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DINER, G.G.; YEREMENKO, V.S.

Mechanical engineering study and practical work in school workshops.
Politekh. obuch. no.8:38-42 Ag '58. (MIRA 11:9)

1.Srednyaya shkola No.20, g. Serov.
(Manual training)

S/204/62/002/004/012/019
E075/E435

AUTHORS: Levin, S.Z., Diner, I.S., Gurevich, G.S.
TITLE: Catalytic hydrogenation of dimethylester of
terephthalic acid

PERIODICAL: Neftekhimiya, v.2, no.4, 1962, 566-572

TEXT: In view of scarcity of data on the industrial preparation of hexahydrophthalic acid, hexahydroisophthalic acid and hexahydro-p-xylyleneglycol, an investigation was carried out of the hydrogenation of phthalic acids. The catalysts examined were: Zn-Cr, Cu-Cr-Ni, Ni-Cr and Ni on Kieselguhr. The experiments were conducted in a steel autoclave with a powdered catalyst suspended in the molten reactant. Ni-Cr and Ni on Kieselguhr catalysts gave an 85 to 89% yield of hexahydrodimethylterephthalate under a wide range of pressures and temperatures. For the Ni on Kieselguhr catalyst, pressures from 150 to 300 atm and temperatures from 180 to 300°C can be used. The best conditions are: pressure 150 atm, temperature 240°C, giving yields of the product of up to 90%. The product constitutes a mixture of stereoisomers of hexahydrodimethylterephthalate. The main
Card 1/2

Catalytic hydrogenation ...

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hydrogenation reaction leads to the formation of cis - isomer and the presence of trans - isomer is due to a secondary isomerization reaction. The ratio between the two isomers depended strongly on the reaction temperature and pressure, the highest yield of the trans - isomer obtained being 60 to 70%. Hexahydro-p-cylene-glycol was prepared by using Cu-Cr catalyst reduced with H₂. The apparatus and conditions used were similar to those given above (temperature - 300°C, pressure - 300 atm). To obtain the highest yields of the product (94 to 95%) the catalyst concentration must be between 8.0 and 10.0% wt. of the feedstock. An unsuccessful attempt was made to produce individual isomers of the glycol by hydrogenation of the pure isomers of hexahydrodimethylterephthalate. There are 1 figure and 6 tables. ✓

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov (All-Union Scientific Research Institute of Petrochemical Processes)

Card 2/2

RESEARCH AND PROPERTY INDEX

1ST AND 2ND ORDERS 3RD AND 4TH ORDERS

Carboids formed in catalytic hydrogenation I. S. Pina and M. S. Nemtsov *Khim. Tverdogo Tela* 2, 727 (1932). The existing methods for the detn. of carboids in hydrogenation are reviewed and the following procedure is recommended: the used catalyst is burned in an elementary-analysis furnace after a preliminary Ca₂ extr. and drying. In addn. to the detn. of C a detn. of the increase in the wt. of the boat with the catalyst is made, which permits detn. of the amt. of O which combined with the inorg. part of the catalyst during the combustion. The hydrogenation conditions are of great influence on the type of carboids formed. Thus with an increase in H pressure the amt. of carboids decreases and their content of H increases. The carboids are more solid with a lowering in the reaction temp. A decrease in the amt. of H used in the hydrogenation lowers the efficiency of the latter, whereby a larger amt. of carboids is formed and the latter are lower in H. A. A. B.

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

E 27712

MATERIALS INDEX CHEMISTRY

1ST AND 2ND ORDERS 3RD AND 4TH ORDERS

CA

PROCESSES AND PROPERTIES: NICKEL

22

Destructive hydrogenation in the presence of catalysts.
 I. S. Dimer and M. S. Nemtsov. *Khim. Tverdogo Topiva* 3, 837-87(1932).—Hydrogenation expts. were conducted with a Grosny mixed-base fuel oil of the following characteristics for the purpose of detg. the variations caused by changing the amt. of stock charged into the autoclave, the velocity of agitation, the severity of the processing conditions and the temp.: flash point 126°, sp. gr. 0.890, pour point 35°, E_{50} viscosity 4.08, paraffin 10, resins 18 and fraction b. 300° 0%. NiO was used as catalyst at 430-450°. A theoretical analysis of the process is presented and the relationships of thermal decompn., condensation and hydrogenation are discussed. The energy of activation of the thermal decompn. of the mixt. amounted to 38,000-70,000 cal. II. *Ibid.*, 2, 136-51 (1933).—A Ni catalyst which was preliminarily reduced and NiO charged directly into the autoclave give identical results in high-pressure hydrogenation. Increase in the amt. of catalyst up to 20% acts favorably. Coke formation under the above conditions ceases in the presence of 5-8% of the catalyst. The small amt. of carboids formed on the catalyst is stabilized, and no addnl. formation is observed. Increase of the partial H pressure causes a stabilization of the hydrogenation that is reflected mainly in the degree of the aromatization of the products of hydrogenation. The content of aromatic hydrocarbons in the light fractions probably is not in excess of the equil. concn. The influence of the H pressure on the content of unsatd. compds. is of a kinetic nature, because their concn. is a function of the sp. velocities of the thermal decompn. and the hydrogenation. The unsatd. compds. are the coke-forming agents. Therefore, the elimination of coke formation is governed by the velocity of the reaction. Conclusion: Destructive hydrogenation can be carried

ASB-15A METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS

OPEN

MATERIALS INDEX

SEARCHED

INDEXED

FILED

APR 1933

U.S. DEPARTMENT OF COMMERCE

BUREAU OF MINES

Geological Survey

WASH. D.C.

CA 71

Hydrogenation of petroleum residues and tars in continuously operated equipment. J. S. Dinger and M. S. Nemtsov. *Khim. Tverdого Topiva* 5, 428-49(1974).

Grossly paraffinic bottoms hydrogenated in a lab. app. at 150 atm. with a continuous withdrawal of the lighter products, yielded, in the presence of Ni or of an Ni₂ molybdate catalyst suspended in the oil, up to 92% (by wt.) of distillates. The gasoline fraction, obtained because of its immediate evapn. on formation and withdrawal from the reaction zone, was but slightly hydrogenated. It was very stable, but had a low octane no. The kerosene and gas-oil fractions may be used as Diesel fuel or as cracking or hydrogenating stocks. Coke was not formed, and asphaltene added to the original stock were converted into liquid products. The gasoline prepd. from shale tar had an octane no. of 58.5 and that from phenols from primary Cherepnkhov tars 92.0. At lower rates of hydrogenation the degree of decurnjn. was considerably increased and the capacity of the app. lowered. The use of a catalyst pressed into balls with a binder eliminated the necessity of removing the finely dispersed catalyst from the oil. In hydrogenation at 520° of a fraction of Emba crude oil b. 175-300° together with recycling stock at a ratio of 1:2 in the presence of 6 vols. of H₂ at 200 atm. (at 20°) the yield of gasoline b. below 180° was 27% (by wt.) on the product charged or 77% on the original stock.

A. A. Boettingk

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

62

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21

Destructive hydrogenation of peat tar. I. Hydrogenation in the liquid phase. I. I. Andreevskii, I. S. Diger, B. A. Mikhalev, M. S. Nemtsov and M. I. Ryskin *Khim. Tverdogo Topliva* 6, 926-42(1965). - In an attempt to det. the quantity and quality of com. fuels obtained by the hydrogenation of peat tars, the following catalysts were investigated: MoO_3 , H_2MoO_4 , MoO_3 (active), SnS , MoS_2 and Cr_2O_3 (amorphous). MoS_2 gives good results. The process was carried out in 2 stages: (1) a liquid-phase crude tar was hydrogenated at low temp. under conditions to prevent coke formation and to give the least amt. of gas; (2) the distillates were converted into gasoline at high temp. (vapor-phase stage). The best conditions for the first stage were: temp. about 430-440°, pressure 200 atm. and the amt. of circulating gas = 0.1 l./hr. Analytical data for various peat tars and details of expts. and app. are given. Ten references.

A. A. Podgorny

AS A - L L A METALLURGICAL LITERATURE CLASSIFICATION

SA

A 53

90. Brownian Motion of an Axially-Symmetrical Particle.
G. A. Krut'kov and I. I. Dimer. *Comptes Rendus (Doklady) de l'Acad. des Sciences, U.S.S.R.* 3. 6. pp. 242-246, 1935. In German.—In a previous paper [see Abstract 2310 (1935)], Krut'kov has discussed the following problem: An axially symmetrical particle is, at time $t = 0$, given component angular velocities p, q, r ; determine the probability that at time t the component angular velocities will have values between $p, p + dp$; $q, q + dq$; $r, r + dr$. Using the notation in which the probability is denoted by (dp, dq, dr) , expressions are now derived for (dp, dq, dr) for a spherically symmetrical particle, for (dw, dr) , (dp, dq) , (dx) , where $w^2 = p^2 + q^2$ and $x = p$ or q . Expressions are likewise derived for the most probable values of r^2, p^2, q^2 and the rotational energy. I. S. G. T.

AISI-31A METALLURGICAL LITERATURE CLASSIFICATION

ca

2/

Motor fuel for peat tar. II. Destructive hydrogenation in the vapor phase. I. S. Altman, I. S. Diner, B. V. Mitkalev, M. S. Nemtsov and M. I. Ryskin. *Akim. Izv. Vys. Shk. 7*, 31-48(1930).—The following conditions for the vapor-phase stage were found best: temp. 320-540°, H pressure 200 atm. The H concn. was 0:1 0:1 (ratio by vol.), and its consumption was 2.5-3.0% by vol. of stock. The special catalyst was prepd. by pressing (200 atm.) 50 parts of Cr₂O₃ (amorphous), 25 parts of NiS₂ and 25 parts of ZnO. The two stage process of the hydrogenation of peat tars yields about 68-72% comp. products. Detailed app. and expts. are given. **Twenty-four references.** III. **The characteristics of the product of hydrogenation.** S. M. Vainshtein, I. S. Diner, M. S. Nemtsov, T. V. Nizovkina and T. A. Stoyanova. *Ibid.* 359-67.—The liquid-phase process yielded a gasoline (I) different in chem. compn. from that (II) obtained in the vapor-phase process. I contained considerable unsatd. hydrocarbons and little S, whereas II was low in unsatd. hydrocarbons and contained no S. The octane values for both gasolines were of the order 70 (max. 1.5 for II). In order to obtain gasoline of higher octane value, tar should be freed first from waxes and solid paraffin. The two-stage treatment of the Gusev and Ural'sk tars yielded 64-86% of aviation benzine. The by-products obtained included low-mol. phenols, low-mol. homologs of pyridine and NH₃. The most rational method of treatment of tar is destructive hydrogenation. Results of analyses of the products are tabulated. Ten references. A. A. P.

ASB-51.6 METALLURGICAL LITERATURE CLASSIFICATION

000

Hydrogenation of C₁₁ aldehydes into alcohols. S. G. Levin, I. S. Diner, and A. Z. Karpov. *Khim. i Tekhnol. Toplina* 1950, No. 8, 8-12. A milt. b. 27-412°, which was composed (in wt.-%) of 22-32 aldehydes (C₁₁-C₁₂), 20 olefinic hydrocarbons, and products of condensation of aldehydes, was hydrogenated 9 hrs. under 300 atm. pressure. With NiS + WS on activated Al₂O₃ as the catalyst, the selectivity and the activity were good. At 180° with the H/charge ratio 1000:1 and the vol. rate 1, the conversion of aldehydes to the corresponding alcs. was 73%. Under these conditions 4.5% of all O-contg. compds. were converted to the hydrocarbons. With an increase in the vol. rate up to 2, the conversion of aldehydes increased to 47.1%. An increase in temp. to 200° and to 230° resulted in higher conversion of aldehydes, (2.0 and 41.2%, resp.), accompanied by still greater conversion to hydrocarbons. With 2NiS.WS as the catalyst at 160-180° (H/charge = 1000:1, vol. rate 2, and 300 atm. pressure) 91.0% of the aldehydes were converted to the corresponding alcs., and only 0.4% of the O-contg. components of the mixt. were reduced to hydrocarbons. Similarly high yields were obtained with Al-coant-Mo catalyst at 250° and the vol. rate 2.0-2.5. This catalyst, in contrast to the other 2, could be regenerated directly in the reactor. A. P. Koltun

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Hydrogenation of C₆-C₈ Aldehydes to Alcohols. sov/65-58-5-9/14

when evaluating the suitability of the process. A number of experiments were carried out at 180°C to investigate the influence of the pressure on the selectivity of the process. Results are given in Table 1. Fig.1 shows that the increase of a pressure to 200 - 300 atms does not alter appreciably the depth of conversion of the aldehydes, but that the selectivity of the process is slightly reduced, and that the yield of alcohols is reduced from 95.8% to 94.6%. Various experiments were also carried out to investigate the influence of the temperature on the process (at 160°C - 220°C and at a pressure of 150 - 300 atms). From results in Table 2 it appears that the process is selective at a temperature of 160°C. The depth of hydrogenation of aldehydes, at a pressure of 150 atms = 54.5% and at a pressure of 300 atms = 65.2%. A 93% - 95% conversion of the aldehydes was achieved at 180° - 200°C and the yield of alcohols = 100%. 48.9% of oxygen-containing compounds were contained in the hydrogenate as against 56.9% in the carbonylated raw material. (Fig.2). Fig.3 shows the influence of temperature at a pressure of 300 atms. The influence of the volumnar

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Hydrogenation of C₆-C₈ Aldehydes to Alcohols. SOV/65-58-5-9 '14

rate of supply of the raw material was tested (Tables 3 and 4 and Fig. 4). The authors also investigated the optimum conditions for carrying out the process on an industrial scale at 150 and 300 atms; it was shown that when using either catalyst the selective hydrogenation of aldehydes can be achieved at volume rates of 1.0 - 4.0. The catalyst 2 NiS.WS₂ was proved to possess high stability. The activity of the catalyst after 5,000 hours was not impaired. The liquid reaction products were identified. The hydrogenate was separated by distillation into the following fractions with a boiling point of 100°- 140°, 140°- 200°C, and a residue boiling above 200°C. The first fraction (33.9%) contained C₅-C₇ hydrocarbons and 0.8% of aldehyde admixtures. The fraction boiling between 100°- 140°C (7.5%) contained about 10% aldehydes. The residue boiling above 200°C (17.2%) contained esters, higher alcohols and polymers. There are 5 Figures, 4 Tables and 1 Soviet reference (page 51).

Card 3/3

ASSOCIATION: LenNII

LEVIN, S.Z.; DINER, I.S.; prinimali uchastiye; DEMBO, A.I., mladshiy nauchnyy sotrudnik; KUCHINSKIY, V.N., mladshiy nauchnyy sotrudnik; KUCHINSKAYA, Z.Ye., mladshiy nauchnyy sotrudnik; MEZHEBOVSKAYA, Z.Ye., mladshiy nauchnyy sotrudnik; BAULIN, V.A., inzh.; KARTYSHOVA, V.M., inzh.; DERGACHEVA, R.D., inzh.; DRABKINA, I.Ye., inzh.

Production of motor fuels and chemical products from Baltic shale tars by the destructive hydrogenation method. Trudy VNIIT no.9:65-90 '60. (MIRA 13:11)

(Motor fuels) (Oils shales)

LEVIN, S.Z.; ~~DINER, I.S.~~; KUCHINSKIY, V.N.; Prinsipali uchastiye:
MOLDAVSKIY, B.L.; KUCHINSKAYA, Z.Ye.; BAULIN, V.A.;
ZISEL'SON, Kh.L.; TUKAY, O.P.

Synthesis of dicyclohexylamine nitrite, an inhibitor of
the atmospheric corrosion of metals. Khim.prom. no.9:566-570
Ag '62. (MIRA 15:9)
(Cyclohexylamine) (Metals--Corrosion)

LEVIN, S. Z.; DINER, I. S.; GUREVICH, G. S.

Catalytic hydrogenation of terephthalic acid dimethyl ester.
Neftekhimia 2 no.4:566-572 J1-Ag '62. (MIRA 15:10)

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

(Terephthalic acid) (Hydrogenation)

ARTYUKHOV, I.M., DINER, I.S., VASIL'YEV, S.F., LAPIDES, A.A., MOSIN, A.M.

Production of olefins by pyrolysis of petroleum products.

Report presented at the 12th Conference on high molecular weight compounds devoted to monomers, Baku, 3-7 April 62

GUREVICH, G.S.; LEVIN, S.Z.; DINER, I.S.

Stereochemistry of cyclohexanedicarboxylic acids. Part 1:
Cis-trans-isomerization of dimethyl ester of cyclohexane-1,4-dicarboxylic
acid. Zhur.ob.khim. 33 no.6:1916-1919 Je '63. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut
neftekhimicheskikh protsessov.
(Cyclohexanedicarboxylic acid) (Stereochemistry)

GUREVICH, G.S.; LEVIN, S.Z.; DINER, I.S.

Stereochemistry of cyclohexanedicarboxylic acids. Part 2: Stereochemistry of the catalytic hydrogenation of dimethyl ether of cyclohexane-1,4-dimethanol. Zhur.ob.khim. 34 no.2:696-699 F '64.

(MIRA 17:3)

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

GUREVICH, G.S.; LEVIN, S.Z.; DINER, I.S.

Production of hydroaromatic dicarboxylic acids. Zhur.prikl.
khim. 37 no. 5:1139-1141 My '64. (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhi-
micheskikh protsessov.

SVESHNIKOV, Aram Arutyunovich; FARMAKOVSKIY, S.P., kand. tekhn. nauk, retsenzent; CHEREDNICHENKO, N.Ya., kand. tekhn. nauk, retsenzent; ~~DINER, L.Ya., nauchnyy red.~~; APTISMAN, M.A., red.; SHISHKOVA, L.M., tekhn. red.

[Applied methods of the theory of random functions] Prikladnye metody teorii sluchainykh funktsii; Leningrad, Gos. soiuзное izd-vo sudostroit. promyshl., 1961. 251 p. (MIRA 14:8)
(Probabilities)

VOLODIN, Boris Grigor'yevich; GANIN, Mikhail Pavlovich; DINER, Isay
Yakovlevich; KOMAROV, Lazar' Borisovich; SVESHNIKOV, Aram
Arutyunovich, doktor tekhn. nauk, prof.; STAROBIN, Kalman
Berkovich; GINZBURG, R.I., kand.tekhn.nauk, retsenzent;
CHEREDNICHENKO, N.Ya., kand. tekhn.nauk, retsenzent; SHAYKEVICH,
I.A., red.; KONTOROVICH, A.I., tekhn.red.

[Manual for engineers on the solving of problems in probability
theory; collection of basic formulas, typical solutions, and
problems for exercises] Rukovodstvo dlia inzhenerov po resheniiu
zadach teorii veroiatnostei; sbornik osnovnykh formul, tipovykh
reshenii i zadach dlia uprazhnenii. [By] B.G.Volodin i dr. Le-
ningrad, Sudpromgiz, 1962. 422 p. (MIRA 15:7)

(Probabilities)

DINER, I. YA.

PHASE I BOOK EXPLOITATION

SOV/6203

Volodin, Boris Grigor'yevich, Mikhail Pavlovich Ganin, Isay Yakovlevich Diner,
Lazar' Borisovich Komarov, Aram Arutyunovich Sveshnikov, Doctor of
Technical Sciences, Professor, and Kalman Berkovich Starobin

Rukovodstvo dlya inzhenerov po resheniyu zadach teorii veroyatnostey; sbornik
osnovnykh formul, tipovykh resheniy i zadach dlya uprazheniy (Handbook
for Engineers on the Solution of Problems in the Theory of Probability;
Collection of Basic Formulas, Typical Solutions, and Practice Problems)
Leningrad, Sudpromgiz, 1962. 422 p. Errata slip inserted. 14,300 copies
printed.

Ed. (Title page): A. A. Sveshnikov; Reviewers: R. I. Ginzburg, Candidate of
Technical Sciences, and N. Ya. Cherednichenko, Candidate of Technical
Sciences; Ed.: I. A. Shaykevich; Tech. Ed.: A. I. Kontorovich.

PURPOSE: This handbook is intended for engineers, scientific workers, and
students at schools of higher education interested in applying formulas of

Card 1/2

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Handbook for Engineers (Cont.)

the theory of probability to the solution of practical problems.

COVERAGE: The book includes all basic formulas in the theory of probability applicable to the solution of practical problems in automatic control, radio communication, processing and verifying experimental data, and other fields. In each section, work formulas and diagrams are applied to the solution of typical problems. Additional work problems with answers are provided. No personalities are mentioned. There are 33 references: 29 Soviet (including 7 translations from English and German), 3 French, and 1 German.

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Ch. I. Random Events	9
1. Relationships between random events	9
2. Direct calculation of probabilities	11
3. Geometric probabilities	14
Card 2/2	

DINER, I.Ya., inzhener-polkovnik, doktor tekhn.nauk, prof.

Efficient use of the possibilities offered by military cybernetics.
Mor. sbor. 46 no.7:34-41 Jl '63. (MIRA 16:11)

VOLODIN, B.G.; GANIN, M.P.; DINER, L.Ya.; KOMAROV, L.B.;
SVESHNIKOV, A.A., zasl. deyatel' nauki i tekhniki RSFSR,
doktor tekhn. nauk, prof.; STAROBIN, K.B.; DONCHENKO, V.V.,
red.; BLAGOVESHCHENSKIY, Yu.N., red.

[Problems in probability theory, mathematical statistics,
and theory of functions of random variables] Sbornik za-
dach po teorii veroiatnostei, matematicheskoi statistike i
teorii sluchainykh funktsii. Moskva, Nauka, 1965. 632 p.
(MIRA 18:10)

DINER, J.

Reduction of production cost is a duty of technicians. p. 197 PRZEGLAD
TECHNICZNY (Naczelna Organizacja Techniczna) Warszawa. Vol. 76, no. 6,
June 1955

SOURCE: East European Accessions List, (EEAL), Library of Congress,
Vol. 4, no. 12, December 1955

DINER, M.I.

Abdominal syndrome in rheumatism. Sov.med. 21 no.4:114-116 4p '57.
(MLRA 10:7)

1. Iz terapevticheskogo otdeleniya bol'nitsy No.16 (glavnyy vrach
L.A.Nasonova, konsul'tant i nauchnyy rukovoditel' - prof. L.I.
Gefer) Voronezha.

(RHEUMATISM, compl.

abdom. pain)

(ABDOMEN, dis.

pain in rheumatism)

DINER, M.K.

25230

DINER, M.K. Luchshei zhizni pered mezhdunar. Konferentsiy rabochei
molodezhi molodezhh mira, 1948, No. 3, S. 1-2

SO: Letopis, Zhurnal Statey, No. 30, Moscow, 1948

DINER, V. Ya.

Case of simultaneous diabetes mellitus and diabetes insipidus.
Zdravookhranenie 5 no.5:55-56 S-0'62. (MIRA 16:7)

1. Iz kafedry gosital'noy terapii (za. - prof. M.A.Polyukov)
Kishinevskogo meditsinskogo instituta i Moldavskoy respubli-
kanskoy bol'nitsy (glavnyy vrach - T.V.Moshnyaga).
(DIABETES)

DINER, Ye.S., inzhener.

Using a gantry for installing turbines. Elek.sta. 24 no.7:47 JI '53.
(MLRA 6:7)
(Cranes, derricks, etc.)

DINER, Ye.Sh. (Kiyev)

One widespread error. Mat.v shkole no.1:62-63 Ja-F '60.
(MIRA 13:5)

(Multiplication--Study and teaching)

L-15298-65 EWT(m)/EPF(c)/EPR/NEP(j) Pc-4/Pr-4/Ps-4 RPL WW/RM
ACCESSION NR: AP4047670 S/0138/64/000/010/0017/0019

AUTHOR: Rappoport, L. Ya.; Diner, Ye.Z.; Bystritskaya, G.Yu.; Myuller, B. Ye.

TITLE: The use of the dimer of toluylene-2,4-diisocyanate as a vulcanizing agent for urethan rubbers

SOURCE: Kauchuk i rezina, no. 10, 1964, 17-19

TOPIC TAGS: toluylene diisocyanate, urethan rubber, vulcanization, rubber strength, naphthylene diisocyanate/SKU rubber

ABSTRACT: The possibility of using the dimer of toluylene-2,4-diisocyanate as a vulcanizing agent for urethan rubbers to eliminate premature vulcanization was investigated at both increased temperatures and room temperature. The effect of vulcanization temperature, time and dimer content in the SKU rubber on the properties (modulus at 300% elongation, tear strength, relative elongation, residual elongation) was determined and is shown by tabulated data. The formation of a cross-linked structure as a result of the reaction of diisocyanate with the urethan groups of the macromolecules is shown schematically. The best results were obtained at 143°C by vulcanization for 20 minutes. Good mechanical properties were obtained with 14 parts by weight of dimer for 100 parts by weight of rubber.

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L 15298-65
ACCESSION NR: AP4047670

Vulcanization for more than 20 minutes did not change the value of the residual elongation. The comparative vulcanizing effect of the dimer of toluylene-2,4-diisocyanate and naphthylene-1,5-diisocyanate in mixtures based on SKU was established and it was found that mixtures based on SKU in the presence of the dimer retain their satisfactory technological properties on exposure to 110C, whereas mixtures containing naphthylene-1,5-diisocyanate under the same conditions are unsuitable for further use. The use of the dimer of toluylene-2,4-diisocyanate also increases the stability of polyurethan rubbers when stored at room temperature. The plasticity hardly varies in 5 days; after ten days it is still high, and the rubber becomes rigid only after 20 days. Naphthylene-1,5-diisocyanate yielded less favorable data in this respect as well. Orig. art. has: 2 formulas, 4 tables and 1 figure.

ASSOCIATION: Opy*tny* zavod Vsesoyuznogo nauchno-issledovatel'skogo instituta sinteticheskogo kauchuka im. S. V. Lebedeva (Pilot Plant of the All-Union Scientific Research Institute for Synthetic Rubber)

SUBMITTED: 00

ENCL: 00

SUB CODE: OC, MT

NO REF SOV: 000

OTHER: 010

Card 2/2

DINER-VLOSKO, T.B., pedagog-metodist (Moskovskaya oblast')

Forms for the guidance of educational work in nurseries and children's homes of Moscow Province. Vop.okh.mat.i det. 5 no.1:73-77
Ja-F '60. (MIRA 13:5)
(MOSCOW PROVINCE--EDUCATION, PRESCHOOL--METHODOLOGY)

DINERMAN, A. A.

SEMENOVA G. T., DINERMAN A. A.

Izmenenie funktsional'nogo sostoiانيا nervnoi sistemy pri belkovo
nedostatochnosti. [Functional modification of the nervous system
in protein deficiency.] Arkh. pat., Moskva 12:4 July-Aug 50 p.62-8.

1. Of the Laboratory of Experimental Pathology (Head -- Prof,
L. A. Cherkas) of the Institute of Nutrition of the Academy
of Medical Sciences USSR and the Department of Physiology
(Head -- Active Member of the Academy of Medical Sciences
USSR Prof. I. P. Razenkov) of First Moscow Order of Lenin
Medical Institute, Moscow.

UDL 19, 5, Nov 50

DINERMAN, A. A.

"Some Pathological Variations Which Occur in a State of Experimental Protein Deficiency and Their Reversibility." Cand Med Sci, Acad Med Sci, USSR, 12 Oct 54. (VM, 4 Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

CHERKES, L.A., FILCHAGIN, N.M.: DINERMAN, A.A.

Relation of metabolism of nicotinic acid to metabolism of sulfur
containing amino acids. Biokhimiia 20 no.2:140-145 Mr-Apr '55.
(MLBA 8:8)

1. Laboratoriyz eksperimental'noy patalogii Instituta pitaniia
Akademii meditsinskikh nauk SSSR, Moskva.

(SULFUR, metabolism,
amino acid bound, relation to nicotinic acid metab.)
(AMINO ACIDS, metabolism,
sulfur-binding, relation to nicotinic acid metab.)
(NICOTINIC ACID, metabolism,

USSR / Human and Animal Physiology (Normal and Pathological).
Metabolism.

T-3

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 60097

Author : Dinerman, A. A.

Inst : Not given

Title : Effect of Nicotinic Acid Upon the Changes Produced
in the Body by Increased Amounts of Cystine in the
Diet

Orig Pub : Vopr. pitaniya, 1957, 16, No 1, 36-43

Abstract : Male rats were fed an artificial diet including 9 or
18 gm.% of casein, with added cystine (I) and nicotinic
acid (II). The test lasted 120 days. The addition of
I to the feed in a quantity of 80 mg. daily per rat
decreased its growth rate, produced fatty infiltration
in the liver, and reduced the life span of the animal.
When II was added (2 mg.) with I, the effect of I was

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USSR / Human and Animal Physiology (Normal and Pathological).
Metabolism.

T-3

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 60097

reduced. Pathology occurring after the administration of large doses of I is especially pronounced in rats kept on a low protein diet, and the defensive effect of II under these conditions is weaker. Large doses of II had a negative effect, reflected in increased pathological changes produced by I. -- L. A. Kashchevskaya

Card 2/2

KOROBKINA, G.S.; DINERMAN, A.A.; KAZAKOVA, Z.A.

First session on the problem of "Fat in nutrition." Vop.pit. 17
no.6:79-82 N-D '58. (MIRA 12:2)

(FAT)

CHEKES, L.A.; DINERMAN, A.A. (Moskva)

Hypertension induced by choline deficiency and its reversibility
[with summary in English]. Arkh.pat. 20 no.12:16-24 '58.

(MIRA 12:1)

1. Iz laboratorii patologicheskoy fiziologii (zav. - prof. L.A.
Cherkes) Instituta pitaniya AMN SSSR.

(CHAOLINE, deficiency,

causing exper. hypertension, reversibility (Rus)

(HYPERTENSION, exper.

caused by choline defic., reversibility (Rus)

DINERMAN, A.A.

Effect of antibiotics on the course of choline deficiency [with
summary in English]. Vop.pit. 18 no.1:17-23 Ja-F '59.

(MIRA 12:2)

1. Iz laboratorii patologicheskoy fiziologii (zav. - prof. L.A.
Cherkes) Instituta pitaniya AMN SSSR, Moskva.

(CHOLINE, deficiency,

eff. of antibiotics in animals (Rus))

(ANTIBIOTICS, eff.

on exper. choline defic. in animals (Rus))

CHERKES, L.A.; DINERMAN, A.A.

Effect of sorbitol on the course of choline deficiency. Biokhimiia
24 no.2:329-335 Mr-Apr '59. (MIRA 12:7)

1. Laboratory of Pathological Physiology, Institute of Nutrition,
Academy of Medical Sciences of the U.S.S.R., Moscow.

(SORBITOL, eff.

on exper. choline defic. (Rus))

(CHOLINE, defic.

eff. of sorbitol (Rus))

CHEKERS, L.A.; DINERMAN, A.A.

Preventive effect of prolonged sorbitol administration in choline deficiency. *Biokhimiya* 25 no.1:102-105 Ja-F '60. (MIRA 13:6)

1. Laboratory of Pathological Physiology, Institute of Nutrition, Academy of Medical Sciences of the U.S.S.R., Moscow.

(SORBITOL pharmacol.)

(CHOLINE defic.)

(KIDNEYS pathol.)

DINERMAN, A.B.

[Electric woodworking machines] Elektrifitsirovannyi instrument
dlia obrabotki dereva. Moskva, Vses. kooperativnoe izd-vo, 1953.
81 p. (MLRA 7:3)
(Woodworking machinery)

DINERMAN, A. P.

Static and dynamic balancing of turbine rotors. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1946. 99 p. (52-18140)

TJ870.D5

DINEHMAN, A. P. and D.KH. GARBER.

Tekhnologiia paroturbostroeniia.

Moskva, Mashgiz, 1948. 366 p. illus.

Bibliography: p. (364)

(Technology of steam-turbine construction.)

DLC: TJ735.D55

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

D. Nekrasov, A.P.

AUTHOR: Ivlev, D. D.
TITLE: Conference on Sustained Static Strength of Turbine Components Working at High Temperatures (Sovesbchaniye po dletel'noy staticheskoy prochnosti detal'nykh turbomashin, rabotayushchikh pri vysokoy temperature)

PERIODICAL: Investitsiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, No. 2, pp. 149-150 (USSR)

ABSTRACT: The Commission on the Strength of Gas Turbines from the Institute of Mechanics of the USSR (Institute of Mechanics of the USSR) (Chairman - Iu. N. Babitskiy) and the Section of the Leningrad Technical Committee on Strength Construction (Chairman - V. K. Naumov) held a conference during February 20-22, 1957 on the sustained static strength of turbine components working at high temperature. The conference was opened by an introductory speech by the Chairman of the Leningrad Technical Committee on Strength Construction, S. A. Kantor.

The paper by V. K. Naumov (Institute of Metallurgy, A.S. USSR) "Structural Theory of Creep" contained an account of the author's theory of creep.

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V. E. Ivanova and L. K. Gordizhenko (Institut metallurgii A.S. USSR - Institute of Metallurgy of the USSR) in the paper "Experimental Investigation on the Strength of the Theory of Structural Creep" described results of corroborating aspects of Odintsov's theory. L. A. Kuznetsov (Kavkazskiy metallicheskiy zavod im. Lenina - Leningradskiy zavod im. Lenina) in his paper "Problems in the Field of Static Strength of Turbine Components Working at High Temperature" dwelt on data obtained in Leningrad industrial undertakings indicating the need for further improvement of design and constructional procedures. The basic investigation of the author's opinion is not so much the investigation of stresses in individual components as the investigation of stresses in individual actual constructions. The author of the limiting states of turbine components suggested a method for the experimental investigation of model turbine components and frameworks of turbines and suggested a method for the Government the question of organizing such an assembly in one of the factories with complete centralization and co-ordination of work in this direction. The author criticized the inadmissible unplanned work taking place at the present time in extremometry when each undertaking must itself solve problems relating to gauge, constants for the methods of testing and appropriate apparatus.

A. P. Blizor (IzIAM) presented a paper on "Standards of Creep of Components at High Temperatures". A. P. Blizor (IzIAM) presented a paper on "Standards of Investigation of Turbine Capacity of Disks". M. A. Koren' (Leningradskiy zavod im. Lenina - Leningradskiy zavod im. Lenina) presented a paper on "Experimental Investigation of Turbine Capacity of Disks".

"Apparatus for Testing Sustained Strength of Turbine Stator Components" dealt with items of gauge. Some turbine number of components: disintegrators, stress stations, etc. V. B. Maslennikov (Koskovskiy gosudarstvennyy universitet - Moscow State University) gave a paper on "Creep of Heat-Resistant Alloys at High Temperature". The author described experimental investigations on the behavior of the steels Kh-25T and Kh-25 under conditions of complex stress and high steady temperature.

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DINERMAN, A. P.

Cand Tech Sci - (diss) "Study of the effect of accelerated conditions of starting of turbine on the work capacity of its vanes." Moscow, 1961. 23 pp; with diagrams; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Lenin Power Inst); 150 copies; price not given; (KL, 10-61 sup, 214)

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S/114/61/000/001/006/009
E194/E355

AUTHORS: Dinerman, A.P., Merinov, G.N., Engineers and
Toropov, V.A., Candidate of Technical Sciences

TITLE: Operating Experience with the Welded Rotor of an
Experimental Gas Turbine of TsNIITMASH
Type ДГТ-700 (EGTU-700)

PERIODICAL: Energomashinostroyeniye, 1961, No. 1,
pp. 31 - 35

TEXT: In 1950 TsNIITMASH (Central Scientific Research
Institute of Technology and Machine Building) developed
and operated an experimental gas turbine type EGTU-700. The
main use of the set was in studying the strength of blade
steel by means of a model and making full-scale tests on
turbine blades under conditions close to those encountered
in service. The programme involved testing blades to
failure. A cross-sectional diagram of the gas turbine is
given; it had a welded rotor. The turbine delivered no
useful power, all the energy of the gas being expended in
overcoming friction. The gas temperature at the guide vanes
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S/114/61/000/001/8707/009
E194/E355

Operating Experience with the Welded Rotor of an Experimental Gas Turbine of TsNIITMASH Type EGTU-700

was 700 °C and the turbine speed was 4 200 r.p.m. Until this turbine had been built no welded rotors had been used in Soviet turbine manufacture and a welded rotor was incorporated in this turbine so that a thorough check could be made on its operating properties. During 25 000 hours operation of the turbine the performance of the rotor was carefully observed in respect of stability of shape and dimensions. Watch was also kept on the operating conditions. After 25 000 hours operation the rotor was cut up into samples and thoroughly examined. The rotor was made of steel grade 7M40E (EI405). Its heat treatment and welding are described; analyses of the main and weld metal are given. During running, the gas temperature was 700 °C, the disc-rim temperature was 630 - 635 °C and the weld temperature was 600 - 620 °C. During its period of operation the turbine was started and stopped more than 1 800 times and of these 250 starts were from cold. During operation there were

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75 cases of blade failure and at each the rotor experienced a sudden impact load of up to 5 tons, leading to bending stresses in the welds of up to 250 kg/cm².

The behaviour of the rotor was carefully observed in service.

Vibration measured on the bearing frame was 6 - 10 μ at the start and after 25 000 hours operation had increased to

18 - 20 μ. Systematic measurements of the rotor showed that

the external diameter of the rim increased by 0.45 mm in

25 000 hours, which is about 0.08%. Analysis showed that the

rate of disc strain was greatest during the period of a large number of starts and stops as compared with other periods.

After 8 000 - 9 000 hours operation some cracks were observed

at the place where the blades were fitted to the rim and at the

end of operation of the turbine the cracks had extended and

increased in width up to 0.4 - 0.5 mm. Cracking started

during a period of intensive operation of the turbine under

variable conditions with frequent starts and stops. The disc

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Operating Experience with the Welded Rotor of an Experimental Gas Turbine of TsNIITMASH Type EGTU-700

and neighbouring parts of the blade roots underwent appreciable erosive-corrosive wear during the first 500 - 700 hours. After 3 000 hours of operation the oxide film was completely removed from the rotor. The thickness of the layer removed was 0.2 mm and the rotor surface became uniformly rough and of a grey colour.

Metallographic sections were made of the rotor and weld metal. Both before and after operation the microstructure of the main metal consisted of austenite, carbides of niobium and a finely-dispersed phase which was not identified. The amount of this finely-dispersed phase increased during service. The microstructure of the weld metal after service consisted of austenite and carbides. A finely-dispersed phase was evolved in service. Mechanical tests were made on the metal. During service the plastic properties of the main metal of the rotor were impaired, particularly the impact strength₂ which, on tangential specimens, fell from 7.3 to 2.6 kg.m/cm².

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Operating Experience with the Welded Rotor of an Experimental Gas Turbine of TsNII TMASH Type EGTU-700

After 25 000 hours operation the weld metal had very poor plastic properties, the impact strength was about 1 kg.m/cm^2 , the relative extension 5% and the constriction 8% at room temperature. After 25 000 hours operation the weld metal broke after bending through a very small angle ($30 - 35^\circ$) but the main metal retained high plasticity in the axial direction and reduced plasticity in the tangential specimen (angle of bending $50 - 55^\circ$).

It is concluded that the welded rotor was substantially undeformed after service. The weld became much more brittle. It is concluded that if the weld metal has 5-8% relative elongation and 1 to 1.5 kg.m/cm^2 impact strength its plastic properties are adequate for reliable operation in rotors of the kind and subject to the conditions described. There are 5 figures and 3 tables.

Card 5/5

DINERMAN, A. P.

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PHASE I BOOK EXPLOITATION

SOV/6086

Nauchnoye soveshchan'ye po teplovym napryazheniyam v elementakh turbomashin.
2d, Kiyev, 1961.

Teplovyye napryazheniya v elementakh turbomashin; doklady nauchnogo soveshchaniya, vyp. 2 (Thermal Stresses in Turbomachine Parts; Reports of the Scientific Conference, no. 2). Kiyev, Izd-vo AN UkrSSR, 1962. 174 p. 1800 copies printed.

Sponsoring Agency: Akademiya nauk Ukrain'skoy SSR, Institut mekhaniki.

Resp. Ed.: A. D. Kovalenko, Academician, Academy of Sciences UkrSSR; Ed.: T. K. Remennik; Tech. Ed.: A. M. Lisovets.

PURPOSE: This collection of articles is intended for scientific workers and turbine designers.

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Thermal Stresses (Cont.)

SOV/6086

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COVERAGE: The book contains 18 articles dealing with investigations connected with thermal stresses in turbine components. Individual articles discuss thermoelasticity, thermoplasticity, thermal conductivity, and temperature fields. No personalities are mentioned. References accompany 17 articles. The conference recommended broadening the theoretical and experimental investigations of aerothermoelastic and aerothermoplastic problems, the development of investigations of general problems of the theory of thermoelasticity and thermoplasticity based on the thermodynamic principles of reversible and nonreversible processes, the development of effective calculation methods for thermal stresses taking into account plastic deformations and creep in thin- and thick-walled structural members under stationary and nonstationary operating conditions, the development of experimental-research methods for thermometry and tensiometry in connection with modern operational conditions of mechanical structures, and the broadening of investigations of problems in the thermostrength of structures, especially of those operating under conditions of frequent and sharp-temperature changes.

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Thermal Stresses (Cont.)	SOV/6086
Savchenko, V. I. [Kiyev]. Investigation of Thermal Stresses in Turbine-Machine Components by the Photoelasticity Method	106
Dinerman, A. P. [Moscow]. On the Mechanism of the Effect of Accelerated Regimes of Turbine Startups on the Efficiency of Turbine Disks	117
Gokhfel'd, D. A. [Chelyabinsk]. Some Results of the Experimental Investigations of Adaptability to Thermal Influences	133
Vasil'chenko, G. S. [Moscow]. Effect of the Radial Temperature Gradient on the State of Stress of Turbine Disks Operating Under Creep Conditions	141
Fridman, L. I. [Kuybyshev]. On the Problem of Investigating Repeated Heating and Cooling	149
Ulitko, A. F. [Kiyev]. Stationary Problem in Thermal Conductivity for a Cone	156

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E194/E454

26.2/20

AUTHORS: Dinerman, A.P., Engineer, Getsov, L.B., Engineer

TITLE: An investigation of the strength of gas turbine discs under transient conditions

PERIODICAL: Toploenergetika, no.5, 1962, 38-43

TEXT: A study made at TsNIITMASH of the influence of multiple turbine starts on disc life of four discs made by the "Ekonomayzer" Works for a 600 kW turbine of steel grades ЭИ-612 (EI-612) and ЭИ-481 (EI-481) is described. Properties and analysis of the metals are given. Stresses were calculated on a computer, rim stress calculations being made without allowance for stress concentrations. Conditions were: speed 12000 rpm, frequent and rapid starts (1500 to 3000), calculated minimum temperature drop in the disc 300°C, disc rim temperature at 100% load = 520°C and at 125% load = 570°C. Test conditions were chosen to suit two opposite assumptions, namely (1) the intensity of disc cooling ensures the same temperature drop immediately after starting and during steady running and (2) after starting the temperature drop in the disc is gradually reduced to a level Card 1/3

An investigation of the strength ... S/096/62/000/005/003/009
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corresponding to a steady state condition. The main objects were to compare the life and performance of the discs made of the two kinds of steel, to obtain an idea of the role of stress concentrators and to determine whether the disc operating conditions are safe if there are stress concentrations in the rim. All discs were tested to failure. Detailed test results are given and they show the following. The disc life is not reduced when the rim stress concentrations are increased. Discs of steel EI-481 were stronger than those of EI-612 under the stated test conditions. During the tests the discs of steel EI-481 were somewhat strained and those of steel EI-612 were not. Cracks originated at places of highest stress concentration and extended over the width of the disc despite the absence of any clear influence of stress concentrations on the disc performance. The numbers of cycles to disc failure was considerably greater than that at which cracks were observed to form so that the materials are plastic and cracked discs can operate safely for a time. Samples taken from the disc rims after testing were of the same mechanical properties as the initial materials. Attempts were
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An investigation of the strength ... S/096/62/000/005/003/009
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made to estimate disc life under rapid starting conditions by means of L.F.Coffin's formulae but they were unsuccessful. Calculated in accordance with Coffin, number of cycles to failure was much greater than the experimental number. However, the tests confirmed that the discs can operate safely under starting conditions which do not cause repeated plastic deformation of varying sign anywhere in the disc. There are 6 figures and 6 tables.

ASSOCIATION: TsNIITMASH - zavod "Ekonomayzer"
(TsNIITMASH - "Ekonomayzer" Works)

Card: 3/3

X

D. Gershteyn, A.G.

AL'TSHULER, Z.Ye., inzh.; BASTUNSKIY, M.A., inzh.; BERSTEL', V.N., inzh.;
 BIRNBERG, I.E., inzh.; BOGOPOLSKIY, B.Kh., inzh.; BUKHARIN, S.I.,
 inzh.; GERSHTEYN, B.G., inzh.; GRINSHPUN, L.V., inzh.; DREYNER, G.I.,
 inzh.; DINERSHTEYN, A.G., inzh.; ZLATOPOL'SKIY, D.S., inzh.; KLANYUK,
 A.V., inzh.; KOZIN, Yu.V., inzh.; LEVITIN, I.P., inzh.; MEL'NIKOV,
 L.F., inzh.; MEL'KUMOV, L.G., inzh.; NADEL', M.B., inzh.; PAVLOV,
 N.A., inzh.; PASIEN, D.A., inzh.; PMSIN, B.Ya., inzh.; PYATKOVSKIY,
 P.I., inzh.; RAZNOSCHIKOV, D.V., inzh.; ROZENOYER, G.Ya., inzh.;
 ROZENBERG, R.L., inzh.; ROYTENBERG, N.L., inzh.; RYABINSKIY, Ya.I.,
 inzh.; SYPCHEENKO, I.I., inzh.; TABACHNIKOV, L.D., inzh.; FEL'DMAN,
 M.S., inzh.; SHTRAKHMAN, G.Ya., inzh.; SHTERMNGAS, N.S., inzh.;
 LEVITIN, I.P., otvetstvennyy red.; STEL'MAKH, A.N., red.izd-va;
 BEKKER, O.G., tekhn.red.

[Overall mechanization and automatization of production processes in
 the coal industry] Kompleksnaya mekhanizatsiya i avtomatizatsiya
 proizvodstvennykh protsessov v ugol'noi promyshlennosti. Pod red.
 I.U.V.Kozina i dr. Moskva, Ugletekhizdat, 1957. 82 p. (MIRA 11:3)

1. Gosudarstvennyy proyektno-konstruktorskiy institut. 2. Institut
 Giprougleavtomatizatsiya i Tekhnicheskogo Upravleniya Ministerstva
 ugol'noy promyshlennosti (for all except: Levitin, Stel'makh,
 Bekker)

(Automatic control) (Coal mining machinery)

DINERSHTEYN, G.; BERSHADER, M., rukovoditel' fotokruzhka (Leninskiye
gory)

Builders master photography. Sov.foto 18 no.11:32 N '58.

(MIRA 11:12)

1. Predsedatel' pravleniya Doma kul'tury "Novator" (for Diner-
shteyn)

(Photography)

IVANOV, Konstantin Petrovich; SHEYNIS, Zinoviy Savel'yevich;
DINERSHTEYN, I., red.; DANILINA, A., tekhn.red.

[The state of Israel, its economic conditions and foreign
policy] Gosudarstvo Izrail', ego polozhenie i politika.
Izd.2., dop. Moskva, Gos.izd-vo polit.lit-ry, 1959. 187 p.

(MIRA 12:11)

(Israel--Economic conditions) (Israel--Foreign relations)

MOREV, Vladimir Nikolayevich, zhurnalist-mezhdunarodnik; DINERSHTEYN, I.,
red.; TROYANOVSKAYA, H., tekhn. red.;

[Pentagon; notes of a Soviet journalist] Pentagon; zametki sovet-
skogo zhurnalista. Moskva, Gospolitizdat, 1963. 158 p.

(MIRA 16:2)

(United States—Military policy)

DINERSHTEYN, L.I.; POZHIDAYEVA, Ye.V.

Results of the analysis of disease incidence in workers of
firebrick factories. Trudy Vor. med. inst. 47:102-103 '62
(MIRA 16:12)

1. Voronezhskaya oblastnaya sanitarno-epidemiologicheskaya
stantsiya.

DINERSHTEYN, L.V.; SOKOLOVA, A.P.; SHIRMAN, A.M.

Problem of late sequelae following a craniocerebral trauma
in early childhood. Zhur. nevr. i psikh. 64 no.7:1058-1064 '64.
(MIRA 17:12)

1. Otdel patomorfologii tsentral'noy nervnoy sistemy (zaveduyush-
chiy- kand. med. nauk A.P. Sokolova, nauchnyy konsul'tant - prof.
A.P. Avtsyn) Nauchno-issledovatel'skogo instituta psikhatrii
(direktor - prof. D.D. Fedotov) Ministerstva zdravookhraneniya
RSFSR, Moskva.

DINERSHTEYN, N.B.
AKSEL'BAND, A.I.; DINERSHTEYN, N.B.

Improve operations in enterprises manufacturing leather accessories.
Leg.prom.17 no.9:40 S '57. (MIRA 10:12)

1. Rabotniki Minskoy [kozhevennoy] fabriki imeni Kuybysheva.
(White Russia--Gloves)

SHISHMAREVA, L.B.; DINERSHTEYN, P.A.

Painting of metallic and wood items with heated lacquers and
enamels. Lakokras.mat.1 ikh prim. no.3:41-44 '60. (MIRAL4:4)
(Painting, Industrial)

MAKSIMOVA, V.G.; DINERSHTEYN, P.A.; YELISEYEVA, K.G.; GOLOVINA, K.N.

Using the PE-220 polyester lacquer for finishing wooden articles.
Lakokras.mat. i ikh prim. no.4:48-50 '62. (MIRA 16:11)

MAKIMOVA, V.G.; YELISEYEVA, K.G.; GORDINA, N.V.; DINERSHTEYN, P.A.

Finishing of wood articles with FE-219N maleic acid polyester
by means of the flow coat method. Lakokras. mat. i ikh prim.
no.4:38-41 '63. (MIRA 16:10)

DINES, S.

TRUB, G., inzhener; DINES, S., inzhener; SHEVTSOV, N., inzhener.

Standardization of labor and technological processes. Sots.
trud no.12:69-76 D '56. (MLRA 10:2)

(Production standards)

PUZYNYA, L.V.; DINES, Yu. I.

Two-tone colored leather for shoe uppers. Leg.prom.15 no.10:
44-47 0 '55. (MLRA 9:1)

1.Glavnyy model'yer fabriki no.2 "Proletarskaya pobeda" (for
Puzynya).2.Nachal'nik sakroyno-vyrubochnoy laboratorii (for
Dines). (Shoe industry)

ROMANIA / Chemical Technology. Chemical Products and H
Their Application. Ceramics. Glass. Binding
Materials. Concretes.

Abs Jour: Ref Zhur-Khimiya, No 19, 1958, 65207

Author : Voichescu P, Dinescu A

Inst : -

Title : Mineralizing Action of Fluorapatite on Portland
Cement Clinker

Orig Pub: Bul. Inst. politehn. Bucuresti, 1956, 18, No 3-4,
231-243

Abstract: It was established that raw-material mixtures
with fluorapatite act in the capacity of a miner-
alizer cake at a temperature of 1410°. The pre-
sence of a continual isomer series $2CaO \cdot SiO_2 - 3CaO \cdot$
 P_2O_5 in a 4-component system $CaO - 2CaO - SiO_2 - CaF_2 -$
 $3CaO \cdot P_2O_5$, which belongs to the mixture investi-

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ROMANIA / Chemical Technology. Chemical Products and H
Their Application. Ceramics. Glass. Binding
Materials. Concretes.

Abs Jour: Ref Zhur-Khimiya, No 19, 1958, 65207

Abstract: gated, specifies the process of mineralization.
The eutectic point of this system lies below 1205° ,
while the normal clinker of the system $\text{CaO-Al}_2\text{O}_3\text{-Fe}_2\text{O}_3\text{-SiO}_2$
forms the liquid phase at 1338° . Accord-
ing to a comparison with CaF_2 , fluorapatite reduces
the temperature of the formation of the liquid phase
by 40° . Fluorapatite exerts a stabilizing action
on $\text{A-2CaO}\cdot\text{SiO}_2$, by expanding the zone of its stabil-
ity to the temperature of the environment. The
method of cooling the clinker from the mixtures
mineralized by the fluorapatite has no influence
on the quality of the cement.

Card 2/2

TEODORESCU, Gr.; DINESCU, A.

Colorimetric method for dosing isonicotinic acid hydrazide.
Bul Inst Politeh 26 no.1:49-52 Ja-F '64.

1. Laboratory of Inorganic and Analytic Chemistry, Polytechnic
Institute, Bucharest.

~~DINESCU, Alexandru~~
SURNAME, Given Names

Country: Rumania

Academic Degrees: Engineer

Affiliation: Trust for Prospecting, Explorations and for the Opening of
New Mines (Trustul de Prospectiuni, Explorari si Deschideri de
~~Source~~ Mine Noi), Bucharest.

~~Data~~
Source: Bucharest, Revista de Geodezie si Organizarea Teritoriului, No 3,
1961, pp 3-17.

Data: "The Determination of the Azimuth in a Star and in Pairs of
Stars Having the Same Height."

GPO 981643

S/269/63/000/001/005/032
A001/A101

AUTHOR: Dinescu, Alexandru

TITLE: Application of the method of calculating ephemeris of Earth's artificial satellites on the basis of the known elements, and comparison of the results with observations made in Bucharest

PERIODICAL: Referativnyy zhurnal, *Astronomiya*, no. 1, 1963, 10, abstract 1.51.89 ("Studii și cercetări astron. și seismol. Acad.RPR," 1962, v. 7, no. 1, 167 - 181, Rumanian; Russian and French summaries)

TEXT: The method of calculating the ephemeris of an artificial Earth satellite proposed by M. S. Yarov-Yarovoy and Ye. A. Grebennikov (*RZhAstr*, 1960, no. 6, 4936) and applied by the author to the satellites II (1957 β) and III (1958 δ) during several days when these satellites were observed in Bucharest is considered. The calculation of ephemeris was performed on the basis of elements published by Yu. V. Batrakov for the satellite 1958 δ_2 (*RZhAstr*, 1962, 1A115) and L. G. Jacchia 1957 β , while these calculations were conducted with both formulae and auxiliary tables by I. D. Zhongolovich and V. M. Amelin (*RZhAstr*, 1961, Card 1/2

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2A152). Discrepancies between the observed and calculated positions are less than differences between the observations and positions reported by the telegrams of "Kosmos", which means that the elements have been improved. There are 9 references.

From author's summary

[Abstracter's note: Complete translation]

Card 2/2

DINESCU, Alexandru

Observations made with theodolite of the earth's artificial satellite
1960 tj. Studi astron seismol 7 no.2:311-315 '62.

POPOVICI, Calin; SINGEORZAN, Ion Corvin; DINESCU, Alexandru

Visual observations of artificial satellites, made at the Station 131
of the Bucharest Observatory from January 1st to December 31st, 1961.
Studii astron seismol 7 no.2:317-322 '62.

POPOVICI, Calin; SINGEORZAN, Ion Corvin; DINESCU, Alexandru

Visual observations of the artificial satellites of the earth made at the astronomical observatory in Bucharest, Station 131, in the period: January 1 - December 31, 1962. Studii astron spismol 8 no.1:121-129 '63.

DINESCU, Alexandru

Theodolite observations of the earth artificial satellite in 1960
1. Studii astron seismol 8 no.1:131-134 '63.

SOURCE: Nablyudeniya iskusstvennykh satel'nikov Zemli, no. 2, 1963. Warsaw PAN, 1963, 26-41

TOPIC TAGS: artificial earth satellite, artificial satellite observation, artificial orbit, triangulation geometry, geodesy

ABSTRACT: The coordinates of observation stations are determined by the space triangulation method using the circle of simultaneity. A model of cosmic triangulation has been calculated for hypothetical satellites on the basis of nonsimultaneous observations. In this method it is not necessary to know the satellite orbit. The author solves the problem in two ways: first using three simultaneous observations of three different satellites and then using two periods of observation and the equation for the tangent plane to the ellipsoid at the point where the station is situated. In both methods, the problem can be simplified in practice by taking two observations of the same satellite, one on the ascending path and

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another on the descending path on two different days

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OTHER: 008

DINESCU, Alexandru

Geocentric coordinate calculation of satellites and stations,
using nonsimultaneous observations of the earth artificial
satellites. Studii astron seismol 8 no.2:175-195 '63.

DINESCU, Alexandru

Observations of ECHO I, the earth's artificial satellite,
with the theodolite. Studii astron 9 no. 1:97-100 '64.

POPOVICI, Galin; CIRSMARU, Magdalena; DINESCU, Alexandru; SINGEORZAN,
Ion Corvin

Visual observations of the earth's artificial satellites carried
out at Station 1131 of the Astronomical Observatory in Bucharest
during the period January 1-December 31, 1963. Studii astron
9 no. 1:101-111 '64.

DINESCU, Alexandru

Errors of geocentric positions of a satellite. Studii astron
10 no.1:13-23 '65.

Theodolite observations of artificial satellites. Ibid.:107-
112

1. Astronomical Observatory, 5 Cutitul de Argint St., Bucharest.
Submitted October 23, 1964, June 1, 1964.

POPOVICI Calin; DINESCU Alexandru; IRSMARU, Magdalena; CORVIN SINGEORZAN,
Ion

Visual observations of artificial satellites obtained at the
(1131) Bucharest Station in 1964. Studii astron 10 no.1:113-
125 '65.

1. Astronomical Observatory, 5 Cutitul de Argint St., Bucharest.

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ACCESSION NR: AP4044191

R/0003/64/015/007/0404/0408

AUTHOR: Ciocolu, Paulina, Dinescu, Analia, Dinescu, R., Gothard, Fr., Minea, I.
Russu, R., Solacolu, S.

TITLE: The synthesis and uses of some molecular sieves. II. The synthesis of some granular molecular sieves from kaolin

SOURCE: Revista de Chimie, v. 15, No. 7, 1964, 404-408

TOPIC TAGS: molecular sieves, kaolin, kaolin sieve preparation, kaolin granulation, Malaxa process, kaolin extrusion, calcination

ABSTRACT: The authors report the results of experiments carried out with the intention of reproducing the synthesis of molecular sieves from kaolin, without the addition of binding agents and using methods which vary slightly from those previously described in the literature. The kaolin found in Aghires, Rumania, was used as the basic material; either the 1st (78% kaolin) or 2nd (75% kaolin) grade of this material may be used, both being able to yield sieves with high absorption capacities (25-32g H₂O/100g) was pores of 4A. The static absorption capacities were first determined for both types of material; the results are reported in tables, and a schematic diagram of the laboratory apparatus used is also given. The various steps used in the actual manufacturing procedure are then described

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in detail, as follows: 1) The granulation of the kaolin to the desired dimensions (length \approx diameter) may be carried out by 2 methods: method (a) is based on the extrusion of wet kaolin paste, after previous heating at 120C and addition of 30% water ("Malaxa" process), drying and grinding of the extruded material, and final sorting of the granules; b) grinding of dry kaolin cakes directly to the desired dimensions, and subsequent sorting of the granules. 2) The calcination of the granules is carried-out partially in a laboratory oven and partially in an electric oven type KYLS, of 100 liters capacity, equipped with silica rods. The optimum temperature of calcination is 670-700C (not to exceed 750C), for a duration of 5 hours. Both ovens are equipped with temperature regulators, calibrated in intervals of \pm 20C. 3) The alkali treatment phase is carried out with a 9-10% NaOH solution (not to exceed 16%), for a period of 5-10 hours. Mechanical stirring of the kaolin granules is not recommended. Consequently, the operation is carried out partially in a boiler without stirrer, and partially in a boiler equipped with a Cottrell pump system, for the reflux of the solution. During this operation, to produce a maximum absorption capacity of the molecular sieve structure, the diameter of the granules cannot exceed 2 mm. Following alkali treatment, the molecular sieves obtained are washed with water until the washing solution reaches a pH of 9-9.5. A schematic diagram of a laboratory-

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scale apparatus for the alkali treatment of the kaolin granules is given. 4) The ion-exchange phase (exchange of sodium ions for calcium ions) is carried out by 2 treatments with a 25-33% CaCl_2 solution, for 4 hours at the boiling temperature and under normal pressure. These parameters are considered optimal for the production of maximum absorption capacities. Following each treatment with CaCl_2 the molecular sieves are washed with water in order to eliminate the traces of sodium ions remaining on the surface of the granules. 5) Activation of the sieves is carried out by a process of calcination for 1 hour at a temperature of 300-350C. Prolonged calcination (4-5 hours) results in a stable absorption capacity, having a lower value (60-70% of the initial value). The molecular sieves obtained by this process have a mechanical resistance of 1-2 kg/mm^2 , as compared with 0.1 - 0.5 kg/mm^2 for those manufactured outside of Rumania, with a specific area between 500 and 700 m^2/g , and a real density of 1.9-2.1 g/cm^3 . A diagram of an industrial installation for the manufacture of the 4A molecular sieves is given. The authors conclude by stressing the importance and specificity of the method for sieves having 4A pores. Molecular sieves with 5A pores, prepared by this method, have much lower absorption capacities. Orig. art. has: 3 figures and 7 tables.

ASSOCIATION: None

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OTHER: 013

DINESCU, D.

Concerning the activity of the technical committee of the metallurgical enterprise "Boleslaw Bierut". Metallurgy and Machine Construction, #3:79:Mar. 55

(3)

ROMANIA

NICULESCU, T., MD; CIMPONIERU, S., MD; DINESCU, Elena, MD;
MACSUT, Gh., MD.

Bucharest, Igiene, No 3, May-Jun 63, pp 277-282.

"Aspects of the Organization of Labor Hygiene and Labor
Protection in the Bulgarian People's Republic."

4

FURNICA, M.; DINESCU, G.; NICOLESCU, P.; SAPATINO, V.

Contributions to the study on peroxidizing in tumors. Studii
cerc biochimie 6 no.3:403-410 '63.

1. Laboratorul de enzimologie al Institutului oncologic,
Bucuresti.



ROSENBERG, A., Jr.; BERCU, L., Conf.; DILESCU, Gh., Dr.; RELEBI, I., Dr.

Clinical and radiological value of intravenous cholecysto-cholangiography with biligriffin. Med. int., Bucur. 9 no.5:752-765 May 57.

1. Incrare efectuata la Spitalul de stat nr. 12.

(IODIPAMIDE

sodium iodipamide in cholangio-cholecystography, value)

(CHOLIANGIOGRAPHY

cholangiocholecystography with sodium iodipamide, value)

KITZOULESCU, I.; BALUTA, V.; DINESCU, G.

New biochemical aspects of the action of certain substances exerting
an influence on the activity of the central nervous system. Rev. sci.
med. 5 no.1/2:61-65 '60.

(PHOSPHATES metab) (BRAIN metab) (MORPHINE pharmacol)
(URETHANE pharmacol) (PROCAINE pharmacol)