GORUN, Ye.G., inzh.

Popped corn products. Muk-elev.prom. 25 no.1:25-26 Ja '59.
(MIRA 12:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Corn products)

GORUN, Ye.G.

Effect of the type of corn on the yield and quality of flakes. Kons. i ov. prom. 14 no.6:18-20 Je '59. (MIRA 12:8)

1.TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Corn (Maize)) (Cereals, Prepared)

GORUN, Ye.G.

Determining moisture content by the VCh apparatus during the manufacture of corn flakes. Kons. i ov. prom. 14 no.8:40-41 Ag '59. (MIRA 12:9)

1.TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Corn (Maize))

LOBANOV, D.I.; GORUN, Ye.G.

Cooking of groats in the production of corn flakes. Kons. i ov. prom. 14 no.9:27-28 S '59. (MIRA 12:12)

1.Moskovskiy institut narodnogo khozyaystva im. G.V. Plekhanova (for Lobanov). 2.TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti (for Gorun).
(Corn products)

KALASHNIKOVA, L.M., kand.tekhn.nauk; BABICHEVA, O.I., starshiy nauchnyy sotrudnik; GORUN, Ye.G., starshiy nauchnyy sotrudnik

Technological control of the vegetable dehydrating industry. Trudy VNIIKOP no.9:119-138 '59. (MIRA 14:1)
(Vegetables, Dried)

GORUN, Ye.G., starshiy nauchnyy sotrudnik

Comparing different varieties of corn used in the production of flakes. Trudy VNIIKOP no.10:139-147 '59. (MIRA 14:8)
(Corn products)

GORUN, Ye.G., starshiy nauchnyy sotrudnik

Studying the crushing process of corn in the production of flakes. Trudy VNIIKOP no.10:148-154 '59. (MIRA 14:8)
(Corn products)

GORUN, Ye.G., starshiy nauchnyy sotrudnik; MOKAN, L.M., mladshiy nauchnyy sotrudnik; KORNEVA, O.I., laborant

Production of puffed corn with ingredients. Trudy VNIIKOP no.10:155-158 '59. (MIRA 14:8)
(Corn products)

GORUN, Ye.G.

Objective methods for evaluating the quality of corn flakes.
Kons.i ov.prom. 15 no.2:40-41 F '60.
(MIRA 13:5)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Corn products)

GORUN, Ye.G.; KORNEVA, O.I.

Puffed corn. Kons.i ov.prom. 15 no.8:22-24 Ag '60. (MIRA 13:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Corn products)

GORUN, Ye.G.

Use of corn in the production of dry breakfast foods. Kons.i ov.prom. 15 no.10:34-37 O '60. (MIRA 13:10)
(Cereals, Prepared) (Corn (Maize))

GORUN, Ye.G.

Popcorn products. Kons. i ov. prom. 15 no. 12:30-31 D '60.
(MIRA 14:1)
(United States—Pop corn)

GORUN, Ye.G.

Conference on the utilization of corn in the food industry. Kons.i ov.prom. 16 no.4:46-47 Ap '61. (MIRA 14:3)
(Corn(Maize)-Congresses) (Food industry)

GORUN, Ye.G.; DMITRIYEVA, Ye.T.; KORNEVA, O.I.; DUBOVA, G.I.

Technology of the production of food concentrates from corn meal.
Trudy VNIIKOP no.11:77-81 '62. (MIRA 17:9)

GORUN, Ye.G.; KORNEVA, O.I.

Using yellow corn for flakes. Kons. i ov. prom. 16 no.10:28-29 O '61. (MIRA 14:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Corn (Maize))

GORUN, Ye.G.

Conference on the use of corn for the manufacture of flakes and popcorn. Kons.i ov.prom. 17 no.7:46-47 Jl '62. (MIRA 15:6)
(Ukraine--Cereals, Prepared)

GORUN, Ye.G.; DMITRIYEVA, Ye.T.

Food concentrates made with corn flour. Kons.i ov.prom. 17 no.9:6-8 S '62. (MIRA 15:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Corn products) (Food, Concentrated)

GORUN, Ye.G.; MASLENNIKOVA, A.P.

Manufacture of wheat-and corn flour mixes for pancakes. Kons.i ov.prom. 18 no.5:24 My '63. (MIRA 16:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti (for Gorun). 2. Upravleniye torgovli khleboproduktami Ministerstva torgovli RSFSR (for Maslennikova).

(Food, Concentrated)

GORUN, Ye. G.; YANCHENKO, A.G.

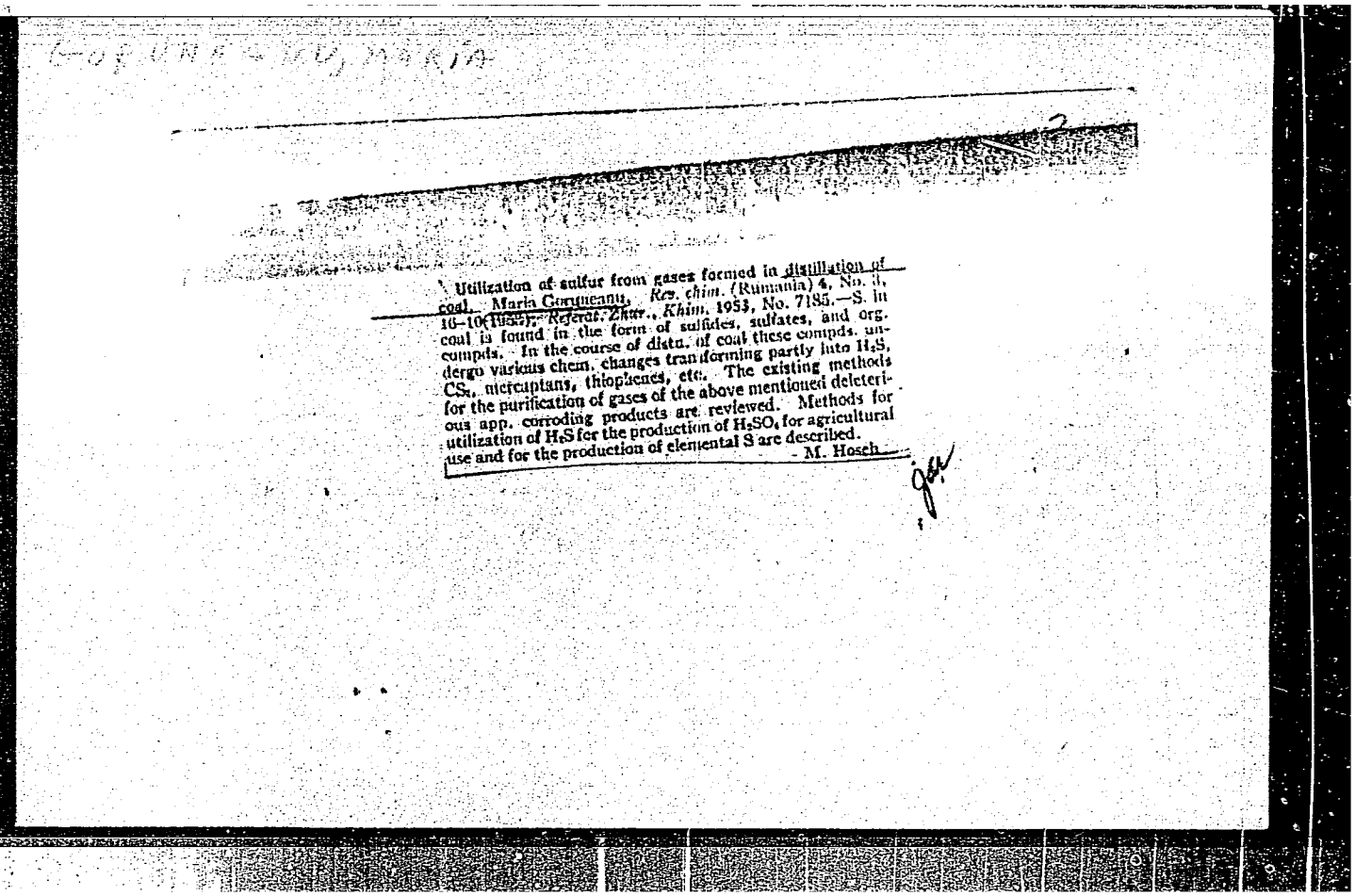
Chemical and technological properties of the promising popcorn hybrids. Kons. i ov. prom. 18 no.11:38-39 N '63. (MIRA 16:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.

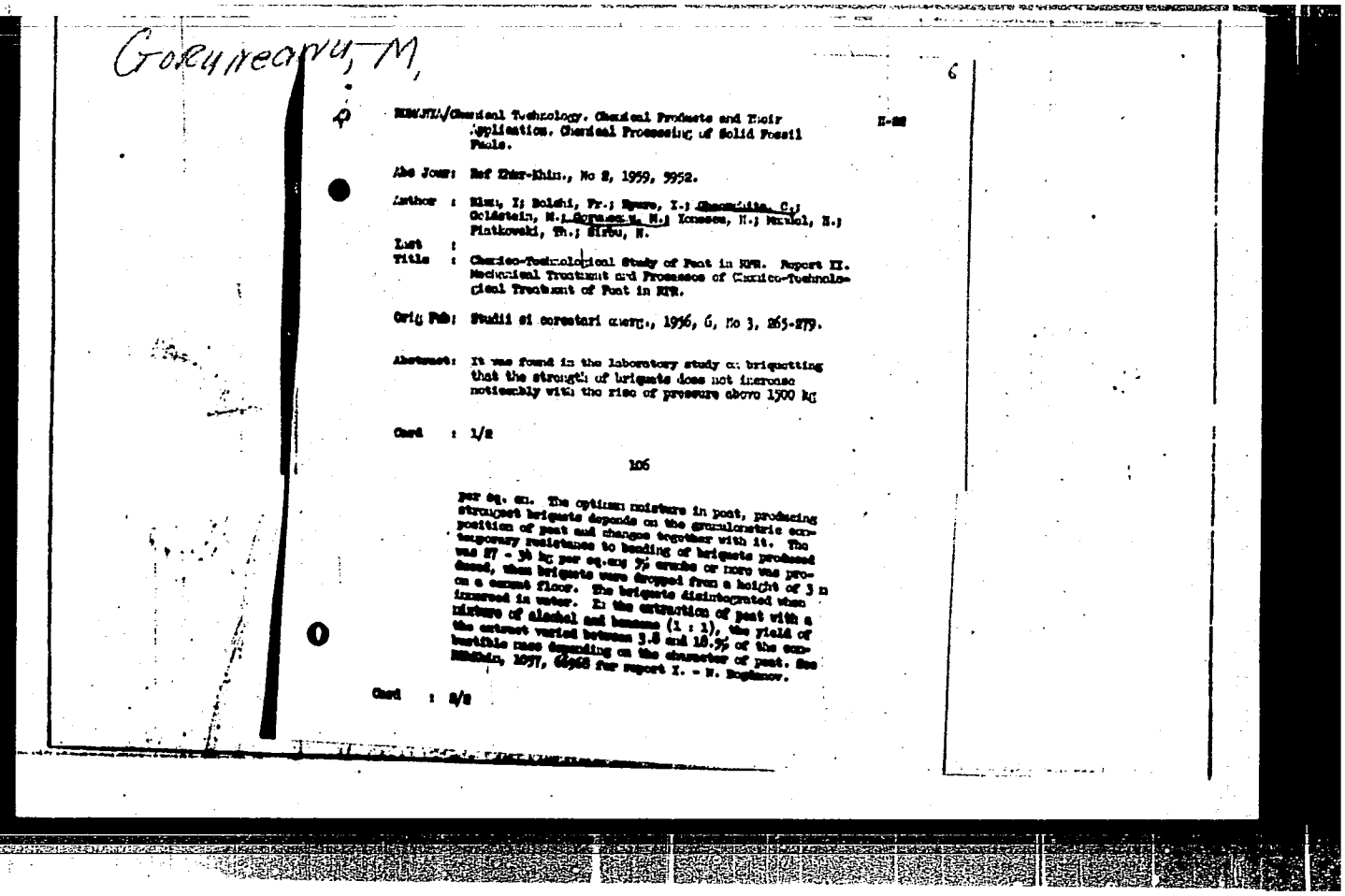
GORUNEANU, M.

Attempts to desulfurize coking coal. I. The sulfur compounds in coking coals used in the Rumanian Peoples Republic. I. Blum, M. Goruneanu, and Th. Piatkowski. *Acad. rep. populare Romîne, Bul. ştiinţ., Secţ. ştiinţ. tehn. şi chim.* 4, No. 1-2, 101-8(1952)(French summary).—Coals from two regions (Banat and the river Jiu valley) were analyzed in the light of their utilization in coking. The predominant source of S in the Banat coal is of an org. nature, while in the Jiu valley coal the S is half pyritic and half org.

Gary Gerard



Utilization of sulfur from gases formed in distillation of coal. Maria Gavrilescu. *Rev. chim.* (Rumania) 4, No. 3, 16–10(1953); *Referat. Zhur., Khim.* 1953, No. 7185.—S. in coal is found in the form of sulfides, sulfates, and org. compds. In the course of distn. of coal these compds. undergo various chem. changes transforming partly into H_2S, CS_2, mercaptans, thiophenes, etc. The existing methods for the purification of gases of the above mentioned deleterious app. corroding products are reviewed. Methods for utilization of H_2S for the production of H_2SO_4 for agricultural use and for the production of elemental S are described.
– M. Hosch



Gorunearu, M.

6

RZhKhTL/Chemical Technology. Chemical Products and Their Application. Chemical Processing of Solid Fossil Fuels. H-28

Abs Jour: Ref Zhur-Khim., No 8, 1959, 29952.

Author : Simu, I.; Solchi, Fr.; Spuru, I.; Chemidlin, C.; Goldstein, M.; Gorunearu, M.; Ionescu, H.; Mankol, E.; Piatkowski, Th.; Sirbu, N.

Inst :

Title : Chemico-Technological Study of Peat in RPR. Report II. Mechanical Treatment and Processes of Chemico-Technological Treatment of Peat in RPR.

Orig Pub: Studii si cercetari energ., 1956, 6, No 3, 265-279.

Abstract: It was found in the laboratory study of briquetting that the strength of briquets does not increase noticeably with the rise of pressure above 1500 kg

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106

per sq. cm. The optimum moisture in peat, producing strongest briquets depends on the granulometric composition of peat and changes together with it. The temporary resistance to bending of briquets produced was 27 - 36 kg per sq.cm if crumbs or more was produced, when briquets were dropped from a height of 3 m on a cement floor. The briquets disintegrated when immersed in water. In the extraction of peat with a mixture of alcohol and benzene (1 : 1), the yield of the extract varied between 3.8 and 18.9% of the combustible mass depending on the character of peat. See RZhKhim, 1957, 68958 for report I. - N. Bogdanov.

Card : 2/2

RUMANIA / Chemical Technology, Chemical Products and Their Application, Part 1. - Water Treatment Sewage. H

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61380.

Author : T. Ionescu, C. Fostiropol, M. Goruneanu, V. Cristoloveanu.
Inst : Polytechnical Institute Bucharest.
Title : Treatment of Water by Coagulation in Presence of Activated Silica.

Orig Pub: Bul. Inst. politehn. Bucuresti, 1956, 18, No 1 - 2, 59 - 64.

Abstract: Experimental results of water coagulation in the presence of activated silica (AS) are presented. $Al_2(SO_4)_3$, $Fe_2(SO_4)_3$ and $FeSO_4$ were used as coagulants. AS was prepared by adding 3%-ual H_2SO_4 drop by drop to a freshly prepared

Card 1/3

GORUNESCU, C., ing.; MUNTEANU, Gh.; TODORAN, Aurel, ing.

Reduction of specific metal consumptions. Probleme econ 18 no.1:163-165 Ja '65.

1. Technical Director, "Progresul" Plant, Braila (for Gorunescu). 2. Planning Chief Engineer, "Progresul" Plant, Braila (for Munteanu). 3. Head of the Service of Technology, "Progresul" Plant, Braila (for Todoran).

GORUNOV, G. V., SHCHUKIN, Ye. D., ROZHANSKIY, V. N., and PERTSOV, N. V.

"Unhomogeneous Plastical Deformation and eht Effect of Surface-Active Mediums on the Mechanical Properties of Crystals."

paper presented at the Conf. on Mechanical Properties of Non-metallic Solids, Leningrad, USSR, 19-26 May 58,

Moscow State Univ., Inst. of Physical Chem. Acad. Sci. USSR, Moscow.

GORUNOV, N.S.

S/062/63/000/003/003/018
B101/B186

AUTHORS: Izvekov, V. I., and Gorbunov, N. S.

TITLE: Determination of the absorption coefficient when studying diffusion in metallic oxides

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 3, 1963, 450 - 454

TEXT: It has been suggested in previous papers (Fizika metallov i metallovedeniye, 7, no. 5, 1959, 713 - 721; Inzhenerno-fizicheskiy zh., 4, 119 (1961)) to cover the oxides with an Fe^{59} layer and to measure the absorption coefficient μ of the Fe^{59} radiation in aluminum foils of different thickness. The mass absorption coefficient μ_m of the Fe^{59} β-radiation may be calculated from $-\mu_m(\ln N - \ln N_0)/d_{max}$, where N is the radioactivity for a film thickness d, and d_{max} is the thickness at which the straight line $\ln N = f(d)$ intersects the abscissa. As $\mu_m = u/\rho \simeq$ const for substances

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with $z \leq 30$, μ is derived to be 99.2 ρ for the linear absorption coefficient, where ρ is the density. The present paper provides additional data for the diffusion of Fe^{59} in TiO_2 after annealing at 952, 995, or 1049°C. The following was found for the diffusion coefficient of Fe in rutile: $D = 3.21 \cdot 10^{-2} \exp(-35500/RT)$. This is in good agreement with the data obtained by the layer stripping method. There are 3 figures and 1 table.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences USSR)

SUBMITTED: June 7, 1962

GORUNOVIC, M.

SURNAME (in caps); Given Names

Country: Yugoslavia

Academic Degrees: not given

Affiliation: not given

Source: Belgrade, Arhiv za Farmaciju, Nr 6, 1960, pp 510-514.

Data: Book review: "Medicinal Raw Material," Symposium.

GORUNOVIC, M.

SURNAME (in caps); Given Names

Country: Yugoslavia

Academic Degrees:

Affiliation: Institute for Pharmacognosis of the Pharmaceutical Faculty (Institut za farmacognoziju Farmaceutskog fakulteta), Belgrade

Source: Belgrade, Arhiv za Farmaciju, No 2, 1961, 111-116.

Data: "Contribution to the Pharmacognosic Investigation of Our Rhamnus Frangula L."

Authors:

LUKIC, Predrag, Docent Dr.
SAVIN, K.
GORUNOVIC, M.

1

GORUNOVIC, M.

(23)

YUGOSLAVIA

F. LUKIC, M. GORUNOVIC, and N. KRSTIC, Department of Pharmacognosy (Institut za farmakognoziju) School of Pharmacy (Farmaceutski fakultet) Belgrade.

"Quality of Imported Teas (Theae folium) Used in Our Country."

Belgrade, Arhiv za Farmaciju, Vol 12, No 5, 1962; pp 313-316.

Abstract [German summary modified]: Analysis of 6 Indian and 1 Soviet (Georgian) tea specimens marketed in Yugoslavia. All were more than adequate in complying with requirements of the Yugoslav Pharmacopeia (minimum caffeine 2%, maximum ashes 6%). Soviet tea had 2.8 caffeine, 20% aqueous extractive substances; Indian 3 to 4.8 caffeine, 26 to 33 extractives. Three tables, 3 Yugoslav, 2 German, 1 Soviet 1 Polish reference.

1/1

TUCAKOV, Jovan (Beograd); ĆORUNOVIĆ, Momcilo (Beograd)

Field studies of medicinal plants as a complement to the teaching of pharmacognosy to the pharmacy students of the Pharmaceutical Faculty, Belgrade. Farmaceut gl Zagreb Supplement (18) no.5:57 '62.

1. Institute of Pharmacognosy of the Pharmaceutical Faculty, University of Belgrade, Belgrade.

YUGOSLAVIA

P. LUKIC, N. KRSTIC and M. GORUNOVIC, Department of Pharmacognosy of the Faculty of Pharmacy of University (Farmakognosticki zavod Farmaceutskog fakulteta Univerziteta,) Belgrade.

"Pharmacognosy of the Rumex Genus. Part 3. Tannin Concentrations in Roots and Leaves of Some Experimentally Cultivated Species of Rumex of Domestic and Import Origin."

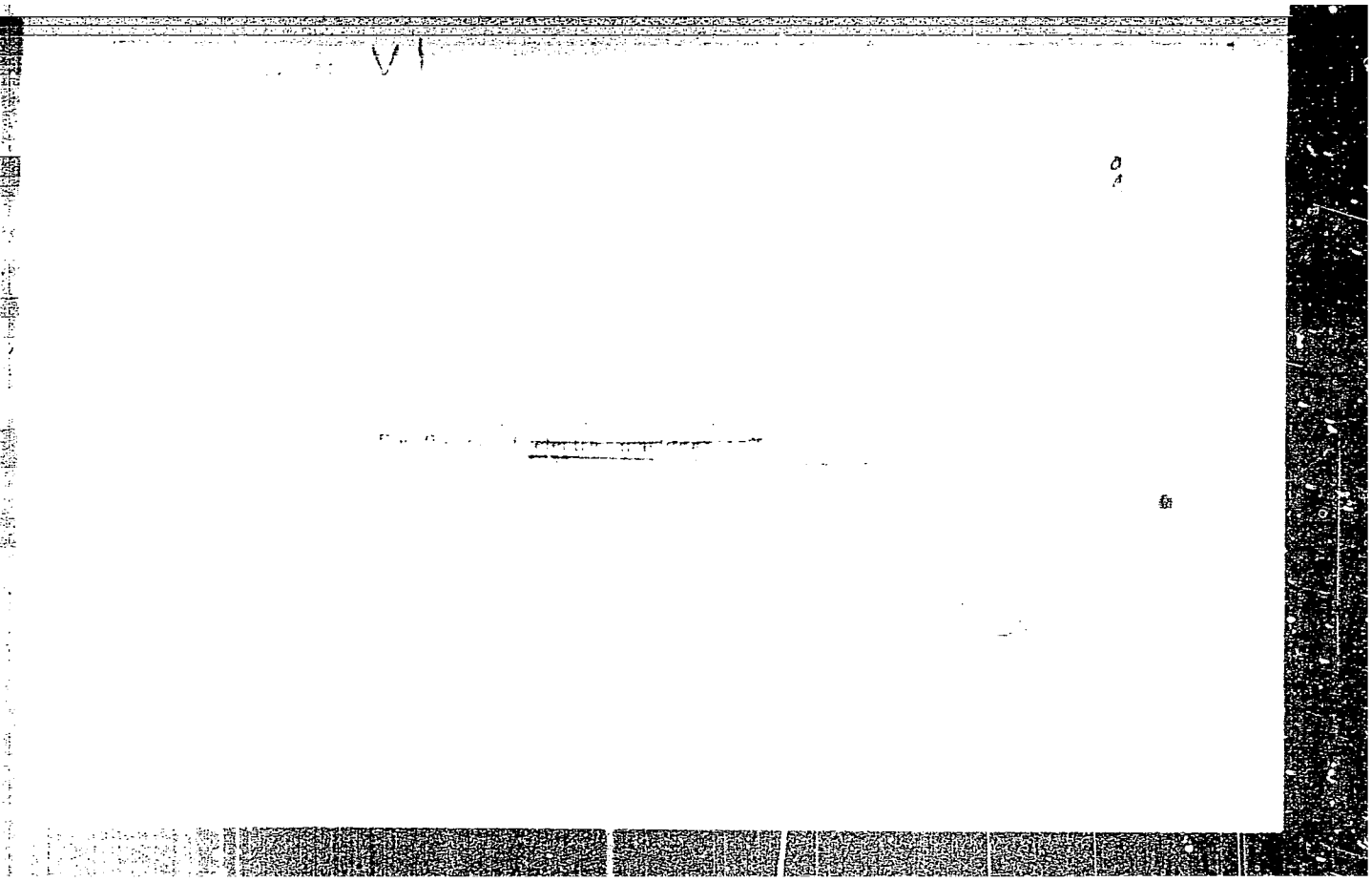
Belgrade, Arhiv za Farmaciju, Vol 13, No 2, 1963; pp 89-92.

Abstract [German summary modified]: Report of study of 10 species of Rumex (crispus L., domesticus Hartm., salicifolius Weimm., patientia L., aquaticus L. var max., pulcher L., altissimus L., orbiculatus A. Grey, conferius Willd., and pallidus Big.) grown in herb garden in Belgrade: tannin and anthraquinone concentrations in roots and leaves of each are tabulated and shown graphically. Graph, table, 3 Yugoslav references.

GORUSHKIN, V. I.

"Linear transformations and matrical computations", by Candidate of Technical Sciences V. I. Gorushkin, at the Power Engr. Inst. im KRZHIZHANOVSKIY of the Acad. Sce. USSR.

SO: Elektrichestvo, No 5, Moscow, May 1947 (U-5533)



GORUSHKIN, V. I.

USSR/Electricity Feb 49
Power Plants, Electric
Frequency Control

"Contemporary Methods of Regulation of Frequency and Power Exchange in Power Systems," I. M. Markovich, V. I. Gorushkin, Power Eng Inst imeni G. M. Krzhizhanovskiy, Acad Sci USSR, 11 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 2

Discusses systems of frequency regulation and control of power supply to various stations. Decides that most practical system is one where changes in the load of separate stations are assigned by the dispatcher, who is guided by value of total load variation, power reserve in frequency-controlling station (one station is charged with frequency regulation), and considerations of economy. While this system mechanizes the functions of station watch personnel, it is hard on the dispatcher. Submitted by Acad G. M. Krzhizhanovskiy, 8 Jul 48.

PA 33/49T29

GORUSHKIN, V. I.

USSR/Engineering - Power Plants, Electric
Power, Distribution of

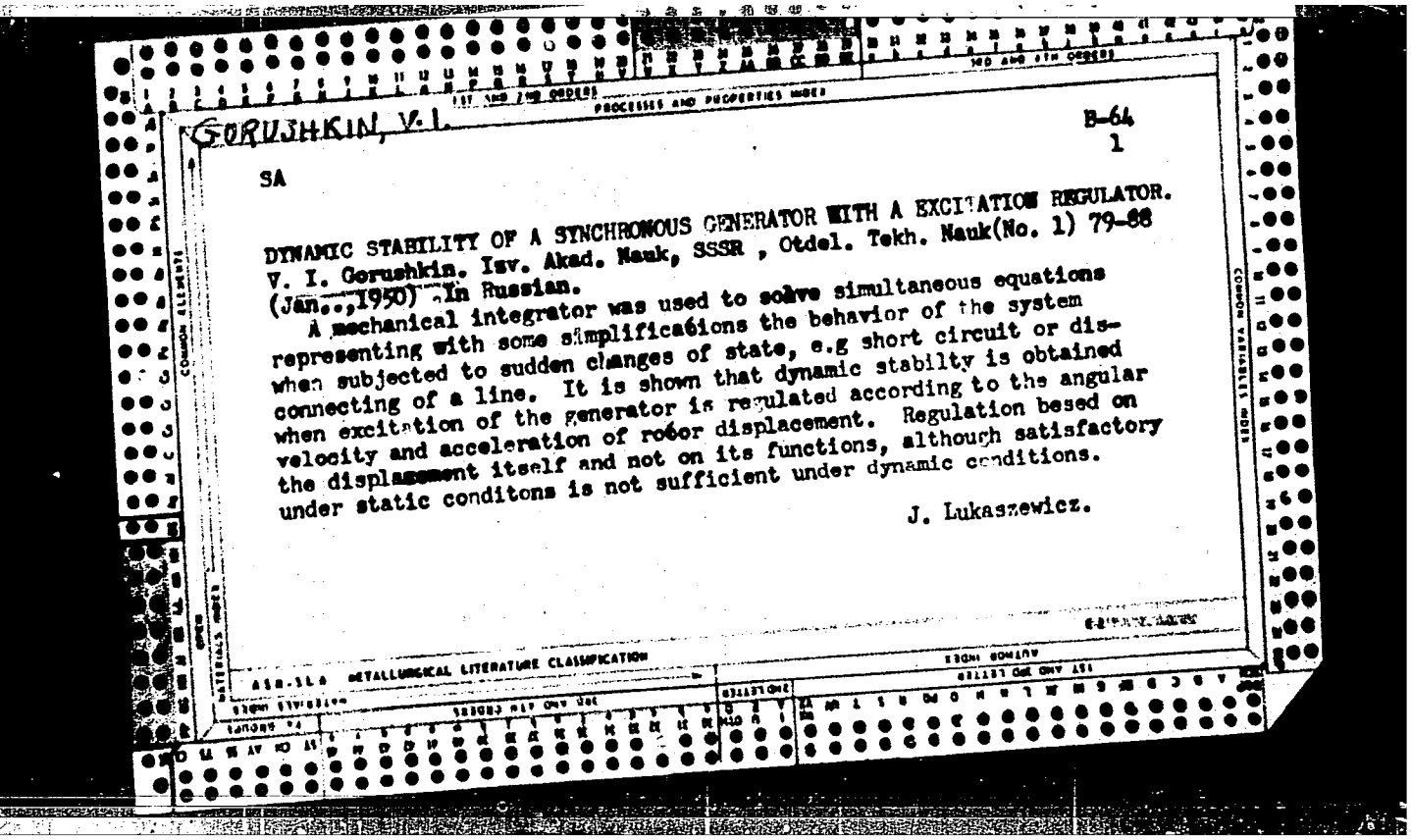
Sept 49

"Automatic Distribution of Operating Loads in an Electric Power System," I. S. Bruk, Corr Mem, Acad Sci, I. M. Markovich, Dr. Tech Sci, V. I. Gorushkin, S. A. Sovalov, Candidates Tech Sci, 4 pp

"Elektrichestvo" No 9

Description of automatic load distributing device "RAM," developed in 1946-1947 in ENIN (Power Eng Inst, Acad Sci USSR) Lab. Device permits optimum distribution of operating loads between stations of electric power systems, from standpoint of operating economy. Includes three diagrams.

PA 153T45



GORUSHKIN, V. I.

B-64
1

SA

DYNAMIC STABILITY OF A SYNCHRONOUS GENERATOR WITH A EXCITATION REGULATOR. V. I. Gorushkin. Izv. Akad. Nauk, SSSR , Otdel. Tekh. Nauk(No. 1) 79-88 (Jan.,1950) In Russian.

A mechanical integrator was used to solve simultaneous equations representing with some simplifications the behavior of the system when subjected to sudden changes of state, e.g short circuit or disconnecting of a line. It is shown that dynamic stabilty is obtained when excitation of the generator is regulated according to the angular velocity and acceleration of rotor displacement. Regulation based on the displacement itself and not on its functions, although satisfactory under static conditons is not sufficient under dynamic conditions.

J. Lukaszewicz.

USSR/Engineering - Mechanics Jul 51

"On Stresses Under Torsion in a Round Bar Weakened by a Prismatic Cavity," D. I. Sherman

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 7, pp 969-995

Analyzes torsion of hollow body whose cross section represents area limited outside by circumference and inside by square with rounded vertexes and explains how to study torsion of box profile with similar boundaries. Develops methods which may be used for soln of certain problems in the mech of continuous medium, such as detn of pressure in rocks, problems on stressed condition in unlike parts linked by force fit, strength of rotating

205T12

USSR/Engineering - Mechanics (Contd) Jul 51

discs weakened by several holes, etc. Submitted by Acad L. S. Leybenzon (deceased) 16 Dec 50.

205T12

GORUSHKIN, V. I.

USSR/Engineering - Electrical Engineering Dec 51

"On the Stability of Synchronous Generator When Its Excitation Is Regulated by Stator Current," G. V. Mikhnevich, V. I. Gorushkin

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 12, pp 1769-1776

Investigates static characteristics, static stability and dynamic stability of compounded synchronous generator at various values of regulation coeff and discusses results. Regulation of excitation under certain conditions may provide for increase of static as well as dynamic stability and

205T22

USSR/Engineering - Electrical Engineering Dec 51
(Contd)

thus increase carrying capacity of long-distance elec power lines. Submitted Acad A. V. Vinter.

205T22

GORUSHKIN, V.I.

B. T. R.
Vol. 3 No. 3
Mar. 1954
Electrical
Engineering

3186* Stability of a Synchronous Generator With Ionic Exciter. (Russian.) V. I. Gorushkin. *Izvestiia Akademii Nauk SSSR, Otdelenie Tekhnicheskikh Nauk*, 1953, no. 5, May, p. 653-663.
Discusses static stability problems. Describes regulations by starter current, voltage, and displacement angle of rotor. Suggests three methods of quickly increasing voltage. Graphs, tables. 4 ref.

GORUSHKIN V. I.

Zubkov P. I. and Gorushkin V. I., "Increasing the Stability of Synchronous Generators by Regulating Excitation in Slipping and Speeding up the Rotor;" Izvestiya Akademii Nauk SSSR /News of the Academy of Sciences USSR/, OTN, 1953, No. 9, Pages 1262-1281, 7 figures; bibliography, 12 items.

GORUSHKIN, V. I.

AID P - 1279

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 3/30

Authors : Venikov, V. A., Doc. of Tech. Sci., Prof., Ivanov-Smolenskiy, A. V., Kand. of Tech. Sci., Dotsent and Gorushkin, V. I., Kand. of Tech. Sci.

Title : Problem of efficiency in forcing up the generator field

Periodical : Elektrichestvo, 1, 12-19, Ja 1955

Abstract : The determination of dynamic stability with the help of a network analyzer is compared with the calculation on a mechanical computer. This helps explain several factors usually not considered, particularly the limiting capacity of long power transmission lines with forcing up of the field. The theoretical and the actual results in a simple case coincide closely. Eleven diagrams and oscillograms, 2 tables, 5 Russian references (1941-1954).

Institution : Moscow Power Engineering Institute im. Molotov; Power Engineering Institute of the Academy of Sciences, USSR.

Submitted : My 20, 1954

AID P - 3252

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 7/25

Authors : Meyerovich, E. A., Doc. Tech. Sci., Prof., V. I. Gorushkin, Kand. Tech. Sci., and Z. B. Golembo, Kand. Tech. Sci.

Title : Computation of currents and voltages in an electric power system feeding asymmetrical loads

Periodical : Elektrichestvo, 9, 32-39, S 1955

Abstract : The authors present a method of computing currents and voltages in a three-phase system feeding an unsymmetrical load at several points. The method is based on the division of the whole system into two parts: one symmetrical, the other asymmetric. The operating conditions of the symmetrical part are found by the method of symmetrical components. Currents and voltages in connecting points are determined by the method of successive approximations. The conditions of convergence applied for electric power system calculations are analyzed. The same method is applied in an example to calculate asymmetrical currents and

AID P - 3252

Elektrichestvo, 9, 32-39, S 1955

Card 2/2 Pub. 27 - 7/25

voltages in an electric power system feeding from five substations the contact line network of a railroad operating on single-phase a-c current. Three tables, 6 connection diagrams, and 8 Soviet references, 1 - 1936, 7 - 1949-1954.

Institution : Power Engineering Institute of the Academy of Sciences, USSR, and Trust for the Planning and Investigation of Thermal and Electric Power Plants, Networks and Substations.

Submitted : My 31, 1955

Gorushkin, V.I.

USSR/ Scientific Organization - Conferences

Card 1/1 Pub. 124 - 26/30

Authors : Popkov, V. I., and Gorushkin, V. I.

Title : Long distance delivery of electric power

Periodical : Vest. AN SSSR 25/7, 123-124, Jul 1955

Abstract : Minutes are presented of a scientific meeting held at the G. M. Krzhizhanovskiy Energetics Institute where problems of rural electrification and long distance electric power delivery were discussed.

Institution : .....

Submitted : .....

GORUSHKIN, V.I., kandidat tekhnicheskikh nauk; GOLEMBO, Z.B., kandidat tekhnicheskikh nauk.

Method for approximate calculation of voltage and current unbalance in substations supplying an out-of-balance load. Elektrichestvo no.10:22-24 O '56. (MLRA 9:11)

1. Energeticheskiy institut Akademii nauk SSSR. (for Gorushkin);
2. Teploelektroproyekt Ministerstva elektrostantsii (for Golembo).
(Electric power distribution)

GORUSHKIN, V.I., kandidat tekhnicheskikh nauk.

Long-distance power transmission. Elektrichestvo no.11: 92-93 N '56. (MLRA 9:12)

1. Energeticheskiy institut imeni Krzhizhanovskogo Akademii nauk SSSR.

(Electric power distribution)

GORUSHKIN V. I.

AUTHORS: Krzhizhanovskiy, G. M., Veyts, V. I., Baum, V. A., Gorushkin, V. I., Nekrasov, A. M., Markovich, I. M., Tolstov, Yu. G. 105-58-4-34/37

TITLE: V. I. Popkov, Corresponding Member of the AS USSR (Chlen-korr. AN SSSR V. I. Popkov)

PERIODICAL: Elektrichestvo, 1958, Nr 4, pp. 94-94 (USSR)

ABSTRACT: On the occasion of his 50th birthday and his 25th anniversary of scientific activity. Valeriy Ivanovich Popkov was born in February 1908. His activity as engineer started in the Dzerzhinskiy Works in 1930. In 1932 he worked at the All Union Institute for Electrical Engineering and began with the elaboration of lightning protective plants for energy systems. His main activity was devoted to the problem of corona discharge. In 1934 he began a great work at the ENIN of the AS USSR concerning the investigation of d. c. corona. In the course of this he elaborated the theory of dipolar corona and experimentally

Card 1/2

determined a number of important physical parameters in this field. In 1948 he became Dr. of Technical Sciences and Director of the Group for the Investigation of Corona Discharge at the Institute for Power Engineering of the AS USSR. Under his direct charge the research works on the corona are coordinated in the various institutes of the Union. He wrote 40 scientific works. In 1953 he became Corresponding Member of the AS USSR. Since 1953 he has been First Vice Director of the Institute for Power Engineering imeni G. M. Krzhizhanovskiy of the AS USSR and President of the Department for Electrical Power Engineering of the Scientific Coucil (Uchenyy sovet). There are 1 figure.

AVAILABLE: Library of Congress

1. Biography

Card 2/2

SOV/30-58-9-26/51

AUTHOR: Gorushkin, V. I.

TITLE: News in Brief (Kratkiye soobshcheniya) Transactions of the Congress on Electrical Power Engineering (Elektroenergeticheskiy s"yezd)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 9, pp. 94 - 95 (USSR)

Vol. 29,

ABSTRACT: The congress was arranged by the Pol'skaya Akademiya nauk (Polish Academy of Sciences) together with the Soyuz pol'skikh elektrotekhnikov (Association of Polish Electrical Engineers) and was held in Zoppot (Sopot) near Danzig (Gdan'sk) from May 19 - 22. Guests from Bulgaria, Hungary, China, Roumania, the USSR, Czechoslovakia, Jugoslavia were present. The Soviet delegation consisted of V.I.Gorushkin, A. V.Lykov, Z.B. Nikitin, M.L.Raman, I.G.Kheyl', G.M.Shchegolev. A number of problems connected with the plan of the electrification of Poland were discussed. The Polish Academy of Sciences in 1956 has established a committee of experts from industrial enterprises, scientific institutions, universities, and the administrative apparatus which is to elaborate a 15-years plan for the electrification (1960-1975). J.Jakubowski,

Card 1/2

Member, Academy of Sciences, Poland, was appointed president of this committee. The Polish experts K.Kopecki, Z.Jasicki, A.Kopysciański reported on methodical problems. The Soviet delegation presented 4 reports, among them one prepared by G.M.Krzhizhanovskiy and V.I.Veyts on the technical and economical principles of the uniform power system in the USSR.

GORUSHKIN V.I.

PHASE I BOOK EXPLOITATION SOV/3407

Akademiya nauk SSSR. Energeticheskiy institut im. G.M. Krzhizhanovskogo

Problemy energetiki; sbornik posvyashchayetsya akademiku G.M. Krzhizhanovskomu (Problems of Power Engineering; Collection of Articles Dedicated to Academician G.M. Krzhizhanovskiy) Moscow, 1959. 851 p. Errata slip inserted. 2,500 copies printed.

Eds. of Publishing House: B.D. Antrushin, F.V. Dubkov, P.I. Zubkov, and S.M. Moyzhes; Tech. Ed.: T.A. Prusakova; Editorial Board: A.V. Vinter, Academician (Deceased), V.I. Popkov (Resp. Ed.) Corresponding Member, Academy of Sciences USSR, V.I. Veyts, A.S. Predvoditelev, M.A. Styrikovich, N.V. Chuchmanov, N.B. Bogdanova, Candidate of Technical Sciences, B.K. Kozlov, Candidate of Technical Sciences, M.M. Lebedev, Candidate of Technical Sciences, and I.N. Sundukov.

PURPOSE: This collection of articles is intended as a tribute to the memory of Academician G.M. Krzhizhanovskiy.

COVERAGE: The collection contains sixty articles by former students and coworkers of the deceased Academician. The articles deal with problems of a wide range of subjects in the field of power engineering: problems of the regional development of electrical and thermal power engineering, power engineering technology, and the physics of combustion. No personalities are mentioned. References are given after most articles.

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Gorushkin, V. I.

16(6), 8(0) PHASE I BOOK EXPLOITATION SOV/3071

Akademiya nauk SSSR. Energeticheskiy institut

Elektroenergetika, vyp. 1 (Electric Power Engineering, Nr 1) Moscow, Izd-vo AN SSSR, 1959. 159 p. Errata slip inserted. 2,800 copies printed.

Eds. of Publishing House: P. F. Ogarkov and Ye. M. Grigor'yev; Tech. Ed.: Ye. V. Zelenkova; Editorial Board: Yu. G. Tolstov, Doctor of Technical Sciences (Resp. Ed.), I. M. Markovich, Doctor of Technical Sciences, I. S. Stekol'nikov, Doctor of Technical Sciences, P. I. Zubkov, Candidate of Technical Sciences, V. I. Levitov, G. V. Nikhanovich, Candidate of Technical Sciences, and N. D. Bol'shov (Secretary) Candidate of Technical Sciences.

PURPOSE: This collection of articles is intended for specialists in the various fields of electric power engineering treated in it.

COVERAGE: The first issue of the collection of articles, Elektroenergetika, appeared in April 1959. It is published by ENIN [Energeticheskiy institut] imeni G. M. Krzhizhanovskiy of the Academy of Sciences, USSR. The articles in this issue are based on research and work by the authors under the auspices of ENIN. The articles are on a high theoretical and technical level and represent original contributions to various present-day problems in electrical engineering. References are given after most of the articles.

SOV/24-59-2-26/30

AUTHOR: Gorushkin, V. I. (Moscow)

TITLE: Conditions of Synchronization of a Synchronous Generator with a Non-Linear Asynchronous Characteristic (Usloviya sinkhronizatsii sinkhronnogo generatora s nelineynoy asinkhronnoy kharakteristikoy)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1959, Nr 2, pp 144-146 (USSR)

ABSTRACT: Experiments showed that it is possible to allow a synchronous generator to run in an asynchronous manner for a short time. This can be utilized for starting or stopping its motion after a breakdown (Ref 1). A simplified equation of motion of the rotor can be shown as Eq (1), where δ - angle between the longitudinal rotor axis and that of the rotational magnetic force of this stator, D - moment of damping, β - moment of rotation. The limiting value of D can be defined as Eq (2) (Ref 7). The integral curves of δ and S were obtained experimentally by the Power Institute of the Academy of Sciences USSR (Refs 8 and 9). The diagrams of phases were constructed for different values of the parameters α , S_o and β . Two points at the axis δ were determined from Eq (4): one of

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Conditions of Synchronization of a Synchronous Generator with a Non-Linear Asynchronous Characteristic

these at $\delta < \frac{1}{2}\pi$ represents the stable equilibrium and the other, $\delta > \frac{1}{2}\pi$ - unstable equilibrium (Ref 4). Three types of the possible phase characteristic are represented in Fig 1. The first type, I, has only one (unstable) limiting cycle, while the type II has two cycles (stable and unstable) and the type III has none. For the given parameters α and S_o, the type of phase depends on the moment of rotation β. If β is smaller than a certain value β_2, then the type I (Fig 1) is obtained. In this case it is necessary for the synchronization that the point at the initial moment of rotation is placed below the unstable cycle. If β is greater than a certain value β_1, then the limiting cycles do not exist (type III, Fig 1) and the two points should be placed below the separation in order to obtain synchronization. Similarly, the two points

Conditions of Synchronization of a Synchronous Generator with a Non-Linear Asynchronous Characteristic

should lie below the separation when $\beta_2 < \beta < \beta_1$, which is the case of type II. Fig 2 illustrates the limiting values of the moments of rotation β_2 (continuous line) and β_1 (dotted line) in relation to S_0 for various α. The values of $\beta = \beta_0$ obtained from Eq (2) are shown as broken lines. It can be seen from Fig 2 that for $S_0 > 5$ the phase of the type I can be determined for the conditions Eq (5). The verification of the self-synchronization of the generator can be performed in two operations. The phase type should be determined from Fig 2 if $S_0 < 5$ or from Eqs (2) and (5) for greater values of S_0. Second, the initial values of δ_* and S_* should be determined and plotted on the phase diagram. In the case of the II and III types, the conditions of synchronization coincide with the conditions of dynamic stability, while for the I type the points should be situated below the unstable

Conditions of Synchronization of a Synchronous Generator with a Non-Linear Asynchronous Characteristic

limiting cycle. The latter can be recognized when the sliding becomes a periodic function of the angle δ and the amplitude of vibration of sliding is small. There are 2 figures and 9 references, of which 6 are Soviet, 1 French, 1 German and 1 English.

ASSOCIATION: Energeticheskiy institut, AN SSSR (Power Institute, Academy of Sciences, USSR)

SUBMITTED: December 18, 1958.

Card 4/4

GORUSHKIN, V.I.; ZUBKOV, P.I. [deceased]

Concerning one criteron of the static stability of synchronous generators. Elektronergetika no.2:55-60 '60. (MIRA 14:3)
(Electric generators)

GORUSHKIN, V.I. (Moskva)

Asynchronous characteristic of an excited synchronous generator. Izv. AN SSSR, Otd. tekh. nauk. Energ. i avtom. no.6:165-167 N-D '60. (MIRA 13:12)

(Electric generators)

GORUSHKIN, V.I., doktor tekhn.nauk; MALKHAS'YAN, I.V., inzh.; AZAR'YEV, D.I., kand.tekhn.nauk

Electric power engineering in Finland. Elektrichestvo no.1: 86-89 Ja '61. (MIRA 14:4)

(Finland--Electric power)

POPKOV, V.I.; TOLSTOV, Yu.G.; STEKOL'NIKOV, I.S.; MEYEROVICH, E.A.; MOSKVITIN, A.I.; TAFT, V.A.; GORUSHKIN, V.I.; SOVALOV, S.A.; LIBKIND, M.S.

Sixtieth birthday of I.M. Markovich. Elektrichestvo no.5: 87 My '61. (MIRA 14:9)
(Markovich, Isaak Moiseevich, 1901-)

GORUSHKIN, Vadim Ivanovich, doktor tekhn. nauk; VENIKOV, V.A., prof., doktor tekhn. nauk, laureat Leninskoy premii, red.; KHRUSTALEVA, N.I., red.; VORONINA, R.K., tekhn. red.

[Use of electronic computers in power engineering calculations] Vypolnenie energeticheskikh raschetov s pomoshch'iu vychislitel'nykh mashin. Pod red. V.A.Venikova. Moskva, Vysshaia shkola, 1962. 174 p. (MIRA 15:9)
(Electronic calculating machines) (Power engineering)
(Electric network analyzers)

GORUSHKIN, V.I.

Concerning a certain criterion of static stability.
Elektrichestvo no.1:92 Ja '62. (MIRA 14:12)
(Electric machinery, Synchronous)

GORUSHKIN, V.I.; KOVAL'KOV, G.A.; KOZLOVSKIY, G.F.; LUTIDZE, Sh.I.; MARKOVICH, I.M.; MEYEROVICH, E.A.; MIKHNEVICH, G.I.; POPKOV, V.I.; STEKOL'NIKOV, I.S.; TAFT, V.A.; TOLSTOV, Yu.G.

Sixtieth anniversary of the birth of A.I. Moskvitin. Elektrichestvo no.4:94 Ap '62. (MIRA 15:5)
(Moskvitin, Anatolii Ivanovich, 1902-)

39092
S/105/62/000/007/002/004
E200/E135

9,7100

AUTHORS: Gorushkin, V.I., Doctor of Technical Sciences;
Krumina, A.A., Engineer; and
Latysheva, T.S., Engineer

TITLE: On extending the range of problems solvable by means of small digital computers

PERIODICAL: Elektrichestvo, no.7, 1962, 28-29

TEXT: The difficulties connected with the strict limitation of the range of numbers in small computers may be avoided to a great extent by resorting to operations over numbers represented in "normal form". Any number in normal form is represented as

$$x = q_x 2^{P_x} \quad (1)$$

where $1/2 \leqslant q_x < 1$; q_x is the mantissa, P_x is the order of magnitude. The number represented in such form is recorded in two adjacent memory storage cells of the computer: in one cell one records the mantissa q_x and the other $P_x \cdot 2^{-30}$.

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On extending the range of problems...

All arithmetic operations may be carried out over numbers represented in normal form. However, in most machines there are no commands for such operations. The arithmetic operations with such numbers are carried out by means of special programs. The rules for carrying out arithmetic operations over numbers represented in normal form are given below. Addition is carried out as follows: say the numbers $A = q_A \cdot 2^{pA}$ and $B = q_B \cdot 2^{pB}$ are to be added. First one equates the orders and the difference $p_A - p_B$ is found. Then if $p_A - p_B < 0$, then q_A is multiplied by $2^{(p_A - p_B)}$ and added to q_B:

$$C = A + B = q_A 2^{p_A} + q_B 2^{p_B} = \quad (2)$$
$$= (q_A 2^{p_A - p_B}) 2^{p_A - (p_A - p_B)} + q_B 2^{p_B} =$$
$$= (q_A 2^{p_A - p_B} + q_B) 2^{p_B} = q_C 2^{pC}.$$

On extending the range of problems...

If $p_A - p_B > 0$ then q_B is multiplied by $2^{p_B - p_A}$ and is added to q_A:

$$C = A + B = q_A 2^{p_A} + q_B 2^{p_B} = q_A 2^{p_A} + (q_B 2^{p_B - p_A}) 2^{p_B} = (p_B - p_A) = \quad (3)$$

$$= (q_A + q_B 2^{p_B - p_A}) 2^{p_A} = q_C 2^{p_C}.$$

For multiplication the mantissas are multiplied together and the orders are added:

$$A \cdot B = (q_A 2^{p_A})(q_B 2^{p_B}) = (q_A q_B) 2^{p_A + p_B}. \quad (4)$$

Division is carried out thus:

$$\frac{A}{B} = \frac{q_A 2^{pA}}{q_B 2^{pB}} = \frac{q_A}{q_B} 2^{p_A - p_B} = q_C 2^{p_C} \quad (5)$$

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E200/E135

On extending the range of problems...

Programs for multiplication and division are written directly in the base program. The program for addition and subtraction is used as an independent routine. The method described above makes it possible to use fixed point computers of type M-3 (M-3) to carry out operations over numbers lying between the limits of $2^{-2^{30}}$ and $2^{2^{30}}$ or approximately between $10^{-300\ 000\ 000}$ and $10^{300\ 000\ 000}$ (the machines "Strela" and "Ural-2" operate with numbers in the range from 10^{-19} to 10^{19}). Thus it is possible to "transform" a fixed point computer into a floating point one.

ASSOCIATION: Energeticheskiy institut im. Krzhizhanovskogo
(Power Engineering Institute imeni Krzhizhanovskiy)

SUBMITTED: September 25, 1961

Card 4/4

LATYSHEVA, Tamara Sergeyevna; GORUSHKIN, V.I., doktor tekhn.nauk, otv. red.; LETNEV, B.Ya., red.izd-va; SIMKINA, G.S., tekhn. red.

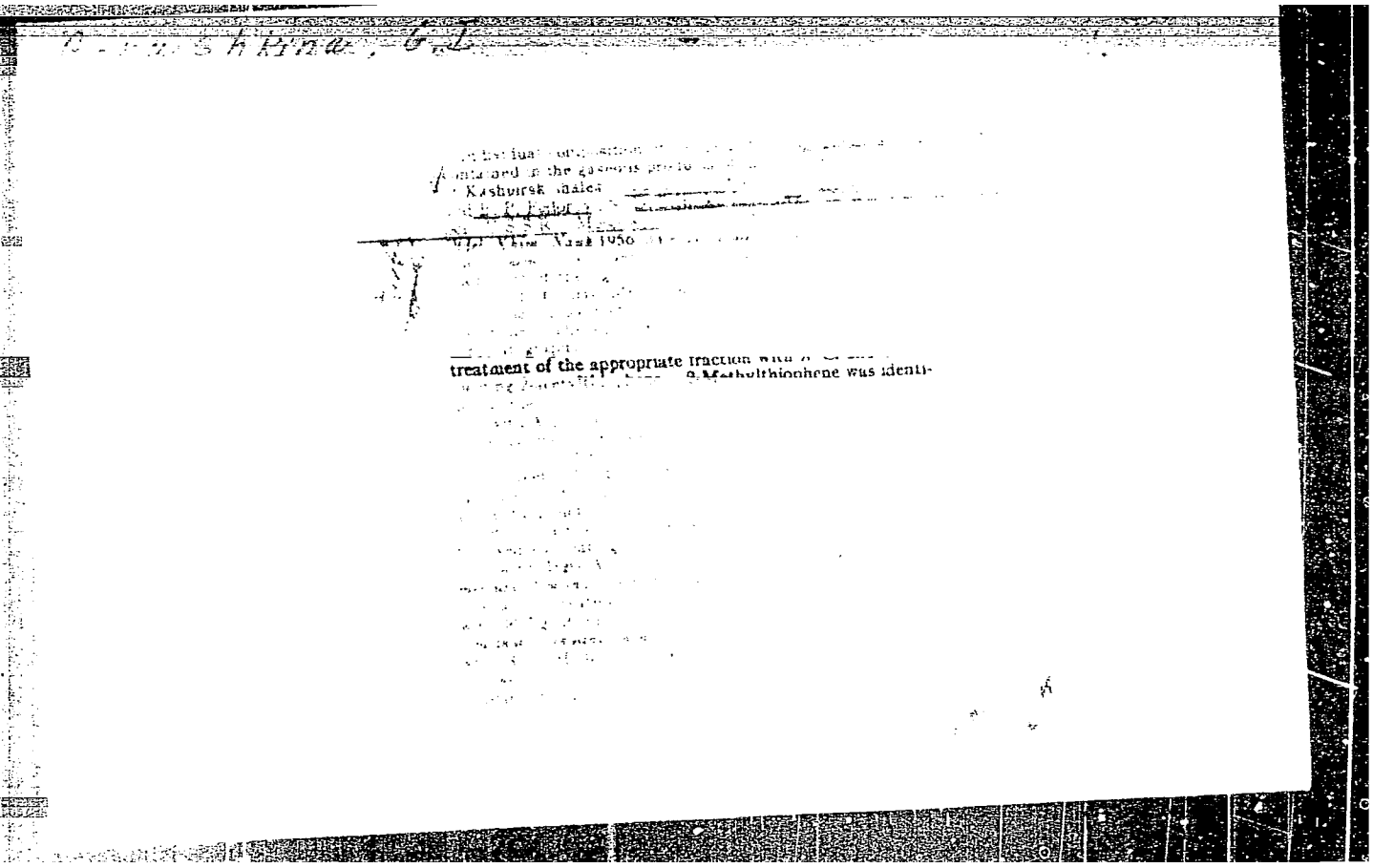
[Programming and problem solving on two-address machines] Programmirovanie i reshenie zadach na dvukhadresnykh mashinakh. Moskva, Izd-vo AN SSSR, 1963. 182 p. (MIRA 16:10)
(Programming (Electronic computers))

BRAILOV, V.P.(Moskva); GORUSHKIN, V.I. (Moskva); DENISOV, V.I. (Moskva); ZAKHARIN, A.G. (Moskva); KUZ'MINA, A.A. (Moskva); POLYANSKAYA, T.M. (Moskva)

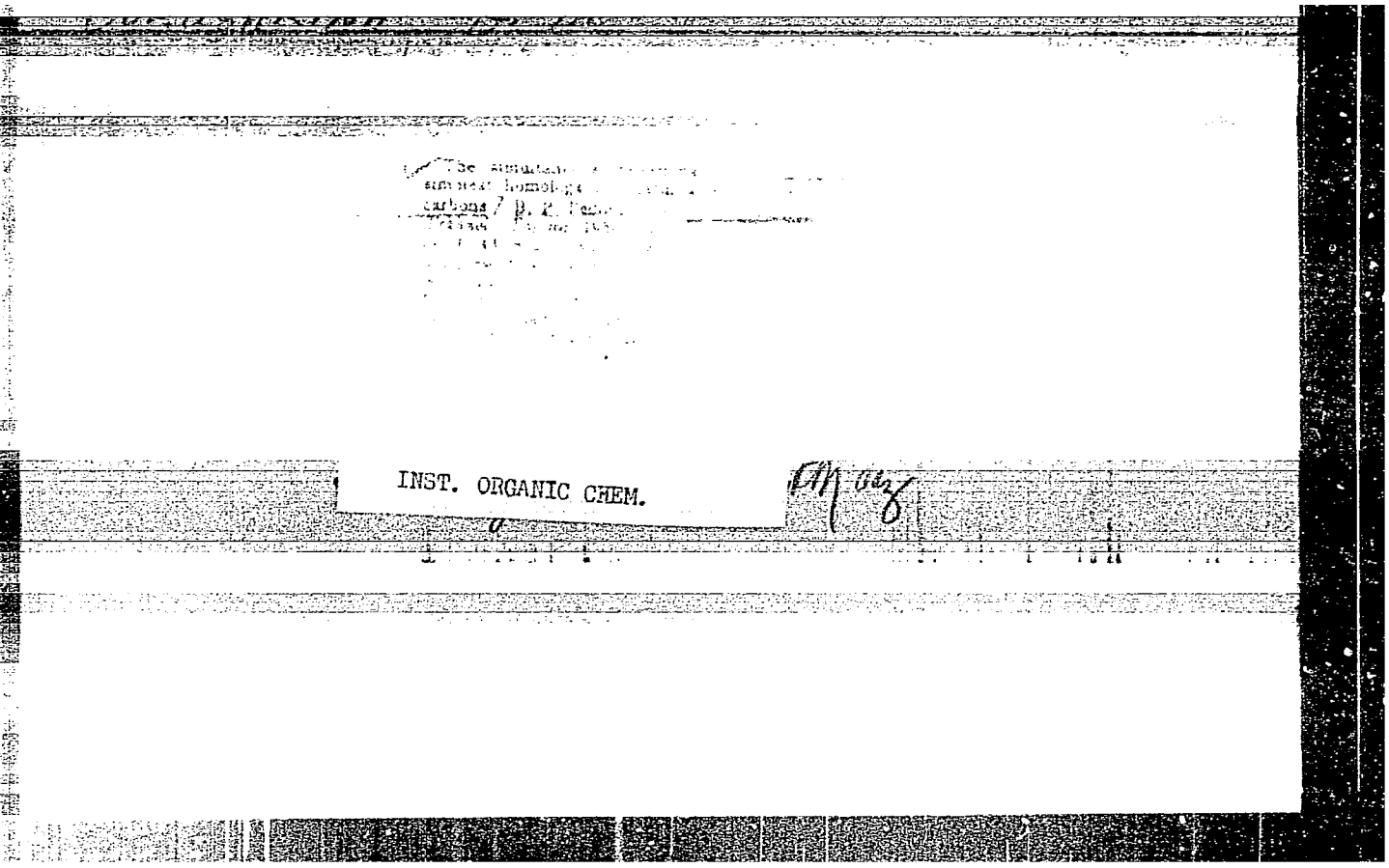
Optimization of the selection of fuels for thermal electric power plants and boiler systems in long-range planning. Izv. AN SSSR. Energ. i transp. no.4:514-524 Jl-Ag '63. (MIRA 16:11)

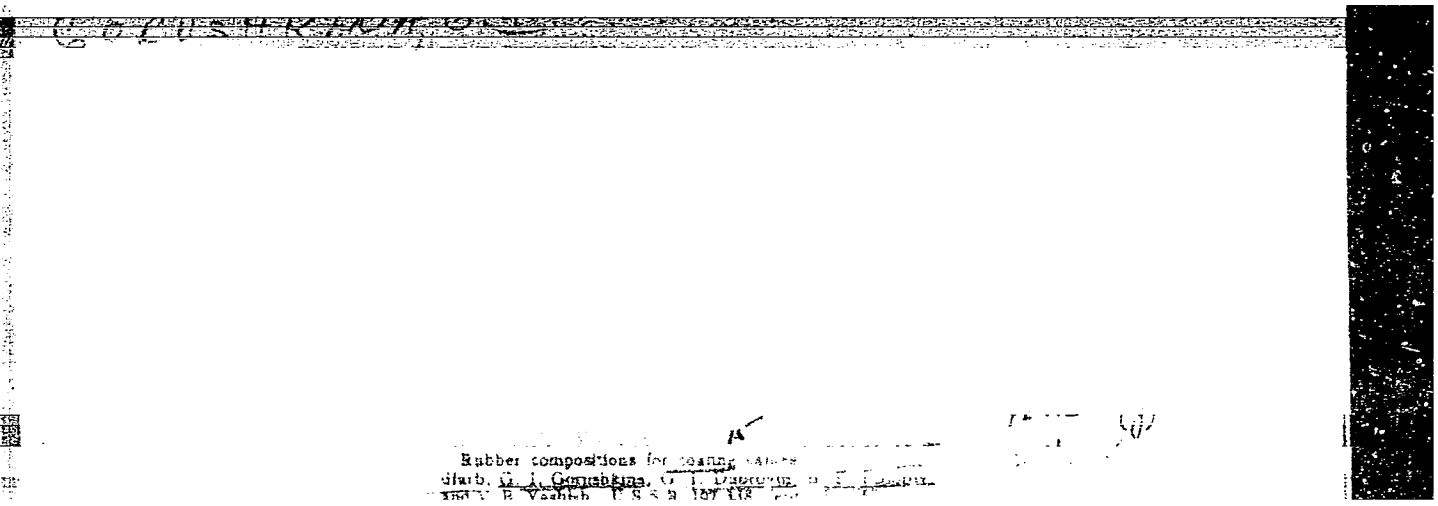
GORUSHKIN, V.I.; SHUL'GIN, N.V.

Individual consideration of the staturation of the rotor and stator of a synchronous machine. Elektroenergetika no.7:72-83 '63. (MIRA 16:9)

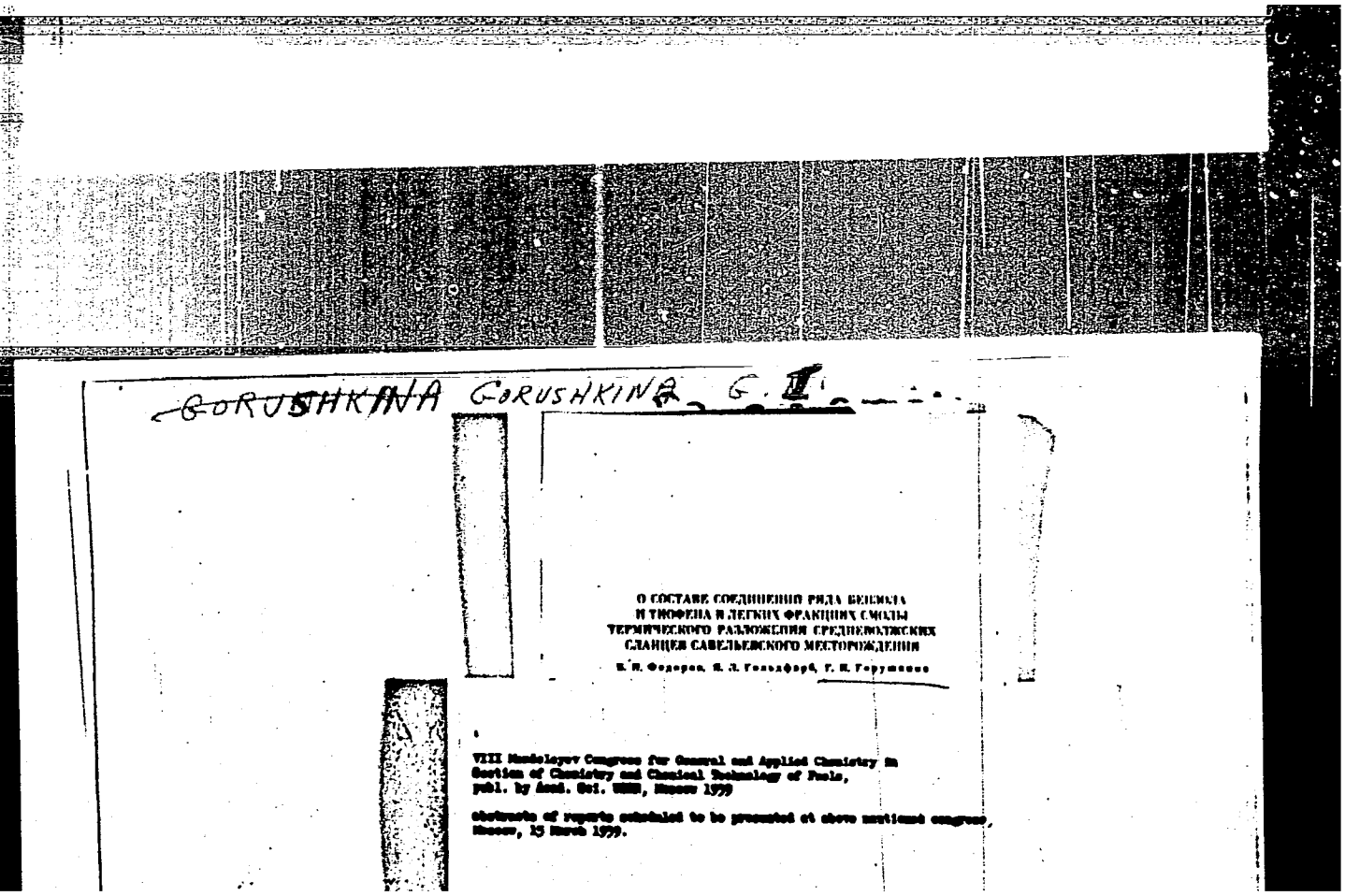


treatment of the appropriate fraction





Rubber compositions for [illegible]



GORUSHKINA GORUSHKINA G. I.

О СОСТАВЕ СОЕДИНЕНИЙ РЯДА БЕНЗОЛА И ТИОФЕНА В ЛЕГКИХ ФРАКЦИЯХ СМОЛЫ ТЕРМИЧЕСКОГО РАЗЛОЖЕНИЯ СРЕДНЕМАЗУТСКИХ СЛАНЦЕВ САВЕЛЬЕВСКОГО МЕСТОРОЖДЕНИЯ

В. Н. Федоров, Н. Л. Гольдфарб, Г. И. Горушкина

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

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

SOV/80-32-2-32/56

AUTHORS: Angert, L.G., Gol'dfarb, Ya.L., Gorushkina, G.I., Zenchenko, A.I., Kuz'minskiy, A.S., Fedorov, B.P.

TITLE: Syntheses of Some Thiophene Derivatives and the Study of Their Behavior as Ingredients of Resins (Accelerators and Antioxidants) ((Sintezy nekotorykh proizvodnykh tiofena i izucheniye ikh povedeniya v kachestve ingredientov rezin (uskoriteley i antioksidantov))

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 2, pp 408-418 (USSR)

ABSTRACT: A total of 15 compounds of the thiophene series were investigated as ingredients of resin mixtures. They all contained the azomethine group $XC_4H_2SCH = NRY$, where X is hydrogen or CH_3 -, R an aliphatic or aromatic radical, Y a substituting group. Secondary amines were prepared by heating thenyl dichloride with amines in a solution of benzene or toluene. The products of this reaction, their melting and boiling points, analyses and yields are given in Table 2. These compounds inhibit the oxidation of rubber. The inhibiting action is due to the nature of the ortho- and paragroups in the benzene ring. As a control sample rubber containing phenyl-β-naphthylamine was used in the experiments. The thenyl group $C_4H_3SCH_2$- has nearly the same inhibiting influence

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Syntheses of Some Thiophene Derivatives and the Study of Their Behavior as Ingredients of Resins (Accelerators and Antioxidants)

as the phenyl group. The most pronounced effect have the inhibitors 5-methyl-2-thenylidene-n-aminophenol, 2-thenyl-β--naphthylamine, etc. The synthetized compounds were tested also as vulcanization accelerators on the rubbers SKB, SKS-30, SKN-26 and NK. Most effective were 2-mercapto-4-(2'-thienyl)--thiazole and di-2-thenylideneethylenediamine. The thenylidene group had a greater effect on vulcanization acceleration than the benzene ring.
There are 5 tables, 1 graph and 20 references, 10 of which are Soviet, 3 American, 3 English, 2 German, and 2 French.

SUBMITTED: May 13, 1957

Card 2/2

Gorushkina, G.I.

S/080/60/033/005/008/008

AUTHORS: Kuz'minskiy, A.S., Gol'dfarb, Ya.L., Fedorov, B.P., Zaichenko, A.I., Kogerman, A.P., Gorushkina, O.I., Angert, L.G.

TITLE: The Synthesis of Some Thiophene Derivatives and the Study of Their Behavior as Rubber Ingredients (Accelerants and Antioxidants). Communication 2.

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, No 5, pp 1182 - 1187

TEXT: Some azomethines of the thiophene series are accelerants of the vulcanization process [Ref 1], some of them being also antiseptics [Ref 2] which is important for the cable industry. The most suitable azomethines are those containing hydroxyl groups. Other substances of this type were synthesized, therefore, which differed only in the position of the hydroxyl groups. The following substances were synthesized: bis-[2-thenylidene]-hydrazine, bis-[5-methyl-2-thenylidene]-hydrazine, bis-[2-thenylidene]-μ-phenylenediamine, 5'-methyl-2'-thenylidene-6-amino-2-mercaptobenzothiazole, 5-methyl-2-thenylidene-o-aminophenol and 2'-oxybenzylidene-2-thenylamine, as well as two new sulfides: [β-oxyethyl]-2-thenylsulfide and 2-thenyl-[n-oxyphenyl]-sulfide. The two sulfides mentioned and 2'-thenylidene-6-

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amino-2-mercaptobenzothiazole and 6-amino-2-mercaptobenzothiazole are accelerants, but their efficiency is less than that of mercaptobenzothiazole. It was evident that the hydroxyl group positively affects the accelerating action of the compounds, if it is located in the para-state of the benzene ring. The introduction of molecules of mercaptobenzothiazole of the amino-group into the benzene ring decreases the efficiency of the compound. A further complication of the molecule decreases the efficiency still more. The cause of these phenomena is not known at the present time. The principal role in the accelerating action of the compounds considered is played by the hydroxyl group.

There are 4 tables and 5 references: 2 Soviet, 2 English and 1 German.

SUBMITTED: August 20, 1959

Card 2/2

FEDOROV, B.P.; GORUSHKINA, G.I.; GOL'DFARB, Ya.L.

Synthesis of secondary amines of the thiophene series. (MIRA 15:2)
Zhur.ob.khim. 31 no.12:3933-3939 D '61.
(Amines)
(Thiophene)

FEDOSOV, B.I.; GORUSHKINA, G.I.; GOL'DFARB, Ya.L.

Syntheses of the derivatives of N-substituted dithiocarbamic acids of the thiophene series. Zhur. org. khim. 1 no.4:777-787 Ap '65. (MIRA 18:11)

GORUSHKINA, L. P.

Dissertation: "The Effect of Alloying Elements on Certain Physicomechanical Properties of Cast Iron With Globular Graphite." Cand Tech Sci, Khar'kov Polytechnic Inst, Khar'kov, 1953. (Referativnyy Zhurnal--Khimiya, Moscow, No 4, Feb 54)

SO: SUM 243, 19 Oct 1954

GORUSHKINA, L. P.

137-58-3-5934

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 211 (USSR)

AUTHORS: Farafonov, Ye. Ye., Gorushkina, L. P.

TITLE: Improving the Physico-mechanical Properties of Spheroidized Cast Iron by Means of Alloying with Nickel, Nickel-chromium, and Nickel-chromium-molibdenum (Povysheniye fiziko-mekhanicheskikh svoystv chuguna s sharovidnym grafitom putem legirovaniya nikelem, nikelem i khromom, nikelem, khromom i molibdenom)

PERIODICAL: Tr. Khar'kovsk. politekhn.in-ta, 1957, Vol 9, Nr 1, pp 17-28

ABSTRACT: An examination of the effect of single and complex additives, consisting of Ni, Mo, and Cr, on the improvement of the base metal and the physico-mechanical properties of spheroidized cast iron (SCI). Investigations were conducted on a SCI of the SPG-11-45 type with 0.5 percent-0.7 percent-0.9 percent-1.1 percent and 2.0 percent additions of Ni. It is established that optimum distribution of structural constituents and best ratio of strength and plastic characteristics of cast iron is achieved by concurrent addition of Ni, on the order of 1.0 percent, and of

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Improving the Physico-mechanical Properties (cont.)

0.06 percent of Mg; the improvement in mechanical properties is attributable to the strengthening of the ferrite caused by the formation of a solid solution and by the sorbitization of its structure; the machinability of the cast iron is not impaired, however. It is noted that wear-resistance indices increase also. The authors stress the favorable effect of the addition of 1.0 percent of Ni which reduces quasi-isotropy almost to zero. When added in amounts exceeding 1.0 percent, the Ni in conjunction with Si has merely a graphitizing effect and lowers the mechanical properties of cast iron. In case of combined alloying of cast iron with Ni and Cr the σ_b increases by 14 percent on the average, while the $\sigma_{b\ compr.}$, the a_k, and the deflection increase by 13 percent, 20 percent, and 17 percent, respectively; the δ attains a 4 percent value. In the case of concurrent alloying with Ni and Mo the σ_b increases by 14-17 percent on the average, while the a_k increases by 25-30 percent. In combined alloying with Cr and Ni, as well as with Cr, Ni, and Mo, high values of $E_{tens.}$ and $E_{compr.}$ were obtained (on the order of 1.6×10^6 to 1.83×10^6 and 1.6×10^6 to 1.9×10^6, respectively). A proper selection of alloying elements refines the precipitation of the spheroidal graphite somewhat, in connection with which certain improvements in mechanical properties, particularly of E, are observed. Owing to the combined alloying the field of application of SCI

'Improving the Physico-mechanical Properties (cont.)

, as a substitute for components made of steel, non-ferrous metals, and alloys, may be widened even more to reduce the weight of structures below current levels.

S. Sh.

Card 3/3

GORUSHKINA, L. P.

137-58-4-8246

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 273 (USSR)

AUTHORS: Gorushkina, L.P., Kashirskiy, A.V.

TITLE: Titanium Alloying of Iron (Legirovaniye chugunov titanom)

PERIODICAL: Tr. Khar'kovsk. politekhn. in-ta, 1957, Vol 11, pp 143-148

ABSTRACT: The results of investigations in a new field to determine the effect of Ti on the properties and structure of VCh-40 spheroidal-graphite cast iron (I). Mechanical properties and microstructure were studied. It was found that in such I, Ti acts as a carbide-former, inhibits the precipitation of graphite spheroids, facilitates structural fineness in the base metal and more specifically of the graphite, both spheroidal and flaky. No improvement in mechanical properties was noted. It is expected that reduction in wear and improvement in the corrosion resistance of the I will be achieved.

Yu. I.

1. Cast iron--Mechanical properties--Effects of titanium
2. Cast iron--Structure--Effects of titanium 3. Titanium --Applications

Card 1/1

GORUSHKINA, L.P.

High quality cast iron with spheroidal graphite as structural material in the manufacture of mining machinery. Sbor.nauch. trud. KHGI 5:357-367 '58. (MIRA 14:4)
(Cast iron—Metallography)
(Machinery industry)
(Mining machinery)

S/128/60/000/007/014/017/XX
A105/A033

AUTHORS: Farafonov, Ye.Ye, and Gorushkina, L.P.

TITLE: Alloying of Nodular Cast Iron

PERIODICAL: Liteynoye proizvodstvo, 1960, No. 7, pp. 24-26

TEXT: Tests of the physical and mechanical properties of nodular cast iron alloyed with copper, chromium, nickel and molybdenum are described. Chemical composition and structure of inspected cast irons are shown in Table 1 and their mechanical properties in Table 2. The influence of copper on the wear resistance of nodular cast iron was tested on a МИ (MI) device by the friction method at a pressure of 100 and 150 kg/sq cm on 30ХГСА (30KhGSA) steel brace hardened to 57.5. The abrasion coefficient was determined by weighing the specimens and the gage brace at intervals between 1,000-75,000 revolutions. The Curve 1 in Fig.2 corresponds to СЧ 12-28 (SCh 12-28) cast iron; Curve 2 to ВЧ45-1.5 (VCh 45-1.5) cast iron without copper and Curve 3 to ВЧ 45-1.5 (VCh 45-1.5) cast iron with copper. It was established that even small quantities of copper increase the wear resistance of nodular cast iron.

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S/128/60/000/007/014/017/XX
A105/A033

Alloying of Nodular Cast Iron

The addition of copper to the cast iron led to a negligible decrease in shrinkage from 1.4 to 1.3%. After the usual annealing for 4 hours at 850°C, cooling down to 200°C and subsequent air cooling the nodular cast iron had a mainly ferritic structure with small quantities of undecomposed pearlite. The mechanical properties after annealing are shown in Table 3. The alloying elements and their quantities were determined according to recommendations in respect of gray cast iron with laminated graphite and also on account of previous tests on nodular iron. A characteristic of complex alloyed cast iron is the considerable crushing of pearlite. Complex alloying increases the tensile strength, especially if copper, nickel or molybdenum are used. The elasticity increases to $1.6\text{-}1.7 \cdot 10^6$ in case of copper and chromium and to $1.7\text{-}1.8 \cdot 10^6$ kg/sq cm in case of copper, nickel and molybdenum, as compared to $0.6\text{-}0.8 \cdot 10^6$ of grey iron and $1.1\text{-}1.2 \cdot 10^6$ of non-alloyed nodular cast iron. The shrinkage of nodular cast iron alloyed with copper and chromium was higher (1.5%) than that of non-alloyed nodular cast iron (1.4%). Alloying with nickel, molybdenum and copper reduced the shrinkage to 1.3-1.35%. Alloying with copper and chromium decreased the flowability of the metal, while alloying with copper, nickel and molybdenum did not affect it at all. There are 5 tables and 2 figures.

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Alloying of Nodular Cast Iron

Table 1:

1) No. of heat; 2) Chemical composition; 3) Structure; 4) Prior to pickling; 5) After pickling; 6) Coarse graphite flakes; 7) Finely whirled graphite; 8) Spheroidal graphite; 9) Spheroidal graphite; 10) Medium-size spheroidal graphite; 11) Mixed spheroidal graphite; 12) Coarse-laminated pearlite, small ferrite section; 13) Laminated pearlite, small ferrite parts; 14) Laminated pearlite, ferrite fringes around graphite; 15) Fine-laminated pearlite, fine ferrite fringes around graphite; 16) Laminated pearlite, now and then ferrite fringes; 17) Fine-laminated pearlite, insignificant ferrite parts.

Таблица 1

1) № плавки	2) Химический состав в %								3) Структура	
	$C_{об}$	$C_{св}$	Si	Mn	P	S	Mg	Cu	4) до травления	5) после травления
1	3,41	1,11	2,25	0,6	0,12	0,05	—	—	6) Грубые пластинки графита	Грубопластинчатый перлит, небольшие участки феррита 12)
2	3,47	0,99	2,48	0,59	0,12	0,08	—	0,05	7) Мелкий завихренный графит	Пластинчатый перлит, небольшие участки феррита 13)
3	3,42	0,90	2,80	0,6	0,14	0,016	0,06	—	8) Шаровидный графит	Пластинчатый перлит, оторочки феррита вокруг графита 14)
4	3,33	1,18	2,74	0,61	0,15	0,012	0,06	0,6	9) Шаровидный графит	Тонкопластинчатый перлит, тонкие оторочки феррита вокруг графита 15)
5	3,40	0,90	2,48	0,42	0,13	0,014	0,07	0,91	10) Шаровидный графит, средний	Пластинчатый перлит, изредка феррит в виде оторочек 16)
6	3,44	1,19	2,86	0,52	0,15	0,012	0,04	1,06	11) Смешанный шаровидный графит	Тонкопластинчатый перлит, небольшие участки феррита 17)

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Alloying of Nodular Cast Iron

Table 2

Таблица 2

1) № плавки	2) Механические свойства					
	$\sigma_{в}$ в кг/мм²	δ в мм	$\sigma_{изг}$ в кг/мм²	$\sigma_{сж}$ в кг/мм²	$a_{к}$ в кгм/см²	НВ
1	28,4	4,6	12,7	60,8	—	149
2	39,6	2,6	17,2	68,0	—	255
3	92	3,8	45,3	166,0	0,16	302
4	97,0	2,4	57,2	174	0,53	285
5	104,6	2,9	51,4	193	0,43	278
6	87,5	2,4	51,0	172	0,38	321

3) • Данные испытания образцов 10×10 мм с надрезом.

1) No. of heat
2) Mechanical properties
3) Test data from notched 10 x 10 mm specimens

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Alloying of Nodular Cast Iron

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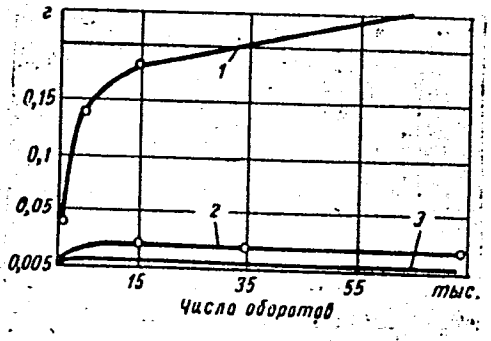
Table 3

Таблица 3

Cu в %	Mg в %	$\sigma_{изг}$ в кг/мм²	f в мм	$\sigma_в$ в кг/мм²	δ в %	$\sigma_{сж}$ в кг/мм²	ψ в %	$a_к$ в кг/см²	HB
—	0,04	92,0	3,6	45,3	0,6	168	—	0,45	302
—	0,06	94,5	18	40,6	5,5	254	64	1,87	135
0,91	0,07	104,6	2,9	51,4	1,0	193	—	0,43	277
0,89	0,01	103,2	18	50,6	14	245	60	2,0	185

Figure 2

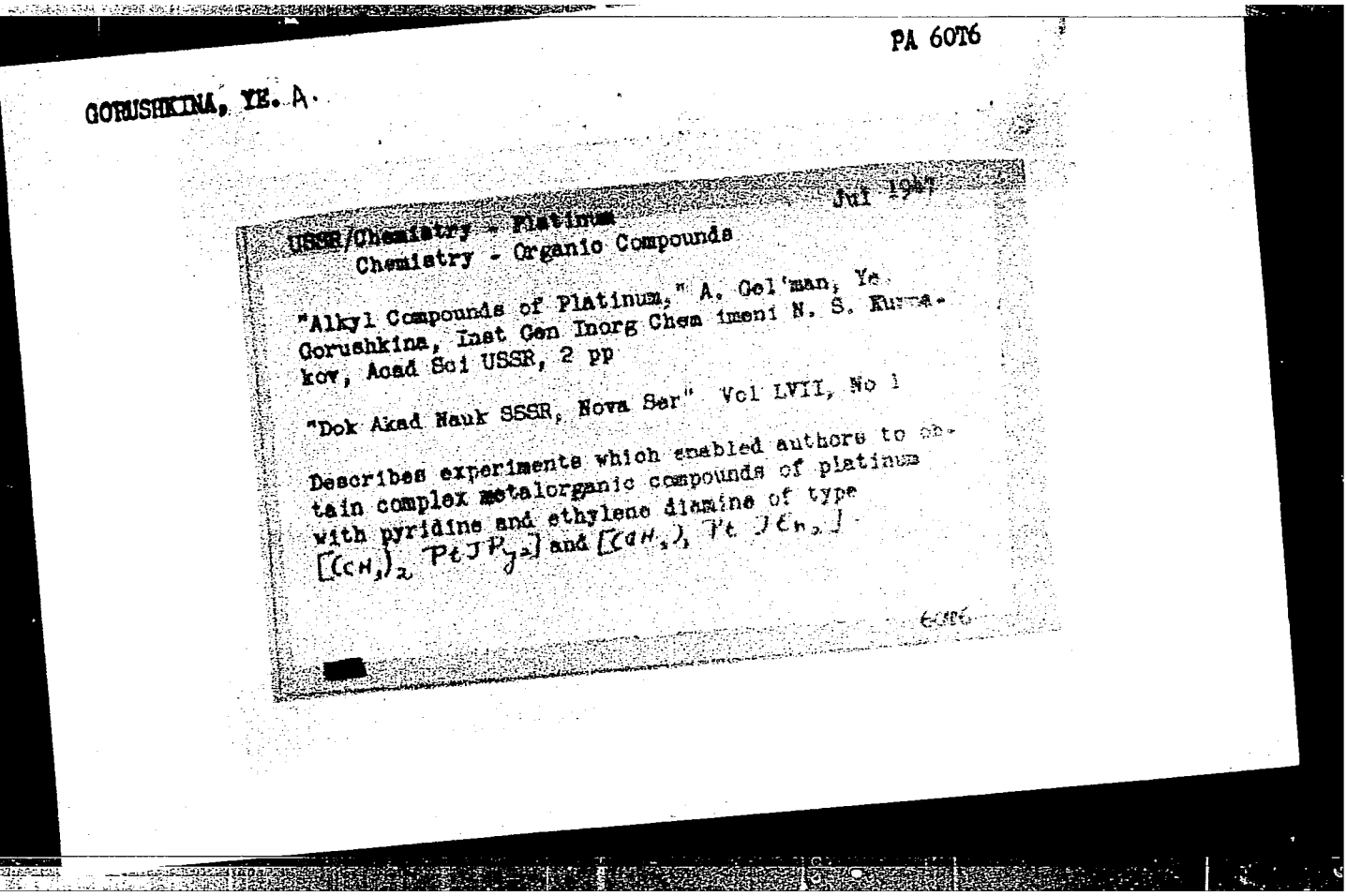


No. of revolutions

Card 5/5

GORUSHKINA, L.P.; PRIKHOD'KO, N.M.; SELIVERSTOV, A.O.; CHERNYSH, S.I.; BESPALKO, V.K.

Use of quick-hardening mixtures. Lit. proizv. no. 2:39 F '61. (MIRA 14:4)
(Sand, Foundry)



PA 60T6

GORUSHKINA, YE. A.

USSR/Chemistry - Platinum
Chemistry - Organic Compounds

Jul 1947

"Alkyl Compounds of Platinum," A. Gel'man, Ye. Gorushkina, Inst Gen Inorg Chem imeni N. S. Kurnakov, Acad Sci USSR, 2 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LVII, No 1

Describes experiments which enabled authors to obtain complex metalorganic compounds of platinum with pyridine and ethylene diamine of type $[(C_6H_5)_2 Pt(Py)_2]$ and $[(C_6H_5)_2 Pt(En)_2]$.

[redacted]

GORUSHKINA, Ye. A.

USSR/Chemistry - Platinum Compounds
Chemistry - Isomers

Jan 1947

"The Formation of the Third Isomer of Ethylene-Ammonia-Chloride-Bromide Platinum," A. Gel'man, Ye. Gorushkina, Inst Gen and Inorg Chem imeni N. S. Kurnakov, Acad Sci USSR, 3 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LV, No 1

Describes experiments in which it was found possible to synthesize third isomer of ethylene-ammonia-chloride-bromide platinum; possible only after forming a group of atoms with ethylene in a cation. Submitted by Academician I. I. Chernyayev, 3 Jul 1946.

PA 58T12

GORUSHKINA, Ye. [A.]

CA

Alkyl compounds of platinum. A. D. Gel'man and M. Gorushkina (Gorushkina) (Korsakov Inst. Gen. Inorg. Chem., Moscow). *Doklady Akad. Nauk S.S.S.R.* 57, 43–4 (1947); *Chem. Zentr.* 1948, I, 1136; cf. C.A. 43, 1078*i*. —Mixed metalloorg. compds. of Pt with pyridine and with ethylenediamine were prepd. Me_3PtIPy was obtained in theoretical yield by heating a soln. of Me_3PtI in benzene with pyridine. The reaction proceeded rapidly and smoothly. The fine, light-yellow crystals formed were readily sol. in hot benzene and alc. The compd. gave no pyridine when heated for a long time in water and H_2SO_4. This is evidence that the pyridine is bound to the Pt by a coordinate linkage. $Me_3PtI.2en$ was obtained as fine crystals by heating Me_3PtI in benzene with ethylenediamine. Recrystn. from hot water yielded bright, glistening needles having the formula $[(Me_3Pten)_{en}]I_2$. The mol. cond. at $v. = 10{,}000$ and $t = 25°$ was $\mu = 274.24$. $[Me_3Pt(NH_3)_3]I$ was prepd. by the action of NH_3 on a soln. of Me_3PtI in benzene. NH_3 was lead into the soln. until the latter became colorless. The fine crystals were readily sol. in water and alc. M. G. Mowe

GORUSHKINA, Ye.A.
CA

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The production of alkyl compounds of platinum from Zeise's salts. Anna D. Gel'man and E. A. Gorushkina. *Doklady Akad. Nauk S.S.S.R.*, 57, 259-61 (1947); *Chem. Zentr.* (Russian Zone Ed.) 1948, I, 1267.—The Pt in the ethylene salts of Zeise is to be regarded as quadrivalent. Although attempts to replace the C_2H_4 by NH_3, pyridine, NO_3^-, or CN^- have yielded compds. with bivalent Pt, the salt Me_3PtI (in which the Pt is quadrivalent) was successfully prepd. by the action of MeMgI on the Zeise K salt, $K[PtC_2H_4Cl_3]$. The MeMgI was prepd. from 3 g. Mg + 30 g. MeI in 50 cc. ether. C_6H_6 (100 cc.) was added, then 10 g. $K[PtC_2H_4Cl_3]$ in small portions, next HCl to dissolve the $Mg(OH)_2$, and the compd. recrystd. from hot C_6H_6 in the usual manner. Derivs. prepd. in like manner were: $[Me_3Pt.2C_5H_5N]I$, $[Me_3Pt(NH_3)_3]I$, $[PtMe_3]SO_4$, and Me_3PtCl.

M. G. Moore

ISUPOV, Yu.G.; GORUSTOVICH, A.M.; SARKISOV, G.M.

Pumping petroleum products from underground reservoirs. Transp. i khran. nefti i nefteprod. no.8:12-14 '65. (MIRA 18:9)

1. Nauchno-issledovatel'skiy institut po transportu i khraneniyu nefti i nefteproduktov.

GORVAN', I.S.; MARTYNENKO, V.V.; SHONOV, V.P.

Geminids in 1950. Biul.VAGO no.11:22-23 '52. (MLRA 6:6)

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(Meteors)

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(NICOTINIC ACID) (PREGNANCY, COMPLICATIONS OF)