YERAMISHEVA, N.V.

Development of the retina in Misgurnus fossils. Dokl. AN SSSR 109 no.6:1219-1221 Ag '56. (MLRA 9:11)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova. Predstavleno akademikom Ye.N. Pavlovskim.
(Loaches) (Embryology--Fishes) (Retina)

L 8789-66 EWT(m) WW

ACC NR: AP5028030 SOURCE CODE: UR/0119/65/000/011/0012/0015

AUTHOR: Afonin, V. A. (Candidate of technical sciences); Yeramov, I. A. (Engineer)

ORG: none

TITLE: Pneumatic-scanning generator with a high-accuracy digital output

SOURCE: Priborostroyeniye, no. 11, 1965, 12-15

TOPIC TAGS: pneumatic scanning generator, pressure measurement

ABSTRACT: A new pneumatic-scanning generator intended for measuring pressure by a dynamic-compensation method is described. The generator is based on a quantized-scale manometer, see Fig. 1, equipped with many sensors and a special 10-slot pointer. As the pointer moves over the sensors, a sequence of pulses formed by photodiodes Ph1) is fed to a scaler, see Fig. 2, which turns

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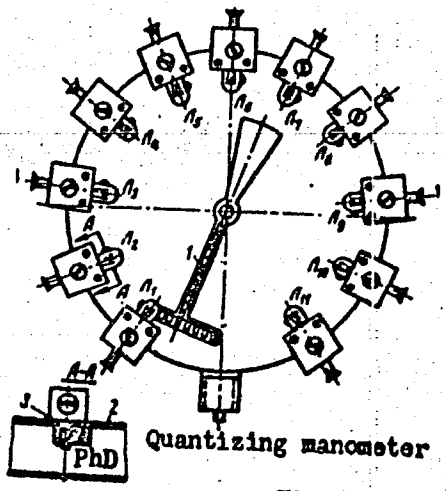
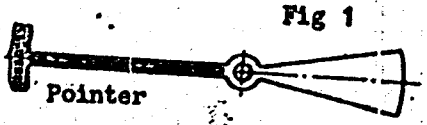
ACC NR: AP5028030



Quantizing manometer

Fig 1



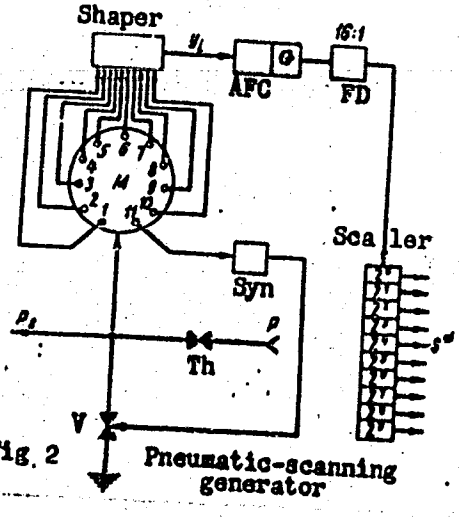


Fig. 2 Pneumatic-scanning generator

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them into a code S*. A 10 OR-gate shaper amplifies the photodiode signals and includes a single-shot multivibrator and an emitter follower. Pulse generator G is started by a pulse y_i. Synchronizer Syn operated by the eleventh (special) photodiode opens valve V connecting the manometer with the atmosphere for the time needed for the pointer to return; all elements are cleared. "Th" is a feed-pressure throttle. The instrument has a frequency output. Some results of an experimental verification are reported. Orig. art. has: 6 figures and 8 formulas.

SUB CODE: 13 / SUBM DATE: 00 / ORIG REF: 004
09

Card 3/3

YERAMOV, R.A.

Across the lowlands of Albania; from travel notes. Vest. Mosk. un. Ser.5:Geog. 15 no.2:66-70 Mr-Ap '60. (MIRA 13:9)

1. Kafedra fizicheskoy geografii zarubezhnykh stran Moskovskogo universiteta.

(Albania--Plains)

ALEKSANDROVSKAYA, Nataliya Vital'yevna; YERAMOV, Ruben Artemovich; IGNAT'YEV, Grigoriy Mikhaylovich; LUKASHOVA, Yevgeniya Nikolayevna; MARKOV, Konstantin Konstantinovich; MIKHAYLOVA, Lyudmila Alekseyevna; RYABCHIKOV, Aleksandr Maksimovich, prof.; SHAGIROVA, I.M., red.izd-va; YEZHOVA, L.L., tekhn. red.

[Physical geography of parts of the world] Fizicheskaia geografiia chastei sveta. [By] N.V.Aleksandrovskaia i dr. Moskva, Gos.izd-vo "Vysshaia shkola." 1963. 546 p. (MIRA 17:1)

YERAYAN, A. V.

Foot - Diseases

Experiment of treating epidermo-hytosis of the foot with ethyl chloride irrigations. Vest. ven. i derm. No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Unclassified.

YERAMYAN, S.G., KOROSTYLEVA, Ye.F. (Moskva)

Spontaneous pneumothorax in a virtually healthy person. Gig.truda i prof.zab. 2 no.2:55 Mr-Ap '58 (MIRA 11:6)

1. Kafedra profbolezney TSentral'nogo instituta usovershenstvovaniya vrachey.
(PNEUMOTHORAX)

YEOLYAN, S.L.; ISTAMANYAN, L.S.; YERAMYAN, S.G.; MELIK-OGANDZHANYAN, A.B.

Some data on early manifestations of the injurious effect of lead on the organism of workers. Izv. AN Arm.SSR. Biol.nauki 13 no.9:75-80 S '60. (MIRA 13:11)

1. Institut gigiyeny i profzabolevaniy Minzdrava Armyanskoy SSR.
(LEAD POISONING)

YENGLYAN, S.L., kand.med.nauk; YERAMYAN, S.G.

Changes in the excitability of the olfactory analyzer induced by the action of vairous industrial chemical substances. Vest. otorin. 22 no.6:40-43 '60. (MIRA 14:1)

1. Iz otdeleniya professional'nykh zabolevaniy Instituta epidemiologii i gigiyeny Armyanskoy SSR, Yerevan.
(LEAD--PHYSIOLOGICAL EFFECT) (FLUORINE--PHYSIOLOGICAL EFFECT)
(CYANATES--PHYSIOLOGICAL EFFECT) (SMELL)

YERANOV, A., predsedatel' zavodskogo komiteta.

Fifty years at one combine. Masl.-zhir.prom. 18 no.6:31 Je '53. (MLRA 6:6)

1. Gor'kovskiy zhirkombinat imeni S.M. Kirova. (Poliakov, Pavel Ivanovich)

PISAREVSKIY, M., kand. tekhn. nauk; YERASHEV, A., inzh.

Magnetic supports. Mashinostroitel' no.10:21 O '59. (MIRA 13:2)

(Machine-shop practice)

YERASHEVA N. A.

VOLKOV, L.Ye.; SMIRNOV, K.A.; YERASHEVA, N.A.

Operating experience with a vortical cleaner. Bum.prom. 29 no.6: 16-19 Je '54. (MLRA 7:8)

1. NIIBUMMASH (for Volkov and Smirnov). 2. Pervaya Leningradskaya bumazhnaya fabrika (for Yerasheva)
(Papermaking machinery)

BLEYZIZE, T.P., inzh.; YERASHEVA, N.A.

Use of activated silicate. Bum. prom. 33 no. 6:17-19 Je.'58.
(MIRA 11:7)

1. Pervaya Leningradskaya bumazhnaya fabrika. 2. Nachal'nik laboratorii Pervoy Leningradskoy bumazhnoy fabriki(for Yerasheva).
(Paper)
(Sodium silicate)

Yendovitskaya, L. V.

128

PHASE I BOOK EXPLOITATION SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye (Synthetic Zeolites: Production, Investigation, and Use). Moscow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady) Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor of Chemical-Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P. Golub'.

PURPOSE: This book is intended for scientists and engineers engaged in the production of synthetic zeolites (molecular sieves), and for chemists in general.

Card 1/[illegible]

Synthetic Zeolites: (Cont.) SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

Card 2/[illegible]

Synthetic Zeolites: (Cont.) SOV/6246

THEORETICAL PROBLEMS OF ADSORPTION ON ZEOLITES. METHODS OF INVESTIGATION

Card 3/3

1. YERASHKO, I. S., Eng.; FOKIN, V. A.

2. USSR (600)

4. Shaft Sinking

7. Mechanized shaft sinking in coal mines. Gor. zhur. No. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

YERASHKO, I. S. ENG.; LITINSKIY, M. E., ENG.

Mining Engineering

Fundamental tendencies in the industrialization of mine surface construction, Ugol', 27, no1 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 1952 1666, Uncl.

YERASHKO, I.S.

KUZ'MICH, A.S., redaktor; BARABANOVA, F.A., redaktor; BOHROV, I.V., redaktor; VLADIMIRSKIY, V.V., redaktor; GRAFOV, L.Ye., redaktor; DOKUKIN, A.V., redaktor; [redacted], redaktor; ZABLODSKIY, G.P., redaktor; ZADEMIDKO, A.N., redaktor; ZAYTSEV, A.P., redaktor; ZASADYCH, B.I., redaktor; KAGAN, F.Ya., redaktor; KRASNIKOVSKIY, G.V., redaktor; KRIVONOGOV, K.K., redaktor; LALAYANTS, A.M., redaktor; MELAMED, Z.M., redaktor; MINDELI, E.O., redaktor; MOGILEVSKIY, N.M., redaktor; OSTROVSKIY, S.B., redaktor; POPOV, T.T., redaktor; SKOCHINSKIY, A.A., redaktor; SKURAT, V.K., redaktor; SOBOLEV, G.G., redaktor; STUGAREV, A.S., redaktor; SUMCHENKO, V.A., redaktor; TERPIGOREV, A.M., redaktor; SHEVYAKOV, L.D., redaktor; SHELKOV, A.A., redaktor; ANDREYEV, G.G., tekhnicheskiy redaktor

[Safety regulations in coal and shale mines] Pravila bezopasnosti v ugol'nykh i slantsevykh shakhtakh. Moskva, Ugletekhizdat, 1953. 226 p. (MLRA 8:4)

1. Russia (1923- U.S.S.R.) Ministerstvo ugol'noy promyshlennosti. (Coal mines and mining--Safety measures)

Yurashko A.S.

ANDROS, I.P., inzh.; ASSONOV, V.A., kand. tekhn. nauk.; BERNSHTEYN, S.A., inzh.; BOKIY, B.V., prof.; BROVMAN, Ya.V., inzh. BONDARENKO, A.P., inzh.; BUCHNEV, V.K., kand. tekhn. nauk; VERESKUNOV, G.P., kand. tekhn. nauk; VOLKOV, A.F., inzh.; GELESKUL, M.N., kand. tekhn. nauk; GORODNICHEV, V.M., inzh.; DEMENT'YEV, A.Ya., inzh.; DOKUCHAYEV, M.M., inzh.; DUBNOV, L.V., kand. tekhn. nauk; EPIFANTSEV, Yu.K., kand. tekhn. nauk.; YURASHKO, I.S., inzh.; ZHDANOV, S.A., kand. tekhn. nauk; ZIL'BERBROD, A. [illegible] inzh.; ZINCHENKO, E.M., inzh.; ZORI, A.S., inzh.; KAPLAN, L.B., inzh.; KATSAUROV, I.N., dots.; KITAYSKIY, E.F., inzh.; KRAVTSOV, V.P., inzh.; KRIVOROG, S.A., inzh.; KRINITSKIY, L.M., kand. tekhn. nayk; LITVIN, A.Z., inzh.; MALEVICH, N.A., kand. tekhn. nauk; MAN'KOVSKIY, G.I., doktor tekhn. nauk; MATKOVSKIY, A.L., inzh.; MINDELI, E.O., kand. tekhn. nauk; NAZAROV, P.P., kand. tekhn. nauk; NASONOV, I.D., kand. tekhn. nauk; NEYYENBURG, V.Ye., kand. tekhn. nauk; POKHOVSKIY, G.I., prof., doktor tekhn. nauk; PROYAVKIN, E.T., kand. tekhn. nauk; ROZENBAUM, inzh.; ROSSI, B.D., O.B., inzh.; SEMOVSKIY, V.N., doktor tekhn. nauk; SKIROKLLO, tekhn. nauk; SUKHUT, A.A., inzh.; SUKHANOV, A.F., prof., doktor inzh.; TARANOV, P.Ya., kand. tekhn. nauk; TOKAROVSKIY, D.I., doktor tekhn. nauk; TRUPAK, N.G., prof., doktor tekhn. nauk; FEDOROV, S.A., prof., KHRABROV, N.I., kand. tekhn. nauk; FEDYUKIN, V.A., inzh.; KHOKHLOVKIN, D.M., inzh.; N.N., inzh.; SHREYBER, B.P., kand. tekhn. nauk; CHEKAREV, V.A., inzh.; CHERNAVKIN, tekhn. nauk; YAKUSHIN, N.P., kand. tekhn. nauk; EPOV, B.A., kand. YAKHONTOV, A.D., inzh.; POKROVSKIY, N.M., otvetstvennyy red.; KAPLUN, Ya.G. [deceased], red.; MONIN, G.I., red.; SAVITSKIY, V.T.,

(Continued on next card)

ANDROS, I.P.---(continued) Card 2.
red.; SANOVICH, P.O., red.; VOLOVICH, M.Z., inzh., red.; GORITSKIY, A.V., inzh., red.; POLUYANOV, V.A., inzh., red.; FADEYEV, E.I., inzh., red.; CHECHKOV, L.V., red. izd-va; PROZOROVSKAYA, V.L., tekhn. red.; NADEINSKAYA, A.A., tekhn. red.

[Mining; an encyclopaedic handbook] Gornoe delo; entsiklopedicheskii spravochnik. Glav. red. A.M. Terpigorev. Moskva, Gos. nauchno-tekhnicheskoe izd-vo lit-ry po ugol'noi promyshl. Vol.4 [Mining and timbering] Provedenie i kreplenie gornykh vyrabotok. Red-kollegiia toma: N.M.Pokrovskii... 1958. 464 p. (MIRA 11:7)

(Mine timbering) (Mining engineering)

KALMYKOV, Yevgeniy Pavlovich; PRISHVITSIN, V.M., otv.red.; YERASHKO, I.S., otv.red.; ZVORYKINA, L.I., red.izd-va; IL'INSKAYA, G.M., tekhn.red.

[Arrangement of vertical shaft tops] Sooruzhenie ust'ev vertikal'nykh stvolov. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 118 p. (MIRA 14:1)
(Shaft sinking)

KALMYKOV, Yevgeniy Pavlovich; PRISHVITSIN, V.M., otv. red.; YERASHKO, I.S., otv. red.; ZVORYKINA, L.N., red. izd-va; IL'INSKAYA, G.M., tekhn. red.

[Construction of vertical shaft tops] Sooruzhenie ust'ev vertikal'nykh stvolov. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1960. 122 p. (MIRA 14:9)
(Coal mines and mining)

TIMOFEYEV, D.P.; YERASHKO, I.T.

Dependence of the diffusion coefficient upon the extent of adsorption of activated carbon. Dokl.AN SSSR 132 no.5:1144-1147 Je '60. (MIRA 13:6)

1. Institut fizicheskoy khimii Akademii nauk SSSR. Predstavleno akademikom M.M.Dubininym.
(Adsorption) (Carbon, Activated)
(Diffusion)

TIMOFFYEV, D.P.; KABANOVA, O.N.; Prinimala uchastiye YERASHKO, I.T.

Kinetics of water vapor sorption on zeolites of the type A from gas carrier flow. Izv. AN SSSR. Otd.khim.nauk no.9:1539-1542 S '61. (MIRA 14:9)

1. Institut fizicheskoy khimii AN SSSR.
(Water vapor) (Zeolites)

5.1115

25272 S/062/61/000/007/002/009
B117/B230

AUTHORS: Timofeyev, D. P., and Yerashko, I. T.

TITLE: Sorption kinetics of water vapors on A-type zeolites

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 7, 1961, 1192-1197

TEXT: In the present work the sorption kinetics of water vapors were examined with a large amount of fillers on a molecular sieve of the type Linde 5A, grain radius 1.6 mm. The sorption kinetics was measured at constant water vapor pressure in vacuum by means of a sorption scale. A common weighing device, used for examining adsorption isotherms was applied, provided with an additional volume of ~10 l connected to the system for the control of vapor pressure. For a more convenient computing of diffusion coefficients, the grains of the adsorbent were carefully treated to obtain a cylindrical form of equal height and width. The weighed portion consisting of a few grains was evacuated by means of a mercury pump at 350°C within 3 to 4 hours before the experiment. The increase in the amount of

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Sorption kinetics of water...

adsorption was determined by elongation of the spiral spring of the scale by a cathetometer having a graduation of 0.01 mm. The sensitivity of the spiral amounted to $2.44 \cdot 10^{-3}$ g/mm. The experiments were conducted at 0° and 30°C. Temperature in the air thermostat was maintained at 20°C in the first case, and at 30°C in the second case. Diffusion coefficients were computed from the diffusion equation for finite cylinders. Within the examined range of charging, the diffusion coefficient depends in a complex manner on the amount of adsorption: at the beginning it increases and after passing through a maximum it decreases. A 30°C, diffusion coefficients have amounts several times higher than at 0°C. This indicates an activated diffusion character. The dependence of the coefficient of activated diffusion on temperature is expressed by the equation

$$D = D_0 \exp(-E/RT) \qquad (5)$$

E - activation energy; D_0 - factor before the exponent; R - gas constant; T - temperature. In case of two different temperatures, the activation energy of the diffusion process may be found from the equation

Card 2/6

Sorption kinetics of water...

$$E = 4.57 (T_1T_2/T_2 - T_1) \log (D_2/D_1) \quad (6)$$

D_1 and D_2 are diffusion coefficients corresponding to temperatures T_1 and T_2. Values of activation energy computed from this equation show (Table 1) that it decreases as the amount of adsorption increases. Isosteric adsorption heat, calculated from the water vapor isotherms at 0° and 30°C, drops within the examined charging range as low as 11 to 10 kcal/M. Experiments were conducted within the charging range of 18 to 24 per cent by weight of the adsorbent. The most probable pore radius amounted to 2500 Å. With zeolite grains diffusion takes place in the intercrystalline cavities and inside the crystals. Experiments were conducted at pressures as high as 26 mm Hg; thus, the mean free path of molecules (of the order of magnitude of 10^{-3} to 10^{-4} cm) was, under such conditions, longer than the intercrystalline cavities. Therefore transition into the gaseous phase took place by Knudsen diffusion. The coefficient of the Knudsen diffusion for a capillary of infinite length is determined by the equation $D_k = (2/3)$ ur (9), u - gas-dynamic velocity of molecules (for water at 20°C,

Card 3/6

Sorption kinetics of water...

$u = 5.1 \cdot 10^4$ cm/sec); r - radius of capillary. From (9), $D \approx 1$ cm^2/sec was found by introducing the values for u and r (2500 Å). Correcting the finite capillary length according to Clausing, (Ref. 10: P. Clausing, Physica 2, 65 (1929)) this amount is reduced to 0.4 cm^2/sec. The Henry constant amounted to 2000 to 5000 within the examined charging range. Hence, the real diffusion coefficient in the gaseous phase amounted to

$$D_e = D_k/H = 0.8 \cdot 10^{-4} - 2 \cdot 10^{-4} \text{ cm}^2/\text{sec},$$

i.e, it was by two orders of magnitude higher than the values obtained by experiments. It follows that diffusion resistance mainly occurs at diffusion in the crystalline components of zeolite grains. Taking account of the migration of molecules on the external crystal surface may be only appraised as an additional argument in favour of this conclusion. Table 2 shows the values D_o for different amounts of adsorption and mean free paths Δ in the transition of molecules into an activated state. It is evident that the values of Δ and, accordingly, D_o decrease as the charging degree rises. In this case, the decrease of D_o affects the amount of the diffusion

Card 4/6

coefficient, dropping in spite of decreasing activation energy, more than the factor exp (-E/RT). The values found for Δ show a satisfactory agreement with the mean free paths of molecules with elementary displacement in the sorption cell, obtained by purely geometrical considerations. There are 4 figures, 2 tables, and 10 references: 2 Soviet-bloc and 8 non-Soviet-bloc. The most recent references to English-language publications read as follows: Ref. 1: R. M. Barrer, Brit. Chem. Engng. May 1959, 1; Ref. 8: P. H. Lewis, J. phys. Chem, 63, 527 (1959).

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR
(Institute of Physical Chemistry of the Academy of Sciences USSR)

SUBMITTED: September 30, 1960

TIMOFEYEV, D.P.; YERASHKO, I.T.

Kinetics of water vapor sorption on A-type zeolites. Report No.2: Dependence of the diffusion coefficient on filling. Izv. AN SSSR. Ser. khim. no.10:1761-1769 O '64. (MIRA 17:12)

1. Institut fizicheskoy khimii AN SSSR.

L 24197-65 EWT(m)/T

ACCESSION NR: AP4047394 S/0062/64/000/010/1761/1769

AUTHOR: Timofeyev, D. P.; Yerashko, I. T.

TITLE: Kinetics of the sorption of water vapors on type A zeolites. Communica- [illegible] average

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1964, 1761-1769

TOPIC TAGS: type A zeolite, sorption kinetics, water sorption, coefficient of diffusion, energy of activation, entropy of activation

ABSTRACT: The kinetics of water vapor sorption onto two samples of type A zeolites were investigated at 20, 50, 100 and 150C by studying the diffusion coefficient-surface coverage relationship of the granular zeolites in the Na form: NaA-I beads of ~5 mm diameter and NaA-II, Linde 4A molecular sieve cylinders of ~3 mm diameter. The diffusion coefficients were the same for both samples, decreasing [illegible] decreasing adsorption except at 150C. At 150C the diffusion coefficients increased again in the small surface coverage region attaining a

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L 21197-65
ACCESSION NR: AP4047394

maximum in the region where θ (the kinetic characteristic expressed as a function of the extent to which the sorption volume is filled) ~0.2. The energy of

adsorbed phase. These results confirmed a system, proposed earlier, for water vapor diffusion in zeolites in which the determining factor was the diffusion into the crystals. Orig. art. has: 6 tables, 12 equations and 5 figures.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Phys-

SUBMITTED: 15Jan64 ENCL: 00 SUB CODE:

NO REF SOV: 003 OTHER: 004

Card 2/2

SLOVETSKIY, V.I.; SHEVELEV, S.A.; YERASHKO, V.I.; FAYNZIL'BERG, A.A.; NOVIKOV, S.S.

Structure of salts of 1,1-dinitroalkanes and trinitromethane. Izv.AN SSSR.Otd.khim.nauk no.6:1126 '62. (MIRA 15:8)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Paraffins--Spectra)

SHLYAPOCHNIKOV, V.A.; SHEVELEV, S.A.; YERASHKO, V.I.; FAYNZIL'BERG, A.A.; NOVIKOV, S.S.

Intensity of stretching N-O vibrations in nitro-alkanes and halogenated nitro alkanes. Izv.AN SSSR.Otd.khim.nauk no.9:1684-1686 S '62. (MIRA 15:10)

1. Institut oganicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Paraffins--Spectra)

S/062/63/000/001/007/025
B101/B186

AUTHORS: Slovetskiy, V. I., Shevelev, S. A., Yeraghko, V. I., Faynzil'berg, A. A., and Novikov, S. S.

TITLE: Spectrometric structural analysis of the salts of 1,1-dinitro alkanes and trinitro methane

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 1, 1963, 57-63

TEXT: A comparative study was made of the IR spectra of the lithium, potassium sodium and ammonium salts of 1,1-dinitro methane, 1,1-dinitro ethane, 1,1-dinitro propane, 1,1-dinitrobutane, 1,1-dinitro pentane, 1,1-dinitro hexane, 1,1-dinitrodecane, and trinitro methane, in order to elucidate their structures. Results: All 1,1-dinitro alkanes have bands at ~1450, ~1210, and ~1120 cm^{-1}, but no bands characterizing the stretching vibrations of N-O in the noncharged NO_2 groups exist in the spectra of any of the compounds. The spectra of the salts show neither the two bands in the region of 800-900 cm^{-1} that are found in free gem-dinitro alkanes, whereof at least one is caused by the stretching vibra-

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Spectrometric structural ... S/062/63/000/001/007/025
B101/B186

tions of the C-N bond, nor bands characteristic of the C=N bond. The nature of the cation has no effect on the spectrum except that in ammonium salts additionally NH_4^+-ion bands appear as well as a weak 1580 cm^{-1} band produced by hydrolysis. Conclusion: All nitro groups are equivalent and participate similarly in the formation of the anion. Hence, the formulas of the salts are $[RC(NO_2)_2]^- M^+$ and $[C(NO_2)_3]^- M^+$. No carbanions are present. There are 2 figures and 5 tables. The most important English-language references are: N. Jonathan, J. Molecul. Spectra, 7, 105 (1961); L. W. Kissinger, H. E. Ungnade, J. Organ. Chem., 25, 1471 (1960).

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR (Institute of Organic Chemistry of the Academy of Sciences USSR)

SUBMITTED: March 26, 1962

Card 2/2

YERASHKO, V.I.; SHEVELEV, S.A.; FAYNZIL'BERG, A.A.

Convenient process of obtaining dinitro and dibromodinitromethane. Izv. AN SSSR. Ser. khim. no.11:2060-2061 '65.
(MIRA 18:11)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

Yerashov, A.F.

USSR/Solid State Physics - Structure of Deformable Materials. E-9

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 11853

Author : Vasil'yev, D.M., Yerashov, A.F.

Inst : Leningrad Institute of Engineers of Railroad Transport, USSR.

Title : Residual Variation in Interplanar Distances of Polycrystalline Specimens After Plastic Deformation.

Orig Pub : Izv. AN SSSR, ser. fiz., K56, 20, No 6, 659-663

Abstract : X-ray diffraction methods were used to investigated the dependence of the relative change Δ d/d of the interplanar distance of the lattice on the angle ψ between the reflected plane and the axis of deformation and of the magnitude of strain ε_{pl} on steel specimens St25, first subjected to plastic deformation by tension of 0.6, 2.4, 4.9, 9.3, and 14% of compression of 6.4 and 19%. The general character

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Abs Jour : Ref Zhur - Fizika, No 5, 1957, 11853

of the dependence $\Delta d/d = f(\psi)$ changes little upon transition from small degrees of deformation to higher ones. A tendency is observed towards a monotonic increase in the ratio $\Delta d/d$ with increasing ε_{pl}. The resultant curves do not agree with the theoretical curves calculated in accordance with the Grinaf hypothesis. The assumption that the shift of the X-ray lines is due to the presence of a system of oriented microstresses in the deformed specimen is confirmed.

Bibliography, 24 titles.

YERASHOV, A. F.

PISAREVSKIY, M.M., kandidat tekhnicheskikh nauk; YERASHOV, A.F., inzhener.

Determining the cavitation resistance of materials with the aid of a magnetostriction vibrator. Energomashinostroenie 3 no.9:38-39 S '57. (MIRA 10:10)

(Materials--Testing)

PISAREVSKIY, M.M., kand. tekhn. nauk.; YERASHOV, A.F., inzh.

Determining the elasticity constants of austenitic steel. Energomashinostroenia 4 no.9:47-48 S '58. (MIRA 11:11)
(Steel--Testing)

25(6)

SOV/135-59-3-16/24

AUTHORS: Yerashov, A.F. and Anfimov, V.M., Engineers

TITLE: The Ultrasonic Inspection of Rivet Welds (Ul'trazvukovoy kontrol' svarnykh zaklepok)

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 3, pp 35-37 (USSR)

ABSTRACT: An ultrasonic inspection method by which it is possible to evaluate the magnitudes of faults in rivet welds is developed by the authors. The method is based on the shielding effect of a fault on the bottom pulse (e.g. the pulse reflected from the inner surface of a hollow shaft). The inspection will be done with a "UZD-7N" defectoscope on 2.5 megacycle frequency over the highly-finished and well-oiled surface. The article gives a detailed description of the method, which has proved fully reliable in detection of faults (voids, slag inclusions, cracks) not less than 0.3-0.4 sq mm in area.

Card 1/2

It can be also applied for the inspection of seam welds. There is 1 photograph, 1 graph and 1 diagram.

ASSOCIATION: Leningradskiy metallicheskiy zavod im. Stalina (The Leningrad Metal Plant imeni Stalin)

PISAREVSKIY, M.M.; YERASHOV, A.F.

Magnetic sockets. Stan. i instr. 30 no.2:37-38 F '59. (MIRA 12:3)

(Machine-shop practice)

PISAREVSKIY, M.M.; YERASHOV, A.F.

Portable mechanical tensometer. Zav.lab. no.11:1384-1386 '59.
(MIRA 13:4)

1.Leningradskiy metallicheskiy zavod im.Stalina.
(Strain gauges)

YERASHOV, A. F.

57

PHASE I BOOK EXPLOITATION SOV/5460

Leningradskiy metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Nekotoryye voprosy tekhnologii proizvodstva turbin (Certain Problems in the Manufacture of Turbines) Moscow, Mashgiz, 1960. 398 p. (Series: Its: Trudy, vyp. 7) Errata slip inserted. 2,100 copies printed.

Sponsoring Agency: RSFSR. Sovet narodnogo khozyaystva Leningradskogo ekonomicheskogo administrativnogo rayona, Upravleniye tyazhelogo mashinostroyeniya, and Leningradskiy dvazhdy ordena Lenina metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Ed. (Title page): G. A. Drobilko; Editorial Board: Resp. Ed.: G. A. Drobilko, B. A. Glebov, A. M. Mayzel', and M. Kh. Mernik; Tech. Ed.: A. I. Kontorovich; Managing Ed. for Literature on Machine-Building Technology: Ye. P. Naumov, Engineer, Leningrad Department, Mashgiz.

PURPOSE: This collection of articles is intended for technical personnel in turbine plants, institutes, planning organizations, as well as for production innovators.

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Certain Problems (Cont.) SOV/5460

COVERAGE: The experience of the LMZ (Leningradskiy metallicheskiy zavod - Leningrad Metalworking Plant) in the manufacture of modern large-capacity turbines is presented. Methods for the rationalization of basic manufacturing processes and for the mechanization and automation of manual operations are given. Descriptions of attachments and tools designed by LMZ for improving labor productivity and product quality are provided, and advanced inspection methods discussed. References accompany some articles. No personalities are mentioned. There are 26 references: 25 Soviet and 1 English.

TABLE OF CONTENTS:

Card 2/12

PISAREVSKIY, M.M., kand.tekhn.nauk; YERASHOV, A.F., inzh.

Effect of elastic vibrations on the magnetic properties of certain materials. Trudy LMZ no.9:214-222 '62. (MIRA 16:6)
(Ferromagnetism) (Vibrations)

YERASHOV, A.F., inzh.

Methods and results of measuring residual stresses in weld joints. Trudy LMZ no.9:237-251 '62. (MIRA 16:6)
(Welding—Testing) (Thermal stresses)

YERASHOVA, N.A.; IVANYUSHKINA, A.M.

Practice of utilizing webs of semi-serge texture. Bum.prom.30 no.10:26 O '55. (MLRA 9:1)

1.Nachal'nik laboratorii pervoy Leningradskoy bumazhnoy fabriki (for Yerashova). 2. Smennyy master tsekha no.1 fabriki (for Ivanyushkina). (Leningrad--Paper industry)

TERASHOVA, N.A.

Method of rapid determination of the moisture content in paper.
Bum. prom. 32 (n.6:17-19 Je '57. (MLRA 10:8)

1.Nachal'nik laboratorii pervoy Leningradskoy bumazhnoy fabriki.
(Paper--Testing)

YERASHOVA, N.V.

Exploration of the Russian polar expedition of 1900-1903 in the western part of the Taymyr Peninsula. Let. Sev. 3:158-167 '62. (MIRA 15:8)

1. Mogilevskiy gosudarstvennyy pedagogicheskiy institut, kafedra fizicheskoy geografii.
(Taymyr Peninsula—Discovery and exploration)

YERASHOVA, N.V.

Geomorphological observations of the Russian Polar Expedition on the Siberian Islands. Izv. Vses. geog. ob-va 96 no.6:523-525 N-D '64 (MIRA 18:1)

YERASHOVA, Z.M.

Experimental determination of certain characteristics of the drawing process. Izv. vys. ucheb. zav.; tekh. tekst. prom. no.5:77-81 '58. (MIRA 11:12)

1.Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti.
(Spinning)

YERASHOVA, Z.M.; KOKORIN, V.V.

New method for feeding the semifinished product to the draw box.
Izv.vys.ucheb.zav.; tekh.tekst.prom. no.2:58-60 '60. (MIRA 13:11)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti.
(Spinning machinery)

5(3) SOV/20-124-6-20/55

AUTHORS: Topchiyev, A. V., Academician, Krentsel', B. A., Pokatilo, N. A., Yerasova, Ye. L.

TITLE: On the Polymerization of α-Butene With a Complex Metallo-organic Multi-purpose Catalyst $Al(C_2H_5)_3 + TiCl_4$ (O polimerizatsii α-butena s kompleksnym metalloorganicheskim katalizatorom $Al(C_2H_5)_3 + TiCl_4$)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 6, pp 1255-1257 (USSR)

ABSTRACT: Since recently the problems of stereospecific polymerization of α-olefins with complex metallo-organic catalysts have attracted the attention of many research workers. This can be explained by the theoretical interest in polymerization reactions which yield stereoregular polymers on the one hand, and by valuable technical properties of the products formed, on the other hand. The mechanism of stereospecific polymerization of α-olefins and the properties of the polymers were frequently the subject of publications (Refs 1-8). Least attention in the discussion was paid to the synthesis of polymers with a high molecular weight on the α-butene

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basis (Refs 5-8). This is what induced the authors to write the present paper. In an experimental part they deal with the production of the initial substance, course, duration, and details of the reaction as well as with the quantity of the catalyst used. The ready polymer is described with respect to its properties. Figure 1 shows the dependence of the polybutylene yield upon the duration of reaction. Figure 2 gives the radiograms of amorphous (a) and crystalline (b) polybutylene. From figure 3 the dependence of the characteristic viscosity of polybutylene (A) can be seen and that of the content of crystalline substances (B) on the molecular ratio of the catalyst $(C_2H_5)_3Al : TiCl_4$. Figure 4 reveals the dependence of the same viscosity (A) and the yield in polybutylene upon the reaction temperature. There are 4 figures and 9 references, 3 of which are Soviet.

SUBMITTED: November 13, 1958

Card 2/2

YERASHOVA, Z. M.

YERASHOVA, Zinaida Mikhaylovna (All-Union Correspondence Ins of Textile and Light Industry) for Docent in the chair of "Spinning and the Mechanical Technology of Fiber Fabrics." (BMVISSO USSR, 1-61, 17)

YERASOV, A.V., inzh.; SHELIN, M.P., inzh.

Redesigning of PV-150-3 fuel oil heaters. Elek. sta. 33 no.7: 84 Jl '62. (MIRA 15:8)

(Petroleum as fuel)
(Electric power plants--Equipment and supplies)

YERASOV, F.N., inzh.

Planetary hydraulic units. Vest. mashinostr. 45 no.5:5-11 My '65. (MIRA 18:6)

ACC NR: AP6021483 (A) SOURCE CODE: UR/0413/66/000/011/0112/0112

INVENTOR: Yerasov, P. H.

ORG: None

TITLE: An air motor. Class 46, No. 182442

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 112

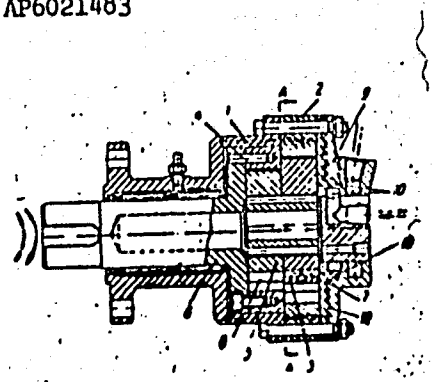
TOPIC TAGS: pneumatic device, shaft, torque

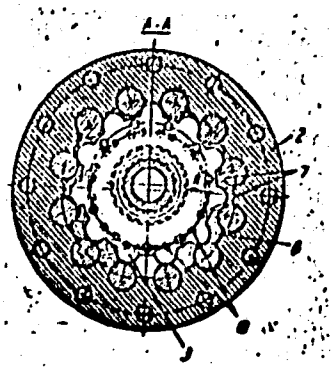
ABSTRACT: This Author's Certificate introduces: 1. An air motor consisting of a casing with internal gears and planet gears which convert the force of air pressure into rotary motion of the output shaft. Output torque is increased during engine operation at low rpm by planetary gearing. Air is distributed in the movable gear by holes which periodically align with holes in the housing cover for intake and exhaust of the working fluid. 2. A modification of this device with a system of air distribution channels on the planet gears and in the housing cover for reverse operation of the motor.

UDC: 621.541-233.316-581.32

Card 1/2

ACC NR: AP6021483





1—housing; 2—fixed gear; 3—planet gear mounted on fixed gear; 4—rotating gear; 5—planet gear mounted on rotating gear; 6—output shaft; 7—holes in the fixed gear; 8—working cavity of planet gear mounted on rotating gear; 9—housing cover; 10—holes (channels) in the housing cover

SUB CODE: 13, 21/ SUBM DATE: 18Jan64

Card 2/2

YERASOV, V.S., polkovnik

Photo interpretation of radar target images. Mor. sbor. 48 no.12: 43-50 D '64. (MIRA 18:2)

YERASOVA, A.A.

Diagnosing the localization of small foreign bodies in the hand. Vest.khir. 89 no.8:68 Ag '62. (MIRA 15:10)

1. Iz khirurgicheskogo otdeleniya (zav. - zasluzh. vrach RSFSR S.P.Sychev) Ustyuzhenskoy rayonnoy bol'nitsy Vologodskoy oblasti.

(HAND--FOREIGN BODIES)

YERASOV, N., gvardii inzh.-podpolkovnik

They are preparing airplanes for flights. Av.i kosm. 45 no.4: 67-70 Ap '63. (MIRA 16:3)

(Airplanes--Maintenance and repair)

YERASOV, N., gvardii inzh.-podpolkovnik

Engineer's order: Test the performance of the engine. Av.i kosm. 45 no.5:65-69 My '63. (MIRA 16:5)
(Airplanes--Engines)

L 45618-66 EWT(m)/T DJ

ACC NR: AT6016853 (N) SOURCE CODE: UR/3189/65/000/001/0074/0078

AUTHOR: Groza, V. F.; Shorokh, Ye. A.; Yerasov, P. I.

ORG: None

TITLE: Experimental determination of reactions in the D100 engine crankshaft supports

SOURCE: Kharkov. Politekhnicheskiy institut. Vestnik, no. 1(49), 1965. Mashinostroyeniye, no. 1, 74-78

TOPIC TAGS: hydrodynamic bearing, hydrodynamic theory, engine crankshaft, stress distribution, pressure lubrication

ABSTRACT: The authors conduct this study to achieve the following three conditions in determining the reactions of crankshaft supports: 1. high degree of accuracy; 2. absolute and not relative reaction values; 3. maintaining actual working conditions for main bearings, their rigidity, radial and axial clearances, temperature and oil pressure. These conditions can only be met by testing a full-scale functioning engine and not by modelling; 4. determine the minimal disturbances in the working parts of the engine. All of the above can be obtained by using one of the following three procedures; 1. varying the pressure in the oil layer; 2. varying the deformation of main bearing bolts. Both of these procedures are used and yield highly accurate results

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L 45618-66

ACC NR: AT6016853

with respect to main bearing stress distribution. Both methods fail to give a precise interpretation of the contact arc of a bearing. The second method is more successful than the first in measuring main bearing bolt deformation. The basis for the selection of boundary conditions is given which should be very useful in their selection for integrating the basic hydrodynamic equation for the lubricating layer inside the bearing. Orig. art. has: 5 figures, 2 formulas.

SUB CODE: 13/ SUBM DATE: None/ ORIG REF: 009

Card 2/2 mjs

30540

S/081/62/000/006/100/117
B162/B101

5,1190
15,8063

AUTHORS: Pokatilo, N. A., Yerasova, Ya. L., Unmut, A. M., Krentsel', B. A., Topchiyev, A. V.

TITLE: Production of isotactic polybutylene

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 6, 1962, 615, abstract 6P43 (Tr. In-ta nefti. AN SSSR, v. 14, 1960, 58-64)

TEXT: An investigation is made of the polymerization reaction of α-butylene using two systems of complex organo-metallic catalysts: $Al(C_2H_5)_3 + TiCl_4$ and $Al(iso\text{-}C_4H_9)_3 + TiCl_4$. The polymerization reaction of α-butylene was carried out in a medium of n-heptane, cleansed of moisture and unsaturated compounds. It is established that the best conditions for the production of isotactic α-polybutylene with the catalyst $Al(C_2H_5)_3 + TiCl_4$ are: molar ratio $(C_2H_5)_3Al:TiCl_4$ = 8:1, reaction temperature 20-30°C, reaction time 3 hrs; with the catalyst $Al(iso\text{-}C_4H_9)_3 + TiCl_4$ they are: molar ratio $(iso\text{-}C_4H_9)_3Al:TiCl_4$ = 1:1, reaction temperature 20-30°C, reaction time 5 hrs. An attempt is made to

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Production of isotactic ...

S/081/62/000/006/100/117
B162/B101

carry out polymerization of α-butylene in the liquid phase at temperatures and pressures close to the critical ones, in a β-butylene medium and also in a part of the α-butylene not involved in the reaction, using the catalytic system $Al(C_2H_5)_3 + TiCl_4$. [Abstracter's note: Complete translation.]

Card 2/2

S/510/60/014/000/002/006
D244/D307

AUTHORS: Pokatilo, N.A., Yerasova, Ye.L., Unmut, A.M., Erentsel', B.A., and Topchiyev, A.V.

TITLE: Preparation of isotactic polybutylene

SOURCE: Akademiya nauk SSSR. Institut nefti. Trudy, v. 14, 1960, Khimiya nefti, 58 - 64

TEXT: In view of the improved mechanical properties of poly-α-butylene the polymerization of α-butylene with the application of complex organometallic catalysts was investigated. $Al(C_2H_5)_3$ - $TiCl_4$ and $Al(\underline{iso}\text{-}C_4H_9)_3$ - $TiCl_4$ systems were used as catalysts. The polymerization was carried out in a glass apparatus under atmospheric pressure and also at temperatures and pressures close to the critical values for α-butylene. In the latter apparatus α-butylene served as the solvent as well as the part of liquid α-butylene unused in the reaction. The best conditions found for the polymerization with $(C_2H_5)_3$ Al - $TiCl_4$ were as follows: 1) Molar ratio $(C_2H_5)_3Al$: $TiCl_4$ = 8:1;

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S/510/60/014/000/002/006
D244/D307

Preparation of isotactic polybutylene

reaction temperature 20° - 30°C; reaction time 3 hrs. With iso - $(C_4H_9)_3Al$ - $TiCl_4$ the best conditions are as follows: 1) Molar ratio iso - $(C_4H_9)_3Al$: $TiCl_4$ = 1:1; 2) Reaction temperature 20° - 30°C, reaction time 5 hrs. There are 9 figures.

Card 2/2

S/190/62/004/012/004/015
B101/B186

AUTHORS: Yerasova, Ye. L., Krentsel', B. A., Pokatilo, N. A., Topchiyev, A. V.

TITLE: Isomerizing action of the catalytic system $Al(C_2H_5)_3 + CrCl_3$ in the polymerization of but-1-ene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 12, 1962, 1796-1798

TEXT: The applicability of the catalyst $Al(C_2H_5)_3 + CrCl_3$ suggested by J. E. Gillespie, J. W. Tordman (Industr. and Engng. Chem., 51, 1365, 1959) for the polymerization of propylene was studied with respect to the polymerization of but-1-ene. The experiments were carried out in ampoules, with the ratios $Al(C_2H_5)_3 : CrCl_3$ = 1:1, 1:2, 1:6, and 1:9 at 30-80°C. The polybutene yield was only 5%. However, a considerable isomerization from 1-butene to 2-butene was observed, which did not occur in the polymerization of 1-butene with $AlR_3 + TiCl_4$. Example: The initial butene had the composition (in % by weight): 70.03 1-butene, 11.42 cis-2-butene, and

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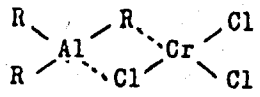
Isomerizing action of the...

18.55 trans-2-butene. After 30 hrs action of a catalyst with the ratio $(C_2H_5)_3Al : CrCl_3 = 4:1$ at 80°C, the composition was 24.41 1-butene, 41.07 cis-2-butene, and 34.52 trans-2-butene. Since $CrCl_3$ alone showed nearly no isomerizing effect, this is ascribed to the catalyst complex



There is 1 table.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR (Institute of Petrochemical Synthesis AS USSR)

SUBMITTED: July 1, 1961

Card 2/2

YERASOVA, Ye.L.; KRENTSEL', B.A.; POKATILO, N.A.; TOPCHIYEV, A.V.

Isomerizing action of the catalytic system $Al(C_2H_5)_3+CrCl_3$ in the polymerization of 1-butene. Vysokom. soed. 4 no.12:1796-1798 D '62. (MIRA 15:12)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Butene) (Polymerization) (Catalysts)

YERASTOV, B.M.

Improving the traversing jack. Put' i put. khoz. no.5:9 My '58.
(MIRA 13:3)

1.Glavnyy inzhener putevoy mashinnoy stantsii-38, stantsiya Novo-Obraztsovaya Kuybyshevskoy dorogi.
(Railroads--Equipment and supplies)

YERASTOV, B.M.

New developments in track raising and surfacing. Put' i put.khoz. 4 no.4:22-23 Ap '60. (MIRA 13:7)

1. Glavnyy inzhener Putevoy mashinnoy stantsii No.38, g.Kuybyshev.
(Railroads--Maintenance and repair)

29381
S/196/61/000/008/017/026
E194/E155

11.7350

AUTHOR: Yerastov, K.P.

TITLE: An investigation of drop evaporation in a fuel flame at high gas temperature

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.8, 1961, 8, abstract 8G79. (Sb. "3-e Vses. soveshchaniye po teorii goreniya" (Third All-Union Conference on the Theory of Combustion) Vol.2, M., 1960, 3-8)

TEXT: The rate of evaporation of kerosine grade Т-1 (T-1) was investigated. The investigations were made in a flame directed along a flow of air. To study the vaporising characteristics of the fuel it was first coloured with a soluble non-volatile dye. The dye used was 0.001% by weight Sudan red. The degree of vaporisation of the fuel was determined by comparing the intensity of coloration of extracted samples with the colour of the initial samples. At gas temperatures of 700 °C soot was found in the samples and was removed by filtration; it then had no influence on the correctness of assessment of the intensity of coloration of

Card 1/3

An investigation of drop evaporation ...

the samples. The tests were carried out under the following conditions: gas flow temperature t = 200, 400, 720, 1100 and 1400 °C; rate of gas flow 40 m/sec; gas pressure P_r, 1 atm; fuel atomisation pressure P_T, 30 kg/cm^2. The following expression is recommended to calculate the rate of vaporisation at temperatures up to 800 °C:

$$Nu_D = 0.8\ Re^{0.5} \cdot Pr_D^{1.3} \left(1 - \frac{P}{P_r}\right);$$

and for temperatures above 800 °C:

$$Nu_D = 0.8\ Re^{0.5} \cdot Pr_D^{1/3} \left(1 + \frac{P}{P_r}\right)\left(\frac{t_r}{800}\right)^2$$

where: Nu_D is Nusselt's diffusion criterion; Re is the Reynolds number of the drops; Pr_D is Prandtl's diffusion criterion; P is the vapour pressure of the drop surface; and P_r, t_r are the gas pressure and temperature. It was found that during evaporation there is a change in the fuel composition, because the light fractions are evaporated first.

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29381

An investigation of drop evaporation... S/196/61/000/008/017/026
E194/E155

[Abstractor's note: Complete translation.]

Card 3/3

YERASTOV, N. P.

Yerastov, N. P.

"Psychological Principles of Forming the Habit of Expressing Thoughts in One's Own Words among Pupils." Academy of Pedagogical Sciences RSFSR, Inst of Psychology, Moscow, 1955. (Dissertation for the Degree of Candidate in Pedagogical Science)

So: Knizhnaya letopis', No. 27, 2 July 1955

ARBUZOV, B.A., akademik; YERASTOV, O.A.; REMIZOV, A.B.

Spectroscopic study of the tautomerism of 4-carbomethoxy-3-ketothiophane, 2-carbomethoxy-3-ketothiophane, and 4-methyl-2-carbomethoxy-3-ketothiophane. Dokl. AN SSSR 162 no.1:82-85 My '65. (MIRA 18:5)

1. Kazanskiy gosudarstvennyy universitet im. V.I.Ul'yanova-Lenina.

ARBUZOV, B.A., akademik; YERASTOV, O.A.; REMIZOV, A.B.

Spectroscope study of the tautomerism of methyl and ethyl esters of 4-ketotetrahydrothiopyran-3-carboxylic acid. Dokl. AN SSSR 161 no.1:103-106 Mr '65. (MIRA 18:3)

1. Kazanskiy gosudarstvennyy universitet im. V.I. Ul'yanova (Lenina).

L 25466-66

ACC NR: AP6011205 SOURCE CODE: UR/0413/66/000/006/0041/0042

INVENTOR: Gaskarov, D. V.; Glazunov, L. P.; Yerastov, V. D.; Kozgalevskiy, A. V. 31 B

ORG: none

TITLE: A device for checking the qualitative indices of a dynamic link. Class 21, No. 179817 [announced by Leningrad Electrical Engineering Institute im. V. I. Ul'yanov (Lenin) (Leningradskiy elektrotekhnicheskiy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 41-42

TOPIC TAGS: computer circuit, flip flop circuit

ABSTRACT: This Author's Certificate introduces: 1. A device for checking the qualitative indices of a dynamic link during a step reaction. The unit contains a number of identical flip-flops, shaping circuits, switches, delay circuits and counters. The rise time of the transient at the output of the link is compared with the required value by connecting two structurally identical parallel channels at the link output. Each of these channels contains a series-connected asymmetric flip-flop with a switch connected to a delay circuit based on a driven multivibrator and a clamping circuit. 2. A modification of this device in which simultaneous evaluation of maximum overcontrol, oscillation index, control time and control error is simplified by connecting four structurally identical channels to the link output with an asymmetric flip-flop

UDC: 621.3.078:
:681.178.1

Card 1/2

L 25466-66
ACC NR: AP6011205 0

and clamping circuit connected in series in each of the channels. Switches are included in the asymmetric flip-flop circuits in the channels for evaluating control time and control error. These switches are connected to a second delay circuit based on a driven multivibrator. A counter is connected in the channel for evaluating the oscillation index between the asymmetric and symmetric flip-flop of the clamper.

SUB CODE: 09/ SUBM DATE: 04Feb65/ ORIG REF: 000/ OTH REF: 000

Card 2/2 dc

L 21810-66 EWT(1) IJP(c) AT
ACC NR: AP6012186 SOURCE CODE: UR/0386/66/003/008/0321/0323

AUTHOR: Belyayev, V. A.; Brezhnev, B. G.; Yerastov, Ye. M.

ORG: none

TITLE: Measurement of the cross sections of ion-atom collisions at low energies by the method of overtaking beams

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 8, 1966, 321-323

TOPIC TAGS: ion beam, ion interaction, atom, particle collision, collision cross section

ABSTRACT: It is shown that the difficulties involved in the measurement of the cross sections of ion-atom collisions at energies below ~100 ev by customary methods can be eliminated by providing conditions whereby the two colliding particles, while having a low energy relative to each other, but each particle has sufficiently high energy in the laboratory frame. The low interaction energy is brought about by having the two particles have a small difference in velocity at the instant of collision. Conditions of this kind can be obtained when monochromatic particle beams cross at a small angle ("overtaking beams"). A similar idea was recently advanced by S. M. Trujillo et al. (IV Int'l. Conf. on the Physics of

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Electronic and Atomic Collisions, Quebec, 1965). The authors have constructed a setup based on the described principle, and carried out preliminary measurements. The process chosen for investigation was resonance charge exchange of protons with hydrogen atoms. The proton beam came from an ion source of the oscillating type. The mixed atom-ion beam was obtained by partial charge exchange of a beam of (1150 ± 9) ev protons, with a gas target ahead of the entrance to the collision chamber. The protons produced from the atoms as a result of the charge exchange in the collision chamber acquired on leaving the collision chamber an additional energy, which made it possible to separate them subsequently from the total particle stream and to register them. The cross section of the process was calculated from the current of these newly produced protons. The cross section value obtained in a preliminary experiment, $(5.45 \pm 1.35) \times 10^{-15}$ cm^2 at an energy (31.8 ± 3.6) ev, is in satisfactory agreement with the only experimental results obtained for this interaction in this energy range. It is concluded that the overtaking-beam method can be used to study not only collisions between ions and atoms of the same element but also ion-ion and ion-atom collisions for different vapors and gases (both atomic and molecular), and is therefore quite promising for the study of ion-atom collision processes at low energies, down to fractions of an electron volt. The authors thank L. A. Artsimovich, M. K. Romanovskiy, and A. M. Andrianov for the opportunity to

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ACC NR: AP6012186

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perform the work and for continuous interest, and N. V. Fedorenko, V. V. Afrosimov, and R. N. Il'in for a discussion of the method.

SUB CODE: 20/ SUBM DATE: 25Feb66/ OTH REF: 002

Card 3/3 PB

MAYFAT, L.D.; YERASTOV, Ye.V.

Mechanization of casting operations in a locomotive repair shop. Zhel.dor.transp. 42 no.1:77-79 Ja '60.
(MIRA 13:5)

1. Glavnyy konstruktor Novosibirskogo parovozoremontnogo zavoda (for Mayfat). 2. Nachal'nik laboratorii Novosibirskogo parovozoremontnogo zavoda (for Yerastov).
(Railroads--Repair shops) (Iron founding)

5(1) SOV/32-25-4-53/71

AUTHORS: Zizin, V. G., Yerastov, Yu. N., Il'in, V. D.

TITLE: Apparatus for the Continuous Determination of Calcium and Magnesium in Water (Pribor dlya nepreryvnogo opredeleniya kal'tsiya i magniya v vode)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 4, pp 492 - 493 (USSR)

ABSTRACT: The titration of aqueous calcium and magnesium salt solutions with trilon B besides chrome dark blue as indicator cannot be done directly by the calorimetric method because of the nature of the color change. To permit such a titration a special apparatus was designed in the case under review, which permits a continuous checking of the alkaline-earth metal contents of various aqueous solutions. The mixture of the solution to be analyzed and the indicator passes consecutively through a series of flasks. Prior to entry into each of the flasks increasing quantities of a trilon B solution are added to the mixture. As soon as the trilon B concentration suffices to bind all Ca^{2+} and Mg^{2+} ions, the color changes from red to blue. Of course,

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Apparatus for the Continuous Determination of Calcium and Magnesium in Water

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the color will, then, remain blue in all subsequent flasks. A sketch (Fig 1) and description of the flask are given. The flask is actually a series of hermetically sealed, interconnected flasks placed one on top of the other. The setup of the entire apparatus is also given (Fig 2). There are 2 figures.

ASSOCIATION: Bashkirskiy nauchno-issledovatel'skiy institut nefti (Bashkirian Scientific Research Institute of Petroleum)

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ZIZIN, V.G.; YERASTOV, Yu. N.; IL'IN, V.D.

Instrument for titration in a flow. Trudy Bash NII NP no.3:204-208 '60. (MIRA 14:4)
(Titrimeters)

YERASTOVA, A. P.

YERASTOVA, A. P. -- "Investigation of Structural Changes in Nickel-Zinc--Oxide Ferromagnetic Substances." Min Higher Education USSR. Leningrad Inst of Precision Mechanics and Optics. Leningrad, 1955. (Dissertation for the Degree of Candidate of Technical Sciences.)

SO: Knizhnaya Letopis', No 5, Moscow, Feb 1956

ACC NR: AP7002412 SOURCE CODE: UR/0363/66/002/012/2260/2261

AUTHOR: Titova, A. G.; Yerastova, A. P.; Petrov, R. A.

ORG: none

TITLE: Growing and certain properties of ferromagnetic garnet crystals $Bi_{3-2x}Ca_{2x}Fe_{5-x}V_xO_{12}$

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 12, 1966, 2260-2261

TOPIC TAGS: garnet, saturation magnetization, vanadium compound, bismuth compound, calcium compound, iron compound

ABSTRACT: The object of the work was to grow single crystals of solid solutions in the system $Bi_{3-2x}Ca_{2x}Fe_{5-x}V_xO_{12}$ in order to study ferromagnetic resonance ΔH, magnetic and certain other properties of these crystals. The crystals were grown by crystallization from solution in the melt; x ranged from 0.96 to 1.46. Also grown were garnet single crystals with a minimum bismuth content: $Bi_{0.08}Ca_{2.92}Fe_{3.54}V_{1.46}O_{12}$. In addition to the garnet, two crystalline phases, $CaFe_2O_4$ and $PbFe_{12}O_{19}$, were formed. Goniometric measurements showed that in contrast to $Y_3Fe_5O_{12}$ crystals, the $Bi_{3-2x}Ca_{2x}Fe_{5-x}V_xO_{12}$ crystals have cube faces {100} in addition to {110} and {211} faces. A study of the structure of these faces showed their different solubilities in the mother liquor. As the vanadium content decreases from 1.46 to 1.0, the saturation magnetization decreases, while the ferromagnetic resonance width increases. The $Bi_{10}Ca_{2.0}Fe_{4.0}V_{1.0}O_{12}$ crystals are not magnetic. Crystals with $x \geq 1.25$ have a

UDC: 553.85

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ACC NR: AP7002412

relatively low value of $2\Delta H$ and are therefore strong competitors of expensive yttrium iron garnet. Orig. art. has: 2 figures.

SUB CODE: 07/ SUBM DATE: 12Jan66/ ORIG REF: 002/ OTH REF: 002

Card 2/2

YERASTOVA, A.P.

Category : USSR/Magnetism - Ferrites F-5

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 1440

Author : Yerastova, A.P., Sakhov, V.B.
Title : Investigation of the Structure and of the Mechanical Properties of Certain Oxide Ferromagnetics (Oxyfers).

Orig Pub : Sb. statey Leningr. in-ta tochnoy mekhan. i optiki, 1955, vyp. 18, 104-112

Abstract : The dependence of the lattice constant on the composition was investigated for the Ni-Zn ferrite system $Ni_kZn_{1-x}Fe_2O_4$. The measurements were made on nickel and zinc ferrites having a stoichiometric composition, and also on the 0--2000, 0--400, I--5, and RCh-50 (RCh-10) oxyfers. The lattice constant increases linearly with the zinc contents and amounts to 8.32 A for $NiFe_2O_4$ and 8.45 A for $ZnFe_2O_4$. The microhardness of the above ferrites was also investigated. An increase of the mocrohardness with the zinc content was observed. The mocrohardness of ferrites in the cross section is higher than the microhardness on the surface.

Card : 1/1

YERASTOVA, A.P.

USSR/Physical Chemistry - Crystals, B-5

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 60868

Author: Yerastova, A. P., Sakhov, V. B.

Institution: None

Title: Investigation of Structure and Mechanical Properties of Some Oxidic Ferromagnetics (Oxifers)

Original Periodical: Sb. statey Leningr. in-ta tochnoy mekhan. i optiki, 1955, No 18, 104-112

Abstract: None

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