



LOKSA, I.

LOKSA, I. Coenologic investigations of Collembola in the Bükk Mountains. In German.  
p. 379

Vol. 2, No. 4, 1956  
ACTA ZOOLOGICA  
SCIENTIFIC  
Budapest, Hungary

So: East European Accession, Vol. 6, No. 2, Feb. 1957

LOKSA, Imre

Arthropoda of the Kovacsi Hill. Allattani kozl 48 no.1/4:65-  
80 '61.

1. Eotvos Lorand Tudomanyegyetem Allatrendszertani Intezete,  
Budapest.

LOKSA, Imre, dr.

"Contributions to the Neotropical fauna" by M.Beier, W.Bucherl,  
M.Koepecke and H.W.Koepecke. Reviewed by Dr. Imre Loksa.  
Allattani kozl 48 nol/4:144 '61.

LORSA, L.

LORSA, L. Coenologic investigation of Collembola in a Hungarian meso-  
Potentilletum Alnus association. In German. p. 199.

Vol. 2, no. 1/3 1956

Acta Zoologica

SCIENCE

Budapest, Hungary

So: East European Accession, Vol. 6, No. 3, March 1957

LOKSA, L.

The Diploped and Chilopod faunas of the environs of lake Velence. In English. p385.  
(Magyar Nemzeti Muzium Termeszettudományi Muzium Evkonyve, Vol. 7, 1956,  
Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) IC. Vol. 6, no. 9, Sept. 1957. Uncl.

LOKSAN, J.

New type of automatic-control equipment for belt-conveyer lines in electrified mines.  
p. 40

UHLI. (Ministerstvo paliv)  
Praha, Czechoslovakia  
Vol. 1, no. 2, Feb. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 3, no. 7  
July 1959  
Uncl.

PEREKAL'SKIY, N.P., doktor. tekhn. nauk; ANTONOVICH, L.N., kand. tekhn. nauk; KRYUKOVA, Z.M., kand. tekhn. nauk; KURYLEV, Yu.V., inzh.;  
Prinimali uchastiye: Ivanova, V.I., mladshiy nauchnyy sotrudnik;  
BRUSNICHKINA, V.F., starshiy laborant; LOKSH, R., studentka-diplomantka

Use of alkyl ketene dimers for paper sizing. Trudy LTITSBP  
no.10:15-26 '62. (MIRA 16:8)

(Sizing. (Paper)) (Ketene)



LOKSHA, B.K., inzh.

Industrial electric heating elements. Vest. elektroprov.  
33 no.5:73-76 My '62. (MIRA 15:5)  
(Electric furnaces)

LOKSHA, B.K. (Ust'-Kamenogorsk)

Dependence of the reaction rate of carbon oxide decomposition on  
temperatures. Izv. AN SSSR. Obi. tekhn. nauk. Met. i gor. delo  
no.4:46-53 JI-Ag '63. (MIRA 16:10)

LOKSHA, B.K.; VERSHININA, V.V.

Electric viscosimeter with a noncontracting a.c. motor. Zav.  
lab. 30 no.6:757-758 '64 (MIRA 17:8)

1. Gorno-metallurgicheskiy nauchno-issledovatel'skiy institut  
AN Kazakhskoy SSR.

LOKSHA, Boris Kornel'yevich, mladshiy nauchnyy sotrudnik

Design of graphite heaters for electric furnaces. Izv. vys.  
ucheb. zav.; elektromekh. 6 no.5:619-627 '63. (MIRA 16:9)

1. Laboratoriya promyshlennoy energetiki Ust'-Kamenogorskogo  
otdeleniya Instituta energetiki AN KazSSR.  
(Electric furnaces)

LOKSHA, I.

Two new forms of Chilopoda from the vicinity of Rybinsk. Zool.  
zhur. 41 no.6:854-858 Je '62. (MIRA 15:7)

1. Institut sistematiki zhivotnykh Universiteta imeni L.Etvosha,  
Budapesht.

(Rybinsk region—Centipedes)

LOKSHAREV, M. A.

Category: USSR / Physical Chemistry - Electrochemistry

B-12

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 30128

Author : Loksharev M. A., Dikova M. G.

Inst : ~~not given~~

Title : Effect of the Nature of the Solvent on Chemical Adsorption Polarization. 1. Degree of Irreversibility of Electrode Processes.

Orig Pub: Ukr. khim. zh., 1956, 22, No 4, 457-465

Abstract: A study was made of the effect of a number of surface-active substances (SAS) (camphor, thymol, beta-naphthol, beta-phenylamino ethanol, tribenzylamine) on polarographic behavior of  $\text{Cu}^{2+}$ ,  $\text{Pb}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Cd}^{2+}$  and  $\text{Sn}^{2+}$  in aqueous, formamide, acetone and ethanol solutions. In ethanol and acetone solutions the maxima are strongly developed, which is correlated with the low viscosity of these solutions. Most SAS do not inhibit at all the electrode reactions in these solutions, whereas in formamide, which has a high dielectric constant ( $\epsilon$ ), the inhibitory effect of camphor is retained. The inhibitory effect of a number of SAS decreases with decrease of  $\epsilon$ ;

Card : 1/2

-4-

ACC NR: AP6032524

(i)

SOURCE CODE: UR/0413/66/009/017/0119/0119

INVENTOR: Lokshin, A. L.; Mal'tsev, V. P.; Sundeyev, B. K.

ORG: none

TITLE: Thrust bearing. Class 47, No. 185635 [announced by Kaluga Turbine Plant (Kaluzhskiy turbinyy zavod)]

SOURCE: Izobreteniya, promyshlennyye obrazttsy, tovarnyye znaki, no. 17, 1966, 119

TOPIC TAGS: gas turbine, steam turbine, turbine bearing, turbine design, *anti friction*

*bearing, thrust bearing*  
ABSTRACT: The proposed thrust bearing for turbomachines, such as steam or gas turbines, contains a ring having rigidly fixed supports and pivoting, self-aligning

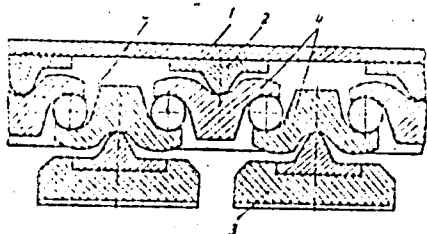


Fig. 1. Thrust bearing

1 - Ring; 2 - supports; 3 - supporting blocks; 4 - balancers; 5 - balls.

Card. 1/2

UDC: 621.165+621.438-233.23

ACC NR: AP6032524

supporting blocks and a double-row system of interconnected balancers, resting both on the rigid supports and on pivoting support blocks. In order to increase reliability and supporting capacity, the supports and the supporting blocks have ribs, serving as pivoting axes for all moving parts of the bearing. Balls are placed between the balancers; the contact points of these balls are in a straight line with the balancer, perpendicular to the pivoting axis of the balancer and pass through the axis or below it (see Fig. 1). Orig. art. has: 1 figure.

SUB CODE: /321/ SUBM DATE: 25Jan65/

Card 2/2



*Lokshin, A. M.*

USSR/Electronics

Card 1/1 : Pub. 133 - 6/20

Authors : Lokshin, A. M., and Kolpakov, P. M.

Title : The selection of cathode chock coils and capacitors for a stage-coupling of transmitters, designed on an inversion diagram

Periodical : Vest. svyazi 10, page 11, Oct 54

Abstract : A description is presented of methods for calculating the inductance of cathode chock coils and coupling capacitors used in short-wave transmitters. Diagrams; graph.

Institution : ... *Engineering Planning Inst, Min Communications*

Submitted : ...

*LOKSHIN, A.M.*

USSR/ Miscellaneous - Conferences

Card 1/1 Pub. 133 - 16/18

Authors : Lokshin, A. M.; Adyakin, N. M.; Kisel'nikov, A. M.; and Miroshin, A. I.,  
Engineers

Title : To improve the performance stability of transmitting installations

Periodical : Vest. svyazi 2, 28 - 29, Feb 1955

Abstract : Minutes are presented of a discussion held on the subject of improving the performance stability of telephone-telegraph and radio transmitting installations in the USSR.

Institution: ..... *Eng. Planning Inst, Min Communictoria USSR*

Submitted: .....

ROZENFEL'D, Yefim Isaakovich; LOKSHIN, A.M., otvetstvennyy redaktor;  
VERKHOVINA, T.M., redaktor; VEYNTAUB, A.B., tekhnicheskiiy redaktor

[Filtration of harmonics in shortwave transmitters] Fil'tratsiia  
garmonik korotkovolnovykh peredatchikov. Moskva, Gos. izd-vo  
lit-ry po voprosam sviazi i radio, 1956. 42 p. (MLRA 9:11)  
(Radio filters)

SHKUD, M.A.; LOKSHIN, A.M.; AGEYEV, V.I.

Automatic control of radio transmitting installations. *Elektrosviaz'* 10 no.1:35-38 Ja '56. (MLRA 9:5)  
(Radio--Transmitters and transmission) (Automatic control)

ASTAF'YEV, Vladimir Aleksandrovich; BARKOV, Nikolay Kuz'mich; LOKSHIN,  
A.M., red.; SOBOLEVA, Ye.M., tekhn.red.

[Hydraulic turbines and their maintenance] Gidroturbiny i ikh  
obsluzhivanie. Moskva, Gos.energ.izd-vo, 1958. 300 p. (MIRA.12:4)  
(Hydraulic turbines)

ZOTOV, P.I., inzh.; LOKSHIN, A.M.

Maintaining open water above hydroelectric power station structures  
and sluices by means of a machine for generating water currents.

Elek. sta. 31 no.12:44-47 D '60.

(MIRA 14:5)

(Hydroelectric power stations)

LOKSHIN, A.M., inzh.; ZEVELEV, N.M., inzh.

A control demodulator for television transmitters. Vest. sviazi  
22 no.10:6-7 0 '62. (MIRA 15:11)  
(Television--Transmitters and transmission)

LOKSHIN, A.M.

Characteristics of color television transmitters. Elektrosviaz'  
16 no.8:32-40 Ag '62. (MIRA 15:9)  
(Color television)  
(Television--Transmitters and transmission)



ZAKIMATOV, D.P., inzh.; LOKSHIN, A.M., inzh.; OSTROUMOV, G.A., prof.;  
SHTIYENBERG, A.A., inzh.

One cause for accelerating the corrosion of hydrogenerator  
thrust bearings. Elek. sta. 34 no.7:38-42 JI '63.  
(MIRA 16:8)

LOKSHIN, A.M.; KOLPAKOV, P.M., inzhener.

Selecting the inductance of cathode tubes and the capacitance of communication condensers for the stages of transmitters built according to an inverse system. Vest.svyazi 14 no.10:11 0 '54.

(MLRA 7:11)

1. Inzhener Proyektного instituta Ministerstva svyazi (for Lokshin)  
(Radio, Short-wave--Transmitters and transmission)

LOKSHIN, A.M., inzh.; IVANOV, V.K., inzh.

A new modulating device for a standard TTR-5/2,5 kw. television  
station. Vest. svyazi 24 no.9:3-5 3 '64. (MIRA 17:11)

LIVANOVA, O.V., kand. tekhn. nauk; LOKSHIN, A.N., inzh.

Economic efficiency of hydraulic clutches for feed pump drives.  
Elek. sta. 36 no. 8:37-41 Ag '65.

(MIRA 13:8)

POSYSAYEV, A.I.; VORONOV, V.I.; LOKSHIN, A.V.; OGIYEVICH, V.A.,  
kand. tekhn. nauk, retsenzent; SMIRNOVA, V.L., red. izd-va;  
VLADIMIROVA, L.A., tekhn. red.

[The S-285V mobile automated continuous mortar mixer] Pere-  
dvizhnaia avtomatizirovannaia rastvorosmesitel'naia ustanov-  
ka S-285V nepreryvnogo deistviia. Moskva, Mashgiz, 1962. 73 p.  
(MIRA 15:7)

(Mortar) (Mixing machinery)

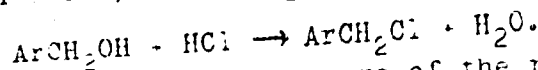
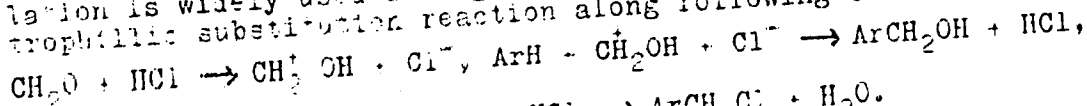
S/080/60/033/010/022/029  
D216/D306

AUTHORS: Kretov, A.Ye., Silin, N.F., Korchagina, A.M.,  
Lokshin, G.B., and Kitaina, S.N.

TITLE: The synthesis of terephthalic acid by chloromethylation of the products of aromatic hydrocarbons

PERIODICAL: Zhurnal prikladnoy khimii, v. 33, no. 10, 1960, 2329 - 2335

TEXT: The authors studied the synthesis of terephthalic acid from toluene and its homologues by chloromethylation. This chloromethylation is widely used in organic synthesis, being a typical electrophilic substitution reaction along following scheme:



The authors, by increasing the temperature of the reaction by 20°C. (to 70-75°C) achieved the cut in synthesis time to 12 hours while

Card 1/4

The synthesis of ...

S/080/60/033/010/022/029  
D216/D306

still retaining the yields of I. Nazarov and A. Semenovskiy (Ref. 21: DAN SSSR, 12, 1437, 1956). The increase in yield of isomeric xylochlorides was obtained by changing the proportions of toluene and formaldehyde. The optimum yield of 82.5 % was obtained with the formaldehyde content of 95 % of toluene giving a molar proportion of toluene and formaldehyde of 2:1 (formaldehyde was used in form of 40 % formalin). On the chloromethylation of ethyl benzene at 70-75°C for 25 hours a maximum yield of ethyl benzyl chloride of 90 % (on ethyl benzene used) was obtained with a proportion 1:1 of ethyl benzene-formaldehyde. The optimum yield of iso-propylbenzyl chloride was 80 % on the cumene used and with a proportion of cumene:formaldehyde of 3:1, temperature 70-75°C, time 25 hours. The authors studied the oxidation of isomeric xylochlorides with dilute (10 %) nitric acid with an optimum yield of toluic acids, of 89 % for periods of 17-18 hours. Later, in connection with the discovery of nitroproducts, the concentration of acid was cut down to 7-5 % and the times to 12-10 hours. The yield obtained was 85 %. On oxidation of iso-propyl benzyl chloride, besides iso-propyl benzoic acid, whose yield was up to 80 %, 20 % of a product was obtained which

Card 2/4

S/080/60/033/010/022/029  
D216/D306

The synthesis of ...

was insoluble in a soda solution and which seemed to be a tertiary alcohol. The fractional precipitation of toluic acids was also used as a means of separation, by removing HCl from the solutions of sodium salts. *m*-toluic acid was obtained with a yield of 22.3% and melting point 170 - 178°C, *p*-toluic acid with a yield of 4.1% and a melting point 95 - 99°C. Dicarboxylic acids were also obtained with high melting points and a yield of 13.5%. Technical literature gives various methods of esterification of terephthalic acid, but the authors obtained dimethyl terephthalate by esterification of the acid with a large excess of methanol (48 ml. to 1 g. of acid) and in the presence of concentrated sulphuric acid. This product proved unsuitable for transesterification. Esterification of dicarboxylic acids in the presence of hydrogen chloride yielded 96% of dimethylterephthalate which did not darken on heating to 250°C. Further purification was achieved by double distillation under CO<sub>2</sub>. The product obtained gave a melting point of 141°C, which agrees with the required standard. There are 4 tables, 1 figure and 32 references: 6 Soviet-bloc and 26 non-Soviet-bloc.

Card 3/4



The synthesis of ...

S/080/60/033/010/022/029  
D216/D306

The 4 most recent references to the English-language publications read as follows: Chem. Trade J., 143, 3717, 504, 1958; J. Bengstrom, J. Org. Chem., 23, 212, 1958; Khasimoto, Ono Kagakihama, Annesi, J. Chem. Soc. Japan (Ind.) 59, 1196, 1956. Am. pat 2766280 1956.

SUBMITTED: March 15, 1960

Card 4/4

LOKSHIN, A. Z.

USSR/Engineering - Welding, Processes May 52

"Investigation Into Deformations of Plates During  
Welding Metal on Their Edges," Docent V. D.  
Matskevich, A. Z. Lokshin, Candidates Tech Sci

"Avtogen Delo" No 5, pp 6-9

Stating importance of detg expected deformations  
caused by welding in fabrication of welded con-  
structional members, attempts to develop method  
for calcg deformations of wide elements during  
formation of narrow weld along their edges. Deduces  
formulas and gives numerical example.

217T38

Book contains an introduction, eight chapters  
The subjects treated are: the general theory and energy relations  
of structures; the theory of flexure of



KOROTKIN, Yakov Isayevich; LOKSHIN, Aleksandr Zinov'yevich; SIVERS, Nikolay I'vovich; KURDYUMOV, A.A., redaktor; OSVENSKAYA, A.A., redaktor; KANOLOVA, V.M., tekhnicheskiy redaktor.

[Bending and resistance of plates and cylindrical shells  
structural mechanics of ships] Izbig i ustoichivost' plastin i  
krugovykh tsilindricheskikh obolochek; stroitel'naya mekhanika  
korablia. Leningrad, Gos.soiuznoe izd-vo sudeistvoitel'noi  
promyshl., 1955. 307 p. (MLRA 8:11)  
(Elastic plates and shells)

SHIMANSKIY, Yu.A., akademik, red.; SLEPOV, B.I., red.; LOKSHIN, A.Z.,  
red.; TAUBIN, G.O., red.; CHUVIKOVSKIY, G.S., red.; CHUVIKOVSKIY,  
V.S., red.; LUCHININOV, S.T., otv.red.; OSVENSKAYA, A.A., red.;  
KONTOPOVICH, A.I., tekhn.red.

[Handbook on structural mechanics of ships] Spravochnik po  
stroitel'noi mekhanike korablia. Leningrad, Gos. soiuznoe izd-vo  
sudostroit. promyshl. Vol.2. 1958. 528 p. (MIRA 12:1)  
(Shipbuilding) (Strains and stresses)

LOKSHIN, A.Z.; MATSKEVICH, V.D.

Standards for localized deformations in seagoing transport  
ships with cross framing. Sudostroenie 24 no.12:9-13 D '58.  
(MIRA 12:2)

(Ships--Standards)

KOZLIYAKOV, Vitaliy Vasil'yevich; KOROTKIN, Yakov Isayevich;  
KURDYUMOV, Aleksandr Aleksandrovich; LOKSHIN, Aleksandr  
Zinov'yevich; POSTNOV, Valeriy Aleksandrovich; SIVERS,  
Nikolay L'vovich; YEKIMOV, V.V., doktor tekhn. nauk, prof.,  
retsenzent; SEGAL', V.F., doktor tekhn. nauk, prof., re-  
tsenzent; SMOLEV, B.V., red.; ERASTOVA, N.V., tekhn. red.

[Book of problems on the structural mechanics of ships]  
Zadachnik po stroitel'noi mekhanike korublia. [By] V.V.  
Kozliakov i dr. Leningrad, Sudpromgiz, 1962. 254 p. (MIRA 15:6)  
(Naval architecture--Problems, exercises, etc.)



LOKSHIN, A.Z., kand.tekhn.nauk; RYABOV, L.I., kand.tekhn.nauk

Formulas for calculating the strength and stability of beam  
knees. Sudostroenis 28 no.4:9-10 Ap '62. (MIRA 15:4)  
(Hulls (Naval architecture))

KUZMICHEV, M.N., inzh.; LOKSHIN, A.Z., kand. tekhn. nauk

Nonlinear bending of plastic plates. Sudostroenie 30 no.5:  
15-17 My '64. (MIRA 17:6)

LOKSHIN, Aleksandr Zinov'yevich; AMIROVA, M.K., kand. tekhn. nauk, retsenzent; YEKIMOV, V.V., prof., doktor tekhn. nauk, retsenzent; TSYNDRYA, I.I., kand. tekhn. nauk, retsenzent; SIVERS, N.L., nauchn. red.; KLIORINA, T.A., red.

[Strength of ship plates and span coverings made of glass-reinforced plastics] Ustoichivost' sudovykh plastin i perekrytii iz stekloplastikov. Leningrad, Sudostroenie, 1964. 90 p. (MIRA 17:11)

LOKSHIN, B. S.

Lokshin, B. S. - "The graphic method of interpolation as a means of solving problems on the selection of a transportation site for loads in the mining of mineral deposits,"  
Investiya Dnepropetr. gornogo in-ta, Vol. XIX, 1948, p. 167-17

SO: U-3600, 10 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949).

LOKSHIN, B. S.

Lokshin, B. S. "The solution of the problems of selecting a place for sinking a mine shaft by means of construction mechanics", *Izvestiya Kneproctr. gornogo in-ta im. Artema*, Vol. XX, 1948, p.83-94, - Bibliog: 7 items.

SO: L-4631, 16 Sept. 1953, (Letopis 'Zhurnal 'nykh Statey, No. 24, 1949)



NEKRASOVSKIY, Ya.E., kandidat tekhnicheskikh nauk; LOKSHIN, B.S., otvetstvennyy redaktor; ANDREYEV, G.G., tekhnicheskiy redaktor

[Working seams subjected to sudden ejections of coal and gas]  
Razrabotka plastov, podverzhennykh vnezapnym vybrosam uglia i gaza.  
Moskva, Ugletekhizdat, 1951. 222 p. [Microfilm] (MIRA 10:1)  
(Coal mines and mining) (Mine explosions)

LOKSHIN, B. S., Docent

Mine Haulage

Determining transportation costs for the principal horizontal mine drifts. Ugol'  
27, no. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.



NEKRASOVSKIY, Ya.E., professor; LOKSHIN, B.S., dotsent; GRISHKO, N.T.,  
assistant.

Use of special shields under laboratory and experimental  
conditions to demonstrate the feasibility of driving headings  
in seams where coal and gas outbursts are likely to occur.  
Izv. DGI no.24:5-49 '55. (MLRA 10:2)

(Coal mines and mining--Safety measures)

NEKRASOVSKIY, Ya.E., professor; LOKSHIN, B.S., dotsent; BELINSKIY, M.L.,  
aspirant; SNITKO, A.A.

Protective bore bit for the boring of raising shafts in steeply  
pitching coal seams where coal and gas outbursts are likely to  
occur. Izv. DGI no.24:50-64 '55. (MLRA 10:2)

(Boring machinery) (Coal mines and mining--Safety measures)

NEKRASOVSKIY, Ya.E., professor; LOKSHIN, B.S., dotsent; ZIL'BERMAN, A.I., dotsent; ANAN'YEV, B.S., dotsent; PRONIMAK, D.Ya., inzhener.

Mining systems used in steeply pitching seams where coal and gas outbursts are likely to occur. Izv. DGI no.24:65-120 '55.  
(MLRA 10:2)

(Coal mines and mining--Safety measures)

LOKSHIN, D.D.

NEKRASOVSKIY, Ya.E., professor; LOKSHIN, B.S., dotsent.

Working extremely thin, steeply pitching coal seams. Izv.  
DGI no.24:121-142 '55. (MLRA 10:2)

(Donets Basin--Coal mines and mining)

LOKSHIN, B.S., detsent, kandidat tekhnicheskikh nauk.

Determining maintenance costs for inclined coal seam drifts in  
the Donets Basin. Ugol' 30 no.12:11-15 D '55. (MIRA 9:2)

1. Dnepreptetrevskiy gornyy institut imeni Arseny.  
(Donets Basin--Coal mines and mining--Accounting)

LOKSHIN, B.S., dotsent; SMITKO, A.A., aspirant.

Establishment of cost parameters and expenditures for the maintenance of drifts with metallic supports in central Donets Basin coal seams. Ugol' 32 no.7:15-18 J1 '57. (MLRA 10:7)

1. Dnepropetrovskiy gornyy institut imeni Artema.  
(Donets Basin--Coal mines and mining--Costs)  
(Mining industry and finance)

LOKSHIN, B.S., kand. tekhn. nauk, dots.

Baring and development of a new type of mine in the Donets Basin.  
Ugol' Ukr. 2 no.2:1-6 P '58. (MIRA 13:3)

1.Dnepropetrovskiy gornyy institut.  
(Donets Basin--Coal mines and mining)

SOV/24-58-38/39

**AUTHOR:** Solosonov, M.  
**TITLE:** Combating Sudden Ejections of Coal and Gas From Coal Mines (Bor'ba s vnasapnyai vybrosami uglia i gaza v ugol'nykh shakhtakh) (Conference at the Institute of Mining of the A.S.S.R. USSR) (Soveschaniye v Institute gornogo dela Akademii nauk SSSR)

**PERIODICAL:** Investitsiya Akademii Nauk, SSSR; Otdeleniye Tekhnicheskikh Nauk, 1958, Nr. 4, pp 155 - 156 (USSR)

**ABSTRACT:** On February 17 - 21, a conference was held at the Institut gornogo dela Akademii Nauk SSSR (Mining Institute of the A.S.S.R.) on combating sudden ejections of coal and research work on ejections in mines. Members of the Central Commission for combating sudden ejections of coal and gas, representatives of scientific research and project institutes and of higher teaching establishments participated in the conference. After a brief opening speech by Academician G.A. Skochinskiy, the following papers were read at the conference: "Investigation of the Conditions in the Field of Application of Local Methods of Preventing

**Card1/4**

Sudden Ejections of Coal and Gas in preparatory workings and in driving (L.F. Kibodot); "Development of a Classification of Measures for Safe Mining of Coal in Slopes of the Central Seams of Sudden Ejections of Coal in Slopes of the Mine of Vostochny Sibirskiy Kuznetskiy Ugl'nyy Bassein" (G.M. Krichavskiy); "Finding a Safe and Productive Gas System of Working Individual Steeply Sloping Seams Which Have an Inclination to Develop Sudden Ejections of Coal and Gas" (B.S. Loshkin); "Finding an Effective System of Working Steep Seams for the Purpose of Utilizing Them as Protective Seams" (B.S. Loshkin); "System of Working of the 'Pugachevskaya' Mine of the IM. Arden Trust of Marshalskiy (L.V. Zhilov); "System of Working Individual Seams of the Central Dombass region Where There is a Danger of Sudden Ejections of Coal and Gas (G.P. Shchegolev); "Rare and Effective Methods of Working Steeply Sloping Seams for the Purpose of Preventing Sudden Ejections of Coal and Gas" (D.P. Sakhov); "Tendency to Ejections of Coal of the Makhovskiy subdistrict

deposits and justification of Rational Methods of Mining This Coal (I.F. Sigorskiy); "Method of Detection of Sections Which are Dangerous as Regards Sudden Ejections in Seams of the Igarka (Central Siberian Coal Basin) for Establishing and Studying the Possibility of Sudden Ejections of Coal and Gas" (G. Anteyev); "Results of Scientific Investigations on the Problem of Combating Shocks in Coal Mines During 1957" (I.G. Avershin); "On the State of Designing and Testing Milling Machines and Equipment for Passing Through Galleries in Seams Which are Dangerous from the Point of View of Ejections of Coal and Gas" (L.B. Kozlov). On the basis of the presented papers and discussions, the participants in the conference concluded that in 1957 progress was achieved in the theory of sudden ejections of coal and gas.

Some of the interesting items discussed at the conference are briefly summarized.



LOKSHIN, B.S., dots., kand. tekhn. nauk.

Determining the number of blocks when baring and developing Donets Basin coal mine fields. Ugol' 33 no.3:3-5 Mr '58. (MIRA 11:3)

1. Dnepropetrovskiy gornyy institut im. Artema.  
(Donets Basin--Mining engineering)

NEKRASOVSKIY, Ya.E., prof.; LOKSHIN, B.S., dots.

Systems of mining central Donets Basin seams subject to  
coal and gas outbursts. Ugol' Ukr. 3 no.3:12-16 Mr '59.  
(MIRA 12:5)

1. Dnepropetrovskiy gornyy institut in. Artema.  
(Donets Basin--Coal mines and mining--Safety measures)

NEKRASOVSKIY, A.E., prof.; LOKSHIN, B.S., dots.; MASEVICH, M.V., inzh.

Multiple-plow machinery for mining very thin steep by pitching  
coal seams. Ugol' Ukr. 3 no.10:10-13 0 '59. (MIRA 13:2)

1. Dnepropetrovskiy gornyy institut.  
(Coal mining machinery)

NEKRASOVSKIĬ, Ya.E., prof.; LOKSHIN, B.S., dotsent

Coal mining in steeply pitching seams with DGI-type chain saws.  
Izv. vys. ucheb. zav.; gor. zhur, no.10:3-8 '60. (MIRA 13:11)

1. Dnepropetrovskiy gornyy institut imeni Artema.  
(Coal mining machinery) (Chain saws)

LOKSHIN, B.S., dotsent; KIYASHKO, I.A., kand.tekhn.nauk; KIYASHKO, I.Ye.,  
inzh.

Simultaneous mining of several coal seams in the mines of  
Lisichanskugol' Trust. Ugol' Ukr. 4 no. 11: 7-8 M '60.

(MIRA 13:12)

(Donets Basin--Coal mines and mining)

LOKSHIN, B.S., kand.tekhn.nauk, dotsent

Determining the dimension of mine areas in mining with the panel development system. Ugol' 36 no.5:12-15 My '61. (MIRA 14:5)

1. Dnepropetrovskiy gornyy institut.  
(Coal mines and mining)

PAVLENKO, I.Ya.; LOKSHIN, B.S.; PARCHEVSKIY, L.Ya.

Transfer to the caving method of roof control. Ugol' 36 no.4:17-  
19 Ap '61. (MIRA 14:5)

1. Shakhta No.17-bis tresta Chistyakovantratsit (for Pavlenko);
2. Dnepropetrovskiy gornyy institut (for Lokshin, Parchevskiy).  
(Mining engineering)

GRISHKO, N.T.; LOKSHIN, B.S.

Methods for determining the advantages of the wide work system  
for mining drifts in flat seams. Ugol' Ukr. 5 no.5:42-44 Ap '61.  
(MIRA 14:4)

1. Dnepropetrovskiy gornyy institut.  
(Donets Basin--Coal mines and mining)



LOKSHIN, B.S., dotsent; PARCHEVSKIY, L.Ya., gornyy inzhener

Instrument for automatic recording of the displacement of  
roof rocks in the mining-out of coal seams. Ugol' Ukr. 5  
no.12:39-40 D '61. (MIRA 14:12)

1. Dnepropetrovskiy gornyy institut.  
(Recording instruments)  
(Rock pressure)

YAROVY, A.P.: NEKRASOVSKIY, Ya.E.; LOKSHIN, B.S.; RAKHUTIN, V.S.

Mechanization of coal extraction by means of EMS small-range plows  
in mining steeply dipping Donets Basin seams. Ugol' 37 no.3:29-31  
Mr '62. (MIRA 15:2)

1. 3-ye shakhtoupravleniye tresta Ordzhonikidzeugol' (for Yarovoy).
2. Dnepropetrovskiy gornyy institut im. Artema (for Nekrasovskiy,  
Lokshin, Rakhutin).

(Donets Basin--Coal mining machinery)

NEKRASOVSKIY, Ya.B.; LOKSHIN, B.S.; MASEVICH, M.V.; GRISHKO, N.T.

Mechanization of the mining of thin flat coal beds. Ugol.  
prom. no.5:51-53 S-0 '62. (MIRA 15:11)

1. Dnepropetrovskiy gornyy institut im. Artema.  
(Coal mines and mining)

LOKSHIN, B.S., dotsent

Determining the distance between crosscuts along the level  
(the height of the level) during the opening of a coal seam  
series. Izv. vys. ucheb. zav.jgor.zhur. 6 no. 12:3-7 '63.  
(MIRA 17:5)

1. Dnepropetrovskiy ordena Trudovogo Krasnogo Znameni gornyy  
institut imeni Artema. Rekomendovana kafedroy razrabotki plastovykh  
mestorozhdeniy.

LOKSHIN, Boris Savel'yevich; SELETSKIY, R.A., dots., retsenzent;  
OKHRIMENKO, V.A., red.

[Selecting the location for sinking a mine shaft; analytical and graphical methods of solving the problem] Vybor mesta zalozheniia stvola shakhty; analiticheskie i graficheskie sposoby resheniia zadach. Moskva, Nedra, 1965. 83 p.  
(MIRA 18:4)

LOKSHIN, B.I., dataent; BABETS, Yu.N., inzh.

Mine depressions and grouping of seams. Ugol' 40 no.4:  
24-25 Ap '65. (MIRA 18:5)

1. Dnepropetrovskiy gornyy institut.

LOKSHIN, B.S., dotsent

Determining the optimum dimensions of mining areas by taking into  
account the time element of previous capital outlays. Ugol' 40  
no.9:58-60 S '65. (MIRA 18:10)

LOKSHIN, B.S.; GRISHKO, N.T.

Establishing the advantageousness of wide working drifts  
in flat Donets Basin seams. Izv. DGI 42:148-156 '64.

(MIRA 18:11)



NEKRASOVSKIY, Ya.F.; LOKSHIN, B.S.; BAKHUTIN, V.S.; MAGEVICH, M.V.

Complex of small-size coal plows for mechanizing the mining  
of steep thin coal seams. Izv. DGE 42:134-139 1964.  
(MIRA 18:11)

Lokshin, B. V.

20-3-21/52

AUTHORS: Nesmeyanov, A. N. , Academician, ~~Kazitsyna~~ , L. A. , Lokshin, B. V. and Kritskaya, I. I.

TITLE: Position of Substituents in Ferrocene Compounds, as Determined From Infrared Absorption Spectra (Opredeleniye polozheniya zamestiteley v ferrotsenovykh soyedineniyakh po infrakrasnym spektram pogloshcheniya)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 3, pp. 433 - 436 (USSR)

ABSTRACT: With respect to the possession of the apparently greatest series of these spectra of ferrocene together with the derivatives, the authors are able to draw the conclusion on the conformity of the spectra mentioned, with some characteristics of their structure. These conclusions helped at the establishment of the structure of the ferrocene homologues, and rendered possible the precisizing of structure of the condensation products of the formaldehyde and other aldehydes with ferrocene. Up to now the first author has worked out together with E. G. Perevalova (reference 17) two methods of the determining mentioned in the title, both of which show limitations. 1.) Catalytic hydrogenation under rigorous conditions leads to corresponding cyclopentane derivatives, 2.) Bromination

Card 1/4

20-3-21/52

## Position of Substituents in Ferrocene Compounds, as Determined From Infrared Absorption Spectra

leads to pentabrominecyclopentane in the case of such ferrocene derivatives possessing a non-substituted cyclopentadiene ring. As the condensation products of ferrocene with formaldehyde, according to both methods, do not possess the nonsubstituted rings mentioned, they have structure I (shown at the scheme) and not an isomere - II. The infrared spectra of the ferrocene compounds, according to the high molecular symmetry, are remarked by simplicity. In addition to the C-H-valent oscillations in the range of from 3000 - 3100  $\text{cm}^{-1}$  they have only still 4 sufficiently intensive strips; the frequencies at 811 and 1001  $\text{cm}^{-1}$  arise according to C-H deformation oscillations. The most intensive bands correspond to the frequencies at 1002 and 1008  $\text{cm}^{-1}$ . They were chosen as criterion of determination of position of the substituents. Spectra of ferrocene and of mono-substituted ferrocenes with very different substituents were recorded (table 1 Nr 1 - 16), furthermore, spectra of 7 di-substituted having the substituents notoriously in different rings. Here, frequencies 1002 and 1007  $\text{cm}^{-1}$  did not occur. However, they were found as intensive strips in the spectra of the compounds Nr 24 - 28, the fact of which points to the occurring of a free cyclopentadienyl ring. This ring was chemically proved

Card 2/4

20-3-21/52

## Position of Substituents in Ferrocene Compounds, as Determined From Infrared Absorption Spectra

by the bromination reaction for the compounds Nr 26 - 28. In presence of surplus bromine a stereoisomeric mixture of pentabromine-cyclopentane with a melting point =  $83 - 101^{\circ}$  was isolated out of these 3 substances in tetrachlorinecarbon (at its boiling temperature). Substance Nr 28 has a non-closed structure, because here among others the frequency  $1350 \text{ cm}^{-1}$  being characteristic for the deformation oscillations of the hydroxyl group was found. Di-substituted ferrocenes (29 - 30) (table 1) have a free cyclopentadienyl ring, because within their spectra occur the frequencies  $1002$  and  $1007 \text{ cm}^{-1}$ . At ferrocene compounds containing a carbonyl group conjugated with ferrocene ring, the signification of the frequencies of the C = O - group was investigated (table 2). Therefore is to be seen that the frequency of the ketone C = O is lying in the range of  $1650 - 1678 \text{ cm}^{-1}$ , the fact of which may be explained by the conjugation of the carbonyl with the cyclopentadienyl ring. There are 2 tables, and 20 references, 11 of which are Slavic.

Card 3/4

20-2-21/52

Position of Substituents in Ferrocene Compounds, as Determined From Infra-red Absorption Spectra

ASSOCIATION: Institute for Elemental-organic Compounds AN USSR  
(Institut elementoorganicheskikh sovedineniy Akademii nauk SSSR)

SUBMITTED: June 26, 1957

AVAILABLE: Library of Congress

Card 4/4

5 (3,4)

AUTHORS:

Kazitsyna, L. A., Lokshin, B. V.,  
Polstyanko, L. L., Terent'yev, A. P.

SOV/55-58-6-26/31

TITLE:

Infrared Spectra of Several Inner-complex Compounds in the Field of the Valency Oscillations of N-H (Infrakrasnyye spektry nekotorykh vnutrikompleksnykh soyedineniy v oblasti valentnykh kolebaniy N-H)

PERIODICAL:

Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958, Nr 6, pp 207 - 213 (USSR)

ABSTRACT:

The object of this article is the investigation of the structure of the inner-complex compounds of the quadri-coordinated metals (Cu, Ni, Pd, Be, Zn, Cd) in which a successive modification of the electronic shell takes place. These metals are capable of forming tetraedric or even (in this case cis- and transisomers) complexes. The examination was carried out by means of infrared-absorption spectra. These spectra permit a determination concerning the existence of the transisomers, as with the latter the symmetrical oscillations are not active in the infrared spectrum owing to the absence of a change of the bipolar moment. In order to draw conclusions as to the even cis-shape or the tetraedric shape, further tests are re-

Card 1/3

Infrared Spectra of Several Inner-complex Compounds      SOV/55-58-6-26/31  
in the Field of the Valency Oscillations of N-H

quired. In the present paper the authors restricted their investigations to the possibility of determining the even trans-configuration. Infrared spectra were taken of a number of compounds containing the atomic group of HN-Me-NH. The authors tried to find out the configuration, taking into account the absorption bands in the field of the valency oscillations of the N-H bond. The following compounds were investigated: Cu, Ni, Pd, Cd, Be, iminates of salicyl aldehyde, the acetyl-acetone iminates of Cu, Ni, Pd, the o-oxyacetophenone iminates of Cu and Ni, the  $\beta$ -oxynaphtaldehyde-iminates of Cu and Ni and the copper salts of the ethylene-bis- $\alpha$ -iminopropione- and of the  $\alpha$ -phenyl acetic acid. The experimental part contains a short description of the syntheses of the various complex compounds; the outward form and the contents of nitrogen and copper are shown in table 1. In figure 1 the spectra of those compounds are shown whose X-ray structural analysis and magnetic measurements seemed to point to a trans-structure. Figure 2 refers to the spectra of the Cd and Be salicylal iminates which are of tetrahedric structure, and to the spectra of the last-mentioned compounds, which - owing to the presence of an

Card 2/3

Infrared Spectra of Several Inner-complex Compounds SOV/55-58-6-26/31  
in the Field of the Valency Oscillations of N-H

ethylene-bridge - show an even *cis*-configuration. Table 2 is a compilation of all results, characterizing the absorption of the compounds investigated in the field of the N-H-binding valency oscillations. The data obtained permit the following conclusions to be drawn: the composite bands of the *cis*- and *trans*-configuration are generated under the influence of the crystal lattice. If in the field of the valency oscillations but one band becomes clearly visible, this is considered as a proof that there is an even *trans*-configuration. If in solutions this one band remains unchanged in spite of another scission, then the existence of this band is only a proof for an even *trans*-configuration, if the solvent does not exercise any influence on the interaction between the metal-atom and the donor atoms. There are 2 figures, 2 tables, and 8 references, 2 of which are Soviet.

ASSOCIATION: Kafedra organicheskoy khimii (Chair for Organic Chemistry)

SUBMITTED: July 25, 1958  
Card 3/3



24(7),7(3)

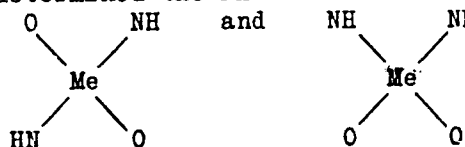
SOV/48-23-10-10/39

AUTHORS: Kazitsyna, L. A., Lokshin, B. V., Polstyanko, L. L., Terent'yev, A. P.

TITLE: The Infrared Spectra of Some Innercomplex Compounds Within the Range of NH-Valence Oscillations

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 10, pp 1196-1198 (USSR)

ABSTRACT: The authors investigated a number of innercomplex metal compounds (coordinate number 4) by means of infrared spectra within the range 3000 - 3500  $\text{cm}^{-1}$  and determined the NH-valence oscillation frequency in the formations



The formulas for the structure of the investigated compounds are given (Me denotes the metal). The substance to be investigated was prepared as vaseline paste; measurements were carried out by using a spectrophotometer of the type IKS-11. The results are shown by a table. Figures 1 - 3 show the characteristic shape of the spectra of three compounds. The data given by the table are

Card 1/2

The Infrared Spectra of Some Innercomplex Compounds  
Within the Range of NH-Valence Oscillations

SOV/48-23-10-10/39

then discussed. One or several bands may occur in the spectrum. If one band occurs in the spectrum of an innercomplex compound containing an NH-group in connection with NH-valence oscillations, this may be considered to prove the existence of a plane trans-structure of the complex. The non-existence of a splitting-up in the spectra of solutions and the occurrence of only one band may be considered to prove the existence of a trans-structure only if the solvent exercises no essential influence upon the interaction between the metal and the donor atoms. There are 3 figures, 1 table, and 4 references, 1 of which is Soviet.

Card 2/2

5(3)

AUTHORS:

Nesmeyanov, A. N., Academician, SOV/20-125-5-23/61  
Kazitsayna, L. A., Lokshin, B. V., Vil'chevskaya, V. D.

TITLE:

Infrared Spectra of Some Alkyl- and Arylferrocenes  
(Infrakrasnyye spektry nekotorykh alkil- i arilferrotsenov)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 5,  
pp 1037-1040 (USSR)

ABSTRACT:

It was proved earlier that frequencies within the range of 1000 and 1100  $\text{cm}^{-1}$  in the infrared spectrum of ferrocene derivatives may be indicative of the presence of a cyclopentadienyl ring free from substituents (Refs 1, 2). The next problem to be solved is the determination of the mutual position of the substituting groups in a ring of the homoannular disubstituted ferrocene derivatives. The authors succeeded in obtaining 1.2.- and 1.3-isomers according to these spectra for acetyethyl- and ethyl-dimethyl ferrocene. However, the attempts which were made to use the derived rules for other homoannular disubstituted ferrocenes failed. The authors investigated the infrared spectra of

Card 1/3

## Infrared Spectra of Some Alkyl- and Arylferrocenes

S07/20-125-5-23/64

some substituted ferrocenes within the range of the NaCl-prism (Table 1). It was reported (Ref 1) that the spectra of two diethyl-ferrocenes ( $n_D^{20}$  1.5820 and 1.5847) differ only by the frequency  $1277 \text{ cm}^{-1}$ , which is observed in one spectrum only. Since either spectrum exhibits absorption within the range of  $1000$  and  $1100 \text{ cm}^{-1}$  (which indicates a free cyclopentadienyl ring), their structure has to be either 1.2- or 1.3-diethyl-ferrocene. Absorption within the range of  $1280 \text{ cm}^{-1}$  is observed in all monosubstituted alkyl-ferrocenes (except methyl-ferrocene), phenyl-ferrocene, and all alkyl- and aryl-ferrocenes disubstituted in various rings, and, finally, in homoannular di-isopropyl and di-tert-butyl-ferrocenes. In the case of the last-mentioned substances a 1.3-structure is more probable, due to steric considerations. However, absorption within the range of  $1280 \text{ cm}^{-1}$  is lacking in constantly 1.2-substituted homoannular ferrocenes (substances Nr 11 - 13, Table 1), in which a 1.2-position of the substituents results from their

Card 2/3

Infrared Spectra of Some Alkyl- and Arylferrocenes

SOV/20-125-5-23/61

bicyclic structure. The synthesis of the compounds 11 and 12 was given earlier (Ref 9). The synthesis of Nr 13 is described in the present paper. The data discussed here render the assumption probable that the absorption within the range of  $1280\text{ cm}^{-1}$  is owing to the presence of two carbon atoms of ferrocene. These atoms are not substituted and adjacent to a carbon atom of ferrocene to which a hydrocarbon radical is bound. The occurrence of these bands in the spectra of homoannular disubstituted ferrocenes indicates the 1,3-position of the substituents. There are 1 table and 12 references, 8 of which are Soviet.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR  
(Institute of Elemental-organic Compounds of the Academy of Sciences, USSR)

SUBMITTED: January 30, 1959

Card 3/3

5 (3)

AUTHORS:

Kazitsyna, L. A., Lokshin, B. V.,  
Nesmeyanov, Nik. A.

SOV/20-127-2-27/70

TITLE:

The Infrared Spectra of Ferrocenes. On the Reciprocal Influence  
of Substituents in the Ferrocene Molecule

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 2, pp 333-336 (USSR)

ABSTRACT:

Recently it was proved that the reciprocal influence of the substituents is passed on through the entire ferrocene system from ring to ring (Refs 1-3). The authors drew this conclusion on the strength of the comparison of the dissociation constants of the ferrocene-carboxylic acids of the type  $Y-C_5H_4-Fe-C_5H_4-COOH$ . The substituents form with respect to their effect the following series:  $C_4H_9 < C_2H_5 < H < COOCH_3 < COCH_3 < CN < SO_2NH_2 < SO_2F$ . The substituents on the right side of the hydrogen increase the dissociation constant of hydroxyl, whereas the left ones reduce the latter. The reciprocal influence of the substituents can be expressed in the ferrocene system by the frequency change of a substituent in one ring under the influence of different substituents in the second ring of the molecule. Since the frequencies of the carboxyl group are very characteristic the authors could

Card 1/4

The Infrared Spectra of Ferrocenes. On the Reciprocal  
Influence of Substituents in the Ferrocene Molecule

SOV/20-127-2-27/70

carry out spectroscopic investigations for the above-mentioned series in the infrared range also for ferrocene carboxylic acids which have unequal substituents in the other cyclopentadienyl ring. Table 1 shows the obtained spectra. The infrared spectra were absorbed by the solution in order to eliminate additional effects caused by intermolecular interaction. The authors were forced to use chloroform because of the low solubility of most of the compounds investigated, in spite of the favorable properties of tetrachloromethane. Table 2 shows the oscillation frequencies of the C=O group in solutions and in solid state. They show the change of the frequency of the carbonyl group in the transition from solid state to solution. The division of the frequencies in solid state is neutralized in the solution, although one of the carboxyl bands is apparently blurred. This phenomenon is assumed to be caused by an interaction with the solvent. The comparison of the frequencies of the C=O group shows that the frequency of the carbonyl group is considerably changed under the influence of the substituents in the second ring. Furthermore it follows from table 2 that the increase of the electrophilic property of the substituents increases the frequency of the C=O bond of carboxyl

Card 2/4

The Infrared Spectra of Ferrocenes. On the Reciprocal Influence of Substituents in the Ferrocene Molecule SOV/20-127-2-27/70

(and of carbomethoxyl) which is located in the other ring of the ferrocene molecule. The substituents are on the strength of this placed in two different series with respect to the influence on carboxyl and on carbomethoxyl. These series agree well with each other and with the series initially mentioned in the abstract. An exception is the position of the absorption bands of the not substituted acids and esters ( $1682^{-1}$ ,  $1712\text{ cm}^{-1}$  respectively), i.e. the hydrogen is located in the series between the groups  $\text{CH}_2\text{CO}$  and  $\text{CH}_2\text{OOC}$ , whereas in the initially mentioned series it was located between the alkyls and the  $\text{COOCH}_3$  group. This could not be explained for the time being. The influence of the substituents is passed on from ring to ring in spite of this divergence. There are 2 tables and 3 Soviet references.

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

Card 3/4



MAYENTS, L.S.; LOKSHIN, B.V.; SHALTUPER, G.B.

Vibrational spectra of ferrocenes. Part 1. Calculation  
of normal vibrations of the cyclopentadiene ring of  
ferrocene. Opt. i spektr. 13 no.3:317-323 S '62. (MIRA 15:9)  
(Iron)  
(Cyclopentadiene--Spectra)

KAZITSYNA, L.A.; LOKSHIN, B.V.; GLUSHKOVA, O.A.

Determination of the nitrile group from infrared spectra.  
Aminonitrile hydrochlorides. Zhur.ob.khim. 32 no.5:1391-1395  
My '62. (MIRA 15:5)  
(Nitriles--Spectra)

LOKSHIN, B.V.; PISKUNOV, A.K.; KAZITSYNA, L.A.; SHIGORIN, D.N.

Investigation of the structure of certain inner-complex compounds by means of electron paramagnetic resonance. Dokl. AN SSSR 143 no.4:867-870 Ap '62. (MIRA 15:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
Predstavleno akademikom A.N.Nesmeyanov,m.  
(Complex compounds—Spectra)

S/048/63/027/001/025/043  
B108/B186

AUTHORS: Lokshin, B. V., Piskunov, A. K., Kazitsyna, L. A., and Shigorin, D. N.

TITLE: Investigation of the structure of some chelate compounds by means of electron paramagnetic resonance.

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 27, no. 1, 1963, 75-77

TEXT: The e.p.r. spectra of several copper complexes formed by the alkyl- and aryl imines of salicyl aldehyde, o-oxy acetophenone, and  $\beta$ -oxy naphthaldehyde in the form of powders and solutions in chloroform were studied. The powder samples displayed one single asymmetric absorption band and the solutions showed a hyperfine structure (three lines). This splitting is due to the interaction of the unpaired 3d electron of copper with the nucleus of the copper atom (nuclear spin 3/2). An additional hyperfine splitting into five lines was observed in the case of copper o-oxy acetophenone iminate, which is due to interaction of the unpaired electron with two equivalent nitrogen atoms ( $J = 1$ ). This could  
Card 1/2.

Investigation of the structure, ...

S/048/63/027/001/025/043  
B108/B186

not be resolved with the other compounds, but was also inferred from the dependence of the distance between the split lines on the structure of the groups around the Cu atom (ligand). The width of the e.p.r. lines of the solid compounds depends on the exchange interactions between the paramagnetic particles in the crystal. As the substituent increases, the volume of the molecule and their steric hindrance of close packing also increase. This leads to a reduced volume interaction and, in the case of equivalent packing of the paramagnetic particles in the crystal, to a narrowing of the e.p.r. lines. There are 2 figures and 1 table.

ASSOCIATION: Khimicheskiy fakul'tet Moskovskogo gos. universiteta im. M. V. Lomonosova (Chemical Branch of Moscow State University imeni M. V. Lomonosov)

Card 2/2

LOKSHIN, B. V.

Dissertation defended for the degree of Candidate of Chemical Sciences at the Institute of Elemento-organic Compounds in 1962:

"Investigation of Several Intracomplex Compounds Using Spectroscopic Methods."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

L 22750-66 EWT(m)/EWP(j)/I LJP(c) WH/EM  
ACC NR: AP6010109 (A) SOURCE CODE: UR/0190/66/008/003/0455/0460

AUTHORS: Frunze, T. H.; Korshak, V. V.; Baranov, Ye. L.; Lokshin, B.V.

ORG: Institute of Organoelemental Compounds, AN SSSR (Institut elemen-  
toorganicheskikh soyedineniy AN SSSR)

TITLE: Copolymerization of styrene with N-methacryloylcaprolactam in  
the presence of ε-caprolactam

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 3, 1966, 455-460

TOPIC TAGS: caprone, styrene, copolymerization, copolymer, chain  
polymer, monomer

ABSTRACT: The copolymerization of styrene with N-methacryloylcapro-  
lactam (MACL) has been investigated. The optimum copolymerization  
conditions were established. The empirical dependence of the MACL in  
the copolymer on the amount in the feed mixture was found. The re-  
activities of these monomers during copolymerization in ε-caprolactam  
solution were determined. The chain transfer constant through ε-capro-  
lactam was determined. It is shown that ε-caprolactam does not con-  
siderably affect the chain growth and that it is a suitable solvent  
for the reaction. Orig. art. has: 3 figures and 5 tables. [Based on  
author's abstract] [NT]

Card 1/2

UDC:66.095.26+678.13+678.675+678.746

L 22750-66

ACC NR: AP6010109

SUB CODE: 07/

SUBM DATE: 30Mar65/  
OTH REF: 003/

ORIG REF: 002/

Card 2/2 *JUR*



L 01265-67 EWT(m)/EWP(j)/T IJF(c) AW/RM

ACC NR: AP6003493

(A)

SOURCE CODE: UR/0020/66/166/001/0118/0121

AUTHOR: Lokshin, B. V.; Mozgova, K. K.; Korshak, V. V. (Corresponding member AN SSSR); Yegorova, Yu. V.

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

TITLE: Graft copolymers. Mechanism of grafting polyethyleneterephthalate (Lavsan)

SOURCE: AN SSSR. Doklady, v. 166, no. 1, 1966, 118-121

TOPIC TAGS: graft copolymer, thermal decomposition, *polyethylene terephthalate*

ABSTRACT: The mechanism of grafting of polymers is discussed. It is concluded that the thermal activation of the process of grafting of a Lavsan film is related to its thermooxidational destruction. Heating of a Lavsan film at 110C for 6 min caused the appearance of new infrared absorption bands at 670, 720, 810, 920, 1620, and 1840 cm<sup>-1</sup>. These changes were due to the formation of hydroxyperoxide, anhydride, and vinyl groups in the process of the thermooxidational destruction. Orig. art. has: 2 fig.

SUB CODE: 07/ SUBM DATE: 20Apr65/ ORIG REF: 005/ OTH REF: 005

Card 1/1 awm

UDC: 541.64

Surgery

CZECHOSLOVAKIA

UDC 617.55-089.65-039.35

LORENC, J.: Surgical Clinic, Medical Faculty of Hygiene, Charles University (Chirurgická Klinika Lékařské Fakulty Hygienické KU), Prague, Head (Prednosta) Prof Dr E. POLAK.

"Indication for Early Urgent Relaparotomy."

Prague, Casopis Lékařů Českých, Vol 105, No 46, 18 Nov 66, pp 1248 - 1250

Abstract [Author's English summary modified]: Basic indications for early urgent relaparotomy are described. A new technique of surgical treatment is discussed; this technique, used at the clinic where the author works, improved the postoperative course of the disease in more than 2/3 of the cases. Early urgent relaparotomy is fully justified in local irreversible disorders occurring after an operation when carried out at the proper time. 4 Tables, 5 Western, 4 Czech references.

1/1

LOKSHIN, B.Ye.

Investigation of reversing mills for cold rolling. Prokat.  
proizv. no.2:5-13 '60. (MIRA 14:11)  
(Rolling mills)

TRET'YAKOV, Andrey Vladimirovich; LOKSHIN, Boris Yevgen'yevich;  
BENYAKOVSKIY, Mark Aleksandrovich; DRUZHININ, N.N., retsenzent;  
DRALYUK, B.N., red.; CHAPAYKINA, F.K., red.izd-va; TURKINA, Ye.D.,  
tekhn.red.

[Specific power consumption in cold rolling] Udel'nyi raskhod  
energii pri kholodnoi prokatke. Sverdlovsk, Gos.nauchno-tekhn.  
izd-vo lit-ry po chernoi i tsvetnoi metallurgii. Sverdlovskoe  
otd-nie, 1961. 83 p. (MIRA 14:6)  
(Rolling (Metalwork))