

31(5)

SOV/25-59-3-23/46

AUTHOR: Bolgarov, N., Engineer

TITLE: Boats of Plastic (Suda iz plastmass)

PERIODICAL: Nauka i zhizn', 1959, Nr 3, pp 65 - 66 and p 4 of centerfold (USSR)

ABSTRACT: Last fall the first passenger cutter made of plastic was tested on the Khimki water reservoir of the Moskva canal. It has room for 10 - 12 passengers and develops a speed of 27 km/h. In comparison with other material, its weight is reduced by 50% and its durability is equal to that of steel. The cutter was produced by the zavod imeni M.I. Kalinina (Plant imeni M.I. Kalinin) from glass plastic material consisting of a mass of glass fibers treated with polyethereal resin. The technological process of building plastic boats is very simple. The frame of the plastic vessel is entirely formed on special matrices.

Card 1/2

Boats of Plastic

SOV/25-59-3-23/46

There are good prospects to build big ships, e.g. tankers up to 100 tons, etc. from plastic material in the near future. There are 3 drawings and 1 photo.

Card 2/2

BOLGAROV, N. (Leningrad)

Future of semiconductors. NTO 5 no.11:54-55 N '63. (MIRA 16:12)

1. Neshtatnyy korrespondent zhurnala "Nauchno-tekhnicheskiye obshchestva SSSR".

BOLGAROV, N., inzh. (Leningrad)

Automation of engineer's work. NTO 6 no.5:16-18 My '64.
(MIRA 17:8)

32(3,4)

30V/25-59-8-28/48

AUTHOR: Bolgarov, N.P., Engineer

TITLE: Trains Cross the Sea

PERIODICAL: Nauka i zhizn', 1959, Nr 8, p 66 (USSR)

ABSTRACT: The Zavod "Krasnoye Sormovo" ("Krasnoye Sormovo" Plant) has started construction of a ferry boat for the Caspian Sea designed by Gor'kiy engineers under the guidance of chief designer A.S. Rachkov. The ship will take aboard trains running from Tashkent to Baku or Makhachkala. It will be 134 m long, 19 m wide and will displace 3,000 tons. It will hold 30 loaded four-axle 50-ton freight cars, or 18 all-metal passenger cars. It will cross the Caspian Sea in 12 hours and reduce the time for transportation of loads from Tashkent to Baku by more than three times, thus saving 40 million rubles per boat yearly. The ship will have a speed of 16 knots, and will be driven by three remote controlled electromotors fed with current from 4 diesel generators of a capacity of 1800 h.p.

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307/25-59-8-28/48

Trains Cross the Sea

each. The ferry boat will be equipped with the most modern navigation instruments. On the middle superstructure 300 passenger cabins will be placed. In the near future, the ferry boat will cruise regularly between Baku and Krasnovodsk.

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32(4)

SOV/25-59-9-27/49

AUTHOR: Bolgarov, N., Engineer (Leningrad)

TITLE: A Sectional Barge

PERIODICAL: Nauka i zhizn', 1959, Nr 9, p 66 (USSR)

ABSTRACT: The first sectional barge was seen on the river paths of Gor'kiy, in fall 1958. The barge, consisting of three sections, was developed by Gor'kiy designers under the guidance of B.V. Bogdanov and built by the Stalingradskiy sudostroitel'nyy verf' (Stalingrad Ship-building Yard). A tug placed at the stern pushes the barge instead of pulling it. The following data are given: loading capacity 8,600 tons, speed 15 km/hr, length 232 m, including tug pusher 273 m, width 14 m, capacity of the pusher 1200 hp. The barge cost about 1 million rubles less than 3 ships with the same loading capacity and 130 tons of metal have been saved. The Tsentral'noye tekhnikonstruktorskoye byuro rechnogo flota (Central Technical Designing Office of Inland Water Transport) has developed, under the guidance

Card 1/2

A Sectional Barge

SOV/25-59-9-27/49

of the chief designer S.B. Shur, some variants of sectional barges pushed by powerful tugs or power-driven. They will be put into operation during the Seven Year Plan.

Card 2/2

BOLGAROV, N., inzh.

Submarines in modern war. Voenn. znan. 35 no.8:36 Ag '59.

(MIRA 12:12)

(Submarine boats)

BOLGAROV, Nikolay Pavlovich; IVANOV, A.P., inzh.-kapitan 2 ranga, red.;
SRIBNIS, M.V., tekhn.red.

[Stories about submarines] Rasskazy o podvodnoi lodke. Moskva,
Voen.izd-vo M-va obor.SSSR, 1960. 230 p. (MIRA 13:6)
(Submarine boats)

BOLGAHOV, N.P.M. inzh. (Leningrad)

Institute in the ocean. Nauka i zhizn' 27 no.3:65-66 Mr '60.
(MIRA 13:6)
(Oceanographic research) (Ships)

BOLGAROV, N.P., inzh. (Leningrad)

Diesel-boiler. Nauka i zhizn' 27 no.6:65 Je '60. (MIRA 13:7)
(Marine gas turbines)

BOLGAROV, N., inzh.

Automatic ship. Znan.sila 35 no.4:45 Ap '60. (MIRA 13:8)
(Automatic control) (Ships)

86202

S/004/60/000/006/003/003/XX

A111/A026

15.11.20 2109
2209

AUTHOR: Bolgarov, N., Engineer

TITLE: Glue^{1b} Replaces Welding¹⁸

PERIODICAL: Znaniye-Sila, 1960, ^{v. 55} No. 6, p. 30

TEXT: The article describes experiments carried out by the Leningradskiy institut vodnogo transporta (Leningrad Institute of Water Transport) and the Nauchno-issledovatel'skiy institut morskogo flota (Naval Scientific Institute) on the properties of epoxy resins as substitutes for welding. A corroded piece of plating was thoroughly cleaned with a portable polishing machine and all traces of oil removed with acetone. A mixture of epoxy resin and a number of unspecified agents was filled into cavities and within a few minutes a hard wearing, corrosion resistant layer had formed on the surface. The same method was applied to defect steel, cast iron and bronze parts. Instead of gas and electric welding, of sodium silicate and bakelite treatment, epoxy resin was applied to porous and cracked surfaces. Micro-cracks were filled under pressure or reverse vacuum. Surfaces which have become conic or elliptic by long wear can be regenerated with the help of epoxy resins. A hollow cylinder made of sheet steel to the same shape as the damaged object is glued onto the latter
Card 1/2

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86202

S/004/60/000/006/003/003/XX
A111/A026

Glue Replaces Welding

with epoxy resin and then machined and polished. Tubings are glued^{to} together with fabric strips soaked in epoxy resin, dried for 10-15 hours and then wound around carefully cleaned tubes. The whole is covered with detachable, firmly fastened coupling and heated to 200°C. The seam thus obtained is equal in quality to a welded joint. Epoxy resins have a great potential particularly for the gluing of non-metallic material to metal surfaces owing to the excellent adhesion to both.

Card 2/2

BOLGAROV, N., inzh.

Builders of plastic boats. Voen.znan. 36 no.8:20-21
Ag '60. (MIRA 13:7)
(Boatbuilding) (Plastics)

BOLGAROV, N., inzh.

From Volga River to the Baltic Sea. IUn.tekh. 5 no.3:30-32 Mr
'61. (MIRA 14:6)
(Canals)

BOLGAROV, N., inzh.

SPGG free-piston gas generator is a diesel playing the part of a
boiler. Un.tekh. 5 no.6:42-44 Je '61. (MIRA 14:9)
(Gas turbines) (Diesel engines)

BULGAROV, N., inzh. (Leningrad)

Soviet bathyscaphe, Nauka i shizn' 28 no.1:24 Ja '61. (MIRA 14:1)

(Bathyscaphe)

BOLGAROV, N.

New developments on the blue roads. Znan.sila 36 no.7:32-33
Jl '61. (MIRA 1479)
(Barges) (Ships) (Ground-effect machines)

BOLGAROV, N., inzh.

Steppe giant. NTO 4 no.12:34-35 D '62.
(Leningrad--Tractor industry)

(MIRA 16:1)

BOLGAROV, N., inzh.

It will be near Krasnoyarsk. Znan.sila 37 no.3:22-25 Mr '62.
(MIRA 15:4)
(Krasnoyarsk Hydroelectric Power Station)

BOLGAROV, N. y inzh.

Ship sails above the water. NTO 5 no.1:60-61 Ja '63.

(MIRA 16:5)

(Ground effect machines)

BOLGAROV, N., inzh.

Automatic harbor. Znanie-sila 38 no.1:28-29 Ja '63. (MIRA 16:3)
(Loading and unloading) (Automatic control)

in

BOLGAROV, N., inzh.

Gliding ships. Voen. znan. 39 no.6:28 Je '63. (MIRA 16:8)
(Boats and boating)

BOLGAROV, N., inzh.

Power plants of the future. Voen. znan. 41 no.4:33-34 Ap '65.
(MIRA 18:3)

L 30043-65 EWT(1) GW

ACCESSION NR: AP500446

S/0029/65/000/001/0005/0005

AUTHOR: Bolgarov, N. (Engineer) (Leningrad)

TITLE: "Sever" at the bottom of the ocean¹²

12
B

SOURCE: Tekhnika - molodezhi, no. 1, 1965, 5, and bottom half of insert facing p. 5

TOPIC TAGS: underwater equipment, scientific research, food / Sever 2 submarine craft

ABSTRACT: A deep-water exploration craft "Sever-2"¹² is being designed at the "Giprorybflot" and will be launched in 1966. Its purpose will be to explore the depth zone at 2000 m for commercially valuable fish, to observe the productivity of the fishing equipment, and to study the behavior of fish. Outwardly it will resemble a miniature submarine equipped with remote control measuring and sample collecting apparatus. "Sever-2" will consist of two shells, the outer one of pervious plastic, the inner one of 40-mm steel. It will carry a crew of two men and will contain in its forepart instruments for navigation and scientific research, three illuminators, and an automatic light and sound signaling which will detect the smallest defects in the function of the main instrument systems.

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L 30034-65

ACCESSION NR: AP500446

Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 000

OTHER: 000

Card 2/2

(7) L 39268-66 ENP(1)/ENP(n)/ENP(1) GD-2

ACC NR: AP6000424 SOURCE CODE: UR/0309/65/000/010/0017/0019

AUTHOR: Bolgarov, N. (Special correspondent of "NTO SSSR", Engineer)

ORG: none

TITLE: Freight in transit

SOURCE: Nauchno-tekhnicheskkiye obshchestva SSSR, no. 10, 1965, 17-19

TOPIC TAGS: transportation equipment industry, industrial automation, transportation equipment, conveyer transportation system, fork lift vehicle, crane, education, industrial personnel

ABSTRACT: The need for improved mechanization and automation of freight loading, unloading, and handling is discussed qualitatively, and some improved freight handling methods are explained. Over four million laborers are used for manual loading and unloading of rail cars, ships, and trucks. To improve this situation, the freight handling industry is scheduled to receive 2 million containers, 130 000 fork lifts and self-powered carts, 20 000 auto cranes, 27 000 boom, bridge, and cable cranes, 38 000 automatic loaders with internal combustion engines, 500 rail-car unloaders, and many other items during the 1966-70 period. Gosudarstvennyy komitet po delam izobreteniy i otkrytiy SSSR (Government Committee for Inventions and Discoveries, SSSR), which received 1600 new technical ideas in 1963 in the area of freight handling, should play an important role in the modernization program. At present about 70 million tons of goods annually are shipped in packages and

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2

ACC NR: AP6000424

containers; by 1970 up to 800 million tons annually will be so packaged. Some estimates have shown that for distances of less than 10 km and an annual capacity of 4 million tons, conveyer systems may be profitable (4--15 kopeks versus 30 for rail, and 90 for trucks). Development of vibration type of conveyers, automated carts, and air cushion supported conveyers may even improve this prediction. The biggest problem appears to be in the education of a sufficient number of industrial transportation experts. In all the universities of the SSSR only nine departments of industrial transportation are presently listed. Since the educational plan for universities has cut the time for teaching of specific disciplines in half, such courses as "Industrial Transportation," "Cable Transports," etc have been dropped completely. Orig. art. has: 5 figures.

SUB CODE:13,05/ SUBM DATE: none

Card 2/2

HS

BOLGAROVA, O.I.

General incidence of disease among the adult population of the city of Frunze in 1958. Report No.3: Malignant neoplasms. Sov. zdrav. Kir. no.6:42-46 N-D'62. (MIRA 16:6)

1. Iz kafedry organizatsii zdravookhraneniya i istorii meditsiny (zav. - prof. A.A.Aydaraliyev) Kirgizskogo gosudarstvennogo meditsinskogo instituta.
(FRUNZE--CANCER)

BOLGAROVA, O.I.

General incidence of disease among the adult population of
Frunze in 1958. Report no.4. Sov. zdrav. Kir. no.3:37-41
My-Je'63. (MIRA 16:9)

1. Iz kafedry organizatsii zdravookhraneniya i istorii medi-
tsiny (zav. - prof. A.A.Aydariliyev) Kirgizskogo gosudarst-
vennogo meditsinskogo instituta.
(FRUNZE—STATISTICS, MEDICAL)

AKIMOVICH, N.N.; BOLGAROVA, Ye.S.

Moisture cycle in the atmosphere over the territory of the
Ukrainian S.S.R. Trudy OGMI no.19:3-8 '59.

(MIRA 13:5)

(Ukraine--Humidity)

BOLGARSKIY, A.V.

Performance of carburetors in humid air. Trudy KAI 22:36-49 '49.
(Airplanes--Engines--Carburetors) (MIRA 10:6)

BOLGARSKIY, A.V.

Effect of fuel evaporation on the performance of superchargers. Trudy
KAI 22:50-61 '49. (MIRA 10:6)
(Airplanes--Engines--Superchargers)

Rabochie protsessy v zhidkostno-
reaktivnykh dvigatelyakh (Working processes in liquid-jet engines)
Oborongiz, Moscow, 1953, 424 pp.

BOLGARSKIY, A. V.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Bolgarskiy, A. V.	"The Problem of a Moist Gas"	Kazan' Aviation Institute

SO: W-30604, 7 July 1954

BOLGARSKIY, A. V.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Bolgarskiy, A. V. Shehukin, V. K.	"Working Processes in Liquid Fuel Jet Engines"	Kazan' Aviation Institute

SO: W-30604, 7 July 1954

PHASE I BOOK EXPLOITATION

357

Bolgarskiy, Andrey Vladimirovch

Raschet protsessov v kamere sgoraniya i sope zhidkostnogo raketnogo dvigatelya. (Calculation of Processes in the Combustion Chamber and Nozzle of the Liquid-propellant Rocket Engine) Moscow, Oborongiz, 1957. 94 p. 5,000 copies printed.

Reviewers: Zastela, Yu. K., Docent, and Kvasnikov, A.V., Doctor of Technical Sciences, Prof.; Ed.: Yanovskiy, G. Yu., Engineer; Managing Ed.(Oborongiz): Sokolov, A.I., Engineer; Ed. of Publishing House: Petrova, I.A.; Tech. Ed.: Rozhin, V.P.

PURPOSE: The book is designed for the use of students studying the theory of combustion and nozzle flow in liquid-propellant rocket engines at aeronautical institutes, but it can also be of use to engineers working in this field.

COVERAGE: The author discusses the problem of combustion and gas flow under high temperatures in liquid-propellant rocket engines. He also presents in detail the method of thermodynamic

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Calculation of Processes in the Combustion Chamber (Cont.) 357
calculation of the operating process, along with a series of useful problems and their solutions. He substantiates the possibility of using the graphic method of calculating parameters of liquid-propellant rocket engines, which to a great extent facilitates this calculation. The author also explains in detail the method of plotting such nomographic charts. The book contains an appendix of nomographic charts of two different types of fuel worked out by the author. V. Ye. Alemasev, Docent, Candidate of Technical Sciences, prepared the tables (tables I, II, III, and IV); L.V. Ignat'yev, laboratory worker of the Department of Heat Engines, worked on the calculation diagrams and the illustrations. There are no references.

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Calculation of the Processes in the Combustion Chamber (Cont.) 357

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AVAILABLE: Library of Congress

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6-20-58

L 17607-65 EWI(1)/EWI(m)/EPF(c)/EPF(n)-2/EPR/EWP(j)/T/EPA(bb)-2/EIA(1) Pc-4/
Pr-4/PS-4/PI-4/PU-4 RPL/ASD(f)-2/AS(mp)-2/AEDC(a)/AFWL/SSD/BSO/AFETR JD/WW/
JW/MLK/RM
ACCESSION NR AM4046716 BOOK EXPLOITATION S/

Bolgarskiy, Andrey Vladimirovich (Professor); Mukhachev, Gennadiy R+1
Alekseyevich (Docent); Shchukin, Viktor Konstantinovich (Docent)

Thermodynamics and heat transfer (Termodinamika i teploperedacha), Moscow,
"Vysshaya shkola", 1964, 457 p. illus., biblio., tables. 9,500 copies
printed.

TOPIC TAGS: thermodynamics, heat transfer

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SUB CODE:TD

SUBMITTED: 05Jun64 NR REF SOV: 048

OTHER: 018

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IL'YASHENKO, Sergey Mikhaylovich [deceased]; TALANTOV, Aleksey Vasil'yevich; BOLGARSKIY, A.V., doktor tekhn. nauk, retsenzent; BESPALOV, I.V., kand. tekhn. nauk, retsenzent; KLYACHKO, L.A., kand. tekhn.nauk, retsenzent; CHUMACHENKO, B.N., inzh., red.; BONDARYUK, M.M., doktor tekhn. nauk, prof., red.; POPOV, A.V., red.

[Theory and design of direct-flow combustion chambers] Teoriia i raschet priamotochnykh kamer sgoraniia. Moskva, Mashinostroenie, 1964. 305 p. (MIRA 17:12)

BOLGARSKIY, B.V.

N.I. Lobachevskii's ideas on mathematical method
Mat. v shkole no. 2 (March/April), 1952

BOIGARSKIY, B.V. (Kazan').

Contribution of I.N.Ul'ianov in the field of mathematical
methodology. Mat.v shkole no.1:11-14 Ja-F '54. (MLRA 7:1)
(Ul'ianov, Il'ia Nikolaevich, 1831-1886)

BOLGARSKIY, B. V.

Bolgarskiy, B. V. -- "The Kazan' School for Mathematical Training (Its
Main Outlines)." *in Higher Education USSR. Kazan' Order of Labor
Red Banner State U imeni V. I. Ul'yanov-Lenin. Kazan', 1955.*
(Dissertation for the Degree of Doctor in Pedagogical Science)

So: Knizhnaya Letopis', No 12, 1956

BOLGARSKIY, B.V. (Kazan')

Basic stages of the development of trigonometry and the familiarization
of students with them. Mat. v shkele no.1:21-27 Ja-F '56. (MIRA 9:4)
(Trigonometry)

BOLGARSKIY, B.V., prof., otv. red.

[Methodological textbook for the physics and mathematics
faculty] Metodicheskii sbornik fiziko-matematicheskogo
fakul'teta. Kazan', 1963. 232 p. (MIRA 17:8)

1. Kazan. Gosudarstvennyy pedagogicheskii institut.

BOLGARSKIY, B.V. (Kazan')

A theoretical and practical conference at Kazan. Mat. v shkole
no.4:11-12 J1-Ag '63. (MIRA 16:9)
(Mathematics—Study and teaching)

BOLGARSKIY, I. S. (Tashkent)

Polycystosis of a congenital single kidney. Urologia no.3:53-54
'61. (MIRA 14:12)

(KIDNEYS--ABNORMITIES AND DEFORMITIES)

KOYSMAN, A. A., kand. med. nauk; BOLGARSKIY, I. S. (Tashkent)

Urogenital schistosomiasis. Urologia no.2:47-51 '62.
(MIRA 15:4)

(SCHISTOSOMIASIS) (GENITOURINARY ORGANS--DISEASES)

ZHOYRO, I.D.; HOLGARSKIY, I.S.

Spontaneous rupture of the urinary bladder. Urologia
no.4:55-56 '69. (MIRA 17:10)

1. Iz kafedry urologii (zav.- dotsent A.A. Koysman) Tashkent-
skogo instituta usovershenstvovaniya vrachey i urologicheskogo
otdeleniya Tashkentskoy gorodskoy bol'nitsy No.1.

KOYSMAN, A.A., dotsent; BOLGARSKIY, I.S.

Diagnosis and indications for surgical treatment in fatty
degeneration of the kidney. Urologiia no.6:6-9 N-D '63.
(MIRA 17:9)

1. Iz urologicheskoy kliniki (zav.-dotsent A.A. Koysman)
Tashkentskogo instituta usovershenstvovaniya vrachey i
15-y Gorodskoy klinicheskoy bol'nitsy Tashkenta.

BOLGARSKIY, I.S.

Renal angiography using Saldinger's transcutaneous catheterization and its diagnostic significance. Urologia. 29 no.2:6-11 Mr-Apr '64.

(MIRA 18:7)

1. Urologicheskaya klinika (zav. - dotsent A.A.Koysman) Tashkentskogo instituta usovershenstvovaniya vrachey i urologicheskoye otdeleniye 15-y Tashkentskoy gorodskoy klinicheskoy bol'nitsy.

BOLGARSKIY, I.S.

Acute renal failure caused by pachycarpine poisoning. Urologiia.
29 no.3:56-58 My--Ie '64. (MIRA 18:10)

1. Urologicheskaya klinika (zav.- dotsent A.A. Koyzman)
Tashkentskogo instituta usovershenstvovaniya vrachey i urologi-
cheskoye otdeleniye 15-y Gorodskoy klinicheskoy bol'nitsy.

BOLGARSKIY, I.S.

Transfemoral catheterization angiography in the diagnosis
of kidney tumors. Vop.onk. 11 no.11:42-47 '65.

(MIRA 19x1)

1. Iz urologicheskoy kliniki (zav. - dotsent A.A.Koysman)
Tashkentskogo instituta usovershenstvovaniya vrachey na baze
15-y gorodskoy klinicheskoy bol'nitsy (glavnyy vrach - A.K.
Sadykov) i urologicheskoy kliniki (zav. - chlen-korrespondent
AMN SSSR prof.A.Ya.Pytel') II Moskovskogo meditsinskogo
instituta imeni N.I.Pirogova.

SOLOMONIYA, O.G., ~~Land.~~ tekhn. nauk; BOLGASHVILI, N.Sh., inzh. (Tbilisi)

Use of linear programming in irrigation planning. Gidr. i mel.
16 no.6:10-20 Je '64.

DOLETT

Oxidizing power of steelmaking slags. I. Equilibrium relations in liquid $\text{SiO}_2\text{-CaO-MgO-FeO-Fe}_2\text{O}_3$ slags, melted in open crucibles, at 1,550° and 1,650°, in the absence of metallic iron. Trapan Négresco and Marie Boşgin (Ecole polytech. Bucharest). *Rev. met., Acad. Roumaine* 1, 5-32(1958); cf. C.A. 53, 16319a. -- In the formula $\bar{x} = 7f - \frac{1}{2}(s - \frac{2}{3}m)$ which holds for all slags of the system $\text{SiO}_2\text{-CaO-MgO-FeO-Fe}_2\text{O}_3$ under equil. conditions and from 1,550°-1,650°, \bar{x} is Fe_2O_3 , f FeO , s SiO_2 , and m CaO . To explain this formula: the silica-lime melts having more than 35.9% CaO by wt. have all the silica bound as $3\text{CaO}\cdot 5\text{SiO}_2$ (I). When FeO is gradually added, the free lime is displaced to give $3\text{FeO}\cdot 5\text{SiO}_2$ (I). When FeO is gradually added, the free lime is displaced to give $2\text{FeO}\cdot 3\text{SiO}_2$ (II). Excess FeO is oxidized to give $5\text{FeO}\cdot 7\text{Fe}_2\text{O}_3$ (III), presumed ionic like the other groupings. MgO displaces both lime and FeO , to give groupings of $4\text{MgO}\cdot 5\text{SiO}_2$ (IV), the freed FeO forming then III, the only possible state in the oxidizing atm. of steelmaking furnaces from 1,550°-1,650°C. SiO_2 progressively added forms IV first, and II only if insufficient FeO and MgO are present in the slag. The order of diminishing activities in forming IV, II, and I, is that of the increasing diams. of Mg^{++} , Fe^{++} , and Ca^{++} . These compns. agree with the "principal eutectic" of the corresponding binary systems. These formulas indicate that molten silicates are not perfect ionic solns., nor are they regular solns. Simple quant. relations between activities and compns. are established, giving a model for the idea of "quasi-thermodynamic activity".

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BOLGIU, M.

COUNTRY : Romania
 CATEGORY : Chemical Technology
 SUBCATEGORIES : Ceramics, Glass, Mining Materials, Concrete
 ABST. JOUR. : Rukh., No. 20 1959, No. 72000
 AUTHOR : Negrescu, T.; Bolgiu, M.
 INST. : Bucharest Polytechnic Institute
 TITLE : Experimental Study of Oxidative Power of
 Steel-Making Slag. IV. Equilibrium in Fluid
 Slag of $SiO_2-CaO-MgO-FeO-Fe_2O_3$ System, *
 ORIG. PUB. : S.I. Inst. Politehn. Bucuresti, 1957, 19,
 No 1-2, 1-30
 ABSTRACT : To define the quantitative ratios of SiO_2 ,
 FeO and Fe_2O_3 in artificial slag fused at 1600° , Negrescu
 and Krok [transliterated] have proposed the formula: $sr =$
 $r + f - s$, wherein r, f, and s -- mol.%, respectively, of
 FeO , Fe_2O_3 , and SiO_2 . The formula was derived on the basis
 of the experimentally established fact that the amount of
 CaO contained in the fused slag does not affect these ratios,
 and also on the basis of the assumption that in slag MgO
 plays the same part as CaO , for which reason MgO and CaO
 were changed. In subsequent investigations it was ascertained
 that on interaction of CaO with SiO_2 there is formed the
 compound $7CaO \cdot 3SiO_2$, whereas MgO forms $3MgO \cdot 5SiO_2$. For this
 CARD: 1A

* Fused in Open Crucibles at 1550° and 1650° in the absence of metallic iron.

14
Temperature spectra and their use. Maria Bozianu
Rev. mé. Acad. ré. populaire Roumaine 3, 113-21 (1958).
See C.A. 52, 16854c. R. S. Young

BOLGIU, Ovidiu; BOLGIU, Maria

"Suballotropic" transformations of iron, combined with certain properties of steel. Studii cerc metalurgie 7no.1:7-32 '62

1. Centrul de cercetari metalurgice al Academiei R.P.R.
2. Membru al Comitetului de redactie, "Studii si cercetari de metalurgie" (for Ovidiu Bolgiu).

BOLGIU, Ovidiu; BOLGIU, Maria

"Suballotropic" transformations of iron, combined with certain properties of steel. Studii cerc metalurgie 7 no.1:7-32 '62.

1. Central de cercetari metalurgice al Academiei R.P.R.
2. Membru al Comitetului de redactie, "Studii si cercetari de metalurgie" (for Ovidiu Bolgiu).

BOLGIU, Maria; BOLGIU, Ovidiu

Observations on aluminum. Rev Roum metalurg 8 no. 2:133-153
'63.

1. Laboratory of Crystallography and Mineralogy, and Laboratory
of Physical Metallurgy, Polytechnic Institute, Bucharest and
Center of Metallurgic Research, Rumanian Academy.

BOLGIU, Maria; BOLGIU, Ovidiu

Observations on aluminum. Studii cerc metalurgie 8 no.2:155-177
'63

1. Institutul Politehnic Bucuresti, Laboratorul de cristalografie si mineralogie si Laboratorul de metalurgie fizica.
Centrul de cercetari metalurgice al Academiei R.P.R.

CATEGORY :
ABS. JOUR. : RZKhim., No. 14 1959, No. 48749
AUTHOR : Bolciu, O. and Dumitrescu, A.
INST. : Not given
TITLE : The Thermal Investigation of Minerals. I. Investigation of the Transformation of Kaolinite into Quartz on Heating by the Method of Differential*
ORIG. PUB. : Rev Metallurgie (Rumania), 2, 145-157(1957); 3, No 1, 121-164 (1958)
ABSTRACT : I. The method of differential thermal analysis was applied to the investigation of the transformation of kaolinite (I) into quartz (II) between 20 and 1000°C. Concerning I the following conclusions were reached: mullite formation begins at 875°; that of gamma-Al₂O₃, at 685°; and of amorphous SiO₂, at 630°; so-called meta-kaolinite does not exist in the temperature range 875-980°, at which temperatures I is observed
*ential Thermal Analysis. II. Investigation of the Transformation of Some of the Minerals of Clayey Rocks by the Method of Differential Thermal Analysis.

CARD: 1/4

R-31

COUNTRY	:	Rumania	B-5
CATEGORY	:		
ABS. JOUR.	:	RZKhim., No. 14 1959, No.	48749
AUTHOR	:		
INST.	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	to be present in different stages of decomposition. In the thermograms of II, in addition to the previously known inflection points at 183, 573, 845, and 870°, inflection points are noted at 100, 166, 252, 366, 633, 713, and 775°, which in the opinion of the authors, are 'second-order' inflection points and do not correspond to polymorphic transitions.	
			S. Glebov
CARD:		2/4	

COUNTRY : Rumania
CATEGORY :
ABS. JOUR. : RZKhim., No. 14 1959, No. 48749
AUTHOR :
INST. :
TITLE :
ORIG. PUB. :
ABSTRACT : II. The DTA method has been applied to the study of transformations occurring in pyrophyllite, talc, montmorillonite, muscovite, biotite, lepidocrocite, antigorite, chrysotile, feldspar, and in a number of naturally occurring clayey rocks. It has been found that the interpretation of the results of the analysis in a number of cases is difficult and frequently impossible. In the case of more or less pure minerals, some conclusions concerning changes in their structure
CARD: 3/4
1-32

COUNTRY : Romania

CATEGORY :

ABS. JOUR. : RZKhim., No. 14 1959, No. 48749

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : and chemical composition occurring during
heating can be drawn.

A. Nikerov

CARD: 4/4

BOLGIU, O.; DUMITRESCU, A.

"A contribution to the thermal studies of rock minerals. I. Thermo-differential analysis of the kaolinite and quartz transformations during heating."

p. 155 (Studii Si Cercetari De Metalurgie) Vol. 2, no. 1/2, 1957;
Bucharest, Rumania

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

BOLGID, ③

Indigenous argillaceous rock offering the possibility of being used instead of bauxite in the aluminum industry. Ovidiu Bolgiu and Aurelia Dumitrescu, Acad. rep. populare Romine, Studii cercetari met. 4, 229-43(1959).--Romania does not possess sufficient bauxite to sustain large-scale Al production over a long period of time. A review is given of argillaceous rock found in numerous locations, of which Pădurea Craiului seems the most promising. F. D. G.

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Bolgiu, O. ; Demitrescu, A. ; Fruchter, S.

Notes on serpentines in the Southern Banat and the possibilities of their utilization. p. 391.

Academia Republicii Populare Romine. STUDII SI CERSETARI DE METALURGIE.
Bucuresti, Rumania. Vol. 4, No. 3, 1959.

Monthly List of East European Accessions (EEAL) LC Vol. 9, No. 2, January 1960

Uncl.

18.8100

S/058/62/000/007/037/068
A061/A101

AUTHORS: Bolgiu, Ovidiu, Dumitrescu, Aurelia

TITLE: On the discontinuous character of the expansion of solid bodies

PERIODICAL: Referativnyy zhurnal, Fizika, no. 7, 1962, 1, abstract 7E5
("Studii și cercetări metalurgie Acad. RPR", 1961, v. 6, no. 2,
185 - 192, Rumanian; Russian and French summaries)

TEXT: It has been established experimentally that solid bodies expand discontinuously, no matter whether they are single crystals, polycrystals, or vitreous materials. Discontinuities in expansion are more pronounced in single crystals, particularly in crystals with few lattice imperfections.

[Abstracter's note: Complete translation]

Card 1/1

✓B

BOLGIU, Ovidiu; BOLGIU, Maria

"Suballotropic" transformations of iron, combined with certain properties of steel. Studii cerc metalurgie 7no.1:7-32 '62

1. Centrul de cercetari metalurgice al Academiei R.P.R.
2. Membru al Comitetului de redactie, "Studii si cercetari de metalurgie" (for Ovidiu Bolgiu).

BOLGIU, O.; PROTOPODESCU, A.; CRISTEA, S.

Sintering of copper and copper-aluminum powders as compared to the thermal evolution of copper. Studii cerc metalurgie 7 no.4:414-440 '62.

1. Membru al Comitetului de redactie, "Studii si cercetari de metalurgie" (for Bolgiu).

BOLGIU, Maria; BOLGIU, Ovidiu

Observations on aluminum. Rev Roum metalurg 8 no. 2:133-153
'63.

1. Laboratory of Crystallography and Mineralogy, and Laboratory
of Physical Metallurgy, Polytechnic Institute, Bucharest and
Center of Metallurgic Research, Rumanian Academy.

BOLGIU, Maria; BOLGIU, Ovidiu

Observations on aluminum. Studii cerc metalurgie 8 no.2:155-177
'63

1. Institutul Politehnic Bucuresti, Laboratorul de cristalografie si mineralogie si Laboratorul de metalurgie fizica.
Centrul de cercetari metalurgice al Academiei R.P.R.

BOLGIU, O.; TRITA, V.; DUMITRESCU, M.

Contributions to the determination of the equilibrium diagram of the Fe-Cr system between 20 and 1000°C. Studii cerc metalurgie 9 no.2:103-118 '64.

BOLDI, O.; BOLDI, V.; JACOB, J., S.

Contributions to the definition of the equilibrium of iron-carbon system between 2000° and 1000° C. by X-ray metallography. No. 2: 131-147. Ital.

BOLGIU, O.

"The art and science of growing crystals." Reviewed by
O. Bolgiu. Studii cerc metalurgie 9 no.2:407-408 '64.

L 13313-66

ACCESSION NR: AP5025535

RU/0027/65/010/001/0125/0136

AUTHOR: Bolgiu, Ovidiu; Dumitrescu, Aurelia

TITLE: Changes of the sulphurs of iron and of calcopyrites during heating and possibilities for establishing some correlations with the expansion of the corresponding metals

SOURCE: Studii si cercetari de metalurgie, v. 10, no. 1, 1965, 125-136

TOPIC TAGS: sulfur, iron, copper, pyrite, heating, mineralogy

ABSTRACT: In a discussion of the over-all expansion curves of iron and calcopyrite sulphurs, the authors note that the transformation temperature of the sulphurs coincides with that of the change of reticular or over-all expansion of iron or copper. They conclude that the transformation temperatures are related to the metallic atoms that bring about structural changes, and propose the appearance of pyrotine as an intermediate phase in the oxydation of calcopyrite. Orig. art. has: 4 graphs, 13 figures, 3 formilas.

Card 1/2

L 13313-66

ACCESSION NR: AP5025535

ASSOCIATION: Laboratorul de cristalografie si mineralogie, Institutul politehnic
"Gheorghe Gheorghiu-Dej," Bucharest (Laboratory of Crystallography and Mineralogy,
"Gheorghe Gheorghiu-Dej" Polytechnical Institute)

SUBMITTED: 07Dec64

ENCL: 00

SUB CODE: IC, TC

NR REF SOV: 001

OTHER: 018

JPRS

Card 2/2

BOLGOV, A.

Problems of differential land rent on collective farms.
Vop. ekon. no.10:87-102 0 '62. (MIRA 15:11)
(Rent (Economic theory))
(Collective farms)

BOLGOV, A.

Decisions of the March Plenum of the Central Committee of the
CPSU and some problems of economic theory. Vop. ekon. no. 5:5-14
'62. (MIRA 15:6)

(Agriculture--Economic aspects)
(Communist Party of the Soviet Union--Congresses)

BOLGOV, A. T.

Min Higher Education USSR. Tomsk Order of Labor Red Banner Polytechnic Inst imeni S. M. Kirov. Chair of "Internal Combustion Engines."

BOLGOV, A. T. - "Some characteristics of the damping of torsion oscillations of shafts of equipment with internal-combustion piston engines." Min Higher Education USSR. Tomsk Order of Labor Red Banner Polytechnic Inst imeni S. M. Kirov. Chair of "Internal Combustion Engines." Tomsk, 1956.
(Dissertation for the Degree of Candidate in Technical Sciences.)

SO: Knizhnaya Letopis', No. 13, 1956

BOIGOV, A.T.

BOIGOV, A.T.

Relationship between damping force characteristics and the
flywheel moment in motor units. Izv.TPI 85:49-54 '57. (MIRA 10:12)

1. Predstavleno prof. doktorom tekhn.nauk V.K. Nechayevym.
(Shafts and shafting--Vibration)

124-58-9-10551

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 9, p 158 (USSR)

AUTHORS: Nechayev, V. K., Bolgov, A. T.

TITLE: On the Determination of Energy Losses in Shafts Due to Hysteresis
(K opredeleniyu gisterezisnykh poter' energii v valakh)

PERIODICAL: Izv. Tomskogo politekhn. in-ta, 1957, Vol 85, pp 61-68

ABSTRACT: The methodology proposed is based on an analysis of "vibrograms", recorded with the aid of inductive transducers, of free vibrations. The vibrations were excited by a pair of electromagnets which acted upon protuberances on a flywheel suspended to the lower extremity of a shaft, the upper end of which had been rigidly clamped. The electromagnets received their power from a synchronous A-C generator. In determining the hysteresis-loss parameters s and q the authors based their reasoning on the following expression for the elementary "hysteresis work" dA_h done in an elementary volume:

$$dA_h = s \tau^q dV,$$

Card 1/2

124-58-9-10551

On the Determination of Energy Losses in Shafts Due to Hysteresis

where τ is the value of the amplitude of the shearing stress in the given volume element dV .

G. S. Pisarenko

1. Shafts--Performance 2. Vibrations--Analysis 3. Hysteresis--Analysis

Card 2/2

BOLGOV, A.T., kand.techn.nauk

Evaluating dynamic damping of torsional vibrations in power units having piston engines. Nauch.dokl.vys.shkoly; mash.i prib. no.2: 75-79 '58. (MIRA 12:10)

1. Predstavleno kafedroy "Dvigateli vnutrennego sgoraniya" Altayskogo instituta sel'skokhozyaystvennogo mashinostroyeniya. (Damping(Mechanics))

Мирошников, А.П., канд.техн.наук, доцент.

Approximate analysis of torsional vibrations of the shaft of an
experimental unit during the slipping. (Изв. выс. учеб. зав.;
masl' nostr. no.6:32-38 '61. (ИРА 14:7)

1. Altayskiy politehnicheskii institut.
(Shafting--Vibration)

BOLGOV, A.T., kand.tekhn.nauk, dotsent

Using the method of dimensional analysis in experimental
determination of damping coefficients. Izv.vys.ucheb.zav.;
mashinostr. no.9:30-37 '61. (MIRA 14:12)

1. Altayskiy politekhnicheskiy institut.
(Damping(Mechanics))

BOLGOV, A.T.; TRUSHKO, K.A.

Universal load device for testing connecting rods. Zav.lab. 28
no.7:874-875 '62 (MIRA 15:6)

1. Altayskiy politekhnicheskiy institut.
(Testing machines)

BOLGOV, A.T.; DROZDOV, B.N.

The article "Studying the tension in a connecting rod." Trakt.
i sel'khoz mash. no. 6:44-45 Je'64 (MIRA 17:7)

BOLGOV, A.T., kand. tekhn. nauk, dotsent; MAKAROV, V.V., kand. tekhn. nauk,
dotsent; MINAYEV, A.N., kand. tekhn. nauk, dotsent

Criterional relation of damping coefficients of a motor unit and basic
parameters of the rotating system. Izv. vys. ucheb. zav. mashinostr. no. 5:
46-51 '64. (MIRA 18:1)

1. Altayskiy politekhnicheskii institut.