-Ag '62. (MIRA 17:11)

1. Electrophysiology Laboratory, Institute of Brain, U.S.S.R. Academy of Medical Sciences, Moscow.

NAUMOVA, T.S.

Modification of neural processes during the closure of temporary bonds. Fiziol.zhur. 42 no.8:695-703 Ag '56. (MLRA 9:11)

1. Nauchno-issledovatel'skiy institut mozga, Moskva.
(ELECTROENCEPHALOGRAPHY,
eff. of closing of conditioned & unconditioned foci of irritation in cerebral cortex (Rus))
(CEREBRAL CORTEX, physiology,
closing of conditioned unconditioned foci of irritation, EEG (Rus))

MAUKOVA, T.S. (Moskva)

The so-called "activating systems" of the brain stem; review of the literature. Zhur.nevr. i psikh. 56 no.8:668-675 '56. (MLRA 9:11)
(BRAIN STEM, physiology,
activating systems, review (Rus))

EXCERPTA MEDICA Sec.2 Vol.10/9 Phy.Biochem. Sept 57

NAUMOVA, T.S.

3996. NAUMOVA T.S. Brain Res. Inst., Moscow. * Changes in electrical activity of caudate nucleus due to establishment of temporal relationship (coupling) between auditory and motor analysors FIZIOL. Ž. 1957, 43/1 (14-21) Illus. 5 (Russian text)

During application of direct current to the cortical motor zone in rabbits, an acoustic stimulus produces a motor response, associated with depression of the electrical activity of the caudate nucleus, similar to the reaction to sound before polarization. However, the changes in the cortical zone of the motor analysor produced by sound and movement are different from those before polarization. The motor response to acoustic stimulation does not occur in the case of development of slow oscillations of the cortical EG and synchronization in cortical and caudate nucleus EG. The synchronization is interpreted as an electrographic correlate of subcortical inhibition.

Simonson - Minneapolis, Minn.

T-10

USSR/Human and Animal Physiology - Nervous System.
Cortex of Cerebral Hemispheres.

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32146

Author : Naumova, T.S.
Inst ✗ :
Title : Electrographic Data on the Problem of Bilateral (Paired) Activity of Cerebral Hemispheres.

Orig Pub : Fiziol. zh. SSSR, 1957, 43, No 4, 310-316

Abstract : In a rabbit in which a dominant focus had been created by a gradual current in the cortical representation of one of the extremities, electrograms (EG) of the symmetrical motor regions were analogous during carrying out of a motor reaction of this extremity to sound (closure of a temporary junction). If in response to the sound the motor reaction appeared in other effectors, the EG of symmetrical motor regions were characterised by opposite changes of the amplitude of oscillations.

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L 6 Electrophysiology Sci Res Inst Benin

USSR/Human and Animal Physiology - Nervous System. T-10
Cortex of Cerebral Hemispheres.

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32146

This phenomenen was observed when polarization caused significant increase in the rate of oscillations in the focus of the electrotonic.

Card 2/2

NAUMOVA, T.S.

Problems in the structure and function of the reticular formation and its part in the analysor system. Zhur.vys. nerv. deist. 8 no.4:625-627 Jl-Ag '58 (MIRA 11:9)

(BRAIN STEM,
reticular form., role in system of analyzers (Rus))

NAUMOVA, T. S. (Moskva)

Issledovaniye elektricheskikh potentsialov retikulyarnykh struktur srednego i prodolgovatogo mozga v protsesse vyrabotki oboronitel'nykh uslovnykh refleksov u sobak

report submitted for the First Moscow Conference on Reticular Formation, Moscow, 22-26 March 1960.

NAUMOVA, T.S.

Individual characteristics of electrical processes in structures of the brain stem and cerebral cortex in dogs. Zhur. vys. nerv. deiat. 11 no.1:133-141 Ja-F '61. (MIRA 14:5)

1.Laboratory of Electrophysiology, Institute of Brain, U.S.S.R. Academy of Medical Sciences, Moscow.
(BRAIN) (CEREBRAL CORTEX)

NAUMOVA, T.S., STANKEVICH, I.A. (Moskva)

Results of the conference on the problem "Structure and function of the nervous system." Zhur. nevr. i psikh. 61 no.11:1737-1740 '61. (MIRA 15:2)

(NERVOUS SYSTEM)

NAUKOVA, T. S.

Physiology

Dissertation: "Changes in the Electrical Conductivity of the Cortex, the Nucleus Caudatus, and the Corpus Geniculatum Mediale in the Closing of the Auditory and Motor Analysors in Rabbits." Cand Biol Sci, Acad Med Sci USSR, 16 Mar 54. (Vechernyaya Moskva, Moscow, 4 Mar 54)

SO: SUM 213, 20 Sept 1954

NAUMOVA, T. S.

EXCERPTA MEDICA Sec.2 Vol.9/10 Physiology,etc. Oct56

4759. NAUMOVA T.S. Lab. of Electrophysiol., Res. Inst. of Brain, Moscow. Electrical activity of a dominant cortical focus in reflex reactions to sound (Russian text) FIZIOL. Z. 1956, 42/4 (361-371) Illus. 5

Direct electric current applied to the cortical motor fields of rabbits produces a dominant focus which changes the EEG pattern according to its direction and strength. A current of 5 to 10 μa. and a duration of fractions of a second is subthreshold. At a strength of 10-100 μa., anelectrotonus increases the EEG frequency, while catelectrotonus does not produce essential changes. At a strength from 100 to 2,000 μa., both anode and cathode increase the frequency of oscillations (up to 19 per sec.). During prolonged stimulation with strong direct current, synchronization of EEG oscillations with respiratory and cardiac rhythm was frequently observed, and there was a moderate increase in motor activity of the contralateral limb.

Simonson - Minneapolis, Minn.

NAUMOVA, T.S.

Dynamics of the electrical processes in the structures of the medulla oblongata and in the cortex during reflex reactions in dogs to irritations of varying intensity. Zhur.vys.nerv.deiat. 12 no.1:118-127 Ja-F '62. (MIRA 15:12)

1. Electrophysiology Laboratory, Institute of Brain, U.S.S.R. Academy of Medical Sciences, Moscow.
(CONDITIONED RESPONSE) (ELECTROENCEPHALOGRAPHY) ([redacted]ES)

NAUMOVA, T.S.; LYUBIMOV, N.N.; TROFIMOV, L.G.

One of the mechanisms of appearance of the diffuse component of the conditioned response reaction. Bul. eksp. biol. i med. 56 no.7:3-8 Jl'63 (MIRA 17:3)

1. Iz elektrofiziologicheskoy laboratorii (zav. - prof. L.G. Trofimov) Instituta mozga (direktor - deystvitel'nyy chlen AMN SSSR S.A. Sarkisov) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR A.V. Lebedinskim.

[illegible]EYEV[illegible], I.[illegible]; NAUMOVA, [illegible]

[illegible]aracteristics of th[illegible] [illegible]fect of nivaline on the higher nervous activity in d[illegible]. [illegible] vys. nerv. deiat. 14 no. 4:667-67[illegible] Jl-Ag '64. [illegible] 17:12

1. Institute of Brain, [illegible] Academy of Medical Sciences, Moscow.

NAUMOVA, T.S.

Characteristics of the dynamics of cortical processes at the stage of stable defensive conditioned reflexes. Zhur. vys. nerv. deiat. [illegible]

1. Laboratoriya elektrofiziologii Instituta mozga AMN SSSR.

Наумов, Т.В.

AUTHOR: Kudryavtsev, I.V., Professor, Doctor of Technical Sciences and Naumova, T.V., Engineer. 96-7-16/25

TITLE: The influence of large plastic deformations on the mechanical properties of austenitic steels. (Vliyaniye bol'shikh plasticheskikh deformatsiy na prochnostnye svoystva austenitnykh staley).

PERIODICAL: "Teploenergetika" (Thermal Power) 1957, Vol.4, No.7, pp. 64 - 67 (U.S.S.R.)

ABSTRACT: Investigations were made to establish the effect of cold working on the durability of superheater tubes in the high pressure boilers of the Cherepetsk Power Station (Cherepetskoy GRES). The causes of the appearance of brittle cracks in the cold worked bends of superheater tubes made of steel ЭИ-257 were not known. It was considered possible that the fatigue strength of the metal had been reduced by the high degree of plastic deformation that occurred at the bends. The influence of small plastic deformations had been studied earlier but the present work was on the influence of very great cold working on the fatigue strength of steels ЭИ-257 and 1Х18Н12Т most of the work was done

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The influence of large plastic deformations on the mechanical properties of austenitic steels. (Cont.)

96-7-16/25

on steel ЭИ-257. The analyses of the steels are as follows:

Steel	Percentage composition								
	C	Cr	Ni	W	Mo	Mn	Si	S	P
ЭИ-257	0.14	13.3	14.1	2.2	0.5	0.53	0.48	0.02	0.03
1Х18Н12Т	0.12	17.9	11.2	-	0.3	1.20	0.68	0.02	0.02

The degree of cold working is estimated from the geometry of tube bends and it is found that the greatest possible strain is 89% and the minimum 50%. Specimens were strained in torsion. The increase in the hardness of specimens of steel ЭИ-257 as a result of cold working in torsion are given in Fig.2., on the Vickers scale with a load of 10 kg. The distribution of hardness across the thickness of the section is shown in Fig. 3 where it is seen that the increase is least at the centre of the specimen. The changes in other mechanical properties of steel ЭИ-257 as a result of cold working are shown in Fig. 4. The cold working

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The influence of large plastic deformations on the mechanical properties of austenitic steels. (Cont.)

96-7-16/25

increased the hardness and strength. It has a great influence on the yield point and reduces the strain. The influence of tempering steel ЭИ-257 was investigated on specimens with 50% cold working. They were maintained for one hour at temperatures of 300 °, 600 ° and 800 °C and tested in tension at room temperature. The results are given in Fig. 5 which shows that treatment at 300 °C did not affect the tensile strength but that higher temperatures reduced it considerably. Cold working in torsion reduced the impact strength of the steel, but even for very high strains the impact strength did not fall below 10 kg/cm^2. The results are given in Fig. 6 which shows that the impact strength is the same at room temperature and at 580 °C. Standard impact test specimens were prepared from metal which had been cold-worked and heat-treated. The tests were carried out at room temperature and at 580 °C, the results of the tests are given in Table 2. They show that the impact strength of steel ЭИ-257 is reduced by cold-working and subsequent ageing.

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The influence of large plastic deformations on the mechanical properties of austenitic steels. (Cont.)

96-7-16/25

Fatique tests were made on smooth samples of steels ЭИ-257 and 1Х18Н12Т. The results are given in Fig. 7. From the tests it is shown that cold-working with subsequent ageing increases the fatigue limit of steel ЭИ-257 by about 3'/% at 20 °C. Similar cold working with the same subsequent ageing at a test temperature of 580 °C leads to a noticeable decrease in the fatigue limit (see Fig. 8).

It is concluded that the fatigue strengths of both steels are increased as a result of cold working up to 50% both at room temperature and at the working temperature of 580 °C. Further increase in the strain up to 300% does not cause a noticeable change in the fatigue limit at room temperature but at 580 °C there is some reduction in the yield limit. Thus, cold plastic working that occurs during bending of the tube cannot be the cause of fatigue failure in the super-heater tube provided that the plastic deformation does not cause cracks in the metal. The strength of steel ЭИ-257 under static load increases with cold working.

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NAUMOVA, T. V.

129-3-1/14

AUTHORS: Kudryavtsev, I. V., Doctor of Technical Sciences, Prof., Naumova, T. V., Eng. and Rozenman, L. M. Tekhn.

TITLE: Influence of work hardening on the mechanical properties of carbon steels. (Vliyaniye naklepa na mekhanicheskiye svoystva uglerodistykh staley).

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, No.3, pp.2-6 (USSR).

ABSTRACT: The authors considered it of interest to study the influence of work hardening on the strength characteristics of steel, namely, hardness, impact strength, fatigue limit as well as the behaviour during static tension. The investigations were effected on the most widely used structural materials, namely, hot rolled carbon steel "45" and steel "3". For obtaining large degrees of work hardening, the method of torsion was selected, using cylindrical specimens of 19 and 22 mm dia. The maximum deformations were so chosen that there should be no cracks at the surface of the specimen, i.e. the relative elongation of the external fibres, ε, equalled 120 and 65% respectively. The results of the influence of the degree of deformation on the hardness are graphed in Fig.1, p.3. The influence of annealing for one hour at

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Influence of work hardening on the mechanical properties of carbon steels.

300, 600 and 800°C after maximum deformation on the hardness is graphed in Fig.2; Fig.3 gives the influence of the degree of deformation on the mechanical properties of the steel, whilst Fig.4 gives the influence of the testing temperature on the impact strength for degrees of freedom of 0, 20, 65, 80 and 120%. Fig.5 gives the change of the impact strength of steel as a function of the tempering temperature after work hardening with a maximum degree of deformation. It is concluded that large plastic deformations, which are equivalent to elongation in tension of 65 and 120%, bring about an appreciable increase in the hardness, yield point and ultimate strength of carbon steels. Simultaneously, the values of the relative elongation and contraction decrease. However, the decrease of the relative contraction of the cross section is only a slight one. Plastic deformation reduces the impact strength of both the tested steels for all the investigated temperatures (up to 600°C). The fatigue strength of the investigated steels, determined on smooth specimens, increases with increasing degree of work hardening; no increase in the fatigue strength was observed in the case of notched specimens.

129-3-1/14

Influence of work hardening on the mechanical properties of carbon steels.

Annealing of the steel at 300°C after the work hardening leads to a further increase in the hardness of the metal and to a decrease of the impact strength, whilst annealing at 600°C causes a reduction in these values. Annealing of work hardened steel at 800°C eliminates completely the changes in the mechanical properties caused by plastic deformations.
There are five figures and one table.

ASSOCIATION: TsNIITMASh.

AVAILABLE: Library of Congress.

Card 3/3

NAUMOVA, T.V.

25(2,5) PHASE I BOOK EXPLOITATION SOV/2885

Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya

Povysheniye prochnosti elementov konstruktsiy i detaley mashin (Increasing the Strength of Constructional and Machine Elements) Moscow, Mashgiz, 1959. 210 p. (Series: Its: [Sbornik] kn. 91) 5,500 copies printed.

Ed. (Title page): I. V. Kudryavtsev, Doctor of Technical Sciences, Professor; Ed. (Inside book): A. G. Nikitin, Engineer; Tech. Ed.: V. D. El'kind; Managing Ed. for Literature on Transport Machine Building (Mashgiz): K. A. Ponomarev, Engineer.

PURPOSE: This collection of articles is intended for designers, process engineers, and scientific research workers in the machine-building industry.

COVERAGE: The collection contains papers dealing with experimental work done recently by TsNIITMASh. The experiments are concerned with the practical use of surface work hardening in industry. Industrial practices intended to increase the strength and service life of machine parts and constructional elements are discussed. Several articles are devoted to problems of increasing the fatigue strength of machine parts by work hardening. Industrial practices of NKMZ in Kramatorsk in external burnishing of large machine parts are presented. Tools and fixtures used in surface work hardening are described. No personalities are mentioned. References follow each article.

Kudryavtsev, I. V., T. V. Naumova and L. N. Rozenman [Engineers]. Effect of Work Hardening on the Strength of Carbon Steels 129

Changes in hardness, ductility, yield, ultimate stress, impact toughness, and fatigue limit of carbon steels due to work hardening are investigated. Results are presented in tables and diagrams.

Kudryavtsev I. V., and T. V. Naumova. Effect of Large Plastic Deformations on the Strength Properties of Austenitic Steels 159

The investigation described in this article was conducted in order to establish the effect of extensive strain hardening on the fatigue resistance of heat-resistant steels. In addition to fatigue tests, short-time tensile, compression, impact, and hardness tests were taken. The tests were taken at room temperature (20°C) and at elevated temperatures (580°C). The effect of heat treatment on strain-hardened steels and the simultaneous effect of strain hardening and artificial aging were investigated.

Aleksandrov, B. I. [Candidate of Technical Sciences]. Fatigue Resistance of EI723 Pearlitic Steel at High Temperatures 174

The method of investigation and preparation of samples are described. The influence of temperature and external burnishing with rollers, the sensitivity to stress concentration, and the changes in microstructure due to cyclic

Card 8/10 [illegible]

Gulyayev, A. P. [Doctor of Technical Sciences, Professor], and N. F. Vorokhanova, [Engineer]. Microscopic Investigation of Plastic Deformation 188

This article describes an experimental investigation of plastic deformation with the use of the optical microscope. A titanium model of the microsection was then studied in an electron microscope. Plastic flow, changes in grain shape, and generation of cracks are discussed.

IV. MODERN STRENGTH-TESTING EQUIPMENT

Yatskevich, S. I. [Candidate of Technical Sciences], and N. Ye. Naumchenkov [Engineer]. Model U-200 Machine for Fatigue Testing Shafts With up to 200-Millimeter Diameters 201

This machine, designed and built by TsNIITMASh, requires only 16 kw. for fatigue testing 200-millimeter shafts. It employs the principle of resonance for loading. Other design considerations and operating techniques are discussed.

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S/114/60/000/008/006/010
E193/E255

18.8200 2708, 2808, 3515

AUTHORS: Kudryavtsev, I. V., Doctor of Technical Sciences, Professor and Naumova, T. V., Engineer

TITLE: Fatigue Strength of Welded Austenitic Steel Tubes

PERIODICAL: Energomashinostroyeniye, 1960, No. 8, pp. 35-37, 42

TEXT: The object of the present investigation was to determine the cause of frequent failures of the steam supply lines at the Cherepetsk GRES, where cracks, showing evidence of brittle fracture, had developed in welded austenitic steel steam pipes. Since low fatigue strength of the metal in the vicinity of the welded seams was considered to be the most likely cause of these failures, the welding procedure and subsequent heat treatment were varied, to study their effect on the fatigue strength of the tube material. The composition (nominal and factual) of the austenitic steel ЭИ157(EI257), used in this application, was as follows (in %): Nominal: 0.15 C, 13-15 Cr, 13-15 Ni, 2-2.75 W, 0.40-0.60 Mo, max. 0.70 Mn, 0.80 Si, max. 0.03 S, max. 0.085 P. Factual: 0.16 C, 14.1 Cr, 14.1 Ni, 2 30 W, 0.50 Mo, 0.49 Mn, 0.46 Si, 0.022 S, 0.019 P. The fatigue tests were carried out both at room

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S/114/60/000/008/006/010
E193/E255

Fatigue Strength of Welded Austenitic Steel Tubes

temperature and at 580°C, i.e. at the working temperature. Both unwelded and welded specimens were tested. In the former case, two methods of welding were employed: in method No. 1, the seam was formed in 15-20 passes, narrow fillets being deposited in each pass, and metal in the vicinity of the weld being allowed to cool to 50°C after each pass. In method No. 2, the seam was formed in 10-14 passes without intermediate cooling, and wider fillets were deposited in each pass. Both welded and unwelded specimens were tested after having been subjected to each of the following heat treatments: (a) stabilizing treatment (20 h at 800°C); (b) austenitizing treatment (1 h at 1050°C); and (c) austenitizing treatment (1 h at 1150°C). The endurance limit, σ_1, of unwelded steel in the as-received condition, tested at 580°C, was 29.5 kg/mm^2, and was reduced to 21.5-22.5 kg/mm^2 when given any of the above-described heat treatments. Test pieces welded by method No.1 had a considerably higher σ_1 than those made by method No. 2, the respective values being 28.5 and 21.5 kg/mm^2. The application of treatment (a) or (b) brought about a decrease in σ_1 of welded test

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Fatigue Strength of Welded Austenitic Steel Tubes

pieces tested at 580°C; no change in σ_1 of welded test pieces was observed after subjecting them to treatment (c). As a rule, fracture of welded test pieces due to fatigue at room temperature started at the root of the weld, i.e. near the inside wall of the tube. It was concluded from the results obtained that, since σ_1 of the metal in the vicinity of the weld was not much lower than that of unwelded material, the failure under investigation could not have been caused by insufficiently high fatigue strength of the steel in this region. There are 5 figures, 5 tables and 4 Soviet references.

Card 3/3

L 10314-66 EWT(d)/EWT(m)/EWP(v)/EWP(t)/EWP(k)/EWP(b)/EWP(l)/EWA(c) JD/HW

ACC NR: AT5028253 SOURCE CODE: UR/2590/65/108/000/0182/0196

AUTHORS: Kudryavtsev, I. V. (Doctor of technical sciences); Naumova, T. V. (Engineer)

ORG: Central Scientific Research Institute of Technology and Machine Construction (Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya)

TITLE: Devices for increasing machine part durability through surface cold working by the hammering method (with a riveter)

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya. Trudy, v. 108, 1965. Povysheniye dolgovechnosti detaley mashin metodom poverkhnostnogo naklepa (Increasing the durability of machine parts by the surface riveting method). 182-196

TOPIC TAGS: cold working, surface hardening, riveting/ UP 0.5 riveter, SUP 0.5 riveter, UP 0.25 riveter, UP 7 riveter, UP 7M riveter, ChM 3 riveter, UVP-1 riveting attachment

ABSTRACT: Surface cold working devices using the hammering method to harden surfaces 1--30 mm deep are described. The UP-0.5 (see Fig. 1) has a riveter driven

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ACC NR: AT5028253

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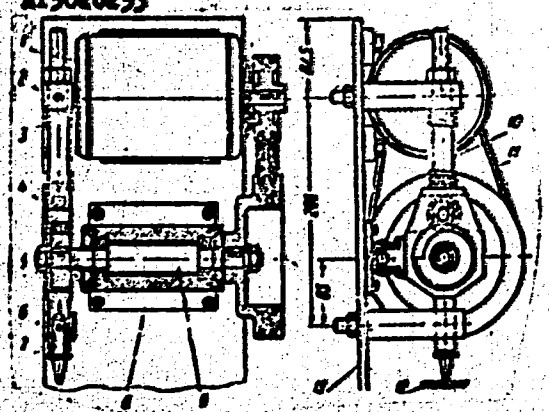

Fig. 1. UP-0.5 riveter.

at 700--1500 cpm by an electric motor. The impact energy of 0.5 kg affects the surface to a depth of 3 mm. The 5UP-0.5 is similar to the UP-0.5 except that it has 5 riveting heads which raise its capacity to ≈ 1 m^2/hr. The UP-0.25 is used primarily to cold work fillets with 0.25-kg impact energy (1800--2800 cpm). The UP-7 is a single-spindle riveter similar to the UP-0.5 but has an impact energy of 7.5 kg at 600 cpm (cold working to 14--mm depth). The UP-7M has a spring preloading mechanism which permits adjustment of impact energy. A four-spindle

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ACC NR: AT5028253

3

riveter using UF-0.5 spring-loaded riveters was developed by NKMZ and is used to cold work large plates (up to 1700 mm wide). A pneumatic riveter for cold working of fillets on large shafts is also used by NKMZ. It has 3.3-kg impact energy at 1150 cpm and can handle shafts of 25--80 mm diameter. Another pneumatic NKMZ riveter used for perimeter cold working of large plates has 5.4--kg impacts at 1200 cpm. Pneumatic riveter UM-3 with vibrating roller for cold working threads and fillets has 4.5-kg impacts at 1250 cpm from a MO-10 pneumatic drive operating at 5 kg/cm^2. Attachments UVP-1 and UVP-2 for internal threads and surfaces produce 2.1- and 4.2-kg impacts at 1500 cpm from a MO-19 pneumatic drive. The mechanical riveter proposed by engineer M. I. Kuz'min, the NKMZ rotary riveter, and the rotary riveter proposed by the Kharkov factory im. Malyshev use similar operating principles but no specifications are given. Orig. art. has: 14 figures and 7 tables.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 013

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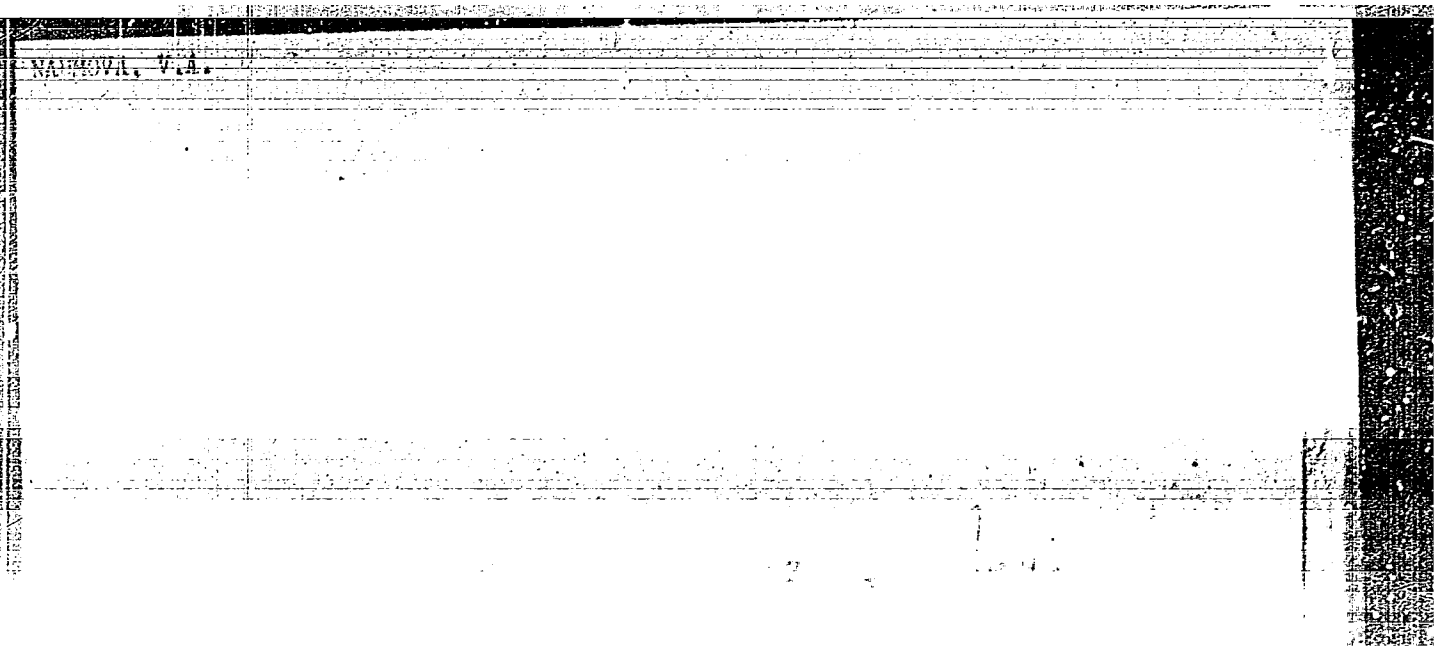

YUSHKOV, [illegible] Ivanovich, kand.tekhn.nauk; NAZAROV, [illegible] Grigor'yevich; FEL'DMAN, Akim Konstantinovich; GOLOVKO, Ye.N., red.

[Repair of the technological equipment of woodpulp and paper enterprises] Remont tekhnologicheskogo oborudovaniia tselliulozno-bumazhnykh predpriiatii. Moskva, Lesnaia promyshlennost', 1965. 120 p. (MIRA 18:9)

NAUMOVA, V.I.

Myxedema and hypothyreosis in children. Vop.okh.mat.i det. 5 no.3:56-62 My-Je '60. (MIRA 13:7)

1. Iz kafedry detskikh bolezney lechebnogo fakul'teta (zav. - prof. M.M. Bubnova) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova (dir. - dotsent M.G. Sirotkina).
(MYXEDEMA)

NAUMOVA, V.I.

Changes in the cardiovascular system in children with thyrotoxicosis. Pediatriia 38 no.8:72-75 Ag '60. (MIRA 13:12)

1. Iz kafedry detskikh bolezney lechebnogo fakul'teta (zav. - prof. M.M. Rubnova) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova (dir. - dotsent M.G. Sirotkina)
(HYPERTHYROIDISM) (CARDIOVASCULAR SYSTEM)

NAUMOVA, V. I., CAND MED SCI, "CHANGES IN THE CARDIO-VASCULAR SYSTEM IN CHILDREN WITH disturbed FUNCTION OF THE THYROID GLAND." MOSCOW, 1961. (FIRST MOSCOW ORDER OF LENIN MED INST IM I. M. SECHENOV). (KL, 3-61, 234).

NAUMOVA, Y.I.; BELIKHOVA, Ye.L.

Treatment of thyrotoxicosis in children. Vop. okh. mat. i det. 6 no.4:22-28 Ap '61. (MIRA 14:6)

1. Iz kafedry detskikh bolezney lechebnogo fakul'teta (zav. - prof. M.M.Bubnova) II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova (dir. - dotsent M.G.Sirotkina) i Vsesoyuznogo instituta eksperimental'noy endokrinologii (dir. - prof. Ye.A. Vasyukova).

(THYROID GLAND—DISEASES)

ZHDANOV, V.M.; DREYZIN, R.S.; MEKLER, L.B.; YANKEVICH, O.D.; NAUMOVA, V.I.

Study of the properties of adenoviruses and their agglutinins by fractionation using chromatography on DEAE cellulose. Vop. virus no.6:688-692 N-D '63. (MIRA 17:6)

1. Institut virusologii imeni D.I. Ivanovskogo, AMN SSSR, Moskva.

NAUMOVA, V.I., dotsent, kand. ekonom. nauk

Textile industry of the member countries of the Mutual Economic Assistance Council. Tekst. prom. 24 no.8:80-82 Ag '64. (MIRA 17:10)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti imeni S.M. Kirova (LITLP).

5(2) SOV/78-4-9-13/44

AUTHORS: Zinov'yev, A. A., Naumova, V. I.

TITLE: The Perchlorates of Nickel and Cobalt

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 9, pp 2009-2013 (USSR)

ABSTRACT: The above compounds were obtained by dissolving nickel carbonate, or cobalt carbonate, respectively, in dilute chloric acid. The solutions were evaporated to beginning crystallization in an air bath, and then left to crystallize at room temperature. The composition of the crystal hydrates was determined analytically. The loss of water from the hexahydrates with rising temperature, and transition to tetra- (110°) and dihydrate (130°) are shown in the diagrams given in figures 1 and 2. At a pressure of only 1 torr this transition was observed already at 70° and 90°, respectively. The preparation of anhydrous perchlorates was not possible, not even in vacuum, owing to decomposition. The crystal hydrates of Ni- and Co-perchlorates underwent a phase transformation in the solid state between 50° and 70°. This was proved thermographically

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The Perchlorates of Nickel and Cobalt

(Figs 3-8) and by means of the polythermal lines of solubility (Tables 1, 2, Figs 9, 10). Table 3 gives the density of the different crystal hydrates. There are 10 figures, 3 tables, and 5 references.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences, USSR)

SUBMITTED: June 12, 1958

KORCHEMNAYA, Ye.K.; RYABCHIKOV, D.I.; NAUMOVA, V.I.

Separation of small amounts of cerium from the main components of a chromium-nickel alloy. Zav.lab. 28 no.5:539-540 '62. (MIRA 15:6)

1. Institut geokhimii i analiticheskoy khimii imeni V.I.Vernadskogo AN SSSR.
(Chromium-nickel alloys) (Cerium--Analysis)

MARCHENKO, N.A.; RAYBER, Z.S.; LIPKO, S.K.; OSTMAKOVA, V.T.; KRYMER, S.Ye.; LOMEKHOV, A.S.; STREL'NIKOVA, N.P.; KORCHEMNAYA, Ye.K.; NAUMOVA, V.I.

Exchange of experience. Zav.lab. 28 no.10:1192-1193 '62. (MIRA 15:10)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina (for Marchenko, Rayber, Lipko). 2. Severnyy nikel'nyy kombinat (for Kreymer, Lomekhov). 3. Noril'skiy gorno-metallurgicheskiy kombinat imeni A.P. Zavenyagina (for Strel'nikova). 4. Institut geokhimii i analiticheskoy khimii imeni V.I. Vernadskogo (for Korchemnaya, Naumova).

(Chemistry, Analytical)

KETILADZE, Ye.S.; ZHILINA, N.N.; MEKLER, L.B.; NAUMOVA, V.K.; LOZHKINA, A.N.; ORLOVA, N.N.; NISEVICH, L.L.

Use of the fluorescent antibody technique for rapid differential diagnosis of influenza and parainfluenzal and adenovirus diseases. Vop. virus. 9 no.3:348-353 My-Je '64. (MIRA 18:1)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

NAUMOVA, V.K.; MEKLER, L.B.; ZHILINA, N.N.; KETILADZE, Ye.S.

A method for rapid diagnosis of viral respiratory infections.
Vop. virus 9 no.4:502-505 Jl-Ag '64. (MIRA 18:7)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

MEKLER, L.B.; CHIBISOVA, V.A.; FRIZYUK, S.G.; NAUMOVA, V.K.

Simple method of analyzing fluorescein-protein conjugates.
Vop. virus. 9 no.5:631-634 S-O '64. (MIRA 18:6)

1. Institut virusologii imeni Ivanovskogo (dir.- deystvitel'nyy chlen AMN SSSR prof. V.M. Zhdanov) AMN SSSR, Moskva.

MEKLER, L.B.; NAUMO..., ..S.

Producing [illegible] γ-globulin adequate for clinical and laboratory differential diagnosis of virus infections. Vop. virus. 10 no.2:235-240 Mr-Ap '65. (MIRA 18:10)

1. Institut v[illegible] imeni D.I. Ivanovskogo AMN SSSR, Moskva.

MAYEVSKAYA, V.P.; NAUMOVA, V.P.; LYSENKO, Ye.I.

Studying the process of escape of mercury fumes from differential pressure gauges during their graduation and use. Gig. i san. 21 no.9: 91 S '56. (MLRA 9:10)

1. Iz Khar'kovskoy laboratorii Vsesoyuznogo nauchno-issledovatel'skogo instituta okhrany truda VTsSPS.
(PRESSURE GAUGES) (MERCURY--TOXICOLOGY)

RUGG, D.S.; NAUMOVA, V.T. [translator]

Present state of cartography in the U.S.A. [a abridged translation from the German]. Geod. i kart. no.9:68-75 S '62. (MIRA 15:10)
(United States—Cartography)

ACCESSION NR: AP4009835 S/0191/64/000/001/0052/0054

AUTHOR: Nikolayev, A. N.; Yartsev, V. G.; Kulikov, N. V.; Vitenberg, A. R.; Matveyeva, Ye. A.; Ter-Mkrtchan, G. S.; Naumova, V. V.

TITLE: Glass plastics for constructional purposes

SOURCE: Plasticheskiye massy*, no. 1, 1964, 52-54

TOPIC TAGS: plastics, glass plastics, binders, polyester, resin, epoxy resins, styrene, glass lubricants, glass fillers, plastics, hexamethylenediamine, metaphenylene diamine

ABSTRACT: A very simple and effective technological process for the continuous manufacture of shaped products from glass plastics is described. The products obtained on the stretching apparatus are characterized by high strength and can be applied in various industrial fields. The relationship between the hardeners and the processibility of resin on the continuous apparatus is investigated for a styrene-epoxide compound at a hardening temperature of 140 C. The properties of the styrene-epoxide compound with different hardeners

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ACCESSION NR: AP4009835

are tabulated. The influence of new lubricants, As-1, AF-1, PVE, PVE-3, on the strength of glass plastic was investigated. The relationship between the strength of glass plastic pipes under axial compression and the glass filler content is established. Suggestions for the best choice of binders, lubricants and fillers are given. Glass plastic rods of small diameter made on the continuous machine have a high breaking strength similar to the strength of steel cables. Orig. art. has: 2 tables.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 10Feb64 ENCL: 00

SUB CODE: CH, MA NO REF SOV: 000 OTHER: 000

Card 2/2

ZHUKHOVITSKIY, A.A.; TURKEL'TAUB, N.M.; MALYASOVA, L.A.; SHLYAKHOV, A.F.; NAUMOVA, V.V.; POGREBNAYA, T.I.

Chromatography without gas carriers. Zav. lab. 29 no.10:1162-1166 '63. (MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut yadernoy geofiziki i geokhimii.

NIKOLAYEV, N.; YARTSEV, V.G.; KULIKOV, N.V.; VITENBERG, A.R.;
MATVEYEVA, Ye.A.; TER-MKRTCHAN, G.S.; NAUMOVA, V.V.

Glass plastics for building purposes. Plast.massy no.1:52-54
'64. (MIRA 17:6)

Pavlov ref.

The effect of trional on the higher nervous system of the dog. V. V. Naumova. (Med. Inst., Kharkov). *Fiziol. Zhur., Akad. Nauk URSR.* R.S.R.1, No. 4, 20-6 (Russian summary). 26-7 (1945).—Expts. were performed on 4 adult dogs with different neurostability patterns. Three pos. reflexes were established in all the expts. Cogs. and a differentiation reaction to one of the reflexes. Trional was administered in bulk of bread in doses of 0.5 and 0.25 g. 15, 30, 45 and 60 min. prior to the reflex testing. In the dogs of low neurostability trional brought about a disturbance in the differentiation reaction, the appearance of an ultraparadoxical phase and a gradual reduction in the intensity of the reflex responses down to their complete disappearance. In the dog with the high type of neurostability 30 min. after the administration of the trional the reflex intensities remained unaffected. However, they began to ebb after 45 min.; the reflex responses to light became completely obliterated after 60 min. In the case of this dog intermittent extinction with no trional fortification appeared after the 24th test, and complete extinction upon repeated administration of trional after the 13th test. From this it was concluded that 0.5 g. of trional causes in all dogs a weakening of the active inhibition as well as of the process of stimulation, corresponding to the manifestations of the second phase of the effects of sleep-inducing drugs. The effect of trional was more forceful and appeared earlier in the low neuro-resistant type of dogs. Trional (0.25 g.) was administered 4 times to each of 4 dogs. In the low neuroresistant type changes in the conditioned reflexes began to appear 45 min. after the drug administration and expressed themselves as disturbances in the differentiation function and in the appearance of the compensation phase on a high level and of the paradoxical phase after 60 min. In the high neuroresistant type of dog 60 min. after the drug administration there appeared an inhibition of the reflex differential function and a slight increase in the reflex intensity, which corresponds to the first phase of the effect of sleep-inducing drugs. On the basis of the expt. evidence trional was considered as belonging to the group of nervous system paralysers.

B. S. Lazin