Dobrynina, T. A.

Investigation of systems containing concentrated hydrogen peroxide. XI. Characteristics of the solid phase systems [illegible] A. Dobrynina [illegible] Chem. [illegible] 1954

FM

DOBRYNINA, T. A. Cand Chem Sci -- (diss) "Physicochemical study of the triple system $LiOH = H_2O_2 = H_2O$, and the synthesis of peroxide compounds of lithium." Mos, 1957. 10 pp with graphs, 20 cm. (Inst of General and Inorganic Chemistry im N. S. Kurnakov, Acad Sci USSR. Laboratory of Peroxide Compounds), 180 copies (KL, 24-57, 116)

85601

S/062/60/000/006/012/025/XX
B020/B060

11.2140

AUTHOR: Dobrynina, T. A.

TITLE: Solubility Isotherm of the Ternary System LiOH - H_2O_2 - H_2O at 30.5° and Study of Lithium Peroxide Hydrate

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 6, pp. 961-965

TEXT: The existence of lithium peroxide perhydrates $Li_2O_2 \cdot H_2O_2 \cdot 3H_2O$, $Li_2O_2 \cdot H_2O_2 \cdot 2H_2O$ and $Li_2O_2 \cdot 2H_2O_2$ was established during the study of solubility of the ternary system mentioned in the title at 10°, 0°, -10°, and -21°C, the composition of the solid phases being determined at the same time (Ref. 1). Hydrate forms of lithium peroxide were not found. Lithium peroxide perhydrates are, however, little stable, and readily eparate crystalline hydrogen peroxide on heating as well as in vacuum. At mperatures, one had reason to expect either the formation of or that of its hydrated forms as solid phases in the

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Solubility Isotherm of the Ternary System LiOH - H_2O_2 - H_2O at 30.5° and Study of Lithium Peroxide Hydrate

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system concerned. The investigation was conducted in a water thermostat with a contact thermometer. Sampling and analysis of liquid phase and the "rest" for active oxygen and lithium oxide content were made by the method described in Ref. 1. The composition of the solid phases formed in the system is determined by the "rest" method. Data obtained on solubility in the LiOH - H_2O_2 - H_2O system at 30.5° are given in Table 1 and diagrammatically shown in Fig. 1, the same diagram being shown in rectangular coordinates in Fig. 2. The solubility of $LiOH.H_2O$ at 30.5°C amounts to 6.83% Li_2O or 10.95% LiOH. At 30.5° in the LiOH - H_2O_2 - H_2O system, the existence of the following solid phases was established: $LiOH.H_2O$, $Li_2O_2.H_2O$, $Li_2O_2.H_2O_2.3H_2O$, $Li_2O_2.H_2O_2.2H_2O$, and $Li_2O_2.2H_2O_2$. The solid phase $LiOH.H_2O$ exists at 30.5° in the concentration range of hydrogen peroxide in the liquid phase from 0 to 1.63%. At low H_2O_2 concentrations in the liquid phase at 30.5°C the author established the formation of a new solid phase $Li_2O_2.H_2O$, which was not established under the conditions of Ref. 1, and which exists in the hydrogen peroxide

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Solubility Isotherm of the Ternary System S/062/60/000/006/012/025/XX
LiOH - H_2O_2 - H_2O at 30.5° and Study of B020/B060
Lithium Peroxide Hydrate

concentration from 1.63 to 6.17%. At 6.17 - 34.82% there exists the solid phase $Li_2O_2 \cdot H_2O_2 \cdot 3H_2O$ and at 34.82 - 59.51% H_2O_2 the solid phase $Li_2O_2 \cdot H_2O_2 \cdot 2H_2O$. $Li_2O_2 \cdot 2H_2O_2$ is formed at a concentration of 51.59 - 61.57% H_2O_2. The limit of investigated H_2O_2 concentrations in the system mentioned in the title was 64.57%. At still higher H_2O_2 concentrations a violent reaction set in under strong heating. $Li_2O_2 \cdot H_2O$ lithium peroxide hydrate obtained synthetically was studied with the aid of the thermal differential analysis. The differential curve of $Li_2O_2 \cdot H_2O$ heating is shown in Fig. 3; it differs from the heating curve of anhydrous peroxide by a higher endothermal effect beginning at 100° and caused by the removal of the crystal water. When heated up to 100° lithium peroxide monohydrate separates water and passes over to anhydrous Li_2O_2. The endothermic effect beginning at 325° corresponds to the decomposition of Li_2O_2. Lithium peroxide hydrate was submitted to X-ray analysis also by G. A. Gol'der;

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85601

Solubility Isotherm of the Ternary System $LiOH - H_2O_2 - H_2O$ at 30.5° and Study of Lithium Peroxide Hydrate

S/062/60/000/006/012/025/XX
B020/B060

the interplanar distances are given in Table 2. The author thanks S. Z. Makarov for valuable advice. There are 3 figures, 2 tables, and 6 references: 3 Soviet, 1 US, 1 French, and 1 Italian.

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

SUBMITTED: February 3, 1959

X

Card 4/4

82688

S/062/60/000/008/001/012
B004/B054

5.2100

AUTHORS: Makarov, S. Z. and Dobrynina, T. A.

TITLE: Synthesis and Study of the Properties of Lithium Peroxide Diperhydrate

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 8, pp. 1321-1324

TEXT: In a previous investigation of the solubility in the system LiOH - H_2O_2 - H_2O in the temperature range -21 to +30°C, the authors obtained the compound $Li_2O_2 \cdot 2H_2O_2$ which could not be prepared in a pure state. The present paper reports on the synthesis of this compound. $Li_2O_2 \cdot H_2O_2 \cdot 2H_2O$ was treated with concentrated H_2O_2 at 0 to -21°C, and the resulting precipitate was filtered off. Table 1 gives the analytical data of some preparations. They still contained mother lye which could not be washed out with cooled ether, and were unstable. To obtain pure $Li_2O_2 \cdot H_2O_2$, the preparations were dried at 10 torr and 0 - 2°C, or at 18 - 21°C in an

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Synthesis and Study of the Properties of Lithium Peroxide Diperhydrate

82688

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B004/B054

exsiccator over phosphoric anhydride. Table 2 indicates the analyses of the substances obtained at 0 - 2°C, and Table 3 those of the substances obtained at 18 - 21°C. Fig. 1 shows the change in the content of H_2O_2 and H_2O during drying. The preparations dried at 18 - 21°C were unstable. At 0 - 2°C, however, a preparation was obtained after 15 days' drying that had the composition $Li_2O_2 \cdot 2.02\ H_2O_2 \cdot 0.18\ H_2O$. It was X-rayed at -45°C by G. A. Gol'der. The lattice spacings indicated in Table 4 show that this compound has a peculiar structure differing from that of other lithium peroxides. A thermal analysis showed that $Li_2O_2 \cdot 2H_2O_2$ heated to 50 - 60°C violently decomposes within 16 min, and passes over into anhydrous Li_2O_2 between 85° and 100°C. There are 1 figure, 4 tables, and 7 references: 3 Soviet, 1 US, 2 German, and 1 Italian.

X

ASSOCIATION: Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR (Institute of General and Inorganic Chemistry of the Academy of Sciences, USSR)

SUBMITTED: April 16, 1959

Card 2/2

S/0000/63/000/000/0085/0093

ACCESSION NR: AT4028333

AUTHOR: Dobry*nina, T. A.; Makarov, S. Z. (deceased)

TITLE: Peroxide compounds of lithium and their synthesis

SOURCE: Soveshchaniye po khimii perekisny*kh soyedineniy. Second, Moscow, 1961. Khimiya perekisny*kh soyedineniy (chemistry of peroxide compounds); Doklady* soveshchaniy. Moscow, Izd-vo AN SSSR, 1963, 85-93

TOPIC TAGS: peroxide compound, lithium, peroxide synthesis, hydrogen peroxide, lithium peroxide

ABSTRACT: The authors plotted a polythermal diagram showing the range within which a solid phase in saturated solutions of the $LiOH$--H_2O_2--H_2O ternery system exists. Investigation of this ternery system showed that lithium peroxide was not formed in the temperature range of -21 to +30°C during the interaction of $LiOH$ with H_2O_2. Li_2O_2 synthesis is possible by two methods. In both methods of lithium peroxide synthesis, lithium hydroxide and hydrogen peroxide are the initial products, however, the temperature conditions and the concentration of hydrogen peroxide were different. A schematic of the instrument for producing lithium peroxide is shown. The data obtained from the experiments of lithium peroxide synthesis are presented in tables.

ACCESSION NR: AT4028333

In conclusion, the authors claim a physical-chemical investigation of the ternery system $LiOH--H_2O_2--H_2O$ has made it possible to develop two methods for the synthesis of lithium peroxide through its derivatives of a hydrate or hydrogen peroxide type:

$$Li_2O_2 \cdot H_2O \text{ and } Li_2O_2 \cdot H_2O_2 \cdot (2-3)H_2O$$

Orig. art. has: 4 tables and 2 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N.S. Kurnakova AN SSSR (Institute of General and Inorganic AN SSSR)

SUBMITTED: 13Dec63 DATE ACQ: 06Apr64 ENCL: 00

SUB CODE: CH NO REF SOV: 011 OTHER: 024

Card 2/2

DOBRYNINA, Tat'yana Aleksandrovna; VOL'NOV, I.I., kand. khim. nauk, otv.red.; DRAGUNOV, E.S., red.

[Lithium peroxide] Perekis' litiia. Moskva, Izd-vo "Nauka," 1964. 49 p. (MIRA 17:7)

DOBRYNINA, T.A.; DZYATKEVICH, B.S.

Peroxyhydrates and hydrates of rubidium and cesium carbonates. Report No. 1: Solubility isotherms of the ternary systems $Rb_2CO_3 - H_2O_2 - H_2O$ and $Cs_2CO_3 - H_2O_2 - H_2O$ at 0°C. Izv. AN SSSR.Ser.khim. no. 5:790-794 My '64. (MIRA 17:6)

1. Institut obshchey i neorganicheskoy khimii im. N.S. Kurnakova AN SSSR.

DZYATKEVICH, B.S.; DOBRYNINA, T.A.

Peroxyhydrates and hydrates of rubidium and cesium carbonates. Report No.2: Physicochemical study of the ternary system $Rb_2CO_3 - H_2O_2 - H_2O$. Izv.AN SSSR. Ser.khim. no.1:37-42 '66. (MIRA 19:1)

1. Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova AN SSSR.

MANOYLOV, S.Ye.; CHAMIN, N.N.; DOBRYNINA, T.I.; VOSKOBOYNIKOV, G.V.

Isolation of crystalline catalase from horse erythrocytes and the study of some of its physicochemical properties. Biokhimiia 26 no.3:408-411 My-Je '61. (MIRA 14:6)

1. Chair of Biochemistry, Chemo-Pharmaceutic Institute, Leningrad.
(CATALASE) (ERYTHROCYTES)

CHAMIN, N.N.; DOBRYNINA, T.I.

Separation of an amorphous and crystalline catalase from waste products of blood serum production. Trudy Len.khim.-farm.inst. no.13:11-14 '62. (MIRA 15:10)

1. Laboratoriya enzimologii pri kafedre biokhimii (zav. prof. S.Ye.Manoylov) Leningradskogo khimiko-farmatsevticheskogo instituta.

(CATALASE)

Dobrynina, T.P.

6000

Chem ✓ Catalytic dehydrogenation of isopentane. N. I. Shuikin, T. P. Dobrynina, E. A. Timofeeva, and Yu. P. Egorov. *Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci.* 1955, 869-70 (Engl. translation).—See *C.A.* 50, 9275c. B. M. R.

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PM

Dobrynina, T.P.

SHUYKIN, N.I.;DOBRYNINA, T.P.;TIMOFEYEVA, Ye.A.;YEGOROV, Yu.P,

Catalytic dehydrogenation of isopentane. Izv.AN SSSR,Otd.khim. nauk no.5:952-953 S-O '55. (MLRA 9:1)

1.Institut organicheskoy khimii imeni N.D.Zelinskogo Akademii nauk SSSR. (Butane) (Dehydrogenation)

Dobrynina, T.P

[illegible]atalytic dehydrogenation of 2-methylbutane [illegible] T. P. Dobrynina, and [illegible] *Rev. Inst. Franç. Pétrole* [illegible] 11, 1185-8(1956). Isopentane (I) [illegible]ated by passage through a glass tube [illegible] catalyst (II) at atm. pressure, 527°, and [illegible] II comprised the oxides of [illegible] promoter. After charging each 40-ml. batch of I, II was regenerated with air for 2 hrs. at 550°. Yield of isoprene (III) was increased by reduction of II with [illegible] prior to [illegible] catalyzate (IV) [illegible] III ranged from 64 to 92%, [illegible] isomer predominating. [illegible] unreacted I and small amts. of 1-pentene, 2-pentene [illegible] and probably pentane. The av. yield of III [illegible] I charged. W. L. B[illegible]

DOBRYNINA, T. P.

AUTHORS: Timofeyeva, Ye. A.; Kleymenova, V. M.; Dobrynina, T. P. 62-1-18/21

TITLE: Application of the Kaufman-Gal'pern Bromometric Iodine Number Determination Method to Certain C_5 and C_6 Hydrocarbons (Primeneniye bromometricheskogo metoda opredeleniya iodnykh chisel po Kaufmanu-Gal'pernu k nekotorym uglevodorodam sostava C_5 i C_6).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk, 1957, No. 1, pp. 122-123 (U.S.S.R.)

ABSTRACT: The applicability of the Kaufman-Gal'pern method to the determination of iodine numbers and the content of unsaturated hydrocarbons in catalysates obtained during the dehydrogenation of n-pentane, isopentane and n-hexane, is discussed. The tendency (of the basic saturated hydrocarbons as well as hydrocarbons forming during catalysis, and artificial mixtures of these very same hydrocarbons) toward the bromine solution is analyzed. It was established that the bromometric method of determining iodine numbers (the Kaufman-Gal'pern method), when

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62-1-18/21

Application of the Kaufman-Gal'pern Bromometric Iodine Number Determination Method to Certain C_5 and C_6 Hydrocarbons

applied to individual monoolefines C_5 and C_6 and their mixtures with alkanes, offer highly satisfactory results. The authors determined the coefficient with the aid of which it became possible to utilize the Kaufman-Gal'pern bromometric method for the determination of the content of monoolefins in their mixture with conjugated diolefines and alkanes.

Detailed results of this investigation are presented in unnumbered table on page 123.

Table. There are 5 Slavic references.

ASSOCIATION: Academy of Sciences of the USSR, Institute of Organic Chemistry imeni N. D. Zelinskiy

PRESENTED BY:

SUBMITTED: October 10, 1956

AVAILABLE: Library of Congress

Card 2/2

DOBRYNINA, T. P

~~Distr: 4E3d/4E4j/4E2c(-3)~~

"Investigation of the Antiknock properties of individudal petroleum hydrocarbons." S. S. Novikov, B. A. Englin, T. I. Naryshkina, A. P. Subbotin, E. Ya. Lapshina, T. P. Dobrynina, and I. D. Inozemtsev, Khim. i Tekhnoi. Topliva i Masel 1957, No. 9, 7-II.--The following octane nos. were found for the synthetich hydrocarbons, k listed after addn. of 4.0 cc. of "r-9"/kg. before and after addn. of 20% naphthenes: cyclopentane 104.8 and 104.9; ethylcyclopentane 104.8 and --; isopropylcyclopentane 104.8 and 102.0; 1,1,3-trimethylcyclopentane 104.8 and 104.1. Octane ratings of the following nonsynthetics are given as: cyclohexane 93; methylcyclohexanae [illegible] 89; ethylcyclohexane 73; [illegible] isopropylcycolhexane 82. H. L. Olin/

AUTHORS: Shuykin, N. I., Timofeyeva, Ye. A. SOV/62-58-6-12/37
Dobrynina, T. P.

TITLE: The Contact-Catalytic Dehydration of Isopentane in Dependence on Temperature (Kontaktno-kataliticheskaya degidrogenizatsiya izopentana v zavisimosti ot temperatury)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1958, Nr 6, pp. 726 - 729 (USSR)

ABSTRACT: In an earlier work (Ref 1) the influence exercised by temperature upon the dehydration of n.isopentane in the presence of an aluminum-chromium catalyst was investigated. It was found that at 500-550° the reaction of the dehydration of n.pentane attains the state of equilibrium. In the present work the same investigation is carried out with isopentane. It was found that in the interval of 500-550° the dehydration of isopentane attains a state of equilibrium. At 500-550° the amount of isopentene obtained from isopentane exceeds that of n.pentene obtained from n.pentane by 7-8 mol %. Less "coke" and gas was formed under existing conditions (by the dehydration of isopentane) than by the dehydration of n.pentane. There are 2 figures, 4 tables, and 5

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The Contact-Catalytic Dehydration of Isopentano in Isopentane in Dependence on Temperature SOV/62-58-6-12/37

references, 4 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N.D.Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N.D.Zelinskiy,AS USSR)

SUBMITTED: December 6, 1956

1. Isopentane--Dehydration 2. Isopentane--Catalysis
3. Isopentane--Temperature factors 4. Aluminum-chromium catalysts
--Performance

Card 2/2

SOV/62-58-7-17/26

AUTHORS: Timofeyeva, Ye. A., Shuykin, N. I., Smirnov, V. S., Dobrynina, T. P., Plotnikov, Yu. N., Petryayeva, G. S.

TITLE: The Dehydrogenation of Hydrocarbons of Different Structure in the Presence of Alumino-Chromium-Potassium Catalysts (Degidrogenizatsiya uglevodorodov razlichnogo stroyeniya v prisutstvii alyumokhromokaliyevogo katalizatora)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1958, Nr 7, pp 895-899 (USSR)

ABSTRACT: It is taken for sure that in the presence of oxide catalysts on certain conditions aromatic hydrocarbons are formed from alkanes having 6 and more carbon atoms in the main chain. Therefore they are not suited for a direct cyclization (Refs 1, 5). In the investigation of the aromatization of alkanes and isoalkanes greatest attention was directed to the formation of aromatic hydrocarbons and less attention to the yield (and the structure) of saturated hydrocarbons. In the present paper the authors deal with the reactions of hydrocarbons of different structure (C_5, C_6, C_8) in the presence of alumino-chromium-potassium catalysts. At 500°

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SOV/62-58-7-17/26

The Dehydrogenation of Hydrocarbons of Different Structure in the Presence of Alumina-Chromium-Potassium Catalysts

(on the conditions assumed) high yields of the corresponding unsaturated hydrocarbons (30 to 36 % in one passage) could be obtained from isohexanes and isooctane. There are 1 figure, 1 table, and 6 references, 5 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR
(Institute of Organic Chemistry imeni N. D. Zelinskiy, AS USSR)

SUBMITTED: February 17, 1958

Card 2/2

SOV/62-58-7-18/26

AUTHORS: Shuykin, N. I., Timofeyeva, Ye. A., Dobrynina, T. P., Plotnikov, Yu. N., Petryayeva, S. S., Kleymenova, V. M.

TITLE: The Reactions of N.Alkanes With a C_5-C_9 Structure in the Presence of Alumino-Chromium-Potassium Catalysts (Prevrashcheniya n.alkanov sostava C_5-C_9 v prisutstvii alyumokhromokaliyevogo katalizatora)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1958, Nr 7, pp. 896-898 (USSR)

ABSTRACT: The production of alkenes and alkadienes by means of the catalytic dehydration of the alkanes is of scientific and practical interest. In the present brief report the authors describe the reaction of n.alkanes (from pentane to nonane) in the presence of alumino-chromium-potassium catalysts of high activity and stability in the dehydration of isopentane. It was shown that on the conditions assumed catalysts could be obtained from these alkanes which contained 8-29 % of unsaturated and 39-50 % of aromatic hydrocarbons. Finally the authors point to the fact that after the dehydration of

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the C_6-C_9 n.alkanes they obtained catalysts which contained more than 14 % of alkenes. There are 1 figure and 5 references, 5 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR
(Institute of Organic Chemistry imeni N. D. Zelinskiy, AS USSR)

SUBMITTED: February 17, 1958

SOV/20-121-3-25/47

AUTHORS: Shuykin, N. I., Corresponding Member, Academy of Sciences, USSR, Timofeyeva, Ye. A., Dobrynina, T. P.

TITLE: Dehydrogenation of n-Pentane and Isopentane in Presence of Alumo-Chromium-Potassium Catalysts (Degidrogenizatsiya n-pentana i izopentana v prisutstvii alyumokhronokaliyevogo katalizatora)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 3, pp. 485-487 (USSR)

ABSTRACT: Although mixed catalysts (Ref 4, 5) as mentioned in the title can be found already in earlier papers the authors of this paper succeeded for the first time in the determination of: A) the most favorable quantity ratio of the components and B) the conditions of the previous activation of the catalyst. These formulae are mentioned together with the formulae for regeneration. The influence of a) temperature, b) bulk velocity (ob"yemnaya skorost') and c) the duration of the working cycles are investigated with respect to the capacity of dehydration of the mentioned catalyst. After each regeneration the catalyst was treated for 1,5 hours with hydrogen. a) Table 1

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Dehydrogenation of n-Pentane and Isopentane in Presence of Alumo-Chromium-Potassium Catalysts

shows the results of the temperature experiments which guarantee an equilibrium yield of pentenes and isopentenes. b) Table 2 reveals the results of the experiments with the bulk velocity within 0,3 - 1,1 hours^{-1}. According to this the pentene and isopentene yields depend on the temperature. The lower it is the higher the influence. Thus the change of velocity from 0,5 to 1,1 hours^{-1} reduces the isopentene yield from 38 to 27 % and the yield of pentenes from 31 to 19 %. At 550 and 575° this influence practically ceases. c) The higher the temperature the more rapidly decreases the activity of the catalyst with respect to time (Fig 1). During a working cycle of an 18 minutes' duration the isopentene content increases from 25 % by weight to 45 % in connection with a rise of temperature from 500 to 550°, computed for the isopentane having passed the catalyst. It is true that in a working cycle of 5 hours and 18 minutes and of 8 hours and 24 minutes at 527° the yields are somewhat higher than at 550°, namely 39,6 compared with 37,1 % and 30 with 26 %, respectively. At the end the main indices of the working process together with the obtained yields are shown under

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SOV/20-121-3-25/47

Dehydrogenation of n-Pentane and Isopentane in Presence of Alumo-Chromium-Potassium Catalysts

the just mentioned conditions. There are 1 figure, 2 tables, and 7 references, 4 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR
(Institute of Organic Chemistry imeni N. D. Zelinskiy, AS USSR)

SUBMITTED: January 4, 1958

Card 3/3

5 (3) SOV/62-59-5-16/40

AUTHORS: Timofeyeva, Ye. A., Shuykin, N. I., Dobrynina, T. P., Kleymenova, V. M.

TITLE: Effect of **Space Velocity** on the Catalytic Dehydrogenation of n-Pentane and Isopentane (Vliyaniye ob"yemnoy skorosti na kataliticheskoye degidrirovaniye n.pentana i izopentana)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 5, pp 875-878 (USSR)

ABSTRACT: In previous works (Refs 1-3) on the temperature effect on the dehydrogenation reaction of n-pentane and isopentane the authors showed that this reaction attains equilibrium at a **space velocity of 0**.5/hr in the temperature range between 500 and 550°. In connection with it the effect of the throughput rate on the reaction mentioned has been investigated in this work. n-Pentane was investigated in the temperature range between 500-550°, isopentane in the same temperature range and at 575°. The **space velocity** was varied from 0.3-1.7/hr. The method of analysis and the investigation conditions were similar to those of the works (Refs 2, 3). The results obtained are shown in tables 1-4 and figures 1 and 2. Tables 1 and 3 show the effect of the **space velocity** on the dehydro-

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SOV/62-59-5-16/40

Effect (**Space Velocity** on the Catalytic
Dehydrogenation of n-Pentane and Isopentane

genation reaction of n-pentane and isopentane, respectively. Tables 2 and 4 show the molar balance of the reaction and the selectivity of the catalyst of the two compounds mentioned. The figures show the molar balance depending on the throughput rate. Aluminum chromium potassium catalysts were used in the reactions. It appeared that the dependence of the mono-olefin yield on the **space velocity** decreases with temperature rise. If the reaction is carried out at a **space velocity** of 0.3-1.1/hr at 550 and 575° the yield is not changed at all. Optimum reaction conditions prevail at 550° and a **space velocity** of 1.1/hr. Under these conditions 45 mole % isopentene, and 5 mole % isoprene were formed from isopentane. 39 mole % pentene are formed from n-pentane. The isoprene yield is practically independent of the change of **space velocity;** it never surpasses 5-6 mole % of the isopentane let through. There are 2 figures, 4 tables, and 3 Soviet references.

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5 (3), 5 (4)

AUTHORS: Timofeyeva, Ye. A., Shuykin, N. I., Dobrynina, T. P., Kleymenova, V. M. SOV/62-59-9-16/40

TITLE: Lifetime of a Catalyst Without Regeneration at the Catalytic Dehydrogenation of Isopentane

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 9, pp 1623 - 1626 (USSR)

ABSTRACT: The present article is the continuation of the investigations of these authors on the dehydrogenization reaction of pentanes on aluminum chromium potassium catalysts. The reaction scheme is described. This showed that the yield of amylenes at higher reaction temperature is independent in a wide range of the volume rate of the initial substance. In the present paper investigation was carried out on the influence on the dehydrogenation reaction of the duration of the operation cycle of the catalyst between regenerations at 500, 527, and 550°. At 500 and 550°, 28 experiments were carried out until the regeneration of the catalyst, and at 527°, 33 experiments. Table 1 contains the indices of the different work cycles. It showed that when the reaction temperature was higher the activity of the catalyst decreased faster. The maximum yield was obtained at 500° in ex-

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periment Nr 8. At 527 and 550° the maximum yield was obtained already at experiment Nr 3. The yield was larger at higher temperatures, but decreased faster and it was considerably smaller at the end of the experiment series as when carried out at lower temperatures. This effect was explained by the shielding effect of the large quantities of formed isoprene on the catalyst. The yield of isopentanes is larger at lower temperatures, because side-reactions do not occur at these temperatures. No isoprene forms at 500°. Therefore, it is preferable to repeat the regeneration of the catalysts when using it at higher temperatures (after 1 hour) and to carry out the reactions at high volume velocities (there is a possibility that more initial hydrocarbons are consumed). At 527° regeneration has to take place after 3 hours, and at 500° after 6-8 hours. There are 1 figure, 2 tables, and 3 Soviet references.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: December 25, 1957

Card 2/2

S/595/60/000/000/012/014
E196/E485

AUTHORS: Shuykin, N.I., Timofeyeva, Ye.A., Dobrynina, T.P.

TITLE: Contact-catalytic dehydrogenation of pentanes

SOURCE: Vsesoyuznoye soveshchaniye po khimicheskoy pererabotke neftyanykh uglevodorodov v poluprodukty dlya sinteza volokon i plasticheskikh mass. Baku, 1957. Baku, Izd-vo AN Azerb. SSR, 1960. 261-265

TEXT: In earlier published work, the authors found that dehydrogenation of n-pentane using catalyst composed of oxides of Al, Cr and Mg in molar ratio 45:30:25 at 500 to 550°C with space velocity of 1.2 hr^{-1} gave condensate containing 21 to 26% pentenes, i.e. 18 to 19% of the transformed pentane. A more effective catalyst of the composition Al_2O_3, Cr_2O_3, K_2O (90.7:5.6:3.7 mol %) gave from isopentane at 527°C an 87% yield of catalysate with an olefin content of 38%, consisting of all isomeric isopentenes, mainly 2-methyl-2-butene and also n-pentane (3%), isoprene (2%) and small quantities of pentene-1, pentene-2 and toluene. Under identical conditions, n-pentane was dehydrogenated in 88% yield to a product containing 31% of olefins including: pentene-2 (28%), pentene-1 (3%), also isopentane (3%) and pentadienes (<1%). The yield is increased by 3 to 4% if the catalyst is reactivated with hydrogen. The same catalyst was used to study the effect of temperature, space velocity and the duration of working cycles. The catalyst's activity is claimed to be such that reaction equilibrium is reached at 500 to 550°C with a space velocity of 0.3 to 0.5 hr^{-1}. The effect of space velocity on the yield of pentenes varies with temperature. At 500°C the yield of isopentenes is reduced from 39 to 27 mol % when space velocity rises from 0.5 to 1.1 hr^{-1}. The corresponding reduction in the yield of isopentenes is 46 to 42% at 527°C and none at 550°C. At 575°C space velocity can be varied from 0.3 to 1.7 hr^{-1} without effect on the yield. The catalyst's active life decreases with increase in reaction temperature. In order to obtain maximum quantity of isopentenes without regard to the usage of raw materials, high reaction temperature (550°C) and high space velocity (1.1 to 1.7 hr^{-1}) are recommended. If, however, the object is to get the highest conversion of isopentane to isopentene, then the lower temperatures may give more economical operation. There are

Contact-catalytic dehydrogenation ... S/595/60/000/000/012/014
E196/E485

2 figures, 2 tables and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc.

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86414
S/062/60/000/008/022/033/XX
B013/B055

11.1210

AUTHORS: Shuykin, N. I., Timofeyeva, Ye. A., ~~Dobrynina, T. P.,~~ Plotnikov, Yu. N., Petryayeva, G. S., and Gayvoronskaya, G. K.

TITLE: Catalytic Dehydrogenation of Isohexanes

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 8, pp. 1457-1465

TEXT: The present paper is a continuation of the investigation into the dehydrogenation of hydrocarbons of different structures over an aluminum-chromium-potassium catalyst. The catalyst is discussed in detail in Ref.1. The 2-methyl pentane, 3-methyl pentane, and 2,3-dimethyl butane used in this investigation were prepared by the Grignard reaction. 2,2-dimethyl butane was obtained by pyrolysis of pinacoline alcohol acetate (Ref. 2). The experiments were carried out in a continuous system, at 500°C and atmospheric pressure and a flow rate of 0.5 h^{-1}. The catalyst was regenerated after every experiment by oxidation in air at 700°C. The properties of the isohexane catalyzates are listed in Table 1 and the

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Catalytic Dehydrogenation of Isohexanes S/062/60/000/008/022/033/XX
B013/B055

composition of the gases formed in Table 2. For comparison, the corresponding data for n-hexane are also given. As is shown, dehydrogenation of 2-methyl pentane, 3-methyl pentane and 2,3-dimethyl butane yields 34-40% unsaturated hydrocarbons. Isohexanes form up to 2% and n-hexane up to 43% aromatic hydrocarbons. 2,2-dimethyl butane was found to form 15% unsaturated hydrocarbons. Formation of aromatic hydrocarbons was not observed. The gaseous products formed from 2-methyl pentane, 3-methyl pentane and 2,3-dimethyl butane contained 84 - 90% hydrogen, 9 - 12% methane, ethane, and propane, and 1 - 4% of other alkenes and alkanes. The gas obtained from 2,2-dimethyl butane contained 72.6% hydrogen, 21.2% C_1-C_3 alkanes and 6.2% of other hydrocarbons. These data show that 2,2-dimethyl butane is less stable under the given conditions than all other isohexanes. This conclusion was confirmed by the examination of the liquid catalyzates. Analytical data on the catalyzate composition allow the conclusion that, in hydrogenation under the given conditions, all the isohexanes form alkenes containing essentially 6 carbon atoms. Isomerization was not observed in dehydrogenation of 3-methyl pentane. Slight isomerization occurred during dehydrogenation of 2-methyl pentane and 2,3-dimethyl butane. 2,2-dimethyl butane formed alkenes during the catalytic reaction. Approximately half of these alkenes were isomerization products: 4-methyl 2-pentene,
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Catalytic Dehydrogenation of Isohexanes S/062/60/000/008/022/033/XX
B013/B055

2-methyl 2-pentene and 2,3-dimethyl 1,3-butadiene. Finally, a thermodynamic calculation of the reaction isohexanes ⇄ isohexenes was carried out (Table 8, Fig. 2). It is evident from the results obtained that the experimental yields of isohexenes approach the equilibrium yields. Fig. 1 represents chromatograms of an artificial hydrocarbon mixture and several fractions of isohexane catalyzates. The authors thank R. N. Shafran for carrying out the analysis of the gases. There are 2 figures, 9 tables, and 9 references: 7 Soviet, 1 US, and 2 British.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR
(Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: February 17, 1959

Card 3/3

TIMOFEYEVA, Ye.A.; SHUYKIN, N.I.; DOBRYNINA, T.P.

Dehydrogenation of 2, 2, 4-trimethylpentane on an alumina-chromium oxide-potassium oxide catalyst. Izv.AN SSSR.Otd.khim.nauk no.5: 863-867 My '61. (MIRA 14:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Pentane) (Dehydrogenation)

TIMOFEYEVA, Ye.A.; SHUYKIN, N.I.; DOBRYNINA, T.P.

Poisoning of chromium-alumina catalyst with cyclopentadiene and furfurole. Kin.i kat. 2 no.4:574-580 Jl-Ag '61. (MIRA 14:10)

1. Institut organicheskoy khimii AN SSSR.
(Catalysts)

SHUYKIN, N.I.; TIMOFEYEVA, Ye.A.; DOBRYNINA, T.P.; PLOTNIKOV, Yu.N.;
PETRYAYEVA, G.S.; GAYVORONSKAYA, G.K.

Catalytic dehydrogenation of isohexanes. Izv.AN SSSR Otd.khim.
nauk no.8:1457-1465 Ag '62. (MIRA 15:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Hexane) (Dehydrogenation)

SHUYKIN, N. I.; TIMOFEYEVA, Ye. A.; PLOTNIKOV, Yu. N.; DOBRYNINA, T. P.;
PETRYAYEVA, G. S.; SMIRNOV, V. S.

Preparation of C_6 - C_{10} alkenes by the catalytic dehydrogenation of alkanes. Neftekhimia 2 no.4:457-466 Jl-Ag. '62.
(MIRA 15:10)

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

(Paraffins) (Olefins) (Dehydrogenation)

DOBRYNINA, T.P.

SHUIKIN, N.I., TIMOFEYEVA, YE.A., PLOTNIKOV, T.P., DOBRYNINA, T.P.
PETRYAYEVA, G.S.

Catalytic dehydrogenation of methylpentanes and a 2,3-dimethylbutane.

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

SHUYKIN, N.I.; POZDNYAK, N.A.; DOBRYNINA, T.P.

Catalytic alkylation of tetralin. Report No.9: Alkylation of tetralin by alkene fractions of paraffin cracking. Izv. AN SSSR. Ser. khim. no.11:2011-2014 N '63. (MIRA 17:1)

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

SHUYKIN, N.I.; POZDNYAK, N.A.; DOBRYNINA, T.P.

Catalytic alkylation of tetraline. Report No.10: Possibility of using the dehydrogenation catalysts of n-nonane for the alkylation of tetraline. Izv. AN SSSR. Ser.khim. no.3:530-534 Mr '64. (MIRA 17:4)

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

SHUYKIN, N.I.; POZDNYAK, N.A.; DOBRYNINA, T.P.

Action of cation-exchange resin KU-2 on the primary alcohols of normal structure. Izv.AN SSSR.Ser.khim. no.9:1705-1707 S '64.
(MIRA 17:10)

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

SHUYKIN, N.I.; POZDNYAK, N.A.; DOBRYNINA, T.P.; LIFANOVA, [illegible]

Catalytic alkylation of tetralin. Report 11: Alkylation of tetralin in the presence of titanium tetrachloride. Izv. AN SSSR Ser. khim. no.1:119-123 '65.

(MIRA 18:2)

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

KOZ'MINA, Z.P.; DOBRYNINA, V.A.

ζ-Potential of bayerite and of the products of its heat treatment. Koll. zhur. 26 no.5:592-594 S-O '64.
(MIRA 17:10)

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

Ca

11F

Alteration of the amino acid composition of the brain protein in relation to the age of man. V. Dobrynina. *J. Physiol. U. S. S. R.* **29**, 220-24 (in English, 223-4) (1940).—Analyses were made of brains from subjects who had died of trauma, not from disease, for tryptophan, tyrosine, cystine, arginine, histidine and lysine. The ages were from infancy to 65 yrs. Tryptophan decreases gradually with age; cystine increases from infancy to 9 yrs., then remains const. Arginine reaches a max. at 9, and drops slightly afterwards; cystine of the cerebellum increases considerably between infancy and 9 yrs. The cystine and lysine contents of the cerebellum differ sharply from those of the hemispheres in all age groups studied. 11 references. C. S. Shapiro

COMMON ELEMENTS

COMMON VARIABLES INDEX

MATERIALS INDEX

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

AUTHOR INDEX

1ST AND 2ND LETTER

DOBRYNINA, V. I.

DOBRYNINA, V.I., Mbr., Chair of Biological & Organic Chemistry.
2nd Medical Instiute, Moscow

"Aminoacid Content of Human Muscel Proteine," Biokhim., 10, No. 1, 1945.
Mbr.,

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

Oa

4-f

Influence of a poor-protein diet on the liver and brain tissue respiration of white rats. V. I. Dobrynina and V. P. Marchenkov (Second Moscow Med. Inst.). *Biokhimiya* 13, 50-4(1948); cf. Libinson, *C.A.* 42, 6436b.—In the presence of a poor-protein diet, the intensity of respiration by liver tissue of white rats is lowered by about 30%. The decrease is the result of a disturbance in the function of oxidative enzyme systems which catalyse the deamination of amino acids and the oxidation of pyruvic and fumaric acids. In the case of brain tissue, the decrease of respiration is not accompanied by a disturbance of the enzymic systems which oxidise pyruvic, fumaric, and succinic acids. The succinic dehydrogenase and cytochrome systems are unaffected by a low-protein diet.

H. Priestley

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

DOBRYNINA, V. I.

Effect of low protein diet on tissue respiration and ascorbic acid content in the brain tissue in white rats. Uchen. zapski vtor. moskov. med. Inst. Stalina 1:133-138 1951. (CLML 21:3)

1. Docent. 2. Department of Pharmacology (Head -- Honored Worker in Science Prof. V. I. Skvortsov, Active Member AMS USSR).

[illegible], V. I.

Pharmacists

Training andplacement of pharmacists. Apt. delo no. 1, 1952.

Monthly List of Russian Accessions. Library of Congress
November 1952 UNCLASSIFIED

1. DOBRYNINA, V. I. Docent

2. USSR (600)

4. Pharmacy - Study and Teaching

7. Training research and teaching personnel is the most important task of pharmaceutical institutes. Apt. delo no. 2. '52.

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

USSR/Medicine - Pharmaceuticals May/Jun 52

"From the Rostrum of the XIV General Assembly of the International Organization of Pharmacists," Docent V. I. Dobrynina

"Aptechnoye Delo" No 3, pp 78, 79

Gives brief account of the meeting of the Organization held in Rome in 1951 with participation of USSR representatives including Dobrynina. The papers mentioned in the account dealt with scientific developments, new drugs, dosage, international standardization of pharmaceutical nomenclature, training of pharmacists in various

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countries, compilation of an international pharmacopoeia, etc. Emphasizes interest in USSR developments evinced by representatives of other countries.

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DOBRYNINA, V. I., Docent

DOBRYNINA, V. I., Docent

Pharmacy - Study and Teaching

Department for the Advancement and Specialization of Pharmacists. Apt. delo no. 4, 1952.

Monthly List of Russian Accessions. Library of Congress. November, 1952. UNCLASSIFIED

DOBRYNINA, V.I.

In memory of A. N. Adova, 1890-1952. Aptech. delo, Moskva 2 no. 1:78-79 Jan-Feb 1953. (CIML 24:1)

1. Director of Moscow Pharmaceutic Institute of the Ministry of Public Health. 2. The deceased was Dean of Moscow Pharmaceutic Institute.

IVANOVA, M.A.; KLYUYEVA, A.D., dotsent, zaveduyushchiya kafedroi marksizma-leninizma Moskovskogo farmatsevticheskogo instituta; DOBRYNINA, V.I., dotsent, direktor Moskovskogo farmatsevticheskogo instituta.

I. V. Stalin's work "Economic problems of socialism in the U.S.S.R." is a great contribution to the treasure house of theories of Marxism and Leninism. Apt.delo 2 no.2:7-13 Mr-Ap '53. (MLRA 6:5)

1. Kafedra marksizma-leninizma Moskovskogo farmatseyticheskogo instituta Ministerstva zdravookhraneniya SSSR. (Economics)

BULENKOV, T.I., aspirant; DOBRYNINA, V.I., direktor, dotsent.

Pharmaceutical centers. Apt.delo 2 no.2:22-24 Mr-Ap '53. (MLRA 6:5)

1. Kafedra organizatsii farmatsevticheskogo dela Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya SSSR. (Pharmacy)

DOBRYNINA, V.I., predsedatel'.

Department of correspondence courses. Apt.delo 2 no.2:63-64. Mr-Ap '53.
(MLRA 6:5)

1. Sektsiya po kadram Aptechnogo soveta pri Glavnom Aptechnom Upravlenii Ministerstva zdravookhraneniya SSSR. (Pharmacy--Study and teaching)

DOBRYNINA, V.I., predsedatel'.

All measures should be employed to provide the people with better pharmaceutical service. Apt.delo 2 no.3:3-5 My-Je '53. (MLRA 6:6)

1. Sektsiya po kadram Aptechnogo soveta pri Glavnom aptechnom upravlenii SSSR. (Pharmacy)

BULENKOV, T.I., aspirant; DOBRYNINA, V.I., direktor, dotsent.

Norms for the evaluation of the quality of medicines prepared in pharmacies. Apt.delo 2 no.3:9-10 My-Je '53. (MLRA 6:6)

1. Kafedra organizatsii farmatsevticheskogo dela Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya SSSR (for Bulenkov).
2. Moskovskiy farmatsevticheskiy institut Ministerstva zdravookhraneniya SSSR (for Dobrynina). (Drugs--Standards)

KOSTYAKOVA, A.I., dotsent; DOBRYNINA, V.I., dotsent, direktor.

Qualitative determination of quinine in pharmacopoeial preparations, by the fluorescent method. Apt.delo 2 no.3:17-19 My-Je '53. (MLRA 6:6)

1. Moskovskiy farmatsevticheskiy institut Ministerstva zdravookhraneniya SSSR. (Quinine)

SHEMYAKIN, F.M.; KARPOV, A.N.; MEDVEDEVA, N.K.; DOBRYNINA, V.I., dotsent, direktor.

Chromatograms of vegetable extracts. Apt.delo 2 no.3:19-22 My-Je '53.
(MLRA 6:6)

1. Moskovskiy farmatsevticheskiy institut Ministerstva zdravookhraneniya SSSR.
(Extracts) (Chromatographic analysis)

KHOKHLOVA, O.I.; SHEMYAKIN, F.M., professor, zaveduyushchiy; DOBRYNINA, V.I., dotsent, direktor.

Determination of admixtures of heavy metals in pharmaceutical preparations, by the method of chromatographic analysis. Apt.delo 2 no.3:22-25 My-Je '53. (MLRA 6:6)

1. Kafedra analiticheskoy khimii Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya SSSR (for Khokhlova and Shemyakin). 2. Moskovskiy farmatsevticheskiy institut Ministerstva zdravookhraneniya SSSR (for Dobrynina). (Chromatographic analysis)

BELOUSOVA, A.G.; DOBRYNINA, V.I., dotsent, direktor.

Apparatus for drawing off liquids with a pipette. Apt.delo 2 no.3:54 My-Je '53. (MLRA 6:6)

1. Moskovskiy farmatsevticheskiy institut Ministerstva zdravookhraneniya SSSR. (Laboratories--Apparatus and supplies)

DOBRYNINA, V.I., dotsent, direktor.

Pressing tasks of the higher pharmaceutical school. Apt.delo 2 no.4:9-12 Jl-Ag '53. (MLRA 6:8)

1. Moskovskiy farmatsevticheskiy institut Ministerstva zdravookhraneniya SSSR. (Pharmacy)

BULENKOV, T.I., aspirant; DOBRYNINA, V.I., dotsent, direktor.

Vital problems in the theory of organization of pharmacy. Apt.delo 2 no.4: 13-14 Jl-Ag '53. (MLRA 6:8)

1. Kafedra organizatsii farmatsevticheskogo dela Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya SSSR. 2. Moskovskiy farmatsevticheskiy institut Ministerstva zdravookhraneniya SSSR (for Dobrynina). (Pharmacy)

SHEMYAKIN, F.M.; ANDREYEV, A.A.; GUMANOV, L.L.; MOKROVA, V.I.; DOBRYNINA, V.I., dotsent, direktor. [redacted]

Possibility of using precipitation chromatography for the separation of mixtures of organic compounds which play a role in pharmacy. Apt.delo 2 no.5:33-39 S-O '53. (MLRA 6:10)

1. Kafedra analiticheskoy khimii Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya SSSR. (Chromatographic analysis)

SHVAYKOVA, M.D., professor; DOBRYNINA, V.I., dotsent, direktor.

History of the origin and improvement of methods of breaking down organic substances for the isolation of metal and arsenic compounds. Apt.delo 2 no.5:55-62 S-O '53. (MLRA 6:10)

1. Kafedra sudebnoy khimii Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya SSSR. (Arsenic organic compounds)

DOBRYNINA, V.I.

Correspondence courses. Apt. delo 3 no.4:38-39 Jl-Ag '54. (MLRA 7:8)

1. Direktor Moskovskogo farmatsevticheskogo instituta.
(PHARMACY, education,
*Russia, correspondence courses)

DOBRYNINA, V.I.

DOBRYNINA, V.I.

Further improvement in pharmaceutic education by correspondence.
Apt. delo 3 no.6:24-26 N-D '54. (MLRA 8:2)

1. Direktor Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya SSSR.
(PHARMACY, education,
in Russia, corespondence courses)

Name: DOBRYNINA Valentina Ivanovna

Dissertation: The Effect of Protein Deficiency in Diet upon Chem Composition and certain Metabolic Processes of the Brain (Experimental Study).

Degree: Doc Med Sci

Affiliation: Moscow Pharm Inst

Defense Date, Place: 10 Oct 55, Council of the 2nd Moscow State Med Inst imeni Stalin

Certification Date: 28 Apr 56

Source: BMVO 4/57

Country :
Category : V

Abs. Jour. : Ref Zhur-Biol, No 19, 1958, No 89828

Author :
Institut. :
Title :

Orig Pub. :

Abstract cont'd. : increase of the dose of caffeine, the intensity of tissue respiration increases, which is reflected in the O_2 consumption. When prescribing caffeine as a stimulant of the nervous system in a weakened condition of the organism, it is recommended that glucose be administered simultaneously as an important energetic substratum for the nervous cells. Bibliography: 19 titles.

Card: 2/2

COUNTRY :
CATEGORY :

V

ABS. JOUR. : RZhBiol., No. 1 1959, No. 4398

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT cont'd. : bably due to a slow elimination of CH from the organism. The activity of enzyme systems participating in the splitting of glucose in the cerebral tissues is preserved during the administration of CH.-- From the author's summary

CARD: 2/2

4

DOBRYNINA, V.I.

For further progress in higher pharmaceutical education. Apt.delo 6 no.1:28-30 Ja-F '57. (MIRA 10:3)

1. Direktor Moskovskogo farmatsevticheskogo instituta.
(PHARMACY--STUDY AND TEACHING)

DOBRYNINA, V.I., professor

First all-Russian conference of pharmaceutical institutes and departments. Apt.delo 6 no.5:94 S-O '57. (MIRA 10:11)

1. Predsedatel' organizatsionnogo komiteta Pervogo Vserossiyskogo soveshchaniya farmatsevticheskikh institutov i fakul'tetov.
(PHARMACY--CONGRESSES)

DOBRYNINA, Valentina Ivanovna, prof.; SVESHNIKOVA, Yekaterina Aleksandrovna, dotsent; DEBOV, S.S., red.; ROMANOVA, Z.A., tekhn.red.

[Manual for practical studies in biochemistry] Rukovodstvo k prakticheskim zaniatiiam po biologicheskoi khimii. Moskva, Gos. izd-vo med.lit-ry, 1958. 342 p. (MIRA 12:1)
(BIOCHEMISTRY--LABORATORY MANUALS)

DOBRYNINA, V.I., prof.

Current conditions and prospects in training pharmacists in the U.S.S.R. Apt.delo 7 no.4:31-35 Jl-Ag '58 (MIRA 11:8)

1. Direktor Moskovskogo farmatsevticheskogo instituta.
(PHARMACY--STUDY AND TEACHING)

SIDOROVA, S.G. , prof.; DOBRYNINA, V.I., dots.

Stimulating effect of phenothiazine on sheep development.
Veterinariia 35 no.5:118-121 My '58. (MIRA 12:1)

1. Stavropol'skiy sel'skokhozyaystvennyy institut.
(Phenothiazine) (Sheep)

DOBRYNINA, Valentina Ivanovna, prof.; PANCHENKO, L.F., red.;
PARAKHINA, N.L., tekhn. red.

[Textbook of biochemistry] Uchebnik po biologicheskoi khimii. Moskva, Medgiz, 1963. 446 p. (MIRA 16:12)
(Biochemistry)

DOBRYNINA, V. P.:

Dobrynina, V. P.: "Data in the study of diagnostic puncture of the liver," Trudy Kazansk. gos. stomatol. in-ta, Issue 2, 1949, p. 277-288, - Bibliog: 26 items

SO: U-5240, 17 Dec. 53, (Letopis 'zhurnal 'nykh Statey, No. 25, 1949).

DOBRYNINA, V. P.

Dobrynina, V. P.: "The treatment of ulcers by intramuscular autohemolysis injections," Trudy Kazansk. gos. stomatol. in-ta, Issue 2, 1949, p. 289-296, - Bibliog: 21 items

SO: U-5240, 17 Dec. 53, (Letopis 'xhurnal 'nykh Statey, No. 25, 1949).

DOBRYNINA, V. P.

Dobrynina, V. P. "The treatment of pulmonary suppurations under army-area conditions during the period of the Fatherland War, 1941-1945," Trudy Kazansk. gos. stomatol. in-ta, Issue 2, 1949, p. 297-305

SO: U-5240, 17 Dec. 53, (Letopis 'zhurnal 'nykh Statey, No. 25, 1949).

USSR / Human and Animal Morphology, Normal and Pathological. S-1

Abs Jour : Ref Zhur - Biol., No 18, 1958, No 83620

Author : Dobrynina, V. P.
Inst : Chkalov Medical Institute
Title : Cytomorphological and Cytochemical Variation in the Liver of Patients with Pulmonary Tuberculosis and Hepatolienal Syndrome.

Orig Pub : Tr. Chkalovskogo med. in-ta, 1956, vyp. 5, 133-138

Abstract : To determine in vivo the morphological and cytochemical variation in the liver of 25 patients with pulmonary tuberculosis, use was made of the method of aspiratory tapping of the liver. 12 patients were subjected to the Quick test and the Tokata-Ara reaction. In all patients the fuchsina-mercuric chloride test was positive, and in 6 patients there was a drop in the synthesis of hippuric acid. In the case of patients with fibro-cavernous

Card 1/2

USSR / Human and nimal Morphology, Normal and Pathological. S-1

Abs Jour : Ref Zhur - Biol., No 18, 1958, No 83620

pulmonary tuberculosis, albuminous, adipose and lipoid degeneration of the liver were noted. In two of these, there was found hepatic amyloidosis, and in one case, amyloidosis of a greatly enlarged spleen. In hematogenno-disseminated pulmonary tuberculosis, degenerative changes in the liver are especially sharply pronounced in cases of subacute course of the disease. There is no parallelism between the morphological and the functional changes in the liver; sometimes, even in the case of gross morphological lesions in the liver, no functional disorders are observed in the organ. -- V. G. Zaytsevskaya.

Card 2/2

AUTHOR: Slavin, V.I., Dobrynina, V.Ya. SOV-5-58-2-3/43

TITLE: The Stratigraphy of Jurassic Deposits of the L'vov Syncline and the Cis-Carpathian Marginal Depression (Stratigrafiya yurskikh otlozheniy L'vovskoy mul'dy i Predkarpatskogo krayevogo progiba)

PERIODICAL: Byulleten' Moskovskogo obshchestva ispytateley prirody - Otdel geologicheskiy, 1958, Nr 2, pp 43-54 (USSR)

ABSTRACT: The author gives the results of recent research work on the Jurassic deposits of the L'vov syncline and the Cis-Carpathian depression, carried out in co-operation with the Geological Institute of the AS USSR. In this connection, the names of Soviet scientists, who devoted their studies to this subject are mentioned, such as A. Al't, F. Beniash, F. Stanislavskiy, P.A. Gerasimov and Ye.A. Gofman, N.R. Ladyzhenskiy, Ya.M. Sandler, I.M. Yamnichenko, K. Voytsik, D. Keshmen, K. Glazevskiy, and S.I. Pasternak. The entire profile of the Jurassic deposits can be divided into three formations (see Figure 2): 1) the Sokal' (Lias) formation consisting of sandy-argillaceous and carboniferous deposits; 2) the Rava-Russkaya (bat-Callovian) formation consisting of dolomite, gypsum, anhydride and clay deposits, and 3) the Bukovina formation (Upper Jurassic period) consisting of limestone and marl deposits. A more detailed

Card 1/2

SOV-5-58-2-3/43

The Stratigraphy of Jurassic Deposits of the L'vov Syncline and the Cis-Carpathian Marginal Depression

classification of the Jurassic deposits of the L'vov syncline and the Cis-Carpathian marginal depression has up to now been impossible.
There are 4 charts and 7 references, 4 of which are Soviet and 3 Polish.

1. Geology--USSR

Card 2/2

DOBRYNINA, V. Ya.

Jurassic of the southwestern Russian Platform and Carpathian piedmont. Trudy VNIGNI no.29:154-161 vol. 2, '61. (MIRA 14:7)

(Ukraine, Western—Geology, Stratigraphic)

DOBRYNINA, Z. G.

Drying of lacquer paints in ozonized air. E. Ya Gol'denshtein, Z. G. Dobrynina and R. F. Rychkina. *Org. Chem. Ind.* (U. S. S. R.) 5, 108-13(1938). The drying of the intermediate base layers can be accelerated 5-8 times in ozonized air at room temp. The method cannot be used in drying the top varnish coat with lustrous finish. Cf. Salmony-Kursten, C. A. 29, 7075^{2}

Chas. Blanc

SHTEYMAN, Ye.A.; DOBRYNINA, Z.G.; MORDOVSKAYA, Ye.A.

Complexometric determination of bismuth and lead in the presence of tin. Zav. lab. 30 nr.10:1200-1201 '64. (MIRA 18:4)

DOBRYNSKIY, A.; VARSHAVSKIY, A.

Use of welding in a carbon dioxide atmosphere in the manufacture of latticed metal elements. Prom. stroi. i inzh. soor. 4 no.3: 13-16 My-Je '62. (MIRA 15:7)

1. Glavnyy inzhener Nikolayevskogo zavoda metallokonstruktsiy (for Dobrynskiy). 2. Glavnyy svarshchik Nikolayevskogo zavoda metallokonstruktsiy (for Varshavskiy).

(Steel, Structural—Welding)

DOBRYSHEV, F.

Business Education

School for management personnel in Soviet commerce. Sov. torg. No. 3, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

DOBRYSHEV, F. B., Prof.

M: Fotogrammet Riya (Photo Grammetry) Moscow-1949.

DOBRYSHEV, V. I. Cand Med Sci -- (diss) "Data for the morphology of the human sacral plexus." Voronezh, 1957. 25 pp with illustrations (Voronezh State Med Inst. Chair of Normal Anatomy), 250 copies (KL, 14-58, 117)

MISHCHENKO, K.P., doktor khimicheskikh nauk; FLIS, I.Ye., kand.khimich. nauk;
BYNYAYEVA, M.K., kand.khimich. nauk; KRYUKOVA, Z.M., kand.khimich.
nauk; SALNIS, K.Yu., kand.khimich. nauk; BLOSHTEYN, I.I., inzh.;
DOBRYSHIN, K.D., inzh.; FISH, S.I., inzh.

Technology of the production of chlorine dioxide. Trudy LTITSBP
no.8:81-88 '61. (MIRA 16:9)
(Chlorine oxides)

DOBRYSHIN, K.D.; FLIS, I.Ye.; FISH, S.I.

Study of the dissolution processes of chlorine dioxide and chlorine in the formation of bleaching solutions. Zhur. prikl. khim. 37 no.11:2382-2387 N '64 (MIRA 18:1)

DOBRYSHMAN, M.; NOZADZE, R.I.

Relation between pressure fields and the wind in a barotropic atmosphere. Trudy TSIP no.86:55-62 '59.

(MIRA 12:9)

(Atmospheric pressure) (Winds)