SOV/122-59-5-20/32

AUTHOR: Kamskov, L.F., Candidate of Technical Sciences

TITLE: On the External Friction in the Cutting of Ductile Metals (O vneshnem trenii pri rezanii plastichnykh metallov)

PERIODICAL: Vestnik mashinostroyeniya, 1959, Nr 5, pp 59-61 (USSR)

ABSTRACT: As in plastic compression it can be assumed in metal cutting that, in a certain zone surrounding the tool/workpiece contact area, where the metal of the chip suffers plastic deformation throughout its volume, the tangential contact shear stresses must be equal to the yield strength in shear. At the interface, where the chip and the tool are in contact, Coulomb friction must be assumed. It follows that in different regions of the contact between the chip and the front flank of the tool, the nature of friction is different. The simultaneous measurement of friction forces and normal pressure forces at the front flank of the tool has been carried out (L.S.Kamskov, "Vestnik mashinostroyeniya", 1958, Nr 6). The use of split tools has made it possible to control the cutting process. Investigations on the free cutting of copper

Card 1/3

On the External Friction in the Cutting of Ductile Metals

are reported. The friction coefficients at the two parts of the tool have been measured and plotted against the cutting speed. It is seen that the front flank friction coefficient rapidly increases with an increase of speed. The friction coefficient of the rear part of the tool depends on the cutting speed to a lesser extent. With increasing depth of cut and width of cut, the region where the friction coefficient does not depend on the cutting speed, increases. Along the length of contact between the chip and the front flank of the tool, regions are observed in which the friction is subject to different laws. In the first zone, the normal stresses exceed the shear stresses. This explains the low values of the friction coefficient. Somewhat further away lies a region where the shear stresses are relatively more important and the friction coefficient increases. Since, in plastic deformation, the magnitude of friction depends on the rate of

On the External Friction in the Cutting of Ductile Metals

deformation, different effects of speed on friction are inevitably observed when large differences exist in the extent of the zone of plastic contact. Lands with a positive or negative front clearance angle create the condition under which the friction in the zone of elastic contact is reduced. Tests carried out in cutting copper with such tools (designed by M.I.Klushin) have shown that the cutting forces can be reduced by a factor of 2 and more. The tool wear at the front edge which forms a little behind the edge also confirms the views expressed here inasmuch as the initial wear crater forms where elastic contact changes into plastic. There are 5 figures and 7 Soviet references

KAMSKOV - L.V.E.

S/187/59/000/04/020/020
E031/E413

AUTHOR: Zolotukhin, V.K.

TITLE: The Scientific-Technical Conference at Kharkov Aviation Institute

PERIODICAL: Izvestiya Vysshikh uchebnykh zavedeniy; Aviatsionnaya tekhnika, 1959, Nr 4, pp 161-165 (USSR)

ABSTRACT: In May 1959, the 16th Conference of Professorial and Teaching Staff took place.

Strength of Aircraft Section.

"On the Theory of Bending of Thin-Walled Columns" by Docent, Candidate of Technical Sciences L.P.Vinokurov;

"The Simulation of Static Experiments on Thin-Walled Structures" by Candidate of Technical Sciences L.A.Kolesnikov and Senior Instructor V.K.Zolotukhin;

"The Bending of Beams Framing an Opening" by Candidate of Technical Sciences L.A.Kolesnikov;

"The Influence of the Rigidity of Ribs and Beams on their Bending" by Assistant M.A.Sheleomov;

"The Calculation of the Bending of Rectangular Plates" by the Discrete Method by Assistant M.P.Petrov;

"The Calculation of Cylindrical Shells" by the Method of Discrete Variables" by Aspirant N.I.Gur'yev.

Engine Construction Technology Section.

"The Choice of a Scheme for a Hydraulic Servo-System for the Automation of Welding Processes" by Assistant V.F.Balatskiy;

"An Investigation of the Process of Polishing by an Abrasive Belt" by Senior Instructor, Candidate of Technical Sciences V.N.Yeremeb;

"The Investigation of the Operation of a Pneumatic-Hydraulic Plant" by Assistant V.K.Bastayevi

"A Static Analysis and Calculation of the Accuracy of the Technological Processes of Machining" by G.M.Rykhkvenko;

"The Automatic Welding of Long Panels" by Candidate of Technical Sciences A.F.Kamakoy;

"Prospects in the Use of Specialized Computers for the Determination of the Optimum Geometry of Cutting Tools" by Docent, Candidate of Technical Sciences V.P.Kocharnovskiy;

"The Spreading of the Experience of Innovators and the Classification of Organizational-Technical Measures in Machine Construction" by Senior Instructor M.M.Apanovich;

"Features of Measurable Abrasion of a Cutting Tool in Fine Sharpening" by Assistant V.N.Malikov;

"An Investigation of the Process of Compression at High Velocities of Deformation" by Docent, Candidate of Technical Sciences A.F.Bayev;

"The Standardization of Vibration Effects on the Human Organism in Aircraft Production" by Senior Instructor V.D.Ivanov.

Theory and Construction of Aircraft Engines and Propellor-Driven Machines Section. "The Investigation of the Flow Between the Inlet and Outlet Valves of a Turbine" by Instructor, Candidate of Technical Sciences V.N.Yershov;

"The Variation in the Stage Parameters of an Axial Compressor in Accordance with the Size of the Radial Clearance" by Assistant A.N.Anyutin;

"On the Problem of Non-Stationary Heat Transfer" by Assistant S.D.Prolov;

"The Influence of an Electric Field on the Flame of a Burner" by Senior Engineer P.P.Kostenkov;

"Calculation of the Temperature Compensation of Capacitance Pressure Pick-Ups" by Assistant L.Ya.Antsfyev.

Aerohydrodynamics Section.

"Ideal Hypersonic Flow Round a Body" by Assistant V.I.Kholyavkoi;

"The Control of the Boundary Layer of a Wing by Perforation of the Leading Edge" by Assistant Ya.P.Yershanov;

"The Gas-Hydraulic Analogy and its Application" by Senior Instructor D.A.Dunshtukov;

"The Aerodynamic Investigation of Wing Profiles" for Small Reynolds Numbers" by Engineer Yu.F.Ulik.

Card 5/11

Card 6/11

Card 7/11

S/135/62/000/006/009/014
A006/A106

1.2300

AUTHORS: Tumarkin, M. B., Kamskov, L. F., Candidates of Technical Sciences, Balatskiy, V. V., Engineer, Manzhos, P. S.

TITLE: Hydraulic servomechanism to direct an automatic welding unit along the weld

PERIODICAL: Svarochnoye proizvodstvo, no. 6, 1962, 28 - 30

TEXT: A hydraulic servomechanism was developed for the automatic motion of a welding unit along a cable (Figure 1). A guide roll, sliding along the cable, registers deviations of the welding torch and transmits them to control valve 4, which reestablishes the correct position of the torch with the aid of pneumatic cylinder 1. To one side the torch moves under the effect of oil supplied under pressure P_1 to the left-hand hollow of the cylinder; to the other side its motion is activated by spring 3. The welding unit moves along the weld on girder guides. The seam can be located parallel or non-parallel to the guides. In the latter case, when the track motion is connected with the turning of the welding torch, the cable must be adjusted with respect to the seam with some correction. The proposed design of the servomechanism can be used in weld-

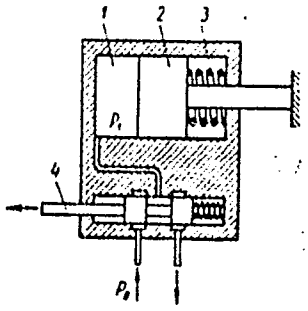
Card 1/2

Hydraulic servomechanism to...

ing of long straight or shaped joints. Tests showed stable operation of the mechanism. The motion speed of the system increases with a greater oil presssure. Maximum speed can be attained (up to 1,000 mm/min) at a pressure of P_o = 25 ÷ 30 kg/cm^2. There are 4 figures.

ASSOCIATION: Khar'kovskiy aviatsionny institut (Khar'kov Aviation Institute)

Figure 1.
Schematic diagram of a hydraulic servomechanism



Card 2/2

TUMARKIN, M.B., kand.tekhn.nauk; KAMSKOV, L.F., kand.tekhn.nauk;
BALATSKIY, V.V., inzh.; MANZHOS, P.S.

Hydraulic servomechanism for guiding automatic welding machines along a weld joint. Svar. proizv. no.6:28-30 Je '62.
(MIRA 15:6)

1. Khar'kovskiy aviatsionnyy institut.
(Electric welding) (Hydraulic control)

Kamskov S Ya.

PHASE I BOOK EXPLOITATION 247

Chelyabinsk. Politekhnicheskiy institut.

Raschet i konstruirovaniye mashin; sbornik statey (Design and Construction of Machines; Collection of Articles) Moscow, Mashgiz, 1957. 93 p. (Its: Sbornik, vyp. 10) 5,000 copies printed.

Reviewers: Kamskov, S. Ya., Mogil'nitskiy, I. Yu., Kharitonchik, Ye.M., Candidates of Tech. Sciences; Ed.: Balzhi, M. F., Candidate of Tech. Sciences; Chief Ed. of Uralo-sibirskoye otdeleniye MASHGIZA: Kravtsov, V. S.

PURPOSE: This book is intended for engineers, scientists, and technical personnel.

COVERAGE: This is a collection of articles covering the scientific research work conducted by the Chelyabinsk Polytechnic Institute on the problems of design and construction of machines and equipment. The articles deal with the following subjects: the problem of more economic automobile engine fuel consumption, analysis of wear characteristics

Card 1/9

in crankshaft journals and bearings, analysis of errors in the indicator diagram, hydraulic radial turbine performance characteristics at various speed, new methods for measuring power, integration of differential equations in lubricant flow analysis, and the techniques used in designing gear transmissions.

TABLE OF CONTENTS:

This article represents the first part of a complete study made by the author on the problem of errors in diagrams obtained by electro-pneumatic indicators. The author discusses general problems connected with the measuring of temperature changes of combustion gases in a cylinder during the various processes in a cycle. He states that at the present time there is no practical method for direct recording of temperature changes in a cylinder. These changes must be determined from the characteristics of the state of the

KAMSKOV, Yermolay Simonovich; GNEDASH, G.N., retsenzent; KRISHTAL', L.I., red.; HOBROVA, Ye.N., tekhn. red.

[Principles of accounting and analysis in railway economic units] Osnovy bukhgalterskogo ucheta i analiza v khozedinitsakh zheleznykh dorog. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1961. 99 p. (MIRA 14:10)
(Railroads—Accounts, bookkeeping, etc.)

ACC NR: AP7005576 (A) SOURCE CODE: UR/0145/66/000/011/0168/0172

AUTHOR: Kamsyuk, M. S. (Aspirant)

ORG: none

TITLE: Dimensional wear of electrodes during electroerosion machining

SOURCE: IVUZ. Mashinostroyeniye, no. 11, 1966, 168-172

TOPIC TAGS: machining, electroerosion machining, surface finishing, metalworking, metal surface

ABSTRACT: A description is given of the experimental device for calculating the magnitude of operating pulses of a technological current on different sections of the surface during its electroerosion machining. The basic pattern is given of the distribution of the current density on the machinable surface and analytical derivations are drawn which explain the process of cavity formation in the blank and the profile distortion of the electrode tool due to its dimensional wear. The paper was presented by Professor Korsakov, V. S., Doctor of technical sciences, Moscow Higher Technical School im. N. E. Bauman, 08 Mar 65. Orig. art. has: 3 figures and 5 formulas. [Translation of author's abstract] [NT]

SUB CODE: 13/SUBM DATE: 08Mar65/ORIG REF: 002/

Card 1/1 UDC: 621.3.035.2

KAMSYUK, Stepan Andreyevich, polkovnik; BELANOVSKIY, A.V., polkovnik, redaktor; [illegible], N.P., tekhnicheskiy redaktor

[Organizing soldiers' leisure in camp] Organizatsiia dosuga voinov v lageriakh. Izd. 2-oe, perer. Moskva, Voen.izd-vo M-va obor. SSSR, 1957. 71 p. (MIRA 10:7)
(Soldiers--Recreation)

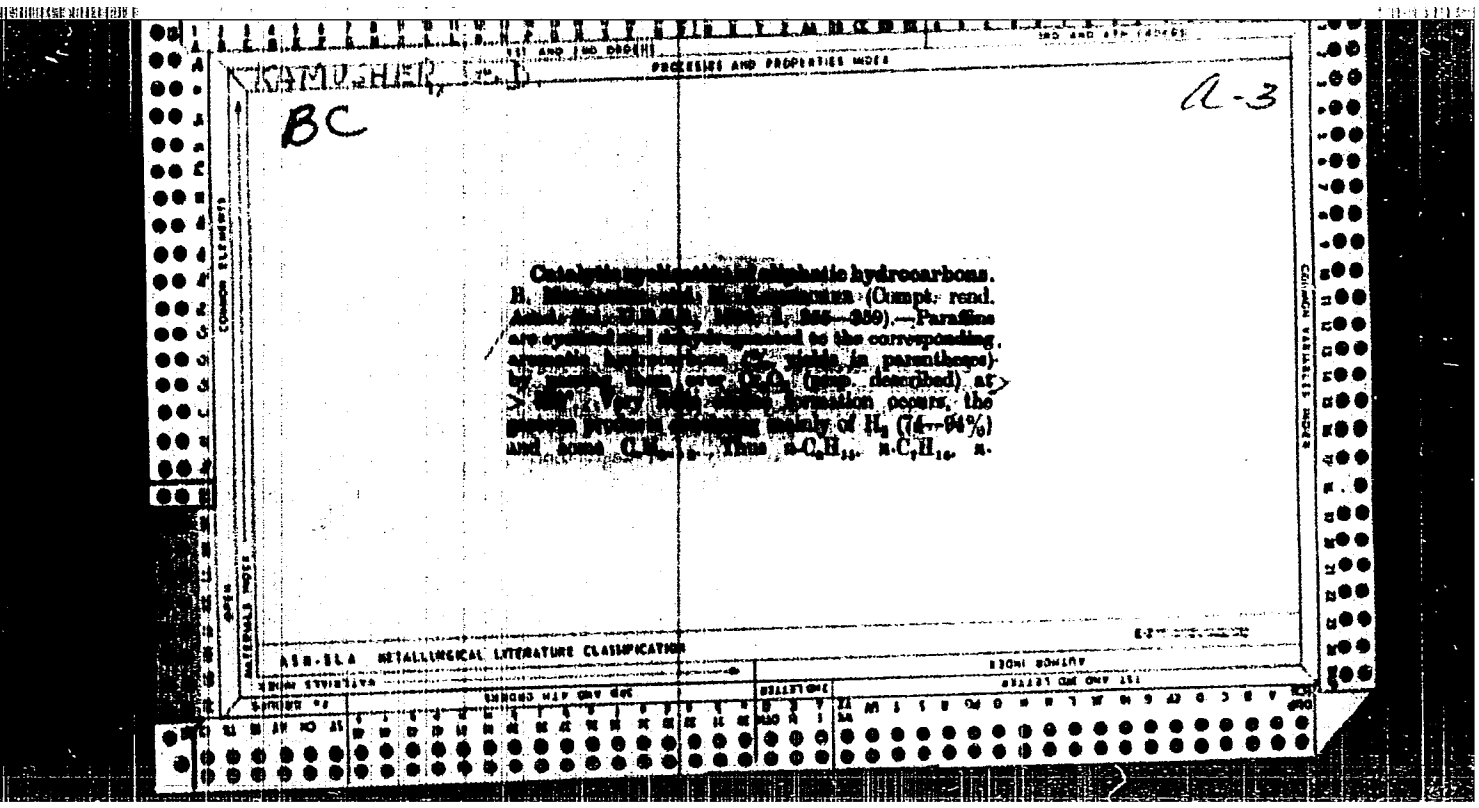
KAMSYUK, S.A., polkovnik; SURIN, P.I., polkovnik; VOSTOKOV, Ye.I., polkovnik, otv.red.; SMIRNOVA, R.P., red.; KRASAVINA, A.M., tekhn.red.

[Universities of culture for Soviet troops; methodological and bibliographical materials] Universitety kul'tury dlia sovetskikh voinov; metodicheskie i bibliograficheskie materialy. Moskva, Voen.izd-vo M-va obor.SSSR, 1960. 94 p. (MIRA 13:4)

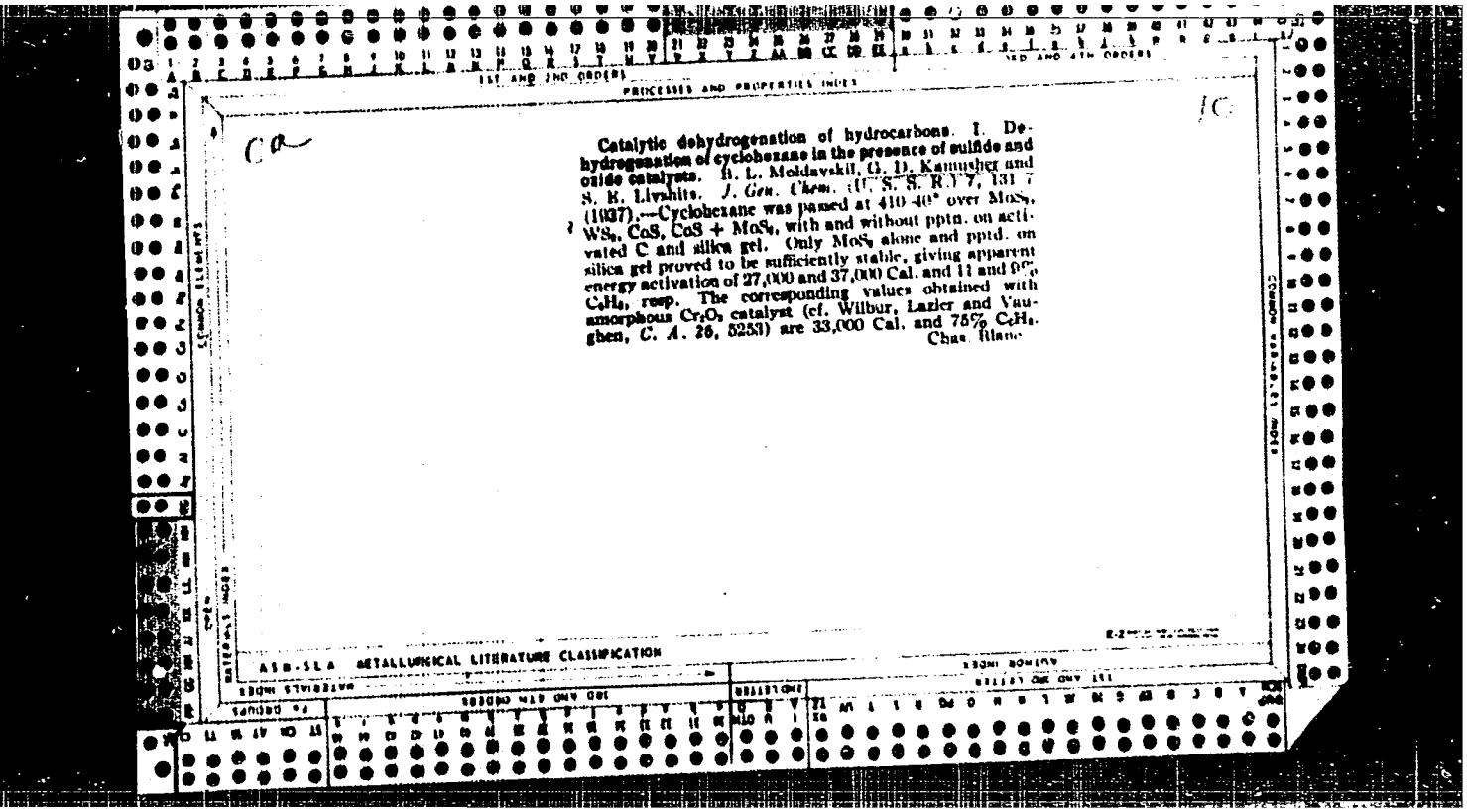
1. Russia (1923- U.S.S.R.) Glavnoye politicheskoye upravleniye Sovetskoy Armii i Voyenno-Morskogo Flota. Upravleniye propagandy i agitatsii.
(Russia--Army--Education, Nonmilitary)

KAMTARDZJOEV, Petur, arkh.

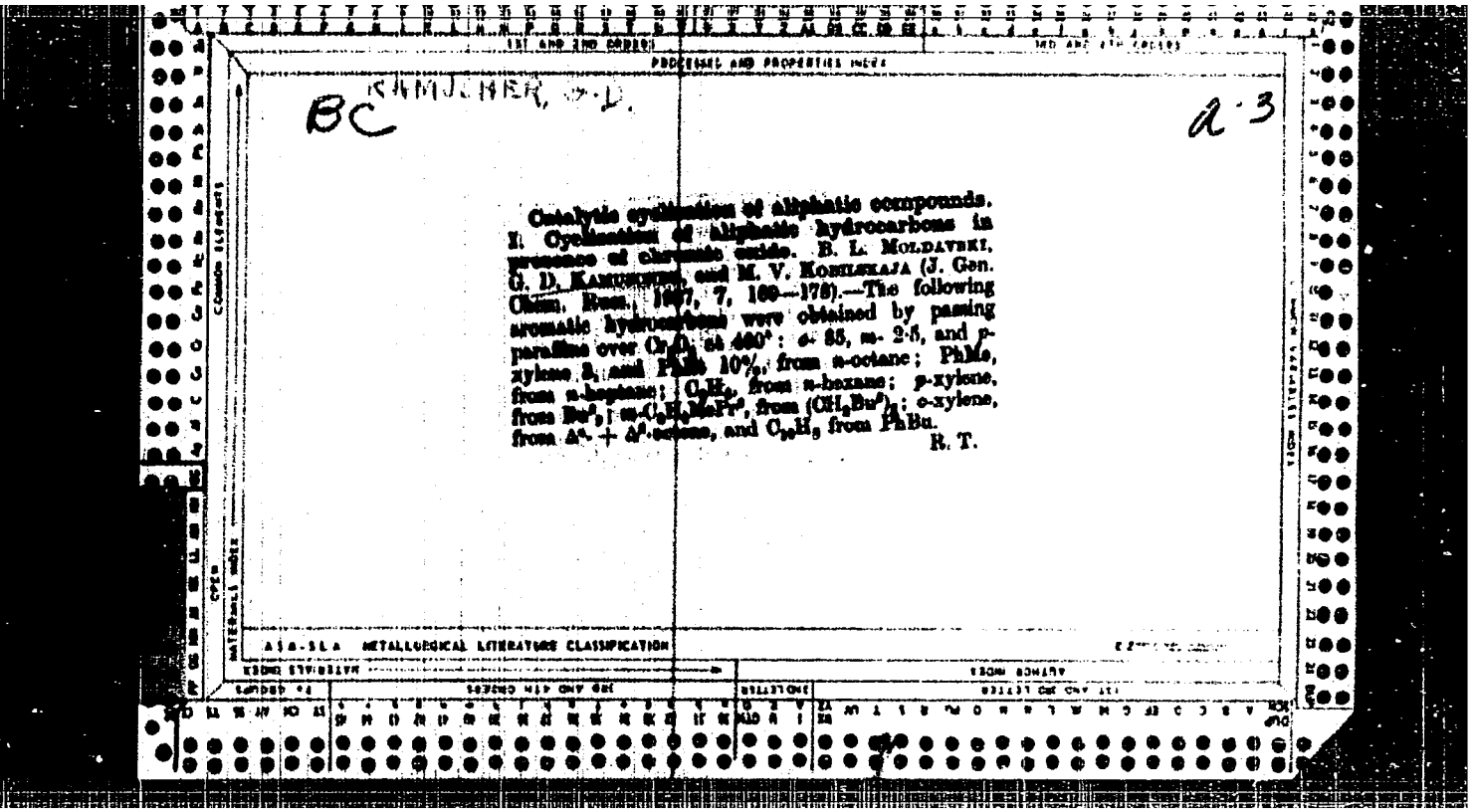
Some expectations related to the preliminary project of the regional planning of the Black Sea. Tekh delo 13 no.430:2-3 9 Je '62.



Catalytic [illegible] aliphatic hydrocarbons.
H. [illegible] (Compt. rend. [illegible], 865—869).—Paraffins are [illegible] to the corresponding, [illegible] yields (in parentheses) [illegible] over Cr_2O_3 (gel, described) at [illegible] formation occurs, the [illegible] consisting mainly of H_2 (74—94%) and some C_nH_{2n} [illegible] $n\text{-}C_5H_{12}$, $n\text{-}C_7H_{16}$, n-



Catalytic dehydrogenation of hydrocarbons. I. Dehydrogenation of cyclohexane in the presence of sulfide and oxide catalysts. B. L. Moldavskii, G. D. Kamusher and S. R. Livshits. *J. Gen. Chem.* (U. S. S. R.) 7, 131-7 (1937).—Cyclohexane was passed at 410-40° over MoS_2, WS_2, CoS, CoS + MoS_2, with and without pptn. on activated C and silica gel. Only MoS_2 alone and pptd. on silica gel proved to be sufficiently stable, giving apparent energy activation of 27,000 and 37,000 Cal. and 11 and 9% C_6H_6, resp. The corresponding values obtained with amorphous Cr_2O_3 catalyst (cf. Wilbur, Lazier and Vaughen, *C. A.* 26, 5233) are 33,000 Cal. and 75% C_6H_6.
Chas. Blanc

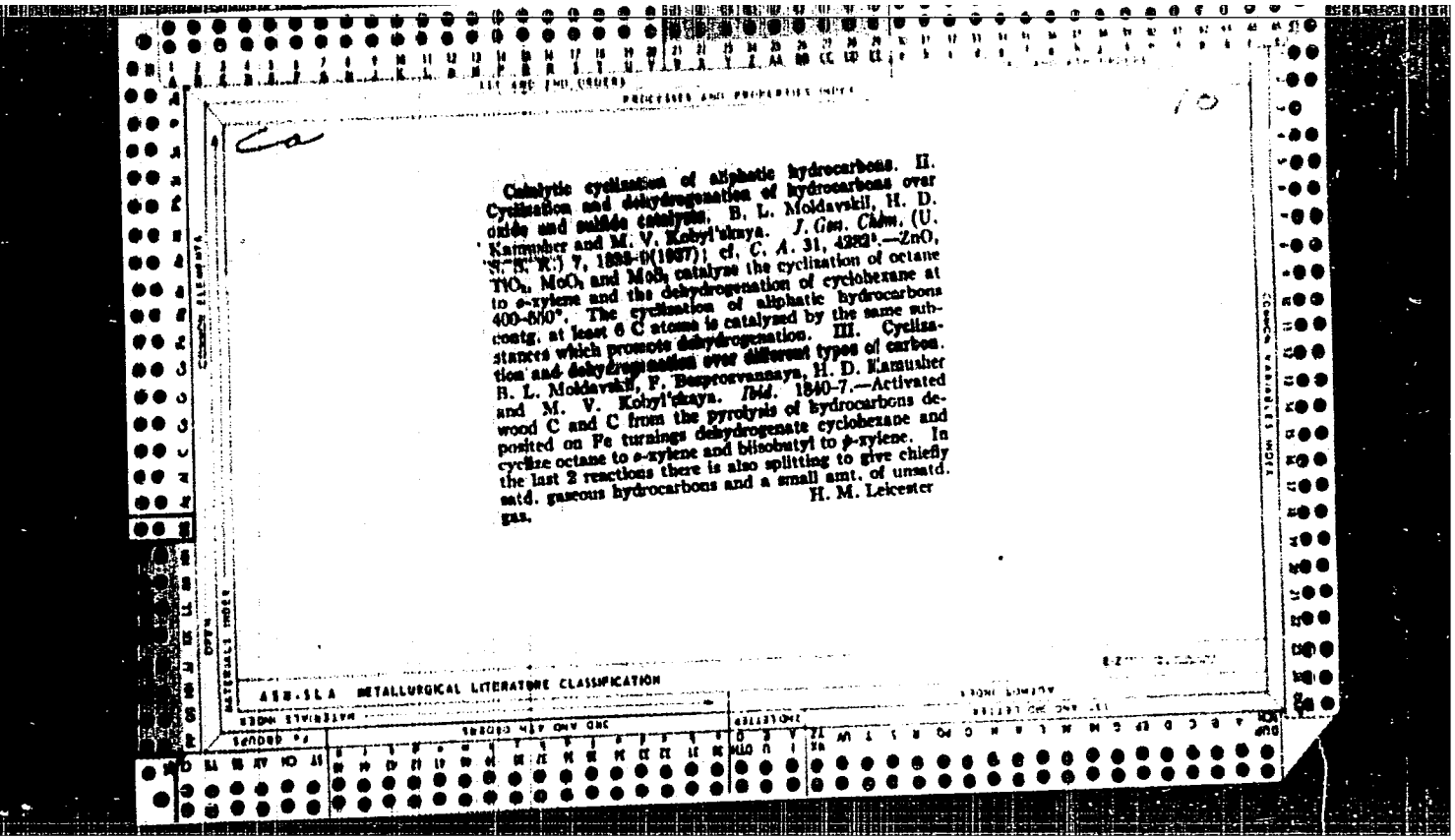


BC SAMUILER, G.D.

a-3

Catalytic cyclization of aliphatic compounds. II. Cyclization of aliphatic hydrocarbons in presence of chromic oxide. B. L. Moldavski, G. D. Kamuiler, and M. V. Koshelkaja (J. Gen. Chem. Russ., 1937, 7, 169—178).—The following aromatic hydrocarbons were obtained by passing paraffins over Cr_2O_3 at 460°: o- 85, m- 2·5, and p-xylene 3, and PhMe 10%, from n-octane; PhMe, from n-heptane; C_6H_6, from n-hexane; p-xylene, from Bu^{β}_2; m-$(C_6H_3Me^{\alpha}Et^{\beta})$, from $(CH_2Bu^{\beta})_2$; o-xylene, from Δ^{α}- + Δ^{β}-octene, and $C_{10}H_8$ from PhBu.

R. T.



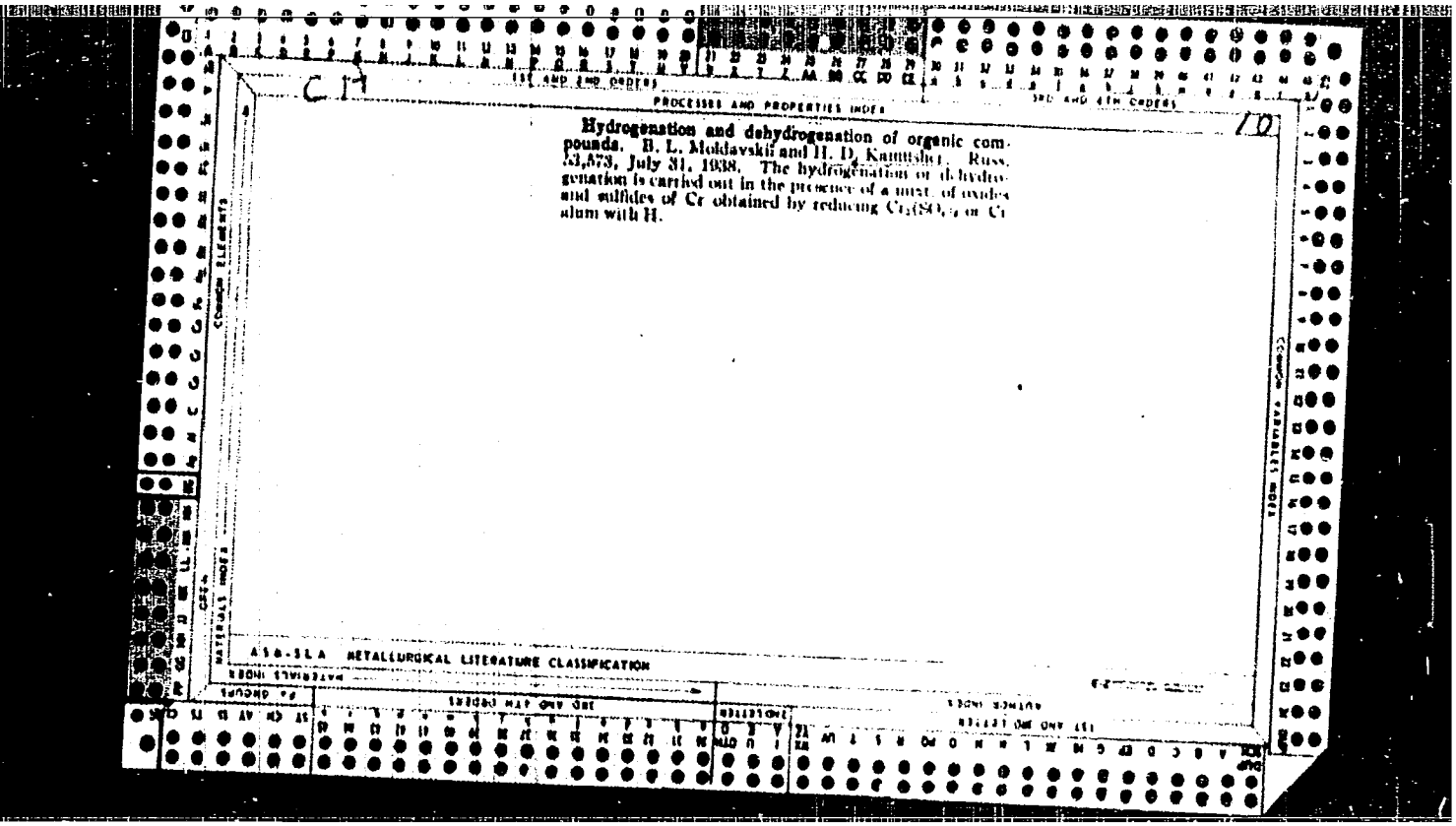
Catalytic cyclization of aliphatic hydrocarbons. II. Cyclization and dehydrogenation of hydrocarbons over oxide and sulfide catalysts. B. L. Moldavskii, H. D. Kamusher and M. V. Kobyl'skaya. *J. Gen. Chem.* (U. S. S. R.) 7, 1888-9(1937); cf. *C. A.* 31, 4282⁸.—ZnO, TiO_2, MoO_3 and MoS_2 catalyze the cyclization of octane to *o*-xylene and the dehydrogenation of cyclohexane at 400–600°. The cyclization of aliphatic hydrocarbons contg. at least 6 C atoms is catalyzed by the same substances which promote dehydrogenation. III. Cyclization and dehydrogenation over different types of carbon. B. L. Moldavskii, F. Bazprozvanaya, H. D. Kamusher and M. V. Kobyl'skaya. *Ibid.* 1840–7.—Activated wood C and C from the pyrolysis of hydrocarbons deposited on Fe turnings dehydrogenate cyclohexane and cyclize octane to *o*-xylene and bisobutyl to *p*-xylene. In the last 2 reactions there is also splitting to give chiefly satd. gaseous hydrocarbons and a small amt. of unsatd. gas.

H. M. Leicester

KAMOUCHERE, G.

"Cyclisation catalytique des composes de la serie grasse. Comm. III." Moldawskij, B., Kamouchere, G. et Kobilskaja, M., et Besprozwannaja, G. (p. 1840)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii). 1937, Volume 7, No. 13.



S/065/60/000/009/004/006/XX
E030/E112

AUTHORS: Maslyanskiy, G.N., Bursian, N.R., Kamusher, G.D., Barkan, S.A., and Shuvayev, Ye.S.

TITLE: Catalytic Reforming of Benzine Fractions on a Platinum Catalyst

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1960, No. 9, pp. 1-9

TEXT: Full-scale plant studies have been conducted on reforming Eastern and Southern crudes on a platinum/alumina catalyst. Rumanian, Kirkuk, and Egyptian crudes have also been investigated. Two types of plant have been developed with reactor pressures around 20 and 40 atmospheres respectively, the former being better for producing high octane spirit and aromatics for organic synthesis. With a 60-120 °C straight-run fraction at 465 °C, the aromatic yield falls from 27% weight to 22%, and at 505 °C from 36 to 32%, on increasing the pressure from 20 to 40 atmospheres. However, coking of the catalyst and deactivation by sulphur compounds become troublesome at the lower pressures, especially with C_8 and heavier fractions. If the sulphur content

Card 1/3

S/065/60/000/009/004/006/XX
E030/E112

Catalytic Reforming of Benzine Fractions on a Platinum Catalyst

of the crude rises from 0.01% to 0.27%, the octane number falls from 77.3 to 70.3, the aromatic yield falls 1.7 times, and the gas yield increases 1.5 times. The sulphur content of the feedstock should be less than 0.02%, especially at 20 atmospheres operation. For low sulphur crudes (0.05-0.7% sulphur feed), the H_2S is removed from the circulating gas with ethanolamine, and for high sulphur feeds (greater than 0.7% weight sulphur) hydrofining is necessary. The catalyst can be regenerated by oxidation for about 30 hours at 300-450 °C, with 0.8-1.5% of oxygen in the gas which circulates at 10-20 atmospheres. After subsequent regeneration, the aromatic yield falls by 30-50%. Oxidation at higher temperatures (around 550 °C) is impracticable because the catalyst becomes deactivated. The most important crude factor determining the yield of high octane spirits and aromatics is the naphthene content. Southern crudes (containing about 50% naphthenes) yield 1.5 times more aromatics than Eastern crudes (containing about 25% naphthenes), the difference becoming greater as higher boiling feedstocks are used. At 80 ON severity, the 85-180 °C cuts yields 83% motor

Card 2/3

26518
S/065/61/000/008/001/009
E030/E135

11.0100

AUTHORS: Maslyanskiy, G.N., Bursian, N.P., Kamusher, G.D., Potapova, A.A., Garanin, I.L., and Chernikov, N.V.

TITLE: Some technological points in catalytic reforming.

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1961, No.8, pp. 1-8

TEXT: Some very important principles in reforming have been established at a pilot plant specially constructed by Lengiprogaz on the basis of data supplied by VNIIneftekhim, and operated over six years. Since the reforming process is highly endothermic, laboratory conditions, which are approximately isothermal, cannot adequately simulate the adiabatic plant-scale conditions. The pilot plant is conventional, with three successive identical reactors, 160 mm diameter and 3100 mm high. Feed can enter at 20 to 50 atmospheres, and the reactors are maintained at 500-525°C. The first three experiments, lasting six months each, used Eastern crudes with about 25% naphthenes and no catalyst regeneration; the fourth used Il'skiy crude, with about 40-50% naphthenes and oxidative regeneration. In the first experiments, the reactor

Card 1/ 3

Some technological points in ...

temperature was slowly increased to compensate for the decreasing catalyst activity (Pt catalyst). The Eastern crudes with 0.15% sulphur feed gave benzine with 72 ON (Motor method) but the fourth experiment, with hydrofined material, gave 78 ON. Adiabatically controlled experiments established the activation energies as around 75 kcal/kg. As the asphaltene content rose, the heating effect also rose sharply; it also rose as the sulphur content fell and destructive hydrogenation increased. The temperature drops in the reactors indicated that, for the Eastern crudes, the reaction of aromatization was virtually completed in the second reactor, but this disagreed with the product analysis from the reactors which gave the production of aromatics from stage to stage as about 50, 35 and 15%. Clearly, reaction continued in the last stage, but heat absorption was masked by the increasing exothermic hydrocracking in the third reactor. In the last series of experiments the temperature was probed through each catalyst bed. It was seen that with fresh catalyst and Eastern crudes with 0.15% sulphur, only about 50% of the first stage showed temperature gradients, and the whole of the second stage showed a gradual temperature gradient; one might therefore wish to reduce the charge

Some technological points in ....

in the first reactor, for economy. However, with catalyst ageing, the temperature drop began to be very shallow in about the first 10% of all three reactors, and there were distinct gradients in them all. This showed that the first stage was acting also as a trap for catalyst "poisons", and a large charge was therefore necessary, unless one wished to previously remove the poisons (such as nitrogen, sulphur, and arsenic) by hydrofining, for example. All the results of the investigation concerned fundamental principles which could not have been resolved in laboratory scale experiments.
There are 3 figures and 5 tables.

ASSOCIATION: VNIIneftekhim

Card 3/3

S/065/63/000/002/005/008
E194/E484

AUTHORS: Maslyanskiy, N.G., Zabryanskiy, Ye.I., Kamusher, G.D., Pannikova, R.F.

TITLE: The detonation stability of gasoline produced by catalytic reforming

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.2, 1962, 49-52

TEXT: After a review of the motor and research methods of determining the octane number of gasoline and the meaning of sensitivity, the use of these methods to assess the detonation characteristics of gasoline produced by catalytic reforming is described. The gasolines were produced by reforming fractions 85 to 180 and 105 to 180°C, produced by rectification of straight run gasoline in the Ufimskiy ordena Lenina neftepererabatyvayushchiy zavod (Ufa Order of Lenin Petroleum Refinery). A study was first made of the influence of the aromatic content of the gasoline which was varied by altering the process temperature; raising the aromatics content increased both the octane number and the sensitivity. Tests made with reforming pressures of 20 and 40 kg/cm^2 showed that this variable had very little effect on the

detonation characteristics of the gasoline of given aromatics content. Tests of the influence of reformed gasoline yield on octane number would yield a similar picture, the higher the yield and, therefore, the lower the aromaticity and octane number the lower the sensitivity. The addition of 0.5 ml t.e.l. concentrate P-9 (R-9) per kg gasoline raised both the motor and research octane numbers by about four points. There are 4 figures and 2 tables.

ASSOCIATION: VNIINeftekhim, VNII NP

MASLYANSKIY, G.N.; BURSIAN, N.R.; KAMUSHER, G.D.; BARKAN, S.A.; POTAPOVA, A.A.

Effect of the hydrocarbon and fractional composition of the raw material on the yield and quality of catalytically reformed gasolines. Khim. i tekh. topl. i masel 8 no.4:5-11 Ap '63. (MIRA 16:6)

(Gasoline) (Petroleum—Analysis)
(Cracking process)

MASLYANSKIY, N.G.; ZABRYANSKIY, Ye.I.; KAMUSHER, G.D.; PANNIKOVA, R.F.

Detonation stability of gasolines from catalytic reforming. Khim.i tekh.topl.i masel 8 no.2:49-52 F '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov i Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva.

ACCESSION NR: AP4018071 S/0080/64/037/002/0393/0399

AUTHORS: Maslyanskiy, G.N.; Kamusher, G.D.; Pannikova, R.F.

TITLE: Catalytic reforming of gasoline fractions in the presence of traces of carbon tetrachloride

SOURCE: Zhurnal prikladnoy khimii, v.37, no.2, 1964, 393-399

TOPIC TAGS: gasoline, gasoline fractions, catalytic reforming, aluminoplatinum catalyst, chloro organic compound addition, catalyst stability, octane number, catalyst regeneration, carbon tetrachloride trace

ABSTRACT: In studying the catalytic reforming of gasoline fractions with a catalyst consisting of 0.6% platinum precipitated with aluminum oxide, it was found that the addition of 0.005-0.01% CCl_4 to the crude oil increases the activity of the catalyst. This increase in activity is shown by the increase in octane number of the product (e.g., from 78.5 to 83), the increase in its aromatic hydrocarbon content (46.3 to 47.5%), and the decrease in its yield (from 81.1 to 75.2%). Introduction of very small amounts of organic chlorine compounds to the reac-

Card 1/2

ACCESSION NR: AP4018071

tion zone with the crude oil signigicantly increases stability of the aluminiplatinum catalyst; activity of the catalyst is constant after 120 hours as compared to reduced activity in 20 hours with "pure" crude oil. After oxidation regeneration, the catalyst shows higher catalytic activity if used on crude oil containing traces of CCl_4 (octane number of 85-87 as compared to 82-83 when used with "pure" crude oil). Orig. art. has: 2 tables and 2 figures.

ASSOCIATION: Vsesoyuzniy*y nauchno-issledovatel'skiy neftekhimicheskiy institut (All-Union Petrochemical Scientific Research Institute)

SUBMITTED: 23Jul62 DATE ACQ: 19Mar64 ENCL: 00

SUB CODE: FL NR REF SOV: 009 OTHER: 003

Card 2/2

MASLYANSKIY, G.N.; PANNIKOVA, R.F.; KAMUSHER, G.D.

Production of high-octane catalytic reforming gasolines. Khim. i tekh. topl. i masel 10 no.12:1-6 D '65. (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov.

ACC NR: AP7002624 (A,N) SOURCE CODE: UR/0413/66/000/023/0159/0159

INVENTOR: Maslyanskiy, G. N.; Kamusher, G. D.; Mushenko, V. M.

ORG: None

TITLE: A method of producing a platinum catalyst. Class 12, No. 108268

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 159

TOPIC TAGS: industrial catalyst, platinum, gasoline, aluminum oxide, CATALYTIC REFORMING

ABSTRACT: This Author's Certificate introduces: 1. A method of producing a platinum catalyst for reforming gasoline by treatment of granulated aluminum oxide in a solution of chloroplatinate. To improve the activity and stability of the catalyst, the depth of platinum penetration into the carrier granule (tablet) is controlled by adding certain quantities of organic or mineral acids to the chloroplatinate solution. 2. A procedure for carrying out this method in which the process is accelerated by maintaining a temperature above 20°C.

SUB CODE: 07, 21 / SUBM DATE: 28Jul55

Card 1/1

ACC NR: AP7002623 (A,N) SOURCE CODE: UR/0413/66/000/023/0158/0159

INVENTOR: Maslyanskiy, G. N.; Kamusher, G. D.

ORG: None

TITLE: A method for producing an activated platinum catalyst. Class 12, No. 109630

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 158-159

TOPIC TAGS: industrial catalyst, gasoline, platinum, aluminum oxide, CATALYTIC REFORMING

ABSTRACT: This Author's Certificate introduces: 1. A method for producing an activated platinum catalyst for reforming gasoline. The catalyst contains aluminum oxide as a carrier. Catalytic activity is improved by the simultaneous use of two promoters--silicon and fluorine. These activators are introduced by treating aluminum oxide or hydroxide in fluosilicic acid or silicon tetrafluoride. 2. A modification of this method in which fluosilicic acids are introduced in quantities from 0.2 to 3.0%.

SUB CODE: 07, 21 / SUBM DATE: 23Jul57

Card 1/1

KNORR, KLAUS; LITVIN, Z.V. [translator]; GOLANSKIY, M.M., kand.ekonom.nauk [translator]; KAMUSHER, K.G. [translator]; KAZAKOV, V.M. [translator]; GANTMAN, V.I., kand.yurid.nauk, red.; ZHEREBTSOV, L.P., red.; KONOVALOVA, Ye.K., tekhn.red.

[The war potential of nations] Voennyi potentsial gosudarstv. Moskva, Voen.izd-v M-va obor.SSSR, 1960. 392 p. (MIRA 13:10)
(Armament) (War--Economic aspects)

LODOVNIKOV, V.G., glav. red.; KHRAMELASHVILI, V.N., zam. glav. red.; GOLANSKIY, M.M., red.; DIKANSKIY, M.G., red.; KAMUSHER, K.G., red.; LITVIN, Z.V., red.; FITUNI, L.A., red.; CHERNYSHEV, P.M., red.; SHAPIRO, A.I., red.; SHEVCHENKO, G.N., tekhn. red.; GUSEVA, A.P., tekhn. red.

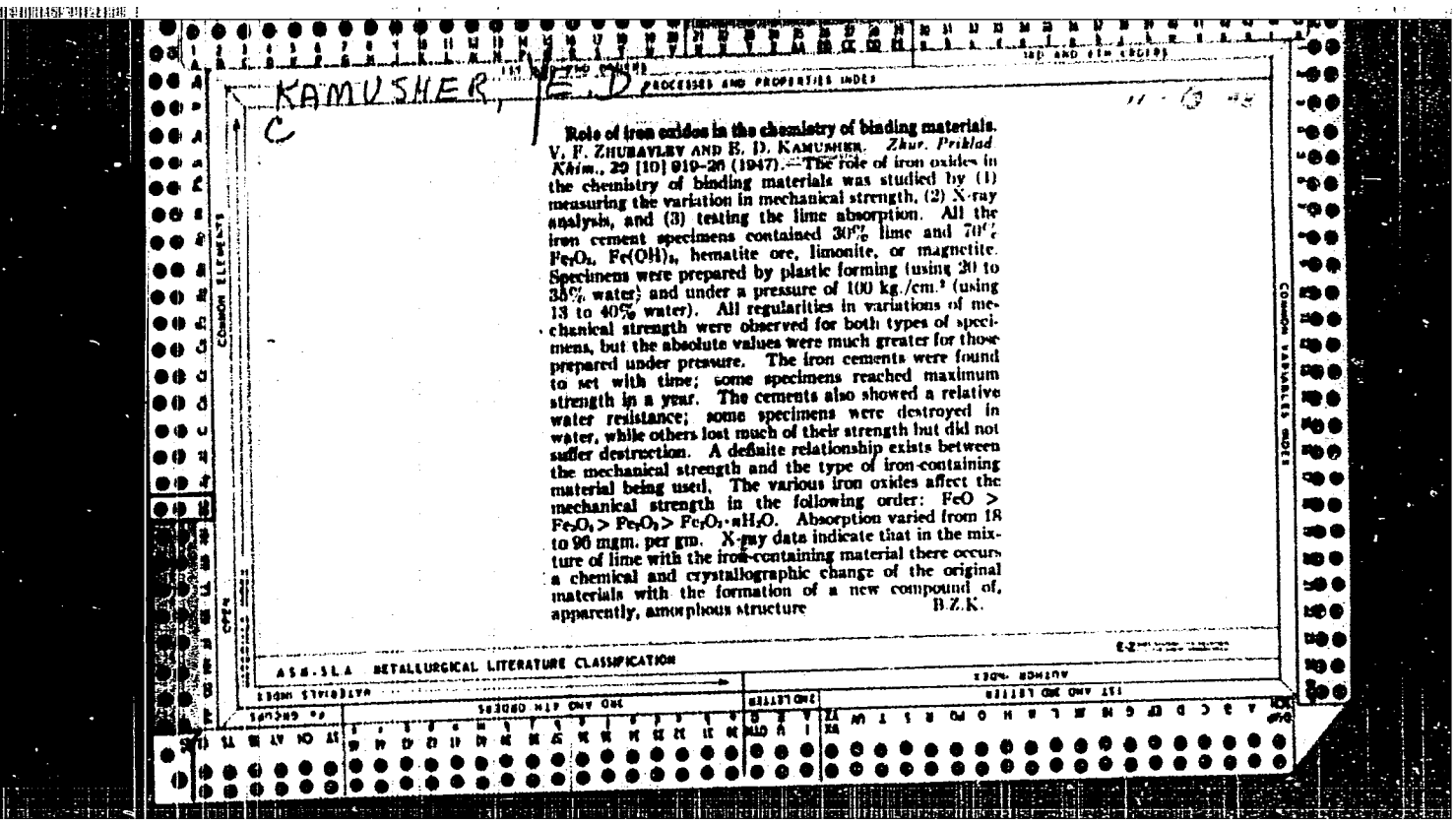
[International economic organizations; handbook] Mezhdunarodnye ekonomicheskie organizatsii; spravochnik. 2., dop. izd. Moskva, Izd-vo Akad. nauk SSSR, 1962. 1108 p. (MIRA 15:2)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhdunarodnykh otnosheniy.
(International agencies--Handbooks, manuals, etc.)

GLADKOV, I.A., doktor ekon. nauk; KOSSOY, A.I., kand. ekon. nauk; VIDONOV, S.S., nauchn. sotr.; SAMOYLOVA, I.D., nauchn. sotr.; GORBUNOV, E.P., kand. ekon. nauk; MAYEVSKIY, I.V., doktor ekonom. nauk; CHEBOTAREV, V.A., kand. ekon. nauk; KAMUSHER, L.N., nauchn. sotr.; STROYEVA, Z.N., nauchn. sotr.; FOMINA, L.V., nauchn. sotr.; VOROB'YEV, Yu.F., kand. ekon. nauk; KRAYEV, M.A., doktor ekon. nauk; KAPLINSKIY, Ye.M., kand. ekon. nauk; LAPINA, S.N., nauchn. sotr.; YAKOVTSEVSKIY, V.N., kand. ekon. nauk; ORLOV, B.P., kand. ekon. nauk; DIKHTYAR, G.A., doktor ekon. nauk [deceased]; PLOTNIKOV, K.N.; MALIKOVA, A.I., nauchn. sotr.; TOVMOSYAN, M.Ye., red.izd-va; POLYAKOVA, T.V., tekhn. red.

[Socialist national economy of the U.S.S.R. in 1933 to 1940] Sotsialisticheskoe narodnoe khoziaistvo SSSR v 1933-1940 gg. Moskva, Izd-vo AN SSSR, 1963. 665 p. (MIRA 16:12)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Sektor istorii narodnogo khozyaystva Instituta ekonomiki AN SSSR (for Stroyeva, Fomina, Kaplinskiy, Lapina). 3. Chlen-korrespondent AN SSSR (for Plotnikov).
(Russia—Economic conditions)



KAMUSHER, E. D.

C

PROCESSES AND PROPERTIES INDEX

Role of iron oxides in the chemistry of binding materials. V. F. ZHUBAVLEV AND E. D. KAMUSHER. *Zhur. Prikład. Khim.*, 20 [10] 919–26 (1947).—The role of iron oxides in the chemistry of binding materials was studied by (1) measuring the variation in mechanical strength, (2) X-ray analysis, and (3) testing the lime absorption. All the iron cement specimens contained 30% lime and 70% Fe_2O_3, $Fe(OH)_3$, hematite ore, limonite, or magnetite. Specimens were prepared by plastic forming (using 20 to 35% water) and under a pressure of 100 kg./cm.^{2} (using 13 to 40% water). All regularities in variations of mechanical strength were observed for both types of specimens, but the absolute values were much greater for those prepared under pressure. The iron cements were found to set with time; some specimens reached maximum strength in a year. The cements also showed a relative water resistance; some specimens were destroyed in water, while others lost much of their strength but did not suffer destruction. A definite relationship exists between the mechanical strength and the type of iron-containing material being used. The various iron oxides affect the mechanical strength in the following order: $FeO > Fe_2O_3 > Fe_3O_4 > Fe_2O_3 \cdot nH_2O$. Absorption varied from 18 to 90 mgm. per gm. X-ray data indicate that in the mixture of lime with the iron-containing material there occurs a chemical and crystallographic change of the original materials with the formation of a new compound of, apparently, amorphous structure B.Z.K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

BOZHENOV, P.I., prof., doktor tekhn.nauk, otv.red.; KAMUSHER, Ye.D., red.; SMIRNOV, A.N., tekhn.red.

[Reports of the Conference of Institutions of Higher Learning on Studying Autoclave-hardened Materials and their Use in Construction] Doklady Mezhvuzovskoi konferentsii po izucheniiu avtoklavnykh materialov i ikh primeneniiu v stroitel'stve. Leningrad, Leningr.inzhenerno-stroit.in-t, 1959. 301 p. (MIRA 13:1)

1. Mezhvuzovskaya konferentsiya po izucheniyu avtoklavnykh materialov i ikh primeneniyu v stroitel'stve. 2. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR; Leningradskiy inzhenerno-stroitel'nyy institut (for Bozhenov).
(Building materials) (Autoclaves)

21-5250
15.3200

31564
S/081/61/000/022/046/076
B101/B147

AUTHORS: Bozhenov, P. I., Kamusher, Ye. D., Glibina, J. V.

TITLE: Selection of concrete mixtures with given boron content

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 311, abstract 22K313 (Sb. "Stroit. materialy". L., 1961, 29 - 30)

TEXT: Concrete mixtures were developed on the basis of Portland cement 400, quartz sand and crushed granite, grain size 20mm. The boron-containing materials used were boron-containing glass of the "Lenzos" plant with 7% B and borate ore of the Indera deposit with 10% B. These boron materials were added to the binder and to the coarse and the fine aggregates. When used as aggregate the borate ore was molten. The melt was either cooled in water with formation of slag sand as fine aggregate or used in the form of glass pieces which served as crushed material. Concrete mixtures with 0.3 - 2.85% B and a strength of 100 - 300 kg/cm^2 after 28 days were obtained. The weight by volume of the concretes was 2.3 - 2.5 kg/liter. Autoclave treatment of mortars and concretes considerably increased the strength in the first solidification period. After 4 to 7 days, the strength of con-

Card 1/2

31564
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Selection of concrete mixtures...

cretes with boron-containing glass is 220 - 260 kg/cm^2. [Abstracter's note: Complete translation.]

Card 2/2

BELITSIN, M.N.; OREKHOVA, Z.M.; FREYDLIN, Ya.A.; ZARINA, E.Ya.; BARANOVA, Z.D.; KAMUSHKIN, P.P.

Production of viscose silk with a higher uniformity of its physical and mechanical properties. Khim.volok. no.5:60-62 '61. (MIRA 14:10)

1. Klinskiy kombinat.

(Rayon)

KAMUSHKIN, Yu. I., inzh.

Construction of the motorboat "Rubin." Sudostroenie 26 no.12: 40-44 D '60. (MIRA 13:11)
(Boatbuilding)

KAMUSIC, Mitja

Training of students at the Kranj Higher School for Cadres. Nova proizv 13 no.6:415-417 D '62.

KAMUTI, J.

Results in the innovators' movement of railroad men, p. 6, UJITOK LAPJA, (Orszagos Talamanyi Hivatal) Budapest, Vol. 7, No. 5, Mar. 1955

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 4, No. 12, December 1955

L 01058-67 EWT(1)/EWP(e)/EWT(m)/EEC(k)-2/T/EWP(t)/ETI/EWP(k) IJP(c) AT/WH/WG/
ACC NR: AT6015132 GD/JD SOURCE CODE: UR/0000/66/000/000/0077/0090

AUTHOR: Brodin, M. S.; Vatulev, V. N.; Zakrevskiy, S. V.; Kamuz, A. M. 67 B+1

ORG: Institute of Physics, AN UkrSSR (Institut fiziki AN UkrSSR)

TITLE: Some effects of the interaction between a ruby-laser beam and transparent crystals 18 25 15

SOURCE: Respublikanskiy seminar po kvantovoy elektronike. Kvantovaya elektronika (Quantum electronics): trudy seminara/ Kiev, Naukova dumka, 1966, 77-90

TOPIC TAGS: laser, ruby laser, solid state laser

ABSTRACT: The two-photon effects in some crystals and the effect of a laser beam on crystal dispersion were studied by the authors for some time. The mechanism of crystal destruction in some experiments could not be explained by simple heating. Additional experiments intended to clarify some points are described in the present article. A ruby crystal 12-cm long 12-mm diameter, a polished-tin reflector, and an IFP-2000 flashtube were used in the test laser. The radiation spectrum of anthracene powder served to verify the intensity of the laser beam and the method of

Card 1/2

L 01058-67

ACC NR: AT6015132

spectrum recording. Both structured and structureless radiation spectra were observed in sodium-uranyl-acetate crystals; dimples, pinholes, and small cracks were formed in the crystals under the influence of the focused laser beam. The effects of a concentrated beam upon dispersion and fundamental-absorption-edge position were studied on ZnS and CdS crystals. It was found that a nonfocused laser beam did not affect the spectrum; a sharp-focused beam caused a long-wave displacement of all visible interference lines and absorption edge; various interpretations are discussed. Samples of anthracene, NaCl, KCl, KBr, and plexiglas were tested for destruction by sharp-focused laser pulses. The mechanism of destruction was found to be complex, dependent on the properties of the specimen, and resembling application of large local mechanical forces. Orig. art. has: 5 figures.

SUB CODE: 20 / SUBM DATE: 12Feb66 / ORIG REF: 008 / OTH REF: 016

awm
Card 2/2

L 04624-67 EWT(l)/EWP(e)/EWT(m)/EEC(t)-2/T/EWA(c)/EWP(t) IJP(c) WW/JW/JH

ACC NR: AP6033528 SOURCE CODE: UR/0185/66/011/010/1151/1153

AUTHOR: Brodin, M. S.; Vatul'ov, V. M.; Kamuz, O. M.

ORG: Institute of Physics, AN UkrSSR, Kiev (Instytut fizyky AN UkrSSR)

67
B

TITLE: Self-focusing of light in NaCl crystals

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 11, no. 10, 1966, 1151-1153

TOPIC TAGS: ruby laser, laser beam, laser optics, nonlinear optics, sodium chloride, cubic crystal

ABSTRACT: An investigation was made of special features of the broadening of a focused beam from a Q-switched ruby laser (power 10—15 Mw) in NaCl crystals. The investigation was carried out with the aim of observing self-focusing of light in a cubic crystal. A lens with a 5-cm focal length was used to focus the laser beam inside the crystal. The determination of self-focusing was made on the basis of the distribution of damage produced by the beam along its path and on the basis of photographs of the cross section of the laser beam taken from the face of the crystal. The damage produced by a Q-switched pulse differed in character and extent from that produced by a non-Q-switched pulse. Photographs showed damage scattered randomly between the boundaries of the laser beam and clear, straight lines which when enlarged resolved into dense damage of small size. These lines, which apparently belong to regions of increased intensity, can be observed ahead of the focal point, and in some

Card 1/2

L 04624-67

ACC NR: AP6033528

cases beyond the focal point. The shape of the beam deviates from the conical, and the generatrix departs from the straight line. Such a beam shape cannot be attributed to spherical aberration of the focusing lens. The increased refraction index in the field of the light wave apparently affects the shape of the beam. In the case of a sufficiently powerful beam the divergence was not observed. Damage appeared only in a channel region approximately 0.1 mm in diameter and 0.5 cm long. Such traces were observed at room temperature and when the NaCl crystal was cooled to 77K. In a crystal cooled to 77K the damage was most densely exposed at a point somewhat ahead of the focus. The traces were considerably smaller behind the focus, apparently as the result of the diminishing intensity of the light beam. The case for self-focusing is most convincing in photographs taken from the crystal face at a distance of 2 cm from the point of the focusing in the crystal. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 30May66/ ORIG REF: 003/ OTH REF: 003/ ATD PRESS: 5100

Card 2/2 LC

KAMYAGIN, A.F.

LISTOV, P.N., doktor tekhnicheskikh nauk, professor; KAMYAGIN, A.F., inzhener.

Studing the cable drum drive of electric tractors and combines. Izv. TSKhA no.3:215-232 '56. (MLRA 10:3)
(Electric cables) (Tractors) (Combines (Agricultural machinery))

L 39107-66 EWT(l)/EWT(m)/EWP(j)/T IJP(c) RM

ACC NR: AP6030372 SOURCE CODE: UR/0428/66/000/001/0111/0115

AUTHOR: Valodz'ka, L. V.; Kamyak, A. I.; Sabila, K. V.; Sewchanka, A. N.; Slyaptsow, L. Ye.

ORG: none

TITLE: Luminescence and vibrational spectra of potassium-uranyl-chloride

SOURCE: AN BSSR. Vestsi. Seryya fizika-matematychnykh navuk, no. 1, 1966, 111-115

TOPIC TAGS: luminescence spectrum, vibration spectrum, IR spectrum, Raman scattering, uranium compound

ABSTRACT: The infrared absorption spectrum of a $K_2UO_2Cl_4 \cdot 2H_2O$ monocrystal at room temperature was studied and compared with the luminescence spectrum at 77°K. The frequencies in the luminescence spectrum were analyzed, taking into account infrared absorption and Raman scattering of a saturated aqueous solution of potassium-uranyl-chloride. Four frequencies were determined from the latter which are attributed to different complexes existing in the solution. The vibrational frequencies of water containing coordinate bonds are discussed, and a structure is proposed for the complex. Orig. art. has: 2 figures and 1 table. [JPRS: 35,668]

SUB CODE: 07, 20 / SUBM DATE: 16Oct65 / ORIG REF: 007 / OTH REF: 005

Card 1/1

S/032/63/029/002/006/028
B101/B186

AUTHORS: Lisetskaya, G. S., Romazanovich, N. P., Olefirenko, V. P., and Kamyanaya, K. K.

TITLE: Determination of microimpurities in caustic alkalis

PERIODICAL: Zavodskaya laboratoriya, v. 29, no. 2, 1963, 156-158

TEXT: The colorimetric determination of 10^{-5} - 10^{-6}% Cu, Pb, Ca, Ni, Fe, Hg, Mn, and of the sum of heavy metals in alkalis is described. The sum of heavy metals of the hydrogen sulfide group is determined by extracting the diethyl dithiocarbamate complexes from the alkali neutralized by HCl. The extract is evaporated, moistened with H_2SO_4, calcined at 600°C, and dissolved in HCl. The sulfides are precipitated with water containing hydrogen sulfide and the color of the solution is compared with a calibration scale in acetic acid medium. The absolute sensitivity is 2µg in 4-5 ml of the enriched solution (referring to Pb). Since mercury volatilizes in this treatment a weighed portion of NaOH is neutralized by HNO_3, it is boiled with $KMnO_4$, the excess permanganate is reduced by oxalic acid, the disturbing elements are bound with Trilon B at pH = 4,

Card 1/3

and Hg is determined with dithizon. The sensitivity is $5 \cdot 10^{-6}$%. Copper is determined by extracting the diethyl dithiocarbamate complex at pH = 4 from NaOH neutralized by HCl. Disturbance by Fe(III) is prevented by sodium pyrophosphate, the disturbance of the other ions by Trilon B. The determinable minimum amount of Cu is 0.1 µg in 0.5 ml of CCl_4 extract. To determine Pb, NaOH is neutralized by HNO_3, and the dithizon complex of Pb is extracted with CCl_4 at pH = 8. Precipitation of the hydroxides is prevented by ammonium citrate, Fe(III) is reduced by hydroxylamine, Cu is bound by KCN. Only Bi is disturbing. Pb can be separated from Bi by re-extracting Pb into the aqueous phase in acid medium. The sensitivity is $2.5 \cdot 10^{-6}$%. To determine Ni, NaOH is neutralized by HCl and the nickel dimethyl glyoximate is extracted by chloroform. After re-extraction into the aqueous phase, Ni is determined with dimethyl glyoxime in the presence of iodine. The sensitivity is $1 \cdot 10^{-6}$%. Fe is photocolorimetrically determined as sulfosalicylate complex in NaOH neutralized by HCl. The sensitivity is $1 \cdot 10^{-5}$%. To determine Ca, NaOH is neutralized by HCl, evaporated to dryness, and $CaCl_2$ extracted by ethyl alcohol. The heavy

metals are previously separated as diethyl dithiocarbamate complexes. Ca is determined by murexide. The sensitivity is $5 \cdot 10^{-5}$%. Mn is determined by the usual silver persulfate method by extracting the diethyl dithiocarbamate complex from NaOH, calcining, and oxidizing Mn to Mn(VII). The sensitivity is $1 \cdot 10^{-6}$%. Maximum sensitivity can be reached with weighed portions of 20-50 g of dry NaOH. The method was tested on mixtures of pure salts. There are 1 figure and 1 table.

KAMENOV, I.M., mayor med.slushby

Combined method for treating paroxysmal spasms of the peripheral blood vessels. Voen.-med.zhur. no.12:84-85 D '55 (MIRA 12:1)
(BLOOD VESSELS--DISEASES)

KAMLANOV, I.M., mayor meditsinskoy sluzhby

Compound method of treating stuttering. Voen.med.zhur. no.12:28-32 D '56. (MLRA 10:3)

(SPEECH DISORDERS, ther.
complex ther. of stuttering in enlisted men)
(ARMED FORCES PERSONNEL, dis.
stuttering complex ther.)

17(1) SOV/177-58-11-42/50

AUTHORS: Kamyanov, I.M., Candidate of Medical Sciences and Barenboym, Ye.L., Lieutenant-Colonels of the Medical Corps

TITLE: About the Method of Recognizing Lumbosacral Pains

PERIODICAL: Voyenno-meditsinskiy zhurnal, 1958, Nr 11, p 87 - 88 (USSR)

ABSTRACT: The determination of the sensibility of the skin against ultraviolet rays and the determination of the degree of the codeine swelling and the velocity of its resolution and arterial oscillography are suggested as additional diagnostic methods for recognizing lumbosacral pains. In the first case, the determination of the erythema threshold dose was carried out by a mercury-quartz lamp with a PRK-2 type burner through a Gorbachev biodosimeter on symmetric parts of the skin of the healthy and the affected extremity. The second determination was performed by an electrophoresis of a 2% solution

Card 1/2

KAMYANOV, I. M., kand. med. nauk (Liepaia)

Rhinogenic hydrocephalus. Vest. otorin. no.5:42-47 '61.
(MIRA 14:12)

(HYDROCEPHALUS) (SINUSITIS)

KAMYANOV, I.M. (Liyepaya)

Pigment metabolism disorders in syringomyelia. Zhur. nevr. i psikh. 62 no.5:703-705 '62. (MIRA 15:6)
(SYRINGOMYELIA) (SKIN--DISEASES)

KAMYANOV, I.M.

Atypical [illegible]sultus at a senile age. Zhur. nevr. i psikh. 64 no.10: 1464-1469 '64. (MIRA 17:11)

1. Rizhskaya respublikanskaya psikhiatricheskaya bol'nitsa (glavnyy vrach Z.G. Sochneva).

KAMYANOV, I.M.

Use of sodium salt of nicotinic acid in simulating the antabuse-alcohol test in the process of treating chronic alcoholics. Zhur. nevr. i psikh. 63 no.12:1881-1883 '63.

(MIRA 18:1)

1. Rizhskaya respublikanskaya psikhonevrologicheskaya bol'nitsa (glavnyy vrach Z.G.Sochnev).

KAMYANOV, I.M.

Clinical aspects in poisoning with aminazine. Zhur. nevr. i psikh. 65 no.6:918-919 '65. (MIRA 18:6)

1. Rizhskaya respublikanskaya psikhiatricheskaya bol'nitsa (glavnyy vrach Z.G. Sochneva).

KAMYANOV, I.M.

Therapeutic significance of pneumoencephalography in epilepsy.
Zhur. nevr. i psikh. 65 no.9:1388-1391 '65.
(MIRA 18:9)

1. Rizhskaya respublikanskaya psikhiatricheskaya bol'nitsa
(glavnyy vrach Z.G. Sochneva).

L 27911-66 EWT(1) RO
ACC NR: AP5017771 SOURCE CODE: UR/0246/65/065/006/0918/0919

25
B

AUTHOR: Kamyanov, I. M.

ORG: Riga Republic Psychiatric Hospital/head physician--Z. G. Sochneva/ (Rizhskaya respublikanskaya psikhiatricheskaya bol'nitsa)

TITLE: Clinical symptoms of chlorpromazine poisoning 22

SOURCE: Zhurnal nevropatologii i psikhiatrii, v. 65, no. 6, 1965, 918-919

TOPIC TAGS: chlorpromazine, toxicology, poison effect

ABSTRACT: Ingestion of massive doses of chlorpromazine causes marked inhibition of the respiratory and vasomotor centers, with resultant lowering of arterial pressure and impairment of respiration. In the case of a 56-year-old female patient who had been frequently hospitalized for schizophrenia, ingestion of 2,500 mg of chlorpromazine was followed by a long latent period marked by a sense of well-being. The first symptoms of poisoning did not appear until 6 hours after she had swallowed the drug. The main difficulty was paralysis of the intestine.

Treatment included gastric lavage, enemas, and administration of detoxicants and agents aimed at overcoming the intestinal paresis. Within 24 hours pain had subsided, the abdomen had shrunk, and the patient was able to sleep. The next day her condition was satisfactory and she had no complaints.

UDC: 615.786-099-036

Card 1/2

L 27911-66-

ACC NR: AP6017771 O

The author remarks that thus far no effective antidote has been found for chlorpromazine poisoning. Drugs described as chlorpromazine antagonists, e.g., caffeine, norepinephrine, ephedrine, amphetamine, etc., have proved to be ineffectual. [GPRS]

SUB CODE: 06/ SUBM DATE: 18Dec64 / ORIG REF: 004 / OTH REF: 004/

Card 2/2 BLG

MOISEYKOV, S.F.; KAMYAKOV, V.F.; TOLSTENEV, V.S.

Five- and six-member naphthene hydrocarbons in the gasoline fractions of petroleums. Neftepер. i neftekhim. no.10:23-25 '64. (MIRA 17:12)

1. Turkmenskiy filial Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta.

NOISYKOV, S.F.; KAMYANOV, V.F.; SOLODKOV, V.K.; TOLSTENEV, V.S.

Deasphalting the residues of petroleum from western Turkmenia.
Neftepere. i neftekhim. no.6:20-23 '65. (MIRA 18:7)

1. Turkmenskiy filial Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta.

USSR / General and Specialized Zoology. Insects. P

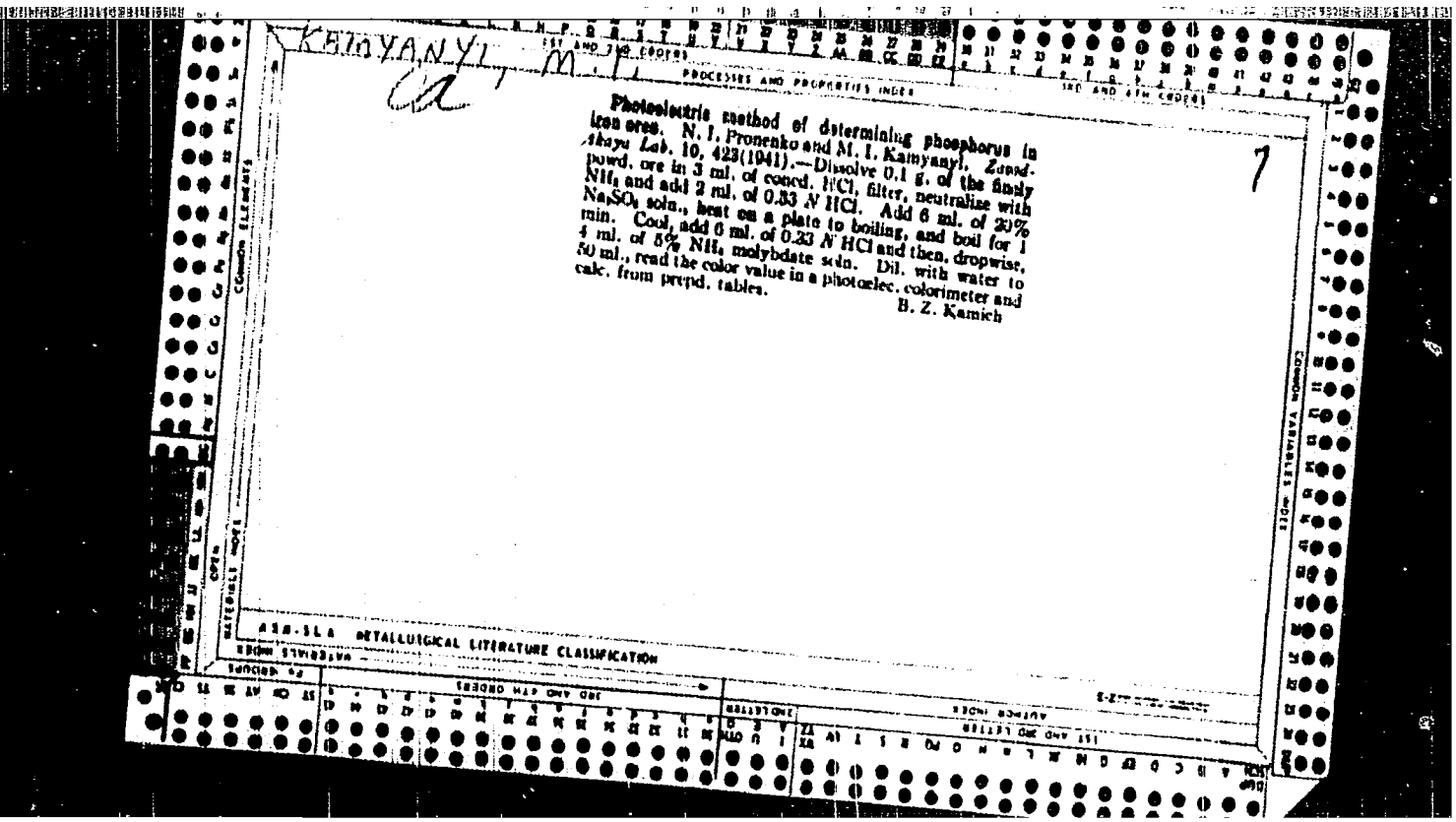
Abs Jour: Ref Zhur-Biol., No 2, 1958, 6869.

Author : Zrazhevskaya, O. N., Kamyanov, L. A., Mochalov, S.P.
Inst : Not given.
Title : From the Practice of Using the DDT Technical Solution in Diesel Fuel Against Forest Pests.

Orig Pub: Lesn. kh-vo, 1956, No 10, 74-76.

Abstract: Plantings were sprayed with a 5% DDT solution in diesel fuel from a plane during the emergence of the pine silkworm in 1954 (40 and 20 litres per hectare). The larvae mortality was high (92%), in spite of the fact that during the spraying the meteorological conditions were unfavorable. The seat of thecoak leaf-roller was sprayed with a 5% and 10% oil solution (20 litres per hectare); 99.3% and 99.5% of the larvae correspondingly perished. As a result of aerial treatment in favorable

Card 1/3



KAMYANYI, M. I.

PROCESSES AND PROPERTIES INDEX

Photoelectric method of determining phosphorus in iron ores. N. I. Pronenko and M. I. Kamyanyi. *Zavod. Lab.* 10, 423(1941).—Dissolve 0.1 g. of the finely powd. ore in 3 ml. of concd. HCl, filter, neutralize with NH_4 and add 2 ml. of 0.33 *N* HCl. Add 6 ml. of 20% Na_2SO_4 soln., heat on a plate to boiling, and boil for 1 min. Cool, add 6 ml. of 0.33 *N* HCl and then, dropwise, 4 ml. of 5% NH_4 molybdate soln. Dil. with water to 50 ml., read the color value in a photoelec. colorimeter and calc. from prepd. tables.

B. Z. Kamich

1

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Kamýček, Z.

Adamantane and its derivatives. II. Synthesis of 1,3-diisopropyladamantane. Preliminary communication. S. Landa and Z. Kamýček (Vysoká škola chem. technol., Prague). *Chem. listy* 52, 688 (1958); cf. *C.A.* 49, 10055.—Di-Me adamantane-1,3-dicarboxylate treated with MeMgI gave *1,3-bis(α-methyl-α-hydroxyethyl)adamantane* (I), m. 161–3°, which was transformed with $SOCl_2$ to the corresponding *dichloro deriv.*, m. 71–2°. Dehydrochalogenation yielded *1,3-diisopropenyladamantane*, b_{10} 102–5°, n_D^{20} 1.519 whose hydrogenation afforded *1,3-diisopropyladamantane* (II), b_{10} 102°, identical with the product of reduction of I with HI at 265°. Infrared spectrum of II is given.

CZECHOSLOVAKIA/Organic Chemistry. Organic Synthesis.

Abs Jour: Ref Zhur-Khim., No 11, 1959, 38567.

Author Landa, S. and Kaylcch, Z.

Inst

Title Adamantane and its Derivatives. IV. Synthesis of Ditopic Basic Derivatives.

Orig Pub: Collection Czech Chem Listv, 52, No 6, 1150-1155 (1958) (in Czech)

Abstract: The authors have synthesized 1,3-disopropenyladamantane (nomenclature uncertain) (I), 1,3-diisopropyladamantane (II), and 1,3-dimethyladamantane (III). The dimethyl ester of bicyclo [3,3,1] nonane-2,6-dione-3,7-dicarboxylic acid, obtained in 40-55% yields by the method of Prelog (V. Prelog and R. Seiwerth, Ber, 74, 1769 (1941)), on heating with CH_3NO_2 in the

Card : 1/5

G-11

presence of CH_3ONa is converted to the dimethyl ester of adamantane-2,6-dione-1,5-dicarboxylic acid (IV ester, V acid) (yield 31%) which on hydrolysis with HCl-CH_3COOH is converted to V. The reduction of V or of IV according to Kishner (210-220° in a sealed vessel) gives adamantane-1,3-dicarboxylic acid (VI), yield 90 and 96%, respectively, mp 279.5-280.5° (from glacial CH_3COOH). When VI is reacted with CH_2N_2 or heated with $SOCl_2$, followed by treatment with CH_3OH, the dimethyl ester (VII) is obtained, yield 95-100%, mp 60.5-61.5° (after chromatography on silica gel). VII has also been prepared by converting IV to the corresponding bis-dithioketal (VIII) (a solution of IV in $CHCl_3$ is treated with $(CH_2SH)_2$ and

also obtained by the reduction of IX with HI acid with P at 255°. The reduction of VII by $NaAlH_4$ in tetrahydrofuran gives 1,3-dihydroxymethyladamantane (XI), yield 100% (when $LiAlH_4$ is used the yield is 90%) which on heating with $SOCl_2$ is converted to 1,3-bis-(chloromethyl)-adamantane (XII), yield 62%, mp 63.8-65.3° (from abs ether and CH_3OH; when XI is heated with $SOBr_2$, 1,3-bis-(bromomethyl)-adamantane (XIII) is obtained, yield 91.5%, mp 85.5-87° (from CH_3OH). When XI is heated with HI acid (5 hrs at 210-220° in a sealed tube), 1,3-bis-(iodomethyl)-adamantane is obtained, mp 85.5-86.5° (from acetone). The reduction of XII with Na in liquid NH_3 or of XIII by Na in CH_3OH or by Raney Ni yields III, bp 100-110°/

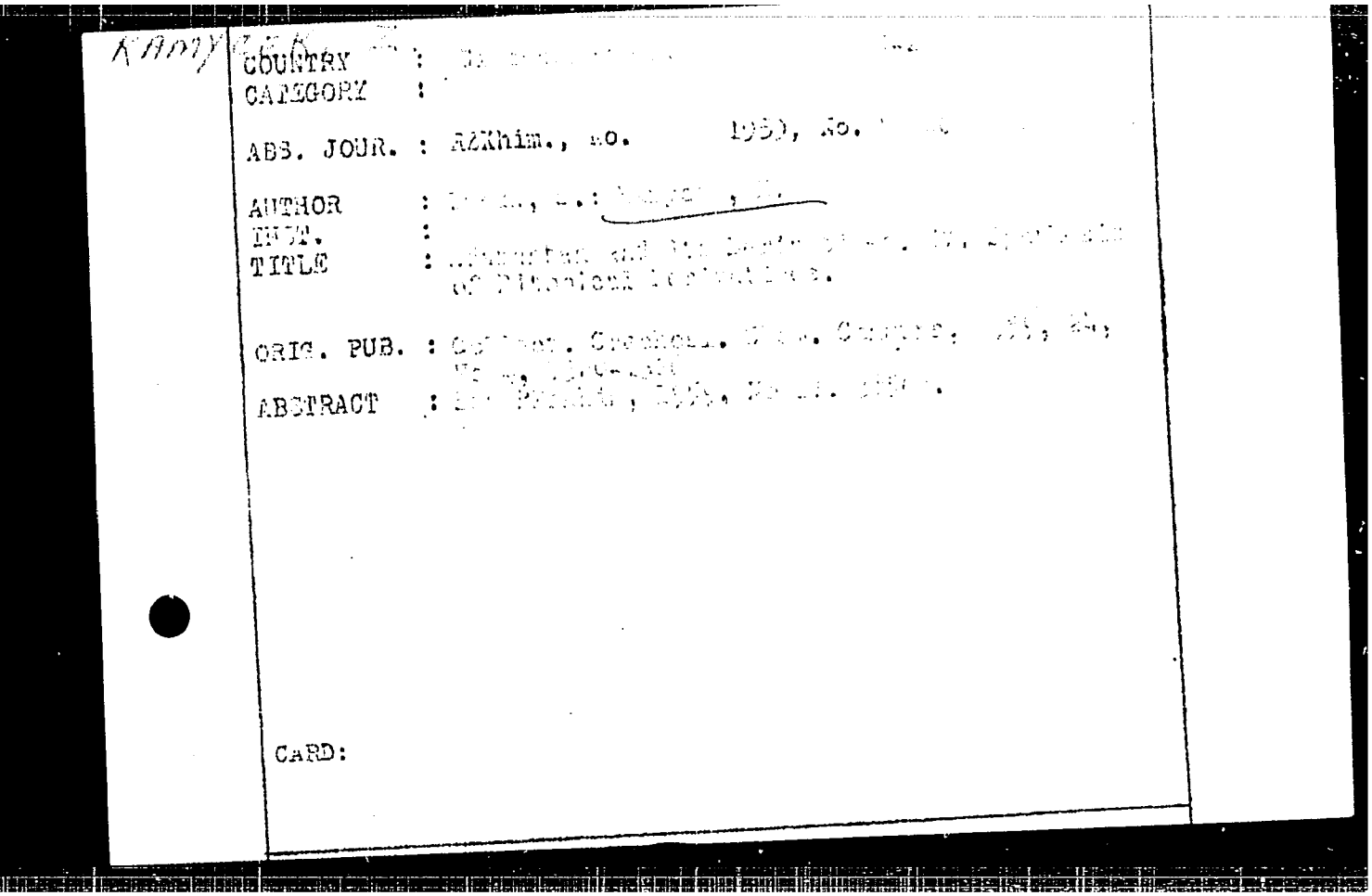
CZECHOSLOVAKIA/Organic Chemistry. Organic Synthesis. G

Abs Jour: Ref Zhur-Khim., No 11, 1959, 38567.

15-16 mm, $n^{20}D$ 1.4768. The IR absorption spectra of III and XII are given. For Communication III see RZh-Khim, 1958, 81566. -- K. Setinek.

Card : 5/5

G-13



COUNTRY :
CATEGORY :

ABS. JOUR. : AZKhim., no. 1953, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT :

CARD:

LANDA, S.; KAMYCEK, Z.

Adamantane and its derivatives. V. Synthesis of 1,3,5,7,-tetramethyladamantane. Coll Cz chem 25 no.12:4004-4009 '59. (EEAI 9:6)

1. Institut fur synthetische Treibstoffe, Technische Hochschule fur Chemie, Prag.

(Adamantane) (Methyl group)

KAMYK, N.

Improve the boning of meat. Mias. ind. SSSR 33 no.4:43 '62.
(MIRA 17:2)

1. Kemerovskiy myasokonservnyy kombinat.

KAMYKOWNA, Barbara

Chemical structure of melanocyte-stimulating hormones. Przegl zoolog 6 no.2:135-136 '62.

1. Katedra Fizjologii Zwierzat, Instytut Zoologiczny, Uniwersytet, Wroclaw.

KAMYNIN, D. F.

Cand Tech Sci - (diss) "Technical standardizing of bulldozer operations." Moscow, 1961. 28 pp with illustrations; 3 pp of diagrams; (Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev); 200 copies; price not given; (KL, 6-61 sup, 218)

LAZAREV, P.S., prof.; FEDOROV, A.I., prof.; BUKHTILOV, F.N., prepodavatel'; KAMYNIN, I.N., prepodavatel'; KONDAKOV, A.F., aspirant; AMELIN, I.P.; ZAYNIKAYEV, M.Sh., veterinarnyy vrach

Malignant course of foot-and-mouth disease. Veterinariia 41 no.5: 39-42 My '64. (MIRA 18:3)

1. Troitskiy veterinarnyy institut (for Lazarev, Fedorov, Bukhtilov, Kamynin, Kondakov). 2. Nachal'nik Chelyabinskogo oblastnogo veterinarnogo otdela (for Amelin).

KAMYNIN, Leonid Ivanovich; MIKHAYLOV, M., red.; VLASOVA, V., tekhn.red.

[Hello, Cuba!] Zdravstvui, Kuba! Moskva, Izd-vo "Izvestiia," 1960. 78 p. (Biblioteka "Izvestii," no.8) (MIRA 14:7)
(Cuba--Description and travel)

KAMYNIN, L. I.

Kamynin, L. I. (Mathematics) Limitation of solutions of the differential equation $y'' + F(x)y = 0$. P. 3

Chair of Differential Equations
Dec. 2, 1950

SO: Herald of the Moscow University Series on Physics-Mathematics and Natural Sciences, No. 3, No. 5, 1951

KAMYNIN, L. I.

KAMYNIN, L. I. - "On the Applicability of the Method of Finite Differences to the Solution of an Equation of Thermal Conductivity." Sub 29 Oct 52, Sci Res Inst of Mechanics and Mathematics, Moscow Order of Lenin State U imeni M. V. Lomonosov. (Dissertation for the Degree of Candidate in Physico-mathematical Sciences).

SO: Vechernaya Moskva January-December 1952

KAMYNIN, L. I.

USSR/Mathematics - Finite-Difference Equations, Differential 1 Jan 52

"The Difference of Uniqueness Theorems for the Heat-Conductivity Equation and of Systems of Finite-Difference Differential Equations," L. I. Kamynin

"Dok Ak Nauk SSSR" Vol 82, No 1, pp 13-16

Demonstrates that the nonuniqueness of the soln of $du_n/dt = u_{n+1} - 2u_n + u_{n-1}$ $(n = \ldots -2,-1,0,1,2,\ldots)$, representing the finite-difference system for the heat-conduction eq $u_t = u_{xx}$, requires less limitations on its growth, which fact is of theoretical

230T72

significance for the application of the method of finite difference to the soln of the heat-conduction eq. Acknowledges the guidance and assistance of Acad S. L. Sobolev. Submitted by Acad Sobolev 6 Nov 51.

230T72

KAMYNIN, L. I.

USSR/Mathematics - Finite-Difference 1 Aug 52
Methods, Approximation

"Convergence of the Finite-Difference Process for the Equation of Heat Conduction," L.I. Kamynin

"Dok Ak Nauk SSSR" Vol 85, No 4, pp 701-703

PA 227T58

States that the soln of partial differential eqs by finite differences leads to the necessity of considering the finite-difference operators. However, the article notes they are not equiv to the differential operators, they are not equiv results in serious difficulties in the application of finite-difference methods. Cites work of A.N. Tikhonov ("Matemat Sbor" 42, 2, 199, 1935). Acknowledges assistance of Acad S.I. Sobolev, who submitted this report 31 May 52. Mentions Watson's Theory of Bessel Functions, which has been translated into Russian."

227T58

KAMYNIN, L. I.

Mathematical Reviews
Vol. 14 No. 11
Dec. 1953
Analysis

Kamynin, L. I. On applicability of the method of finite differences to the solution of the equation of heat conduction. I. Uniqueness of solution of a system of finite-difference equations. Izvestiya Akad. Nauk SSSR. Ser. Mat. 17, 163–180 (1953). (Russian)

The present paper contains detailed proofs of the results announced earlier by the author [Doklady Akad. Nauk SSSR (N.S.) 82, 13–16 (1952); these Rev. 14, 172]. These results were summarized in the previous review. In the particular case of the heat equation they center around the disparity in the uniqueness theorems for the initial value problem for the heat equation:

$$\frac{\partial u}{\partial t}=\frac{\partial^2 u}{\partial x^2}, \quad t>0, \ -\infty<x<+\infty,$$

$$u(x, 0)=\varphi(x), \quad -\infty<x<+\infty,$$

and the corresponding problem for the associated infinite system of differential-difference equations:

$$\frac{\partial u^{(h)}}{\partial t}(x, t)=\frac{1}{h^2}[u^{(h)}(x+h, t)-2u^{(h)}(x, t)+u^{(h)}(x-h, t)],$$

$$(x=\cdots, -2h, -h, 0, h, 2h, \cdots),$$

$$u^{(h)}(x, 0)=\varphi(x).$$

J. B. Diaz (College Park, Md.).

USSR/Mathematics-Finite Differences May/Jun 53

KAMYNIN, L. I.

"Applicability of the Method of Finite Differences to the Solution of the Equation of Thermal Conduction II: Convergence of the Finite-Difference Process for the Equation of Thermal Conduction," L. I. Kamynin

Iz Ak Nauk, Ser Matemat, Vol 17, No 3, pp 249-268

Demonstrates convergence of the difference process in the case of substitution of the differential equation by a "cut off" difference system in the interval $-X \leqslant x \leqslant X$ and in the case of selection of the step along x of order $1/X$. Received 13 Oct 51.

KAMYNIN, L.I.

Construction of an explicit solution for an infinite system of ordinary differential equations with constant coefficients. Dokl.AN SSSR 93 no.3: 397-400 N '53. (MLRA 6:11)

1. Predstavleno akademikom S.L.Sobolevym. (Differential equations)

SANSONE, G.; VILENKIN, N.Ya. [translator]; KAMYNIN, L.I., redaktor; KORNILOV, B.I., tekhnicheskiy redaktor

[Ordinary differential equations] Obyknovennye differentsial'nye urovneniia. Perevod s ital'ianskogo N.IA.Vilenkina. Moskva, Izd-vo inostrannoi lit-ry. Vol. 2. 1954. 415 p. (MLRA 7:10)
(Differential equations)

KAMYNIN, L.I.

One defect in the method of straight lines. Dokl.AN SSSR 95 no.1: 13-16 Mr '54. (MLRA 7:3)
(Differential equations)

USSR/Mathematics - Finite difference FD-2855

Card 1/2 Pub. 85-8/16

Author : Kamynin, L. I. (Moscow)

Title : Behavior of the solution of the finite-difference analog of the wave equation

Periodical : Prikl. mat. i mekh., 19, Sep-Oct 1955, 589-598

Abstract : The solution to the wave equation $u_{tt}=a^2u_{xx}$ ($a^2=0$ to 1, $x=-\infty$ to $+\infty$, $t = 0$ to $+\infty$) by the method of finite differences leads to the finite-difference equation $u(m,n+1) = a^2[u(m+1,n)+u(m-1,n)] + 2(1-a^2)u(m,n) - u(m,n-1)$. Of interest is the study of the so called elementary solution $u(m,n)$ satisfying the initial conditions $u(m,0)=0$, $u(m,1)=0$ (for m not 0) and 1 (for $m=0$). Here the author constructs an explicit solution of the above difference equation and investigates the behavior of $u(m,n)$ for $m,n\to\infty$, which corresponds to an investigation of the solution of the finite-difference equation in a finite region if the steps in x and t are decreased without limit. It turns out that the solution $u(m,n)$ differs from zero in the triangle bounded by the straight line $m=\pm n$, $n=0$ and containing the characteristic triangle of the wave equation $x=\pm at$, $t=0$ within it; however, with increasing m and n the values of the solution at points outside

the characteristic triangle of the wave equation decreases with a speed not less than $1/n^{2/3}$ to zero. Within and on the boundary of the characteristic triangle of the wave equation the values of u(m,n) tend correspondingly to the limits a/2 and a/6. No references.

Institution :

Submitted : December 3, 1954

KAMYNIN, L.I.

Solution of a Cauchy problem for an infinite system of ordinary differential equations. Vest.Mosk.un. 11 no.6:3-10 Je '56. (MLRA 9:11)

1. Moskovskiy universitet, Kafedra matematicheskogo analiza. (Differential equations)

SUBJECT USSR/MATHEMATICS/Differential equations CARD 1/2 PG - 369
AUTHOR KAMYNIN L.I.
TITLE On the Cauchy problem for an infinite system of ordinary differential equations.
PERIODICAL Doklady Akad. Nauk 109, 446-449 (1956)
reviewed 11/1956

The author considers the system

$$(1)\qquad \frac{\partial u(x,t)}{\partial t} = f(x,t;\ldots,u(x+kh,t),\ldots) \qquad k=\ldots -2,-1,0,1,2,\ldots$$

$$u(x,0) = \alpha(x) \qquad -\infty < x < +\infty ,$$

where the right sides f depend on infinitely many unknown functions. He gives assertions of existence and uniqueness on the solutions of the Cauchy problem and investigates the dependence between f and the order of increase of the $u(x,t)$ for which the solution is unique. The mean result of the present paper is the following lemma which follows from Cauchy's estimations. Let $f(x,t;\ldots,u(x+kh,t),\ldots)$ satisfy the Lipschitz condition

$$\left|f(x,t;\ldots,\bar{u}(x+nh,t),\ldots)-f(x,t;\ldots,\bar{\bar{u}}(x+nh,t),\ldots)\right| \leq \sum_{k=-\infty}^{+\infty} L_k \left|\bar{u}(x+kh,t)-\bar{\bar{u}}(x+kh,t)\right| ,$$

$$|t| \leq T, \quad -\infty < x < +\infty$$

for all systems $\{\bar{u}\}$ and $\{\bar{\bar{u}}\}$ for which this inequation has a sense. $L_k = L_{-k}$.

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16,3500

AUTHORS: Kamynin,L.I., and Maslennikova,V.N.

TITLE: Certain Properties of Solutions of Mixed Problems for a Parabolic Equation With Discontinuous Coefficients

PERIODICAL: Doklady Akademii nauk SSSR, 1960,Vol.133,No.5,pp.1003-1006.

TEXT: In $Q = \Omega \times (0,T)$, where Ω is a domain of the $x = (x_1,\ldots,x_n)$, the authors consider the parabolic equation

$$(1) \quad Lu \equiv \sum_{i,j=1}^{n} a_{ij}(x,t) \frac{\partial^2 u}{\partial x_i \partial x_j} + \sum_{i=1}^{n} b_i(x,t) \frac{\partial u}{\partial x_i} + c(x,t)u - \frac{\partial u}{\partial t} = 0.$$

The coefficients are sufficiently smooth, but in the points of finitely many n-dimensional cylindric manifolds $\Gamma_k = S_k \times (0,T)$ they may have discontinuities of first kind. Ω is bounded by a closed surface S. The Γ_k decompose Q into domains $Q_k = \Omega_k \times (0,T)$. Let the boundaries of Q_k and Q_l (resp. Ω_k and Ω_l) not coinciding with $\Gamma = S \times (0,T)$ be Γ_{kl} (resp. S_{kl}). Let two Γ_{kl} be disjoint $\Gamma_{kl} \cap \Gamma = 0$. Let $a_{ij}^{(k)}$, $a_{ij}^{(l)}$ etc. be the limit values of a_{ij} etc. on both sides of Γ_{kl}. Γ and Γ_{kl}

Card 1/7

84642

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C111/C222

Certain Properties of Solutions of Mixed Problems for a Parabolic Equation With Discontinuous Coefficients

belong to the Lyapunov class. The authors investigate the properties of the solution $u(x,t)$ of

(2) $Lu = f(x,t), \quad (x,t) \in Q_k$

continuous in $\bar{Q}$, with the conditions

(3) $l(u) \equiv \alpha(x,t) \frac{\partial u}{\partial N} + b(x,t)u\Big|_{\Gamma} = \varphi(x,t)$

(4) $u(x,0) = F(x), \quad x \in \bar{\Omega}$

(5) $\alpha_k(x,t) \frac{\partial u}{\partial N_k} + \alpha_1(x,t) \frac{\partial u}{\partial N_1}\Big|_{\Gamma_{kl}} = h_{kl}(x,t)$

(6) $u(x,t)\Big|_{\Gamma_{kl}^{-0}} = u(x,t)\Big|_{\Gamma_{kl}^{+0}}$,

where

(7) $a(x,0) \frac{\partial F(x)}{\partial N} + b(x,0)F(x) = \varphi(x,0)$.

Card 2/7

84642

S/020/60/133/005/021/034XX
C111/C222

Certain Properties of Solutions of Mixed Problems for a Parabolic Equation With Discontinuous Coefficients

Here $\frac{\partial N}{\partial N_k} = \sum_{i,j=1}^{n} a_{ij}^{(k)} \cos(n_k, x_i) \frac{\partial}{\partial x_j}$ is the derivative with respect to the conormal N_k, where n_k is the inner normal of Γ_{kl} with respect to Q_k; $\partial/\partial N$ is the derivative with respect to the conormal of Γ.

Furthermore it holds

(8) $\alpha_k(x,t) \geq \alpha > 0$ for $(x,t) \in \Gamma_k$

and

(9) $a(x,t) \geq 0$, $b(x,t) \leq 0$, $a^2(x,t)+b^2(x,t) > 0$ for $(x,t) \in \Gamma$.

Theorem 1: If $u(x,t)$ is a solution of (1) continuous in $\bar{Q}$ which satisfies the conditions (5),(6) and

(17) $l(u)\big|_{\Gamma} = 0$,

(18) $u(x,0) = 0$

and which has the derivatives $\partial u/\partial N$ on Γ, $\partial u/\partial N_k$, $\partial u/\partial N_l$ on Γ_{kl}.

Card 3/7

Certain Properties of Solutions of Mixed Problems for a Parabolic Equation With Discontinuous Coefficients

where Γ and Γ_{kl} are so smooth that the lemma 1 exists, then everywhere in $\bar{Q}$ it holds

(19) $$|u(x,t)| \leq \frac{A}{r\alpha} \max_{k,l} \max_{(x,t)\in\Gamma_{kl}} |h_{kl}(x,t)|,$$

where A, r, α are constants of (Ref.8,15,16).

[Abstractors note: Lemma 1 is valid if the conditions of the existence theorems of T.D.Ventsel' (Ref.5) and A.Fridman (Ref.7) are satisfied. The A and r defined by (15) and (16) are least upper bounds of the solution resp. its derivative, of a mixed auxiliary problem appearing in lemma 1].

Theorem 2: If the coefficients of (2) and Γ, Γ_k satisfy the conditions under which lemma 1 is valid, and if $f(x,t)$, $F(x)$, $\partial F(x)/\partial x_i$, $\varphi(x,t)$ and $h_{kl}(x,t)$ in (2)-(6) are continuous in their domains of definition $\bar{Q}$, $\bar{\Omega}$, Γ and Γ_{kl}, where (7)-(9) is satisfied, then (2)-(6)

Certain Properties of Solutions of Mixed Problems for a Parabolic Equation With Discontinuous Coefficients

has not more than one solution $u(x,t)$ continuous in $\bar{Q}$, two times continuously differentiable in Q_k and having derivatives with respect to the inner conormals to Γ and Γ_k.

Theorem 3: Let $u(x,y)$ in $\bar{Q}$ be a continuous solution of (2),(17),(18), (5) and (6). If

(20) $$c(x,t) \leq 0,$$

then everywhere in Q it holds:

$$|u(x,t)| \leq \frac{\max\limits_{(x,t)\in\bar{Q}} |f(x,t)|}{\min\limits_{(x,t)\in\bar{Q}} |c(x,t)|} + \frac{A}{r\alpha} \max_k \max_{(x,t)\in\Gamma_k} |h_k(x,t)| \equiv B(f,h),$$

where A, r, α are the same as above.

Theorem 4: Let for arbitrary $\psi_1(x,t)$, $\psi_2(x,t)$ of $C^k(\bar{Q})$ $(k \geq 0)$ exist a solution of (1) continuous in $\bar{Q}$ ($c(x,t)$ satisfies (20)), which satisfies

Card 5/7

S/020/60/133/005/021/034XX
C111/C222

Certain Properties of Solutions of Mixed Problems for a Parabolic Equation With Discontinuous Coefficients

the conditions (5) for $h_k(x,t) \equiv 0$ and $l(u)|_\Gamma = \psi_1(x,t)$, $u(x,0) = \psi_2(x)$. If $a(x,t)$, $b(x,t)$ satisfy the condition (9) and if they belong to the same class $C^{(k)}(\Gamma)$, then the solution $u(x,t)$ of (2),(3),(5),(6),(18) which is continuous in $\bar{Q}$, satisfies the inequation

$$|u(x,t)| \leq B(f,h) + K_1 \frac{\max\limits_{(x,t)\in\Gamma} |\varphi(x,t)|}{\min\limits_{(x,t)\in\Gamma} (|a(x,t)|+|b(x,t)|)} \times \tag{21}$$

$$\times \left\{ 1 + K_2 \left[\frac{2A}{\nu R} \sum_{i,j=1}^{n} \max_{(x,t)\in\bar{Q}} |a_{ij}(x,t)| \cdot \max_{(x,t)\in\Gamma_k} |\alpha_k(x,t)| + \right.\right.$$

$$\left.\left. + \frac{\max\limits_{(x,t)\in\bar{Q}} \left(\sum\limits_{i=1}^{n} |a_{ij}| + \sum\limits_{i=1}^{n} |b_i| + 1 \right)}{\min\limits_{(x,t)\in\bar{Q}} |c(x,t)|} \right] \right\} \equiv M(f,\varphi,h),$$

Card 6/7