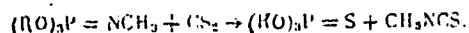


Concerning Imides of Phosphorus Acids.
Infrared Absorption Spectra of Imido-
phosphates and Imidophosphonates

77069
SOV/62-59-12-13/43

Trialkyl N-methylimidophosphates are colorless liquids, easily hydrolyzed by water with formation of methylimides of dialkylphosphoric acids. They react with CS_2 as follows:



E. M. Popov, I. F. Lutchenko, V. N. Smorchkov, I. Ya. Kachkurova, I. V. Obreimov took part in this work. There are 4 figures; 2 tables; 12 references, 1 German, 2 U.S., 2 U.K., 7 Soviet. The 4 U.S. and U.K. references are: L. W. Daasch, J. Amer. Chem. Soc. 76, 3403, (1954); L. W. Daasch, D. C. Smith, Analyt. Chem. 23, 853 (1951); D. E. Corbridge, J. Appl. Chem. 6, 10, 456 (1956); D. E. Corbridge, E. J. Lowe, J. Chem. Soc. 1954, 4555.

Card 11/12

Concerning Imides of Phosphorus Acids.
Infrared Absorption Spectra of Imido-
phosphates and Imidophosphonates

77069
SOV/62-59-12-13/43

ASSOCIATION: Institute of Element-Organic Compounds, Academy of
Sciences, USSR (Institut elementoorganicheskikh
soedineniy Akademii nauk SSSR)

SUBMITTED: April 18, 1958

Card 12/12

KABACHNIK, M.I.; GILYAROV, V.A.

Imides of phosphorus acids. Report No.5: Reactions of trialkyl-phosphites with hydrazoic acid. Izv.AN SSSR.Otd.khim.nauk no.5: 816-818 My '61. (MIRA 14:5)

1. Institut elementoorganicheskikh soedineniy AN SSSR.
(Phosphorous acid) (Hydrazoic acid)

KABACHNIK, M.I.; GILYANOV, V.A.

Imides of phosphorus acids. Report No.6: Trialkyl-N-acylimido-
phosphates. Izv.AN SSSR.Otd.khim.nauk no.5:819-823 My '61.
(MIRA 14:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Phosphoric acid)

KABACHNIK, M.I.; GILYAROV, V.A.; POPOV, Ye.M.

Amides of phosphorus acid. Report 7: Amideimidolic tautomerism of amides of pentavalent phosphorus acids. Izv.AN SSSR, Otd.khim.nauk no.6:1022-1030 Je '61. (MIRA 14:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Phosphorus acids) (Amides)

KABACHNIK, M.I.; GILYAROV, V.A.; POPOV, Ye.M.

Tautomerism of phosphamidines. Zhur.ob.khim. 32 no.5:1598-1604
My '62. (MIRA 15:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Phosphorus acids) (Amidines) (Tautomerism)

GILYAROV, V.A.

"Tautomerism of certain imides of phosphorus acids."

Khimiya i Primeneniye Fosfororganicheskikh Soedineniy (Chemistry and application of organophosphorus compounds) A. YE. KILYAROV, Ed.
Publ. by Kazan Affil. Acad. Sci. USSR, Moscow 1962. 116 pp.

Collection of complete papers presented at the 1969 Kazan Conference on Chemistry of Organophosphorus Compounds.

GILYAROV, V.A.

Reaction of salts of dialkylphosphorus acids with diazomethane."

Khimiya i Primeneniye Fosfororganicheskikh Soedineniy (Chemistry and application of organophosphorus compounds) A. Zh. Akad. Nauk, ed. Publ. by Kazan AFill. Acad. Sci. USSR, Moscow 1962, 441 pp.

Collection of complete papers presented at the 1962 Kazan Conference on Chemistry of Organophosphorus Compounds.

KABACHNIK, M.I.; ~~GILYAROV, V.A.~~; CHZHAN CHZHEN-DE [Chang Chêng-tieh]; MATROSOV, Ye.I.

Problem of tautomerism of N-acylamidophosphates and N-acylamidophosphinates.
Izv. AN SSSR. Otd. khim. nauk no. 9:1589-1599 S '62. (MIRA 15:10)

1. Institut elementoorganicheskikh soedineniy AN SSSR.
(Phosphoramidic acid) (Phosphinamidic acid) (Tautomerism)

L 54446-65 EWT(m)/EPF(c)/FCC/EWP(j)/FCS(f)/T/EWP(n)/EWA(c) Pc-4/Pr-4 RPL

ACCESSION NR: AP5012451

JH/RM

UR/0062/65/000/004/0665/0669

541

30

21

B

AUTHORS: Kabachnik, M. I.; Gilyarov, V. A.; Chang, Cheng-teTITLE: Trialkyl-n-acylimidophosphates as conjugate systems

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 4, 1965, 665-669

TOPIC TAGS: conjugate system, phosphate, alkylation

ABSTRACT: Trialkyl-n-acylimidophosphates as conjugate systems were investigated, and it is shown that these compounds enter into substitution reactions according to 1,2; 1,4; and 1,6 types. The 1,2 reaction was obtained by heating triethyl-n-trifluoro-acetylimidophosphate with triethylamine. In this process the nitrogen of the tertiary base underwent alkylation by triethyl phosphite. The 1,4 reaction was observed when trialkyl-n-acylimidophosphate was acted on by HCl. The imidophosphate goes to amidophosphite and alkyl halide is split off. The 1,6 reaction was encountered in the reaction of trialkyl-n-acylimidophosphate with alkyl halide. On heating trialkyl-n-acylimidophosphate with methyl iodide or ethyl bromide at 100-130C for 4-6 hours, ortho-alkyl-n-(diethyl phosphoryl) iminoacetate is formed. When this same procedure was attempted with

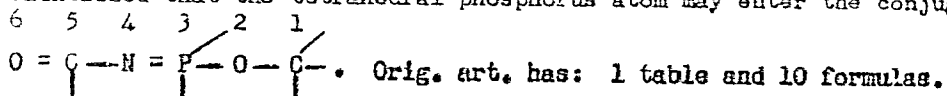
Card 1/2

L 54446-65

ACCESSION NR: AP5012451

3

triethyl-n-dichloroacetylimidophosphate (and methyl iodide), no reaction was observed. The lower reactivity of the acetylimidophosphate may be due to lower nucleophilicity of the carbonyl oxygen at the expense of the inductive effect of the CHCl_2 group. Actually, triethyl-n-trifluoro-acetylimidophosphate reacts readily with triethylamine, whereas unsubstituted triethyl-n-acetylimidophosphate does not react with triethylamine under the same conditions. It is therefore maintained that the tetrahedral phosphorus atom may enter the conjugate chain



ASSOCIATION: Institut elementoorganicheskikh sovedineniy, Akademii nauk SSSR (Institute of Hetero-Organic Compounds, Academy of Sciences, SSSR)

SUBMITTED: 15Apr63

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 006

OTHER: 001

Card 2/2

L 1131-66 EWT(m)/EPF(c)/EWP(j) RL

ACCESSION NR: AP5022927

UR/0062/65/000/008/1331/1336

543.422 + 661.718.1

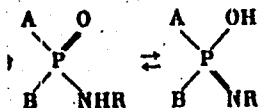
AUTHOR: Matrosov, Ye. I.; Gilyarov, V. A.; Kabachnik, M. I.

TITLE: About amidoimido-tautomerism of N-phosphorylamidophosphates and phosphines

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 8, 1965, 1331-1336

TOPIC TAGS: amide, imide, tautomerism, N-phosphorylamidophosphate, phosphine, IR spectroscopy

ABSTRACT: The amido-imido tautomerism of amides of acids of pentavalent phosphorus,



was investigated by IR spectroscopy. The IR absorption spectra of N-phosphorylamidophosphates and phosphines are shown in fig. 1 of the Enclosure. The IR absorption spectra of N-phosphorylamidophosphates and phosphines are shown in fig. 2 of the Enclosure. For the compounds in question, vibrational frequencies corre-

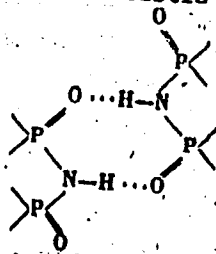
Card 1/4

L 1131-66

ACCESSION NR: AP5022927

3

sponding to P = N group occur in the 1296-1338 cm^{-1} region and those corresponding to P = O group occur in the 1210-1253 cm^{-1} region. The IR spectra indicate an amide type structure of the N-phosphorylamidophosphates and phosphines. The phosphoryl group may form a strong hydrogen bond to the NH-groups and, thus, cause a strong shift of the bond corresponding to N-H vibration toward wave numbers shorter than 3100 cm^{-1} . As a result, the absorption band characteristic for N-H vibration in N-phosphorylamidophosphates and phosphines,



occurs at 2700 cm^{-1} . Orig. art. has: 2 figures, 2 tables.

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR
 (Institute of Elemental Organic Compounds, Academy of Sciences, SSSR) 44153

SUBMITTED: 11Jan65

NO REF SOV: 005

ENCL: 02

OTHER: 002

SUB CODE: GC, OC

Card 2/4

L 1131-66

ACCESSION NR: AP5022927

ENCLOSURE: 01.

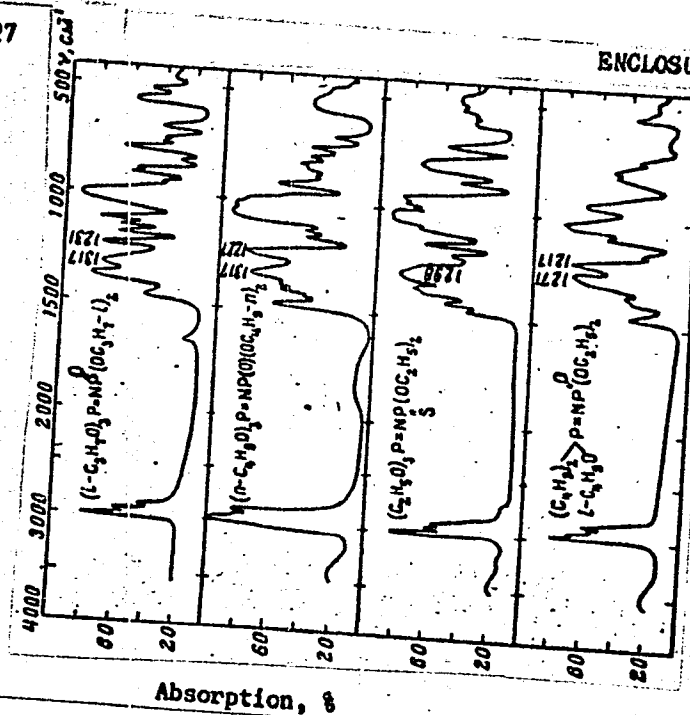


Fig. 1.

Card 3/4

L 1131-66

ACCESSION NR: AP5022927

ENCLOSURE: 02

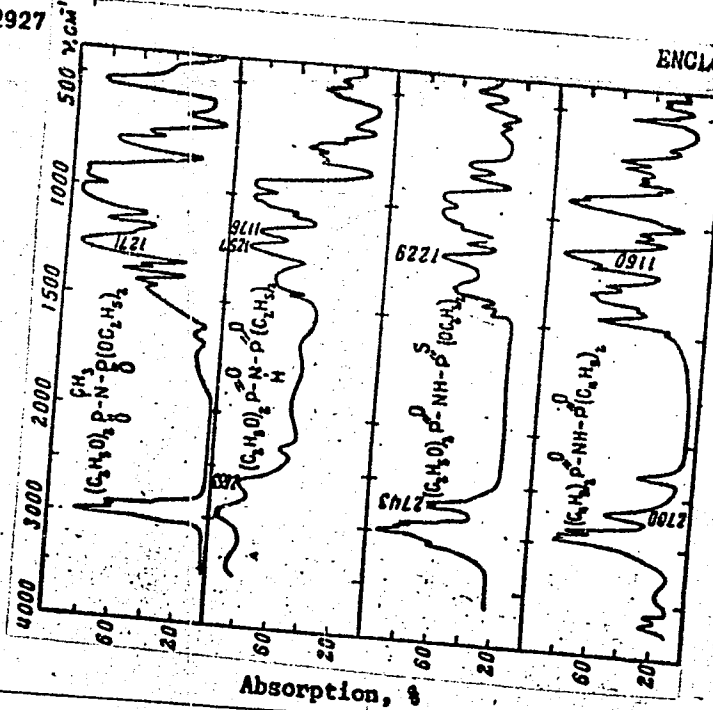


FIG. 2.

Card 4/4

L 25325-66 EWP(j)/EWT(m) RM

ACC NR: AP6019323

SOURCE CODE: UR/0079/65/035/008/1476/1481

AUTHOR: Kabachnik, M. I.; Gilyarov, V. A.; Kudryavtsev, R. V. 27
B

ORG: Institute of Organoelemental Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)

TITLE: Study of conjugation in systems with a tetrahedral phosphorus atom.
Phosphamide system

SOURCE: Zhurnal obshchey khimii, v. 35, no. 8, 1965, 1476-1481 27

TOPIC TAGS: tautomerism, organic phosphorus compound, methylation

ABSTRACT: The reactions of O,O-diethyl-N, N'-diphenylphosphamidine and of O,O-diethyl-N-phenyl-N'-m-tolylphosphamidine with CS₂ were investigated. The products were O,O-diethyl-N-phenylamidothio-phosphate and aryl isothiocyanates. Formation in the second case of a mixture of phenyl isothiocyanate and m-tolyl isothiocyanate confirmed the existence of phosphamidine tautomerism. In the methylation of Na derivatives of diarylphosphamidines with MeI, a mixture of two methylation products formed when two different aryl groups were contained in the diarylphosphamidine. The ratio between the two methylation products depended on the nature of the substituents in the aryl groups. The tautomerism of diarylphos-

Card 1/2

UDC: 546.185+546.171.1

L 25325-66 ...

ACC NR: AP6019323

phamidines and the dual reaction capacity of their Na derivatives indicated a high mobility of bonds in the $-N = P - N =$ group and consequently a capacity of phosphorus to participate in conjugation. Orig. art. has: 12 formulas. [JPRS] 0

SUB CODE: 07, 06 / SUBM DATE: 05Jun64 / ORIG REF: 005 / OTH REF: 005

Card 2/2 CC

L 46184-65 EWT(m)/EPF(c)/EWP(j)/LWA(c) Pc-4/Pr-4 RM
ACCESSION NR: AP5007563 S/0020/65/160/005/1079/1082

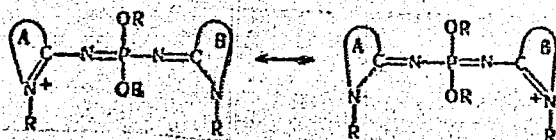
AUTHOR: Kabachnik, M. I (Academician); Gilyarov, V. A.; Yusupov, M. M.

TITLE: Study of conjugation in systems containing a tetrahedral phosphorus atom. Phosphaazacyanines.

SOURCE: AN SSSR. Doklady, v. 160, no. 5, 1965, 1079-1082

TOPIC TAGS: conjugation, phosphamidine, tautomerism, resonance, polyphosphonitrile, organic dye, heterocyclic compound, azacyclic compound

ABSTRACT: The authors discuss the following resonance system in the phosphorus analogues of azacyanines:

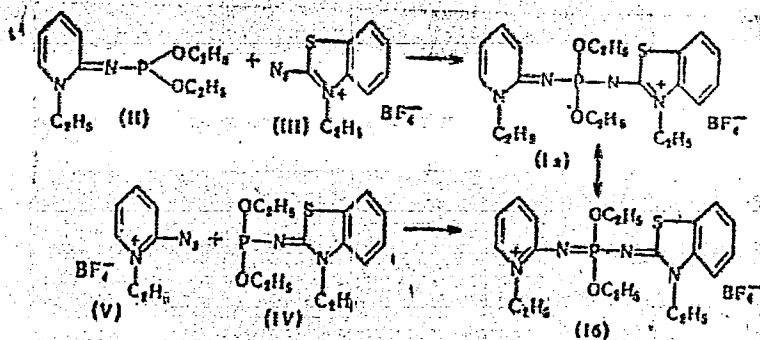


The synthesis of structures Ia, with an ammonium nitrogen in the benzthiazole ring, and Ib, with an ammonium nitrogen in the pyridine ring, was carried out as follows:

Card 1/3

L 46184-65

ACCESSION NR: AP5007563



A series of reactions proved that phosphazacyanines Ia and Ib were identical, that a positive charge was dispersed over the terminal nitrogen atoms, and therefore that the resonance system Ia \leftrightarrow Ib is a weakly conjugated system with low-frequency interaction. Orig. art. has: 8 formulas and 1 table.

Card 2/3

L 46184-65

ACCESSION NR: AP5007563

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR
(Institute of Organometallic Compounds, Academy of Sciences SSSR)

SUBMITTED: 12Sep64

ENCL: 00

SUB CODE: 00

NO REF SOV: 006

OTHER: 007

ml
Card 3/3

KABACHNIK, M.I., akademik; GILYAROV, V.A.; YUSUPOV, M.M.

Stable salts of alkoxyaminophosponiums with a delocalized onium charge. Dokl. AN SSSR 164 no.4:812-815 O '65.

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

(MIRA 18:10)

L 31272-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6022796

SOURCE CODE: UR/0079/66/036/002/0274/0282

AUTHOR: Gilyarov, V. A.; Tsvetkov, Ye. E.; Kabachnik, M. I.ORG: Institute of Heteroorganic Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)TITLE: Imides of phosphorus acids, VIII. N-acylimidophosphates and -phosphinates and N-acylamidophosphates and -phosphinates

SOURCE: Zhurnal obshchey khimii, v. 36, no. 2, 1966, 274-282

TOPIC TAGS: organic phosphorus compound, chemical synthesis, dissociation constant, organic amide, molecular structure, IR spectrum, azide, imide

ABSTRACT: A series of new azidophosphates and azidophosphinates was produced by the reaction of chlorophosphates and chlorophosphinates with triethyl-ammonium azide. N-Acylimidophosphates and -phosphinates were synthesized by reaction of acyl azides with esters of phosphorous and phosphinous acids, and then dealkylated with hydrogen chloride to the corresponding N-acylamidophosphates and -phosphinates. The concentration dissociation constants of a number of N-acylamidophosphates were determined, and it was concluded on the basis of the Bronsted rule that these substances possess an amide, not an imidol structure. Infrared spectra of the products were also studied and will be published separately. Orig. art. has: 1 figure and 4 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 10Nov64 / ORIG REF: 014 / OTH REF: 008

Card 1/1

UDC: 546.185

L 31273-66 EWI(m)/EWF(j)/T RM

ACC NR: AFG022797

SOURCE CODE: UR/0079/66/036/002/0282/0289

AUTHOR: Gilyarov, V. A.; Kabachnik, M. I.ORG: Institute of Heteroorganic Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)TITLE: N,N'-diaryldi-phosphamidines and some of their properties

SOURCE: Zhurnal obshchey khimii, v. 36, no. 2, 1966, 282-289

TOPIC TAGS: organic phosphorus compound, chemical synthesis, organic amide, reaction mechanism, substituent

ABSTRACT: A series of diethylphosphoryl-N,N'-diarylamidines and diethylphosphinyl-N,N'-diarylamidines were synthesized from diethyl chlorophosphite and arylamines through intermediate O,O-diethyl-N-amidophosphites (some of which were synthesized for the first time). In the synthesis of diethylphosphinyl-N,N'-diarylamidines, the intermediate N-phenylamidodiethylphosphinite was produced by transamination from N-diethylamidodiethylphosphinate and aniline. The pronounced nucleophilic character of the phosphamidines was noted. A method of synthesizing O-alkyl-N,N'-diaryldiamidophosphates with various substituents in the amido groups was found. Orig. art. has: 5 tables. [JPRS]

SUB CODE: 07 / SUPM DATE: 24Feb65 / ORIG REF: 008 / OTH REF: 005

Card 1/1

UDC: 546.183:547.398.5

L 34020-66 EWT(m)/EWP(j) RM

ACC NR: AP6025530

SOURCE CODE: UR/0079/66/036/001/0057/0061

AUTHOR: Kabachnik, M. I.; Gilyarov, V. A.; Kudryavtsev, R. V. 39
BORG: Institute of Heteroorganic Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)TITLE: Reactivity of sodium derivatives of phosphamidines. 1 Methylation of ambident anions of N, N'-diarylphosphamidines by methyl iodide

SOURCE: Zhurnal obshchey khimii, v. 36, no. 1, 1966, 57-61

TOPIC TAGS: methylation, anion, electron donor, sodium compound

ABSTRACT: The polar influences of substituents on the course of methylation of sodium salts of N,N'-diarylphosphamidines by methyl iodide were studied. Fifteen sodium derivatives of O,O-diethyl-N,N'-diphenylphosphamidines, substituted in the phenyl rings, were used. The course of methylation (at one of the two nitrogen atoms) was found to depend upon the nature of the substituents in the phenyl rings. The ratio of the yields of methylation products obeys a Hammett equation of the type $\log(Q_a/Q_b) = 0.757(\sigma_B - \sigma_A)$

- 0.022. Methylation was found to be directed primarily toward the more nucleophilic nitrogen atom, i.e., to that situated closer to the more electron donor (or less electron acceptor) substituent. Orig. art. has: 2 figures and 1 table. [JPRS: 35,998]

SUB CODE: 07 / SUBM DATE: 22Feb65 / ORIG REF: 005 / GEN REF: 547.26718 010
UDC: 547.26718

0916

0917

GILYAROVA, M.A.

GILYAROVA, M. A. "Stratigraphy and tectonics of the karelian formation in central Karelia," Uchen. zapiski (Leningr. gos. ped. in-t im. Gertsena), Vol. LXXII, 1948, p. 125-67 --- Bibliog: 19 items

SC: U-3566, 15 March, 53, (Letopis 'Zhurnal 'nykh Statel, No. 14, 1949)

GILYAROVA, M.A.

Stratigraphy of the Pre-Cambrian of the Kozozero region (Tunguda) of
the Karelo-Finnish S.S.R. Vest.Len.un.10 no.1:139-150 Ja '55.
(Kozozero region--Geology, Stratigraphic) (MIRA 8:4)

GILYAROVA, M.A.

Stratigraphic position of the Sursaari volcanic complex. Uch.sap.
Len.un. no.209:80-100 '56. (MLRA 9:8)
(Farelia--Geology, Stratigraphic)

GILYAROVA, M.A.

Quartz porphyries and keratophyres of central Karelia. Uch.
zap.LGU no.215:58-83 '57. (MIRA 12:5)
(Karelia--Porphyry) (Karelia--Keratophyres)

GILYAROVA, M.A.

Pillow lavas in the Suisari area in southern Karelia and the
genesis of pillow lavas. Uch.zap.LGU no.268:3-69 '58.

(MIRA 12:6)

(Karelia--Lava)

GILYAROVA, M.A.

On some controversial problems of the Pre-Cambrian geology of
Karelia. Vest.LGU no.24:34-37 '62. (MIRA 16:2)
(Karelia--Geology, Stratigraphic)

GILYAROVA, M.A.

Karelian basal formations (Lower Proterozoic) in the Parandovo-
Nadvoitsy region in the Karelian A.S.S.R. Vest. LGU 18 no.18:
15-27 '63. (MIRA 16:11)

GILYAROVA, M. A.

Weathering surface and conglomerates in the Lamma Valley of
Pechenga District. Vest LGU 19 no. 6:22-30 '64. (MIRA 17:5)

GILYAROVA, V.N.

Ultraviolet radiation in animal husbandry. Vest. AN SSSR 31 no.11:
115-116 N '61. (MIRA 14:11)

(Ultraviolet rays--Physiological effect)
(Stock and stockbreeding)

GILYAROVSKAYA, L. A.
cd

21

Oxidized and unoxidized humic acids of peat. I. V. Rakovskii and L. A. Gilyarovskaya. *Akim. Tverdog. Topiro* 6, 768-70 (1915).—The extn. of humic acids from peat with 1% NaOH in a N atm. yields results almost identical with those by extn. in air; accordingly there is no basis for the hypothesis of the existence of "unoxidized" protohumic acids and of the formation of phenols from humic acids. Five references. A. A. Podgorny

ASB 11 A METEOROLOGICAL LITERATURE CLASSIFICATION

Gilyarovskaya, L. A.

| | | |
|-----------|---|------|
| Country | : NORTH KOREA | H-22 |
| Category | : Chemical Technology. Chemical Processing of Solid Fossil Fuels | |
| Abs. Jour | : Ref Zhur-Khimiya, No 14, 1959, No 50982 | |
| Author | : Em Tkhe Nen; Gilyarovskaya, L. A.; Pechuro, NS. | |
| Institute | : - | |
| Title | : Reactability of Coke Derived from the Korean Brown Coal of the Aodi Region and from Anthracite of the Sanchau Region (KNDR) | |
| Orig Pub. | : Khvakhak ka khvakhak konop, 1957, No 3, 157-162 | |
| Abstract | : No abstract. | |

Card: 1/1

AUTHORS: Em Tkhe Den, Peshuro, N. S.,
Gilyarovskaya, L. A. SOV. 156-58-1-38/46

TITLE: Use of Movable Checkers for Thermic Coal Processing (Primeneniye
podvizhnykh nasadok dlya termicheskoy pererabotki ugley)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya
tekhnologiya, 1958, Nr 1, pp. 157 - 160 (USSR)

ABSTRACT: In some production processes a moving laminated solid phase
is successfully used as a catalyst, heat carrier, or adsorbent.
As investigations of the authors have shown, this principle
may be extended to thermal processing of pulverized solid
fuels, too. In order to prove the technological possibilities
of this method, the authors decomposed two samples of solid
fuels showing different properties and heating behavior: a)
a boghead from Olenek, an easily meltable fuel, and b) brown
coal from Ao-Di (Korea) of low mechanical and thermal strength.
Table 1 gives the features of the two coal sorts, table 2
the semicoking products, while table 3 contains some data
on the composition of first gases from this partial carbonization.
Table 4 features the coal tars from both coal sorts. These

Card 1/3

Use of Movable Checkers for Thermic Coal Processing

SOV/156-58-1-38/46

coals were thermally processed on a movable, circulating checker under particular consideration of the variability of gas yield and gas composition with temperature. The pilot plant is shown in figure 1. As a checker cast iron balls of 4,8 mm diam. were used. The grain size of the coal processed was 0,5 to 1,0 mm. In table 5 the products obtained are given, while figures 2 and 3 show the content of combustible gas components, and the gas heating value, depending on the temperature. Besides thermal decomposition of coal from Ao-Di some thermochemical processes have also taken place, whereas processes of thermal decomposition prevailed in processing the boghead from Olenek. The following conclusions were drawn: 1) According to the principle described easily meltable fossil fuels can be processed. 2) Industrial gases can be generated from pulverized fuels under consideration of reagents containing oxygen, with this process. 3) The solid residue can be burned, the generated heat being used for preheating the circulating checker. There are 3 figures, 5 tables, and 3 references, 1 of which is Soviet.

Card 2/3

Use of Movable Checkers for Thermic Coal Processing

SOV/156 58-1-38/46

ASSOCIATION: Kafedra neftekhimicheskogo sinteza i iskusstvennogo zhidkogo topliva Moskovskogo instituta tonkoy khimicheskoy tekhnologii im.M.V.Lomonosova (Chair of Petrochemical Synthesis and Synthetic Liquid Fuels of the Institute of Fine-Chemical Engineering imeni M.V.Lomonosov, Moscow)

SUBMITTED: September 20, 1957

Card 3/3

GILYAROVSKAYA, L.A.

Alkylation of phenols by olefins in the presence of fluoroborane dihydrate. Izv. vys. ucheb. zav.; neft' i gaz 2 no.8:63-69 '59.
(MIRA 12:11)

1. Institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova.
(Alkylation) (Phenols)

S/020/63/148/006/014/023
B117/B186

AUTHORS: Bashkirov, A. N., Corresponding Member AS USSR,
Shaykhutdinov, Ye. M., Gilyarovskaya, L. A.

TITLE: Oxidation of monomethylsubstituted paraffins in liquid phase
in the presence of boric acid

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 6, 1963, 1309 - 1311

TEXT: The effect of the tertiary carbon atom on the conversion of mono-substituted paraffins during oxidation and on the composition of the alcohols formed is studied. For this purpose, 2-methyldodecane and 8-methylpentadecane were synthesized according to Grignard's method. These hydrocarbons were oxidized in an apparatus described previously (A. N. Bashkirov, Khim. nauka i prom., 1, 273 (1956)) under normal pressure at 165 - 170°C for 3 - 4 hrs, using a mixture of nitrogen and oxygen with 3.0 - 3.5% O₂ (consumption 800 l/kg·hr). The main conversion products were compounds containing hydroxyl with a yield of ~75 mole%. The alcohols formed were identified as a mixture of tertiary (~25 - 30 mole%) and secondary alcohols having the same carbon skeleton and the same number of C-atoms in the molecule as the original hydrocarbon. The secondary
Card 1/2

Oxidation of monomethylsubstituted...

S/020/63/148/006/014/023
B117/B186

alcohols proved to be a mixture of a variety of isomers. Hence it was assumed that, under the oxidation conditions described, the tertiary C-atoms are more reactive with respect to oxygen than the secondary C-atoms of the highest monosubstituted paraffin molecules. There are 3 tables.

ASSOCIATION: Institut neftekhimicheskogo sinteza Akademii nauk SSSR (Institute of Petrochemical Synthesis of the Academy of Sciences USSR); Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov)

SUBMITTED: July 26, 1962

Card 2/2

GILYAROVSKAYA, Ye. P.

~~GILYAROVSKAYA, Ye. P.~~

"Therapeutic gymnastics and massage in rickets and hypotrophy."
E. I.A. Ginsburg, R.G. Sorochek. Reviewed by E.P. Giliarovskaia.
Pediatria no. 6: 91-92 N-D '54. (MLRA 8:4)
(PHYSICAL THERAPY) (RICKETS) (GINZBURG, E. I.A.)

GILYAROVSKAYA, Ye.P.; TIKHOMIROVA, A.V.; BILEYKINA, A.M.; RODIONOVA, O.S.

Using ozocerite in the compound treatment of dysentery in children.
Pediatria no.8:81-82 Ag '57. (MIRA 10:12)

1. Iz detskoy bol'nitsy imeni F.E.Dzerzhinskogo v Moskve.
(OZOCERITE) (DYSENTERY)

GILYAROVSKAYA, Ye.P.; GOLODENKO, G.S.; BUDAGOSSKAYA, G.A.

Treating highmoritis in children by the electrophoretic introduction of penicillin. *Pediatrics* 37 no.7:88 J1 '59.

(MIRA 12:10)

1. Iz detskogo otdeleniya polikliniki No.2 Moskovskogo gorodskogo otdela zdravookhraneniya.

(PENICILLIN) (ELECTROPHORESIS) (SINUSITIS)

BASHKIROV, A.N.; GILYAROVSKIY, L.A.; ALENT'YEVA, Ye.S.; KOZLENKOVA, R.V.;
KUROCHKINA, A.K.

Effect of aromatic hydrocarbons on the oxidation of paraffins in the
liquid phase in the presence of boric acid. Neftekhimiia 4 no.5:777-
779 S-0 '64. (MIRA 18:1)

1. Moskovskiy Institut tonkoy khimicheskoy tekhnologii imeni M.V.
Lomonosova i Institut neftekhimicheskogo sinteza imeni A.V.Topchiyeva
AN SSSR.

GILYAROVSKIY, Vasilii Aleks.

DECEASED

Medicino

see ILC

GILYAROVSKIY, VLADIMIR ALEXSEYEVICH

527N/5

887

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Moskva I Moskovichi (Moscow and the Muscovites) Moskva, Koskovskiy Rebochiy, 1955.
478 P. Illus.

GILYAROVSKIY, V.A., zasl. deyatel' nauki, red.; FEDOTOV, D.D., red.;
SLYUSAREV, F.M., kand. med. nauk, red.; RIKHTER, G.E., kand.
med. nauk, red.; FEL'DMAN, E.A., kand. med. nauk, red.

[Transactions of the Scientific and Practical Conference of
Neuropathologists and Psychiatrists of the Baltic Republics]
Trudy Nauchno-prakticheskoi konferentsii nevropatologov i
psikhiatrov Pribaltiiskikh respublik. Riga, M-vo zdravookh-
raneniia Latviiskoi SSR, 1956. 466 p. (MIRA 17:5)

1. Nauchno-prakticheskaya konferentsiya nevropatologov i psi-
khiatrov Pribaltiyskikh respublik, 1954. 2. Deystvitel'nyy
chlen AMN SSSR (for Gilyarovskiy). 3. Direktor Instituta
psikhiatrii Ministerstva zdravookhraneniya SSSR (for Fedotov).

GILYAZETDINOV, L.P.
MAKAROV, G.N., kandidat tekhnicheskikh nauk; ZHITOV, B.N., inzhener;
SHASHKOVA, T.D., inzhener; SHTEYN, I.Ya., inzhener;
GILYAZETDINOV, L.P., inzhener.

Preliminary heat treatment of coals for coking. Koks i khim.
no.4:12-17 '57. (MLRA 10:5)

1. Moskovskiy khimiko-tehnologicheskii institut imeni
D.I. Mendeleeva.
• (Coal--Carbonization)
•

SOV/138-58-8-2/11

AUTHORS: Zuyev, V. P; Gilyazetdinov, L. P. and Yevreinova, M. O.

TITLE: The Chemical Composition of Crude Petroleum Products Used in the Manufacture of Carbon Black (O khimicheskoy sostave neftyanogo syr'ya dlya proizvodstva "sazhi)

PERIODICAL: Kauchuk i Rezina, 1958, Nr 8, pp 12 - 14 (USSR)

ABSTRACT: The kerosine-gas-oil fraction (obtained during pyrolysis and coking of petroleum) is used as raw material for the preparation of jet carbon black in the USSR. In the USA and England aromatised gas-oil fractions, obtained during the thermal and catalytic processing of petroleum, are used for the manufacture of the activated carbons HAF, ISAF and SAF. No detailed investigations have been published on the effect of the chemical composition of the raw material on the yield and properties of the carbon black. The nature of the gas-oil fraction of crude petroleum and its products is defined by the GrozNII method by which the percentage of aromatic, naphthenic, paraffinic and olefinic hydrocarbons is determined. The authors used the n-d-M method (Ref.3) for defining the composition of the pyrolysis and of the coke distillate. They determined by experiments the molecular weight M , the refractive index n_D^{20} and the specific weight d_4^{20} . The hydrocarbon content was de-

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SOV/138-56-82/11

The Chemical Composition of Crude Petroleum Products Used in the Manufacture of Carbon Black

defined by chromatographic analysis according to the TsIATIM method (Ref.6) and the degree of unsaturation of the samples was determined iodometrically. The physico-chemical characteristics of the samples of raw material are listed in Tables 1 and 2, and results of the chromatographic analysis in Table 3. The total content of pure paraffins and olefins in the pyrolysis fraction does not exceed 5%; therefore, this fraction consists of aromatic and naphthenic-aromatic hydrocarbons, two condensed rings and partially unsaturated side chains. The content of paraffinic-naphthenic hydrocarbon in the coke distillate fraction varies between 40 - 53%. Approximately 50% of this quantity represents pure paraffinic and olefinic hydrocarbons and it comprises 27% dicyclic aromatic hydrocarbons. The degree of aromatization increases in both

Card 2/3

The Chemical Composition of Crude Petroleum Products Used in the
Manufacture of Carbon Black

SOV/138-58-8-2/11

fractions when the temperature is raised (Table 5).
The degree of aromatization and cyclisation can be
increased in the coke distillate fraction by boosting
the content of high boiling-fractions. There are 5
Tables and 7 References: 3 Soviet and 4 English.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promy-
shlennosti (Research Institute of the Tyre Industry)

Card 3/3

30V/68-58-11-16/25

AUTHORS: Gilyazetdinev L.P., Evreinova M.D. and Prokhorova L.I.

TITLE: An Investigation of High Boiling Fractions of Coal Tar using the Method of Chromatographic Analysis (Issledovaniye vysokokipyashchikh fraktsiy kamennougol'noy smoly metodom khromatograficheskogo analiza)

PERIODICAL: Koks i Khimiya, 1958, Nr 11, pp 51-54 (USSR)

ABSTRACT: An attempt to apply the chromatographic method for determining the group chemical composition of crude unpurified fractions of coal tar is described. The method adopted was as follows: 18g samples were passed through two columns in series filled with silicagel; for desorption the following solvents (200ml each) were used in succession: n-hexane, n-hexane + benzole; benzole, ethyl ether, alcohol-benzene, ethyl alcohol and acetone. Primary identification of desorbed hydrocarbons and organic compounds was based on the colour of the solutions and chromatographic curves (Fig 1). This was later confirmed by coefficients of refraction, melting temperatures, molecular weights (cryoscopy in benzene) and iodine numbers of products freed from solvents. Physico-chemical characteristics of the

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SOV/68-58-11-16/25

An Investigation of High Boiling Fractions of Coal Tar using the Method of Chromatographic Analysis

identified groups of compounds for the investigated coal tar fractions are given in Table 1, physico-chemical characteristics of the coal tar fractions investigated in Table 2, and the results of their chromatographic analysis in Table 3. The following chemical groups were separated: 1) paraffinic, naphthenic and olefinic hydrocarbons, 2) monocyclic aromatic hydrocarbons, 3) naphthenic-aromatic hydrocarbons and phenylalkenes, 4) dicyclic aromatic hydrocarbons, 5) phenanthrene group, 6) anthracene group, 7) tricyclic hetero compounds, 8) pyridene bases and 9) phenols and other acid compounds. On the basis of the chromatographic analysis the number of aromatic rings and the content of carbon in aromatic structures for mean molecule of the samples investigated were calculated, whereupon the molecule weight was taken as the same for all groups and equal to the molecular

Card 2/3

SOV/68-58-11-16/25

An Investigation of High Boiling Fractions of Coal Tar using the Method of Chromatographic Analysis

weight of the starting sample. In this way some new characteristics were obtained for the individual coal tar fractions, namely the degree of cyclisation and aromatisation.

There are 3 tables, 1 figure and 9 references (7 Soviet, 2 English).

ASSOCIATION: NII Shinnoy Promyshlennosti (Scientific Research Institute of the Tire Industry)

Card 3/3

S/138/60/000/008/007/015
A051/A029

AUTHORS: Gilyazetdinov, L.P.; Zuyev, V.P.; Livshits, F.B.; Saulina, V.V.

TITLE: The Production of Low-Module Furnace Carbon Blacks From Liquid Shale Raw Material

PERIODICAL: Kauchuk i Rezina, 1960, No. 8, pp. 32 - 35

TEXT: The effect of the chemical composition of the raw material on the properties of the carbon black was studied on shale oil, shale softener and its mixtures with green oil. The experimental procedure for the production of furnace carbon black with an output capacity of 20kg/h was described in Refs. 1,2. The content of oxygen and oxygen-containing compounds in the liquid shale raw material is 10.9 and 77.8%, respectively, which is a significant difference from green oil. It was established that with an equal specific surface the carbon black produced from shale raw material has significantly lower oil numbers than carbon blacks from green oil. Rubbers containing carbon blacks derived from a shale softener and its mixtures with green oil are close to rubbers with gaseous channel carbon black in their physico-mechanical properties. The carbon blacks from shale raw material produce rubbers with low modulae and high relative elongations. Tests were carried out on semi-active and active carbon blacks and it was noted that the

Card 1/2

S/138/60/000/008/007/015
A051/A029

The Production of Lower-Module Furnace Carbon Blacks From Liquid Shale Raw Material

vulcanizates of the standard mixtures based on CK6(SKB), CKC-30AM (SKS-30AM) containing shale carbon black had low modulus at high values of the tenacity limit and the specific elongation. With an increase of the shale softener in the initial raw material, the tensile strength changes within the limits of 220 - 257 kg/cm², whereas in modulus with 300% the elongation and specific elongations are equal to 130 - 56 kg/cm² and 470 - 667%, respectively. The low structuralization of the carbon blacks produced from shale raw material and the low modulus of the vulcanizates using these carbon blacks is explained by the specific effect of the oxygen organically bound with a raw material molecule on the formation process of the carbon black particles in a turbulent flame. The authors point out that this mechanism has not been completely investigated. They stress the fact that the shale oil and the shale softener can be applied as raw material to the production of special low-module carbon blacks or as a component part of raw material, which gives the carbon black a low structuralization with a wide variety of properties. There are 4 tables and 7 Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute of the Tire Industry)

Card 2/2

S/068/60/000/010/001/001
E071/E435

AUTHORS: Gluzman, L.D., Gilyazetdinov, L.P. and
Molchanov, B.A.

TITLE: On the Utilization of High Boiling Coal Tar Fractions
for the Production of Carbon-Black

PERIODICAL: Koks i khimiya, 1960, No.10, pp.51-54

TEXT: The problem of production of an active carbon black from raw materials derived from the coking by-products and the development of technological and GOST standards for coal tar raw materials for the production of carbon black were investigated. Typical samples of coal-tar oils (creosote absorption oil; a mixture of absorption and anthracene oil; anthracene fraction I; anthracene fraction II; pitch distillate) from the Kadiyevsk and Zaporozhsk Coking Works were taken for the investigation. Physico-chemical characteristics of these oils and, for comparison, of some petroleum oils are given in Table 1. Group-structural analysis of the petroleum and coal tar oils was calculated by the methods given in earlier works (Ref.3 and 4). The product of the total number of benzene rings in the molecule and the content of carbon in the aromatic structures, named "aromatization factor" ✓
Card 1/4

S/068/60/000/010/001/001
EO71/E435

On the Utilization of High Boiling Coal Tar Fractions for the
Production of Carbon-Black

(A=KoCa) was conditionally taken as the main physico-chemical characteristic of the raw materials. This index at $Ca \leq 85\%$ characterizes the influence of the chemical composition of the raw material on the yield and properties of carbon black. Testing of coal-tar oils for the production of anthracene carbon black was carried out on an experimental plant with a throughput of 10 kg/hr under the following conditions: consumption of coke-oven gas for the carburization of oils - $10 \text{ m}^3/\text{kg}$; the temperature of carburized mixture - 360 to 380°C ; the distance between burners and precipitating surface - 46 mm; overflow of tar from the carburettor - 6 to 9% on the starting raw material. The experimental samples of carbon-black did not differ substantially in their physico-chemical and physico-mechanical properties and corresponded to the requirements of GOST 7885-56. The yields of carbon-black from the individual oils are given in Table 2. Testing of the oils for the production of active furnace carbon-black was carried out on a pilot plant NIIShP, described in Ref.5.

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S/068/60/000/010/001/001
E071/E435

On the Utilization of High Boiling Coal Tar Fractions for the
Production of Carbon-Black

Technological conditions were kept the same for all types of raw materials; throughput was 20 kg/hr with an air consumption of 6.5 m³/kg, the temperature of the process varied from 1200 to 1300°C depending on the type of raw material. The experimental results are given in Table 3. It was found that coal tar oils in 79 to 92% consist of di- and tri-cyclic aromatic hydrocarbons. The most aromatized is pitch distillate. The yield of active anthracene carbon-black increases with increasing number of rings in the molecule and the content of aromatic carbon in the raw material. Anthracene fraction and pitch distillate present a high-quality raw material for the production of active anthracene carbon-black. The yield, specific surface and oil number of active furnace carbon black increase with increasing number of rings in the molecule and the content of carbon in aromatic structures of the raw material. In order to obtain moderately structured carbon-black (more suitable for rubber than highly structured black) absorption creosote oil, anthracene oil, anthracene fraction and mixtures of pitch distillate and

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S/068/60/000/010/001/001
E071/E435

On the Utilization of High Boiling Coal Tar Fractions for the
Production of Carbon-Black

anthracene fraction II with petroleum oils can be used.
There are 3 tables and 5 references: 3 Soviet, 1 English and
1 German.

ASSOCIATIONS: UKhIN, Gluzman, L.D.;
Nauchno-issledovatel'skiy institut shinnoy
promyshlennosti (Scientific Research Institute of the
Tyre Industry) Gilyazetdinov, L.P.;
Kadiyevskiy sazhevyy zavod (Kadiyevka Carbon Black
Works) Molchanov, B.A.

Card 4/4

S/138/61/000/002/006/008
A051/A129

AUTHORS: Zuyev, V.P.; Gilyazetdinov, L.P.; Tesner, P.A.

TITLE: The effect of the structural group composition of hydrocarbon oils on the yield and properties of carbon black

PERIODICAL: Kauchuk i rezina, no. 2, 1961, 29 - 32

TEXT: The authors have investigated the possibility of using a new complex index for characterizing the raw material: the factor of aromatization A, which is the product of the total number of rings in the molecule and the carbon content in aromatic structures: $A = K_0 \cdot C_A$ (1), where K_0 is the total number of rings in the molecule (aromatic + naphthene), C_A is the carbon content in the aromatic structures, %. The aromatization factor is additive with respect to the molecular parts of the mixture components. The disadvantage of this index is that it cannot be applied to low-aromatized oils, which, however, are hardly used in the production of carbon black. The authors show that this aromatization factor A characterizes the effect of the composition of oil and coal raw materials on the yield and the properties of the carbon black in the same way. With an increase in the aromatization factor, the yield, specific surface and oil number of

Card 1/4
3

S/138/61/000/002/006/008
A051/A029

The effect of the structural....

the carbon black increase at the same time. Various forms of petroleum and coal oils and their mixtures were burned experimentally, using equipment with a productivity of 20 kg/h based on the raw material. The relationship of the specific surface of the carbon black S determined by the kinetic method to the aromatization factor is expressed by the equation: $S = 30 + 8.13 \cdot 10^{-4} \cdot A^{2.14} \text{ m}^2/\text{g}$ (2). The intensity coefficient of the process of carbon black formation I calculated on the basis of data on the yield and dispersion of the carbon black. This coefficient is the number of carbon black particles formed from one gram of carbon raw material: $I = 3.1 \cdot p \cdot 10^8 \cdot S^3 \text{ g}^{-1}$ (3), where p is the carbon black yield, % . The logarithm of the intensity coefficient has a linear relationship to the logarithm of the aromatization factor of the raw material (Fig. 3). This relationship is expressed by the equation: $I = 8.5 \cdot 10^8 \cdot A^{3.48} \text{ g}^{-1}$ (4). The results showed that the number of carbon black particles formed depends to a great extent on the aromatization factor. The authors point out that an aromatization factor of no less than 140 must be used in the production of jet and lamp oil carbon black with a yield of 56 and 63%, respectively. They also point out that compounds containing sulfur, nitrogen and oxygen increase the specific gravity of the raw material, but their action is not equivalent to the increase in the degree of aromatization of the raw material. There are 4 figures, 1 table and 15

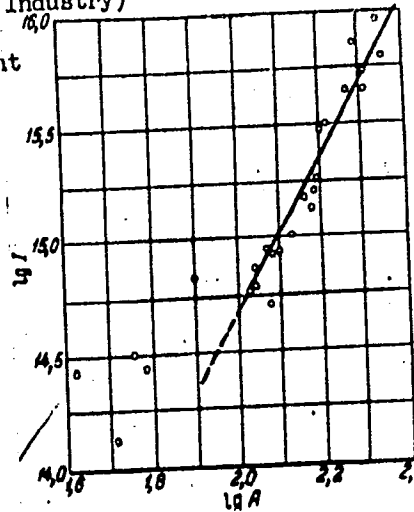
Card 2/3

S/138/61/000/002/006/008
A051/A129

The effect of the structural....

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute of the Tire Industry)

Figure 3: Relationship of the intensity coefficient of the carbon black formation process to the aromatization factor of raw material.



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3

S/138/62/000/001/002/009
A051/A126

AUTHORS: Gilyazetdinov, L.P.; Zuyev, V.P.; Bernshteyn, I.D.; Suyetenko,
L.P.

TITLE: The production of active furnace carbon blacks from mixtures of pe-
troleum and coal oils

PERIODICAL: Kauchuk i rezina, no. 1, 1962, 5 - 6

TEXT: Tests were carried out to determine the optimum composition of pe-
troleum and coal oil mixtures and the production of active furnace carbon blacks.
The experiments were made in a single-chamber cylindrical reactor with an inter-
nal diameter of 500 mm and 3.5 m in length. The reactor capacity was 25 kg/h.
The experimental carbon blacks were analyzed according to physico-chemical meth-
ods and tested in vulcanizates based on CKC-30 AM (SKS-30 AM) (standard composi-
tion). Experimental results showed that the active furnace carbon black output,
the total air consumption and the process temperature corresponded to the aroma-
tization factor. The obtained relation points to the expediency of a wide in-
troduction of the aromatization factor for characterizing the raw material and
for correcting the production methods of the active furnace carbon blacks. Pe-

Card 1/2

The production of active furnace carbon blacks

S/138/62/000/001/002/009
A051/A126

troleum and coal oil mixtures are recommended. There is 1 table and 1 figure.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute of the Tire Industry)

Card 2/2

S/081/62/000/014/023/039
B166/B144

AUTHORS: Molchanov, B. A., Gluzman, L. D., Gilyazetdinov, L. P.,
Chaykun, M. I.

TITLE: Pitch distillate, a new form of raw material for the
production of carbon black

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 14, 1962, 532, abstract
14M204 (Vestn. tekhn. i ekon. inform. N.-i in-t tekhn.-ekon.
issled. Gos. kom-ta Sov. Min. SSSR po khimii, no. 12, 1961,
23 - 24)

TEXT: Industrial test results for a trial batch of pitch distillate (PD) are given, this being got by oxidizing and cooking coal-tar pitch to form a highly aromatized product used in the manufacture of carbon black. The industrial process for producing the carbon black is practically the same as when producing spray burner black from anthracene fraction. It is established that both these forms of carbon black have the same physico-chemical properties but the yield of the carbon black from PD is 2.3% higher. The experimental carbon black fulfils the requirements of

Card 1/2

BLAGOVISNYY, V.I.; GILYAZETDINOV, L.P.; DOLBILIN, Ye.H.; KORABEL'NIKOVA G.P.;
YAGOVKIN, A.G.

Using liquid stock in the production of furnace black. Gaz. prom.
7 no.11:43-46 N '62. (MIRA 17:9)

L 13665-63

ENT(j)/ENT(m)/BDS AFFTC/ASD Pc-4 RM

ACCESSION NR: AP3001431

S/0138/63/000/004/0025/0027

60
89

AUTHOR: Bass, Yu. P.; Gilyazetdinov, L. P.; Zuev, V. P.; Saulina, V. V.

TITLE: The manufacture of low-structured active furnace carbon black

SOURCE: Kauchuk i rezina, no. 4, 1963, 25-27

TOPIC TAGS: carbon black, carbon black furnace, cyclon reactor, reinforcing filler

ABSTRACT: The low yield of carbon black obtained by the channel process induced the authors to attempt the production of a highly dispersed, low-structured active carbon black from high-aromatic crude oil material, which would possess outstanding properties as a reinforcing filler in rubber goods. To this end it was necessary to construct a special furnace which would permit a more thorough mixing of the gases as well as complete combustion of the selected crude oil with an aromatization factor A of 140. The pilot reactor consisted of a wide, short, properly insulated combustion chamber

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ACCESSION NR: AP3001431

into which the oil-air mixture and 0.2-0.5% water were injected by nozzle. The subsequent combustion and thermic decomposition took place in a long, narrow reaction chamber. The oil was preheated to 100-180C, the temperature within the furnace was within the 1200-1300C range, and the pressure amounted to 0.15-0.20 atm. The resulting carbon black-gas mixture was cooled to 400C by water spray. The yield of carbon black amounted to 24.2-45.4%, with a specific surface of 70-140 Sq m/gm. Tests of rubbers containing the new carbon black as reinforcing filler showed it to be equal in tensile strength and superior in abrasion to that with channel carbon black. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promy*shlenosti (Scientific Research Institute of the Tire Industry)

SUBMITTED: 00

DATE ACQ: 30May63

ENCL: 00

SUB CODE: 00

NO REF SOV: 004

OTHER: 005

Card 2/2

ABAYEVA, B.T.; AGAFONOV, A.V.; GILYAZETDINOV, L.P.; GYUL'MISARYAN, T.G.;
ZUYEV, V.P.; MOROZOV, V.I.

Testing thermocatalytic gas oil in the production of furnace black.
Nefteper. i neftekhim. no.12:17-19 '63. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke
nefti i Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

BEKISHCHEN, I.G.; BIL'KIN, V.M.; BIL'KIN, V.M.

Effect of the roasting characteristics of the raw materials on
the properties of furnace black. Khim. i tekhn. 22 no.133
35-36 B '69. (MIRA 17:9)

1. Nauchno-issledovatel'skiy institut khimii promyshlennosti.

GILYAZETDINOV, L. P.

2

S/065/63/000/001/004/005
E075/E436

AUTHORS: Morozov, V.I., Agafonov, A.V., Abayeva, B.T.,
Ryabov, V.A., Karpenko, L.P., Gilyazetdinov, L.P.

TITLE: The preparation of feedstock carbon black in thermal
cracking units

PERIODICAL: Khimiya i tekhnologiya topliv i masel' no.1, 1963,
39-42

TEXT: A threefold increase in the production of carbon black is
scheduled in the current 7-year plan. New feedstocks suitable for
conversion into carbon black are therefore required to supplement
green and anthracene oils used at present. Catalytic gas oils and
lubricating oil extracts (phenol extracts) were subjected to thermal
cracking to produce oils suitable for the production of carbon
black. The cracked oils (43.5, 36.0 and 54.4% yields of the
feedstock for light gas oil, heavy gas oil and phenol extract
respectively) contained from 70 to 80% of aromatic hydrocarbons,
of which at least 50% were heavy aromatics. The cost of these
oils was about half that of green oil and a quarter of anthracene
oil. The yields of carbon black from the oils ranged from 47 to
Card 1/2

The preparation of feedstock ...

S/065/63/000/001/004/005
E075/E436

56.7%, which compares well with the yields from green oils. The carbon blacks satisfy the ГОСТ 7885-56 (GOST 7885-56) specification. There are 1 figure and 4 tables.

ASSOCIATION: Omskiy Neftepereperabatyvayushchiy zavod VNII NP
(Omsk Refinery VNII NP)

Card 2/2

BASS, Yu.P.; GILYAZETDINOV, L.P.; ZUYEV, V.P.

Investigating the formation of carbon black in the pulverization
of hydrocarbon stock in the turbulent flow of combustion products.
Gaz. prom. 8 no.8:35-40 '63. (MIRA 17:11)

ABAYEVA, B.T.; OKINSHEVICH, N.A.; AGAFONOV, A.V.; SIDLYARENOK, F.S.;
KAZANSKIY, V.L.; GYUL'MISAR'HAN, T.G.; SUYETENKO, L.P.;
GILYAZETDINOV, L.P.

Using extracts as stock for the production of active and semi-active carbon black. Neftteper. i neftekhim. no.5:30-33 '64.

(MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva, Kuybyshevskiy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti i Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

BASS, Yu.P.; GILYAZETDINOV, L.P.

Calculating the length of a soot generator. Inzh.-fiz. zhur. 7 no.8:
114-120 Ag '64. (MIRA 17:10)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti, Moskva.

ZUYEV, V.P.; GILYAZETDINOV, I.P.; GYUL'MISARYAN, T.G.; BERNSHTEYN, I.D.;
SAULINA, V.V.; MAGARIL, R.Z.; SEREBRYAKOV, K.F.; BORSHCHEV, B.S.

Extracts of catalytic gas oils as raw stock for the production
of furnace black. Khim. i tekh. topl. i masel 9 no.12:6-11 D '64.
(MIRA 18:2)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti,
Omskiy naucho-issledovatel'skiy konstruktorskogo-tehnologicheskiy
institut shinnoy promyshlennosti, Omskiy sazhevyy zavod i
Kudinovskiy sazhevyy zavod.

GYUL'MISARYAN, T.G.; FEL'DMAN, V.M.; GILYAZETDINOV, L.P.

Effect of coking properties of raw materials on the properties
of furnace black. Nefteper. i neftekhim. no.5:29-32 '65.

(MIRA 18:7)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

L09905-66 EWT(m)/EPF(c)/EWP(j) RM

ACCESSION NR: AP5016635

UR/0138/65/000/006/0019/0024
678.046.2.002.2.001.4 23

AUTHORS: Zuyev, V. P.; Gilyazetdinov, L. P.; Gyl'misaryan, T. G.; Safronov, N. Ya.; Vernshteyn, I. D.; Glagolev, V. I.; Tsygankova, E. I.; Sokolova, V. V.; Bystrov, K. M.; Khokhlov, B. P.

TITLE: Some peculiarities of the production of carbon black PM 70 in cyclone-type reactors by using thermocatalytic gas oil

SOURCE: Kauchuk i rezina, no. 6, 1965, 19-24

TOPIC TAGS: gas oil fraction, carbon black, catalytic cracking / PM 70 carbon black

ABSTRACT: The production of active carbon black PM-70 from a 1:1 mixture of thermocatalytic gas oil and green oil was investigated to correct certain technological parameters and to determine the behavior of carbon black during its recovery and processing. The tabulated physico-chemical properties of green oil, and their mixture show that the thermocatalytic gas oil is distinguished by a high polycyclic aromatic hydrocarbon content. The analysis of several gas oil fractions showed that its kinematic viscosity at 50C varies over a range of

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ACCESSION NR: AP5016635

9.5-11.8 x 10⁻² m²/sec. The viscosity of the 1:1 mixture varies from 3.6 to 3.9 x 10⁻² m²/sec. The kinematic viscosity plotted against heating temperature shows that the green oil and gas oil have the same viscosity only at a temperature of 280-300C. The viscosity value of 1.05 x 10⁻² m²/sec is reached for green oil only at 100C, and for gas oil and green oil mixture at 140C. Pure gas oil has this viscosity at 185C. The high viscosity, high boiling point, and the wide fractional composition of the gas oil make it necessary to preheat it by 80-100C higher than the green oil at minimum 160C before its introduction into the reactors. The average diameter of the droplet of raw material is plotted against the vaporizing air flow rate and the temperature before the atomizer. With an increase in the air flow rate from 0.45 to 1.0 m³/kg, the diameter of the droplet decreased 2.0-2.2 times. During the experiments the gas oil content in the mixture, the heating temperature, and the specific flow rate of vaporizing air were varied. The other technological parameters were almost constant (total specific air flow rate of 4.8-5.1 m³/kg, gas flow rate of 0.25-0.28 m³/kg of raw material, reactor temperature of 1395-1400C). Tabulated data show that by increasing the air flow rate and temperature the specific surface and the oil content of carbon black were increased, while the optical density of the benzene extract of carbon black decreased. The technological data and properties of carbon black PM-70

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are tabulated and discussed. It was established that the carbon black yield is almost the same as that obtained from pure green oil. The thermophysical properties of the gaseous reaction products of carbon black formation are compared. Vulcanizates obtained with FM-70 carbon black have a higher tear strength due to the larger specific surface and oil content. Experimental data show that a carbon black plant equipped with cyclone-type reactors and a dry system of carbon black recovery can be altered to use a mixture of gas oil and green oil. An increase in the vaporizing air flow rate leads to an increased dispersal and oil content of FM-70 carbon black and to the decrease in coking of reactors. It is recommended to increase the air flow rate to 1.0 m³/kg oil. The addition of gas oil to green oil results in the stabilization of the granulation operation on the ASA 1 drums. Orig. art. has: 4 figures and 3 tables. 1 2

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute for the Tire Industry); Novo-Yaroslavskiy sazhevyi zavod (Novo-Yaroslavl Carbon Black Plant)

SUBMITTED: 00

ENCL: 00

SUB CODE: FP, GC

NO REF SOV: 005

OTHER: 001

Card 3/3 *SP*

L 12807-66 EWT(m)/EWP(j)/EWP(t)/EWP(b) IJP(c) JD/RM

ACC NR: AP5028680

SOURCE CODE: UR/0318/65/000/011/0025/0028

AUTHOR: Gyul'misaryan, T. G.; Gilyazetdinov, L. P.; Aksenova, E. I.; Shmeleva,
R. I.; Khokhlov, B. P.; Bystrov, K. M.; Sokolova, V. V.; Sinyakina, A. V.; Abayeva,
B. T.; Okinshevich, N. A. 39
B

ORG: NIISHP; VNIINP: Novo-Yaroslavl Carbon Black Plant (Novo-Yaroslavskiy sazhevyy
zavod); Volgograd Carbon Black Plant (Volgogradskiy sazhevyy zavod); Scientific
Research Technological Design Institute (Nauchno-issledovatel'skiy konstruktorno-
tekhnologicheskii institut)

TITLE: Industrial tests of new types of petroleum stock in the production of
activated PM-70 furnace black

SOURCE: Neftepererabotka i neftekimiya, no. 11, 1965, 25-28

TOPIC TAGS: activated carbon, petroleum product, gas oil fraction, phenol

ABSTRACT: In order to confirm and develop the results of earlier studies which indicated that catalytic and thermal gas oil could be used in the production of activated furnace black, experimental batches of initial sulfur and hydrofined phenol extracts of catalytic and thermal gas oil were produced. The physicochemical characteristics of the new types of petroleum stock are compared with those of green oil; in the degree of aromatization they are identical, but in fractional composition, molecular weight, and viscosity, green oil is slightly lighter. Industrial tests confirmed that hydrofined phenol extracts of catalytic gas oil, the

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UDC: 66.095.21:547.21.001.5

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ACC NR: AP5028680

initial sulfur-containing phenol extract of catalytic gas oil, and also mixtures of thermal gas oil and green oil (in the ratio of 60:40) can be used in the production of activated FM-70 furnace black in plants equipped with cyclone reactors, a dry system being used for trapping the black. Orig. art. has: 2 figures and 3 tables.

SUB CODE: 07 / SUBM DATE: none / ORIG REF: 006

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jw
Card 2/2

L 13771-66 EWP(m)/EWP(j)/EWP(t)/ETI LJP(e) ID/RM
ACC NR: AP6015643 (A) SOURCE CODE: UR/0413/66/000/009/0054/0054

INVENTOR: Gyul' misaryan, T. G. ; Gilyazetdinov, L. P. ; Azhishchev, A. F. ;
Zavidov, V. I. 34
B

ORG: none

TITLE: Method of obtaining furnace carbon black. Class 22, No. 181215
[announced by Scientific Research Institute of the Tire Industry (Nauchno-issledovatel' skiy institut shinnoy promyshlennosti)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966,
54

TOPIC TAGS: hydrocarbon, carbon black, furnace ~~carbon black~~

ABSTRACT: An Author Certificate has been issued for a method of obtaining a furnace carbon black by decomposing liquid hydrocarbon raw material at 1100-1600C using haloid-containing components. To improve the properties of carbon black, the haloid-containing components are added to the raw materials prior to decomposition. Oil distillates are suggested as the hydrocarbon raw material for decomposition. [Translation] [NT]

SUB CODE: 11/ SUBM DATE: 07Dec63/

UDC: 678.046.2

Card 1/1 AM 07/

GILYAZETDINOV, M.M., inzh.; CHERBYKH, N.P., inzh.

Efficiency of sorting during coal preparation in the STS three-product separator, designed by the Kuznetsk Coal Preparation Research Institute. Nauch.trudy KuzNIIUgleobg. no.249-25 '64. (MIRA 17:10)

Results of industrial testing of the STS-1 three-product separator designed by the Kuznetsk Coal Preparation Research Institute. Ibid.: 25-35

MASAGUTOV, R.M.; SHESTAKOVA, N.M.; MIKHAYLOVA, M.G.; GILYAZEV, N.G.;
ZAITOVA, A.Ya.; VOLKOVA, L.I.

Effect of temperature during calcination on the mechanical
strength of catalysts. Khim. i tekhn. topl. i masel 4 no.1:
69-71 Ja '59. (MIRA 12:1)

1. Bashkirskiy nauchno-issledovatel'skiy institut neftyanoy
promyshlennosti.

(Catalysts)

MASAGUTOV, R.M.; DANILOVA, R.A.; ZAITOVA, A.Ya.; GILYAZEV, N.G.;
ZAGRYATSKAYA, L.M.; BUGAY, Ye.O.; PRYAKHINA, K.F.

High-temperature catalytic cracking of heavy fractions of
straight-run gasoline. Trudy BashNII NP no.6:14-18 '63.
(MIRA 17:5)

GILYAZETDINOV, M.M., inzh.; CHERNYKH, N.P., inzh.

Suspended matter from local weighting compounds and results of
operation of a new laboratory separator. Nauch. trudy KuzNIIUgleobog.
no.1:5-33 '62. (MIRA 16:8)
(Coal preparation--Equipment and supplies)
(Separators (Machines)--Testing)

MASAGUTOV, R.M.; SHESTAKOVA, N.M.; MIKHAYLOVA, M.G.; GILYAZEV, N.G.;
ZAITOVA, A.Ya.; VOLKOVA, L.I.

Effect of the firing temperature of a catalyst during preparation
on its mechanical strength. Trudy Bash NII NP no.3:166-170. '60.

(MIRA 14:4)

(Catalysis) (Cracking process)

DEMICHEV, A.I.; GILYAZITDINOV, K.M.; ALEKSEYEV, V.A.; ROMANCHUK, V.A.

New special-purpose machine tools manufactured at the Sterlitamak
Machine-Tool Plant. Mashinostroitel' no.4:16-17 Ap '63. (MIRA 16:5)
(Sterlitamak--Machine-tool industry)

CHESNGKOV, N.I.; GLUMOVA, Ye.A.; GILYAZOV, G.G.

New system for KhL-2M chromatograph operation. Mash. 1 neft.
obor. no.8:30-31 '63. (MIRA 17:6)

1. Tatarskiy neftyanoy nauchno-issledovatel'skiy institut.

KOGAN, A.A.; MANULKIN, A.Ye.; GIIYAZUTDINOVA, Z.Sh.

Prevention of ophthalmia neonatorum with penicillin. Akush. gin.
no.2:18-21 Mar-Apr 1953. (CJML 24:3)

1. Professor for Kogan; Docent for Manulkin. 2. Of the Obstetric-
Gynecological Clinic (Head -- Prof. A. A. Kogan), Tashkent Medical
Institute.

GILYAZUTDINOVA, Z.Sh., dotsent

Intra-arterial blood transfusion in obstetrical practice. Kaz.
med.zhur. 41 no.1:82-85 Ja-F '60. (MIRA 13:6)

1. Iz 2-y kafedry akusherstva i ginekologii (zav. - prof. I.V.
Danilov) Kazanskogo gosudarstvennogo instituta dlya usovershenst-
vovaniya vrachey im. V.I. Lenina.
(BLOOD--TRANSFUSION) (OBSTETRICS)

GILYAZUTDINOVA, Z.Sh., dotsent (Kazan')

Letter to the editor. Kaz.med.zhur. 41 no.1:127-128 Ja-F '60.
(MIRA 13:6)
(BIRTH CONTROL)

GILYAZUTDINOVA, Z.Sh., dotsent; PERFIL'YEVA, G.V., ordinator

Exercise therapy in gynecological and obstetrical practice. Kaz.
med. zhur. no.6:51-52 N-D '60. (MIRA 13:12)

1. Kafedra akusherstva i ginekologii (zav. - prof. I.V. Danilov)
i kafedra fizioterapii i lechebnoy fizkul'tury (zav. - V.Ye.Dobruskin)
Kazanskogo gosudarstvennogo institut dlya usovershenstvovaniya vrachey
imeni V.I.Lenina.

(EXERCISE THERAPY)

(WOMEN—DISEASES)

GILYAZUTDINOVA, Z.Sh., dotsent

Induction of an experimental fibromyoma. Kaz. med. zhur. 4:
33-35 JI-Ag'63 (MIRA 17:2)

1. 2-ya kafedra akusherstva i ginekologii (zav. prof. I.V.
Danilov) Kazanskogo gosudarstvennogo instituta dlya usover-
shenstvovaniya vrachey imeni Lenina.

GILYAZUTDINOVA, Z.Sh., dotsent; VINNIKOV, P.L.; SUBAYDULLINA, M.V.

Tuberculosis of female genitalia. Kaz.med. zhur. no.2:
22-25 Mr-Apr'63 (MIRA 16:11)

1. 2-ya kafedra akusherstva i ginekologii (zav.-prof. I.V. Danilov), kafedra tuberkuleza (zav. - dotsent P.L.Vinnikov) Kazanskogo gosudarstvennogo inatituta dlya usovershenstvovaniya vrachey imeni Lenina i 7-ya zhenskaya konsul'tatsiya (glavnyy vrach polikliniki - V.D.Potukin), Kazan'.

*

GILYAZUTDINOVA, Z.Sh.; PERFIL'YEVA, G.V.

Therapeutic gymnastics in gynecological practice. Vop.
kur., fizioter. i lech. fiz. kul't. 28 no.5:447-454 S-0 '63.
(MIRA 17:9)

1. Iz kafedry akusherstva i ginekologii (zav.- prof. I.V.
Danilov) i kafedry fizioterapii i lechebnoy fizicheskoy kul'-
tury Kazanskogo instituta usovershenstvovaniya vrachey.

GILYAZUTDINOVA, Z.Sh., PERFIL'YEVA, G.V.

Exercise therapy in the puerperium. Vop. kur., fizioter.
i lech. fiz. kul't. 28 no.4:350-353 JI-Ag '64.

(MIRA 17:9)

1. Iz kafedry akusherstva i ginekologii (zav.- prof. I.V.
Danilov) i iz kafedry fizioterapii i lechebnoy fizicheskoy
kul'tury Kazanskogo meditsinskogo instituta.