BeLu, O.

COUNTRY : Rumania H-27
CATEGORY :

ABS. JOUR. : RZKhim., No. 1959, No. 72424

AUTHOR : Teodorescu, St.; Iliescu, L.; Tomescu, F.; *
INST. : Agronomical Research Institute
TITLE : Technology of the Making of Natural Dessert Wines of the "Murfatlar" and "Tirnave" Type

ORIG. PUB. : An. Inst. cercetari agron., 1957 (1958), 25, No 6, 495-516

ABSTRACT : To produce dessert wines, tests were made of addition to the wine must of concentrated must, refined sugar, crude spirits distillate, and of little-aged spirits distillate (LAD). The best results were obtained on adding LAD in small portions during fermentation. The sugar content of the must should be at least 240 g/liter, and the content of extract in the wine at least 24-32 g/liter. The method can be carried out using conventional wine-making equipment.

From Authors' Summary.

CARD: 1/1

* Belu, O.; Bodarici, C.; Dumitrescu, T.

BELU, O.;LEPADATU, V.

Modification of the physicochemical characteristics of grapes artificially infected with Botrytis cinerea. p. 467.

COMUNICARILE. Bucuresti. Vol. 9, no. 5, May 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 1, January 1960.

Uncl.

BELUBEKOV, A.A.; MASTERKOV, A.M.; MOSINYAN, S.A.; REZNIK, B.A.

Strengthening the bottom zones of gas wells by gravel filters.
Gaz. prom. 10 no.9:53-56 '65. (MIRA 18:11)

Belyakov, V.

BELYAKOV, V.

Prospective business. Sov. potreb. koop. no.1:26-28 Ja '58.
(MIRA 11:1)

1. Starshiy okhotoved Amu-Dar'inskogo ondatrovogo promkhoza.
(Amu Darya Valley--Muskrats)

BELUBEKYAN, A.I., prof.; GUSEYNOV, A.G., prof.

Improvement of oxygen therapy for parturients, in asphyxiation of the fetus and newborn infants. Azerb.med.zhur. no.11:84-87 N '59. (MIRA 13:4)

1, Iz akusherskoy kliniki (zav. - prof. A.I. Belubekyan) Azerbaydzhanskogo gosudarstvennogo instituta usovershenstvovaniya vrachey i iz rodil'nogo otdeleniya klinicheskoy bol'nitsy im. Dzhaparidze.
(OXYGEN--THERAPEUTIC USE) (ASPHYXIA)

BELUBEKYAN, A.I., prof. (Baku)

Case of the delayed appearance of the second fetus in multiple births.
Fel'd. i akush. 25 no.11:49-50 N '60. (MIRA 13:11)
(TWINS)
(LABOR, COMPLICATED)

BELUBEKYAN, A.I.; NAZARLI, S. Kh.

Asphyxia and birth injury in the fetus and newborn infants and their prophylaxis. Azerb. med. zhur. no.9:6-12 S '62 (MIRA 18:1)

BELUBEKYAN, A.I.

Management of labor following a cesarean section according to clinical material for 8 years. Azerb. med. zhur. 41 no.8: 33-37 Ag '64. (MIRA 18:11)

BELUBEKYAN, A.I.

Antenatal death of the fetus and the role of women's consultations in its prophylaxis. Azerb. med. zhur. 42 no.8:50-55 Ag '65. (MIRA 18:11)

BELUBEKYAN, M.V.

Boundary layer in a conducting fluid in the presence of a longitudinal magnetic field. Inzh.-fiz. zhur. 6 no.8:97-105 Ag '63. (MIRA 16:10)

1. Politekhnicheskiy institut imeni M.I.Kalinina, Leningrad.

ACC NR: AP7002691 SOURCE CODE: UR/0424/66/000/006/0050/0056

AUTHOR: Bagdasaryan, G. Ye. (Yerevan); Belubekyan, M. V. (Yerevan)

ORG: Institute of Mathematics and Mechanics, Academy of Sciences, Armenian SSR (Institut matematiki i mekhaniki AN ArmSSR)

TITLE: Flutter of a cylindrical shell in a flow of a compressible conductive fluid in presence of a magnetic field

SOURCE: Inzhenernyy zhurnal. Mekhanika tverdogo tela, no. 6, 1966, 50-56

TOPIC TAGS: cylindric shell structure, shell flutter, ~~dynamic~~ shell structure stability, magnetic field, ~~control flutter~~, aero magneto flutter, aero elastic flutter, shell vibration, supersonic flow, gas flow, fluid flow, compressible fluid

ABSTRACT: The dynamic stability of an infinite circular cylindrical shell is investigated in an outer longitudinal supersonic flow of an electrically perfectly conductive inviscid gas with a certain undisturbed velocity at infinity. Inside the shell the gas is at rest under pressure equal to that of the undisturbed gas flow. There is an outer magnetic field parallel to the shell axis. The investigation is carried out assuming the validity of the following assumptions: 1) Kirchhoff-Love hypothesis on nondeformable normals; 2) conventional simplifications in the theory of shells with a large index of variation; 3) disregard of the electromagnetic effects in the shell; 4) equality to unity of the magnetic and dielectric permeabilities of the gas and of the shell material; 5) correctness of the Maxwell equations for the vacuum in the inner space of the shell. The following initial

Card 1/2

ACC NR: AP7002691

equations and relationships are used in accordance with these assumptions: a) the equations of magnetogasdynamics for the outer space of the shell; b) the equation of the shell motion; c) an expression for the normal component of the outer surface load; and d) the equations of the magnetic and electric fields in the vacuum. Equations (a) and (d) are linearized on the assumption that the disturbances are small, and linearized equations (e) are obtained which describe the states in the outer and inner spaces of the shell and satisfy the boundary conditions on both surfaces of the vibrating shell. A characteristic equation is obtained (by a simultaneous solution of equations (a) to (e)) from which the natural frequency w and the divergence speed U (by putting $w = 0$) of the shell can be determined. The effects of Mach and Alfvén numbers, of the rate of elastic wave propagation V, and of magnetic field intensity on U are mentioned. The condition of attaining the flutter speed M_f, as well as instability regions of the shell are discussed, and an expression for M_f in the case when $V < U$ is derived. Orig. art. has: 3 figures and 43 formulas. [WA-52]

SUB CODE: 20/ SUBM DATE: 31Aug66/ ORIG REF: 004/

Card 2/2

BELUBEKYAN, M.V.

Derivation of the equations for a magnetohydrodynamic boundary layer. Trudy LPI no.230:107-110 '64.
(MIRA 17:6)

BELUCH, Imre

"Cancer registration and studies of incidence by surveys" by Percy Stocks. Reviewed by Imre Beluch. Stat szemle 38 no.4:434-435 Ap '60.

I. SH. BELUGA and A. V. BRUKHOVA

"Investigation of Some Delay Systems of the Pin Type" from Annotations of Works Completed in 1955 at the State Union Sci. Res. Inst. Min. of Radio Engineering Ind.

So: B-3,080,964

BELUGA, I.Sh.

Bilateral approximations in the calculation of the dispersion of delay systems. Radiotekh. i elektron. 10 no.9:1724-1725 S '65. (MIRA 18:9)

PHASE I BOOK EXPLOITATION SOV/5292

Konferentsiya po elektronike sverkhvysokoy chastoty

Trudy (Transactions of the Conference on Superhigh-Frequency Electronics) Moscow, Gosenergoizdat, 1959. 271 p. 3,500 copies printed.

Sponsoring Agency: Vsesoyuznyy nauchnyy sovet po radiofizike i radiotekhnike AN SSSR.

Eds. (Title page): I. S. Dzhigit, Professor, and Ye. G. Solov'yev, Candidate of Technical Sciences; Ed.: S. Akalunin; Tech. Ed.: G. Ye. Larionov.

PURPOSE: This book is intended for scientific and technical personnel concerned with the development and operation of superhigh-frequency devices.

COVERAGE: The book contains a number of papers dealing with the more important problems of superhigh-frequency electronics. The papers were submitted at the Conference on Electronics called by the Vsesoyuznyy nauchnyy sovet po radiofizike i radiotekhnike AN SSSR (All-Union Scientific Council for Radiophysics and Radio Engineering, AS USSR) and the Byuro novoy tekhniki MO SSSR (Bureau of Modern Engineering, Ministry of Defense, USSR) and held in Moscow in 1957. The reports deal with the following topics: problems of the theory and calculation of the delay systems of traveling-wave and backward-wave tubes; certain phenomena occurring in a cylindrical electron beam finding itself in a uniform magnetic field; the focusing of long beams by means of periodic magnetic and electric fields; and some problems concerning reflex klystrons. Modern types of cathodes for superhigh-frequency devices are described. No personalities are mentioned. References accompany most of the reports.

06338
SOV/141-2-1-10/19

AUTHOR: Beluga, I. Sh.

TITLE: Calculation of the Field of Transverse Electromagnetic Waves in Rodded Delaying Systems

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1959, Vol 2, Nr 1, pp 84 - 93 (USSR)

ABSTRACT: The wave admittance and the amplitudes of two spatial harmonics are calculated in a multi-wire line with conductors of rectangular section. These parameters are of fundamental importance in studies of the dispersion and coupling impedance in slow-wave structures. In previous publications, (R.C. Fletcher - Ref 1 and J.C. Walling - Ref 3) the field between the conductors has been assumed uniform and the results yielded prove to be unacceptable (errors in the parameters considered may be 100% for $L = l$ in Figure 1). The formulae found in here, taking non-uniformity into account, are 4% in error when $p/l > 1$ and exact when $p/l \to \infty$. The formal definition of wave admittance in terms of current and potential is Eq (1), which applies to both the one- and two-dimensional structures of Figures 1a and 1b, respectively. The current depends on

Card1/3

Calculation of the Field of Transverse Electromagnetic Waves in Rodded Delaying Systems

the integral round the conductor section of the normal component of electric-field strength and consists, in the two-dimensional case, of the components of Eq (5). The second two terms allow for edge effects. These latter may be calculated in terms of "edge-capacitances" and use conformal transformations as in Figure 2. The wave admittances, using these capacitances, are Eqs (8), (9) (line a) and Eq (10) (line δ). The edge capacitances depend on L, l and W in Figure 2a and are listed in Tables 1a and 1b. Which table is used depends on whether $\eta \geqslant f(\mu)$ or $\eta < f(\mu)$, where $f(\mu)$ is plotted in Figure 3. In the formulae quoted in the tables, ϑ indicates Jacobi's theta-function. Table 3 lists simplified formulae giving errors no greater than 1.2%. The conditions attending the use of these formulae are given in the lefthand column. It should be noted that formulae (8) to (11) for wave admittance are based on the approximate Eq (5). The greatest error occurs when $\varphi = 0$, $\theta = \pi$, $\mu = 1$. Compared with the exact

Calculation of the Field of Transverse Electromagnetic Waves in Rodded Delaying Systems

formula the maximum errors for $p/l = 1.5$, 1.0 and 0.5 are respectively 0.8%, 3.8% and 16.8%. Table 5 gives formulae for calculating the amplitudes of spatial harmonics. The appropriate conformal transformation is in Figure 5. The author thanks A.I. Sharko for assistance in computer programming. There are 5 figures, 5 tables and 5 references, of which 2 are Soviet, 1 French and 2 English.

SUBMITTED: July 30, 1958

9.2590

S/141/61/004/004/013/024
E192/E435

AUTHOR: Beluga, I.Sh.

TITLE: Calculation of resonator delay systems by the electrostatic equivalent method

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, v.4, no.4, 1961, 689-702

TEXT: The author attempts to avoid difficulties and inaccuracies of previous attempts to calculate the basic characteristics of resonator delay systems by taking into account the field in the plane of the tips of the "comb", calculated in the approximation of infinite depth of comb and infinite distance of the comb from any conducting surface. Satisfaction of the Floquet condition is assumed. Design formulae are obtained for various cases, such as linear and radial, with slots in the outer or inner regions of the bounding circle. There are 5 figures, 4 tables and 11 references: 5 Soviet-bloc, 4 Russian translations from non-Soviet publications and 2 non-Soviet. The 3 references to English language publications read as follows:
Ref.2: W. Kleen, Electronics of microwave tubes, Academic Press Inc., New York, London, 1958;
Card 1/2

Ref.5: W.Walkinshaw, J. Appl. Phys., v.20, 634 (1949);
Ref.11: P.M.Morse and H.Feshbach. Methods of Theoretical Physics, 1953. Russian translation v.1, IL, M., 1958.

SUBMITTED: September 10, 1960

S/141/61/004/005/013/021
E025/E135

AUTHOR: Beluga, I.Sh.

TITLE: Multiwire lines composed of round conductors

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, v.4, no.5, 1961, 942-954

TEXT: This paper was presented at the Conference MV and SSO USSR on Radioelectronics, Khar'kov, 1960.
The solution of the electrostatic problem equivalent to the calculation of the fundamental wave of a multi-conductor line formed from ideal conductors of circular cross-section arranged so that their cross-sections form a two-dimensional oblique lattice is considered. The potentials and fields are assumed to satisfy Flock's conditions. The solution of the problem is obtained by replacing each charged contour by a system of charges and multipoles located at its centre derived from a Laurent expansion and summing these over the lattice. The field due to a single column of charges is first calculated, then, by summation of columns, that due to the lattice of point charges. The fields due to systems of multipoles are calculated similarly.

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Multiwire lines composed of round ... S/141/61/004/005/013/021
E025/E135

The wave impedance, losses due to non-uniformity of current on the contours (proximity effect) and the amplitudes of the spatial harmonics are calculated. Tables are given showing the effect of the number of terms taken and of the spacing of the conductors in the lattice on the error produced by taking only a given finite number of terms of the expansion.
There are 1 figure, 3 tables and 10 references: 6 Soviet-bloc, 1 Russian translation of non-Soviet publication, and 3 non-Soviet-bloc. The English language references read as follows:
Ref.4: Chiao-Min Chu, J. Appl. Phys., v.29, 88 (1958).
Ref.6: J.C. Walling, J. Electronics and Control, v.3, 239 (1957).

SUBMITTED: January 19, 1961

Card 2/2

BELUGA, I.Sh.

Two-dimensional periodic multiwire line containing N cylindrical conductors in the cell. Izv. vys. ucheb. zav.; radiofiz. 6 no.4:738-751 '63. (MIRA 16:12)

BELUGA, I.Sh.

Wave conductivity of a shielded multiwire line with rectangular conductors. Izv. vys. ucheb. zav.; radiofiz. 6 no.5:1070-1071 '63. (MIRA 16:12)

BELUGA, I.Sh.

Methods of partial regions based on the steady-state of some functionals. Radiotekh. i elektron. 9 no.3:459-468 Mr '64. (MIRA 17:4)

ACC NR: AP6027690 SOURCE CODE: YU/0006/66/000/01-/0045/0055

AUTHOR: Boluch, Jozef--Belukh (Graduate engineer; Cracow)

ORG: none

TITLE: Polish shortwave telemeter "Telemeter OG-1"

SOURCE: Geodetski list, no. 1-3, 1966, 45-55

TOPIC TAGS: telemetry equipment, geodesy/OG-1 telemetry equipment

ABSTRACT: Following a brief survey of the existing electronic telemeters produced in various Western and Eastern countries, the author concentrates on the description of the Polish shortwave telemeter designed in 1962 at the Department of Radiology of the Warsaw Polytechnic. The instrument is presently in widespread use in Poland for geodesic measurements in the 100 m to 15 km range. The article presents the general description of the instrument, its principles of operation, principles of measurement, technological data, and data processing procedures. The last section deals with the use of the Telemeter OG-1 in geodesic work. The standard deviation of the instrument is $M_s = \pm (3 + 5.10^{-6} D_w$ km) cm; basic measuring frequencies - 15, 13.5, and 14. 14.85 Mc; carrier wave frequency - 8.8 to 9.7 Gc; warm-up time 10-25 min; power supply 12 V, 37 Ah battery; weight of one station unit with antenna - 11.4 kg; stable operation within the -10°C to + 35°C limits. Orig. art. has: 5 figures, 5 formulas and 5 tables. [JPRS: 36,844]

SUB CODE: 09, 08 / SUBM DATE: none

Card 1/1

0917 1192

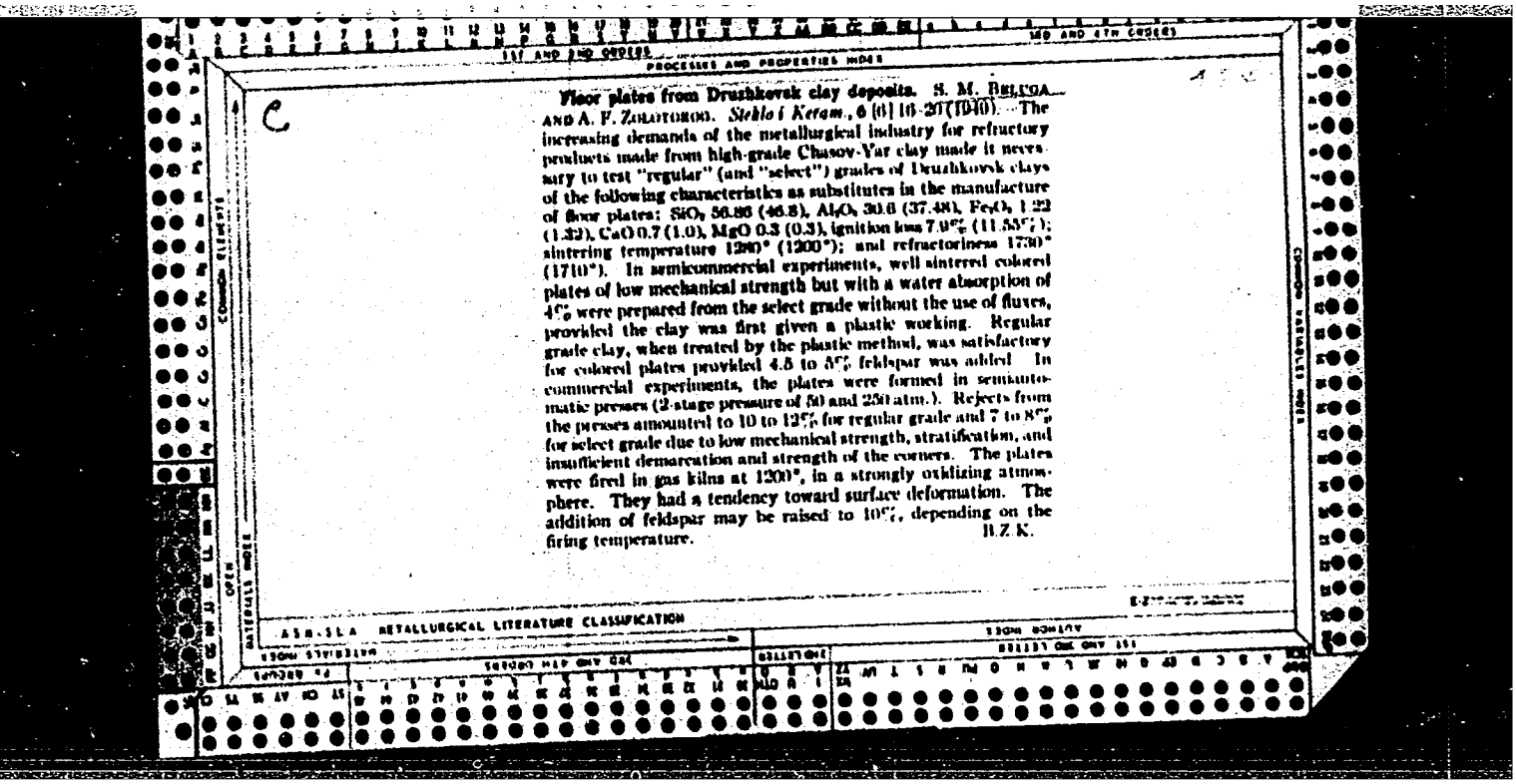
1ST AND 2ND ORDERS | 3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

CA 19

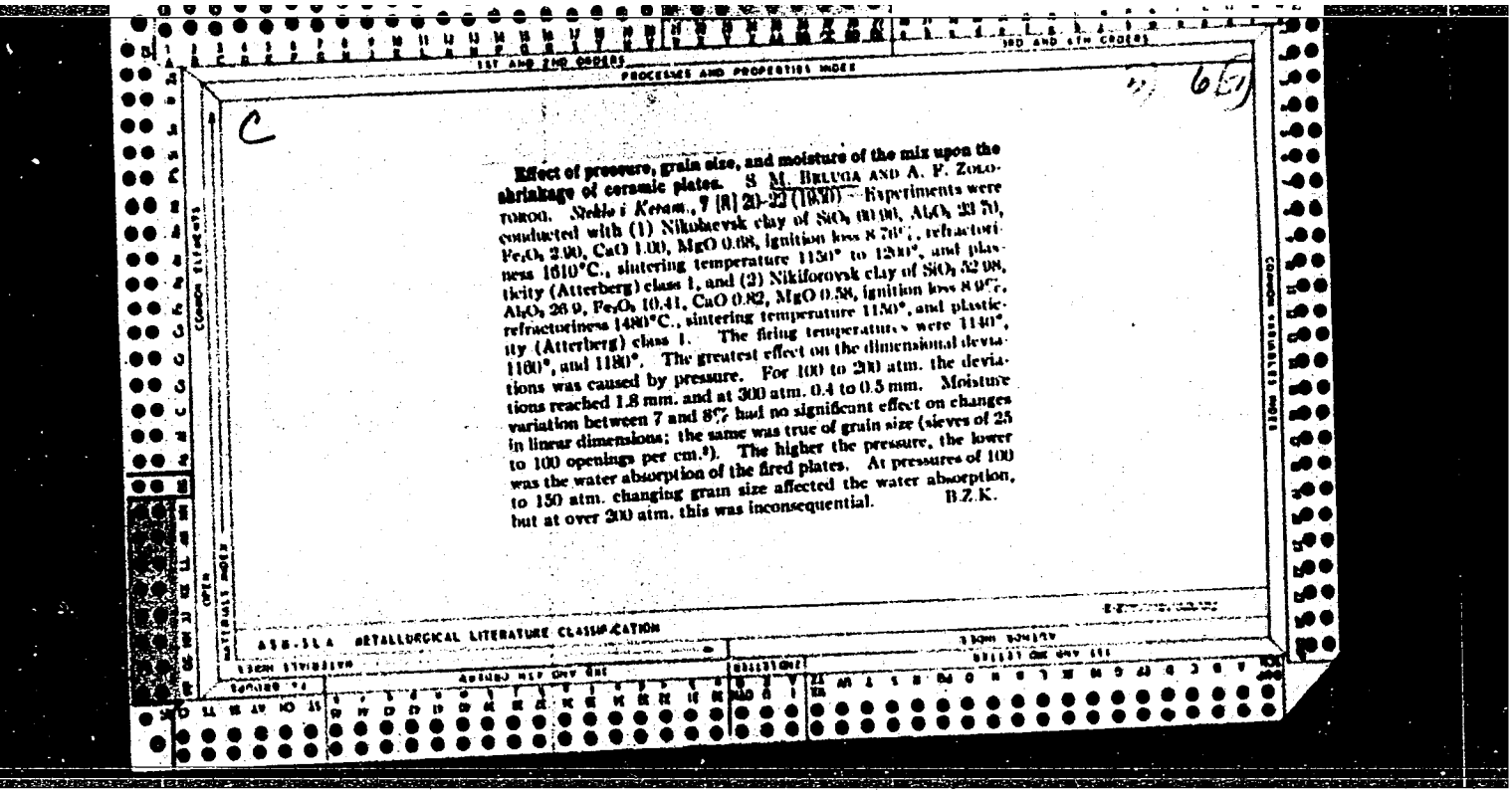
Metlach plates from Artemovsk clays. B. M. Bobaga and A. F. Zolotorog. *Stekol'naya i Keram. Prom.* 1945, No. 6, 11-12.—Metlach plates of satisfactory quality were obtained from Artemovsk clays. Water absorption was 0-1, 2-3, and 4-5% on the top, middle, and bottom, resp. Acid resistance was 87-90% and impact strength slightly less than Russian specifications. B. Z. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Floor plates from Druzhkovsk clay deposits. S. M. BELUGA AND A. F. ZOLATOROB. *Steklo i Keram.*, 6 [6] 16-20 (1949). The increasing demands of the metallurgical industry for refractory products made from high-grade Chasov-Yar clay made it necessary to test "regular" (and "select") grades of Druzhkovsk clays of the following characteristics as substitutes in the manufacture of floor plates: SiO_2 56.86 (46.8), Al_2O_3 30.6 (37.48), Fe_2O_3 1.22 (1.32), CaO 0.7 (1.0), MgO 0.3 (0.3), ignition loss 7.9% (11.55%); sintering temperature 1280° (1200°); and refractoriness 1730° (1710°). In semicommercial experiments, well sintered colored plates of low mechanical strength but with a water absorption of 4% were prepared from the select grade without the use of fluxes, provided the clay was first given a plastic working. Regular grade clay, when treated by the plastic method, was satisfactory for colored plates provided 4.5 to 5% feldspar was added. In commercial experiments, the plates were formed in semiautomatic presses (2-stage pressure of 50 and 250 atm.). Rejects from the presses amounted to 10 to 12% for regular grade and 7 to 8% for select grade due to low mechanical strength, stratification, and insufficient demarcation and strength of the corners. The plates were fired in gas kilns at 1200°, in a strongly oxidizing atmosphere. They had a tendency toward surface deformation. The addition of feldspar may be raised to 10%, depending on the firing temperature.

H.Z.K.



Effect of pressure, grain size, and moisture of the mix upon the shrinkage of ceramic plates. S. M. BELUGA AND A. F. ZOLOTOROO. *Steklo i Keram.*, 7 [8] 20-22 (1950). — Experiments were conducted with (1) Nikubaevsk clay of SiO_2 61.00, Al_2O_3 23.70, Fe_2O_3 2.00, CaO 1.00, MgO 0.68, ignition loss 8.70%, refractoriness 1610°C., sintering temperature 1150° to 1200°, and plasticity (Atterberg) class 1, and (2) Nikiforovsk clay of SiO_2 52.08, Al_2O_3 26.9, Fe_2O_3 10.41, CaO 0.82, MgO 0.58, ignition loss 8.0%, refractoriness 1480°C., sintering temperature 1150°, and plasticity (Atterberg) class 1. The firing temperatures were 1140°, 1160°, and 1180°. The greatest effect on the dimensional deviations was caused by pressure. For 100 to 200 atm. the deviations reached 1.8 mm. and at 300 atm. 0.4 to 0.5 mm. Moisture variation between 7 and 8% had no significant effect on changes in linear dimensions; the same was true of grain size (sieves of 25 to 100 openings per cm.²). The higher the pressure, the lower was the water absorption of the fired plates. At pressures of 100 to 150 atm. changing grain size affected the water absorption, but at over 300 atm. this was inconsequential. B.Z.K.

BELOV, S.V.

Production of ornamental floor tiles. Stek. i ker. 9 no. 6, 1952

BELUGA, S.M.

Ceramics (3)

Fuel Abst.
Vol. XV, No. 2
Feb. 1954
Industrial Furnaces, Kilns, etc.: Combustion.

1626. GAS-FIRED CHAMBER KILNS WITH THREE FIRING ZONES. Beluga, S.M., Zolotorog, A.F. and Gnilitskaya, T.G. (Steklo Keram. (Glass & Ceramics, Moscow), Mar. 1953, 17, 18).

BELUGA S. M.

AUTHOR: None Given 72-2-19/20

TITLE: For the Industry of Ceramics - a Progressive Technology (Keramicheskoy promyshlennosti - peredovuyu tekhnologiyu).

PERIODICAL: Steklo i Keramika, 1958, . Nr 2, pp. 46-47 (USSR)

ABSTRACT: A technical conference of the functionaries of the ceramic industry took place in Khar'kov in December 1957, which was organized by the Ukrainian administration of the Scientific-Technical Society of the building material industry and the Ministry of Building Material Industry of the Ukrainian SSR. The conference was attended by functionaries of the works producing ceramics in the Ukraine and the Russian Federation, the Economic Councils of Stalinsk and Khar'kov, the state-controlled offices for Economic Planning of the USSR, the RSFSR, and the Ukrainian SSR, the Building- and Building-Material Department of the TsK KPU and of the Scientific Research- and Planning Institutes. The results obtained in the Ukrainian Ceramic Industry and prospects for the future were discussed. Particular attention was paid to the utilization of progressive experience in the industry as well as to the introduction of new technical methods, high-efficiency equipment, and a progressive technology.

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1.) I.I.Moroz (Minister for the Building Material Industry of the Ukrainian SSR) delivered a report on the work and the prospects of the ceramics industry.
2.) A.A.Kopeykin (Director of the NIIstroykeramiki) spoke about the work carried out by his institute. He was reproached for talking too much about future plans and too little about work already completed.
3.) A.A.Grebennik (Head of the PKB NIIstroykeramiki), after his report, was criticized for the same reasons as Kopeykin.
4.) Dudnik (TsKB MPSM Ukrainian SSR, Khar'kov) spoke about the introduction of new equipment and assembly lines.
5.) N.I.Dikerman (Chief Engineer of the Administration of the Mosstroymaterialy) stated that the efficacy of the brick charging devices for tunnel kilns at present no longer corresponds to the increased efficiency of the kilns.
6.) A.N.Lyutenko (Chief Engineer of the Administration of the Economic Council, Khar'kov) spoke about production reserves of plants.
7.) S.M.Beluga (Chief Engineer of the Metlakh Tile Works, Khar'kov) spoke about the mechanization of production.

8.) L.K.Parnovskiy (Director of the Ceramics Factory, Lvov) spoke about success achieved in production.
9.) P.Ye.Andrianov delivered a report on the ceramics industry of Italy.
10.) M.D.Abramovich (Director of the Combined Plant "Keramik" at Kiyev) spoke about the organization of the production of mosaic tiles.
11.) S.M.Brekhovskikh (Chief Specialist for Glass of the Gosplan USSR) criticized the lack of reports concerning the stage of furnace technology.
12.) A.N.Lyutenko, G.A.Soldatov, S.M.Beluga, M.V.Gordyga and F.K.Perre reported on the unfavorable situation of the raw material sector, which impairs the delivery of high-quality raw materials to factories and plants.

Decisions were made for the purpose of improving industrial work, for the purpose of reducing time needed for smelting and drying, with a view of speeding up mechanization and improving the quality of products, as well as of increasing production and reducing initial costs.

For the Industry of Ceramics - a Progressive Technology 72-2-19/20

AVAILABLE: Library of Congress

Card 4/4

BELUGA, S.M.; VUL'FSON, D.A.

Continuous rotary mills. Suggested by S.M.Beluga, D.A.Vul'fson. Rats.i izobr.v stroi. no.9:89-91 '59. (MIRA 13:1)

1. Glavnyy inzhener Khar'kovskogo zavoda metlakhskikh plitok Khar'kov, ul.Kotlova, d.67 (for Beluga). 2. Glavnyy mekhanik Khar'kovskogo zavoda metlakhskikh plitok Khar'kov, ul.Kotlova, d.67. (for Vul'fson).
(Milling machinery)

BELUGIN, A.

Multipurpose mandrel cutting-tool holder. Mashinostroitel' no.8:26 Ag '63. (MIRA 14:7)

(Lathes)

MAGAZANIK, S.S.; KHILEVSKIY, K.V.; BELUGIN, A.A.; SAL'NIKOVA, K.I.

"Use of physical factors and physical exercise therapy in the compound treatment and prevention of some diseases." A.N.Obrosov. Reviewed by S.S.Magazanik and others. Vop.kur.fizioter. i lech. fiz.kul't. 21 no.1:80-81 Ja-Mr '56. (MLRA 9:9)
(PHYSICAL THERAPY) (OBROSOV, A.N.)

BELUGIN, A.A.; NIKITINA, L.F.

Scientific session of the Sverdlovsk Scientific Research Institute of Physical Therapy. Vop.kur.fizioter. i lech.fiz.kul't. 21 no.3: 88-94 Jl-S '56. (MLRA 9:10)
(PHYSICAL THERAPY)

SHEFER, D.G.,; BELUGIN, A.A.

Observations of ultraviolet erythema in tumors, abscesses, and cysts of the brain. Zhur. nevr. i psikh. 56 no.3:262-264 '56 (MLRA 9:7)

1. Nervnaya klinika Sverdlovskogo nauchno-issledovatel'skogo instituta fizicheskikh metodov lecheniya i kurortologii Ministerstva zdravookhraneniya RSFSR.

(BRAIN, diseases,
diag., ultraviolet erythema as diag. sign (Rus))
(ULTRAVIOLET RAYS,
ultraviolet erythema as diag. sign in brain dis. (Rus))
(SKIN,
ultraviolet erythema as diag. sign in brain dis. (Rus))

Belugin A. A.

SHEFER, D.G.; KHILEVSKIY, K.V.; BELUGIN, A.A.

Mechanism of the development and clinical role of ultraviolet erythema. Vop.kur.fizioter. i lech.fiz.kul't. 22 no.6:15-21 N-D '57. (MIRA 11:2)

1. Iz Sverdlovskogo nauchno-issledovatel'skogo instituta kurortologii i fizioterapii (dir. - kandidat meditsinskikh nauk N.V.Orlov) i iz Sverdlovskogo gosudarstvennogo meditsinskogo instituta (dir. prof. A.F.Zverev)
(ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT) (SKIN)

BELUGIN, A.A.

Observations on ultraviolet erythema in epilepsy. Vop.kur.fizioter.i lech.fiz.kul't. 25 no.1:43-47 '60. (MIRA 13:5)

1. Iz Sverdlovskogo instituta fizicheskikh metodov lecheniya Ministerstva zdravookhraneniya RSFSR.
(EPILEPSY) (ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT)

ACC NR: AR6000101 SOURCE CODE: UR/0058/65/000/008/A015/A016

SOURCE: Ref. zh. Fizika, Abs. 8A145

AUTHORS: Belugin, A. F.; Leonova, L. M.; Osipova, V. N.; Smirnova, I. A.

ORG: none

TITLE: The SPV-1 spectrovisor

CITED SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 2, vyp. 1, 1964, 635-642

TOPIC TAGS: spectrophotometry, spectrum analysis, continuous spectrum recording.

TRANSLATION: An automatic high-speed spectrophotometer-spectrovisor SPV-1 was developed, intended for the investigation of the intermediate products of substances that change during the course of time. The working range of the instrument is 220--1000 nm. The recorder employed was a cathode-ray tube. The recording rate can be set equal to 15 or 7.5 nm/sec, depending on the complexity of the investigated spectrum. Provision is made in the spectrovisor for connecting an EPP-09 automatic recorder, in which case the spectrum-registration speed is 4 nm/sec.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 000/ OTH REF: 000

Card 1/1

BELUGIN, A.P.; PETROV, V.P.

Improving the roll of a foundry conveyer. Mashinostroitel' no.12:17 D '61. (MIRA 14:12)
(Conveying machinery)

ANASTASIADI, A.P.; BOROVSKIY, V.R.; VYBORNOV, G.V.; KOPELYANSKIY, G.D.; MAK, I.L.; PECHURO, S.S.; PIYEVSKIY, I.M.; RACHEVSKAYA, K.D.; REYZNER, Yu.B.; RYBAK, L.L.; TSEPELIOVICH, M.R.; SHUMAKHER, L.I.; YUSHKEVICH, M.O.[deceased]; AGEYENKO, Yu.G., nauchnyy red.; BELUGIN, A.T., nauchnyy red.; KOGAN, G.S., nauchnyy red.; KRZHEMINSKIY, S.A., nauchnyy red.; MITSKEVICH, M.I., nauchnyy red.; SILENOK, S.G., nauchnyy red.; TRILESNIK, Z.Ye., nauchnyy red.; ZUBAREV, K.A., glav. red.; TROFIMOV, I.P., red.; SKRAMTAYEV, B.G., glav. red.; BALAT'YEV, P.K., red.; KITAYEV, Ye.N., red.; KITAYGORODSKIY, I.I., red.; ROKHVARGER, Ye.L., red.; KHOLIN, I.I., red.; CHERKINSKAYA, R.L., red.; RODIONOVA, V.M., tekhn. red.

[Manual on the production of gypsum and gypsum products] Spravochnik po proizvodstvu gipsa i gipsovykh izdelii. [By] A.P. Anastasiadi i dr. Pod red. K.A.Zubareva. Moskva, Gosstroizdat, 1963. 464 p. (MIRA 16:7)
(Gypsum) (Gypsum products)

BELUGIN, D. A.

Topographical artillery service. ARTILLERIYSKAYA TOPOGRAFICHESKAYA SLUZHBA. Textbook for Artillery Officers' Colleges. Moscow. Mil. Publ. of the Min. of Armed Forces, USSR. 1948. pp. 455.

BELUGIN, D. A.

N/5
213.05
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BELUGIN, D A

Artilleriyskaya Instrumental INaya Razvedka; Uchebnik Dlya Artilleriyskikh Uchilishch (Artillery Reconnaisance, by) D. A. Belugin, V. YA. ZVEREV I V. N. DANILIN. Moskva, Voyenizdat, 1956.
483 p. Illus., Diagrs., Tables.
Bibliography: p. 478.

[redacted] kandidat voyennykh nauk, polkovnik; ZVEREV, V.Ya., polkovnik; DANILIN, V.N., inzhener-polkovnik; VOROB'YEV, P.A. polkovnik, redaktor; KONOVALOVA, Ye.K., tekhnicheskiy redaktor.

[Artillery reconnaissance by instruments; a textbook for artillery schools] Artilleriiskaia instrumental'naia razvedka; uchebnik dlia artilleriiskikh uchilishch. Moskva, Voen.izd-vo M-va obor.SSSR, 1956. 483 p. (MIRA 10:6)
(Military reconnaissance)
(Artillery, Field and mountain)

Belugin, D. A.

BELUGIN, Dmitriy Aleksandrovich, kandidat voyennykh nauk, polkovnik zapasa; MARYSHEV, A.N., red.; STREL'NIKOVA, M.A., tekhn.red.

[Artillery topographic service; a manual for artillery schools] Artilleriiskaia topograficheskaia sluzhba; uchebnik dlia artilleriiskikh uchilishch. Izd. 2-e, perer. i dop. Moskva, Voen.izd-vo M-va obor. SSSR, 1957. 591 p. (MIRA 11:2)
(Military topography) (Artillery)

BELUGIN, S.A., inzh.

Furniture finishing with grained paper-base films. Der.prom. 9 no.4:20 Ap '60. (MIRA 13:9)

1. Moskovskaya mebel'naya fabrika No 14.
(Wood finishing)

BELUGIN, V.

Improve the organization of business correspondence in State Bank establishments

Den. i kred. 11 no. 6, 1952

S/570/61/000/019/008/008
B107/B104

AUTHOR: Belugin, V. F.

TITLE: Monthly forecast of maximum usable frequencies for the F2 layer in the form of world charts in Moscow time

SOURCE: Akademiya nauk SSSR. Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln. Trudy, no. 19 (29), 1961, 140-150

TEXT: Predictions of maximum usable frequencies and the respective critical frequency foF2 for the F2 layer can be given in various forms: (1) As a function of the geographical latitude and daytime for a certain geographical longitude; to get an idea of conditions on the whole globe, a set of such zonal charts is used. (2) As a function of geographical longitude and latitude for a certain time, i. e., world charts. This representation has the advantage that the maximum usable frequency can immediately be found by corresponding charts. Since January 1961, the IZMIRAN has therefore been publishing forecasts in the form of world charts in Moscow time. Two methods of designing such charts have become known: (1) (Ref. 5: C. M. Minnis. J. Atm. Ter. Phys., 3, N 2, 124, 1953)
Card 1/3

Monthly forecast of maximum usable...

Forecasts given by ionospheric research stations are entered for local time into a chart, and the isolines are drawn; from the chart, the foF2 values for areas of equal geographical longitude and latitude are determined, and entered into charts for a certain world time. (2) (Ref. 6: CCIR, Doc. 9-th Assembly, VI/73-E, Geneva 1958) The chart is compiled immediately in Moscow time or world time for which purpose the daily foF2 response for the individual ionospheric research stations is also taken into account. In 1959, the author suggested a simplified method of making monthly forecasts of the IZMIRAN as follows: The stations give their predictions with respect to two meridians, namely, 111° east and 69° west latitude. In between, interpolation is performed at 30° intervals along the geomagnetic latitude. Forecasts obtained in this manner have been published tentatively for July, August, and October 1959, regularly since January 1960. Comparisons with 5-month predictions for individual zones showed that approximately 90% of the data deviated by 0 - 0.5 Mc/sec only. Comparisons with British forecasts (Ref. 2, see below) and measured values also showed good agreement. There are 6 figures, 2 tables, and 7 references: 2 Soviet and 5 non-Soviet. The four most recent references to English-language publications read as follows: Ref. 2:

Monthly forecast of maximum usable... S/570/61/000/019/008/008
B107/B104

Predictions of radio wave propagation conditions, Department of Scientific and Industrial Research, England, 1960; Ref. 3: Ionospheric predictions series S. Commonwealth of Australia Department of Interior, 1956 - 1960; Ref. 4: World maps of F2 critical frequencies, maximum usable frequencies, for 4000 km, August, 1958, Tokyo; Ref. 6: CCIR, Doc. 9-th Assembly, VI/73-E, Geneva, 1958.

Card 3/3

BELUGIN, V.F.; PLANOVSKIY, A.N.

Diagram t-x-y for multicomponent mixtures. Khim. i tekh. topl. i masel 10 no.2:9-13 F '65. (MIRA 18:8)

1. Moskovskiy institut khimicheskogo mashinostroyeniya.

BELUGIN, V.F.; PLANOVSKIY, A.N.

Reducing multicomponent mixture to a pseudobinary. Diagrams T - Y, X and X -Y. Khim. i tekh. topl. i masel 8 no.7:36-40 Jl '63. (MIRA 16:7)

1. Moskovskiy institut khimicheskogo mashinostroyeniya.
(Distillation, Fractional)
(Phase rule and equilibrium)

BELUGIN, V.F.; PLANOVSKIY, A.N.

Reduction of a multicomponent mixture to a pseudobinary one, taking the reflux-to-product ratio into account. Khim. i tekh. topl. i masel 8 no.9:6-10 S '63. (MIRA 16:11)

DYATLOVA, N.M.; BELUGIN, Yu.F.

Certain remarks concerning the applicability of B'errum and Schwatzenbach's methods for calculating the constants of dissociation of acids. Trudy IREA no.25:374-384 '63. (MIRA 18:6)

DYATLOVA, N.M.; TEMKINA, V.Ya.; BELUGIN, Yu.F.; LAVROVA, O.Yu.; BERTINA, L.E.; IOZEFOVICH, F.D.; KALMIKOVA, N.N.; ZHIROV, Ye.P.

Complex formation of β-hydroxyethyliminodiacetic acid with rare-earth elements. Zhur. neorg. khim. 10 no.5:1131-1137 My '65. (MIRA 18:6)

L 53047-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG
ACCESSION NR: AP5012970 UR/0078/65/010/005/1131/1137
546.65:541.49+661.863/.868.7

AUTHOR: Dyatlova, N. M.; Temkina, V. Ya.; Belugin, Yu. F.; Lavrova, O. Yu.; Bertina, L. E.; Iozefovich, F. D.; Kalmykova, N. N.; Zhirov, Ye. P. 20

TITLE: Complexing of beta-hydroxyethyliminodiacetic acid with rare earth elements 27

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 5, 1965, 1131-1137

TOPIC TAGS: beta-hydroxyethyliminodiacetic acid, rare earth complex formation, dysprosium separation, yttrium separation, rare earth element, complex compound

ABSTRACT: The authors studied the capacity of β-hydroxyethyliminodiacetic acid to form complexes with rare earth elements, determined the composition of the complexes formed, and calculated the instability constants of the latter and the dissociation constants of the complexing agent. Such quantitative characteristics of complex-forming processes facilitate the determination of optimum conditions of separation and purification of rare earth elements. The appreciable differences between the instability constants of the complexes show that this complexing agent can be used for the separation of rare earth metals. The difference in the pK of

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L 53047-65

ACCESSION NR: AP5012970

the complexes of dysprosium and yttrium, equal to 0.71, is particularly notable, since it exceeds any previous value attained with other complexing agents. Experiments involving the separation of a binary mixture containing 30% Y_2O_3 and 70% Dy_2O_3 by means of β-hydroxyethyliminodiacetic acid were very successful. It was found that as the atomic number of the rare earth metal increases, the stability of the complexes rises sharply at first (from lanthanum to europium), then remains approximately constant (from europium to lutetium). Orig. art. has: 8 figures, 2 tables, and 11 formulas.

ASSOCIATION: none

SUBMITTED: 16Sep63 ENCL: 00 SUB CODE: IC, GC

NO REF SOV: 001 OTHER: 011

BLB

Card 2/2

L 57010-65 EWT(m)/EWP(j)/T Pc-4 RM

ACCESSION NR: AP5010582 UR/0020/65/161/003/0607/0610

AUTHORS: Dyatlova, N. M.; Kabachnik, M. I. (Academician); Medved', T. Ya.; Rudomino, M. V.; Belugin, Yu. F.

TITLE: Peculiarities of complex formation of phosphoorganic complexing agents

SOURCE: AN SSSR. Doklady, v. 161, no. 3, 1965, 607-610

TOPIC TAGS: phosphonic acid, complex compound, chelate, metalorganic compound

ABSTRACT: The complexing properties of ethylendiaminobismethylphosphonic acid (I), ethylendiaminobisisopropylphosphonic acid (II) and ethylenediaminobismethylphosphonic diacetic acid (III) have been investigated. From potentiometric titration curves it is concluded that I and II are tetrabasic acids and III is a hexabasic acid having a double betaine structure. Complex formation with the cations Mg, Ca, Sr, Cu, Ni, Co, Zn, Mn, Fe^{+3}, Be, Y, La, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tu, Yb, Lu was studied. The pK values of the acids were determined. Formation of hydrogen complexes was observed for a 1:1 composition of components with all cations with the exception of the alkali earth cations. For Fe^{+3}, Cr, Al, Mn, Th, and the rare earth elements the formation of hydroxy complexes was observed. The rare earth elements

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L 57010-65

ACCESSION NR: AP5010582

and Th form in presence of excess reagent compounds of type $Me(H_2X)_2$. Phosphoorganic complexing agents form especially stable hydrogen complexes as compared with carboxyllic complexing agents. Orig. art. has: 1 table, 3 graphs, and 5 formulas.

ASSOCIATION: Institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv (Institute of Chemical Reagents and High Purity Matter); Institut elementoorganicheskikh soyedineniy, Akademii nauk SSSR (Institute for Organoelemental Compounds, Academy of Sciences, SSSR)

SUBMITTED: 04Nov64 ENCL: 00 SUB CODE: OC

NO REF SOV: 005 OTHER: 009

Card 2/2

BELUGIN, Yu.V.

Ways of analyzing regularities in changes in the physical properties of rocks. Geofiz. issl. i probl. neftegaz. iuga Sib. plat. no.2:218-223 '62. (MIRA 15:8)

(Rocks—Testing)

KOLOVERTNOV, G.D.; BORESKOV, G.K.; DZIS'KO, V.A.; POPOV, B.I.; TARASOVA, D.V.; BELUGINA, G.G.

Iron-molybdenum oxide catalyst of methanol oxidation to formaldehyde. Part 1: Specific activity as a function of the catalyst composition. Kin. i kat. 6 no. 6:1052-1056 N-D '65 (MIRA 19:1)

1. Institut kataliza Sibirskogo otdeleniya AN SSSR. Submitted January 25, 1965.

TRAPEZNIKOV, A.A.; BELUGINA, G.V.

Effect of the pH in the precipitation of aluminum soaps on the viscosities of their oleogels. Doklady Akad. Nauk S.S.S.R. 87, 635-7 '52. (MLRA 5:11)
(CA 47 no.13:6220 '53)

1. Institut fizicheskoy khimii, Akademiya nauk S.S.S.R., Moscow.

BELUGINA, G.V.

Influence of temperature upon the properties of aluminium soaps. A. A. Trapeznikov and G. V. Belugina (*C. R. Acad. Sci., U.R.S.S.*, 1932, 87, 825—827).—Experiments indicate the possibility of formation of Al soaps as definite chemical compounds in aq. solution during settling and not only during the following dehydration. Measurements of η of Al soaps of naphthenic acids at pH 3·4, 5, 7, and 9 at temp. 20—100° reveals the existence of an optimum temp. range (about 80°) where η reaches its max. Increase of the free alkali content from 36 to 72% makes thickening of the soaps in the optimum temp. range much more pronounced. The appearance of a max. on a η–temp. curve is due to the re-grouping of chemical bonds between the components of Al soaps which results in the formation of structures possessing high thickening properties.

S. K. Lachowicz.

USSR

Effect of treating aluminum soaps with electrolytes on the viscosity of their oleogels. A. A. Trapeznikov and G. V. Belugina. *Doklady Akad. Nauk S.S.S.R.* 94, 97-100(1954); cf. *C.A.* 47, 6220e.—Al soap of naphthenic acid pptd. at pH 9 and 20° was mixed with solns. of $Al_2(SO_4)_3$ and H_2SO_4 having a definite pH. In all cases the pH of the soln. increased with time; this indicated adsorption of H ions by the soap. Simultaneously the max. relaxational viscosity (*C.A.* 46, 4326h, 6172e) in C_6H_6 increased considerably. Soaps pptd. at pH 5, 7, and 9 and 20 and 80° were treated 30 min. in a concd. soln. of $Al_2(SO_4)_3$, washed, and dried at 105°. This treatment increased the viscosity of the C_6H_6-soap solns. prepd. from soaps pptd. at pH 7 and 9, particularly those pptd. at 20°. Oleogels prepd. from soaps pptd. at pH 5 and benzene increased in viscosity when the soap was pptd. at 20° but decreased in viscosity when it was pptd. at 80°. Acid treatment increases the viscosity by removing OH ion from the soaps. Decrease in viscosity of the oleogel prepd. from the soap pptd. at pH 5 and 80° and C_6H_6 is due to excess adsorption of H ions on the soap.

H. W. Rathmann

BELUGINA, G. V.

BELUGINA, G. V.: "The colloid-chemical basis of methods of preparing aluminum soaps of naphthenic acids and the stability of their oleogels." Acad Sci USSR. Inst of Physical Chemistry. Moscow, 1956. (DISSERTATION FOR THE DEGREE OF CANDIDATE IN CHEMICAL SCIENCE)

So.: Knizhnaya letopis' No 15, 1956, Moscow.

BELUGINA, G. V.

AUTHORS: Belugina, G.V., and Trapeznikov, A.A. 69-20-1-1/20

TITLE: The Effect of the Conditions for the Preparation of the Aluminum Soaps of Naphthenic Acids on the Properties of Their Oleogels (Vliyaniye usloviy prigotovleniya alyuminiyevykh myl naftenovykh kislot na svoystva ikh oleogeley)

PERIODICAL: Kolloidnyy Zhurnal, 1958, Vol. XX, # 1, pp 5-12 (USSR)

ABSTRACT: The authors developed a precipitation method for the preparation of aluminum-soaps in which aqueous solutions of $Al_2(SO_4)_3$ and sodium soaps are poured together, the pH being held constant. The general view of the laboratory equipment used in the precipitation of aluminum soaps of naphthenic acids is shown in fig. 1. It was established by experiment that the thickening properties of the soaps and the structure and stability of their oleogels are strongly affected by the following factors:

1. The ratio of free to bound alkali (fig. 2 and 3). The viscosity of the oleogels of Al-soaps grows with their free alkali content, attaining a maximum at 75-100%. The stability decreases when the alkali content increases. The most stable oleogels are those precipitated with a free alkali content below 50%.
2. The pH during the precipitation (fig. 5). The viscosity of

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The Effect of the Conditions for the Preparation of the Aluminum Soaps of Naphthenic Acids on the Properties of Their Oleogels

the oleogels precipitated at different pH values (10-3.5) grows with diminishing pH passing through a maximum at pH 5. 3. Temperature. The thickening capacity of the Al-soaps increases with the temperature (20-92°C) passing through a maximum at about 80°C. Thermal treatment of the prepared soaps also raises their thickening capacity (fig. 8). The precipitation and treatment temperatures have no significant effect on the stability of the oleogels.

Diminishing the concentrations of the $Al_2(SO_4)_3$ solutions and particularly of the sodium soaps used for precipitating the Al-soaps raises the thickening capacity. A comparison of the thickening properties of the Al-soaps prepared by the "direct" precipitation method and by precipitation at constant pH of the medium showed that on precipitating under optimal conditions (pH 5, elevated temperatures) soaps with higher thickening capacity are obtained by the latter method. The dependence of the viscosity on the time of keeping the oleogels of soap in various solvents (cryoscopic benzene, aviation gasoline type B-70, gasoline, pyrolysis products of kerosene con-

The Effect of the Conditions for the Preparation of the Aluminum Soaps of Naphthenic Acids on the Properties of Their Oleogels

taining a considerable quantity of unsaturated hydrocarbons) is shown in fig. 11. The correlations found for Al-soap gels in a pure non-polar solvent, like cryoscopic benzine, hold also for the gels in industrial solvents.

The results of this study were used in process development of Al-naphthenate soap production.

There are 10 graphs, 2 tables, 1 photo, and 25 references 8 of which are Soviet, 6 American, 5 British, 3 German, 1 Canadian, 1 Indian, 1 Scandinavian.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR, Moscow (Institute of Physical Chemistry of the AS USSR, Moscow)

SUBMITTED: February 20, 1957

AVAILABLE: Library of Congress

Card 3/3

69-58-2 -23/23

AUTHORS: Trapeznikov, A.A.; Belugina, G.V.; Rzhavskaya, F.M.

TITLE: News in Brief. The Effect of the Ratio of Free to Bound Alkali During Precipitation of Aluminum Soaps on Their Thickening Properties (Kratkiye soobshcheniya. Vliyaniye sootnosheniya svobodnoy i svyazannoy shchelochi pri osazhdenii alyuminiyevykh myl na ikh zagushchayushchuyu sposobnost')

PERIODICAL: Kolloidnyy zhurnal, 1958, Vol XX, Nr 2, pp 254-255 (USSR)

ABSTRACT: The composition and the thickening properties of aluminum soaps are determined by the molecular weight and the natural organic radical of the acid, and by the ingredients and preparing conditions of the acid. Among these factors, the ratio of free to bound alkali plays an important role. In this article, the preparation of aluminum soaps from naphthenic acids with a molecular weight of 250 is described. The temperature was 80°C. The free alkali content varied from 25 to 200 %. Figure 1 shows that the best results were obtained with an excess of 75 % of free alkali. There are 2 graphs and 5 references, 3 of which are Soviet, and 2 English.

Card 1/2

69-58-2 -23/23

News in Brief. The Effect of the Ratio of Free to Bound Alkali During Precipitation of Aluminum Soaps on Their Thickening Properties

ASSOCIATION: Institut fizicheskoy khimii AN SSSR, Moskva (Institute of Physical Chemistry of the USSR Academy of Sciences, Moscow) Moskovskiy filial VNIIZh, Moskva (Moscow Branch of the VNIIZh, Moscow)

SUBMITTED: July 6, 1957

1. Aluminum--Soaps--Composition 2. Aluminum--Soaps--Thickening properties

Card 2/2

5(4)

AUTHORS: Belugina, G. V., Zakiyeva, S. Kh., Rebinder, P. A., Academician, Taubman, A. B.

SOV/20-126-2-25/64

TITLE: On the Stability and Viscosity of Concentrated Suspensions in the Oleogels of Metallic Soaps (Ob ustoychivosti i vyazkosti kontsentrirovannykh suspenziy v oleogelyakh metallicheskikh myl)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 2, pp 318-321 (USSR)

ABSTRACT: In the course of the investigations discussed in the present paper the aluminum soaps of naphthenic acids were used as structure-forming additions. They form oleogels with peculiar structurally mechanical properties. These properties of oleogels depend on the molecular nature of the dispersive medium and may be regulated by variation of these factors. In this connection, the authors investigated the time--dependence of the viscosity of the gels of aluminum naphthenate in hydrocarbon media and in concentrated suspensions which are built up on the basis of such hydrocarbon media. Ordinary technical surface-hardened oxidized aluminum powder with particles of aluminum powder from 6 to 13μ served

On the Stability and Viscosity of Concentrated Suspensions in the Oleogels of Metallic Soaps

SOV/20-126-2-25/64

as dispersive phase. The dispersion medium used was the purified basic paraffin-naphthene fraction of the fuel T - 1. The production of the aluminum soaps used for structure-formation is briefly described. A diagram shows the typical curves $\lg\eta - \tau$ for a 2% aluminum-naphthenate-gel. Here η denotes viscosity and τ - time. The introduction of a solid phase increases initial viscosity considerably, but without changing the character of its aging. Analogous curves of aging are given for 2%- and 4%-gels of an aluminum-naphthenate of other composition. If benzene is substituted for the paraffin-naphthene fraction, the initial viscosity of the gel is reduced, but the viscosity of the gel in the suspension undergoes practically no change for the duration of one month. The decrease of viscosity in the oleogels of the aluminum-naphthenate and in the corresponding suspensions is probably a consequence of the latent formation of aggregates. There are 2 figures, 1 table, and 10 references, 9 of which are Soviet.

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On the Stability and Viscosity of Concentrated Suspensions in the Oleogels of Metallic Soaps

SOV/20-126-2-25/64

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

SUBMITTED: February 26, 1959

Card 3/3

S/020/60/132/02/38/067
B004/B007

AUTHORS: Belugina, G. V., Konstantinova, V. V., Zakiyeva, S. Kh., Rebinder, P. A., Academician

TITLE: Investigation of the Gel-forming Ability of Aluminum Oleates in Benzene

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 2, pp. 380-383

TEXT: The authors discuss the behavior of the gels of aluminum soaps of the general composition $Al(OH)_n(OOCR)_m$, where $n + m = 3$. They mention the dependence of the properties of such substances on the number of hydroxyl groups, on the association of the molecules, and on the molecular weight and the type of acid radical. It was the aim of the present paper to investigate the behavior of the aluminum soaps of unsaturated fatty acids on the basis of the example of oleic acid. The aluminum oleates were prepared by the reaction of $Al_2(SO_4)_3$ with an alcoholic solution of sodium oleate at 70°C. From the aluminum oleates gels were formed in pure benzene. The influence exerted by composition on the viscosity η was investigated on 8% gels, which were precipitated in the case of an alkali excess of 25-200%. Fig. 1 shows the dependence of η on the content of free alkali

Investigation of the Gel-forming Ability of Aluminum Oleates in Benzene

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B004/B007

after 5, 7, and 30-32 days. η attains a maximum at 50% alkali excess (n = 1), and a second lower maximum in the case of an alkali excess of 150% (n = 1.7). The soap precipitated with alkali excess of 200% was no longer soluble in benzene. Like in the case of saturated fatty acids, bisubstituted aluminum soap (n = 1) of oleic acid had the greatest viscosity. The stability of the gels was low (Fig. 2). This is ascribed to the low chemical stability of unsaturated fatty acids. However, also α-naphthol added as antioxidizing agent does not influence gel aging. This aging does not depend on the composition of the aluminum oleate, which fact distinguishes the Al oleates from the aluminum naphthenates (Fig. 2). Fig. 3a shows the increase of viscosity with increasing concentration of the soap. The dependence $\log\eta = K + a \log C$ (1) was found (K and a = constants, C = concentration). Increasing concentration (Fig. 4) retards the aging process. However, also 12% gels age and are durable for not more than two weeks, whereas 4% gels of aluminum naphthenates remain stable for longer periods. There are 4 figures and 8 references, 4 of which are Soviet.

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

SUBMITTED: February 6, 1960

Card 2/2

BELUGINA, G.V.; ZAKIYEVA, S.Kh.; KONSTANTINOVA, V.V.; REBINDER, P.A.

Stabilization of concentrated suspensions by the structure formation of the dispersion (hydrocarbon) medium. Koll.zhur. 23 no.6:658-668 N-D '61. (MIRA 14:12)

1. Institut fizicheskoy khimii AN SSSR, Moskva.
(Suspensions (Chemistry)) (Hydrocarbons)

43801

S/069/62/024/006/005/009
B101/B180

11,1280

AUTHORS: Zakiyeva, S. Kh., Belugina, G. V., Konstantinova, V. V., Rebinder, P. A.

TITLE: Effect of the solid disperse phase content on the limiting viscosity of concentrated suspensions in a structurized medium

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 6, 1962, 678 - 681

TEXT: The aging of a suspension of aluminum (particle size, 6 - 13μ) dispersed in a purified paraffin-naphthene fraction, thickened with 2% by weight of aluminum naphthenate, was investigated for φ the solid disperse phase content, which ranged from 5 to 31% by volume. Measurements were made of η_0 the limiting viscosity of the medium and of $\eta_\varphi = \eta_0 \cdot K(\varphi)$ the limiting viscosity of the suspension, where $K(\varphi)$ is the relative viscosity of the suspension dependent on φ. An investigation of η_0 and η_φ as dependent on age showed that within 21 days the η_φ's of suspensions with φ = 5 - 23% dropped to the same value as the η_φ of the unfilled gel. This means that the particles of the solid disperse phase did not form any

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additional coagulation structure. For more strongly aged gels with lowered η_0 values, $K(\varphi)$ is higher in the low φ range (up to 23%), and lower at higher φ (31%). At φ = 31% the particles of the disperse phase begin to act as an active filler. The fact that the $K(\varphi)$'s of all highly structuralized media, i.e. gels with $\eta_0 > 115$ poises, is independent of η_0 up to φ = 23 - 27% suggests that the suspension is completely stabilized. There are 2 figures.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR, Moskva (Institute of Physical Chemistry of the AS USSR, Moscow)

SUBMITTED: July 12, 1962

ZAKIYEVA, S. Kh.; BELUGINA, G. V.; KONSTANTINOVA, V. V.; REBINDER, P. A.

Effect of the solid disperse phase content on the intrinsic viscosity of concentrated suspensions in a structurated medium. Koll. zhur. 24 no.6:678-681 N-D '62. (MIRA 16:1)

1. Institut fizicheskoy khimii AN SSSR, Moskva.

(Colloids) (Viscosity) (Suspensions(Chemistry))

KONSTANTINOVA, V.V.; BELUGINA, G.V.; ZAKIYEVA, S.Kh.; REBINDER, P.A.

Effect of surface-active agents on the strength of structures of concentrated nonaqueous suspensions. Koll.zhur. 25 no.5:555-560 S-O '63. (MIRA 16:10)

1. Institut fizicheskoy khimii AN SSSR, Moskva.

CHIRKOV, Yu.I.; BELUKHINA, G.V.

Microclimate and heat balance on crops of irrigated and nonirrigated corn in Moldavia. Trudy TSIP no.145:90-99 '65.

(MIRA 18:10)

GANBURG, D.Yu.; LELYAKINA, T.M.; VESELOVSKIY, K.B.; BELUGINA, L.N.

Changes in the peat surface during its gasification. Inzh.-fiz. zhur. no.9:99-102 S '60. (MIRA 13:9)

1. Gosudarstvennyy institut azotnoy promyshlennosti, Moskva.
(Peat gasification)

GAMBURG, D.Yu.; BELUGINA, L.N.

Changes in the porous structure of coke during its gazification with carbon dioxide. Inzh.-fiz. zhur. no.12:86-90 D '60. (MIRA 14:3)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza, g. Moskva.

(Coke)

S/138/62/000/012/007/010
A051/A126

AUTHORS: Gamburg, D. Yu., Kazakov, A. V., Lelyakina, T. M., Belugina, L. N., Veselovskiy, K. B.

TITLE: Investigation of carbon black produced by electro-cracking of natural gas to acetylene

PERIODICAL: Kauchuk i rezina, no. 12, 1962, 22 - 24

TEXT: Samples of acetylene carbon blacks, obtained from dry collection and produced in one of the electro-cracking plants, were studied in 1959 - 1960 by the ГИАП (GIAP - State Institute of Scientific Research and Design of the Nitrogen Industry and Products of Organic Synthesis), in cooperation with НИИРП (NIIRP - Scientific Research Institute of the Rubber Industry). Investigations were conducted to determine the possible use of these samples as fillers in rubber mixes. The major disadvantages of the investigated carbon blacks were found to be: the high volumetric numbers, elevated ash content and a low density which in some cases not exceeded 40 - 50 g/l. Work has been carried out to increase the density by 3 to 4 times and reduce the volumetric number from 34

Card 1/2

GAMBURG, D.Yu., kand. khim. nauk; LEYAKINA, T.M., inzh.; BELUGINA, L.N., inzh.

Reacting surface of solid fuels and surface of coal ashes.
Teploenergetika 10 no.8:38-40 Ag '63. (MIRA 16:8)

1. Gosudarstvennyy proyektnyy i nauchno-issledovatel'skiy institut azotnoy promyshlennosti.
(Coal gasification)

GAMBURG, D.Yu.; BELUGINA, L.N.; LELYAKINA, T.M.

Coke surface changes dependent on the nature of the gasifying agent. Khim. i tekh. topl. i masel 9 no.1:38-41 Ja '64. (MIRA 17:3)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza.

AZIMOV, G.I.; LAPINER, M.N.; PCHELINA, V.A.; ORLOV, A.F.; BELUGINA, O.P.; DUDETSKAYA, O.A.

Problem of milk secretion. Biul. eksp. biol. i med. 40 no.12:10-14 D '55. (MLRA 9:3)

1. Iz kafedry fiziologii zhivotnykh (zav.-zasluzhennyy deyatel' nauki prof. G.I. Azimov) Moskovskogo pushno-mekhovogo instituta (dir.-prof. V.S. Yershov)

(LACTATION, physiology,
radioactivity of milk from both udders, of blood & of urine after admin. of radiophosphorus labeled milk into one udder in goat.)
(PHOSPHORUS, radioactive,
labeled milk, radioactivity of milk from both udder, of blood & urine after admin.)
(URINE,
radiophosphorus, after admin. of labeled milk into udder in goat)
(BLOOD,
radiophosphorus, after admin. of labeled milk into udder in goat)

BELUGINA, O.P.

Receptor system of the udder in cows and goats and blood composition. Biul.eksp.biol. i med. 43 no.1 supplement:42-45 '57. (MLRA 10:3)

1. Iz kafedry fiziologii zhivotnykh (zav. - zasluzhennyy deyatel' nauki prof. G.I.Azimov) Vsesoyuznogo sel'skokhozyaystvennogo instituta zaochnogo obrazovaniya (dir. - dotsent P.P.Ipatov) Predstavlena deystvitel'nym chlenom AMN SSSR professorom V.N. Chernigovskim.

(BREAST, physiol.
eff. of massage of udder in cows & goats & of lactation on blood picture)
(BLOOD
same)

AZIMOV, G.I.; ORLOV, A.F.; BELUGINA, O.P.

Reabsorption in the mammary gland. Zhur. ob.biol. 23 no.3:237-238 My-Je '62. (MIRA 15:6)

1. All-Union Correspondence Institute of Agriculture.
(MAMMARY GLANDS) (ABSORPTION (PHYSIOLOGY))

USSR/Human and Animal Morphology (Normal and Pathological). Circulatory System. S-3

Abs Jour: Ref Zhur-Biol., No 16, 1958, 74339

Author : Belugina, V. L.
Inst : Sverdlov Branch, All-Union Society of Anatomists, Histologists and Embryologists.
Title : On Interorganic Vessels of the Liver.

Orig Pub: Sb. nauchn. rabot. Sverdl. otd. Vses. o-va anatomov, gistologov i embriologov, 1957, vyp. 1, 63-65

Abstract: Interorganic anastomoses between the branches of the hepatic artery apparently are always present, but in some cases they are developed sufficiently well, in others, insufficiently; as a result, after ligation of one

Card : 1/2

USSR/Human and Animal Physiology (Normal and Pathological). T-3
Blood. Blood Diseases.

Abs Jour : Ref Zhur - Biol., No 16, 1958, 74715

Author : Mozharova, Ye.N., Belugina, V.T.
Inst : -
Title : Treatment of True Polycythemia With Radioactive Isotopes of Cobalt and Phosphorus.

Orig Pub : Vestn. rentgenol. i radiol., 1957, No 1, 34-40

Abstract : During treatment of patients with true polycythemia in order to obtain resistant and long remission Co^{60} and P^{32} were simultaneously administered to the cervical sympathetic ganglia (SG). Remission with treatment only of P^{32} continued 2-2½ years (average total dose of P^{32} 7.5 microcuries); with use of both agents remission was lengthened up to 5 years (average general dose 4.5 microcuries). Irradiation of the SG of the cervix is justified in serious cases with polycythemia with high hypertension and with a

Card 1/2

BELUGINA, Z.T.

Functional state of the gastrointestinal tract in radiophosphorus therapy of polycythemia vera. Med. rad. 10 no.5:35-40 My '65.
(MIRA 18:6)

1. Radioterapevticheskoye otdeleniye Tsentral'nogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdravookhraneniya SSSR, Leningrad.

BELUGINA Z.T.

Roentgenotherapy of esophageal cancer by rotational method. Vest. rentg., Moskva No.2:26-33 Mar-April 1953. (CIML 25:5)

1. Candidate Medical Sciences. 2. Of the Roentgen Therapeutic Division (Head -- Prof. Yu. I. Arkusskiy), Central Roentgenological, Radiological, and Cancer Institute (Director -- Prof. M.N. Pobedinskiy).

2

8058. **Problem of treatment with** radioactive isotopes of phosphorus **and cobalt in some forms of** leucosis. [illegible] Vestnik Rentgen. [illegible] 1958, [illegible] was investigated [illegible] 9-10 mc in the course [illegible] problems on treatment of leucosis and was shown to be [illegible] effective than other remedies. In [illegible] marked normalisation of the composition of the blood and prolonged remission were observed. A drawback to the method is the impossibility of interrupting treatment at a definite moment since there are no means of removing [illegible] from the organism. Combined treatment of severe forms of leucosis with isotopes of P and Co did not reveal any advantages. (Russian) F. M. [illegible]