"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

Methods of determination of humic acids in solid min

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.; VVEDENSKAYA, T.Ye.

Complete decomposition of humic acids by metallic sodium in liquid ammonia. Khim.i tekh. topl. no.6:25-34 Je '56. (MLRA 9:9)

1.Institut goryuchikh iskopayemukh Akademii nauk SSSR.
(Humic acid)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

15-57-3-3459

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3, p 143 (USSR)

AUTHOR: Kukharenko, T. A.

TITLE: Distinctive Features in the Composition and Properties of Humic Acids in Coals and Their Significance in Classification (Osobennosti sostava i svoystv guminovykh iskopayemykh ugley i ikh klassifikatsionnoye znacheniye)

PERIODICAL: Tr. Labor. geol. uglya AN SSSR, 1956, Nr 6, pp 164-171

ABSTRACT: The author describes the changes due to humic acids in solid mineral fuels in various stages of coal-formation. These stages are controlled by the fundamental composition and amount of the acids. The distinctive properties of bituminous coal weathered by humic acids are noted. These properties permit one to distinguish such coals from brown coals weathered by humic acids. The optical density and the coagulation threshold in alkaline solutions are the criteria. During transitions from the lower stages of coal development to the higher

Card 1/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

15-57-3-3459

Distinctive Features in the Composition (Cont.)

(not excluding weathered coal), the optical density of the humic acids increases. The coagulation threshold is determined by the degree of dispersion of the humic acids, which diminishes in the process of coal formation and is accompanied by complex structures of the organic materials in the coal. A genetic classification of the humic acids in solid mineral fuels is proposed. Methods are suggested for preparing alkaline solutions of the humic acids and for determining the coagulation threshold and the optical density.

Card 2/2

A. N. G.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T. A.

USSR/Chemical Technology. Chemical Products and Their Application -- Treatment of solid mineral fuels, I-12

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5444

Author: Kukharenko, T. A., Ryzhova, Z. A.

Institution: Laboratory of Coal Geology, Academy of Sciences USSR

Title: Investigation of Changes in Composition of the Organic Mass of Mineral Coal During the Process of Its Erosion

Original Publication: Tr. Labor. geol. uglya AN SSSR, 1956, No 6, 183-188

Abstract: Investigated were changes in composition of the organic mass of lustrous coal (PZh grades containing 90-92% vitrain) during erosion. As erosion progresses there are observed a sharp decrease in sintering capacity of the coal and its complete elimination prior to the formation of humic acids (HA). HA of eroded coal, as compared with HA of brown coal, are characterized by a lower content in H, higher optical density and a lower value of coagulation threshold; at the same time their x-ray photographs resemble those of not eroded coal.

Card 1/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

USSR/Chemical Technology. Chemical Products and Their Application -- Treatment of solid mineral fuels, I-12

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5444

Abstract: Content of neutral substances in the coal decreases with erosion intensity while the content of acid substances, soluble in alcohol-benzene, is almost not altered, whereas the content of acid substances similar to HA is greatly increased, which is most characteristic of the erosion process.

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T. A.

The possibility of determining the different grades of coal

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T. A.

3690. Differentiation of brown coal and oxidised coal by means of the coagulation threshold of alkali extracts. T. A. Kukharenko (Inst. of Combustible Minerals, Acad. Sci., USSR). *Zavod. Lab.* 1956, 22 (6) 661–662.—The coagulation thres- [illegible] the smallest amount of an electrolyte [illegible]

[illegible] naturally weathered [illegible]

[illegible] amine as indicator. The result is calculated [illegible] content of C or humic acid (with an assumed content of C of 67 per cent.). The extract is then diluted to give a content of humic acid of 0·02 per cent. and the operation is checked by a re-determination of the content [illegible] in a series of tubes [illegible] with [illegible] portions of the extract and ex- [illegible] which just causes ppth. A similar test [illegible] out in a further series of tubes in which the concn. [illegible]

[illegible] per cent. humic acid [illegible]

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.

1891. EXHAUSTIVE CLEAVAGE OF HUMIC ACIDS OF BROWN COAL BY METALLIC SODIUM

[illegible] Kukharenko, T.A. and [illegible], [illegible] 11 July [illegible]

[illegible] of sodium in liquid ammonia was followed by examination of [illegible]

[illegible] C.A.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T. A.

24-2-13/28

AUTHOR: Kukharenko, T. A. (Moscow).

TITLE: Review of the work carried out in the Soviet Union on investigating the chemical structure and the origin of solid mined fuels. (Obzor rabot po issledovaniyu khimicheskoy struktury i proiskhozhdeniya tverdykh goryuchikh iskopayemykh, provedennykh v SSSR).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, No.2, pp. 114-122 (USSR).

ABSTRACT: According to the calculations of the Soviet Resources Committee, the Soviet Union is the first country in the world as regards reserves of solid fuels. In this paper the author reviews briefly work carried out in the Soviet Union during the forty years of Soviet rule. The subject matter is dealt with under the following headings: peat stage of the coal, lignite stage of mined coal, hard coal, extraction of hard coal, hydrogenation of hard coal, oxidation of hard coal, hydrolysis of hard coal, heat treatment of hard coal, investigation of the structure of coal by X-ray structural analysis, infra-red spectroscopy, investigation by means of electron microscopes, colloidal properties of hard coal, mechanical properties of hard coal, modern conceptions on the structure of hard coal,

Card 1/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

24-2-13/28

Review of the work carried out in the Soviet Union on investigating the chemical structure and the origin of solid mined fuels.

successes achieved in investigating sapropelites, investigations relating to the origin of coal, investigation in the field of scientific and industrial classification of coal, scientific classification of coal, industrial classification of coal. Under each of these headings the work carried out by Soviet scientists is summarised very briefly, giving the names of the individual teams who carried out the respective research work and also in some cases mentioning very briefly the results.
There are 66 references, all of which are Russian.

SUBMITTED: November 11, 1957.

AVAILABLE: Library of Congress.

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

SOV/24-58-11-39/42

AUTHORS: Kukharenko, T. A. and Lyubimova, S. L. (Moscow)

TITLE: On Determining the Grade of Coal from an Oxidised Sample (Ob opredelenii marki uglya po okislennoy probe)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 11, pp 143-144 (USSR)

ABSTRACT: Earlier work of the authors as well as the work described in this paper showsthat the properties of alkali solutions of humic acids produced during soft oxidation of the residues of hard coal,which has been intensively weathered, can be utilised for developing a method of determining the grade of coal from an oxidised specimen. The results obtained for two coals are given.
There are 3 figures, 1 table and 3 Soviet references.

SUBMITTED: April 7, 1958

Card 1/1

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO T. A.

ОКИСЛИТЕЛЬНАЯ ДЕСТРУКЦИЯ ИСКОПАЕМЫХ УГЛЕЙ
КАК МЕТОД ПОЗНАНИЯ ИХ СТРУКТУРЫ
И КЛАССИФИКАЦИИ

Т.А. Кухаренко

VIII Mendeleyev Congress for General and Applied Chemistry in
Section of Chemistry and Chemical Technology of Fuels,
publ. by Acad. Sci. USSR, Moscow 1959

abstracts of reports scheduled to be presented at above mentioned congress,
Moscow, 15 March 1959.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.

11(7) PHASE I BOOK EXPLOITATION SOV/2996

Akademiya nauk SSSR. Institut goryuchikh iskopayemykh

Genezis tverdykh goryuchikh iskopayemykh (Genesis Of Solid Fuels) Moscow, AN SSSR, 1959. 358 p. Errata slip inserted. 2,000 copies printed.

Sponsoring Agency: Vsesoyuznoye khimicheskoye obshchestvo im. D. I. Mendeleyeva. Moskovskoye otdeleniye.

Resp. Eds.: N. M. Karavayev, Corresponding Member, USSR Academy of Sciences, and N. G. Titov, Doctor of Chemical Sciences; Ed. of Publishing House: A. L. Bankvitser; Tech. Ed.: I. F. Kuz'min.

PURPOSE: This collection of articles is intended for geochemists, geologists, and other specialists interested in the genesis of solid mineral fuels.

COVERAGE: The collection of papers on the genesis of solid mineral fuels has been prepared for presentation at the 2nd All-Union Conference on this subject. The formation of humic acids and peat from the decomposition of microorganisms and plants is discussed in connection with studies on the origin of hard coal and brown coal and on the role of certain mineral components in the coal-forming process. The chemical composition of peat and the organic mass of coal are analyzed and shown in a number of tables. Estonian "Kukkersite" oil shales are analyzed as are the brown coals of the Dnepropetrovsk basin. Metamorphism and carbonization of coal found in different parts of the Urals and the Ukrainian SSR are also discussed. The transformation of parent matter into combustible minerals is analyzed. References accompany individual articles.

Randsepp, Kh. T. Genesis of Estonian Kukkersite Oil Shale 69

Fomina, A. S. On the Question of the Origin of Baltic Kukkersite Oil Shale 77

Karavayev, N. M., and I. A. Vikman. Lignite and Initial Stages of Coal Formation 92

Syabryay, V. T. Origin of Brown Coal Found in the Dnepropetrovsk Basin of the Ukrainian SSR 106

Chernousov, Ya. M. Irregular Carbonization of Mesozoic Coal Found on the Eastern Flank of the Central and Northern Urals 121

Bogolyubova, L. I. Petrographic and Chemical Characteristics of Some Types of Coal From Volchanskoye and Bogoslovskoye Deposits 137

Kiryukov, V. [illegible] Conditions of Formation of Slightly Carbonized Coal From Southern Ural Brown Coal Basin 143

Kuyazev, V. A. Metamorphism of Brown Coal From Bogoslovskoye and Veselovskoye Deposits of the Eastern Flank of the Northern Urals 160

Bludorov, A. I. Geologic Conditions of Transformation of Coal Substance in the Southeastern Part of the Russian Platform 166

Grigor'yev, M. Yu. Some Possible Conditions Under Which Coal Strata Could Have Been Formed at the Kuznetsk Basin 180

Zabramnyy, D. T. Evolution of Humic Coal During Metamorphism 189

Shternberg, L. Ye. Changes in Microscopic Characteristics of Clarain Coal of the Donbass During Metamorphism 198

Kalinenko, V. V. Genesis of Jurassic Coal at Tuva 221

Gebler, I. V. Organic Sulfur in Coal 241

Kazatochkin, V. I. Some General Physical and Chemical Questions Concerning the Coal-forming Process 247

Panov, N. I. Characteristics of the Process of Transformation of Parent Matter Into Present Combustible Minerals and the Connection of These Characteristics With the Principal Properties of Combustible Minerals 268

Ammosov, I. I. Genetic Features of the Coal Substance as Ascertained by Petrographic Findings 295

Zabavin, V. I. Chemical Nature of the Basic Organic Mass of Hard and Brown Coal and Changes During Metamorphism 309

Kukharenko, T. A. Changes in the Structure and Properties of Humic Acids During the Coal-forming Process 319

Titov, N. G. Role of Mineral Elements in the Coal-forming Process 338

Kaminskiy, V. S., A. L. Rubinshteyn, and A. Z. Yurovskiy. Genesis of Organic Sulfurous Compounds Contained in Coal 344

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.; YEKATERININA, L.N.

Determining phenol hydroxyls in coals by the azo coupling method. Trudy IGI 8:142-149 '59. (MIRA 13:1)
(Coal--Analysis)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.; SAVEL'YEV, A.S.

Hydrogenation of humic acids in solid fuels at various stages of coal formation. Trudy IGI 8:150-162 '59. (MIRA 13:1)
(Coal geology) (Humic acids)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.; RYZHOVA, Z.A.; BABINKOVA, N.I.

Method for the differentiation of brown coals from weathered coals. Trudy IGI 8:163-171 '59. (MIRA 13:1)
(Coal--Classification) (Lignite)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.; VVEDENSKAYA, T.Ye.

Water soluble acids of solid mineral fuels. Pochvovedenie no.12:51-58 D '59. (MIRA 13:4)

1. Institut goryuchikh iskopayemykh Akademii nauk SSSR.
(Peat) (Coal) (Acids, Organic)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

AUTHORS: Kukharenko, T.A., Yekaterinina, L.N. SOV/80-32-2-51/56

TITLE: The Reaction of Humic Acids With Dimedon (Reaktsiya guminovykh kislot s dimedonom)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 2, pp 462-463 (USSR)

ABSTRACT: Humic acids of peat and coal react with dimedon which is a specific reagent for aldehydes. Several types of peat and coal were investigated as to their aldehyde content. The results are given in a table. The aldehyde content of humic acids varies from 0.24 - 1.36 meq/g. The content of aldehyde groups is lower than the general content of carbonyl groups which is explained by the presence of ketone groups.
There is 1 table and 5 references, 3 of which are Soviet and 2 German.

SUBMITTED: February 7, 1958

Card 1/1

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

SOV/80-32-4-37/47

5(3)

AUTHORS: Kukharenko, T.A. and Yekaterinina, L.N.

TITLE: On the Cryoscopical Determination of Molecular Weight of Humic Preparations in Pyrocatechin (Ob opredelenii molekulyarnogo vesa guminovykh preparatov krioskopicheski v pirokatekhine)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 4, pp 909-913 (USSR)

ABSTRACT: In view of the contradictory data available in the literature on the molecular weight of humic acids, the authors undertook a new determination of it for peats, brown coals and weathered coals from various pits. They made use of the method developed by Smith and Howard [Ref 4] and Polansky and Kinney [Ref 6] by dissolving humic acids in the pyrocatechin. The results of determination are given in Table 1. Analyzing the figures obtained, the authors noticed certain contradictions with the values known from other sources; they investigated the reason and found that humic acids interacted with phenol hydroxyl groups of the pyrocatechin, which resulted in the formation of ester and water, and this led to a decrease of the molecular weight of the compounds under investigation. Therefore the

Card 1/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

SOV/80-32-4-37/47

On the Cryoscopial Determination of Molecular Weight of Humic Preparations in Pyrocatechin

authors conclude that pyrocatechin can not be used as a solvent in the cryoscopic method of determining the molecular weight of humic compounds.
There are 3 tables and 7 references, 1 of which is Soviet, 3 German, 2 American and 1 English.

SUBMITTED: December 17, 1957

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, Tat'yana Aleksandrovna; NEKRASOV, A.S., otv.red.; TSUKERMAN, S.Ya., red.izd-va; SABITOV, A., tekhn.red.

[Chemistry and genesis of coal] Khimiia i genezis iskopaemykh uglei. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 327 p. (MIRA 13:12)
(Coal geology) (Coal--Analysis)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.; YEKATERININA, L.N.

Hymatomelanic acids of fossil coal. Pochvovedenie no.12:64-70 D '60. (MIRA 14:1)

1. Institut goryuchikh iskopayemykh AN SSSR.
(Hymatomelanic acids)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.; RYZHOVA, Z.A.

Weathering of coals in varying stages of metamorphism. Trudy IGI 14:44-57 '60. (MIRA 13:12)

(Coal weathering)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.; YEKATERININA, L.N.

Humic acids in weathered coal. Trudy IGI 14:58-72 '60. (MIRA 13:12)

(Humic acid) (Coal weathering)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A. (Moskva); VVEDENSKAYA, T.Ye. (Moskva); GRIGOR'YEVA, Ye.A. (Moskva); SAVEL'YEV, A.S. (Moskva)

Obtaining of organic acids from weathered coal. Izv. AN SSSR. Otd. tekh. nauk. Met. i topl. no.4:143-149 Jl-Ag '61. (MIRA 14:8)

(Organic compounds)
(Coal)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A. (Moskva); LYUBIMOVA, S.L. (Moskva)

Effect of mineral substances on the outcrop and composition of coal weathering material in various stages of metamorphism. Izv. AN SSSR. Otd. tekh. nauk. Met. i topl. no.6:154-158 N-D '61. (MIRA 14:12)

(Coal weathering) (Humic acid)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.; TSZYAN BIN-TSZYUN [Chiang Ping-shiung]

Infrared spectra of Chinese coals. Izv. AN SSSR. Otd. tekh. nauk. Met. i topol. no.1:180-183 Ja-F '62. (MIRA 15:2)
(China--Coal--Spectra)
(Spectrum, Infrared)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.

Subernite in liptobiolith coal from China. Trudy IGI 21: 109-117 '63. (MIRA 16:11)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.

Data on the composition of peat and the process of its formation as an initial stage in the coal-forming process. Trudy IGI 21:134-143 '63. (MIRA 16:11)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, T.A.; YEKATERININA, L.N.

Oxidation of the hymatomelanic and humic acids of coals by potassium permanganate in an alkaline medium. Koksokhimiia no.13:66-70 N '65. (MIRA 18:12)

1. Institut goryuchikh iskopayemykh, Moskva. Submitted April 14, 1965.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DORMIDONTOV, A., inzh.; KUKHARENKO, V., inzh.

"IUpiter" and "Signal" transistor radios. Radio no.8:49-51 Ag '65. (MIRA 18:7)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DERMIDONTOV, A., inzh.; KUKHARENKO, V., inzh.

The "Iupiter" and "Signal" radio receivers. Radio no.8:49-51 Ag '64. (MIRA 17:11)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, V.K., inzh.; DEMIN, I.V., inzh.; GROSSMAN, V.S., inzh.; SERIKOVA, V.F., inzh.

"Overall mechanization in butter factories" by A.V. Titov. Reviewed by V.K. Kukharenko and others. Mekh. i avtom. proizv. 17 no.5:55 My '63. (MIRA 16:6)

1. Gosudarstvennyy institut po proyektirovaniyu masloboynoy, zhirovoy, mylovarennoy, parfyumernoy i margarinovoy promyshlennosti.

(Creameries--Equipment and supplies)
(Titov, A.V.)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

Kukharenko, V.K.

DEMIN, I.V., inzhener; MIKHAYLOV, Ye.I., inzhener; KUKHARENKO, V.K., inzhener.

Hydraulic filter for dust removal in oil plants. Masl.-zhir. prom. 23 no.3:36-37 '57. (MIRA 10:4)

1. Giproshir.
(Air-purification)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

BABENKO, S.F., inzh.; SHLEZING, M.Sh., inzh.; POLUYANSKIY, S.A., kand. tekhn.nauk; DIKHTYAR, A.A., inzh.; KUKHARENKO, V.P., inzh.

Study of the 2PPN-1 rock loader. Vop. rud. transp. no.7:288-300 '63. (MIRA 16:9)

1. Krivorozhskiy zavod gornogo oborudovaniya "Kommunist" (for Babenko, Shlezing). 2. Otdeleniye gornorudnykh problem Instituta elektrotekhniki AN UkrSSR (for Poluyanskiy, Dikhtyar, Kukharenko).
(Mining machinery--Testing)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

5(2)

AUTHORS: Dem'yanchuk, A. S., Kukharenko, Ye. D. SOV/75-14-1-8/32

TITLE: Spectro-Chemical Determination of Magnesium and Influence of the Magnesium Content on the Results of Silicon and Manganese Analysis in Cast Iron (Spektrokhimicheskoye opredeleniye magniya i vliyaniye yego soderzhaniya na rezul'taty analiza kremniya i margantsa v chugunakh)

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 1, pp 45-49 (USSR)

ABSTRACT: Cast iron usually contains 0.03 - 0.12% magnesium, to be found chiefly in compounds. (Ref 1). The authors of the present paper worked out a spectral-analytical determination method for magnesium in cast iron, by using a high-frequency spark as the energy source to excite the spectrum, (Ref 4). The determinations were carried out on an average dispersion spectrograph of the firm "Khil'ger" under earlier described conditions (Ref 5). An erect copper electrode was employed. The lines Mg 2802.69 Å - Fe 2806.98 Å served as analytical line pair. The method elaborated permits the determination of 0.005% and more of magnesium. The calibration straight line of the determination is characterized by a steep ascent. It is

Card 1/3

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

Spectro-Chemical Determination of Magnesium and Influence of the Magnesium Content Upon the Results of Silicon and Manganese Analysis in Cast Iron SOV/75-14-1-6/32

illustrated in the paper. Reproducibility of results is good. It was found that the intensity of the spectral lines of silicon and manganese in cast iron strongly depends on the cast iron magnesium content in the alternating current - arc discharge. The line intensity of these elements increases markedly with growing magnesium content. With a magnesium content >0.06% 1 1/2 - 2 times as much silicon and manganese is found on the basis of the lines, as is actually contained in the metal. This effect bases on the fact that magnesium influences the evaporation process of silicon and manganese in the arc and consequently, also the determination results. When working with a generator IG-2 (condensed spark) and with a high-frequency spark, the magnesium content has no influence upon the spectral determination of Si and Mn. The working conditions under which the authors carried out their investigations are described. The results of a number of

Card 2/3

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

Spectro-Chemical Determination of Magnesium and Influence of the Magnesium Content Upon the Results of Silicon and Manganese Analysis in Cast Iron SOV/75-14-1-8/32

determinations of silicon and manganese in the presence and in the absence of magnesium according to both methods (with and without generator IG-2) are tabulated. There are 5 figures, 3 tables, and 10 Soviet references.

ASSOCIATION: Institut elektrosvarki im. Ye. O. Patona i Institut mashinovedeniya AN USSR, Kiyev (Institute of Electric Welding imeni Ye. O. Paton and Institute of Machine Building, AS UkrSSR, Kiyev)

SUBMITTED: November 25, 1957

Card 3/3

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARENKO, Yu.A.

Considering the exchange correlation in excitation spectra of nonequilibrium systems of interacting particles. Fiz. met. i metalloved.20 no.1:21-25 Jl '65.

(MIRA 18:11)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

L 32595-66 EWT(m)/T
ACC NR: AP5018853 SOURCE CODE: UR/0126/65/020/001/0021/0025

AUTHOR: Kukharenko, Yu. A.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Calculation of exchange interaction in the excitation spectra for nonequilibrium systems of interacting particles

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 1, 1965, 21-25

TOPIC TAGS: excitation spectrum, exchange reaction, dielectric permeability, kinetic equation, charged particle

ABSTRACT: The author proposes a simple method for taking account of exchange effects in solving the linearized kinetic equation for the combined excitation spectrum in nonequilibrium systems of charged particles. This method may also be used in the theory of fluctuations in nonequilibrium systems when solving equations for random deviations of the number of particles from the mean value and determining the spectral representations of various two-moment correlation functions of particles and

UDC: 530.145.6

Card 1/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

ACC NR: AP5018853

fields. A quantum kinetic equation is derived for the excitation spectrum of the system in the Hartree-Fock approximation taking account of particle correlation due to exchange interaction. Expressions are derived for the dielectric permeability of the system and the density variation for the number of particles. A dispersion equation is given for the energy spectrum and oscillation damping in a system of many particles and it is shown that the formulas for dielectric permeability and density fluctuation reduce to the conventional forms in the case where exchange correlation of the particles may be completely disregarded. While exchange interaction must be taken into account when the energy of vibrations in the quantum system is comparable with the average kinetic energy of the particles, calculations may be limited to the first approximation when the exchange effects are small. Otherwise, the density fluctuations for the number of particles and the dielectric permeability of the system must be determined from the exact expressions derived in this paper. The author is sincerely grateful to Yu. L. Klimontovich for constant interest in the work and valuable consultation. Orig. art. has: 35 formulas.

SUB CODE: 20/ SUBM DATE: 21Jul64/ ORIG REF: 009/ OTH REF: 003

Card 2/2 BK

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

S/188/63/000/001/002/014
B104/B102

AUTHORS: Aleksandrov, I. B., Kukharenko, Yu. A., Niukkanen, A. V.

TITLE: The kinetic equation in statistical quantum mechanics

PERIODICAL: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 1, 1963, 11 - 19

TEXT: Following the perturbation-theoretical method of N. N. Bogolyubov and K. P. Gurov (ZhETF, 17, 614, 1947) the kinetic equation for a spatially homogeneous quantummechanical system of Fermi particles is derived, which is accurate up to the terms $\sim \varepsilon^2$:

$$\frac{\partial n_{p_1}}{\partial t} = \frac{\pi\varepsilon^2}{(2\pi\hbar)^6\hbar}\int |\tilde{\Phi}_0(p_1-p_1') - \tilde{\Phi}_0(p_1-p_1')|^2\,\delta(p_1+ + p_2-p_1'-p_2')\,\delta(T(p_1)+T(p_2)-T(p_1')-T(p_2'))\times \times\{n_{p_1}n_{p_2}(1-n_{p_1'})(1-n_{p_2'})-n_{p_1'}n_{p_2'}(1-n_{p_1})\times \times(1-n_{p_2})\}\,dp_1'\,dp_2'\,dp_2. \qquad (21),$$

$\varepsilon \ll 1$. This equation agrees with that derived by Bogolyubov and contains

Card 1/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

the two-particle scattering amplitudes in the first Born approximation. In the development of the chains of the equation for the correlation functions an initial condition for the weakening of the correlation was applied which differs from that known in quantum mechanics: It is assumed that the correlative deviations of the distribution functions $F_2(1,2)$ and $F_3(1,2,3)$ from the products are small; the operator $g(1,2,t)$ is introduced which tends to zero as $t \to -\infty$. The possibilities of obtaining approximations of higher orders are discussed.

ASSOCIATION: Kafedra elektrodinamiki i kvantovoy teorii (Department of Electrodynamics and Quantum Theory)

SUBMITTED: April 29, 1962

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

ALEKSANDROV, I. B.; KUKHARENKO, Yu. A.; NIUKKANEN, A. V.

Double-timed one-particle Green's functions for a nonideal Fermi system. Vest.Mosk.un Ser.3:Fiz., astron.19 no. 2:43-51 Mr-Ap '64. (MIRA 17:5)

1. Kafedra teoreticheskoy fiziki Moskovskogo universiteta.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

FAIN, Yu.B.; KUKHARENKO, Yu.N.

Tectonics of Pre-Devonian formations in the Birsk anticline.
Geol.nefti i gaza 7 no.2:21-26 F '63. (MIRA 16:2)

1. Kaltasinskaya kontora bureniya i Arlanskaya promyslovo-geofizicheskaya kontora.
(Bashkiria—Geology, Structural)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

ALEKSANDROV, I.B.; KUKHARENKO, Yu.A.; NIUKKANEN, A.V.

Kinetic equation for a nonideal Fermi-gas. Vest. Mosk. un. Ser. 3: Fiz., astron. 18 no.2:15-24 Mr-Ap '63. (MIRA 16:6)

1. Kafedra statisticheskoy fiziki i mekhaniki Moskovskogo universiteta.
(Gases, Kinetic theory of)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

ALEKSANDROV, I.B.; KUKHARENKO, Ya.A.; NIUKKANEN, A.V.

Kinetic equation of a nonideal Fermi-system. Dokl.AN SSSR 149 no.3:557-560 Mr '63. (MIRA 16:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. Predstavleno akademikom N.N.Bogolyubovym.
(Differential equations) (Quantum statistics)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

ACCESSION NR: AP4033633 S/0188/64/000/002/0043/0051

AUTHOR: Aleksandrov, I. B.; Kukharenko, Yu. A.; Niukkanen, A. V.

TITLE: Repeated single-particle Green's functions for a nonideal Fermi system

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 2, 1964, 43-51

TOPIC TAGS: theoretical-physics, Green function, Fermi system, nonideal Fermi system, single particle Green function

ABSTRACT: The authors present and analyze the derivation of equations for binary correlation functions and single-particle Green's functions for a somewhat nonideal Fermi system on the assumption of smallness of the potential energy of binary interaction in comparison with mean kinetic energy. By introduction of a mass operator it has been possible to obtain an equation of the Dyson type in a quadratic approximation relative to the small parameter of the theory of perturbations. In deriving the equations the authors used the condition of attenuation of correlations for spatially distant parts of the system. An expression has been found for the mass operator in the second approximation; this expression is used to compute the energy and attenuation of elementary excitations. "The authors thank N. Bogolyubov (Jr.) and B. Sadovnikov for useful discussion of certain problems

Card 1/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

ACCESSION NR: AP4033633

considered in the paper." Orig. art. has: 44 equations.

ASSOCIATION: Kafedra teoreticheskoy fiziki, Moskovskiy universitet (Department of Theoretical Physics, Moscow University)

SUBMITTED: 22May63 DATE ACQ: 30Apr64 ENCL: 00

SUB CODE: GP NO REF SOV: 011 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

L 41650-65 EWT(1)
ACCESSION NR: AP5006324 S/0126/65/019/002/0161/0168

AUTHOR: Klimontovich, Yu. L.; Kukharenko, Yu. A.

[illegible] quantum kinetic equation for a system of charged particles with regard to [illegible] the particles with waves

SOURCE: Fizika metallov i metallovedeniye, v. 19, no. 2, 1965, 161-168

TOPIC TAGS: quantum kinetic equation, charged particle, particle interaction, quantum equation, kinetic equation

ABSTRACT. A quantum kinetic equation is derived which takes particle collisions into account as well as interaction of the particles with the cooperative oscillations of the system. The equation also takes the exchange correlation of the par- [illegible] sideration, together with the variation in the spectrum of the waves [illegible] The new equation contains additional members [illegible] did not appear in similar equations [illegible] Pines, D., Schriffer, J. R., *Phys. Rev.*, 1962, 125, 804[illegible]. Orig. art. has [illegible] equations.

ASSOCIATION: Moskovskiy gosuniversitet im. M. V. Lomonosova (Moscow State University)

Card 1/2 SUBMITTED: 19 JUNE 64

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

MATUSEVICH, M.G., kand.ekon.nauk; PASHKEVICH, O.N., kand.ekon.nauk; MUKHINA, V.A., mladshiy nauchnyy sotrudnik; MARKOVA, K.Ye., kand. ekon.nauk; SAVEL'YEV, I.T., mladshiy nauchnyy sotrudnik; MERETSKAYA, T.A., kand.ekon.nauk; D'YAKOV, B.I., mladshiy nauchnyy sotrudnik; Prinimali uchastiye: BEL'KO, S.P., mladshiy nauchnyy sotrudnik; ANDROSOVICH, Ye.I., mladshiy nauchnyy sotrudnik; KUKHAREV, B.Ye., mladshiy nauchnyy sotrudnik; REUT, S.B., starshiy statistik. TIMOFEYEV, L., red.; VOLOKHANOVICH, I., tekhn.red.

[Capital assets of industry and their utilization] Osnovnye fondy promyshlennosti i ikh ispol'zovanie. Minsk, Izd-vo Akad.nauk BSSR, 1960. 192 p. (MIRA 14:1)

1. Akademiya nauk BSSR, Minsk. Institut ekonomiki. 2. Institut ekonomiki AN BSSR (for all, except Timofeyev, Volokhanovich).
(White Russia--Capital)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

GRYAZNOV, Yu.N., inzh.; KUKHAREV, I.D., inzh.; MARKELOV, V.A., inzh.

Device for measuring the quantity of material on a scraper conveyor. Mekh. i avtom. proizv. 19 no.7:30-32 Jl '65. (MIRA 18:9)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, M.

More attention to the work with leading specialists. Grazhd.av. 12 no.6:7-9 Je '55. (MLRA 9:5)

1. Nachal'nik politotdela Severokavkazskogo territorial'nogo upravleniya Grazhdanskogo vozdushnogo flota.
(Communist Party of the Soviet Union--Party work)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, M. N.

KUKHAREV, M. N. -- "Investigation of the Atomization of Fuels with Application to High-Speed Diesel Engines." Min Automobile Industry USSR, State Union Order of Labor Red Banner Automobile and Automobile Engine Sci Res Inst NAMI, Moscow, 1955 (Dissertation For the Degree of Doctor of Technical Sciences)

SO: Knizhnaya letopis', No. 37, 3 September 1955

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

GERSHMAN, I.I.; KUKHAREV, M.N.

Investigation of fuel atomization in a laboratory apparatus.
Avt. i trakt.prom. no.2:22-25 F '56. (MLRA 9:6)

1.Nauchno-issledovatel'skiy avtomotornyy institut.
(Fuel--Testing)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, M.N.

INSTALLATION. Gershman, I.I., and Kukharev, M.N. (Avtom. Trakt. Prom. (Autom. Tract. Ind., Moscow), 1956, (4), 9-131 abstr. in Chem. Abstr., 1956, vol. 50, 14203, 14204). Fuel combustion is stu[illegible] chamber provided with inlet and exhaust valves, fuel injector, pressure gauge, and thermocouples. Air from a compressor [illegible] is delivered by a pump. Since a single [illegible] is locked at proper [illegible]

Fuel 2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV M.N.

KHANIN, N.S.; kandidat tekhnicheskikh nauk; KALISH, G.G., doktor tekhnicheskikh nauk; ANDRONOVA, T.B., kandidat tekhnicheskikh nauk; KUKHAREV, M.N., kandidat tekhnicheskikh nauk; GERSHMAN, I.I.; CHAPKEVICH, V.A., kandidat tekhnicheskikh nauk; YERMOLAYEV, P.S.

Review of the book "Internal combustion engines," Edited by A.S. Orlin, N.S. Khanin and others. Avt. i trakt. prom. no.7: 45-46 Jl '56. (MLRA 9:10)

1. Nauchno-issledovatel'skiy avtomotornyy institut.
(Gas and oil engines) (Orlin, A.S.)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, E.M.

Characteristics from the viewpoint of engineering geology of landslide phenomena on the right bank of the Volga near Vol'sk. Vop. godrogeol. i inzh. geol. no.15:134-141 '57. (MIRA 11:5)
(Volga Valley--Landslides)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, M.N

11(4) PHASE I BOOK EXPLOITATION SOV/2764

Tsentral'nyy nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut

Issledovaniye raspylivaniya i goreniya dizel'nogo topliva (Investigation of Atomization and Combustion of Diesel Fuel) Moscow, Mashgiz, 1959. 115 p. (Series: Its: [Trudy] vyp. 87) 1,275 copies printed.

Ed. of Publishing House: I.A. Vasil'yeva; Tech. Ed.: V.D. El'kind; Managing Ed. for Literature on Automotive, Transport, and Agricultural Machine Building (Mashgiz): I.M. Bauman, Engineer; Editorial Board: M.A. Pashin (Chairman), A.A. Lipgart (Deputy Chairman and Resp. Ed.), A.A. Al'perovich, S.G. Borisov, M.I. Briskin, O.V. Dybov, Ya. G. Zil'berberg, A.S. Lozar'; I.S. Lunev, P.V. Nagayev, Ya.M. Pevzner, V.I. Pryadilov, K.S. Ramayya, O.V. Tamruchi, G.I. Samol', Ye.V. Sedova, N.S. Khanin, A.A. Chapchayev, S.B. Chistozvonov, and E.M. Shkol'nikov.

PURPOSE: This publication is intended for scientists, engineers, and technicians engaged in the production of automobile and tractor engines.

Card 1/3

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

COVERAGE: This issue consists of two articles devoted to research on the atomization and combustion of Diesel fuels with varying physicochemical properties. The tests were conducted with laboratory apparatus without the use of engines. The equipment had a fuel unit of the divided type. The research included the study of flame development during injection from nozzles equipped with pin atomizers; variation of atomization during injection phases and the dependence of the atomization process on the design, regulation, and operation of the fuel apparatus and on the parameters of the medium into which the fuel is injected; effect of the quality of atomization on the ignition and combustion of the fuel; and realization of optimum conditions for the atomization and evaporation of fuels. It was determined that there exists an optimum ignition delay resulting in the highest combustion rates. Bibliographies are given at the end of each article.

TABLE OF CONTENTS:

Kukharev, M.N. Study of Fuel Injection for Use in High-speed Diesel Engines 3

Introduction 3

Description of test equipment and research methods 4

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

Investigation of Atomization (Cont.) SOV/2764

Study of the quality of atomization in a cylinder 16
Stroboscopic study of the quality of atomization 21
Generalization of results according to fineness of atomization 41
Study of flame propagation 44
Conclusions 54
Bibliography 55

Gershman, I. I. Effect of Atomization on the Ignition and Combustion of Diesel Fuel
Introduction 57
Research method 57
Results of experimental research 61
Conclusions 72
Bibliography 114
115

AVAILABLE: Library of Congress

Card 3/3

TM/gmp
1-22-60

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, M.N., kand. tekhn. nauk

Investigating the atomization of fuel for high-speed diesel engines. [Trudy] NAMI no.87:3-56 '59. (MIRA 13:1)
(Diesel fuels) (Atomization)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, M.N., kand.tekhn.nauk; STARIKOV, N.I., inzh.; KORETSKIY, N.I., inzh.

Expediency of changing the form of the cutoff window in the sleeve of a fuel pump. Trakt. i selkhozmash. 32 no.3:14-15 Mr '62. (MIRA 15:2)

1. Voronezhskiy sel'skokhozyaystvennyy institut.
(Tractors--Fuel systems)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, M.N., kand. tekhn. nauk

Generalization of the results of investigating the propagation of the fuel flame of pin-type injectors. Trakt. i sel'khozmash. 33 no.6:16-19 Je '63. (MIRA 16:7)

1. Voronezhskiy sel'skokhozyaystvennyy institut.
(Diesel engines—Fuel systems)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAR'V, M.N., kand. tekhn. nauk

Studying the effect of the physical characteristics of fuel on the basic parameters of the process of atomizing. Trakt. i sel'khozmash. no.4:13-15 Ap '65. (MIRA 18:5)

1. Voronezhskiy sel'skokhozyaystvennyy institut.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, M.V.

Specific rigidity of teeth of textolite and polyamide gear wheels. Izv.vys.ucheb.zav.; prib. 5 no.1:136-139 '62. (MIRA 15:2)

1. Leningradskiy institut tochnoy mekhaniki i optiki. Rekomendovana kafedroy optiko-mekhanicheskikh priborov.
(Gearing)
(Plastics—Testing)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHARNV, N.M., inzhener.

Methods of investigating soils abroad. Gidr. stroi. 26 no.4:54-55 Ap '57. (MLRA 10:6)

(Europe, Western--Soils--Analysis)
(United States--Soils--Analysis)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, N. M.

KUKHAREV, N.M.

Landslides in the Lenin Hills. Gor. khoz. Mosk. 32 no.2:27-29 F '58.
(Moscow Province--Landslides) (MIRA 11:1)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, N.M.

Caverns in loesslike clayey soils and the stability of structures. Prom. stroi. 36 no.12:34-35 D '58. (MIRA 12:1)
(Caves) (Soil mechanics)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, N.M., inzh.

Combined device for probing soil. Transp.stroi. 10 no.6:58 Je '60. (MIRA 13:7)

(Switzerland--Soil mechanics)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, N.M.

Interstices in loess loams of the Krasnoyarsk Territory and their genesis. Izv.vys.ucheb.zav.; geol. i razv. 4 no.11:102-105 N '61. (MIRA 15:2)

1. Institut giprotransmost.
(Krasnoyarsk Territory—Loess)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, N.M. (Moskva)

Landslides in the Vol'sk region. Priroda 50 no.12:58-59 D '61. (MIRA 14:12)

(Vol'sk region--Landslides)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

ALEKSANDROV, Yu.; PILIPUSHKO, I.; VOLCHENKO, V.; SENDEROV, I.; LIMARENKOV, L.; YARKOV, G.; YEMTSEV, I.; KUKHAREV, N.; SHCHEKOTOVICH, P.; BOBOVICH, V.; CHEREPANOV, G.

They are raising the level of their qualifications. Zashch.rast. ot vred.i bol. 7 no.5:61 My '62. (MIRA 15:11)
(Plants, Protection of—Study and teaching)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

SHAROV, N.V.; SHAKHET, G.P.; RAMENOV, A.S.; KUKHAREV, P.P.; KLOCHKOV, S.A., retsenzent; MARTYNOV, S.F., retsenzent; OSIPOV, Ya.T., retsenzent.

[Machinery and apparatus for the fur industry] Mashiny i apparaty mekhovogo proizvodstva. Pod obshchei red. N.V.Sharova. Moskva, Gos. nauchno-tekhn. izd-vo Ministerstva promyshlennykh tovarov shirokogo potrebleniia SSSR, 1953. 358 p. (MLRA 7:6)
(Fur industry)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

L 08126-67 EWT(m) FDN/DJ

ACC NR: AP6029988 (A,N) SOURCE CODE: UR/0413/66/000/015/0195/0195

INVENTOR: Zhdanov, K. I.; Kazanskiy, B. P.; Kukharev, V. I.

ORG: none

38
B

TITLE: Variable-pitch propeller. Class 62, No. 184146

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 195

TOPIC TAGS: aircraft propeller, propeller blade, propeller pitch control, hydraulic device

ABSTRACT: An Author Certificate has been issued for a variable-pitch propeller consisting of a hub, blades, a hydraulic mechanism with a piston for changing the pitch, and a constant-rpm governor. To prevent the appearance of negative thrust in flight in the event of the simultaneous action of several defects in the power-plant system, the piston is equipped with a hydraulic sliding support consisting of a spring-supported slide valve. The valve has a regulated pressure chamber connected by a system of channels with a pressure regulator having power, altitude, flight-speed, and ambient-air-temperature transducers. [KT]

SUB CODE: 01, 13/ SUBM DATE: 30Dec64

Card 1/1 nst

UDC: 629.13.01/06

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, V.N.; KUKHARENKO, P.I.

Local air cooling in longwalls of transitional depth. Ugol' Ukr. 4 no.10:27-28 O '60. (MIRA 13:10)

1. Dneprogiproshakht.
(Coal mines and mining--Air conditioning)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, G.V., kand.tekhn.nauk; BARATOV, E.I., kand.tekhn.nauk; KUKHAREV, V.N., inzh.

Research on heat conditions in Krivoy Rog mines during the extension of mining operations to low levels. Izv. vys.ucheb.zav.; gor. zhur. no.5:34-41 1960. (MIRA 14:3)

1. Dneproptrovskiy ordena Trudovogo Krasnogo Znameni gornyy institut imeni Artema. Rekomendovana kafedroy rudnichnoy ventilyatsii.
(Krivoy Rog—Mine ventilation)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, G.V., dotsent; KUKHAREV, V.N., inzh.

Experimental studies of heat emission from rocks in coal mine stopes. Izv.vys.ucheb.zav.; gor.zhur. no.3:89-92 '61. (MIRA 15:4)

1. Dnepropetrovskiy ordena Trudovogo Krasnogo Znameni gornyy institut imeni Artema; rekomendovana kafedroy rudnichnoy ventilyatsii Dnepropetrovskogo gornogo instituta.
(Rocks--Thermal properties) (Mine ventilation)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREV, V.N., gornyy inzhener; KUKHARENKO, P.I., gornyy inzhener; BABCHENKO, Yu.N., gornyy inzhener

Local air cooling in the Artem Mine of the Dzerzhinskugol' Trust. Trudy Sem.po gor.teplotekh. no.3:119-127 '61. (MIRA 15:4)

1. Dneprogiproshakht.
(Krivoy Rog Basin—Mine ventilation)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, G.V., dotsent; KUKHAREV, V.N., gornyy inzhener; BARATOV, E.I., kand.tekhn.nauk

Ways of improving the air condition in the mines of Donets Basin Kadievka District. Ugol' Ukr. 5 no.10:24-26 O '61. (MIRA 14:12)

1. Dnepropetrovskiy gornyy institut (for Duganov, Kukharev).
2. Institut teploenergetiki AN USSR (for Baratov).
(Donets Basin--Mine ventilation)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KALACHNIKOV, A.Ya., inzh.; KUKHARENKO, P.I., inzh.; KUKHAREV, V.N., inzh.

Mobile air conditioners for deep mines; response to N.V.Poliakov and N.N.Khokhotva's article "Results of the experimental operation of air conditioners for air cooling in longwalls." Ugol' 36 no.4: 58-59 Ap '61. (MIRA 14:5)

1. Dneprogiproshakht.
(Coal mines and mining--Air conditioning)
(Poliakov, N.V.) (Khokhotva, N.N.)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, G.V., kand.tekhn.nauk; KUKHAREV, V.N., inzh.; BARATOV, E.I., kand.tekhn.nauk

General study of the heat conditions of mines in the Kadiyevka region of the Donets Basin. Trudy Sem.po gor.teplotekh. no.4: 155-161 '62. (MIRA 15:8)

1. Dnepropetrovskiy gornyy institut im. Artema.
(Donets Basin--Mine ventilation)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

ABRAMOV, F.A., prof.; DUGANOV, G.V., dotsent; KUKHAREV, V.N., inzh.; CHERNIKOV, G.F.

Thermal atmospheric phenomena in the mines of Kadievugol' Trust occurring in the transfer of mining to deep levels. Ugol' 37 no.9:52-55 S '62. (MIRA 15:9)

1. Dnepropetrovskiy gornyy institut.
(Donets Basin—Mine ventilation)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, Georgiy Vasil'yevich, doktor tekhn. nauk; BARATOV, Emil' Iosifovich, kand. tekhn. nauk; Prinimal uchastiye KUKHAREV, V.N.; NIKITIN, V.S., otv. red.; LUCHKO, V.S., red.izd-va; IL'INSKAYA, G.M., tekhn. red.

[Heat regime of mines]Teplovoi rezhim rudnikov. Moskva, Gosgortekhizdat, 1963. 143 p. (MIRA 16:4)
(Mine ventilation)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, G.V.; KUKHAREV, V.N.

Geothermic studies of the Kadiyevskiy region in the Donets Basin. Geofiz.sbor. no.1:116-119 '62. (MIRA 16:3)
(Donets Basin--Rocks--Thermal properties)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, G. V., doktor tekhn. nauk; KUKHAREV, V. N., inzh.

Experimental determination of the thermophysical properties of rocks under mining conditions. Izv. vys. ucheb. zav.; gor. zhur. 5 no.8:71-75 '62. (MIRA 15:10)

1. Dnepropetrovskiy ordena Trudovogo Krasnogo Znameni gornyy institut imeni Artema. Rekomendovana kafedroy rudnichnoy ventilyatsii.

(Rocks—Thermal properties)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, G.V.; KUKHAREV, V.N.

Thermal calculations of local air cooling in stopes by means of portable air conditioners. Izv. vys. ucheb. zav.; tsvet. met. 6 no.4:17-21 '63. (MIRA 16:8)

1. Dnepropetrovskiy gornyy institut, kafedra rudnichnoy ventilyatsii.

(Mine ventilation)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, G.V., doktor tekhn.nauk; CHERNIKOV, G.F., inzh.; KUKHAREV, V.N., inzh.

Study of the oxidizing ability of coals under laboratory conditions and in the mine. Izv.vys.ucheb.zav.; gor. zhur. 6 no. 12:21-25 '63. (MIRA 17:5)

1. Dnepropetrovskiy ordena Trudovogo Krasnogo Znameni gornyy institut imeni Artema. Rekomendovana kafedroy rudnichnoy ventilyatsii.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, G.V., prof.; KUKHAREV, V.N., inzh.; CHERNIKOV, G.F.; MURAVEYNIK, V.I.

Regulating the thermal conditions in stopes of the Kadiyevka region of the Donets Basin in the mining of steep coal seams. Izv.vys.ucheb. zav.;gor.zhur. 7 no.9:63-67 '64. (MIRA 18:1)

1. Dnepropetrovskogo ordena Trudovogo Krasnogo Znameni gornyy institut imeni Artema. Rekomendovana kafedroy rudnichnoy ventilyatsii.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, G.Ya.; KUKHAREV, V.N.

Controlling the high air temperature in mines of the Kadiyevka and Central Donets Basin regions. Izv. DGI 42: 183-186 '64. (MIRA 18:11)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

DUGANOV, G.V., prof.; GRIN'KO, N.K.; KUKHAREV, V.N., kand.tekhn.nauk; MACHIKOV, V.Ya.

Air conditioning of steeply pitching seams in the Kadiyevka region, Donets Basin. Ugol' 40 no.9:60-65 S '65.

(MIRA 18:10)

1. Dnepropetrovskiy gornyy institut (for Duganov). 2. Kombinat Luganskugol' (for Grin'ko). 3. Dneprogiproshakht (for Kukharev). 4. Trest Kadiyevugol' (for Machikov).

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

[illegible], Ye.V., kand. tekhn. nauk; MOGILEVSKIY, [illegible], inzh.; [illegible]KHANEV, V.N., kand. tekhn. nauk

Controlling heat conditions in mines of the central part of the Donets Basin. Ugol' Ukr. 9 no.12:44-47 [illegible]. (MIRA 19:1)

1. Dnepropetrovskiy gosudarstvennyy institut po proyektirovaniyu shakhtnykh ustanovok.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREVA, A.D.

Policlinical department of the Vitebsk Provincia Hospital.
Zdrav.Bel. 9 no.1:11-12 J'63. (MIRA 16:8)

1. Glavnyy vrach polikliniki imeni Lenina, Vitebsk.
(VITEBSK—HOSPITALS—OUTPATIENT SERVICES)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

IVANOV, A.I.; KUKHAREVA, I.G.

Investigating the anode process during the electrolysis of titanium tetrachloride in fused chloride salts. Titan i ego splavy no.8: 220-226 '62. (MIRA 16:1)
(Titanium—Electrometallurgy) (Fused salts)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

LEVINA, M.Ye.; KUKHAREVA, I.N.; KALITIN, V.I.

Phase diagrams of the systems Na_2BeF_4 - Na_3PO_4 and K_2BeF_4 - K_3PO_4. Izv. vys. ucheb. zav.; khim. i khim. tekh. 8 no.1: 3-10 '65. (MIRA 18:6)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, kafedra obshchey khimii.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

KUKHAREVA, L.V.

Synthesis of dichloro- and dibromethyl derivatives of aromatic compounds. A. A. Vanshaidt, E. P. Mel'nikova, and [illegible] Kukhareva.

[illegible]

4,4'-bis(chloromethyl)diphenyl oxide, m. 61°, were thus prepd. The addn. of HI (d. 1.7) to Me$_2$CO solns. of these derivs. pptd. the I derivs. quantitatively. Thus were prepd. p-xylylene diiodide, m. 174°, and [illegible] derivs. of Ph$_2$, m. 190°, and of Ph$_2$CH$_2$, m. [illegible]

1/1

2 MAY

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

VANSHEYDT, A.A.; MEL'NIKOVA, Ye.P.; KUKHAREVA, L.V.; KRIXOVYAK, M.G.

Method for the synthesis of dichloromethyl derivatives of naphthalene and diphenyl oxide. Khim. nauka i prom. 3 no. 2 287 '58. (MIRA 11:6)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.
(Naphthalene) (Phenyl ether)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

AUTHORS: Lebedeva, A. I., [illegible]nareva, L. V. SOV/79-28-10-51/60

TITLE: Investigation of the Isomerization and Dimerization Processes of Dimethyl Vinyl Carbinol as Dependent on the Percentage of the Reagent Contained (Issledovaniye protsessa izomerizatsii i dimerizatsii dimetilvinilkarbinola v zavisimosti ot pH reagenta)IV. Concerning the Structure of a New Geraniol Isomer(IV.K voprosu o stroyenii novogo izomera geraniola)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 10, pp 2782 - 2786 (USSR)

ABSTRACT: In their earlier paper Lebedeva and her collaborator investigated the dependence of the yield of terpene alcohols on the percentage of the reagent as the basis of the effect of the $KHSO_4$ dissolved in water on the dimethyl vinyl carbinol (Ref 1). The mixture of products obtained was not sufficiently characterized. In the present paper they succeeded three compounds, two of which were identical with the previously synthesized unsaturated ether (Ref 2) and the third with geraniol hydrate. The latter was dehydrated in

Card 1/4

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5

Investigation of the Isomerization and Dimerization Processes of Dimethyl Vinyl Carbinol as Dependent on the Percentage of the Reagent Contained. IV.Concerning the Structure of a New Geraniol Isomer SOV/79-28-10-51/60

vacuum with $KHSO_4$ traces, with a terpene alcohol of the general formula $C_{10}H_{18}O$ different from geraniol and linalool being obtained. The oxidation of this alcohol yielded the aldehyde, the hydration by the way of Pt yielded the saturated alcohol that was identical with tetrahydro geraniol. In the catalytic hydration of the alcohol $C_{10}H_{18}O$ by the way of $Pd/CaCO_3$ after the affiliation of 1 mole H_2 a reaction delay was noticed which lead to a selective hydration of the alcohol and, according to the constants, corresponded to the citronellol. After its oxidation it formed citronellic acid and its lactone. The absorption spectrum reminded the authors of that of β-citronellol taken within the same range (Ref 6). Concluding the following results of the reaction of dimethyl vinyl carbinol with $KHSO_4$ are mentioned: 1) An allyl re-

Card 2/4

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R000827230013-5"