

Synthesis and properties of...

S/062/62/000/012/006/007
B117/B101

SI MITTED: July 19, 1962

Card 3/3

S/079/62/032/005/005/009
D204/D307

AUTHORS: Andrianov, K.A., Astakhin, V.V., and Sukhanova, I.V.

TITLE: The reaction of alkyl (aryl) diacetoxysilanes with
alkyl orthotitanates

PERIODICAL: Zhurnal obshchey khimii, v. 32, no. 5, 1962, 1637-1638

TEXT: The interactions of $(EtO)_4Ti$ with $Me_2Si(OCOCH_3)_3$ and with
 $Me \begin{smallmatrix} > \\ Ph \end{smallmatrix} Si(OCOCH_3)_2$ and of $(BuO)_4Ti$ with $Me \begin{smallmatrix} > \\ Ph \end{smallmatrix} Si(OCOCH_3)_2$ were studied,
taking the reagents in molar proportions. The products consisted of
alkyl acetates, alkyl (aryl) dialkoxysilanes (I) and polymers solu-
ble in alcohol, benzene and toluene. The formation of I is ascribed
to the reaction $\Rightarrow TiOR + \Rightarrow SiOCOCH_3 \rightarrow \Rightarrow TiOCOCH_3 + \Rightarrow SiOR$,

where R = Et or Bu.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy i vsesoyuz-
nyy elektrotekhnicheskii institut imeni Lenina (Insti-
tute of Elemental Organic Compounds and All-Union Elec-

Card 1/2

The reaction of alkyl (aryl) ...

S/079/62/032/005/005/009
D204/D307

trotechnical Institute, imeni Lenin)

SUBMITTED: April 27, 1961

Card 2/2

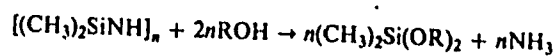
S/079/62/032/007/007/007
1032/1232

AUTHORS: Andriyanov, K. A. and Astakhin, V. V.

TITLE: The reaction of poly-alkyl-amino-silanes with alcohols

PERIODICAL: Zhurnal obshchei khimii, v. 32, no. 7, 1962, 2316-2318

TEXT: The reactions of hexa-methyl-cyclo-triamino-silane and acta-methyl-cyclo-tetra-amino-silane with ethyl-, propyl-, butyl- and iso-butyl-alcohols result in complete destruction of the rings and in formation of ammonia and dimethyl-di-alkoxy-silanes, according to the scheme:



The English-language reference reads: L. Sommer, J. Am. Chem. Soc. 71., 3254 (1949)

ASSOCIATION: Institut elementoorganicheskikh soyedinenii Akademii nauk SSSR (Institute for Metal-Organic Compounds, AS USSR)

SUBMITTED: July 10, 1961

Card 1/1

ANDRIANOV, K.A.; ASTAKHIN, V.V.; KOCHKIN, D.A.

Reaction of hexaalkydisilazanes with aluminum and boron halides.

Izv. AN SSSR.Otd.khim.nauk no.10:1852-1853 0 '62

(MIRA 15:10)

1. Institut elementoorganicheskikh soedineniy i Elektrotekhnicheskii
institut im. V.I.Lenina.

(Silazanes)

(Aluminum halides)

(Boron halides)

ANDRIANOV, K. A.; ASTAKHIN, V. V.; PYZHOV, V. K.

Synthesis and properties of α, ω -dihydroxydimethylsiloxanes.
Izv. AN SSSR Otd. khim. nauk no.12:2243-2245 D. '62.
(MIRA 16:1)

1. Elektrotekhnicheskii institut im. V. I. Lenina, Institut
elementoorganicheskikh soyedineniy AN SSSR i Institut khimii
Soveta narodnogo khozyaystva narodnogo khozyaystva Armyanskoy SSR.

(Siloxanes)

ACCESSION NR: AP3000134

S/0062/63/000/005/0950/0951

AUTHOR: Andrianov, K. A.; Astakhin, V. V.; Losev, V. E.

TITLE: The reaction of organocyclosilazanes with phenols

SOURCE: AN SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 5, 1963, 950-951

TOPIC TAGS: organocyclosilazanes, phenols hexamethylcyclotrisilazane, cresols, dialkyl diaryloxysilanes, transesterification of dimethyldiethoxysilane

ABSTRACT: The reaction of hexamethylcyclotrisilazane with phenol and the three isomeric cresols led to ring opening, evolution of ammonia, and formation of the corresponding dialkyl diaryloxysilanes in yields of 63-75%. These exceed the yields of the same compounds obtained in the transesterification of dimethyldiethoxysilane with phenols in the presence of metallic sodium. Orig. art. has: 1 equation and 1 table.

ASSOCIATION: Institut elementoorganicheskikh soedineniy Akademii nauk SSSR (Institute of Organoelemental Compounds, Academy of Sciences SSSR) Vsesoyuznyy elektrotekhnicheskii institut im. V. I. Lenina (All-Union Electrical Engineering Institute)

Card 1/2

ANDRIANOV, K.A.; ASTAKHIN, V.V.; LOSEV, V.B.

Reaction of organocyclosilazanes with phenols. Izv. AN SSSR
Otd.khim.nauk no.5:950-951 My '63. (MIRA 16:8)

1. Institut elementoorganicheskikh soedineniy AN SSSR i
Vsesoyuznyy elektrotekhnicheskii institut im. V.I.Lenina.
(Silazanes) (Phenols)

ANDRIANOV, K.A.; ASTAKHIN, V.V.

Reaction of organocyclosilazanes with saturated monobasic
acids. Izv. AN SSSR. Ser. khim. no.12:2206 D '63.

(MIRA 17:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i
Vsesoyuznyy elektrotekhnicheskyy institut im. V.I. Lenina.

LOSEV, V.B.; ASTAKHIN, V.V.

Reaction of hexamethylcyclotrisilazane with diatomic phenols.

Plast.massy no.4:26-27 '64.

(MIRA 17:4)

ANDRIANOV, K.A.; ASTAKHIN, V.V.; NIKIFOROV, B.P.

Interaction of hexaalkyldisilazanes with carboxylic acids and
diatomic phenols. Zhur. ob. khim. 34 no. 3:914-916 Mr '64.
(MIRA 17-6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i
Vsesoyuznyy elektrotekhnicheskii institut.

ACCESSION NR: AP4022963

S/0079/64/034/003/0914/0916

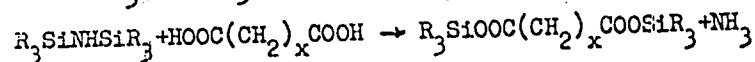
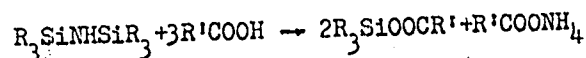
AUTHOR: Andrianov, V. A.; Astakhin, V. V.; Nikiforov, B. P.

TITLE: The reaction of hexaalkyldisilazanes with carboxylic acids and diatomic phenols

SOURCE: Zhurnal obshchey khimii, v. 34, no. 3, 1964, 914-916

TOPIC TAGS: Hexaalkyldisilazane, carboxylic acid, diatomic phenol, monobasic acid, silicon organic ester, bis trialkylsiloxy benzene

ABSTRACT: The reactions of separation of hexaalkyldisilazanes by saturated monobasic and dibasic acids, and by diatomic phenols are studied. Hexamethyldisilazane, acetic, propionic and adipic acids, hydroquinone and resorcin were studied as initial products. It was established that hexaalkyldisilazanes react with the acids according to the equations:

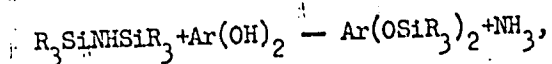


Card 1/3

R=CH₃, C₂H₅

ACCESSION NR: AP4022963

The reaction of hexaalkyldisilazanes with diatomic phenols proceeds according to the schematic:



where Ar is the bivalent aromatic radical. It was indicated that hexaalkyldisilazanes react with saturated monobasic acids with a formation of complex silicon organic esters and ammonium acid salts. The dibasic acids react with hexaalkyldisilazanes causing precipitation of ammonia and the formation of complex silicon organic esters. During separation of hexaalkyldisilazanes by bivalent phenols, ammonia is precipitated and bis (trialkylsiloxy) benzenes are formed. Orig. art. has: 1 table.

Card 2/3

ACCESSION NR: AP4022963

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR
(Institute of Organometallic Compounds, Academy of Sciences, SSSR); Vsesoyuznyy
elektrotekhnicheskii institut (All-Union Electrical Engineering Institute)

SUBMITTED: 07Feb63

DATE ACQ: 15Apr64

ENCL: 00

SUB CODE: CH

No. REF: SOV: 002

OTHER: 000

Card 3/3

ACCESSION NR: AP4028547

S/0191/64/000/004/0026/0027

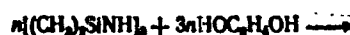
AUTHORS: Losev, V. B.; Astakhin, V. V.

TITLE: Interaction of hexamethylcyclotrisilazane with bivalent phenols

SOURCE: Plasticheskiye massy*, no. 4, 1964, 26-27

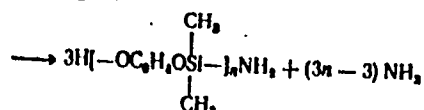
TOPIC TAGS: hexamethylcyclotrisilazane, reaction, rupture, cyclotrisilazane, Si N bond polymer, Si O O bond, polymer, siloxyphenylene polymer, viscosity, thermomechanical property, vitreous polymer, elastic state

ABSTRACT: The reaction of hexamethylcyclotrisilazane with resorcinol and with hydroxyquinone was investigated to determine the possibility of obtaining polymers containing Si-N or Si-O-O bonds. The reaction results in the rupture of the silazane ring and formation of siloxyphenylene-containing polymers and ammonia:



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ACCESSION NR: AP4028547



The products are viscous dark colored polymers; their relative viscosity is shown in fig. 1. The low yield (61,65%) is explained by the sublimation of the phenols from the reaction mixture even though they were used in a 3:1 molar ratio with respect to the cyclosilazane compound. The thermomechanical properties of the polymers were examined (fig. 2). The resorcinol polymer is vitreous to -400 and highly elastic at -30 to -250; the transition from vitreous to the highly elastic states of the hydroxyquinone products is in the -40 to -350 range. Orig. art. has: 2 figures and 1 equation.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 28Apr64

ENCL: 02

SUB CODE: GC

NR REF SOV: 002

OTHER: 000

Card 2/4

ACCESSION NR: AP4028547

ENCLOSURE: 01

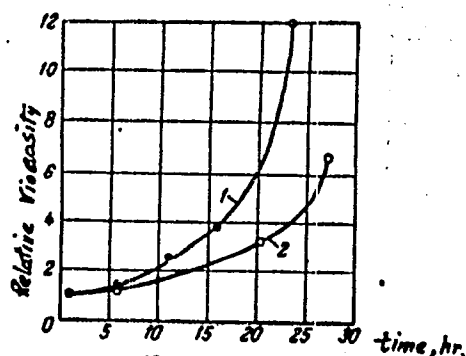


Figure 1

Change of relative viscosity in the process of obtaining polymers based on hexamethylocyclotrisilazane with resorcinol (1) and with hydroxyquinone (2).

3/4
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ACCESSION NR: AP4028547

ENCLOSURE: 02

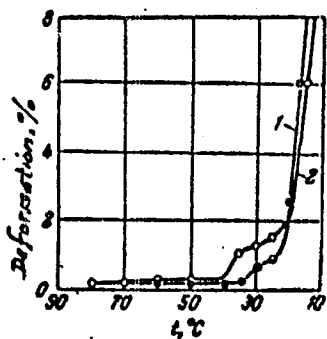


Figure 2

Thermomechanical properties of polymers based on hexamethylocyclo-trisilazane with resorcinol (1) and with hydroxyquinone (2)

Card 4/4

L 34102-66 EWT(m)/EWP(j)/T IJP(c) RM
ACC NR: AP6008710 SOURCE CODE: UR/0079/65/035/011/2020/2021

AUTHOR: Andrianov, K. A.; Astakhin, V. V.; Melikyan, M. O.; Mushegyan, N. G.;
Pyzhov, V. K.

ORG: none

32
B

TITLE: Synthesis of ethoxypolyorganosiloxanes

SOURCE: Zhurnal obshchey khimii, v. 35, no. 11, 1965, 2020-2021

TOPIC TAGS: organosilicon compound, silane, siloxane

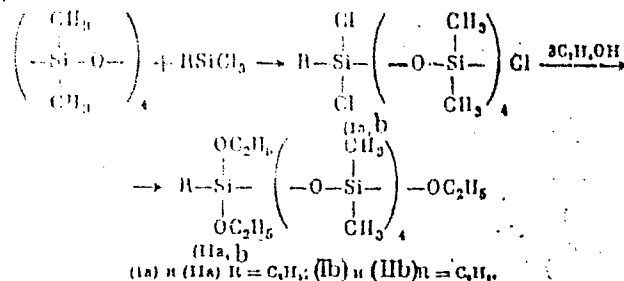
ABSTRACT: The telomerization¹ reaction of octamethylcyclotetrasiloxane¹ with phenyltri-chlorosilane and ethyltrichlorosilane was investigated. Since the telomerization reaction in the presence of catalysts is known to be complicated by side processes forming oligomer homologs instead of telomers, the experiments were carried out in glass ampoules, and in order to increase the conversion, the temperature was raised to 300C. The oligomers obtained were converted into ethoxy derivatives by the the action of alcohol in the presence of a hydrogen chloride acceptor. The reaction proceeds as follows:

Card 1/2

UDC: 547.1'128

L 34102-66

ACC NR: *APL 207710*



The new compounds 1-phenyl-1, 9-triethoxyoctamethylpentasiloxane and 1-ethyl-1, 1, 9-triethoxyoctamethylpentasiloxane were thus synthesized in yields of 45 and 41% respectively, and their physical properties were measured. Orig. ar^t. has: 1 table.

SUB CODE: 07 / SUBM DATE: 20Jul64 / ORIG REF: 001

Card 2/2

DECTYAREVA, O.F.; FEDYAYEVA, N.V.; OSTROVSKAYA, N.F.; ASTAKHINA, L.G.;
prinimali uchastiye: KRYUKOVA, P.A., PROSKURIYAKOVA, A.Ye.

Determination of impurities in copper oxide by the spectral
method. Zav.lab. 27 nq, 7:844-845 '61. (MIRA 14:7)
(Copper oxide--Spectra)

ASTAKHINA, L.G.

DEGTYAREVA, O.F.; FEDYAYEVA, N.V.; OSTROVSKAYA, M.F.: principal participants:
PROKHURYAKOVA, A.Ye.; KRYUKOVA, P.A.; ASTAKHINA, L.G.

Spectral analysis of iron oxide by the vaporization method.
Zev.lab. 27 no.7:842-844 '61. (MIRA 14:7)
(Iron oxide--Spectra)

NEGINA, V.R.; DEGTYAREVA, O.F.; FEDYAYEVA, N.V.; ASTAKHINA, L.G.;
KRASHENNIKOVA, Ye.P.

Determination of impurities in polymers by the spectral
method. Zav.lab. 28 no.4:444-445 '62. (MIRA 15:5)
(Polymers--Spectra)

ASTAKHINA, V.G.

ASTAKHINA, V.G.

A tumor of the kidney with ossification. Urologia no.3:68-69
J1-S '55. (MLRA 8:10)

1. Iz urologicheskoy kliniki (zav.prof. A. Ya. Abramyan)
Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo
instituta imeni M.F.Vladimirskogo.
(KIDNEYS, neoplasms,
ossified tumor, surg.)

ASTAKHINA, V.G.

Tumors of the renal pelvis. Vop. klin. pat. no.2:109-122'61
(MIRA 16:12)

1. Iz urologicheskoy kliniki (zav. - zasluzhennyy deyatel'
nauki prof. A.Ya. Abramyan) Moskovskogo oblastnogo nauchno-
issledovatel'skogo klinicheskogo instituta imeni Vladimir-
skogo.

PA .. 3149

AUTHOR
TITLE

ASTAKHIN, V.V., LOSEV, I.P. and ANDRIANOV, K.A. Corresponding Member of the Academy
On Reaction Between Organic Hydroxysilanes And isocyanates. The synthesis
of Organosilicic Urethanes.

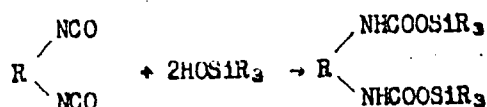
(O reaktsii organogidroksisilanov s izotsianatami. Sintez kremniyorgani-
cheskikh uretanov -Russian)

PERIODICAL

Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 3, pp 581-584 (U.S.S.R.)
Received 6/1957 Reviewed 7/1957

ABSTRACT

The following initial products were selected: triethylhydroxysilane, diethylpropylhydroxysilane, diethylbutylhydroxysilane, and metatoluyliendiisocyanate. In the course of investigations it was found that the interaction between the isocyanates and trialkylhydroxysilanes develops in analogy to the corresponding reaction with organic alcohols and can be represented in the following form:



According to this reaction scheme the following organosilicon urethanes were obtained and characterized: toluylene-2,4-bis-carboamintriethylsilan, toluylene-2,4-bis-carboamiddiethylpropylsilan, toluylene-2,4-bis-carboamindiethylbutylsilan. All organosilicon urethanes obtained were white crystalline substances, soluble in benzole, toluol, ether, and very sensitive to hydrolysis.

Card 1/2

On Reaction Between Organic Hydroxysilanes And Isocyanates. PA - 3149
The synthesis of Organosilicic Urethanes.

A table contains the properties of the new organosilicic compounds which have hitherto not been described in publications.

In the second part the experiments are described, namely the synthesis of diethylbutylchlorosilane, diethylbutylhydroxysilane, diethylpropylhydroxysilane, toluylene-2,4 -bis-carboamintriethylsilane, toluylene-2,4 -bis-carboamin-diethylbutysilane.

(With 1 table)

ASSOCIATION ALLUNION Institute for Electrotechnology "V.I.LENNIN"
PRESENTED BY
SUBMITTED 13.9.1957
AVAILABLE Library of Congress
Card 2/2

ASTAKHOV, A.; RACHKOVSKIY, S.; RUDINKIN, Yu.

Time consumed by underground mining operations and ways to
reduce it. Biul. nauch. inform.: trud i zar. plata 3 no. 11:10-
14 '60. (MIRA 14:1)

(Krivoy Rog Basin—Iron mines and mining)

AKRAMOV, Z.M., kand. geogr. nauk; RAKITNIKOV, A.N., kand.
geograf. nauk; ZAMKOV, O.K., kand. geograf. nauk;
SHERMUKHAMEDOV, A.M. [deceased]; SAUSHKIN, Yu.G., doktor
geograf. nauk, prof, otv. red.; DEGTYAR', V.I., red.;
KHISAMOV, A.V., kand. geograf. nauk, red.;
ASTAKHOV, A., red.; GOR'KOVAYA, Z.P., tekhn. red.

[Agricultural geography of Samarkand and Bukhara Provinces]
Geografiia sel'skogo khoziaistva Samarkandskoi i Bukharskoi
oblasti. [By] Z.M. Akramov i dr. Tashkent, Izd-vo Akad. nauk
UzSSR. Pt.2. 1961. 323 p. (Materialy Z'eravshanskoi ekspedi-
tsii SOPS AN UzSSR, no.1) (MIRA 16:4)

1. Akademiya nauk Uzbekskoy SSR. Tashkent. Otdel geografii.
2. Nachal'nik Otdela sel'skogo khozyaystva Gosplana Uzbek-
skoy SSR (for Degtyar').

(Bukhara Province--Agricultural geography)
(Samarkand Province--Agricultural geography)

PRYAKHIN, M.I., kand.biol. nauk, otv. red.; KANASH, O.A., red.;
ASTAKHOV, A., red.; GOR'KOVAYA, Z.P., tekhn. red.

[New industrial crops in Uzbekistan] Novye tekhnicheskie kul'tury v Uzbekistane. Tashkent, Izd-vo Akad. nauk Uzbekskoi SSR, 1962. 137 p.
(MIRA 15:7)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut botaniki.
(Uzbekistan--Botany, Economic)

ROZHDESTVENSKIY, Ye.D.; ZAPROMETOV, S.G., kand. tekhn. nauk, otv.
red.; ASTAKHOV, A., red.; GOR'KOVAYA, Z.P., tekhn. red.

[Forest soils of Uzbekistan as materials for earthen dams]
Lessovye grunty Uzbekistana kak material dlia zemlianykh
plotin. Tashkent, Izd-vo Akad. nauk UzSSR, 1962. 204 p.
(MIRA 16:4)

(Uzbekistan--Earthwork)

· TERENT'YEV, Georgiy Borisovich; DORMIDONTOV, N.K., prof. , doktor tekhn. nauk, red.; ASTAKHOV, A.A., retsenzent; YEROPKIN, B.I., retsenzent; KLIORINA, T.A., red.; FRUMKIN, P.S., tekhn. red.

[Seagoing wooden vessels] Morskie dereviannye suda. Pod red. N.K. Dormidontova. Leningrad, Gos. soizuznoe izd-vo sudostroit. promyshl., 1961. 244 p. (MIRA 14:6)
(Ships, Wooden) (Hulls (Naval architecture))

ASTAKHCV, A. G.

ASTAKHCV, A. G.: "Investigation of the basic metallurgical properties of agglomerate fluxed with chalk." Acad Sci USSR. Inst of Metallurgy imeni academician A. A. Baykov. Moscow, 1956.
(Dissertation for the Degree of Candidate of Technical Sciences)

So: Knizhnaya Letopis', No. 18, 1956

RYABCHIY, M.Ye., inzhener; ASTAKHOV, A.G.; FEDOROVSKIY, N.V.; BURDYUKOV, D.P.

Steps to improve the quality of sinter. Metallurg no.9:7-9 S '56.
(MLRA 9:10)

1.Aglomeratsionnaya fabrika zaveda "Krivorozhstal'."
(Krivoy Rog--Sintering)

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102420003-9

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102420003-9"

LYAKHOV, P.A., ASTAKHOV, A.G.

Cooling the agglomerate by outdoor storage. Obcg. rud 2 no. 6:51-
54 '57. (MIRA 11:8)

(Ore dressing)

133-58-5-4/31

AUTHORS: Strashnikov, I. B., Astakhov, A. G., Ksendzyk, G. V.
Fedorovskiy, N. V. and Shumilov, K. A.

TITLE: The Dependence of the Coke Rate and the Output of a Blast
Furnace on the Basicity of Sinter (Zavisimost' raskhoda
koksa i proizvoditel'nosti domennoy pechi ot osnovnosti
aglomerata)

PERIODICAL: Stal', 1958, Nr 5, pp 398-402 (USSR)

ABSTRACT: The influence of the basicity of sinter on the coke rate
and the output of blast furnaces is discussed on the basis
of data collected from periods of experimental and normal
operations of blast furnaces on the Southern Iron and
Steel Works (Table). The dependence of the decrease in
the coke rate on the basicity of sinter - Fig.1; the
dependence of the increase in the output of iron per unit
of coke on the sinter basicity - Fig.2; the dependence of
the intensity of coke combustion in a blast furnace on the
sinter basicity - Fig.3; the content of +25 mm (a) and
0-5 mm (b) fraction in sinter after the P. G. Rubin drum
tests in samples of sinters of various basicities - Fig.4;
the content of fractions +40 mm (a), +25 mm (v) and 0-5 mm(b)
in samples of sinters of various basicities collected from
blast furnace bunkers - Fig.5; the dependence of the

Card
1/2

133-58-5-4/31

The Dependence of the Coke Rate and the Output of a Blast
Furnace on the Basicity of Sinter

intensity of combustion of coke in a blast furnace on the size distribution of sinters of various basicities - Figs. 6 and 7. Conclusions: Coke rate is inversely proportional to the sinter basicity. Under operating conditions of the Southern Works the maximum saving of coke is obtained when limestone is completely removed from the burden and amounts to about 12-14%. The intensity of the combustion of coke depends on the size distribution of sinter and increases with increasing proportion of coarse fractions. The output of a blast furnace is determined by the relation between the burden to coke ratio (increasing with increasing sinter basicity) and the intensity of the combustion of coke in the furnace (decreasing with increasing sinter basicity due to the decreasing content of coarse fractions). It is necessary to take some measures to improve the size distribution of high basicity sinters. It would be advantageous to take as the main criterion of the sinter quality the content of +25 mm fraction after the test in the P. G. Rubin drum and not the content of 0-5 mm fraction. There are 1 table and 7 figures.

Card
2/2

ASSOCIATION: Instituty chernoy metallurgii i gornogo dela AN Ukr.SSR
(Ferrous Metallurgy Institute and Mining Institute of the Ac.Sc.
of the Ukrainian SSR)

ONOPRIYENKO, V.P.; ASTAKHOV, A.G.; STARSHINOV, B.N.; ORLOV, V.S.; BURDYUKOV,
D.P.; ROVENSKIY, I.I.; KUSHNIREV, V.A.; POMRYSHKIN, V.L.

Obtaining a high-basicity sinter out of Krivoy Rog iron ores.
Trudy Ukr. nauch.-issl. inst. met. no.6:7-22 '60. (MIRA 14:3)
(Krivoy Rog Basin--Iron ores)
(Sintering)

ASTAKHOV, A.G., kand. tekhn. nauk; FEDOROVSKIY, N.V., inzh.

Conference on pelletizing ores and finely ground concentrates. Met. i gornorud. prom. no.5:82-83 S-0 '63.
(MIRA 16:11)

ASTAKHOV, A.G., kand.tekhn.nauk; FEDOROVSKIY, N.V.

Automation of the sintering processes. Met. i gornorud. prom.
no. 2:13-14 Mr-Ap '64. (MIRA 17:9)

ASTAKHOV, A.G., kand. tekhn. nauk; FEDOROVSKIY, N.V.; PLESKACH, V.I.

Comparing automatic control systems of the sintering process.
Avl. 1 prib. no.4s11-13 O-D '64 (MIRA 18s2)

ASTAKHOV, A.G.; FEDOROVSKIY, N.V.; ARIKHBAEV, V.V.; LAVRENTIK, I.I.;
MAKOVSKIY, V.A.; SUMSKOY, N.A.

Determining the limits of shifting of the maximum temperature
zone along the length of a sintering machine. Met. 1 gornorud.
prom. no.2:18-20 Mr-Ap '65. (MIRA 18:5)

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USSR/Chemistry - Ukrainian Nomenclature 1949

"Ukrainian Chemical Nomenclature," A.I. Astakhov,
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"Ukrainskiy Khim Zhur" Vol XV, No 3, pp 267-274

A project is proposed to remove foreign, especially Germanic chem nomenclature and to replace it with native Ukrainian. This should be done at the secondary school level. A list of presently used terms and their suggested changes is given. This project is being carried out by a commission appointed by the Presidium of the Ukrainian Republic

220T24

Div of All-Union Chem Soc imeni D.I. Mendeleev
(chairman of the commission - Ya. A. Fialkov, Corr
Mem Acad Sci Ukrainian SSR), approved by Inst of
Languages, Acad Sci Ukrainian SSR and Presidium
of Ukrainian Republic Div of VkhO imeni Mendeleev.

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220T24

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p 174 (USSR)

AUTHOR: Astakhov, A. S.

TITLE: Influence of the Geological Conditions on the Cost of
Coal Extraction in the Podmoskovnyy (Moscow) Basin
[Vliyaniye yestestvenno-geologicheskikh usloviy na
sebestoimost' dobychi uglya v Podmoskovnom basseyne]

ABSTRACT: Bibliographic entry on the author's dissertation for
the degree of Candidate of Economic Science, presented
to the All-Union Scientific Coal Institute (Vses. n.-i.
ugol'n. in-t), Moscow, 1956.

ASSOCIATION: Vses. n.-i. ugol'n. in-t (All-Union Scientific Coal
Institute)

Card 1/1

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Use of the linear programming method to solve problems about the
best places for capital investments and selection of working
conditions in mines. Gor. i ekon. vop. razrab. ugol'. i rud. mest.
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(Coal mines and mining)

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[Methods of selecting optimum variants in the overall
design of the development of ore basins and the annual
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Metodika vybora optimal'nykh variantov pri kompleksnom
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efficiency of mining machinery."; "Ugol'", 1962, No.12.

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SKOGOREV, Viktor Alekseyevich; ZVYAGIN, Pavel Zakharovich,
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[Overall labor organization in stoping and development faces
in coal mines] Kompleksnaia organizatsiia truda v ochistnykh
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S/155/59/000/02/023/036

AUTHORS: Astakhov, A.V., Pavlov, V.P., Pavlotskiy, I.P. ¹⁶

TITLE: Spectral Representation of an n-particle Green Function in the Unidimensional Case

PERIODICAL: Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskiye nauki, 1959, No. 2, pp. 124-127

TEXT: Spectral representations of arbitrary multi-particle Green functions are obtained in the case where the field functions only depend on the time (unidimensional model). The results confirm that it is principally possible to obtain the representations from the causality conditions and from the mass spectrum alone ; a direct application of the results is possible, e.g. in thermodynamics.

The authors thank N.N. Bogolyubov for the subject and the guidance, and A.A. Logunov, B.V. Medvedev, M.K. Polivanov for advices.

There are 7 references: 3 Soviet, 2 American, 1 Swiss and 1 Italian.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

SUBMITTED: March 21, 1959

Card 1/1

Astakhov, A.

S/020/60/133/02/15/068
B019/B060

AUTHOR: Astakhov, A. V.

TITLE: A Contribution to the Proof of Double Spectral Representation

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 2, pp. 307-310

TEXT: It is the aim of the present paper to verify the principal premises laid down by S. Mandelstame in the postulation of the double spectral representation. The proof of representation requires the aid of some further information. The present paper investigates the contribution made by the terms of the fourth order of the scattering theory in the analytical structure of scattering amplitudes. The investigation is carried out with the commutator derived by Dayson. First, two scalar bosons are investigated, and expression (5) is derived with the aid of the Feynman graph (Fig. 1) for the imaginary part of the scattering

Card 1/3

✓C

A Contribution to the Proof of Double
Spectral Representation

S/020/60/133/02/15/068
B019/B060

amplitude $\text{Im } T(\omega, \Delta^2, \tau) = 1/2 \cdot \{M(\omega, \Delta^2, \tau) - M(-\omega, \Delta^2, \tau)\}$. Next, the conditions are examined, under which (5) can be represented by the expression (4) for $M(\omega, \Delta^2, \tau)$. Finally, expression (8) is derived in a bulky expansion for $M(\omega, \Delta^2)$. The range of analyticity of (8) is investigated, and the indication (10) is given as to when $M(\omega, \Delta^2)$ becomes singular. It was found by the investigation conducted here that complex singularities are missing in the imaginary part of the scattering amplitude. The connection of the results obtained with ordinary scattering relations showed that the absence of complex singularities is closely related to the absence of a restriction on the momentum transfer in ordinary scattering relations. This proves the existence of a double spectral representation in the fourth degree of the perturbation theory. The author thanks V. S. Vladimirov and M. K. Polivanov for their discussion of the results obtained. There are 3 figures and 5 references: 1 Soviet, 3 American, and 1 Italian.

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A Contribution to the Proof of Double
Spectral Representation

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